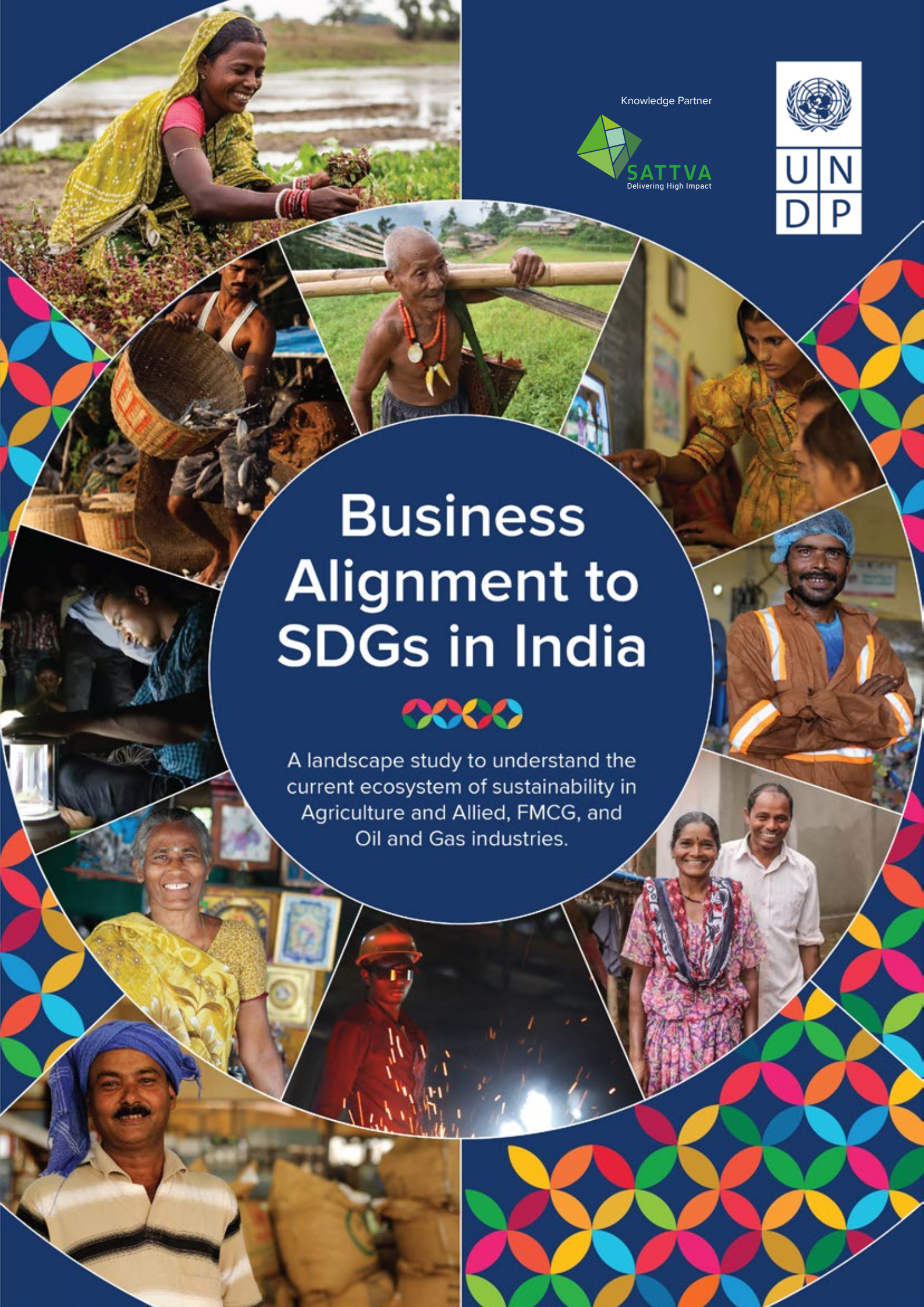

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Business Alignment to SDGs in India

A landscape study to understand the current ecosystem of sustainability in Agriculture and Allied, FMCG, and Oil and Gas industries.

Business Alignment to SDGs in India

CREDITS AND ACKNOWLEDGEMENTS

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TABLE OF CONTENTS

LIST OF FIGURES

ABBREVIATIONS

AWS	Alliance for Water Stewardship
BEE	Bureau of Energy Efficiency
Bn	Billion
CAGR	Compound Annual Growth Rate
CII	Confederation of Indian Industries
CDP	Carbon Disclosure Project
CPCB	Central Pollution Control Board
CSR	Corporate Social Responsibility
CSV	Creating Shared Value
D&I	Diversity and Inclusion
E&S	Environmental and Social
EPR	Extended Producer Responsibility
ESG	Environmental, Social and Governance
FICCI	Federation of Indian Chambers of Commerce & Industry
FMCG	Fast-Moving Consumer Goods
GHGs	Greenhouse Gases
GSIA	Global Sustainable Investment Alliance
GVA	Gross Value Added
HWM	Hazardous waste management
INR	Indian Rupee
IRBI	India Responsible Business Index
ISO	International Organisation for Standardisation
k cr	One thousand cr
L&D	Learning and Development
LEED	Leadership in Energy and Environmental Design
MLP	Multi-Layered Packaging
MMT	Metering, Monitoring and Targeting
Mn	Million
MNCs	Multinational Corporations
MSMEs	Medium, Small and Micro Enterprises
MSW	Municipal Solid Waste
NGOs	Non-Governmental Organisations
PPAs	Power Purchase Agreements
R&D	Research and Development
RPOs	Renewable Purchase Obligations
SBTi	Science-Based Targets initiative
SDGs	Sustainable Development Goals
SEBI	Securities and Exchange Board of India
SRI	Socially Responsible Investing
SSC	Sustainable Supply Chain
SWM	Solid Waste Management
UNGC	United Nations Global Compact
USD	United States Dollar
WASH	Water, Sanitation, and Hygiene
WBCSD	World Business Council for Sustainable Development

ABOUT THE STUDY

Photo: Ruhani Kaur, UNDP India

BACKGROUND AND OBJECTIVES

Businesses across the globe are increasingly realising that sustainability is not a side issue. Both 'push' and 'pull' factors are spurring them to move towards sustainable business practices. In this context, the United Nations' Sustainable Development Goals (SDGs), a framework of 17 broad goals, 169 targets, and 230 indicators, enable the private sector to have a guided approach to sustainability.[1]

Between January 2020 and September 2020, Sattva and the United Nations Development Programme (UNDP) undertook the study titled "Business Alignment to SDGs in India" to plot the landscape of reported sustainability interventions across the Agriculture and Allied, FMCG, and Oil and Gas industries in India.

For the study, "sustainability interventions" have been defined as activities undertaken as part of business-as-usual, such as adopting more water-efficient manufacturing processes and designing products and services catering to society's prevailing needs. In other words, sustainability interventions that are a part of core business efforts.

The interventions were mapped to the relevant SDGs and targets to understand the current focus areas for Indian businesses and their preferred approaches to achieve their planned sustainability outcomes.

This mapped landscape throws light on the following aspects of business sustainability in India:

- Overarching approaches to business sustainability
- Current role of SDGs in enabling businesses to become sustainable
- Current focus areas among businesses
- Understanding the benefits of, and key considerations around, the sustainability interventions adopted by the businesses
- Achievable goals and opportunities that businesses can focus on to make their sustainability strategy more effective

The overarching approaches identified in the course of the study are used to categorise the sustainability intervention across the most consistently addressed focus areas namely:

Figure 1: List of SDGs mapped to each of the focus areas in the study

Finally, the report details the way forward, a section that consists of a range of easily achievable opportunities identified through the course of the study, which can enable Indian businesses to enhance the effectiveness of their sustainability strategies without overhauling their current approaches.

INTENDED AUDIENCE AND USE OF THE STUDY

The study is intended for the perusal of businesses in India that would like to understand the breadth of core-business sustainability efforts undertaken in India and the linkages between these activities and the SDGs. By presenting the landscape of interventions opted for by mature businesses, the study aims to be a guiding tool to businesses that have recently initiated their journey of core business sustainability.

RESEARCH METHODOLOGY

- Desk research was conducted to identify industries of focus namely, agriculture and allied, FMCG and oil and gas. This analysis included comparing industries based on their Gross Value Added (GVA) in 2017-18, their CAGR, and their representation across primary, secondary, and tertiary sectors.

- Market research was carried out to identify a set of 46 companies across the three industries. Companies were ranked on the basis of their market cap, availability of a sustainability report or a BRR report, and the extent to which companies incorporate SDGs in their reporting procedures.

- The core-business sustainability interventions by the 46 companies were mapped to the SDGs. These interventions were identified through a desk review of sustainability reports, annual reports, BRR reports and press pieces.

- Semi-structured qualitative interviews were conducted with the sustainability teams of these companies, wherever possible. These interviews helped validate the data collated on their work through secondary research and gain an understanding of their broad approach to core-business sustainability.

- Semi-structured qualitative interviews were also conducted with business sustainability experts to understand focus areas outlined in the report in detail.

LIMITATIONS OF THE STUDY

- The study results are limited by the inconsistencies in reporting formats used by the sampled corporates.
- The study is also limited by the unavailability of public data on smaller corporates.
- The validation exercise was conducted with a limited number of corporates, however, several domain experts were consulted to validate the findings.


Photo: UNDP India

EXECUTIVE SUMMARY

1. Government regulations are no longer the singular driver for business sustainability in India. Facets like growing Environmental Social and Governance (ESG) consciousness among investors, increasing affinity among consumers for sustainable goods and services, and the business case for adopting sustainable business practices, are growing in significance. In 2019, India received a total Socially Responsible Investment (SRI) of over USD 28.6 billion. India has been the second-fastest-growing market for sustainable investing with a CAGR of 104% between 2014 and 2019, second only to China at 105%.[2]

2. The Sustainable Development Goals (SDGs) are being used by businesses in different capacities. The most commonly observed use-cases are:
   - As a reporting framework
   - As a strategic tool to inform investment decisions; and
   - As a framework to keep track of a business' harmful impact on the society and the environment.

   Out of the three, using the SDGs as a reporting framework was the most common trend across businesses, wherein, activities are mapped retrospectively to the relevant SDGs and reported.

3. Among the 17 Sustainable Development Goals (SDGs), over 57.95% of the analysed interventions map to SDG-12 (Responsible Consumption and Production), and 59.27% map to SDG-8 (Decent Work and Economic Growth). This proportion is consistently maintained across all three industries.[3]

4. After these two, SDGs 9 (Industry, Innovation, and Infrastructure), 11 (Sustainable Cities and Communities), and 7 (Affordable and Clean Energy) are the most addressed goals, with 27.15%, 20.53%, and 17.72% of activities mapping to the three respectively.[4]

5. After studying the landscape of business sustainability interventions, four overarching approaches emerge:

Approach 1:	Approach 2:	Approach 3:	Approach 4:
Making own operations sustainable	Ensuring and enabling sustainable practices across the supply chain	Leveraging business functions to create shared value	Initiating collaborations to achieve sustainability outcomes
Interventions that impact the businesses' internal operations, either at their plant locations or in their corporate offices	Interventions that engage the businesses' suppliers and vendors to make the overall supply chain more sustainable	Interventions wherein businesses leverage their various business functions to create direct benefits for their consumers and the communities it interacts with	Interventions that involve initiating collaborations with various stakeholders to influence the ecosystem or enhance the impact of approaches 1, 2 and 3

Figure 2: Overarching approaches that have been used to classify interventions in the study

6. "Making their own operations sustainable" was the most adopted approach, with over 57% of the reported activities aligning to this. Government compliance plays a huge role in businesses working on making their own operations sustainable.[5]

7. "Ensuring and enabling sustainability across the supply chain" saw low engagement across the industries, with over 5% of the activities reported in this approach. "Instating supplier code of conduct and ensuring adherence," was the most popular intervention to engage the supply chain to act sustainably.[6]

8. With over 37% of its interventions pertaining to "leveraging business functions to create shared value", the FMCG industry reports the most instances of shared value approaches by way of, among other things, leveraging R&D, message-based marketing, and realigning operations to closed-loop approaches.[7]

9. The FMCG industry also reported the most diverse set of collaborations (approach 4: "Initiating Collaborations") ranging from partnerships with civil society and local communities, to inter and intra-industry engagements.

10. "Emission control and energy management" was the most served focus area, accounting for over 35% of the reported activities. In terms of implementation, procuring renewable energy was the most common intervention, encompassing over 25% of all emission control and energy management-related activities.[8]

11. Only 16% of activities were mapped to "water stewardship." Among the six identified interventions under this focus area, "installing water management systems" and "reusing water in other on-site operations" were the most common, in terms of adoption. For example, over 50% of activities pertained to reusing water in on-site operations.[9]

12. "Solid waste management," the third focus area, saw a further dip, with only 11% of all reported sustainability activities mapping to it. On average, "installing waste management systems" seemed to be the most popular method to manage one's solid waste, as over 42% of activities could be mapped to this intervention. Similarly, "co-processing waste for alternate fuel" was another popular intervention in this focus area, with around 28% activities mapped to it.[10]

13. With only 41% of BSE top-100 companies identifying women as a "vulnerable group," it is not surprising to see "diversity and inclusion" receive limited attention. Most reported interventions revolved around fulfilling relevant government compliances. A more thorough approach to D&I was reported by MNCs, albeit with interventions focused on white-collar employees.[11]

14. "Opportunities for decent work and growth" formed another major set of activities. While over 28% pertain to this focus area, this is mostly credited to appropriate regulations under various labour laws and disaster management codes. Another popular intervention under this focus area is "training on future skills," with over 25% of activities identified under it.[12]

15. While COVID-19 created existential threats for several businesses world over, and in the short-run is expected to reverse the progress on business sustainability, it has also been argued that it is likely to be a source of long-term tailwind. This is because:

- Investors see an opportunity in the pandemic to strengthen the ESG agenda: Investors are keen to view the pandemic as an opportunity to strengthen the cause of sustainable investing. In the wake of the pandemic, awareness and action for issues such as climate change and biodiversity losses are likely to accelerate.
- Attitudinal shift among consumers: Surveys gauging consumer sentiments, both in the Indian context and globally, attest to a marked shift among consumers towards embracing sustainability.
- Attitudinal shift among businesses: There is an increased acknowledgement among businesses for the need to create resilience among them to withstand COVID-19-like situations.

INTRODUCTION


Photo: UNDP India

1.1 OVERVIEW

Globally, there is an increased recognition that sustainability in businesses is not a side issue. Challenges such as water scarcity, fluctuating energy costs, and unavailability of raw materials have sensitised businesses about sustainable operations. Additionally, growing consumer consciousness towards responsible buying and evolving investor scrutiny of potential investments, have contributed to businesses revisiting their core strategies and redesigning them to reflect their commitment to environmental and social challenges.[13] Apart from this, climate change and its implication on businesses have increased the equity of sustainability in the past few years.

In India, too, regulatory and compliance imperatives are no longer the singular driving force for ensuring business sustainability. As per the Global Sustainable Investment Alliance (GSIA), since the beginning of 2014, India has been the second-fastest-growing market for sustainable investing with a CAGR of 104% between 2014 and 2019, second only to China at 105%.[14]

In recent years, domestic inventors have also increased their focus on sustainable investments. Between 2012 and 2019, India saw an allocation of about USD 1Bn, with a total CAGR of 20% in domestic Socially Responsible Investments (SRI)[16] (Figure 3). Consumer taste and preferences have also begun to reflect an acute consciousness of sustainability issues in India. According to a study by the Capgemini Research Institute, over 86% of Indian consumers state that buying sustainable products from organisations "makes them happy."[17]

Nearly 88% of Indian consumers were willing to purchase a more sustainable product once they were aware of the sustainability issues surrounding the product. The Covid-19 pandemic is said to have driven this consciousness deeper.

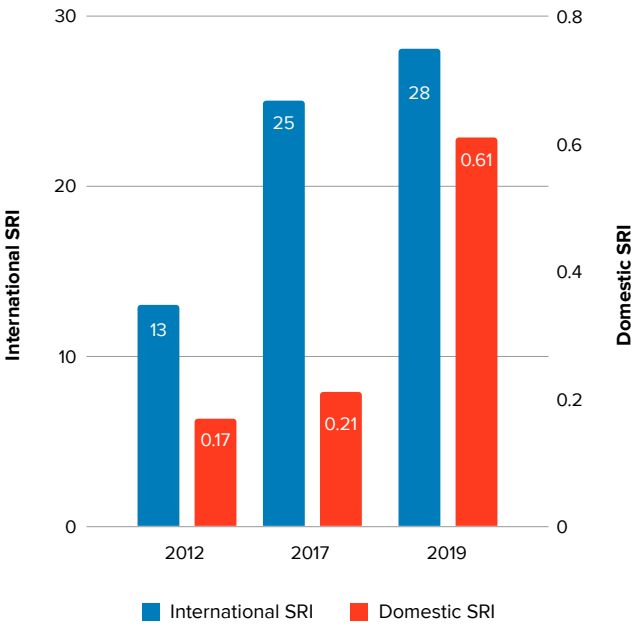


Figure 3: Total socially responsible investing (SRI) in India[15] (in USD Bn)

Even as the issue of sustainability assumes more resonance among Indian businesses, our research identifies a few lacunae that continue to impede the potential of businesses sustainability in India.

Sustainability and CSR have been synonymised:
Corporate Social Responsibility (CSR) and sustainability are being used by businesses interchangeably. While the government envisioned CSR to catalyse philanthropic effort among businesses, sustainability, or core-business sustainability, entails transforming a company's business model to achieve sustainability outcomes.

In 2014, India became the first country to have introduced CSR through a legislative mandate, giving way to transformative outcomes for the country. Between 2014 and 2019, over INR 70,000 cr were invested by over 30,000 corporates, spanning geographies, target groups, and impact areas.[18]

WHAT IS CORE BUSINESS SUSTAINABILITY?

Core business sustainability refers to the integration of the principles of sustainability into the business's entire value chain, instead of operating as a separate engine driven by the organisation's philanthropic effort.

WHY SHOULD BUSINESSES INVEST IN SUSTAINABILITY?

HELPS ANTICIPATES FUTURE RISKS:
Hundreds of executives at leading firms now allocate time to devise a fully funded, corporate sustainability strategy. Risks and opportunities create the pressure points that trigger Board Directors to shape and invest in sustainability strategies.[19]

LEADS TO PROFITABILITY:
Research shows that companies with high ESG ratings have a lower cost of debt and equity, and that sustainability initiatives can help improve financial performance while fostering public support.[20]

LEVER FOR MARKET DIFFERENTIATION:
In a global economy dependent on cross-border trade, complex supply chains, and diverse workforces spanning the globe, companies are increasingly confronted with environmental issues, such as climate change, water scarcity, and pollution, as well as social factors, including product safety and relationships with regulators and the communities in which they operate. In this context, ESG can directly impact a company's competitive positioning. Therefore, managing environmental and social factors is simply part of sustaining a competitive advantage in today's economy.[21]

Figure 4: Core business sustainability and its levers in today's industries

Despite the tremendous impact potential that has been unlocked through CSR, a lack of close coordination between a business' CSR and core-business sustainability effort, or an overt focus on CSR initiatives to the exclusion of core business sustainability lead to the following inefficiencies:[22]

- The scale of CSR activities is determined by business profits, often exposing these projects to business shocks. This was starkly evident during the Covid-19 pandemic. Several CSR projects were either indefinitely shelved or wound up due to the anticipated fluctuations in profits or the need to reorient the CSR focus to relief effort.
- Even as businesses attempt to design their CSR projects at the intersection of their business expertise and their philanthropic focus, ultimately, CSRs function as siloed entities with limited knowledge exchange with the core business.
- Initiatives introduced under CSR are often found to be less successful in the long-term. On the other hand, sustainability ensures repetitive interaction with the local communities. This regular engagement ensures that pilot projects can be made more scalable with the support of local communities.

Businesses with global charters dominate the core business sustainability play in India:
Businesses with a global footprint demonstrate a multi-faceted approach to sustainability. In addition to fulfilling regulatory requirements, these businesses can be seen as working towards highly articulate problem statements. International businesses are said to have a stronger focus on sustainability due to "an overall higher capacity to develop more innovative solutions to survive and exhibit comparative advantage in complex situations."[23] These businesses also demonstrated a more cross-functional approach in addressing their sustainability issues such as Diversity and Inclusion (D&I). In our analysis, international businesses were more likely to have D&I mandates, not only applied to their operations but also their procurement policies. It is also worth noting that D&I in these instances went beyond gender diversity and included, inter alia, age, and sexual diversity. This trend, however, diminishes as we observe more home-grown and home-based businesses, where D&I interventions are largely focused on fulfilling government compliance.

Limited participation in global frameworks:
Although global reporting and assessment frameworks like Carbon Disclosure Project (CDP)[24] and Alliance for Water Stewardship (AWS) are gaining traction today, Indian businesses' participation is still low.[25] Lack of awareness is identified as a key reason for this absence. For example, in CDP's 2018 Global Water Report, out of a total of 2114 companies that responded to requests for data, only eight were Indian.[26]

Cost considerations are a major deterrent to sustainability:
Even though businesses were able to acknowledge the business case for sustainability, the cost implications and the often long gestation period between adopting sustainable practices and their impact on the bottom-line discouraged businesses from making these investments. The absence of lucrative pull factors such as government incentives add to this challenge. For example, in 2018, an estimated 33% of Indian CEOs acknowledged "subsidies and investments." as a critical lever to spur sustainability among businesses in India.[27]

1.2 SUSTAINABLE DEVELOPMENT GOALS (SDGs): TORCH-BEARERS OF SUSTAINABILITY

In recent years, the SDGs have assumed major significance in India. In 2017, India was among the 193 signatories committing themselves to achieve the goals by 2030. Since 2018, NITI Aayog has been tracking India's progress across 13 of the 17 SDGs annually through its SDG India Index.[28] Similarly, to ensure active engagement in the private sector, NITI Aayog has also partnered with the Confederation of Indian Industry (CII) to increase their awareness, share best practices and build a tracking mechanism to improve industry engagement to achieve SDGs by 2030.[29]


Photo: Prashanth Vishwanathan, UNDP India

1.2.1 WHY DO COMPANIES NEED TO WORK ON ADOPTING SDGs?

With rapidly shifting economic and environmental priorities, businesses across the world are witnessing disruptions in their business value chains. These disruptions can be spontaneous, as the recent COVID-19 pandemic,[30] or they could be an outcome of the gradual environmental and social degeneration.[31,32] In light of this shifting ecosystem, companies, both global and domestic, need to be well equipped with a sense of emerging trends that are grounded in ethical considerations, to be able to operate sustainably.[33] SDGs present an all-encompassing framework to businesses that wish to traverse this path.

A 2018 global survey conducted by the World Business Council for Sustainable Development (WBCSD) revealed that 74% of the businesses felt that SDGs offer them the opportunity to focus their sustainability strategy better, followed by 66% who felt that they offered them an opportunity to innovate and provide business solutions to social problems[34] (Figure 5).

It has been estimated that integrating core-business sustainability could open economic opportunities worth up to USD 12 trillion and increase employment by up to 380 million jobs by 2030.[35]

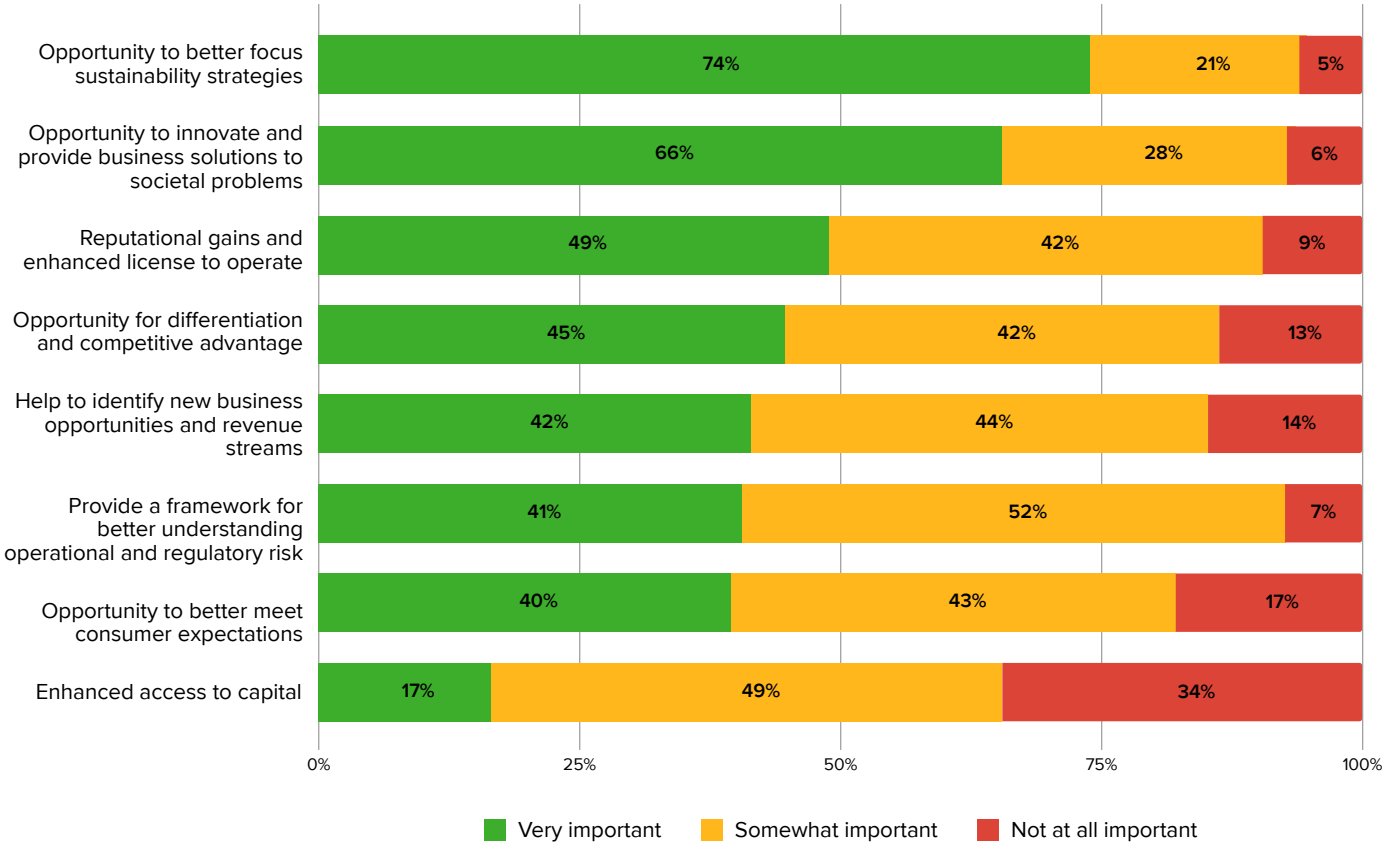


Figure 5: Reasons behind the adoption of SDGs by companies[36]

1.2.2 HOW ARE SDGs BEING USED BY THE SAMPLED COMPANIES?

Despite SDGs' potential to lend to transformative social, economic, and environmental outcomes, several challenges impede businesses from realising this potential. Our analysis reveals the following SDG adoption trends:

SDGs AS A REPORTING FRAMEWORK	SDGs AS A STRATEGIC TOOL FOR INVESTMENTS	SDGs AS A TOOL TO MAP THE HARMFUL IMPACT OF BUSINESS
Most businesses can be seen as using the SDGs as a reporting framework, mapping their work retrospectively to the relevant SDGs. For most, this mapping has been conducted at SDG level, instead of a target level, implying the absence of a detailed approach to map their work to SDGs. A 2018 FICCI report also noted that even if businesses do map their existing work to the SDGs, often little effort is made to address the most relevant goal for their business through new and dedicated programmes."[37]	While using SDGs as a reporting framework for CSR or sustainability outcomes is practised widely, very few businesses use SDGs as a decision-making tool. Sattva's research reveals that considering SDGs in a company's strategic planning in tangible ways is a limited practice. . Even though businesses may acknowledge areas of alignment between the SDGs and their work, it is unclear how they may have actioned on this understanding.	Finally, SDGs may be used by businesses to map the harmful effects of their businesses. As noticed in our research, this is an even rarer instance, wherein businesses may have reported using SDGs to understand the scope of the negative impact they may be causing and use that knowledge to course-correct.

Figure 6: Broad uses for SDGs as a framework in today's industries

1.2.3 WHAT DOES THE CURRENT MAPPING TO SDGs LOOK LIKE?

To understand the current landscape of core-business sustainability efforts and their alignment with SDGs, Sattva mapped over 575 interventions across 46 businesses in the Agriculture and Allied, FMCG, and Oil and Gas sectors to the relevant SDG goals, targets and indicators. Based on this analysis, the following trends were observed:

SDGs 8 and 12 were the most actively mapped goals, with over **55%** of interventions across the three industries mapped to each

17% of all interventions were mapped to SDG-7, with the oil and gas industry pivoting over **32%** of its interventions to this goal

More than **23%** of interventions were mapped to SDG 6, and around **10%** were mapped to SDG-14. In each case, the FMCG and the agriculture and allied industry contributed the most

Over **22%** of all interventions in the Agriculture and Allied industry, and **12%** from FMCG could be mapped to SDG - 2

Only **7.8%** of all interventions were mapped to SDG 5, and only **7.6%** were mapped to SDG - 10, with most companies relying only on policy-level changes

Over **9%** of all interventions were mapped to SDG-17, the highest contribution coming from the FMCG industry, with **16.6%** of all its interventions mapped to this goal

Figure 7: Mapping of reported activities to different SDGs

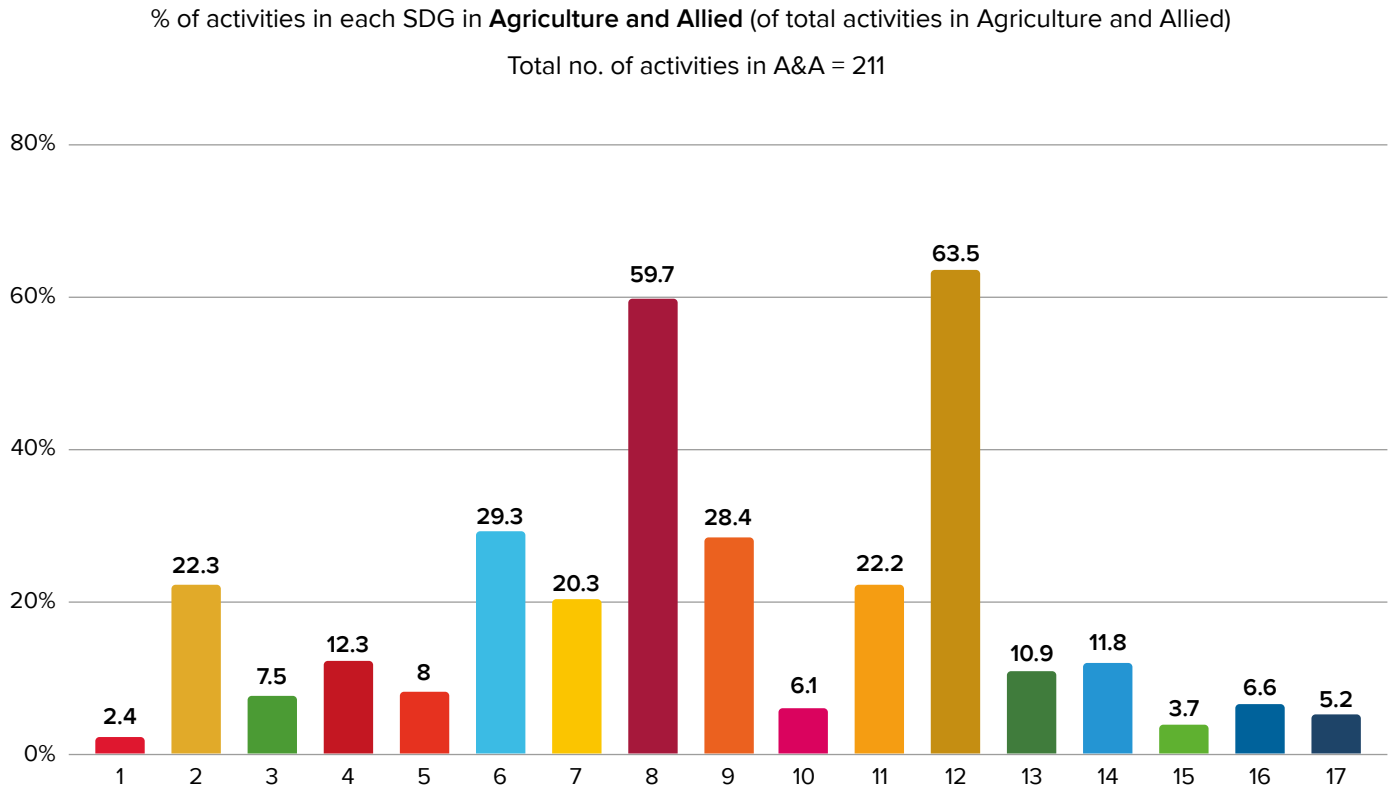


Figure 8: Mapping of interventions reported under each SDG in Agriculture and Allied[38]

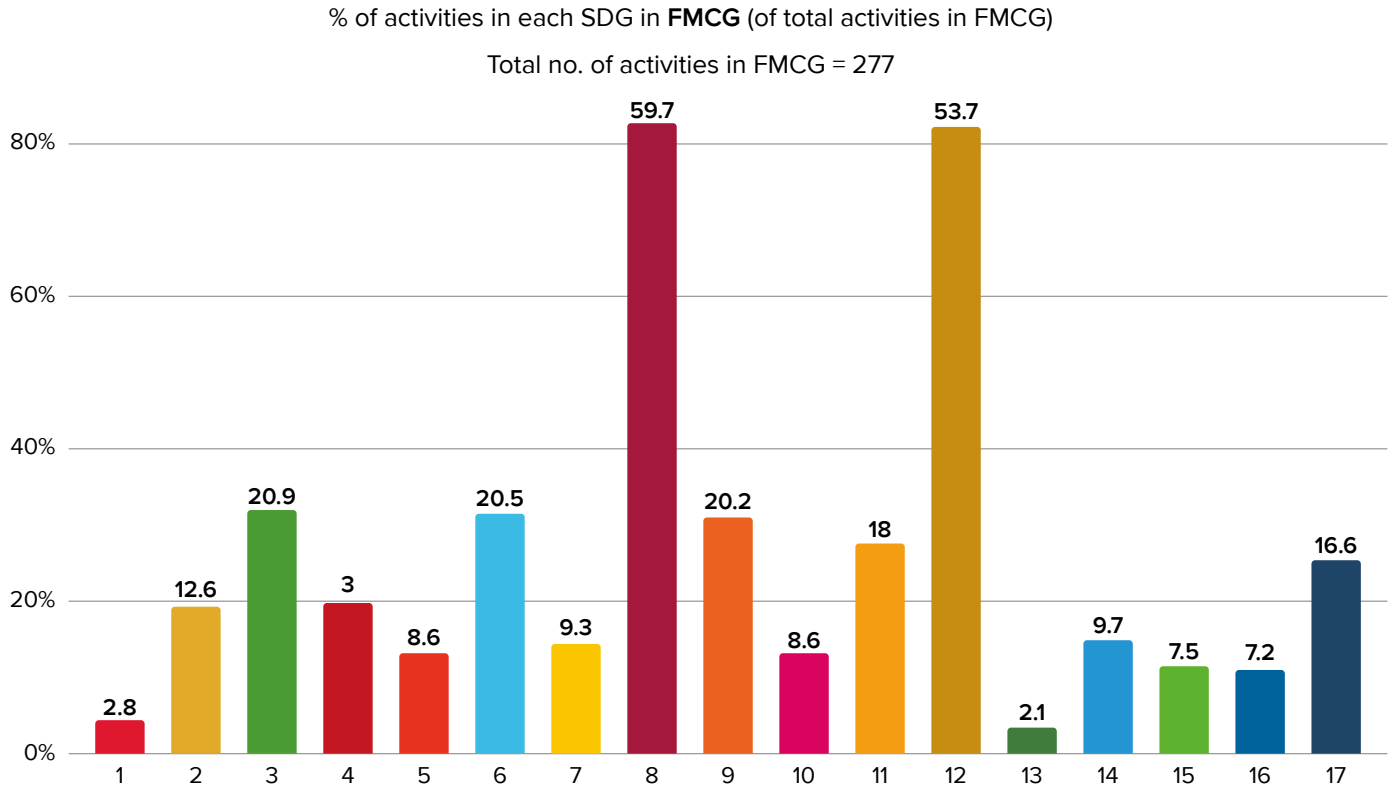


Figure 9: Mapping of interventions reported under each SDG in FMCG[39]

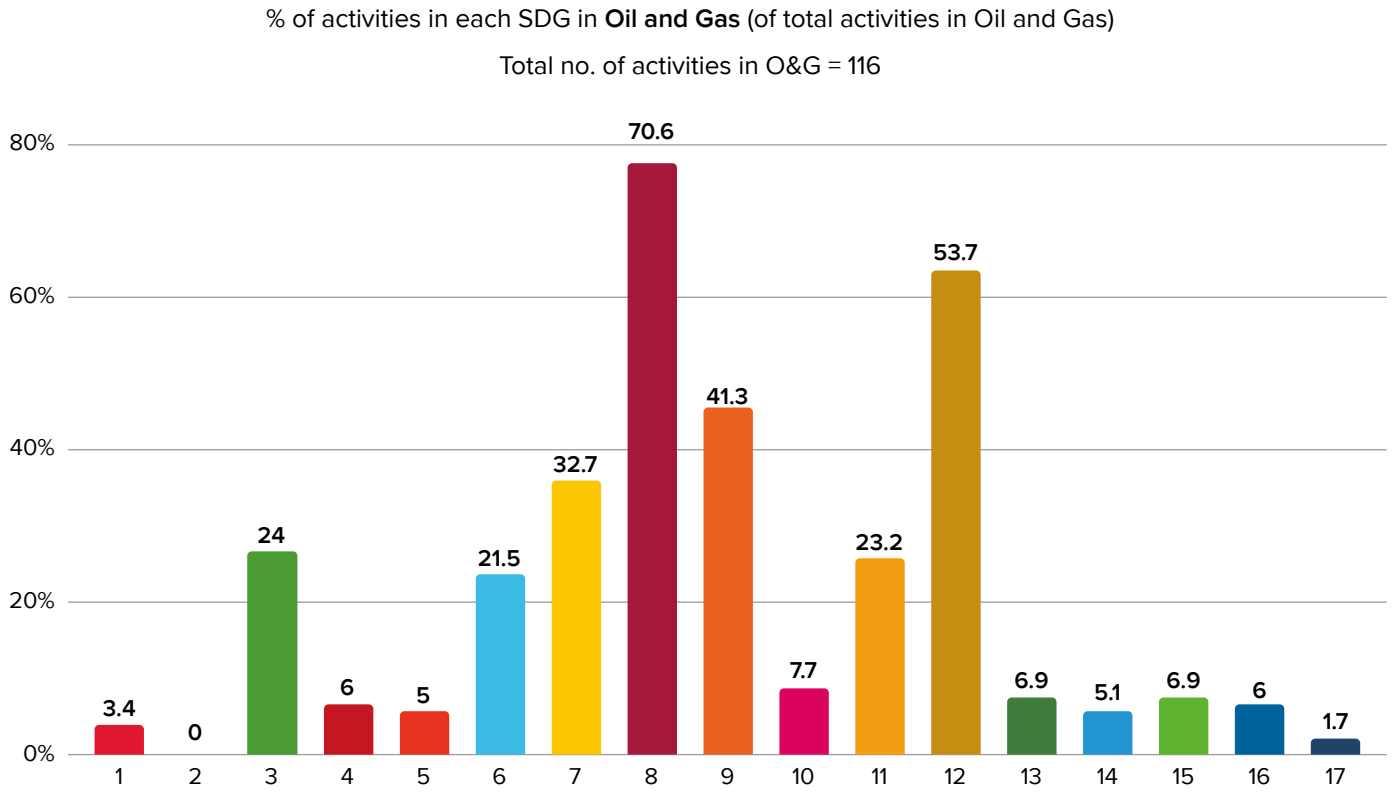


Figure 10: Mapping of interventions reported under each SDG in Oil and Gas[40]


Photo: UNDP India

While the specific goals within the SDGs might appear to be mutually exclusive, they have been found to be extensively dependent on each other. For example, research conducted by the International Council for Science revealed that a total of 316 target-level interactions emerged out of the 169 SDG targets.[41]

Similarly, analysis done by the Stockholm Environment Institute also highlights these interactions in depth.[42] Consequently, this report merges multiple SDGs, based on their inter-linkages with each other, into relevant focus areas, which are further used to classify the reported interventions.

Figure 11: List of SDGs mapped to each of the focus areas in the study

CORE-BUSINESS SUSTAINABILITY LANDSCAPE IN INDIA

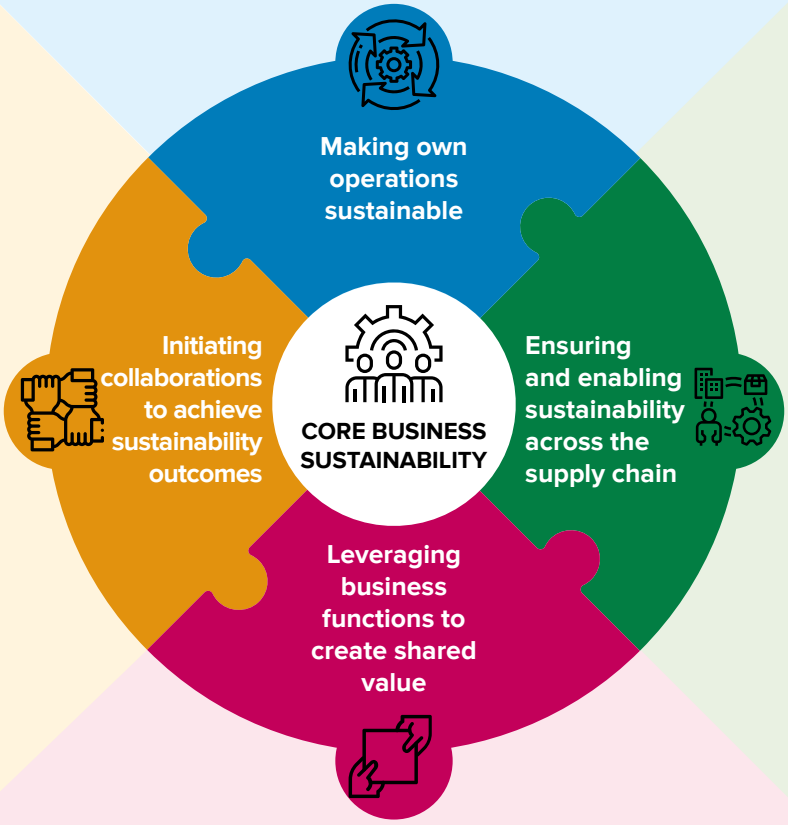
Photo: UNDP India

2.1 OVERVIEW

The following section looks at the core-business sustainability landscape of Indian businesses across the focus areas identified in section 1.2.3. The activities undertaken by the businesses are classified under four broad approaches:

The first step a business takes towards making itself sustainable is working on its within-the-fence operation, for instance, improving the efficiency of its manufacturing processes, and implementing conducive employee policies. Introducing sustainability to a business' own operations leads to a range of easily accessible benefits like increased productivity and a reduction in costs.[43]

The final approach that we witnessed across leading Indian corporates stemmed from their collaborative efforts. These collaborations could be categorised into different approaches based on the kinds of stakeholders involved. One of the most prominent forms of collaboration that we witnessed was between companies and NGOs. Similarly, partnerships with one's industry peers, academic institutions, and governments were also found to be a growing trend. Lastly, participation in global collaborations like disclosure projects and sustainability frameworks was another form of collaboration that was observed.



Enabling sustainability in one's supply chain is critical as over 70% of a business' sustainability burden lies outside its premises. Additionally, embracing sustainability in one's supply chains helps businesses to adapt to externalities such as geopolitical risks, climate change risks, and raw material shortages.[44] While operational, financial and regulatory risks continue to be major drivers of sustainability in supply chains; there is a growing realisation of its strategic relevance. Execution of sustainable activities in one's supply chain enables businesses to enhance product innovation and also amplify market differentiation.[45]

Creating shared value refers to the pursuit of financial success by businesses in a way that also yields societal benefits.[46] For the purpose of the study, we have identified shared value approaches as those that involve businesses leveraging specific business functions to create impact. These could be in the form of product and process innovations, using their R&D capabilities, to create outward value, leveraging their marketing capabilities for positive messaging and awareness creation or leveraging their operational capabilities for public good, for instance, processing municipal waste in one's waste treatment plants.

Figure 12: Definition of the overarching approaches used in the study

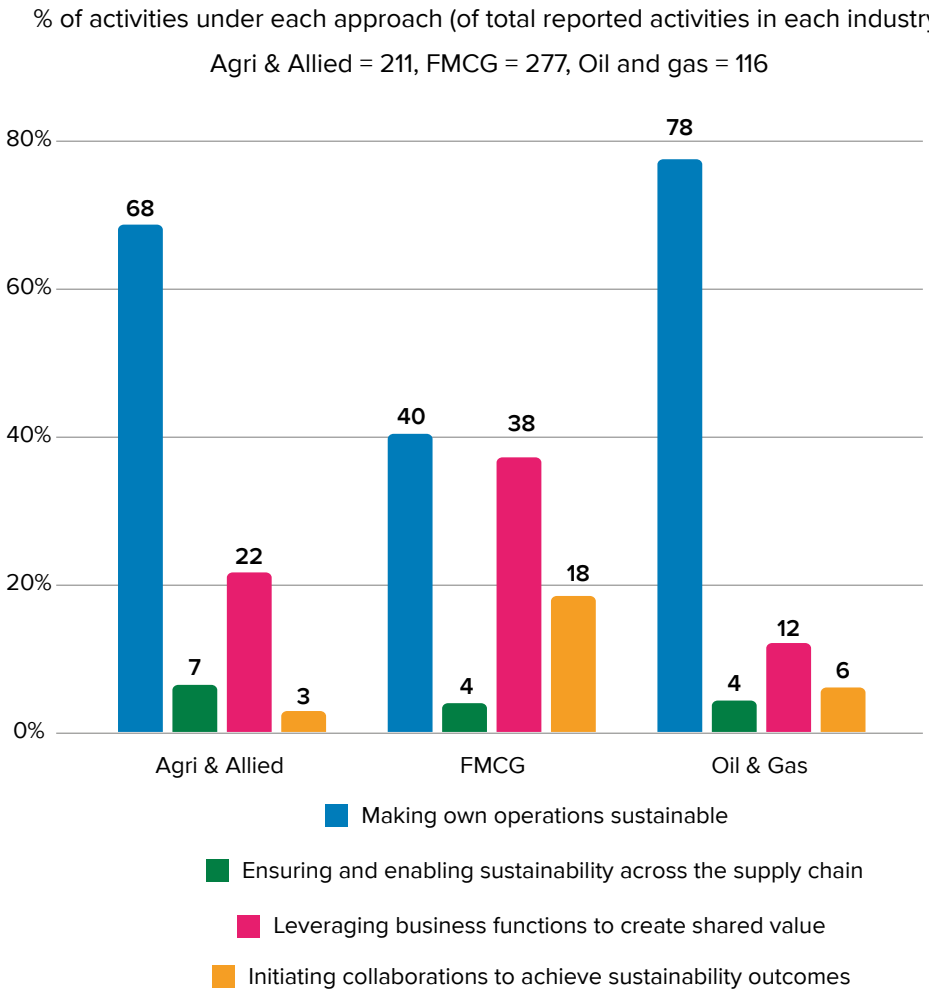


Figure 13: Mapping of interventions to different approaches of execution

Areas of Impact	Broad Approaches			
	Making own operations sustainable	Ensuring and enabling sustainable practices across the supply chain	Leveraging business functions to create shared value	Initiating collaborations to achieve sustainability outcomes
EMISSION CONTROL AND ENERGY MANAGEMENT	**Renewable energy** • Procuring clean energy through PPAs, Onsite, Captive plants **Energy management and productivity** • Procuring certifications such as LEED and BEE Energy Manager Certificate • Installing energy management systems (for example, ISO 50001 and other MMT-based systems) • Investing in clean waste to energy or heat technologies **Emission control** • Redesigning logistics to reduce fuel waste • Assigning internal carbon price or tax • Investing in pollution control equipment	• Designing supplier selection criteria • Instating Supplier Code of Conduct and ensuring adherence • Conducting training sessions • Sourcing locally • Procuring sustainably produced goods as raw materials	• Using CSR to provide for green solutions in local communities • Conducting life-cycle assessments for products • Leveraging R&D to to improve energy efficiency of products and production processes	• Participating in disclosure projects and global movements • Onboarding technical experts across key areas of impact • Intra or inter-industry partnerships to leverage existing and potential synergies in operations • Work with governments to create impact at scale
WATER STEWARDSHIP	**Water conservation** • Conducting risk and vulnerability assessments on water sources • Installing water management systems (for example, using MMT) • Investing in water conservation infrastructure such as rainwater harvesting systems (within premises)		• Leveraging R&D to improve water efficiency of products and production processes • Sharing water conservation infrastructure with local communities • Sharing no-contact process water with other businesses for their operations • Advocacy through marketing campaigns	

	Liquid waste management • Setting up zero liquid discharge plants • Reusing process water in manufacturing (through closed cooling cycles/ recirculation of steam condensates) as process water • Reusing process water in non-manufacturing tasks such as gardening and cleaning			
 **SOLID WASTE MANAGEMENT**	• Installing waste management systems • Practising segregation at source • Adopting zero waste to landfill policy • Co-processing waste for alternate fuels or as raw material for other processes		• Leveraging R&D to improve the recyclability of packaging • Establishing closed-loop systems to collect and process consumer waste • Sharing waste such as fly ash, lime and plastic as raw material for other industries • Advocacy through marketing campaigns	
 **DIVERSITY AND INCLUSION**	• Constituting employee resource groups • Initiating flexible work programmes • Re-integrating women through career 2.0 programmes • Implementing more equitable policies • Conducting training and sensitisation programmes • Setting representative targets for female employment		• Working in local communities to improve gender equality and diversity • Advocacy through marketing campaigns	
 **OPPORTUNITIES FOR DECENT WORK AND GROWTH**	**Employee health and safety** • Designing a comprehensive Employee H&S policy • Installing proper disaster management procedures **Employee L&D productivity growth** • Training on future skills • Employee grievance and feedback mechanism • Setting up reward and recognition programmes • Health camps		• Providing extension services to farmers by leveraging marketing and communication functions • Leveraging R&D to design products that boost worker efficiency • Sourcing locally	

Figure 14: Classification of interventions based on the approaches to sustainability (Each of these interventions have been reported by at least two businesses)

2.2 EMISSION CONTROL AND ENERGY MANAGEMENT

As per the World Bank's report titled "South Asia's Hotspots: The Impact of Temperature and Precipitation Changes on Living Standards", even if India were to adopt all possible preventive measures to control climate impact, India's average annual temperatures are expected to rise by 1°C to 2°C by 2050.[48]

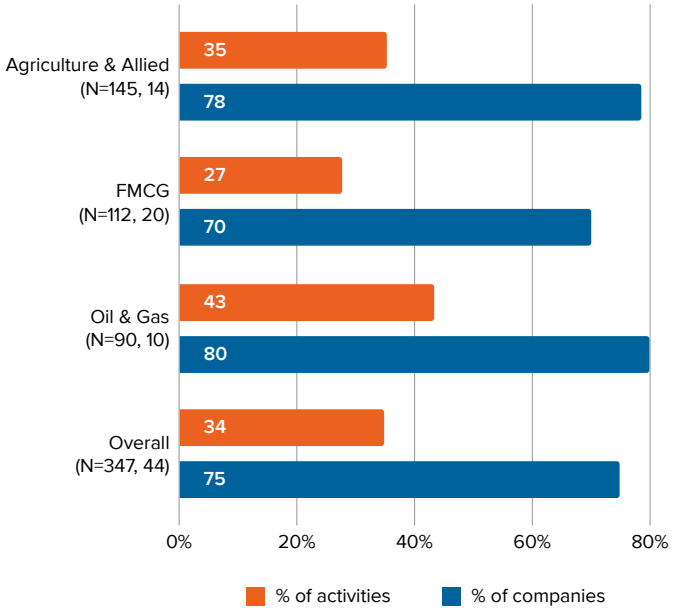


Figure 15: Mapping of interventions and companies reporting in "emission control and energy management"[52]

This is said to have a direct impact on the living standards of the Indian (and the South Asian) population, manifesting itself as "falling agricultural yields, lower labour productivity or related health impacts."[49] India is the world's third-largest emitter of greenhouse gases (GHGs), after China and the US.[50] While coal power plants and agriculture are the largest sources of GHGs in India, industrial operations account for over 1/4th of the country's emissions.[51]

The growing cognizance of climate change among Indian businesses is demonstrated by the fact that over 34% of the interventions identified in our study pertain to emission control and energy management (Figure 15). The biggest trend visible across sectors was the increased adoption of Renewable Energy (RE). Decreasing costs of RE compared to tariffs charged by Discoms has strengthened the business case for corporates to transition to cleaner forms of energy.[53] Additionally, the Government of India's (GoI) commitment to achieve 175 GW of RE installed capacity by 2022, and also establish 40% cumulative electric power capacity from non-fossil fuel-based energy resources by 2030 - as part of its Nationally Determined Contributions (NDC) - has resulted in several policy incentives to promote the uptake of renewable energy.[54] According to a primary survey by the World Wildlife Foundation (WWF) of 40 corporates in India engaged in the use of RE, 35% of the interviewed companies identify falling costs of RE as their primary motivation for adoption. An equal percentage of companies cited meeting regulatory compliance (meeting RPOs) as their driver. This was followed by sustainability or environmental strategy, with 25% of the companies committing to RE to reduce their carbon footprint to address climate change.[55]

Albeit a small number, businesses can also be seen relying on fewer mainstay forms of renewable energy compared to solar and wind in the form of biomass energy and energy derived from process waste. For example, BASF uses the "Biomass Balance Approach," which ensures the use of only renewable feedstock in the chemical analysis without compromising resource efficiency and systems.[56] [57] Similarly, Reliance Industries redirects dried sludge from its emission treatment plant and uses it as a fuel for the captive power plants, reducing its use of coal while generating energy. [58]

Businesses could also be seen as reducing emissions by optimising logistics. "network remapping," "warehouse consolidation," "vehicle upsizing," and "improving vehicle utilisation" are some of the methods that have been reported by businesses. While cost-intensive measures such as acquiring distribution centres that are easily accessible / suitably located for efficient route planning were shared, simple interventions such as training drivers on efficient driving techniques were also reported. Figure 16 contains a few examples of how companies have been able to leverage transportation in order to cut back on emissions.

Indian Oil Corporation Limited[59]

By developing a dosing system, IOCL succeeded in transporting its aviation turbine fuel through pipelines, instead of tank trucks. This innovation helped save the company about 48kl of fuel that was used while transporting in tank trucks.

Marico Limited[60]

Under MarVal, Marico's Value Enhancement programme, the company reduces its GHG emissions through processes such as:

- Warehouse network optimisation
- Logistics cost optimisation through price discoveries
- Vehicle utilisation improvement

Page Industries Limited[61]

To reduce their indirect carbon footprint, Page Industries is implementing multiple measures such as:

- Monitoring of fuel consumption in trucks
- Convincing transporters to retire vehicles that are older than 10 years
- Strategically improving transportation routes
- Tracking fleet status and utilisation in real-time

Figure 16: Examples of companies with interventions on modifying logistics

There is an emerging trend among businesses to set internal carbon prices or apply internal carbon taxes. According to the report titled "Reducing Risks, Addressing Climate Change through Internal Carbon Pricing," "(Corporates) see it as a way to prepare for current and future policies and regulations, to reduce other climate-related risks, to respond to investor concerns, and to encourage innovation."

The report argues that even though adopting carbon pricing is on an upswing in India, Indian businesses report the need for support on implementing such programmes in the Indian context.[62] For instance, there is a requirement for establishing boundary conditions with respect to the utilisation of the revenue generated by carbon pricing.

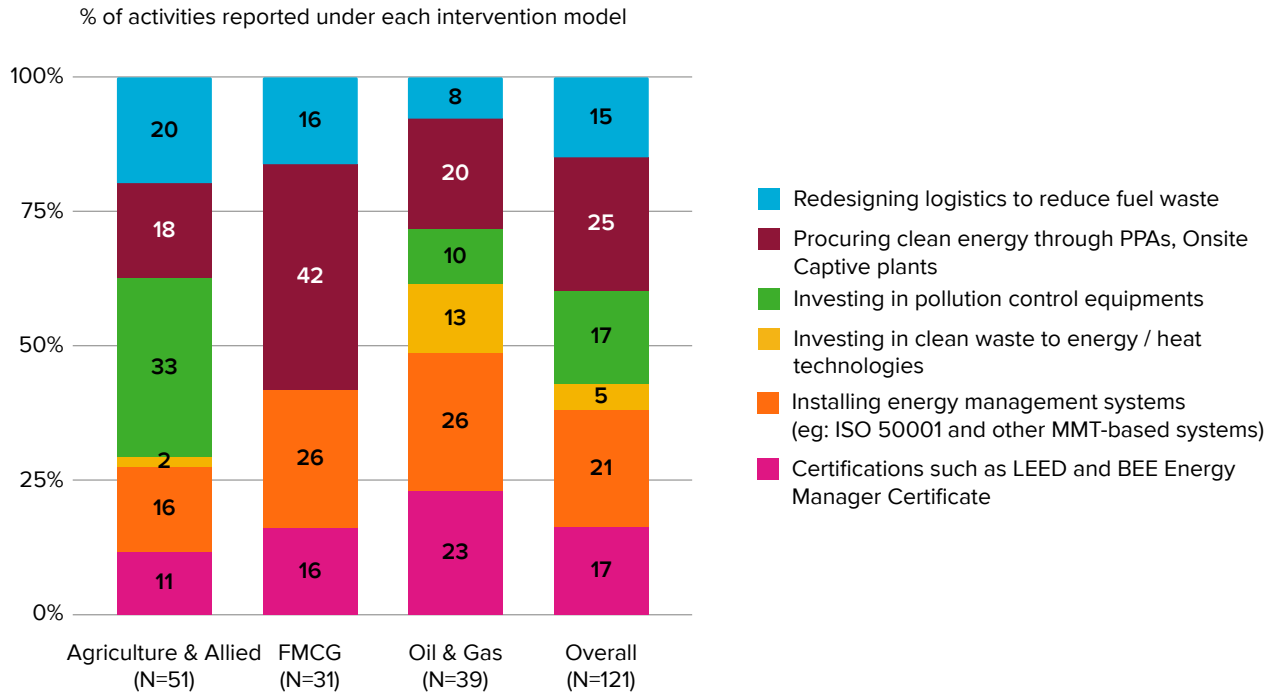


Figure 17: Mapping of interventions in each industry in "emission control and energy management" [63]

2.2.1 MAKING OWN OPERATIONS MORE SUSTAINABLE[64]

Intervention		Benefits	Limitations	Government support
Procuring clean energy through	**PPAs with independent renewable energy developer**	• Low business risk • No upfront investment	• Additional costs, like Cross Subsidy Surcharges (CSS) may apply • Transmission losses may occur in offsite projects • Inconsistencies in state policies	
	Offsite (Captive and group captive projects)	• Stable cost of power	• Upfront capital costs • Project management responsibilities and costs • Contingent on government approvals • Transmission losses may occur in offsite projects • Inconsistencies in state policies	**Incentive:** The Electricity Act protects fully compliant group captive projects from Cross Subsidy Surcharge (CSS), making it a suitable way for corporate buyers to secure power at low costs and avoid regulatory uncertainty.
	Onsite (Rooftop projects)	• Cost-effective • Low-maintenance	• Power capacities are limited depending on plant size and power needs	**Regulation:** Basic custom duty on solar cells being used in manufacturing in India is 0%; Lowest GST bracket applicable **Incentive:** The government pays 30% of the installation cost as a subsidy to the installer.
Certifications such as LEED and BEE Energy Manager Certificate		• Low-hanging fruit in terms of investment	• Expertise required while choosing appropriate certification	
Installing energy management systems (for example, ISO 50001 and other MMT-based systems)		• High return on investment in terms of cost savings • Leads to higher environmental sustainability	• Requires a strong attitude shift in the organisation • Lack of enough energy consumption data	
Investing in clean waste to energy/ heat technologies		• Lowered GHG emissions • Reduced dependence on fossil fuels • Reduced waste going to landfill	• Highly dependent on collected waste consistency • Multi-stakeholder in nature • Upfront capital costs	
Redesigning logistics to reduce fuel waste		• Improved inventory control • Health and safety benefits • Reduced traffic to and from the construction site	• Lack of strong regulatory principles	**Regulation:** The Department of Heavy Industry's implementation of the National Mission for Electric Mobility (NMEM) to have a significant number of EVs and HEVs on the road by 2020 is a positive sign.

Assigning internal Carbon price/tax	• Collected revenue can be redirected to fund more green projects • Incentivises shifting to low-carbon alternatives	• Highly dependent on leadership buy-in • Requires a strong attitude shift in the organisation • Return on investment might not be visible in the short-term	**Regulation:** Programmes such as clean energy and energy efficiency standards, renewable energy certificate schemes and renewables purchase obligations in effect, impose a cost on carbon emissions, thereby making Internal carbon pricing a useful practice
Investing in pollution control equipment	• High return on investment in terms of saved costs • Diversified portfolio helps in customisation	• Lack of government incentives • Upfront technology installation costs	

Figure 18: Details on intervention implemented in one's operations under "emission control and energy management"

2.2.2 ENABLING AND ENSURING SUSTAINABILITY ACROSS THE SUPPLY CHAIN

Scope 3 emissions constitute a significant portion of a business's total carbon footprint. Recognising these emissions as a part of one's own carbon footprint could lead to large-scale change. Estimates state that for consumer goods makers and other manufacturers, between 40% and 60% of the business' carbon footprint resides in its upstream supply chain.[65] Although businesses in our sample may work with suppliers on their carbon footprint, they do not necessarily recognise emissions emerging from their supply chain as part of their own. The most common form of support observed were instating supplier code of conduct and conducting training for the suppliers. Examples of extensive support programmes, such as Mahindra and Mahindra's supplier sustainability assessments and energy audits[66] were observed to be few.

JUBILANT LIFESCIENCES	**Jubilant Life Sciences** (Instating Supplier Code of Conduct and ensuring adherence) Jubilant Life Sciences communicates its green sustainable supply chain policy with its partners and endeavours to categorically communicate its importance. In addition to this, it conducts yearly audits with its critical suppliers and external manufacturers. This audit entails detailed questions to understand the suppliers' energy management practices. Jubilant also conducts supplier meets in which suppliers interact with each other and learn about how they can be more sustainable in their operations.[67]
JAIN Jain Irrigation Systems Ltd.	**Jain Irrigation Limited** (Conducting training sessions) Through the Jain Good Agricultural Practices Programme, the organisation works with its suppliers, who are usually farmers, with rigorous training sessions to help optimise energy, water and fertiliser use in their farming practices, thereby improving their yield multifold.[68]

Figure 19: Caselets highlighting best SSC practices in "emission control and energy management"

2.2.3 LEVERAGING BUSINESS FUNCTIONS TO CREATE SHARED VALUE

Leveraging R&D in oil and gas:
Given the carbon-intensive nature of the oil and gas industry, using R&D to innovate for cleaner products and production processes was found to be a predominant shared value approach among the businesses.

For example, innovation in processes like coal gasification, refining, production optimisation, and creation of more efficient catalysts are some of the most common areas for R&D for the industry.[69]

Deforestation measures as part of CSR:
Another intervention that is common among the chosen industries is undertaking large-scale deforestation measures, often as part of their CSR efforts. For instance, Tata Coffee follows a practice of sustainable plantation management, wherein they maintain over 180 hectares of land as a conservation area within their plantations to maintain ecological balance.[70] Similarly, Piramal Enterprises Limited conducts regular tree plantation drives at all their sites, which saw an increase of 3% in 2019 over the previous year.[71]

IndianOil	**IOCL** (Leveraging R&D to reduce carbon emissions of products) IndianOil refineries are undertaking major technology upgrades to deliver BS-VI fuel, as per the world's cleanest standards. The sulphur content in BS standard fuel is 10 parts per million (PPM) against 50 PPM in presently available BS-IV fuel, which significantly reduces particulate and SOx emission.[72]
BASF The Chemical Company	**BASF** (Leveraging R&D to reduce carbon emissions of products) BASF's novel diesel oxidation catalyst is used on-road in all major markets and thus provides a significant benefit for air quality and fuel economy. The catalyst is designed to meet emission control regulations across the world, including India's BSVI regulations. The technology not only reduces precious metal consumption by at least 25%, but also significantly broadens the temperature region to implement removal of soot.[73]
Pernod Ricard	**Pernod Ricard India** (Conducting life-cycle assessment for products) Pernod Ricard India conducts regular life-cycle assessment of its product line. By working alongside the different stakeholders involved in the process, PRI constantly strives to optimise the production process and monitors closely relevant indicators such as "percentage reduction in packaging" or "percentage increase in recycled glass and plastic" to track progress.[74]

Figure 20: Caselets highlighting best practices in creating shared value in "emission control and energy management"

2.2.4 INITIATING COLLABORATIONS TO ACHIEVE SUSTAINABILITY

Adopting global frameworks and disclosure projects:
A significant area of collaboration that was observed in the space of emission and energy management is adoption of international frameworks and disclosure projects. Disclosure projects help businesses identify avenues of improvement and set up objective pathways to achieve their targets. In recent years, there has been a marked increase in the awareness and adoption of global frameworks for emission control in India.[75] While frameworks like Science-based Target Initiatives (SBTi) help companies in setting their targets, frameworks like the Carbon Disclosure Project (CDP) helps them in reporting and managing their interventions systematically. Out of the 46 businesses analysed by Sattva, 22 adopted the CDP. An additional 9 businesses were part of the Carbon Pricing Coalition.

Mahindra	**Mahindra & Mahindra** (Forging ecosystem partnerships) In 2018, Mahindra & Mahindra collaborated with LG Chem, Korea's leading manufacturer of advanced batteries, to develop "Li-ion cells based on NMC (nickel-manganese-cobalt) chemistry," to be deployed in the Mahindra and SsangYong range of Electric Vehicles. [76]

Figure 21: Caselets highlighting best practices in initiating collaborations in "emission control and energy management"

2.3 WATER STEWARDSHIP

According to various estimates, the current industrial water use in India accounts for 5 to 13% of the total freshwater withdrawal in the country, and the demand is set to rise by 4.2% every year till 2025.[77] [78] Not only does industrial usage stake disproportionate claim on the water resources of the country, every litre of contaminated waste discharged by industries is said to pollute 5-8 litres of freshwater, on average, suggesting that the share of industrial water use could be as high as 50%.[79] Additionally, the declining water resources are rapidly contributing to conflict among different stakeholders, particularly local communities and businesses that share these water sources.[80] With freshwater resources in India depleting fast, water management has gained strategic relevance for businesses. There is an increase in awareness of the risks it poses to business operations.[81] Businesses are also looking to integrate medium and long-term strategies on water issues into their business plans, including modelling for financial risks arising from depleting water.[82] In our analysis, over 17% of the interventions pertain to within-the-fence interventions for water management.

Even though the earliest trend among businesses was working on outside-fence interventions with source protection efforts, it was done from the perspective of ensuring uninterrupted water supply for operations. This approach eventually evolved into efforts to integrate efficiency in manufacturing processes through the uptake of water-efficient technologies and process overhauls to either reduce water requirement or improve efficiency in usage. In recent years, the stringent monitoring of water usage and engaging in disclosure of progress against predetermined targets has received increased recognition, although the uptake in India has been minimal.[84] Monitoring measures account for over 20% of the within-the-fence interventions observed under water stewardship, primarily through engaging in water management technologies. In addition to monitoring, an emerging trend observed is conducting water risk and vulnerability assessment studies. For example, Coca Cola India's bottling units regularly carry out "Source Vulnerability Assessments" and develop "Source Water Protection Plans" to mitigate stress on local water use. These efforts have helped them to reduce the water use ratio for their products from 2.8 in 2009 to 1.83 in 2017.

Similarly, by identifying water catchments using a GPS survey, Tata Consumer Products was able to build storage reservoirs of up to 110 hectares. Additionally, they were also able to channel the run-off rainwater into 227 artificial open tanks that were created in the catchment areas.[85]

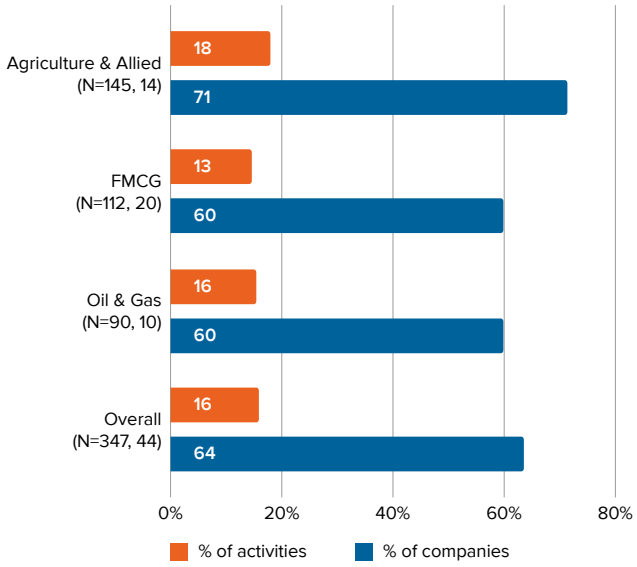


Figure 22: Mapping of interventions and companies reporting in "water stewardship"[83]

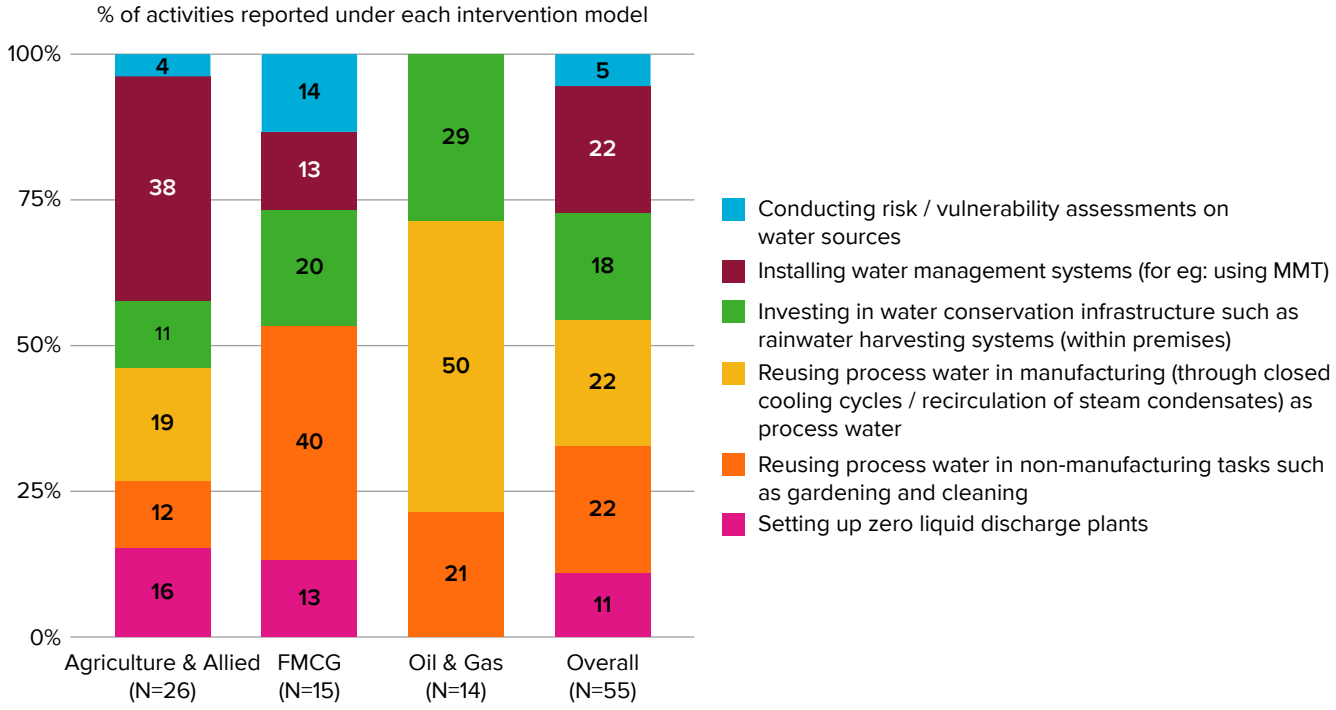


Figure 23: Mapping of interventions in each intervention in "water stewardship"[87]

2.3.1 MAKING OWN OPERATIONS MORE SUSTAINABLE[88]

Intervention	Benefits	Limitations	Government support
Conducting risk/ vulnerability assessments on water sources	• Enhances business continuity • Minimises risks and enables expansion • Provides social licence to operate • Help meet regulatory compliances • Achieve water security	• Lack of freely available self-assessment systems • Lack of any standardised information on water risks • Lack of practical consensus on parameters of assessment	**Regulation:** Incorporating practices like command area development in official policies like PMKSY encourages better irrigational practices
Installing water management systems (for example, using MMT)	• Improved system performance • Reduction in operating costs • Reduction in manpower costs • Reduction in system failure and breakdown	• Some water management systems can have a high carbon footprint	
Investing in water conservation infrastructure such as rainwater harvesting systems	• High return on investment through cost savings • Saves energy and costs on within-the-fence freshwater processing	• Contingent on government approvals • Requires high up-front capital amount • Lack of progressive legislation	**Regulation:** Announcement and declaration of events to engage the public, like rainwater harvesting challenge **Incentives:** State-offered rebates on property taxes that have rainwater harvesting systems installed
Setting up zero liquid discharge plants	• Government regulations ensure proper installation • Reduced water consumption costs • Sludge can be used as fuel for other industries	• Requires regular maintenance and checks • Operating costs can pose as a barrier	**Regulation:** Steps to ensure zero liquid discharge compliance in multiple industries across the country
Reusing process water in manufacturing (through closed cooling cycles/ recirculation of steam condensates) as process water	• Reduced costs of transportation of wastewater • Reduced costs of water consumption	• Can potentially create health hazards, if managed improperly • Lack of knowledge among organisations	**Incentive:** Installation of transmission lines to provide industries with treated water encourages them to implement water-reuse techniques
Reusing process water in non-manufacturing tasks such as gardening and cleaning	• Reduced costs of transportation of wastewater • Reduced costs of water consumption	• Can require installing internal wastewater treatment processes	**Incentive:** Installation of transmission lines to provide industries with treated water encourages them to implement water-reuse techniques

Figure 24: Details on intervention implemented in one's operations under "water stewardship"

2.3.2 ENABLING AND ENSURING SUSTAINABILITY ACROSS THE SUPPLY CHAIN

Efforts to reduce the supply chain's water footprint are dismally low despite sectors like food and beverages and agrochemicals having strong backward linkages with agriculture, which is said to account for over 70% of water withdrawals in their supply chains.[89]

Enabling farmer communities in one's supply chain:
An area of water management in the supply chain is working with farmer communities that form a part of businesses' upstream value chain. These efforts include businesses directly engaging with the farming communities to inculcate effective farming practices such as uptake of drip irrigation, training on usage of fertilisers, and so on. For example, in 2013, AB InBev started SmartBarley, an agricultural development programme to train and monitor farmers in best practices related to cultivating barley. In 2018 alone, the programme helped train over 3268 farmers from three northern states.[90]

PEPSICO	**Pepsico** (Conducting training sessions) PepsiCo helps its farmers in water-scarce areas of Maharashtra, Gujarat, Karnataka and Haryana by promoting drip irrigation in over 3000 acres of agrarian land. PepsiCo's initiatives include helping raise money for farm equipment through banks and incentivising farmers for the adoption of drip irrigation through a buy-back mechanism. Similarly, their work towards replacing transplantation of paddy with direct seeding technology has led to a 30% decline in water consumption during paddy cultivation.[91]

Figure 25: Caselets highlighting best SSC practices in "water stewardship"

2.3.3 LEVERAGING BUSINESS FUNCTIONS TO CREATE SHARED VALUE

Community-based water projects:
CSR has emerged as a strong mechanism for businesses to affect community-based water projects. Between 2014 and 2019, CSR has funded over INR 5018 cr in environmental sustainability, INR 2087 cr in sanitation and INR 824 cr in safe drinking water. Interventions such as building and maintenance of check-dams, rainwater harvesting systems, installing community RO plants and implementing WASH-related interventions are recurring ones. The challenge, however, is that these projects often lack long-term sustainability for two reasons: absence of a well-conceived operations and management (O&M) plan; and a lack of effective stakeholder management.

Finding the right partners is a key aspect in ensuring implementation of sustainable WASH CSR projects. Developing relationships with all stakeholders, including the communities, creates "a greater opportunity of being successful and sustainable."[92]

Leveraging R&D to create water-efficient products:
Along with community-based water projects, leveraging one's R&D capabilities to create water efficient products was also observed. For example, Jain Irrigation's product range includes micro-irrigation systems, both drip and sprinkler-based systems, that are created to improve the farm yield for smallholder farmers.[93]

Godrej agrovet	**Godrej Agrovet** (Sharing water conservation infrastructure with local communities) Under its Green CSR mission, Godrej Agrovet has undertaken four watershed projects across four states, covering 12000 hectares, recharging the groundwater with 10-15 million KL of water annually.[94]
JUBILANT LIFESCIENCES	**Jubilant Life Sciences** (Sharing water conservation infrastructure with local communities) In their yearly community meets, Jubilant Life Science discusses relevant water conservation solutions with the local communities and works with them towards their adoption. For example, for rainwater harvesting, JLS has identified 200+ village ponds and made RWH structures in collaboration with the local communities. Additionally, JLS also tries to identify nearby cities and towns whose sewage water can be treated and used in its own operations.[95]
JAIN Jain Irrigation Systems Ltd.	**Jain Irrigation** (Leveraging R&D to improve water efficiency of products) The tissue culture approach developed by Jain Irrigation helps reduce disease infestation in banana crops. Similarly, their contribution towards making high-density mangoes enables farmers to improve their yield per acre by manifolds.[96]

Figure 26: Caselets highlighting best practices in creating shared value in "water stewardship"

2.3.4 INITIATING COLLABORATIONS TO ACHIEVE SUSTAINABILITY

The shared nature of water necessitates the adoption of collaborative approaches for its management.[97] Collaborations in water management are said to be needed "to understand the true cost of water and to set more appropriate pricing to encourage the behavioural change necessary for its long-term sustainability."[98]

Collaboration with the government:
Although there is a lack of policy incentives to encourage businesses to take part in watershed management projects, local governments are often enthusiastic to collaborate, which can enhance the effectiveness of these projects.[99] Government bodies can provide data and insights on the needs of the region, the socio-cultural dynamic, and provide inroads to the communities.

Inter-firm/industry collaborations:
Another area for building sustainable collaborations has been through partnering with other firms across multiple industries. This approach frequently takes the shape of some form of knowledge-sharing between different businesses, thus reducing the burden on individual players, while ensuring a wider impact.

For instance, Tata Consumer Products' collaboration with the Ethical Tea Partnership and Solidaridad has helped them in training tea farmers with sustainable practices like drip irrigation and rainwater harvesting. In this case, previous experience of the partner organisations results in efficient knowledge-sharing between all the parties involved.[100] Another example of this form of resource sharing is seen with IOCL. At its Mathura refinery, the company has agreed to use treated water from a nearby sewage treatment plant.[101]

Adopting global frameworks and disclosure projects:
Using water risk assessment tools and water-related disclosure projects enables companies to enhance their business continuity and achieve water security while meeting regulatory compliances. Reliance on these tools, however, was noted to be limited.[102] Of the 46 companies analysed by Sattva, 18 had the required data to respond to the CDP water security questionnaire. Similarly, Alliance for Water Stewardship, another water use disclosure programme, saw only eight of the 46 companies as signatories.

Coca-Cola / Jain Irrigation Systems Ltd.	**Coca Cola and Jain Irrigation** (Partnership with government to achieve scale) Under a tripartite partnership between Coca Cola India, the state government of Maharashtra, and Jain Irrigation Systems, 2.5 lakh farmers in water-stressed regions of the state are set to be benefitted through opportunities to create a diverse crop portfolio.[104]
ITC Limited	**ITC** (Partnership with government to achieve scale) In a partnership with the state government of Tamil Nadu and the Tamil Nadu Agriculture University, ITC organises Farmer Water mela to sensitise farmers towards adoption of water-saving practices.[105]
CPCL	**Chennai Petroleum Company Limited** (Collaboration with local government to reuse municipal wastewater) Chennai Petroleum Company Limited (CPCL) curtailed its Manali Refinery operations because of the city's severe shortage of water. Located outside of the city, CPCL depends on water for many of its processing applications. The repetitive water shortage in Chennai posed an enormous challenge to the success of CPCL's business. In order to increase the amount of available water in Chennai, the company's management team made a significant investment in a new wastewater reclamation plant that would take municipal sewage from the Chennai Metro Water District and render it clean enough for industrial operations in the refinery.[106]

Figure 27: Caselets highlighting best practices in initiating collaborations in "water stewardship"

2.4 SOLID WASTE MANAGEMENT

Out of a total of 62 million tonnes of solid waste that is generated in India every year, only 43 million tonnes of waste is collected. Furthermore, only 28% of this collected waste is treated and processed, while the remaining 72% gets dumped into landfills.[107] In response to this situation, the release of the Solid Waste Management Rules (2016) was a positive step, with interventions like segregation at source, proper disposal of sanitary waste, better implementation of Extended Producer Responsibility (EPR) and the promotion of waste to energy and fuel interventions.[108]

In recent years, plastic waste management has received considerable attention.[109] Due to regulatory measures like EPR, the efforts to reduce plastic waste has centred around packaging waste in both FMCG and Agriculture and Allied industries. Estimates reveal that in 2014, over 95% of processed food items and hair care products, and over 85% of dairy products were packaged in plastic.[110] With a collection rate of only 60%, this dependence on plastics has encouraged, both, the government to enforce regulations and the private players to alter their business practices.[111] For example, in 2019, over 30 FMCG companies collaborated to collect 3500 tonnes of multi-layered packaging waste in Punjab.[112]

Examples were also noted of businesses using their R&D abilities to either find alternative methods of packaging, or innovative ways to reuse plastic waste. For instance, in 2019, IOCL took to mixing single-use plastic with bituminous concrete to make roads.[113] Similarly, PepsiCo also reports leveraging its R&D to create compostable plastic.[114] While plastic waste management is a predominant approach to improve sustainability in the industry, lack of organised procedures, especially in waste collection, has hindered its successful implementation. Similarly, absence of regulatory measures around recycling and reusing in operational waste, like those around EPR, has further slowed down progress in these approaches.

Energy recovery or co-processing from both hazardous and non-hazardous waste was found to be another approach to solid waste management, among the industries studied. Particularly in the agriculture and allied businesses, co-processing was reported by several businesses where plastic waste and horticulture waste was co-processed for heat or energy. While 11% of businesses report in-premises co-processing facilities, businesses also report collaborations to co-process their waste as well (discussed subsequently).

The Asia-Pacific region is the fastest-growing market for waste to energy, with China and India potentially being the biggest contributors. While the potential for converting solid waste to energy is 1.5 GW in India, only 2% of the total capacity has been accessed.[115] One of the foremost reasons behind a low adoption rate in India has been poor segregation and waste collection practices, which leads to higher costs and inefficient conversion procedures. For example, incineration of hazardous waste can also release GHG and cause potential health risks.[116] Consequently, more research and investments towards making sustainable co-processing the norm are imperative.In addition to utilising these different interventions, businesses also reported adopting policies such as zero waste to landfill. Interventions like these are not widely adopted by businesses as they involve multiple stakeholders, and can be challenging to execute.[117]

Only 13% of all the activities reported in this study were mapped to a "zero waste to landfill" policy. Furthermore, the FMCG industry was found to be the most active adopter of this intervention, with over 44% of all activities classified under it. For example, P&G India managed to reduce the dumping of its manufacturing scraps to landfill by shredding and compressing them into wall partitions for offices.[118] Using a multifaceted approach of conducting internal audits, streamlining segregation and classification processes and prioritising reusing and recycling over dumping, businesses across the country can look to reduce their harmful contributions to waste landfills and progressively move towards zero dumping.[119]

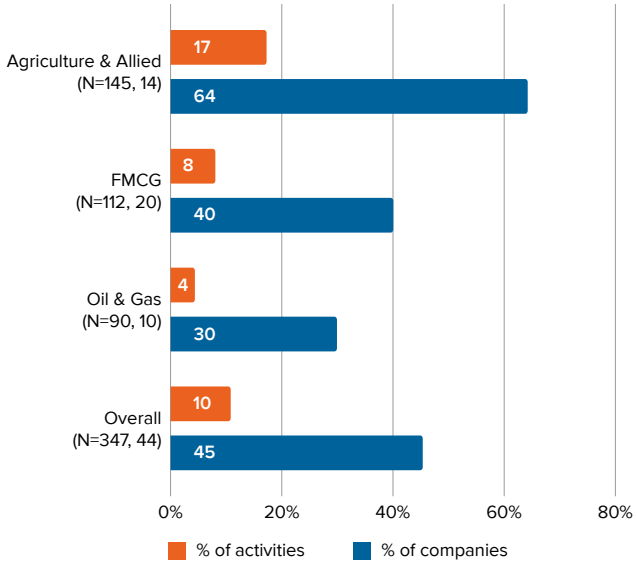


Figure 28: Mapping of interventions and companies reporting in "solid waste management"[120]

While interventions like co-processing can be cost-intensive, other interventions like practising segregation at source in plants can be a low-hanging fruit for businesses. Similarly, redesigning logistics, both within the plants and in supply chains, can help in the reduction of the consumed fuel, further leading to a less wasteful value chain. Businesses also report local sourcing as an effective and low-cost strategy to reduce wastage of raw materials and fuel.

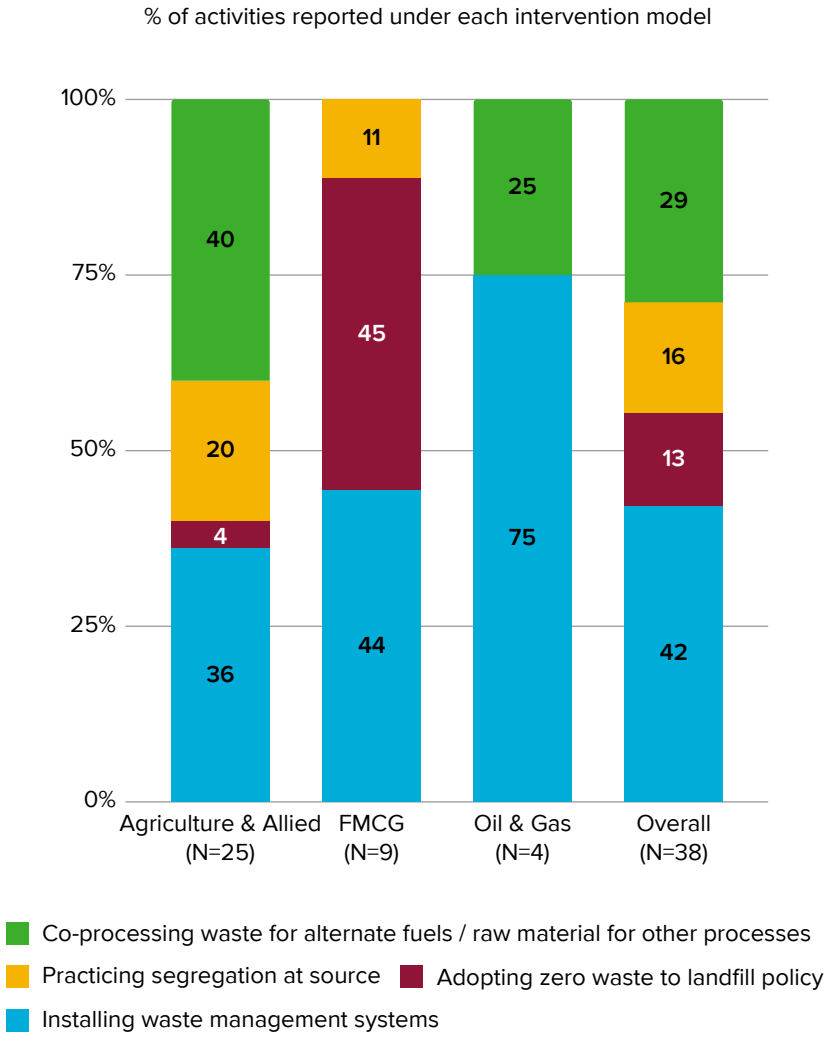


Figure 29: Mapping of interventions in each intervention in "solid waste management" [121]


Photo: UNDP India

2.4.1 MAKING OWN OPERATIONS MORE SUSTAINABLE[112]

Intervention	Benefits	Limitations	Policy Incentives
Installing waste management systems	• Full transparency • Eliminating the cost of unnecessary collection • Reducing the organisation's carbon footprint • Improving process efficiency	• Return on investment is not perceived to be quite high • Fails in the absence of proper segregation • High technical dependence can cause user errors	
Practising segregation at source	• Low-hanging fruit in terms of technology innovation • Saves time spent in re-segregation • Creates multiple opportunities for reuse and recycle	• Absence of a national level framework	**Regulation:** The SWM rules of 2016 mandate waste segregation at source and put local bodies in charge of proper segregation
Adopting zero waste to landfill policy	• Lowered ground percolation through landfills • Low-hanging fruit in terms of resources required	• Storing and disposing of the collected waste can be costly • Incinerating the collected waste can cause environmental damage	
Co-processing waste for alternate fuels / raw material for other processes	• Added benefit of reducing GHG emissions • Reduced burden on treatment, storage and disposal facilities • Reduced use of fossil fuels • Reduced energy costs	• Fails in the absence of proper segregation • Environmental damage from incineration is likely	**Regulation:** CPCB's HWM rules 2016 list co-processing as one of the steps to be taken by industries that produce HW

Figure 30: Details on intervention implemented in one's operations under "solid waste management"

2.4.2 LEVERAGING BUSINESS FUNCTIONS TO CREATE SHARED VALUE

Extended Producer Responsibility

Extended Producer Responsibility (EPR) is among the foremost examples of businesses leveraging their businesses operations to create societal good. EPR holds companies that sell plastic packaging accountable for collection and treatment of post-consumer plastic waste. While the legislative mandate for EPR has been around since 2011, effective implementation continues to be a challenge. Although recollection efforts under EPR are being implemented, work on recycling the recollected waste has been limited.[124] One of the foremost reasons for this has been the highly informal nature of the waste collection industry in India, which results in gaps in the entire chain of processes.[125] Businesses, however, can be seen driving efficiency in their EPR role by leveraging different collaborations. For instance, under their "going circular" programme, Coca Cola India plans to cover over 50 cities under their extended producer responsibility plan. By working with the UNDP, the company aims to establish efficient collaborations with citizen communities, central and state pollution control boards and urban development departments to ensure proper collection mechanisms.[126] Similarly, PepsiCo India is also working actively with waste collection companies, rag picker networks, and bulk consumers to ensure 100% EPR by 2021.[127]

Hindustan Unilever Limited (Leveraging R&D to improve the recyclability of packaging content)
Under Unilever Sustainable Living Plan 2017, innovations in packaging techniques led to to reduction in the use of plastic, resulting in reduced waste generated due to polymer by 1,700 tonnes in that year. Similarly, through optimising material usage in product manufacturing and distribution, HUL was able to save 1,300 tonnes of paper across categories and 95 tonnes of glass in the Foods category.[129]

Figure 31: Caselets highlighting creating shared value in "solid waste management"

R&D to reduce waste:
Another shared value approach towards sustainable waste management was found in R&D projects taken up by different companies. R&D in solid waste management usually covered modifications in one's packaging operations, either through improving the packaging material or the involved processes. For example, PepsiCo India with the help of a charge compaction technology - packs its snacks in smaller bags, hence achieving a reduction in the used plastic. Similarly, under its "Beyond the Plastics" approach, the company is working towards developing biodegradable packaging, which would significantly impact the amount of plastic packaging required.[130]

Marketing and communication to raise awareness:
Because of the lack of an organised waste collection industry, segregation at source has become paramount to ensure proper management of municipal solid waste.[131] In light of this, many businesses have assumed the responsibility to raise awareness in communities that they work in. For example, ITC's "Well-being Out of Waste" initiative aims to train waste workers and rag pickers in proper waste collection practices. The company also manages door-to-door waste collection services, encouraging households to take an active part in segregation at source.[132] The use of marketing campaigns to convey corporate interest towards managing plastic waste has also been a popular practice.

2.4.3 INITIATING COLLABORATIONS TO ACHIEVE SUSTAINABILITY

Collaborations have proven critical for businesses to ensure the success of their waste management strategies, some commonly occurring types of collaborations are the following.

Inter-industry co-processing:
Businesses with large-scale operations are observed as collaborating to facilitate sharing of waste material that could potentially serve as input for the other business or be used for heat or energy generation. HUL, for instance, shares its waste products with ACC's cement plants to be used as fuel.[133] and PepsiCo India has been working to share its multi-layered packaging (MLP) waste with cement kilns and road construction businesses.[134]

Civil society collaborations:
Partnerships with civil society organisations are predominantly aimed towards facilitating effective EPR by working with waste collection networks, nonprofits and municipal bodies.

These collaborations are also used to generate awareness among business' consumer groups, through alliances with NGOs, civil society organisations, and others. For instance, Coca Cola India has worked with Sampurn(e)arth Environment Solutions Pvt. Ltd. and Varanai, a nonprofit, to strengthen government machinery and make people more aware of waste segregation practices.[135]

PepsiCo (Forging partnerships to advocate and enable ecosystem)
Through a partnership with NEPRA, a waste management firm, PepsiCo India works with over ten schools to encourage students to collect and deposit MLP waste in their schools. The collected waste is sent to cement plants for co-processing and recovery. The company also succeeded in using inter-school collaboration to create community-based interventions for achieving sustainable waste management.[136]

Figure 32: Caselets highlighting best practices in initiating collaborations in "solid waste management"

2.5 DIVERSITY AND INCLUSION (D&I)

Even though gender parity at work can potentially boost India's GDP by 27%, there is a lack of targeted interventions to achieve this potential. Analysis by a D&I consulting firm reveals that women's representation in FMCG companies in India in 2020 was only 20%.[138] A similar analysis of the IT-BPM industry showed that only 34% of employees in the industry were women.[139]

Typical interventions observed as part of D&I strategy were sensitisation training, formation of employee resource groups and aligning HR policies to meet compliance requirements. However, most of these interventions focused on gender as their area of D&I work. D&I is a multifaceted issue, potentially dealing with inter-alia, race, ethnicity, caste, age and sexual identity. Yet this nuance is visibly missing from the landscape of D&I interventions observed in the study. For example, India Responsible Business Index (IRBI) 2016 revealed that only 41% of the BSE top-100 companies identified women as a "vulnerable group" in the area of career advancement. This number fell further for other marginalised groups, like scheduled castes at 33%, sexual minorities at 23%, and scheduled tribes at 15%.[140] Additionally, while 100% of the companies disclosed disaggregated data on the presence of women in their boards, none of the companies did so for other marginalised groups.[141]

Only 9.8% of the activities reported as 'own operations' across the three industries were targeted at D&I. Over 70% of these activities were found to be reported by MNCs with foreign headquarters. Only the remaining 30% were reported by home-grown businesses. MNCs demonstrated more nuanced D&I commitments, mostly because of higher focus on the issue and the targets set in their global charters.[142] The focus on supporting the LGBTQI community, for instance, was observed only among the foreign MNCs. Amidst the businesses that report D&I interventions, the two most popular ways were implementing "more equitable policies," such as gender-neutral benefits and progressive leave policies or through constituting employee resource groups. Predominance of compliance-driven interventions in the D&I strategies indicate that there is scope for extensive opportunities in this domain. For instance, reintegration programmes for returning mothers, correcting unconscious bias among hiring teams, taking the D&I agenda to the shopfloor and beyond corporate offices / headquarter cities are some possible next steps for businesses in India.

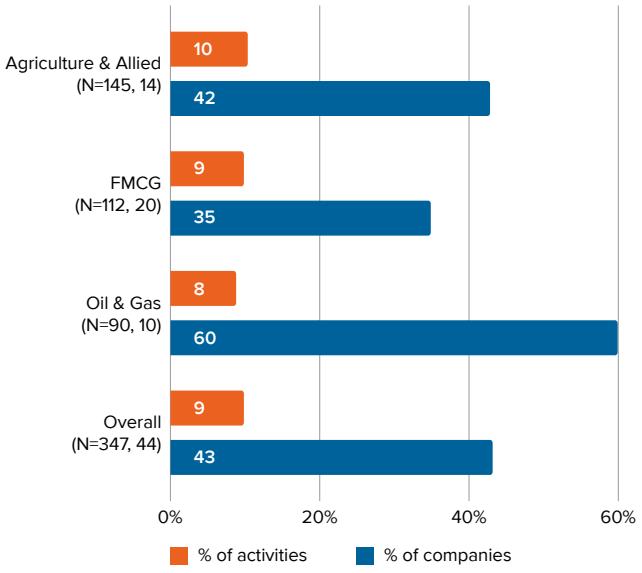


Figure 33: Mapping of interventions and companies reporting in "D&I"[133]

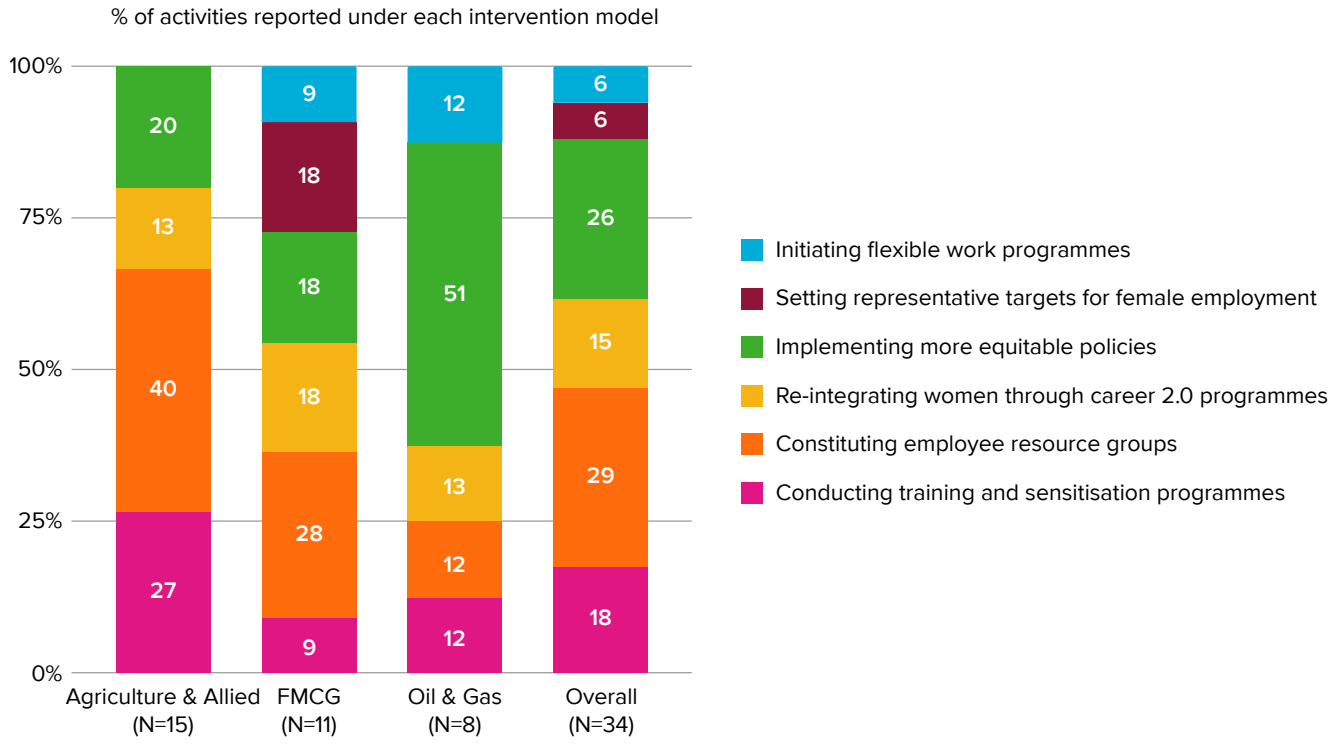


Figure 34: Mapping of interventions in each intervention in "D&I" [144]

2.5.1 MAKING OWN OPERATIONS MORE SUSTAINABLE[145]

Intervention	Benefits	Limitations	Policy Incentives
Constituting employee resource groups	• Helps sensitisation using low-cost measures • Provides support and enables opportunities to "vulnerable" groups	• Highly dependent on leadership buy-in • Requires a substantial attitude shift in the organisation	
Initiating flexible work programmes	• Reduced environmental impact • Can improve employee engagement, specifically in a diverse workforce	• Highly dependent on leadership buy-in • Requires a substantial attitude shift in the organisation • Not easily replicable across all natures of work	
Re-integrating women through career 2.0 programmes	• Improves exposure to a non-traditional talent pool of women returning to work	• Requires a substantial attitude shift in the organisation • Lack of India-centric research	**Regulation:** The Maternity Benefit (Amendment) Act legalises paid maternity leave for 6 months.
Implementing more equitable policies	• Improved hiring in terms of employee talent	• Upfront capital costs • Execution can bear high short-term costs • Lack of progressive legislation	
Conducting training and sensitisation programmes	• Low-hanging fruit in terms of financial investment	• Highly dependent on leadership buy-in • Requires a substantial attitude shift in the organisation • Highly time and money-intensive	
Setting representative targets for female employment	• Substantial improvement in organisational diversity	• Highly dependent on leadership buy-in • Requires a substantial attitude shift in the organisation • Can create a perception of "reverse-discrimination"	**Regulation:** The Companies Act 2013 and the SEBI Regulations 2015 mandate presence of women directors in certain types of companies

Figure 35: Details on interventions implemented in one's operations under "D&I"

2.5.2 ENABLING AND ENSURING SUSTAINABILITY ACROSS THE SUPPLY CHAIN

While improving diversity in one's own operations receives some attention, engaging with D&I across one's supply chain has seen limited uptake. The only notable example is the work taken up by FMCG and agriculture and allied businesses among women farmers constituting their upstream supply chains, in areas such as financial resilience and skill development.

Nestle (Conducting training sessions)
Through Nestle's Village Women Dairy Development Project in India, the organisation aims to empower 60,000 rural women by training them on farm milk collection, automation, digitalization and agripreneurship. To further empower these women, Nestle has also designed a gender assessment tool to help their agricultural team understand the issues affecting gender equality in Indian dairy farming and build and implement appropriate interventions.[146]

Figure 36: Caselets highlighting best SSC practices in "D&I"

2.5.3 LEVERAGING BUSINESS FUNCTIONS TO CREATE SHARED VALUE

Cause-based marketing:
Businesses, especially FMCGs, could be noted as engaging in cause-based marketing, highlighting the need for gender equality and women's rights. While cause-based marketing is a relatively new phenomenon among Indian businesses, its benefits have been known for decades. For example, along with providing "appearance-based" advantages to the businesses, these interventions are also noted to galvanise monetary support for a range of causes.[147]

Gender-focused CSR efforts:
Several businesses report women empowerment as an area of focus for their CSR efforts. Between 2014 and 2019, over INR 1000 cr of total CSR funds in India were made available for gender equality and over INR 630 cr were spent on education and skill development for people with disabilities.[148] For example, Godrej Consumer Products set up a project to identify and train unemployed women and youth in entrepreneurship skills to ensure a stable livelihood for them.[149]

P&G (Consumer advocacy to highlight gender equality issues)
In a video series for their #TouchOfCare campaign, Vicks casts a compassionate spotlight on transgender activist Gauri Sawant, challenging conventional thinking about what it means to be a caring mother.[150]

Figure 37: Caselets highlighting best practices in creating shared value in "D&I"

2.6 OPPORTUNITIES FOR DECENT WORK AND GROWTH

For the purpose of this study, opportunities for decent work and growth are defined as interventions aimed at worker wellbeing, in terms of their health and safety, opportunities for professional growth, and presence of grievance redressal systems for them.

These interventions take the form of installing proper accident protection and disaster management procedures, conducting health checkup camps for employees, creating a progressive employee health and safety policy, providing appropriate Learning and Development (L&D) training to employees, among others.This section also looks at interventions that have created opportunities for decent work through core-business sustainability efforts, among the communities where these businesses work or for the society at large.

Employee training was observed to be a consistent part of business interventions, as there is a business case for it. Studies suggest that returns from a highly trained employee can even exceed 200% of the employee's annual salary.[151] Similarly, trained employees are also likely to "display higher self-regard and sociability".[152]

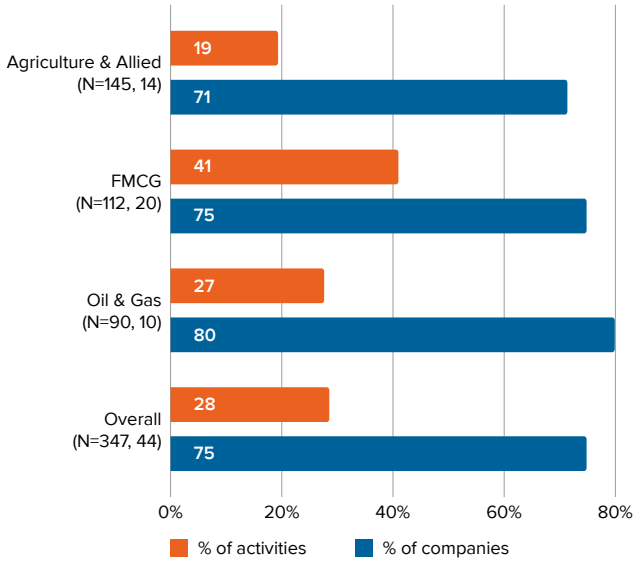


Figure 38: Mapping of interventions and companies reporting in "opportunities for decent work and growth"[153]

Within opportunities for decent work and growth, "training on future skills" and "constructing comprehensive employee health and safety policy" were the most focussed interventions. Apart from these, the presence of "setting up reward and recognition programmes" for employees also featured in about 5% of all reported activities in this domain.

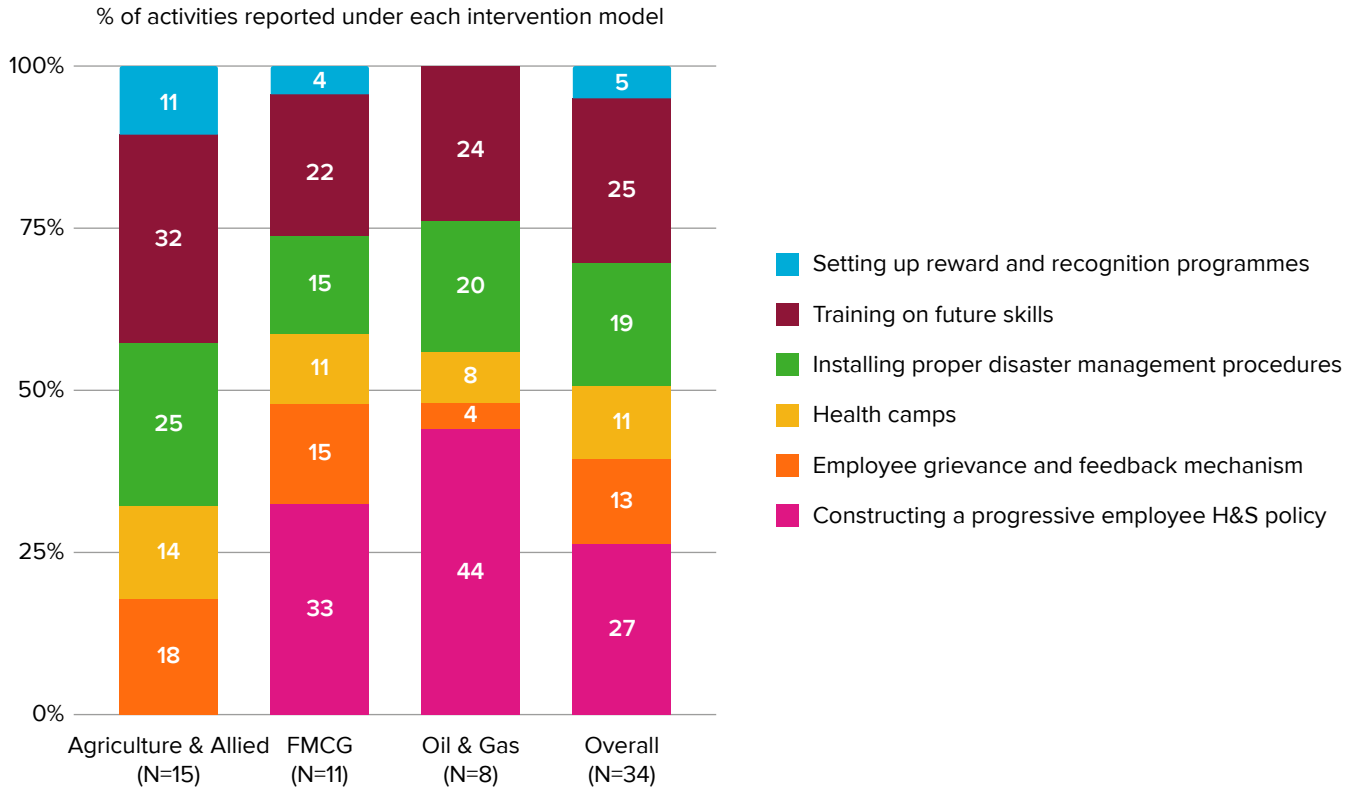


Figure 39: Mapping of interventions in each intervention in "opportunities for decent work and growth"[154]

2.6.1 MAKING OWN OPERATIONS MORE SUSTAINABLE[155]

Intervention	Benefits	Limitations	Policy Incentives
Constructing Employee H&S policy	• Increased productivity • Reduced risk of workplace injuries	• Highly dependent on leadership buy-in • Requires a substantial attitude shift in the organisation	
Installing proper disaster management procedures	• Increased productivity • Reduced risk of workplace injuries	• Requires better implementation of existing laws	**Regulation:** The presence of "Employees' State Insurance Act, 1948" and the "Employees' Compensation Act, 1923" encourages companies to reduce workplace injuries and illnesses
Training on future skills	• Can improve employee engagement • Can improve employee retention and growth • Improved employee performance	• Highly dependent on leadership buy-in • Requires a substantial attitude shift in the organisation • Fails to address systemic problems	
Employee grievance and feedback mechanism	• Increased transparency in the organisation • Reduced investments in finding workplace problems	• Highly dependent on leadership buy-in • Requires a substantial attitude shift in the organisation	
Setting up reward and recognition programmes	• Can improve employee engagement • Increased teamwork and collaboration • Improved hiring in terms of employee talent	• Highly dependent on leadership buy-in • Requires a substantial attitude shift in the organisation	
Health camps	• Improved inter-employee relationships • Increased productivity • Reduced risk of workplace injuries	• Requires a substantial attitude shift in the organisation	**Regulation:** The presence of "Employees' State Insurance Act, 1948" and the "Employees' Compensation Act, 1923" encourage companies to reduce workplace injuries and illnesses

Figure 40: Details on interventions implemented in one's operations under "opportunities for decent work and growth"

2.6.2 ENABLING AND ENSURING SUSTAINABILITY ACROSS THE SUPPLY CHAIN

Limited instances were noted of businesses driving "opportunities of decent work and growth" among its supply chain, despite workers at the bottom of the supply chain exposed to severe occupational and ergonomic risks.[156] While businesses evoke guidelines on issues such as fair wage and child labour in its supplier code, following through on them and maintaining visibility beyond their tier 1 suppliers on these issues is a challenge.[157]

Sourcing locally:
Sourcing locally has been shared by the sampled businesses as a way to improve the economic growth of the geographies they work in. Businesses can be seen providing the technical know-how and the financial support to its upstream suppliers to source products locally and responsibly. For example, as part of Colgate's responsible sourcing strategy, the company initiated a partnership with Rainforest Alliance, an international non-profit organization, to develop a commodity-specific policy for sustainable sourcing of pulp and paper. Local sourcing is said to benefit businesses and local communities by re-localising supply chains, thereby increasing their traceability and accountability; Increasing viability of local businesses and jobs thereby stabilising local economies; and reducing costs in global transportation resulting in creation of greener economies.[158]

Reliance Industries Limited	**Reliance Industries Limited** (Sourcing locally) Reliance Industries Limited procures goods and services (non-crude/non-feedstock) worth over INR 14,070 crore from indigenous suppliers. Through sustained investments in mega projects and operations, it contributes towards developing the country's chemicals and engineering supplier base. Today, leading Indian engineering companies, raw material companies and industrial goods companies are their long-term vendor partners.[159]
Unilever	**Hindustan Unilever Limited** (Sourcing locally) In 2017, over 52% of tea at HUL was sourced from sustainable sources in India, with a goal to reach 90-100% sourcing by the end of 2020. Moreover, over 500,000 plantation workers, 56% of whom are women, and 40,000 smallholders are verified under Trustea code. Similarly, 100% of tomatoes used in Kissan ketchup are sources sustainably. The Public Private Partnership (PPP) between HUL and Maharashtra government, started in 2012 for sustainable sourcing of tomatoes, became self-sustainable by 2015. Along with a buy-back guarantee for their produce, HUL also offers farmers knowledge and expertise in sustainable agriculture practices in tomato cultivation.[160]

Figure 41: Caselets highlighting best SSC practices in "opportunities for decent work and growth"

2.6.3 LEVERAGING BUSINESS FUNCTIONS TO CREATE SHARED VALUE

Providing extension services to farmers:
Sattva's analysis of the three industries revealed that over 35% of interventions under "creating shared value" pertain to "opportunities for decent work and growth." Providing extension services to farmers was a predominant shared value intervention undertaken by businesses, especially in the agriculture and allied sector.[160] These extension services are often led by the marketing or communication teams of the businesses and in some instances also driven through the business's CSR. United Phosphorus Limited (UPL), for instance, has set up a remote advisory contact centre for farmers in India called "Unimart" that provides expert advice to farmers and also provides them with on-ground support, if required.

ITC Limited	**ITC** (Providing extension services to farmers by leveraging marketing and communication functions of the business) The ITC e-Choupals are designed to deliver enhanced value to all participants in ITC's value chain, including farmers, by leveraging the power of Information Technology. With a judicious blend of click and mortar capabilities, ITC e-Choupals have triggered a virtuous cycle of higher productivity, higher incomes, enhanced capacity for farmer risk management, larger investments and better quality of produce.[161]

Figure 42: Caselets highlighting best practices in creating shared value in "opportunities for decent work and growth"

WAY FORWARD

Photo: UNDP India

COVID-19 AND CHANGING CONTEXT FOR SUSTAINABILITY

The COVID-19 pandemic has caused extensive disruptions to businesses world over. Absence of visibility beyond one's Tier 1 supply chain prevented businesses from preempting the shocks caused by the pandemic. Lack of social context on businesses's different stakeholders namely, workers, consumers, local communities, meant that they could not cater to their needs effectively.

The pandemic also highlighted the lack of global collaborations between countries and industries, which led to the absence of concerted effort from all the stakeholders.[162] On the other hand, businesses that had integrated sustainability in their core strategy felt that they were better equipped to weather the challenges because "(they) were taking a stakeholder perspective that looked beyond investors to examine their relationships in all spheres, improving their visibility into the impact and preparing them to respond more quickly and effectively."[163]

While the pandemic created existential threats for businesses world over, and in the short-run is expected to reverse the progress on business sustainability, it has also been argued that it is likely to be a source of long-term tailwind[164] for the following reasons:

Investors see an opportunity in the pandemic to strengthen the ESG agenda:
Investors are keen to view the pandemic as an opportunity to strengthen the cause of sustainable investing. A JP Morgan survey among investors reveals that in the wake of the pandemic, awareness and action for issues such as climate change and biodiversity losses should accelerate.[165] Investor action is already being galvanised, for instance, Global Investors for Sustainable Development (GISD), an alliance comprising investors and companies worth USD 16 trillion, pledged "to promote COVID-19 response and recovery that integrates sustainability and resilience".[166]

Attitudinal shift among consumers:
Surveys gauging consumer sentiments, both in the Indian context and globally, attest to a marked shift among consumers towards embracing sustainability. In a consumer survey by BCG, 90% of consumer respondents said they were equally or more concerned about these issues after the COVID-19 outbreak, and nearly 95% said they believed their personal actions could help reduce unsustainable waste, tackle climate change, and protect wildlife and biodiversity.[167]

Attitudinal shift among businesses:
There is an increased acknowledgement among businesses for the need to create resilience among them to withstand COVID-19-like situations. More than 220 Dutch companies have pledged support to take sustainability as a cornerstone in COVID-19 recovery plans at both a national and European level.[168]

LOW HANGING (SUSTAINABILITY) FRUIT FOR BUSINESSES

The SDGs have created a unifying language to understand the sustainability challenges that face us. Businesses, governments and civil society agents rely on them as a framework to guide their actions. In India, NITI Aayog has not only centred its key strategies around SDGs, but also enabled and encouraged a market-wide adoption of the framework.

This report, titled, **"Business Alignment to SDGs in India,"** is an effort to understand the current alignment of businesses' sustainability efforts with SDGs, particularly, in the industries of Agriculture and Allied, FMCG, and Oil and Gas, and triangulate the approaches and interventions that enable businesses to pursue their sustainability objectives.

While the report captures interventions across the board, the table below highlights interventions that could be especially useful to businesses new to a sustainability journey. Furthermore, the detailed report can help all the businesses in further structuring and strengthening their sustainability approaches to get the most optimal forms of returns.

The insights presented in this study can also contribute towards designing appropriate policy and government incentives so as to encourage more businesses to contribute towards the gaps in the Indian sustainability ecosystem.

Areas of Impact	Broad Approaches			
	Making own operations sustainable	Ensuring and enabling sustainable practices across the supply chain	Leveraging business functions to create shared value	Initiating collaborations to achieve sustainability outcomes
EMISSION CONTROL AND ENERGY MANAGEMENT	• Conducting internal energy audits to understand patterns in energy usage and potential avenues to integrate energy efficiency • Investing in energy management systems to monitor energy use	• Establishing supplier codes of conduct to upfront set sustainability related expectations with suppliers • Conducting training and interactive sessions with own suppliers and passing on one's own sustainability best practices	• Leveraging the marketing function to embed relevant messaging • Signing up for disclosure projects, sustainability toolkits and reporting frameworks like CDP	• Setting up buyers' collaboratives to lobby with suppliers to adopt sustainability • Partnering with municipalities, ULBs and RLBs to improve on-ground implementation
WATER STEWARDSHIP	• Conducting water risk audits • Charting a roadmap to improve internal water security • Investing in water management systems		• Leveraging the marketing function to embed relevant messaging • Leveraging CSR for creating water resource management infrastructure such as check dams, rain water harvesting structures to be co-owned with the community • Signing up for disclosure projects, sustainability toolkits and reporting frameworks like CDP and AWS	
SOLID WASTE MANAGEMENT	• Practicing segregation at source • Investing waste management systems		• Leveraging the marketing function to embed relevant messaging • Drive effectiveness in one's EPR implementation	
DIVERSITY AND INCLUSION	• Create employee resource groups for marginalised communities and creating ownership among them to drive the agenda		• Leveraging the marketing function to embed relevant messaging	
OPPORTUNITIES FOR DECENT WORK AND GROWTH	• Improving grievance redressal mechanisms at plants • Ensuring full compliance with all applicable regulations		• Sourcing locally	

Figure 43: Achievable goals and opportunities across all overarching approaches and focus areas

ANNEXURES

LIST OF BUSINESSES ANALYSED FOR THE STUDY

BUSINESS	INDUSTRY	SOURCE
BASF	Agriculture and Allied	Sustainability report (2018)
Bayer	Agriculture and Allied	Sustainability report (2019)
Chambal Fertilisers and Chemicals Limited	Agriculture and Allied	Sustainability report (2015-16)
Dhanuka Agritech Limited	Agriculture and Allied	Sustainability report (2019)
DuPont	Agriculture and Allied	Sustainability report (2018)
Godrej Agrovet Limited	Agriculture and Allied	Business responsibility report (2017-18)
Jain Irrigation systems	Agriculture and Allied	Sustainability report (2016)
Jubilant Industries	Agriculture and Allied	Sustainability report (2018-19)
Mahindra & Mahindra Limited	Agriculture and Allied	Sustainability report (2017-18)
Meghmani Organics Limited	Agriculture and Allied	Sustainability report (2019)
Monsanto	Agriculture and Allied	Sustainability report (2017)
NACL Industries Limited	Agriculture and Allied	Online sustainability portal
PI industries Limited	Agriculture and Allied	Progress update (2018-19)
Syngenta Global	Agriculture and Allied	Sustainability report (2018)
Tata Chemicals Limited	Agriculture and Allied	Sustainability report (2019)
United Phosphorus Limited	Agriculture and Allied	Sustainability report (2017-18)
Arvind Limited	FMCG	Sustainability report (2016-17)
Coca Cola India Private Limited	FMCG	Sustainability report (2017-18)
Colgate	FMCG	Sustainability report (2017)
Godrej Consumer Products Limited	FMCG	Sustainability report (2017-18)
Grasim Industries Limited	FMCG	Sustainability report (2018-19)
Hindustan Unilever Limited	FMCG	Progress update (2017)
ITC	FMCG	Sustainability report (2018)
Johnson & Johnson	FMCG	Sustainability report (2018)
Marico	FMCG	Sustainability report (2018)
Mondelez International	FMCG	Sustainability progress update (2018)
Nesco	FMCG	Online sustainability portal
Nestle	FMCG	Sustainability report (2018)
P&G	FMCG	Sustainability report (2019)
Page industries	FMCG	Sustainability report (2018-19)

LIST OF BUSINESSES ANALYSED FOR THE STUDY

BUSINESS	INDUSTRY	SOURCE
PepsiCo	FMCG	Sustainability report (2018)
Pernod Ricard	FMCG	Online sustainability portal
Piramal Pharma Solutions	FMCG	Progress update (2018)
Sutlej Textiles	FMCG	Online sustainability portal
Tata Consumer Products Limited	FMCG	Online sustainability portal
United Spirits Limited	FMCG	Sustainability report (2019)
Cairn India Limited	Oil and Gas	Online sustainability portal
Castrol	Oil and Gas	Annual report (2019)
Gulf Oil	Oil and Gas	Annual report (2018-19)
Indraprastha Gas	Oil and Gas	Annual report (2018-19)
Indian Oil Corporation Limited	Oil and Gas	Sustainability report (2018-19)
L&T Hydrocarbon	Oil and Gas	Sustainability report (2017)
Lubrizol	Oil and Gas	Sustainability report (2017)
ONGC	Oil and Gas	Sustainability report (2018)
Petronet LNG	Oil and Gas	Sustainability report (2015-16)
Reliance Industries Limited	Oil and Gas	Sustainability report (2017-18)

LIST OF INTERVIEWS AND RESPONDENTS

ORGANISATION	NAME
ERM	Aniket Jalgaonkar
WWF	Anjana Shanmugavel
Samana centre	Aparna Mittal
WWF	Ayush Sharma
WWF	Bhavna Prasad
Arghyam	Bishwadeep
WRI India	Chirag Gajjar
UNGCI	Pooran Pande
Independent Consultant	Tarunima Bajpai
Interweave Consultants	Ruchira Gokhale
Saahas	Wilma Rodrigues
Consultivo	Saikat Basu
WRI India	Samrat Basak
Shakti Foundation	Shubhashis
WRI India	Ulka Kelkar
Ckinetics	Upendra
Solaron	Vipul Agarwal
Shakti Foundation	Vivek Sen
Godrej Agrovet	Ramnath Vaidyanathan
PRI	Nishikant Singh
Pepsico	Juhi Gupta
Jubilant life sciences	Ritwik Bhaumik
Jain Irrigation	Atin Tyagi
Bayer	Suhas Joshi
PI Industries	Vijay Kumar Singh
Mahindra and Mahindra	Anirban Ghosh

ENDNOTES

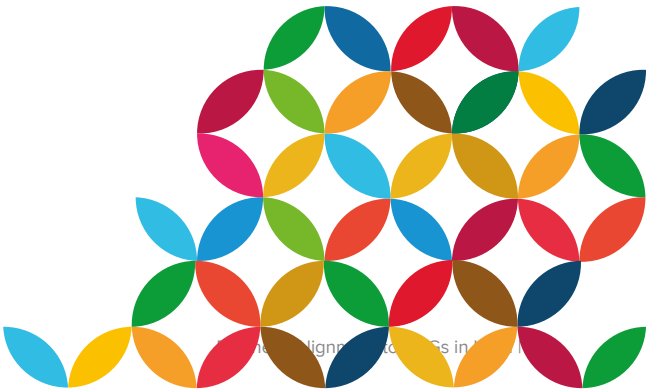
1. "UNDP launches standards to guide the private sector in achieving SDGs." United Nations Development Programme, September 2019. https://www.undp.org/content/undp/en/home/news-centre/news/2019/UNDP_launches_standards_to_guide_private_sector_in_achieving_SDGs.html
2. "2016 Global Sustainable Investment Review." 16. Global Sustainable Investment Alliance, 2017. http://www.gsi-alliance.org/wp-content/uploads/2017/03/GSIR_Review2016.F.pdf
3. "Insights from Sattva's secondary research." Sattva Consulting, Insights from Sattva's secondary research
4. Supra, note 3.
5. Supra, note 3.
6. Supra, note 3.
7. Supra, note 3.
8. Supra, note 3.
9. Supra, note 3.
10. Supra, note 3.
11. "Making Growth Inclusive." 32. Corporate Responsibility Watch, 2017. http://www.picindia.org/wp-content/uploads/Making-Growth-Inclusive-2016-Web-version.pdf
12. Supra, note 3
13. "Value of sustainability reporting." Ernst and Young, 2016. https://www.ey.com/Publication/vwLUAssets/EY_Value_of_Sustainability_Reporting/%24File/EY-Sustainability.pdf
14. Supra, note 2.
15. "ESG Investing Scenario in India." 44. Yes Bank, December 2019. https://www.yesbank.in/pdf/esg_investing_scenario_in_India
16. Supra, note 15 at 44.
17. Alves, G. "Majority Indians now purchase items based on social responsibility, inclusiveness and environmental impact." The Economic Times, August 2020. https://economictimes.indiatimes.com/magazines/panache/majority-indians-purchasing-based-on-social-responsibility-inclusiveness-and-environmental-impact/articleshow/77299600.cms
18. "The state of CSR in India." Sattva Consulting, July 2020. https://www.indiadatainsights.com/product/the-state-of-csr-in-india-2014-19/
19. "Sustainability risks and opportunities report." 3. Deloitte, Accessed August 18, 2020. https://www2.deloitte.com/content/dam/Deloitte/in/Documents/risk/Board%20of%20Directors/in-gc-sustainability-risks-and-opportunities-report-noexp.pdf
20. Whelan, T., Zappa, B., Zeidan, R. and Fishbein, G. "How to Quantify Sustainability's Impact on Your Bottom Line." Harvard Business Review, October 2017. https://hbr.org/2017/09/how-to-quantify-sustainabilitys-impact-on-your-bottom-line
21. Heugh, K. and Fox, M. "ESG and the Sustainability of Competitive Advantage." 2. Morgan Stanley, 2018. https://www.morganstanley.com/im/publication/insights/investment-insights/ii_esgandthesustainabilityofcompetitiveadvantage_en.pdf
22. "Insights from Sattva's expert Interviews." Sattva Consulting, Insights from Sattva's expert Interviews
23. Soytas, M.A. "Does being international make companies more sustainable? Evidence based on corporate sustainability indices." Central Bank Review, June 2018. https://www.sciencedirect.com/science/article/pii/S1303070118300246
24. Haines, L. "5 reasons why your company should respond to CDP." EcoAct, March 2017. https://eco-act.com/sustainability/5-reasons-why-your-company-should-respond-to-cdp/
25. Sengupta, R. "Investors accuse 22 Indian firms for hiding environmental impact." DownToEarth, June 2019. https://www.downtoearth.org.in/news/climate-change/investors-accuse-22-indian-firms-for-hiding-environmental-impact-65180
26. "Treading Water: Corporate Responses to Rising Water Challenges." CDP, 2019. https://6fefcbb86e61af1b2fc4-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/004/232/original/CDP_Global_Water_Report_2018.pdf?1554392583
27. "Sustainable Development Goals: Blueprint for Action." 5. Global Compact Network of India, 2018. https://www.globalcompact.in/uploads/knowledge-center/1529487387GCNI%20Accenture%20CEO%20Study%20India%202018.pdf
28. "SDG India: Index and Dashboard." NITI Aayog, 2020. https://niti.gov.in/sites/default/files/2020-07/SDG-India-Index-2.0.pdf
29. "India-CII." SDG Business Hub, Accessed August 18, 2020. https://sdghub.com/india-cii/
30. Keegan, K. "COVID-19: Operations and supply chain disruption." PwC, 2020. https://www.pwc.com/us/en/library/covid-19/supply-chain.html
31. Chilkoti, A. "Water shortage shuts Coca-Cola plant in India." Financial Times, June 2014. https://www.ft.com/content/16d888d4-f790-11e3-b2cf-00144feabdc0
32. "Future of Supply Chains 2025." BSR, Accessed August 11, 2020. https://www.bsr.org/en/our-insights/primers/future-of-supply-chains-2025
33. "Making Global Goals Local Business." 5. United Nations Global Compact, April 2017. https://d306pr3pise04h.cloudfront.net/docs/about_the_gc%2FMakingGlobalGoalsLocalsBusiness2017.pdf
34. "Business and the SDGs." 7. World Business Council for Sustainable Development, July 2018. https://docs.wbcsd.org/2018/07/WBCSD_Business_and_the_SDGs.pdf
35. "Why Sustainable Development Goals should be in your business plan." Ernst and Young, March 2017. https://www.ey.com/en_gl/assurance/why-sustainable-development-goals-should-be-in-your-business-plan
36. Supra, note 34 at 7.
37. "Sustainable Development Goals: Linkages with corporate actions in India." 18. FICCI, March 2018. http://ficci.in/spdocument/22950/Sustainable-Development-Goals-ficci.pdf
38. Supra, note 3.
39. Supra, note 3.
40. Supra, note 3.
41. "A Guide To SDG Interactions: From Space to Implementation." International Council for Science, May 2017. https://council.science/wp-content/uploads/2017/05/SDGs-Guide-to-Interactions.pdf
42. Nilsson, M. "Important interactions among the Sustainable Development Goals under review at the High-Level Political Forum." Stockholm Environment Institute, May 2017. https://mediamanager.sei.org/documents/Publications/SEI-WP-2017-06-Nilsson-SDG-interact-HLPF2017.pdf
43. Rogers, M. "6 Benefits of Becoming a Sustainable Business." Environmental Leader, March 2016. https://www.environmentalleader.com/2016/03/6-benefits-of-becoming-a-sustainable-business/
44. "The state of sustainable supply chains." 38. Ernst and Young, 2016. https://www.ey.com/Publication/vwLUAssets/EY-building-responsible-and-resilient-supply-chains/$FILE/EY-building-responsible-and-resilient-supply-chains.pdf
45. Supra, note 44 at 4.
46. Kramer, M.R. and Pfitzer, M.W. "The Ecosystem of Shared

Value." Harvard Business Review, October 2016. https://hbr.org/2016/10/the-ecosystem-of-shared-value
47. Supra, note 3.
48. "Climate Change Could Depress Living Standards in India, says New World Bank Report." World Bank, June 2018. https://www.worldbank.org/en/news/press-release/2018/06/28/climate-change-depress-living-standards-india-says-new-world-bank-report
49. Supra, note 48.
50. Timperley, J. "The Carbon Brief Profile: India." Carbon Brief, March 2019. https://www.carbonbrief.org/the-carbon-brief-profile-india
51. "Climate and Business: Partnership of The Future." 4. CDP, January 2020. https://6fefcbb86e61af1b2fc4-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/004/862/original/CDP_India_Report_2019.pdf?1584010372
52. Supra, note 3.
53. "Renewable Energy Demand in India." WWF, 2019. http://awsassets.wwfindia.org/downloads/wwf_india_renewable_energy_demand_in_india.pdf
54. Supra, note 53 at 1.
55. Supra, note 53 at 10.
56. Kruger, C., Kicherer, A., Kormann, C. and Raupp, N. "Biomass Balance: An Innovative and Complementary Method for Using Biomass as Feedstock in the Chemical Industry." Designing Sustainable Technologies, Products and Policies, July 2018. https://link.springer.com/chapter/10.1007/978-3-319-66981-6_12
57. "BASF's biomass balance approach." BASF, Accessed September 16, 2020. https://www.basf.com/global/en/who-we-are/sustainability/we-drive-sustainable-solutions/circular-economy/mass-balance-approach/biomass-balance/biomass-balance.html
58. "Making Life Better for Everyone." 79. Reliance Industries Limited, 2018. https://drive.google.com/file/d/1YP9NhUiUIB4gs-scARBRo6CtuMUD0kXG/view?usp=sharing
59. "Sustainability Report 2018-19." 22. Indian Oil, 2019. https://drive.google.com/file/d/1lj2R3CDanr3Xi-azR5tbq02ihrJwIcnN/view?usp=sharing
60. "Right from the Roots." 49. Marico, 2018. https://drive.google.com/file/d/1Wjr8DfW_4riG0mzFcWr9aVRIGCMDQw1X/view?usp=sharing
61. "Balancing Growth with Sustainability." 22. Page Industries Limited, 2019. https://drive.google.com/file/d/1m6KSzg8N7Y9dDBxPBJy7aROw2cdGNhCe/view?usp=sharing
62. Gajjar, C. and Adhia, V. "Reducing Risk, Addressing Climate Change Through Internal Carbon Pricing." 2. WRI India, March 2018. http://wriorg.s3.amazonaws.com/s3fs-public/internal-carbon-pricing-primer_0.pdf
63. Supra, note 3.
64.
a. "Internal Carbon Pricing." Centre for Climate and Energy Solutions, Accessed August 27, 2020. https://www.c2es.org/content/internal-carbon-pricing/
b. Fuchs, H., Aghajanzadeh, A. and Therkelsen, P. "Identification of drivers, benefits, and challenges of ISO 50001 through case study content analysis." Energy Policy, July 2020. https://www.sciencedirect.com/science/article/pii/S0301421520301968
c. Lim, W.B., Yuen, E. and Bhaskar, A.M. "Waste-to-energy: Green solutions for emerging markets." KPMG, Accessed August 25, 2020. https://home.kpmg/xx/en/home/insights/2019/10/waste-to-energy-green-solutions-for-emerging-markets.html
d. "Sattva's expert and corporate interviews." Sattva Consulting, Sattva's expert and corporate interviews
65. Brickman, C. and Ungerman, D. "Climate change and supply chain management." 1. Mckinsey, July 2008. https://www.sallan.org/pdf-docs/clch08.pdf
66. "Rise for Good." 47. Mahindra and Mahindra, 2018. https://drive.google.com/file/d/1R_6adx7FvP5BfNuortQz1pL3VNF__Eyt/view?usp=sharing
67. "Insights from Sattva's corporate interviews." Sattva Consulting, Insights from Sattva's corporate interviews
68. Supra, note 67.
69. "R&D Conclave 2018: 'Shaping the future through R&D'." Federation of Indian Petroleum Industry, August 2018. https://fipi.org.in/Upload/Report_R&D_2018.pdf
70. "Climate Change: Sustainable Forestry." Tata Consumer Products, Accessed August 24, 2020. https://www.tataconsumer.com/sustainability/climate-change/the-initiatives/sustainable-forestry
71. "Annual Report 2018-19." 108. Piramal Enterprises Limited, 2019. https://drive.google.com/file/d/1ztCLxItek1hjCQfe7hOhv2bUafSFSq99/view?usp=sharing
72. Supra, note 59 at 17.
73. "BASF Report 2018." 75. BASF, 2018. https://drive.google.com/file/d/1gdCh0KsbyBP_gdN5nhAUEJOVz1O_Rbov/view?usp=sharing
74. Supra, note 67.
75. Supra, note 51 at 21.
76. "Mahindra and LG Chem collaborate for Li-ion battery technology." Mahindra and Mahindra, February 2018. https://www.mahindra.com/news-room/press-release/mahindra-and-lg-chem-collaborate-for-li-ion-battery-technology
77. "India's urban water crisis calls for an integrated approach." BASF, June 2017. https://www.basf.com/in/en/who-we-are/sustainability/future-perfect/stories/urban-water-crisis.html
78. "Water Use in Indian Industry Survey." 2. FICCI, September 2011. http://ficci.in/Sedocument/20188/Water-Use-Indian-Industry-Survey_results.pdf
79. Selvadaroy, L.J. "India must pay attention to water use by industries." Hindu Business Line, November 2019. https://www.thehindubusinessline.com/opinion/india-must-pay-attention-to-water-use-by-industries/article29899661.ece
80. Supra, note 22.
81. Lamb, C. "India's looming water crisis – a call to action for companies." CDP, June 2019. https://www.cdp.net/en/articles/companies/indias-looming-water-crisis-a-call-to-action-for-companies
82. Supra, note 81.
83. Supra, note 3.
84. Supra, note 22.
85. "India Sustainability Update 2017-18." 10. Coca Cola India, 2018. https://drive.google.com/file/d/1avHBC4IzhXwQZ6Vtsp-txlp-2e2hErsv/view?usp=sharing
86. "Water management: Making a refreshing difference." Tata Consumer Products, Accessed August 20, 2020. https://www.tataconsumer.com/sustainability/water-management/the-initiatives/tata-coffee-remains-water-positive
87. Supra, note 3.
88.
a. "Water Risk Assessment Tool." Confederation of Indian Industry, Accessed August 25, 2020. https://www.cii.in/Images_Triveni/Water%20Risk%20Assessment%20Tool%20(FN).pdf
b. "Industrial Rainwater Harvesting – the Need, Process, and Everything Else." Chaitanya Rainwater Harvesting, September 2018. http://www.chaitanyaproducts.com/blog/industrial_rainwater_harvesting_need_process/
c. "Water sector resilience - Reimagining a blue future." KPMG, June 2018. https://assets.kpmg/content/dam/kpmg/in/pdf/2018/06/WaterManagement.pdf
d. "India Water Tool." World Business Council for Sustainable Development, Accessed September 16, 2020. https://www.indiawatertool.in/
e. "Corporate Water Accounting." CEO Water Mandate,

Accessed September 16, 2020. https://ceowatermandate.org/accounting/accounting-basics/
f. "Water security is essential to tackling climate change and protecting the bottom line." CDP, Accessed August 13, 2020. https://www.cdp.net/en/water
g. "Thirsty business: Why water is vital to climate action." CDP, November 2016. https://6fefcbb86e61af1b2fc4-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/001/306/original/CDP-Global-Water-Report-2016.pdf?1484156313
h. Supra, note 81.
i. "India's Deepening Water Crisis?" FICCI, February 2012. http://water.columbia.edu/files/2012/06/FICCI_CWC_IndiaWaterCrisisPaper.pdf
j. Mishra, A. and Dhar, D. "India needs to focus on water efficiency." LiveMint, July 2018. https://www.livemint.com/Opinion/Cbw6kcycrx0QtCPLKneAHP/India-needs-to-focus-on-water-efficiency.html
k. Bhushan, R. and Mukherjee, W. "Multiple hurdles in rain water harvesting: India Inc." The Economic Times, July 2019. https://economictimes.indiatimes.com/news/politics-and-nation/multiple-hurdles-in-rain-water-harvesting-india-inc/articleshow/70152000.cms?from=mdr
l. Ward, S. "What Are The Biggest Problems In Wastewater Treatment Plants?." P.E.W.E, January 2019. https://www.pewe-llc.com/blog/biggest-problems-wastewater-treatment/
m. Hayward, K. "India's progress with industrial water reuse projects." International Water Association, May 2019. https://www.thesourcemagazine.org/indias-progress-with-industrial-water-reuse-projects/
n. Abhirrao, S. "Zero Liquid Discharge Solutions." Industrial Water Treatment, Recycle and Reuse, 2014. https://www.sciencedirect.com/topics/engineering/zero-liquid-discharge
o. "Addressing the operational cost challenges of zero-liquid discharge." Hager and Elasser, Accessed August 26, 2020. https://he-water.co.uk/addressing-the-operational-cost-challenges-of-zero-liquid-discharge/
p. "5 Advantages of Recycling Wastewater." Micronics, March 2019. https://www.micronicsinc.com/filtration-news/advantages-of-recycling-wastewater/
q. Fatta, D., Alaton I.A., Gokcay, C. and Rusan, M.M. "Wastewater Reuse: Problems and Challenges in Cyprus, Turkey, Jordan, and Morocco." European Water Resources Association, 2005. https://www.ewra.net/ew/pdf/EW_2005_11-12_08.pdf
r. Supra, note 64 (d).
89. Sen, S. "If 80% water consumption in India is for agriculture, why is it unregulated and inefficient?." Observer Research Foundation, May 2018. https://www.orfonline.org/expert-speak/if-80-water-consumption-in-india-is-for-agriculture-why-is-it-unregulated-and-inefficient/
90. "On Barley Growers Day, AB InBev upskills 1000 farmers through the SmartBarley programme." YourStory, February 2019. https://yourstory.com/2019/02/barley-growers-day-ab-inbev-celebrates
91. "Partnership With Farmers." Pepsico India, August 2017. http://www.pepsicoindia.co.in/live/story/partnership-with-farmers
92. Keys, T., Malnight, T.W. and van der Graaf, K. "Making the most of corporate social responsibility." Mckinsey, December 2009. https://www.mckinsey.com/featured-insights/leadership/making-the-most-of-corporate-social-responsibility
93. "Creating a Better World." 44. Jain Irrigation Systems Ltd., 2017. https://drive.google.com/file/d/14hm9pAGKIRJG6Y2MCZeG-9QQMmhydLws/view?usp=sharing
94. Supra, note 67.
95. Supra, note 67.
96. Supra, note 67.
97. Supra, note 22.
98. "Collaboration: Preserving water through partnering that works." 9. PwC, 2015. https://www.pwc.in/assets/pdfs/services/urban-utilities/preserving-water-through-partnerships.pdf
99. Supra, note 22.
100. Supra, note 85 at 6.
101. "Enterprise of Tomorrow." 43. ITC Limited, 2018. https://drive.google.com/file/d/176MBv8YhX6DXBwgvePRS76HKIA3O-8Bp/view?usp=sharing
102. "Climate change: Sustainable agriculture." Tata Consumer Products, Accessed August 25, 2020. https://www.tataconsumer.com/sustainability/climate-change/the-initiatives/sustainable-agriculture
103. "IOCL to use treated water from STP in Mathura refinery." Business Standard, August 2016. https://www.business-standard.com/content/b2b-chemicals/iocl-to-use-treated-water-from-stp-in-mathura-refinery-116081900622_1.html
104. Supra, note 88 (a) at 1.
105. Supra, note 22.
106. "Ultrafiltration plant provides reliable water for oil refinery operations." WaterWorld, 2006. https://www.waterworld.com/international/desalination/article/16200635/ultrafiltration-plant-provides-reliable-water-for-oil-refinery-operations
107. "Solid waste management rules, 2016." CivilsDaily, September 2017. https://www.civilsdaily.com/solid-waste-management-rules-2016/
108. Sambyal, S.S. "Government notifies new solid waste management rules." DownToEarth, September 2018. https://www.downtoearth.org.in/news/waste/solid-waste-management-rules-2016-53443
109. Tandon, S. "Consumer goods companies partner to launch packaging waste management entity." LiveMint, September 2019. https://www.livemint.com/industry/retail/consumer-goods-companies-partner-to-launch-packaging-waste-management-entity-1568900279346.html
110. "Why and How is the FMCG Industry Fighting Against Plastic Pollution?." Change Started, November 2019. https://changestarted.com/why-and-how-are-fmcg-companies-fighting-against-plastic-pollution/
111. "Shocking! 40% of 25,000 tonnes of plastic waste generated every day in India goes uncollected." Financial Express, November 2019. https://www.financialexpress.com/lifestyle/health/shocking-40-of-25000-tonnes-of-plastic-waste-generated-every-day-in-india-goes-uncollected/1772562/
112. Divya. "Over 30 FMCG companies aim to collect 3,500 tonnes of plastic waste in Punjab." Packaging 360, May 2019. https://packaging360.in/news/over-30-fmcg-companies-aim-to-collect-3-500-tonnes-of-plastic-waste-in-punj
113. "Indian Oil uses single-use plastic waste to build road." LiveMint, October 2019. https://www.livemint.com/companies/news/indian-oil-uses-single-use-plastic-waste-to-build-road-11570105177893.html
114. Yu, D. "Pepsico India pilots plant-based packaging for Frito-Lay and KurKure snacks to address plastic waste." Bakery and Snacks, June 2018. https://www.bakeryandsnacks.com/Article/2018/06/12/PepsiCo-India-pilots-plant-based-packaging-to-address-plastic-waste
115. Nixon, J.D., Dey, P.K. and Ghosh, S.K. "Energy recovery from waste in India: an evidence-based analysis ." 2. Sustainable Energy Technologies and Assessments, Volume 21, 42887. https://publications.aston.ac.uk/id/eprint/30710/1/Energy_recovery_from_waste_in_India.pdf
116. Guimarães, A.G, Vaz-Fernandes, P., Ramos, M.R. and Martinho, A.P. "Co-processing of hazardous waste: The perception of workers regarding sustainability and health issues in a Brazilian cement company." Journal of Cleaner Production, Volume 186, 43252. https://www.sciencedirect.com/science/article/abs/pii/S0959652618307492

117. Supra, note 22.
118. Brucker, D. “10 Zero Waste Companies Leading the Charge.” Rubicon, 43040. https://www.rubicon.com/blog/companies-zero-waste/
119. Deshpande, S. “Achieving zero waste to landfill status.” Manufacturing Today, February 2020. https://www.manufacturingtodayindia.com/sectors/6418-achieving-zero-waste-to-landfill-status
120. Supra, note 3.
121. Supra, note 3.
122.
a. Jaiswal, B. “Antariksh Waste Ventures to digitise waste disposal systems.” The New Indian Express, December 2019. https://www.newindianexpress.com/business/2019/dec/14/antariksh-to-digitise-waste-disposal-system-2075865.html
b. Sharma, K.D. and Jain, S. “Overview of Municipal Solid Waste Generation, Composition, and Management in India.” Journal of Environmental Engineering, March 2019. https://ascelibrary.org/doi/full/10.1061/%28ASCE%29EE.1943-7870.0001490#:~:text=MSW%20composition%20in%20India%20isN%20ratio
c. Mehra, P. “Where one sector’s waste can be another’s fuel.” Hindu Business Line, May 2019. https://www.thehindubusinessline.com/specials/clean-tech/where-one-sectors-waste-can-be-anothers-fuel/article27061205.ece
d. Pervez, M.J., Salahuddin, M., and Thukral, H. “Waste Minimisation in Small Scale Industry.” Ministry of Environment, Forests and Climate Change, June 2014. http://moef.gov.in/wp-content/uploads/2017/08/WMC-BOOKLET.pdf
e. “8 Benefits of Using IoT Fill Level Sensors for Waste Management.” Sensa Networks, January 2019. http://www.sensanetworks.com/blog/8-benefits-of-using-iot-fill-level-sensors-for-waste-management/
f. Agarwal, R. “Divide and Conquer: waste segregation is the key.” DownToEarth, May 2018. https://www.downtoearth.org.in/blog/waste/divide-and-conquer-segregation-is-the-key-60597
g. Naidu, B.R. “Co-processing of Waste – Indian Scenario.” Gujarat Pollution Control Board, November 2014. https://gpcb.gov.in/Final%20Speaker%20PPTS/Day%202/Parallel%20Session%204x/B%20R%20Naidu.pdf
h. Walker, M. “Stage 1 Integrated Solid Waste and Resource Management Plan – Issues for Consideration.” Maura Walker and Associates, August 2012. https://www.crd.bc.ca/docs/default-source/recycling-waste-pdf/iswrmp-stage1issuesmemo.pdf?sfvrsn=c1b96fca_2
i. “Top 5 Challenges Of Smart Waste Management.” Swachh Coin, January 2019. https://medium.com/@swachhcoin/top-5-challenges-of-smart-waste-management-59ecf3e24b6d
j. “Industrial Solid Waste.” Central Public Health and Environmental Engineering Organisation, Accessed August 25, 2020. http://cpheeo.gov.in/upload/uploadfiles/files/chap6.pdf
k. Vijayakumar, S. “Source segregation is a big challenge, say FMCG firms.” The Hindu, January 2019. https://www.thehindu.com/news/cities/chennai/source-segregation-is-a-big-challenge-say-fmcg-firms/article26045131.ece
l. Karunakaran, N. and Ghosh, A. “Co-processing: A clean India for the Indian cement sector?.” The Economic Times, February 2011. https://economictimes.indiatimes.com/special-feature/co-processing-a-clean-indea-for-the-indian-cement-sector/articleshow/7400900.cms
m. “Hazardous Waste Management Rules, 2016.” Central Pollution Control Board, 2016. https://www.npcindia.gov.in/NPC/Files/delhiOFC/EM/Hazardous-waste-management-rules-2016.pdf
n. Lombardi, E. “The Difference Between “Zero Waste to Landfill” and “Zero Waste”.” Waste 360, July 2016. https://www.waste360.com/waste-reduction/difference-between-zero-waste-landfill-and-zero-waste
o. Jones, M. “What is ‘zero waste to landfill’?.” Carbon Trust, March 2017. https://www.carbontrust.com/news-and-events/insights/what-is-zero-waste-to-landfill
p. Supra, note 64 (d).
123. Pulla, P. “Making India’s polluters pay.” The Hindu, December 2018. https://www.thehindu.com/sci-tech/energy-and-environment/making-indias-polluters-pay/article25753356.ece
124. Supra, note 22.
125. Agarwal, R. “EPR Perspectives and experiences from India.” 7. OECD, Accessed September 2, 2020. https://www.oecd.org/environment/waste/Session_1-EPR-Toxics-Link1-Ravi_Agarwal.pdf
126. Supra, note 85 at 7.
127. Supra, note 67.
128. Supra, note 67.
129. “Unilever Sustainable Living Plan.” 3. Hindustan Unilever Limited, 2017. https://drive.google.com/file/d/1XvC_0rkOJijGSTfTLuhbF-lEoA_wejSD/view?usp=sharing
130. Chouhan, V. “Q&A with PepsiCo India’s Chief Govt. Affairs & Comm. Officer.” South Asia fast track, Accessed August 25, 2020. https://southasiafasttrack.com/2019/10/16/viraj-chouhan-pepsico-india-pepsicos-sustainable-plastics-strategy/
131. “Solving India’s garbage problem.” Centre for Science and Environment, Accessed August 25, 2020. https://www.cseindia.org/solving-indias-garbage-problem-6399
132. “ITC’s Solid Waste Management Initiatives.” ITC Limited, Accessed August 25, 2020. https://www.itcportal.com/sustainability/solid-waste-management.aspx
133. Supra, note 122 (l).
134. Supra, note 67.
135. Supra, note 85 at 7.
136. “PepsiCo India Launches Plastic Waste Management Programme Across Darjeeling Schools In Association With NEPRA.” Pepsico India, July 2019. http://www.pepsicoindia.co.in/en-IN/live/pressrelease/pepsico-india-launches-plastic-waste-management-programme-across-darjeeling-schools-in-association-with-nepra
137. “Gender parity can boost India’s GDP by 27%: WEF co-chairs.” The Economic Times, January 2018. https://economictimes.indiatimes.com/news/economy/policy/gender-parity-can-boost-indias-gdp-by-27-wef-co-chairs/articleshow/62589586.cms
138. Singh, N. “Women in India Inc: 19% in 2016, 26% now.” The Times of India, March 2020. https://timesofindia.indiatimes.com/india/women-in-india-inc-19-in-2016-26-now/articleshow/74533423.cms
139. “Making Diversity Work: Key trends and practices in the Indian IT-BPM industry.” 3. PwC, 2016. https://www.pwc.in/assets/pdfs/publications/2016/making-diversity-work-key-trends-and-practices-in-the-indian-it-bpm-industry.pdf
140. Supra, note 11.
141. Supra, note 11.
142. Supra, note 22.
143. Supra, note 3.
144. Supra, note 3.
145.
a. Howington, J. “How Flexible Work Benefits Companies and Employees.” Flex Jobs, August 2020. https://www.flexjobs.com/employer-blog/the-benefits-of-allowing-employees-a-flexible-schedule/
b. “Quotas: Pros and Cons.” Institute for Gender and the Economy, Accessed August 26, 2020. https://www.rotman.utoronto.ca/FacultyAndResearch/ResearchCentres/GE-backup/Research/ResearchBriefs/-/media/7FF5BB639953481AACF86ECF31AE3A77.ashx
c. Paterson, J. “Benefits can ease mothers back to work.” Employee Benefits, February 2011. https://employeebenefits.co.uk/issues/february-2011/benefits-can-ease-mothers-back-

to-work/
d. “Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations 2015.” Securities and Exchange Board of India, Accessed September 1, 2020. https://www.sebi.gov.in/legal/regulations/sep-2015/securities-and-exchange-board-of-india-listing-obligations-and-disclosure-requirements-regulations-2015-last-amended-on-august-05-2020-_37269.html
e. Agnihotri, A. “Most Indian Companies Do Not Value Diversity At Board-Level Hirings: Oxfam India.” Bloomberg Quint, February 2017. https://www.bloombergquint.com/business/most-indian-companies-do-not-value-diversity-at-board-level-hirings-oxfam-india
f. Supra, note 64 (d).
146. “Empowering women.” Nestle, Accessed September 1, 2020. https://www.nestle.com/csv/impact/employment-diversity/gender-balance
147. Aggarwal, V. and Singh, V.K. “Cause-related Marketing in India: Effect of Cause Involvement on Purchase intention.” Mangalmay Group of Institutions, June 2018. https://www.researchgate.net/publication/325718643_Cause-related_Marketing_in_India_Effect_of_Cause_Involvement_on_Purchase_intention
148. Supra, note 18.
149. “Sustainability Report 2017-18.” 69. Godrej Consumer Products, 2018. https://drive.google.com/file/d/1wgQKGXS08LYgj8CZAzEFxzE46F-iypMH/view?usp=sharing
150. Tewari, S. “Vicks’ heartwarming ad takes a stand on trans motherhood.” LiveMint, April 2017. https://www.livemint.com/Consumer/i77gelJ5aLqSzsEeBKoP9N/Vicks-heartwarming-ad-takes-a-stand-on-trans-motherhood.html
151. Boitnott, J. “How and Why You Should Continue to Train Your Employees Throughout Their Employment.” Inc, January 2020. https://www.inc.com/john-boitnott/how-why-you-should-continue-to-train-your-employees-throughout-their-entire.html
152. Adhvaryu, A., Garg, L., Kala, N. and Nyshadham, A. “An Experiment in India Shows How Much Companies Have to Gain by Investing in Their Employees.” Harvard Business Review, July 2017. https://hbr.org/2017/07/an-experiment-in-india-shows-how-much-companies-have-to-gain-by-investing-in-their-employees
153. Supra, note 3.
154. Supra, note 3.
155.
a. “What are the benefits of following health and safety practices?.” Occupational Safety and Health Consultants Register, Accessed August 26, 2020. https://www.oshcr.org/what-are-the-benefits-of-following-health-and-safety-practices/
b. Meswani, H.R. “Safety and Occupational Health: Challenges and Opportunities in Emerging Economies.” Indian Journal of Occupational and Environmental Medicine, April 2008. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2796774/
c. Shah, A. “Workplace Injury Compensation in India – What Businesses Need to Know.” India Briefing, April 2019. https://www.india-briefing.com/news/workplace-injury-compensation-india-11077.html/
d. O’Neill, E. “The Importance of Training Employees for your Business.” Learn Upon, January 2020. https://www.learnupon.com/blog/importance-of-training-employees/
e. Supra, note 155 (d).
f. Carucci, R. “When Companies Should Invest in Training Their Employees — and When They Shouldn’t.” Harvard Business Review, October 2018. https://hbr.org/2018/10/when-companies-should-invest-in-training-their-employees-and-when-they-shouldnt
g. “Employee Grievance Handling.” Economic Discussions, Accessed September 16, 2020. https://www.economicsdiscussion.net/human-resource-management/employee-grievances/employee-grievance-handling/32007
h. “6 Benefits Of Employee Reward And Recognition Programs.” Team River, January 2020. https://teamriver.com/blog/6-benefits-of-employee-reward-and-recognition-programs/
i. Papadopoulos, M. “Importance and Benefits of Health Programs in your Workplace.” Potential, November 2017. https://www.potential.com/articles/importance-benefits-health-programs-workplace/
j. Supra, note 64 (d).
156. “Improving Safety and Health in Global Supply Chains.”ILO https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---lab_admin/documents/projectdocumentation/wcms_554169.pdf
157. “Sustainable Local Procurement.” FAO, 2014 http://www.fao.org/fileadmin/user_upload/nr/sustainability_pathways/docs/SustainableLocalProcurement_Factsheet_ENGLISH.pdf
158. Supra, note 22
159. Supra, note 58.
160. “Unilever Sustainable Living Plan.” 16. Hindustan Unilever Limited, 2017. https://drive.google.com/file/d/1XvC_0rkOJijGSTfTLuhbF-lEoA_wejSD/view?usp=sharing
161. Supra, note 101 at 56.
162. Jan, O. “COVID-19 Impacts on Supply Chains, Sustainability and Climate Change.” Deloitte, June 2020. https://www2.deloitte.com/global/en/blog/responsible-business-blog/2020/covid-19-impacts-on-supply-chains-sustainability-and-climate-change.html
163. Bridges, T. and Eubank, D. “Leading Sustainably: The Path to Sustainable Business and How the SDGs Changed Everything” Routledge, Taylor & Francis Group, July 2020. https://www.routledge.com/Leading-Sustainably-The-Path-to-Sustainable-Business-and-how-the-SDGs/Bridges-Eubank/p/book/9780367428365
164. Davis-Peccoud, J. and van der Branden, J.C. “Covid-19 Gives Sustainability a Dress Rehearsal.” Bain & Company, April 2020. https://www.bain.com/insights/covid-19-gives-sustainability-a-dress-rehearsal/
165. “Why COVID-19 Could Prove to Be a Major Turning Point for ESG Investing.” J.P. Morgan, July 2020. https://www.jpmorgan.com/insights/research/covid-19-esg-investing
166. Sengupta, R. “Focus on business sustainability in a post Covid-19 world.” India Climate Dialogue, July 2020. https://indiaclimatedialogue.net/2020/07/08/marrying-sustainability-with-competitiveness-in-a-post-covid-19-world/
167. Unnikrishnan, S., Biggs, C. and Singh, N. “Sustainability Matters Now More Than Ever for Consumer Companies.” BCG, August 2020. https://www.bcg.com/en-in/publications/2020/sustainability-matters-now-more-than-ever-for-consumer-companies
168. “Dutch businesses endorse sustainable Covid-19 recovery.” ING, June 2020. https://www.ing.com/Newsroom/News/Dutch-businesses-endorse-sustainable-Covid-19-recovery.htm



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