



## White Paper #1

### **Sustainability and Indian Industries: Why? Who? And How?**

This white paper is prepared as a summary of the CXO Roundtable held on October 7<sup>th</sup>, 2023, at Indian Institute of Technology Madras (IITM), Chennai, India, drafted by Dr Charuta Kulkarni and Prof. Ashwin Mahalingam, School of Sustainability, IITM.

**Executive Summary** The concept of “Sustainability” continues to perplex industry leaders, owing to the fact that the chief, *if not sole*, priority for industries is profitability, which often comes at odds with implementing sustainable practices. Meanwhile, with climate-related risks and associated multi-level resource pressure posing a real threat to the industry sector worldwide, bringing sustainability into planning and execution is also an opportunity of growth for industries. Be it compliance-driven or mandate-driven, there is a growing realization within the industry sector in India that a value can be created in facilitating sustainable pathways and reinvested toward growth of companies and industry at large. The trade-off between sustainability and profitability, however, continues to be a hurdle and both “top-down” and “bottom-up” reforms are warranted in all the four legs of sustainability - Mitigation, Adaptation, Recovery, and Innovation - and their effectual and just implementation via Public-Private Partnerships (PPPs).

**Keywords:** Systems Thinking; Sustainable Development Goals, Indian industries; ESG, Capacity Building

### **Thinking and Driving Sustainability in India: Challenges and opportunities**

Inculcating a “*think sustainably*” perspective and subsequent actionability among industry professionals is a systemic challenge, with potential answers lying in: i) Enabling change via capacity building within an industry setting, and ii) steering the action top-down with the government for practical policymaking.

**i) Enabling change via capacity building within an industry setting:** There is an urgent need to impart “Systems Thinking” within an industry ecosystem where a business machinery can be reimaged in its entirety in terms of identifying ways to introduce, monitor, and maintain sustainable practices within a supply chain. Such Business Model Transformation of sorts and the “circularity” within can only be achieved via capacity building at all levels. For example, industry leaders (e.g. CEOs, CXOs) can capitalize on exchanging experiences with peers on how to galvanize a transition toward embedding Sustainable Development Goals (SDGs) Pathways within a business ecosystem. The resultant ideas can often be “slogans” that are transferred to the mid-level employees (e.g. Key Performance Indicator or KPI Managers) as Key Result Areas/Key Responsibility Areas (KRAs). KPIs need support in turning KRAs into actions, putting sustainability in design as a real-world scenario, thereby helping organizations develop a blueprint from the promise to practicality. Lastly, the entry-level employees within the organization are perhaps amongst the most aware as well as energized about sustainable initiatives at large. Their actions are likely to have the greatest impacts on sustainability and therefore, training at the level of the shop floor worker or the site engineer will be critical to an organization to reduce its environmental footprint. Overall, building knowledge platforms and interfaces for interactions toward perpetual change in mindsets within industry professions is imperative.

**ii) Steering the action top-down with the government for practical policymaking:** The topic of sustainability is complex and multi-dimensional with cross-disciplinary solutions, necessitating developing synergies among diverse actors private and public alike. To this end, it is crucial to strengthen the ESG (Environmental, Social, & Governance) as a framework that takes a holistic view at sustainability, thereby offering avenues to explore the cross-functionality of technology, policy, and economics. One of the critical aspects of ESG is the regulation that will drive technological innovation and business compliance, where the national and state governments are to play a key role in defining the mandate. Moreover, while compliances are largely approached from a customer perspective, many, if not all, compliances are set in motion via strong mandates conceived as part of the governmental policies. To achieve [India's Net Zero target by 2070](#), it is important to design a step-wise, sensible and practical roadmap for creating an ecosystem/business space that will help industries move toward carbon neutrality. Overall, the paucity of incorporation

and/or tangible impacts of sustainable initiatives within an industry setting is also due to the thrust on technology-driven sustainability instead of employment-driven sustainability that has an ability to cascade growth across the organizational structure. The desired change in this context is as contingent on changing mindsets within industry as developing “top down” actionable environmental mandates i.e. the policy reforms with an ability to render “cost-benefit analysis” of natural resources that are under use and abuse, led by the government. In Indian context, democracy as the political system in its philosophy and structure, can offer a machinery to promote sustainability, however, pragmatic scenario-building supported by stringent and all-encompassing assessment frameworks are required to be conceptualized on diverse timescales, keeping the long-term and bigger picture in mind.

### **Conclusion: How and where the School of Sustainability partner with Industry to promote sustainability?**

The School of Sustainability at IITM is viewed as a facilitator for multi-level capacity building and skilling to propagate change within industrial and governmental settings. The practical action points can be summarized under the three primary functions of the School -

- 1. Teaching:** Building competencies and confidence in industry professionals as well as government officials via tailor-made Continuing Education Programmes
- 2. Research:** Providing scholarly support to mainstream sustainable initiatives toward -
  - 2.1. Expediting “Execution backwards through technology building” through harnessing academic-industry-government collaborations
  - 2.2. Aiding industries in designing a roadmap towards cost-effective decarbonization that speaks to the respective business ecosystem
- 3. Stakeholder engagement:** Promoting behavioral change and outlook towards sustainability led via a two-pronged approach:
  - 3.1. Creating spaces for dialogues and interactions with industry leaders through periodic roundtables
  - 3.2. Working closely with the governmental agencies to facilitate positive interventions toward policy reforms