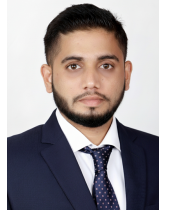


# INTEGRATING EHS INTO SUSTAINABILITY: A Strategic Imperative for Indian Industry

PRATIK S. JADHAV, Senior Manager ESG, Prism Johnson Limited  
Email: pratikjadhavp@gmail.com



## 01 Introduction

In today's dynamic industrial landscape, the conversation around sustainability is not only restricted to carbon footprints, green technologies or energy efficiency alone. At the very heart of sustainability lies the triad of Environment, Health and Safety (EHS) a function that has matured from being a compliance-driven obligation to a strategic enabler of responsible growth (Chatterjee & Sharma, 2018). In Indian industry, this transformation is particularly relevant as companies navigate the twin challenges of maintaining competitiveness in a resource-intensive economy while aligning with global expectations on Sustainability and Environmental, Social and Governance (ESG) performance (Kumar & Singh, 2021).

India's industrial growth has always been a cornerstone of national development. The cement kilns that build our cities, the chemical plants that power our agriculture and manufacturing, and the diverse range of heavy and light industries that fuel the economy all depend on resource extraction, energy consumption and labour-intensive processes. But such growth has often come at an environmental and social cost, air emissions, water stress, occupational hazards and community concerns (Gupta, 2019). These risks cannot be managed in silos. Instead, they require an integrated approach where EHS becomes central to sustainability governance (ILO, 2020).

It has been consistently emphasised that occupational health and safety, environmental management and stakeholder well-being are inseparable pillars of sustainable industrial growth (Patel, 2017). Against this backdrop, the strategic integration of EHS into sustainability reporting and performance is not just a regulatory requirement but a competitive differentiator for Indian companies preparing for the future (SEBI, 2022).

## 02 About EHS in Indian Industry

The journey of EHS in India reflects a broader global trend. In the early decades, EHS was seen primarily as compliance-driven ensuring factories adhered to the Factories Act, 1948 and sector-specific regulations. Audits focused on incident

reporting, pollution control and minimum occupational health standards. For many companies, it was viewed as an operational cost (Patel, 2017).

By the 1990s and early 2000s, as India liberalised and integrated with global supply chains, EHS began to take on a performance-driven dimension. International clients demanded evidence of workplace safety and environmental stewardship. Certifications such as ISO 14001 (Environment) and OHSAS 18001 (Occupational Health & Safety, later ISO 45001) became gateways to global markets (ISO, 2021).

In the last decade, EHS has moved into its strategic phase. No longer confined to compliance or even performance, EHS is now expected to link directly with business resilience, stakeholder trust and sustainability outcomes (Kumar & Singh, 2021). Investors demand disclosures aligned with ESG frameworks. Regulators, such as the Securities and Exchange Board of India (SEBI), require Business Responsibility and Sustainability Reporting (BRSR) (SEBI, 2022). Communities demand transparency and accountability. EHS has become the bridge between operational integrity and sustainable value creation. In India, this transformation is particularly visible as industries adapt to regulatory requirements such as SEBI's mandatory BRSR reporting (SEBI, 2022), while also aligning with global frameworks like GRI Standards, Integrated Reporting (GRI, 2022) and the Task Force on Climate-related Financial Disclosures (IPCC, 2022).

## 03 EHS as a Pillar of Sustainability

The integration of Environment, Health and Safety (EHS) into sustainability is not merely an operational alignment but a structural necessity. EHS provides the fundamental building blocks for sustainability frameworks by directly addressing environmental performance, workplace health and safe operations all of which underpin long-term value creation. At its core, sustainability is about ensuring that growth today does not compromise the ability of future generations to meet their needs. The United Nations Sustainable Development Goals (SDGs) provide a universal framework for aligning industrial practices with global sustainability priorities.

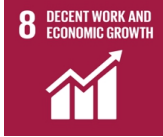
EHS relativeness to several SDGs:

Table 1: SDG's related to EHS



SDG 3: Good Health and Well-being → Occupational health, workplace wellness and industrial hygiene

SDG 6: Clean Water and Sanitation → Wastewater treatment, zero liquid discharge, water recycling.



SDG 8: Decent Work and Economic Growth → Safe working conditions, reduced accidents, worker engagement.

SDG 9: Industry, Innovation and Infrastructure → Safer and cleaner production technologies.



SDG 12: Responsible Consumption and Production → Waste minimisation, circular economy practices.

SDG 13: Climate Action → Emission reduction, adaptation and resilience strategies.



This direct linkage underscores why EHS is not peripheral but central to sustainability. Without protecting the health and safety of workers, reducing environmental risks and building resilience against climate-related events, no company can credibly claim to be sustainable.

reporting ensures comparability, transparency and accountability.

#### 04 The Role of EHS in ESG and BRSR Frameworks

In recent years, sustainability reporting has become an expectation rather than a choice. Frameworks such as the Global Reporting Initiative (GRI), SASB Standards, Integrated Reporting (IR) and SEBI's BRSR mandate require Indian companies to report performance across environmental and social dimensions.

Within these frameworks, EHS metrics serve as the backbone of disclosures:

- ◆ Health & Safety Indicators: Lost Time Injury Frequency Rate (LTIFR), Total Recordable Incident Rate (TRIR), occupational disease incidence, near-miss reporting, safety training hours.
- ◆ Environmental Indicators: Emission intensity, air quality control, energy efficiency, renewable energy share, water withdrawal and recycling, waste generation and utilisation.
- ◆ Governance Indicators: Incident investigation protocols, process safety management systems, audit frequencies and emergency preparedness frameworks.

The SEBI BRSR framework has further accelerated structured reporting. Companies must now disclose occupational health and safety statistics, energy consumption, emissions and risk management mechanisms in a standardised format. This integration of EHS into mainstream

#### 05 Case Insights from Indian Industry

While industries differ in their operations, common themes emerge when examining how EHS is being integrated into sustainability reporting across sectors.

##### ◆ Cement Sector

The cement industry, with its energy-intensive kilns and dust-prone operations, has historically faced challenges around emissions and worker safety. Over the past decade, leading players have transitioned from compliance-driven dust control to integrated sustainability management. (Gupta, 2019) EHS metrics such as particulate matter (PM) emissions per ton of cement, occupational health surveillance for workers exposed to dust and process safety protocols are now disclosed in sustainability reports. Many plants have invested in waste heat recovery, alternative fuel use and predictive safety analytics.

##### ◆ Chemical Sector

The chemical sector operates with inherent process safety risks. Here, occupational health and safety systems are not just about compliance but about risk prevention and reputation protection. Companies report extensively on process safety incidents, hazardous waste management and health monitoring programs for workers exposed to chemicals. Sustainability disclosures increasingly highlight emergency preparedness drills, community safety

initiatives and incident learning systems.

#### ◆ **Manufacturing Sector**

In the broader manufacturing sector, especially in metals, textiles, and heavy machinery, the focus has shifted toward water stewardship, circular economy and worker engagement. Companies now report water withdrawal per unit of production, percentage of waste recycled, and hours of EHS training delivered. Integration of EHS into sustainability reporting here builds credibility with global supply chains and customers who demand ethically and safely produced goods. (Chatterjee & Sharma, 2018)

These case insights highlight that while the specific challenges differ by sector, the role of EHS as a data-driven enabler of sustainability reporting remains constant.

### 06 How EHS Strengthens Sustainability Reporting

EHS strengthens sustainability reporting in several ways:

- **Credibility** → Without robust EHS data, sustainability reports risk being seen as “greenwashing.” Metrics like LTIFR, emissions intensity or water recycling provide hard evidence of performance.
- **Risk Management** → By embedding safety and environmental controls, companies reduce the risk of accidents, litigation and reputational damage.
- **Stakeholder Trust** → Transparent reporting of incidents, near misses and corrective actions demonstrates accountability to investors, regulators and communities.
- **Operational Resilience** → Companies with strong EHS systems are better prepared for disruptions be it workplace accidents, supply chain shocks or climate-related events.
- **Alignment with Global Benchmarks** → Robust EHS disclosures enable alignment with international ESG frameworks, improving access to global capital and partnerships.

### 07 Emerging Trends in EHS & Sustainability Integration

As Indian industry evolves, several emerging trends are reshaping EHS integration into sustainability:

- **Digital Transformation** → IoT sensors, AI-driven predictive analytics and digital safety platforms are enabling real-time monitoring of air quality, worker exposure and process safety risks.
- **Climate Risk Integration** → Companies are linking emergency preparedness and business continuity with climate adaptation strategies, ensuring resilience against floods,

heatwaves and supply chain disruptions.

- **Behavioural Safety & Culture** → Moving beyond systems and checklists, companies are investing in leadership training, behavioural safety programs and worker engagement.
- **Circular Economy Practices** → Waste utilisation, resource recovery and designing for recyclability are being embedded in both EHS and sustainability strategies.
- **Regulatory Push** → The BRSR mandate ensures structured disclosures, while global investors increasingly screen companies on EHS-linked ESG performance.

### 08 Financial Integration of EHS into Sustainability

Perhaps the most challenging yet critical dimension is the integration of EHS into sustainability finance. While EHS professionals are well-versed in environmental and safety metrics, interpreting financial sustainability indicators such as carbon pricing, internal rate of return (IRR) for energy projects or cost of accidents avoided requires new skillsets.

- **Carbon Pricing & Transition Risk:** Carbon taxes, emission trading schemes and internal carbon pricing are increasingly applied in ESG disclosures (World Bank, 2022). EHS professionals contribute by linking emission data with financial liabilities.
- **Resource Efficiency:** Initiatives like WHR or water recycling are justified not only on environmental grounds but also through cost savings, with some Indian industries reporting payback periods of 3–5 years (TERI, 2021).
- **Sustainable Finance:** Green bonds and ESG-linked loans often require disclosure of EHS metrics, making EHS performance central to financial access and investor confidence (KPMG, 2023).
- **Cost of Accidents:** Studies suggest that workplace accidents can cost organizations 3–5% of annual turnover, considering lost productivity, compensation and reputational damage (ILO, 2021). Thus, reporting LTIFR and TRIR has direct financial implications.

This financial integration marks a shift in the role of EHS from compliance managers to sustainability strategists who can articulate both operational and financial value. (Smith et al., 2020)

### 09 Future Roadmap for Indian Industry

For Indian industry to remain competitive, EHS must be embedded deeper into sustainability governance.

**A future roadmap includes:**

1. Institutionalising EHS within Strategy → EHS should not remain a plant-level function but

become part of board-level oversight. Linking executive remuneration to EHS performance is a growing best practice.

2. Leveraging Digital Tools → From drones monitoring emissions to AI predicting incidents, digital infrastructure will play a pivotal role in shaping the next decade of EHS governance.
3. Climate Adaptation and Resilience → Industries must integrate climate risk assessments with occupational health and emergency preparedness to ensure continuity.
4. Capacity Building → Continuous training, upskilling, and engagement of the workforce will be critical to maintain safe, sustainable operations.
5. Stakeholder Collaboration → Partnerships with regulators, industry bodies and communities will ensure that EHS integration serves broader societal goals.
6. Net-Zero Alignment → By 2070, India's net-zero commitment will require every sector to integrate EHS into carbon reduction, resource efficiency and climate adaptation strategies.

## 10 Conclusion

Environment, Health and Safety (EHS) is no longer a siloed compliance function but it is also a strategic imperative for Indian industry. By integrating EHS into sustainability frameworks, companies strengthen operational resilience, build stakeholder trust and align with both National priorities and Global benchmarks.

To achieve our Net-Zero 2070 vision, Indian industries must recognise that sustainability could not be achieved without safe workplaces, healthy employees and environmentally

responsible operations. Embedding EHS into corporate sustainability strategy is not just about regulatory compliance it is about securing the long-term viability of businesses and ensuring shared prosperity for society.

As Indian industries stand at the crossroads of growth and responsibility, EHS integration into sustainability will define their legacy for generations to come.

## 11 Reference

1. Chatterjee, A., & Sharma, R. (2018). *Sustainability and EHS Integration in Indian Industry*. Springer.
2. Ellen MacArthur Foundation. (2020). *Circular Economy in Industrial Operations*.
3. GRI. (2022). *Sustainability Reporting Standards*.
4. Gupta, S. (2019). *Cement Industry Sustainability Practices in India*. *Journal of Industrial Ecology*.
5. ILO. (2020). *Decent Work and Occupational Safety Reports*.
6. IPCC. (2022). *Climate Change and Industrial Resilience*.
7. ISO. (2021). *ISO 14001 and ISO 45001 Standards*.
8. Kumar, P., & Singh, D. (2021). *ESG and EHS Integration in Indian Corporates*.
9. Ministry of Environment, Forests and Climate Change (MoEFCC). (2021). *India's Roadmap to Net-Zero*.
10. Patel, R. (2017). *Occupational Health and Safety in Indian Industries*.
11. SEBI. (2022). *Business Responsibility and Sustainability Reporting Guidelines*.
12. Smith, J., et al. (2020). *Digital Transformation in EHS Management*.
13. United Nations. (2015). *Sustainable Development Goals*.
14. UNEP. (2018). *Water and Industrial Sustainability*.
15. UNIDO. (2020). *Industry and Sustainable Infrastructure*.
16. World Bank. (2019). *Industrial Sustainability in Emerging Economies*.

\* \* \*