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Compendium on ESG

How should MSMEs be prepared

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How should MSMEs be prepared

FOREWORD

In the past few years, we have witnessed a number of rapid developments in the sustainability landscape. The CoVID-19 pandemic resulted in a renewed focus on sustainability and ESG investing. We saw a significant increase in inflows in ESG funds and a number of new fund launches, across the globe. Evidence of climate change is staring at us in the form of extreme weather events across the globe. India has a high vulnerability to climate events on account of its unique geographical features and diverse topography. As per RBI report on Currency and Finance, 2023, up to 4.5 per cent of India's GDP could be at risk by 2030 owing to lost labour hours from extreme heat and humidity conditions. The report also states that climate change mitigation, adaptation, and disaster management will require huge resources, and India will have to arrange new investments estimated to be in the range of \$7.2 trillion to \$12.1 trillion by 2050. Additionally, companies also face the possibility of physical risks arising from severe weather events, as well as transition risks and opportunities arising from regulatory changes as governments take steps towards curbing emissions and achieving their nationally determined contributions.

Given these developments, there is a push for companies to make disclosures on their sustainability related risks, opportunities, metrics and targets. In India, SEBI has been ahead of the curve. SEBI's journey in sustainability disclosures started way back in 2012 when it introduced a mandatory Business Responsibility Reporting (BRR) for top 100 companies. In 2021 SEBI prescribed a new framework for ESG reporting, called the Business Responsibility and Sustainability Report or BRSR. The BRSR was a notable departure from the earlier framework – the Business Responsibility Report or the BRR. The BRR was more of a light touch

regime while BRSR is more focused on having quantifiable metrics with more than 800 data points and is more outcome oriented. The BRSR is driving transparency and aims to bring in greater consistency and comparability of disclosures. While providing a comprehensive ESG disclosure framework, the BRSR thus seeks disclosures towards ascertaining the role played and oversight of the Board on ESG related issues.

From SEBI's perspective, the focus is on smooth implementation – of the BRSR, and of assurance requirements. The endeavor is to make reporting easier for corporates, through guidance and availability of data. The BRSR Core already contains guidance on data and assurance approach. We have constituted an Industry Standards Forum for setting additional guidelines on disclosures in the BRSR Core and applicable assurance requirements, so as to facilitate ease of implementation.

We are at a new frontier for capital markets, where there is a push for companies to consider and report on risks and impacts, that go beyond traditional economics and accounting. Given that disclosures are still evolving in a number of emerging markets, we need to be mindful that additional requirements are introduced at the right time, in a proportional manner, with appropriate glide paths and accompanied with capacity building.

This is a collective journey and a number of stakeholders – investors, companies, regulators, and civil society – will have to coordinate and collaborate in the shift towards more informed capital markets, and more inclusive and sustainable economies, that better serve our environment and society.

Yogita Jadhav

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EDITORS NOTE

India has not only made bold aspirational climate commitments at the global stage but has also demonstrated that it is able to achieve ambitious targets, such as for example the commitments made in UNFCCC's COP meeting in Paris 2015 have been realized! The continued embrace of new technologies such as large scale grid integration of solar and wind, the recent wave of economically competitive battery energy storage systems, the decade of EV focused market revitalizing financial & regulatory allocations, and the policy supported proliferation of futuristic green fuels that will cut across sectors in shipping, marine infrastructure, refineries, materials & mining sectors; have all ensured that the country remains at the forefront of its net zero and beyond targets.

Compounding this effort has been the galloping national GDP that surpassed Japan's in May 2025 to make India the 4th largest globally, and which continues to be infused heavily with a significant growth in manufacturing as throttled by the most recent trade deals with Australia and UK and few others that are in the works, fully justifying the elevation of energy to one of nine budgetary priorities as announced by the Honorable Finance Minister in Jun 2024.

Considering these developments, it is imperative that future growth is sustainable and avoids just shifting goalposts. We would not want our best accomplishments of this generation to become burdening problems for the next generation.

ESG is a vital part of ensuring sustainable development and the fact the Business Responsibility and Sustainable reporting mandate enforced by India's market regulator SEBI has been modelled on the Sustainable Development Goals (SDGs) is a pivotal moment for India industry and businesses to adapt and plan for sustainable future. ESG is a business strategy and not a compliance imperative anymore!

In this compendium we explore the challenges that industries face in ESG reporting and summarize the need for standardization of approaches and terminologies based on data, improving the status of adequate data collection and benchmarking, increasing awareness of ESG reporting processes, indigenization, and availability of technology and, more importantly, methodologies and guidelines.



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SECTION 1:

Building the premise for ESG needs within MSMEs

The need for an ESG reporting framework for the MSME sector in India

Rahul Muralidharan and
Satyanarayanan Seshadri

1. Introduction: ESG and MSME

ESG reporting is the disclosure of the impact of a business on environmental, social, and corporate governance. ESG reporting has been growing in popularity through global sustainability efforts, where organizations of all sizes are required to be more transparent about how they are managing their risks. As nations across the world have promised to meet their net-zero targets, the focus on improving ESG performance has gained renewed attention. To improve compliance, stock exchanges, government agencies and regulatory bodies have mandated ESG reporting.

The Micro, Small and Medium (MSME) sector in India is the largest employer and a vital part of the economy. MSME account for 96% of industrial units in the Indian economy, generating 12 crores jobs, contributing 33% to India's GDP and account 42% of all exports (Forbes, 2023). MSME consumes about 25% of total energy consumed by the industrial sector, and out of that 15% is electricity consumption and 85% is thermal energy consumption. While being a critical link for supply chain and products, the MSME sector is greenhouse gas (GHG) intensive due to high use of fossil-based fuels (TERI, 2022).



ESG reporting has become mandatory now as large manufacturers demand from suppliers that goods are produced in a sustainable manner and employees are held in high regard. Although the MSME sector does not fall under the ambit of regulations now, it is likely a future possibility that ESG reporting becomes a competitive advantage for business.

In this blog post, we argue why we need a dedicated ESG reporting framework for the MSME sector in India. In the subsequent sections we provide a brief history of ESG evolution in India, an overview of global ESG frameworks and the challenges of MSMEs to comply with existing ESG frameworks. We conclude by sharing a few thoughts of how at the Energy Consortium we are planning to address this lacuna.

2. Evolution of ESG in India: A brief history

ESG reporting in India commenced in 2009 following the voluntary guidelines on Corporate Social Responsibility issued by the Ministry of Corporate Affairs (MCA). In 2011, the MCA released National Voluntary Guidelines (NGV) on social, environmental, and economic responsibilities of business. Based on NGV the Securities and Exchange Board of India (SEBI) in 2012 produced Business Responsibility Reporting (BRR) and made it mandatory to top 100 companies from fiscal year 2012-2013, extended to top 500 companies from 2015-2016 and top 1000 companies by 2019-2020. In 2019, the MCA introduced National Guidelines for Responsible Business Conduct (NGRBC), based

on which Business Responsibility and Sustainability Reporting (BRSR) framework was developed and made mandatory in 2022-2023.

In 2023, two noteworthy events took place with respect to ESG reporting in India. First, SEBI introduced BRSR core, which involves measurement of key performance across nine ESG metrics and made it mandatory for the top 1000 listed companies to report from 2023-2024. The companies should also give reasonable assurance, which is a detailed third-party validation of disclosures made. Second, SEBI called for a mandatory ESG disclosure of value chain, covering both suppliers (upstream) and consumers (downstream) comprising 75% of their purchases and sales, of top 250 listed entities on a 'comply-or-explain basis' from 2024-2025. In addition, companies also need to provide limited assurance, which is a less stringent form of third-party validation of value chain reporting from 2025-2026 onward.

3. An overview of global ESG frameworks

In this section, we briefly describe the salience of globally recognized ESG frameworks such as: Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC), and Task Force on Climate-related Financial Disclosure (TCFD). These frameworks are few among the several that are widely adopted globally, and by Indian companies operating within the country and in other parts of the world.

GRI framework that was launched in 1997 is the most widely used for sustainability reporting. The GRI provides a comprehensive overview of ESG requirements across environment, social and governance. Companies adopting GRI must report across 33 universal standards, enhancing transparency, accountability, and stakeholder engagement.

IIRC focuses on the connection between financial, social, and environmental performance, and reporting them in an integrated manner. This framework has six core elements: overview of the organization, governance, business model, risks and opportunities, strategy and performance, and stakeholder relationships. IIRC is inclined more towards financial aspect to enable a more efficient

and productive allocation of capital, encouraging companies to report on their long-term value creation.

TCFD framework focuses on climate change-related financial risks and opportunities, encouraging companies to make more informed decisions. Reporting is done across four core elements: governance, strategy, risk management, and climate-related metrics and targets. As key elements TCFD focuses on financial implications of climate change in GHG emissions, scenario analysis, and integration into financial reporting.

Having provided a glimpse of globally recognized framework, it is pertinent here to note that ESG reporting is both resource intensive and time-consuming for smaller organizations, and more importantly a complete disadvantage for those who are exporters needing to comply with such regulations.

4. The challenges of complying with existing ESG reporting framework for MSME

There are multiple challenges that MSME face while complying with existing ESG frameworks:

- First, MSMEs operate with limited budgets, so the cost of implementation and maintaining reporting standards with local as well as global ESG framework might be high.
- Second, without in-house expertise or access to guidance, MSME may find it difficult to understand and comply with complex ESG reporting frameworks. As standards are evolving continuously, MSME may struggle to keep track of ongoing development and internalize into their reporting requirements.
- Third, accessing data needed to report on all ESG indicators might be particularly challenging for MSME, which is true in the case of environmental indicators such as GHG emissions. Intangible ESG indicators related to social and governance performance can be difficult to manage and quantify, posing challenges to report them in a meaningful way.
- Finally, ESG frameworks beyond being complex are generic in nature not providing specific guidance for different sectors, which can make it difficult for MSMEs to identify and address the specific ESG issues that they face.

For instance, reporting under BRSR framework is data intensive that even large firms are finding it challenging. There are concerns on the quality of reporting and engagement as the BRSR reporting framework covers across nine principles and three sections with more than a hundred data points making the filing process potentially demanding and exhausting for companies (Asokan, 2023). For MSME, the costs of implementing responsible business initiatives outweigh the benefits as they already face heavy compliance regulations creating additional burden (Asokan, 2023).

5. A way forward: Our work at the Energy Consortium

On a fundamental level, our central question here is: Does ESG reporting lead to sustainable outcomes or echoing Asokan (2023) is it another form of a regulatory burden for the MSME sector? Based on this premise, we are developing a framework for the MSME sector that is both cost effective and rigorous enough to collect quality data. Two factors are critical for MSMEs: the cost and scope of reporting. The minimum reporting requirements for MSME need to be aligned with the key sustainability issues in India. More importantly, these minimum reporting requirements should be able to map with global and local ESG frameworks such as GRI, SDG, TCFD and BRSR.

As a first step of the processes, we have completed mapping key sustainability themes along with a list of questions to key ESG frameworks. For instance, MSME in terms of environment can report energy consumption, GHG emissions, water use, and waste management and biodiversity impacts. In terms of social disclosure: employment, labor practice, gender quality, human rights, and decent work. In terms of governance, MSME can report on ethics, anti-corruption, compliance, transparency, and risk management.

There is a dearth of information about MSMEs and their inclination towards ESG reporting in India. To aid in generating information, we have planned to launch a questionnaire survey to collect baseline data on ESG awareness. By launching this initiative and understanding the needs, we hope to develop a robust ESG reporting framework in collaboration with the MSME sector. In addition, by engaging further with the implementation our intent is to make the MSME sector aware of ESG reporting, getting them ready and raring to use it

towards their benefit while making their business sustainable going forward.

6. References

Asokan, A. (2023). An Overview of ESG Reporting in India: Practices and Challenges. Sustainable Boardrooms: Democratizing Governance and Technology for Society and Economy, 19-39.

Forbes (2023). MSME Statistics Of 2023, Forbes Advisor, Published on 7th Nov, accessed on 20 Nov: <https://www.forbes.com/advisor/in/business/msme-statistics>

TERI (2022) Financing Low Carbon Transition for India's MSME Sector, New Delhi: The Energy and Resources Institute. 88 pp: <https://www.teriin.org/sites/default/files/files/Financing-Low-Carbon-Transition-for-India-MSME-Sector.pdf>

Dialogue with MSMEs on ESG Reporting Challenges and the Path Forward

Rahul Muralidharan and Charuta Kulkarni

Chennai, 24 May 2024 – Hall 2, ICSR, IIT Madras
Organized by: Energy Consortium, IIT Madras

Executive Summary

The Energy Consortium and The School of Sustainability, IIT Madras, convened a workshop with industry stakeholders on the challenges of ESG reporting and how they can navigate a path forward. The main agenda of the workshop was to engage with industry participants and get their insights into the reporting status of ESG (Environmental, Social, and Governance) and its challenges. The challenges include standardizing approaches, defining clear guidelines and formats for data collection, ensuring transparency and comparability, traceability, and data integrity, and, importantly, methodologies and guidelines for disclosures. The workshop also aimed to explore opportunities for academia-industry collaboration to address existing problems with respect to the status of ESG reporting. The major focus of the workshop was on the E of ESG reporting, though the S and G were briefly covered during the workshop. The meeting was attended by representatives from academic-industry collaboration to address existing problems related to industry, government, academic, and non-profit organisations.

The participants of the workshop identified four key challenges: the general need for more data and lack of accuracy in measurement; ESG knowledge across the workforce; skilling needs for ESG data collection and reporting; and fairness across the industry for sectoral comparison. The key questions that participants had around ESG from the workshop include econ the economic impact of reporting compliance, the cost of implementing technologies to achieve net zero, ESG compliance to meet commercial proposals for new projects impact of reporting compliance, cost of implementing technologies to achieve net zero, ESG compliance to meet commercial proposal for new project to multilateral institutions and banks and the need for awareness building and social training. Moreover, industry representatives indicated that measuring and reporting Scope 3 emissions was a challenging task for which they require guidance. The workshop ended on a note to facilitate regular dialogues and knowledge sharing between academia, industry, and regulators to identify research needs, support regulatory development, and practical implementation.

1. Identified challenges

1) Data: There is a general need for more data for companies (both internal and external data points). There is a lack of accuracy in measurements, in availability of benchmarks, in frequency of collection of data

2) Knowledge across workforce: The general workforce is not yet sensitized and trickling down ESG would enable organizations to internally be more prepared and have ease in collecting, compiling and cascading data. The knowledge piece has two aspects:

- ESG is limited to the board (probably for all the right reasons as Leadership indicators form the bedrock of ESG disclosures & reporting) but finer details of how data can be collected and compiled is not yet harmonized within organizations, let alone across the industry .
- Awareness building for ESG across the organization is important and its

3) Skilling is needed: This need is being felt both inside and outside the company

- Specific trainings regarding ESG disclosure and how to prepare is necessary for a specific group within the company as this will help make the entire exercise

seamless and probably can be better integrated into other enterprise level practices

- External resources are required as this can particularly help address the need arising across value chain partners

4) Fairness across industry

- There is need to have a fair way of comparing different industries and attributing the emissions as per the business. Representatives of cement industry in particular feel that the way they approach ESG is very different than a IT company would
- (IITM is specifically proposing developing certain sector specific comparators and normalization factors to aid in this)

2. Key questions that the participants had around ESG and from the workshop

1. Economic impact (positive as well as negative) on the central activity arising because of compliance reporting under ESG disclosures

2. Cost of implementing technologies to achieve net zero is unknown. Companies are looking for help (from IITM)

- General feeling that carbon accounting and offset would be the way to go. How to assess this?
- How to involve the value chain partners in the emission accounting?
- How to associate the cost and benefit realization to each of those in the value chain?

3. Representing commercial proposals for new projects to multi-lateral institutions and banks (WDB for e.g.)

- Need help on understanding ESG related parameters for compliance and how to meet those

4. Awareness building exercise is required, and social training is broadly considered to be the need of the hour

- Specific challenges exist in the deployment of ESG, and gaps exist in the on-ground implementation where such advice and help are solicited

3. Conclusion and key takeaways

The Industry Dialogue on ESG organised in IIT-Madras, Chennai is first among the series of workshops to engage with industry stakeholders and identify reporting challenges. The invited participants identified key challenges and questions with reporting ESG including broadly the concerns raised by the participants including the lack of benchmarking, standards, clear definition of reporting parameters, data collection and its frequency and need for skilling are unresolved problems in current ESG reporting landscape.

The invited participants had a mix of people who are currently undertaking ESG reporting and facing challenges as well as people who are new to ESG reporting. Although the participants identified broader concerns with respect to challenges in ESG reporting, the nuanced insights into specific problems faced by reporting companies could not come out clearly. Moreover, the participants were not strictly restricted to ESG analysts or sustainability officers of reporting companies, which meant that we received peripheral views from people.

Therefore, subsequent iterations of the ESG workshop should include representatives from top companies who are engaged in reporting sustainability for us to get an on-ground understanding of reporting challenges. Gathering information on such nuanced challenges will help us consolidate the response and take to the regulators with specific recommendations to the ease the process of ESG reporting and ensure that Indian business becomes more sustainable over time.

Dialogue with Corporates on ESG Reporting Challenges and the Path Forward

Rahul Muralidharan

Mumbai, 18 October 2024 – Ruby Hall, Kohinoor Continental, Andheri
Organized by: Energy Consortium, IIT Madras

1. Purpose and context

The workshop convened corporate leaders, regulators, sustainability practitioners and academic experts to address ESG reporting challenges in India, focusing on the environmental and social (E and S) dimensions of the BRSR reporting framework.

SEBI's shift toward mandatory sustainability reporting has accelerated ESG adoption, but firms struggle with inconsistent standards, data complexity, varying maturity within value chains, and costs of compliance.

2. Key insights

The context-setting emphasized that ESG is moving rapidly from a voluntary disclosure exercise to a regulatory expectation. India now ranks among the few economies where sustainability reporting is mandatory, and BRSR has shifted the conversation from "CSR activities" to "measurable environmental and social performance." The introduction also highlighted gaps identified in earlier workshops—fragmented data systems, lack of comparability across reporting standards, challenges in Scope 3 tracking, and low ESG preparedness among MSMEs—setting the stage for the sessions ahead.

•Regulatory push is accelerating ESG but companies must catch up.

SEBI's representative (Keynote 1) reinforced that India expects better quality disclosures, not just reporting compliance.

Industry observed that smaller suppliers (MSMEs) are being pulled into ESG without readiness, creating data reliability challenges.

•ESG maturity varies dramatically across companies.

Some organizations treat ESG strategically (value creation), while others see it as checkbox reporting.

•Consulting case studies showcased real implementation pathways.

Examples included lifecycle assessment, eco-labeling, green building certification, carbon project development, carbon credits monetization, and ESG adoption frameworks

3. Existing gaps

During the group activity, participants shifted from listening to actively shaping solutions. Across all tables, a striking level of convergence emerged: ESG in India does not fail due to lack of intent, but due to lack of enablement. Participants shared that ESG policies often overlook people most affected by decisions- local communities, workers, and MSME suppliers. One participant noted that communities are "affected but not included," highlighting the need for structured stakeholder engagement and social impact assessments. Another group pointed out that while CFOs are now responsible for BRSR reporting, many lack technical grounding in environmental metrics, prompting a call for mandatory ESG certification or training.

Data traceability and Scope 3 emissions dominated the conversation. Participants described the current reporting burden as "manual, fragmented, and unrealistic without supplier capability." They recommended a national emission database, automated data capture through digital platforms (similar to ONDC), and even blockchain-based traceability to reduce duplication and improve confidence in reported numbers. Groups also expressed frustration with lengthy ESG reports and proposed a one-page BRSR executive summary to enhance transparency and readability.

4. Summary and next steps

Several important aspects have emerged:

1. A shift from "ESG reporting" to "ESG enabling"

Participants emphasized that ESG should not become a regulatory burden. Instead, ESG must become a strategic lever for competitiveness. The conversation frequently returned to money and incentives: *"Money is what moves the world. Incentives and compliance pressure are what motivate real action."* [Participant during the closing dialogue]. Participants stressed that companies respond when ESG links clearly to business outcomes - access to capital, customer preference, and reduced compliance risk.

2. Recognition that Scope 3 and MSME readiness are the biggest blockers

Stakeholders acknowledged that data quality and value chain transparency are the weakest links. MSMEs lack systems, training, and familiarity with BRSR or ESG concepts. The workshop crystallized a collective commitment to capacity-building and handholding MSMEs, rather than transferring compliance pressure downstream.

3. Participants converged on the need for shared national infrastructure

- Concrete solutions emerged from group presentations:
- A central emission factor database for India
- A national-level shared portal for uploading material data
- Use of blockchain for Scope 3 traceability
- Product-level eco-labeling for transparency

4. Consensus on simplifying ESG reporting

Attendees also voiced that ESG disclosures are too lengthy — annual reports running into 300+ pages of ESG material. Participants reflected on how more clarity in reporting enables further adoption.

5. Group agreement: ESG capability is uneven

Several participants noted gaps in ESG literacy even at leadership levels:

- Board directors lack ESG training
- CFOs are shouldering ESG responsibility without technical background
- ESG is often delegated to HSE or compliance staff without strategic involvement

5. Actionable recommendations

1. Introduce a mandatory certification or training for ESG reporting leads (CFOs, sustainability leads).
2. Develop centralized national ESG data portal (like ONDC architecture for supply chain emissions)
3. Publish a one-page BRSR summary per company for easier investor interpretation.
4. Create sector-specific KPIs instead of forcing one-size-fits-all reporting
5. Accelerate creation of Indian emission factor libraries and Scope 3 tools.

SECTION 2: Developing a strong knowledge base and approach to be followed when deploying ESG mindset within MSMEs

Unlocking India's decarbonization potential through a critical analysis of Scope 3 emissions

Rahul Muralidharan and Nikhil S Tamble

Introduction

India is expected to become the third largest economy by 2027, according to IMF. Being the third largest GHG (Greenhouse Gas) emitter, India has not only announced ambitious commitments at UNFCCC (United Nations Framework Convention on Climate Change) Conference of Parties but also is already well underway on meeting 50% of its energy requirement through renewable resources and reducing its emissions intensity by 45% of 2005 baseline by 2030. In India, energy production contributes the highest release of GHG emission, in which the industrial sector consumed almost 41% in the year 20221. India requires a substantial increase in the energy transition trajectory if it were to advance its net-zero targets from 2070 ahead to 2050.

It is imperative to track and abate GHG emissions to mitigate the global implications of climate change and its associated temperature rise. Globally, burning fossil fuels for energy production accounts for 75% of GHG emissions. The industrial sector, still dominated by fossil fuels for energy needs, accounts for about a quarter of energy-related CO2 emissions (IEA). In 2022, for instance, the industrial sector accounted for 37% of global energy use, which is expected to increase with the rising global economy, human population, and energy intensive subsectors. Moreover, the industrial sector is one of the most challenging sectors to decarbonize as low carbon technologies are currently under development or too expensive.



Figure 1: An illustration of the three 'scopes' of emissions. Source: GHG Protocol

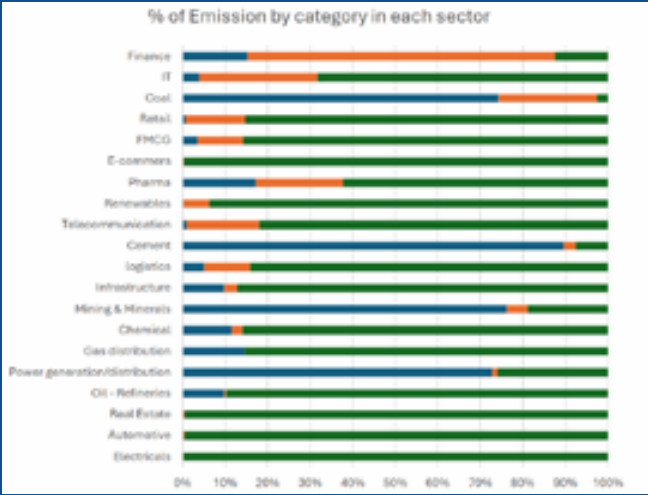


Figure 2: Percentage of emission by category in each sector from BRSR reports 2022-2023. Image source: Courtesy of Rahul Thanniru

Decarbonizing the supply chain is an important task because they are often the largest source of emission of a company. However, since most of the activities involved in Scope 3 emissions take place outside the company's direct operation they are challenging to track, and this makes the measurement of these emissions a complex task. Tracking and measuring Scope 3 emissions, being indirect and external to companies, is challenging due to data scarcity, lack of standardization and excessive costs, presenting a critical challenge for decarbonization. Despite limited data, documenting and operationalizing Scope 3 emission reduction is acute to achieving net-zero targets.

Our findings indicate that sectors such as automotive, chemicals, real estate, FMCG, pharmaceuticals, retail, telecommunications, logistics, oil refineries, electrical, and e-commerce were higher on Scope 3 emissions. The data shows that Scope 3 intensive sectors rely heavily on supply chains, and some are global, exhibiting a significant carbon footprint. Reducing Scope 3 emissions in these sectors could mean cost saving from improved efficiency, enhanced reputation, competitive advantage, and firmer alignment with global sustainability goals.

Table 1: Key sources of Scope 3 emissions by sector

Sector	Category of major emission contributor
Automotive	Use of sold products; purchased goods and services
Chemicals	Purchased goods and services; use of sold products
Real estate	Capital goods; downstream leased assets
FMCG	Purchased goods and services
Pharmaceuticals	Purchased goods and services; and processing of sold products
Telecommunications	Upstream leased assets
Logistics	Purchased goods and services; upstream transportation and distribution; capital goods
Oil refineries	Use of sold products
Electrical	Use of sold products
E-commerce	Unknown
Retail	Unknown

* GHG protocol categories that are reported by companies. Data Source: CDP (2022)



The Scope 3 emission categories highlighted in the Indian context have the potential for decarbonization through the following strategies. First, there is the need to collaborate with key suppliers through a supplier engagement program to decode emission profiles and set joint targets for reduction over time. In addition, larger companies can also prioritize suppliers with strong environmental credentials and those which offer low-carbon alternatives. However, this needs to come through collaboration and partnerships with supplying companies. For instance, the MSME sector should become an integral part of decarbonization strategies that create a competitive advantage for these businesses rather than just becoming a compliance burden. Investing in energy efficient equipment and the integration of renewable energy to power these assets can vastly result in emission reductions. In addition, designing products with circular economy principles that accompanies sustainable raw material extraction and disposal and supply chain fleet electrification can help rapid decarbonization efforts.

Interrogation of ESG Rating and Benchmarking processes

Medhaa Priya, Rahul Muralidharan and Satyanarayanan Seshadri

This study interrogates the Environmental, Social, and Governance (ESG) rating and benchmarking processes in India, focusing on three major rating agencies: MSCI, Sustainalytics, and CRISIL. Amid the rising significance of ESG considerations globally and within India, the study highlights key inconsistencies in methodologies, metrics, and weightages across agencies, which complicates standardized comparisons and decision-making. The objective also resonates with the regulatory efforts by the Securities and Exchange Board of India (SEBI), including its Business Responsibility and Sustainability Reporting (BRSR) guidelines and the recent Master Circular released in the year 2023 for ESG Rating Providers, aimed at harmonizing ESG practices. The research evaluates ESG ratings for 100 leading Indian companies across 14 sectors, using data from publicly available repositories and agency methodology reports.

Despite similarities in overall ESG scores, substantial discrepancies were observed in the interpretation and weighting of individual environmental, social, and governance factors. These differences stem from varied approaches, such as MSCI’s industry relative measures, Sustainalytics’; ESG risk exposure analysis, and CRISIL’s risk-adjusted performance metrics. Sector-specific analysis further elaborates that industries face distinct challenges, necessitating tailored ESG evaluation frameworks.

The study highlights significant implications arising from inconsistencies in ESG rating methodologies.

These discrepancies can mislead investment decisions and result in inefficient capital allocation, emphasizing the urgent need for standardized frameworks to enhance transparency and bolster investor confidence. For corporations, the adoption of standardized practices would drive more robust ESG reporting and encourage the integration of sustainability into core business strategies, fostering long-term value creation. Additionally, the analysis reveals the importance of developing industry-specific ESG frameworks to effectively address the unique risks and challenges faced by different sectors, ensuring more accurate and relevant evaluations.

The study concludes that standardized ESG rating frameworks, coupled with sector-specific flexibility, would enhance India’s competitiveness in sustainable finance, attract global investments, and foster sustainable economic growth. These findings call for regulatory and policy reforms to mitigate discrepancies and promote consistent and reliable ESG disclosures.

Sector-wise analysis

As a drill-down of how companies within the sectors are rated, the authors have generated sector-wise inference for the 10 major sectors in our sample dataset. The sectors include automotive, cement, finance, IT, telecommunication, FMCG, mining and minerals, pharmaceutical, real estate and infrastructure. Few sectors are handpicked for this abridged version to demonstrate the key inferences [More sectoral analysis is available in the original paper]

Automotive sector’s agency-wise ESG ratings distribution

Company Name	MSCI (Normalized)	Sustainalytics	CRISIL
Bajaj Auto	Average	16	54
Eicher Motors	Above Average	13.4	58
TVS Motors	Above Average	15.4	59
Maruti Suzuki	Laggard	29.2	60
Ashok Leyland Ltd	Average	13.4	60
Tata Motors	Below Average	26	62
Hero Motor Corporation	Above Average	12.2	64
Mahindra and Mahindra	Above Average	23.9	66

Finance sector’s agency-wise ESG ratings distribution

Company Name	MSCI (Normalized)	Sustainalytics	CRISIL
Union Bank	Above Average	31.8	57
IDBI Bank Ltd	NA	32.1	59
SBI	Average	23	60
Bank of Baroda	Average	21.9	61
Canara Bank	Average	31.2	61
IndusInd Bank Ltd	Above Average	30.1	66
Bajaj Finance	Above Average	18.5	67
ICICI Bank	Above Average	22.5	69
Axis Bank	Above Average	19.6	71
HDFC Bank	Above Average	29.8	72
Kotak Mahindra	Above Average	13.7	73

FMCG sector’s agency-wise ESG ratings distribution

Company Name	MSCI (Normalized)	Sustainalytics	CRISIL
Varun Beverages	Average	33.4	43
Jubilant Foodworks	Laggard	22.5	51
Dabur India	Above Average	25.4	59
ITC	Above Average	NA	63
Godrej Consumer	Below Average	28.6	66
Britannia	Above Average	26	66
Tata Consumer Products	Above Average	26.5	67
Hindustan Unilever Ltd	Above Average	21.5	68

The variations across different rating agencies presented in this study demonstrate how the composite ESG score may not significantly vary amongst each other. But they may significantly vary across environmental, social and governance factors individually. This is because of the different weightage, interpretations and methodologies employed by the rating agencies on determining such factors. Hence, it is evident that our findings impact the current interrogations on ESG ratings and benchmarking, due to the lack of standardization in ESG reporting and disclosure practices. Given the diversity of various approaches, it also well aligns with the motivation behind SEBI's master circular on standardized practices by ESG Rating Providers (ERPs). Our findings may also have an impact on the other aspects such as

- iv) Investment decisions and capital allocation: the inconsistency may lead to misinformed investment decisions, wherein capital might be allocated to companies based on the non-comparable data. Standardization would ensure that the investors have access to reliable and comparable information, leading better decision making that aligns with sustainable and responsible investment practices. This could also enhance investor confidence in ESG related investments, potentially leading to increased capital flows into companies that genuinely prioritize sustainability.
- iv) Implications for corporate strategy: For companies, the push towards a standardized ESG rating system also means that they will need to align their operations with more transparent and consistent ESG criteria. Further, they would need to adopt more rigorous and comprehensive reporting practices, ensuring that their ESG related initiatives are not only well documented but effectively communicated among its stakeholders. This shift could drive a more strategic integration of ESG factors into core business operations, promoting long-term sustainability over short-term gains.
- iv) Regulatory and policy implications: The findings also suggest that a growing role for regulatory bodies in shaping the future of ESG reporting and ratings system in India. The Securities and Exchange Board of India (SEBI) has already made strides by introducing the Business Responsibility and Sustainability Report (BRSR) guidelines towards a greater regulatory oversight. However, these are still evolving, and not uniformly adopted across all sectors. If uniformly implemented, this trend could lead to more robust policies

that mandate ESG disclosures and ratings, also reducing the risk of greenwashing and ensuring that companies' sustainability claims are credible and verifiable.

- iv) Sector-specific impacts: The sector-wise variations in ESG ratings identified in the report highlight the need for industry-specific approaches to ESG assessment. Different sectors face unique challenges and risks related to ESG factors, and hence, a one-size-fits-all rating approach may not be effective. Standardized yet flexible frameworks that allow for sector specific adaptations could ensure that ESG ratings more accurately reflect the realities of different industries, thereby improving the relevance and applicability of these ratings.

Overall, by aligning closely with a standardized rating and benchmarking process could enhance India's global competitiveness in the realm of sustainable finance. Indian companies can increase their potential in global competitiveness by attracting greater investments and recognitions among global investors who are increasingly prioritizing ESG considerations. This could facilitate enhancing their visibility and attractiveness in the current market.



Bridging MSMEs and the SDGs: A Context-Sensitive ESG Framework for Emerging Economies

Rahul Muralidharan, Satyanarayanan Seshadri, and Nikhil S Tambe

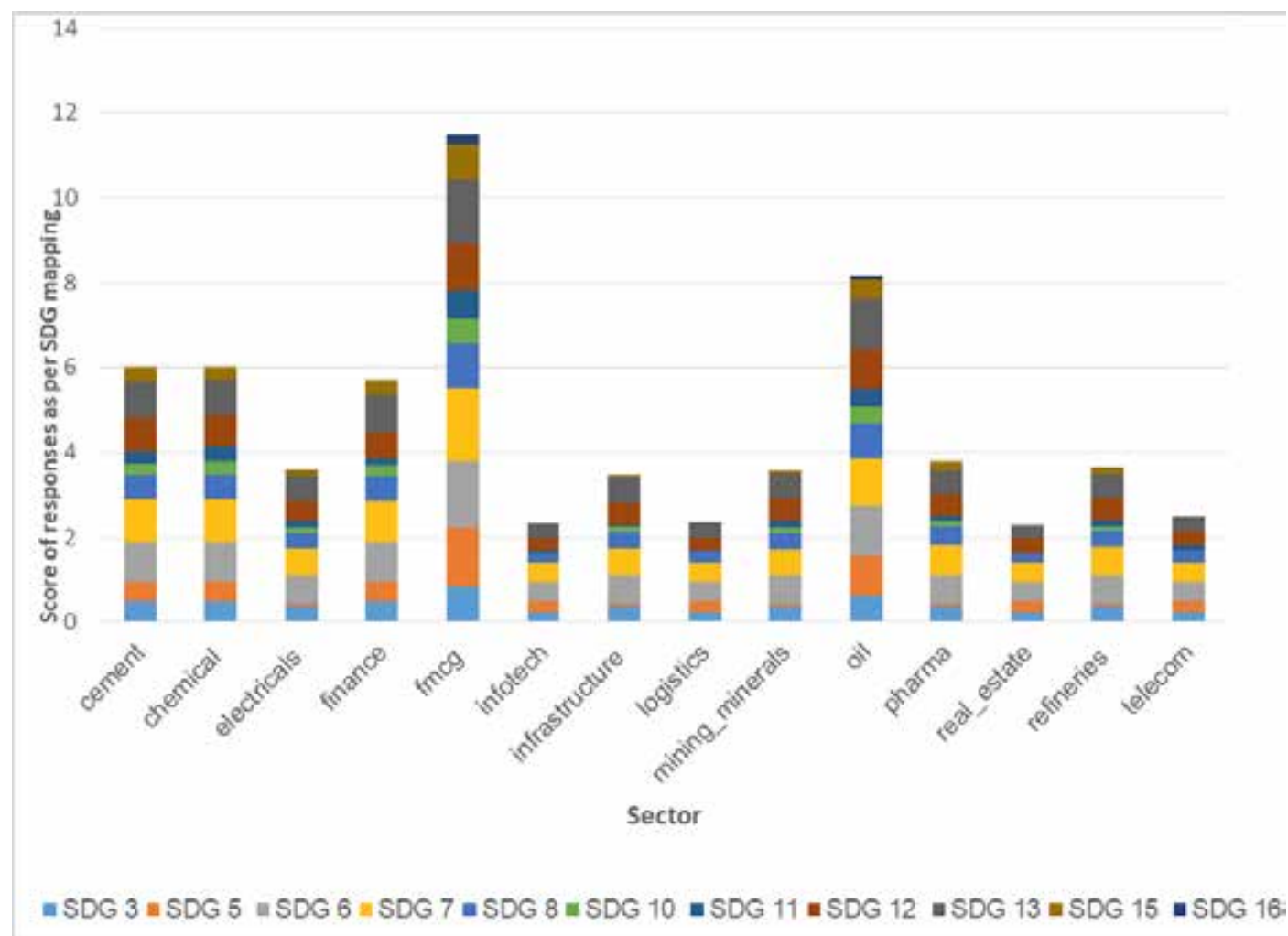
Micro, Small and Medium Enterprises (MSMEs) power India's economic engine. They make what we use, move what we consume, and employ millions. Yet in the growing movement toward sustainability and ESG (Environmental, Social and Governance performance), MSMEs are rarely visible. Large firms are already publishing ESG reports and responding to investors and regulatory pressure. MSMEs, however, are increasingly drawn into ESG conversations because they are situated within the supply chains of these larger firms. As large companies begin reporting Scope 3 emissions — emissions that occur outside their operations, especially from suppliers — emissions that occur outside their operations, especially from suppliers — ns, especially from suppliers, MSMEs find themselves expected to share data on electricity use, waste, water management, safety practices, and even labour conditions. The intent is good: ESG and sustainability should strengthen businesses. However, most existing frameworks are designed for large companies with dedicated sustainability teams, consultants, and internal systems. For MSMEs, the same frameworks feel heavy, expensive, and confusing.

This study responds to that gap. We developed a simple, practical, and MSME-ready ESG framework that removes the complexity associated with reporting, allows MSMEs to get started without additional consultants, and links their everyday practices to sustainability goals. The work began with a fundamental question: what would ESG look like if it were designed for MSMEs instead of large corporations? To answer this, we engaged with MSMEs across multiple sectors — from manufacturing clusters to service providers — to understand what sustainability information they could realistically report and what kind of support they need. MSMEs consistently communicated that the challenge was not a lack of willingness, but rather a need for clarity. They were already

engaging in several sustainability-aligned activities, such as managing waste responsibly, improving energy efficiency, and ensuring workforce safety — they did not have a way to document and communicate these actions in a recognised ESG format.

From these insights, we developed a lightweight ESG framework made of only 35 essential indicators, all of which can be self-reported. Unlike traditional ESG frameworks, which span 100 to 300 metrics, this version remains concise, practical, and grounded in everyday MSME practices. It does not require specialised expertise, consultants, or a digital platform to get started. Each of the indicators is directly linked to 11 relevant Sustainable Development Goals (SDGs), making it easy for MSMEs to demonstrate how their actions contribute to broader sustainability outcomes. Importantly, the framework was tested using real MSME data across 14 sectors, ensuring that it reflects on-ground realities rather than theoretical assumptions. The analysis showed clear patterns: MSMEs connected to global or export-linked supply chains perform stronger on ESG because customers and buyers expect evidence of responsible practices, whereas MSMEs serving domestic markets are less aware of ESG expectations.





Score of responses as per SDG mapping

A key finding from this work is that MSMEs respond to ESG when it enhances business value, rather than when it is framed as a compliance requirement. When sustainability translates into increased customer trust, cost savings through energy efficiency, or new market opportunities, MSMEs view ESG as an investment rather than a burden. Firms that understood ESG in business terms — as a measure of reliability, product quality, and readiness for future regulation — progressed more quickly. The study also revealed that environmental practices are more visible than social or governance practices. MSMEs readily talk about energy use, waste reduction, water savings, or pollution control, because these are tangible. But social practices such as gender equity, formalised labour policies, or grievance mechanisms are more complex to articulate and require more support.

The lightweight framework offers MSMEs something they rarely receive — a clear starting point. Instead

of asking them to build systems for data collection, the framework helps them document what they are already doing and nudges them to take incremental steps forward. It also provides buyers and large companies with a uniform method to request ESG information from suppliers, eliminating the need for excessive spreadsheets and forms. In this sense, the framework serves as a bridge between MSMEs and the increasing sustainability expectations of global supply chains.

What makes the contribution novel is that it treats ESG not as a reporting exercise but as a capability-building process. It shows that MSMEs do not require perfect systems or expensive consultants to get started. They need a simple, structured way to discuss the good practices they already have and identify areas for improvement. The framework shifts ESG from an abstract and technical concept to one that is practical and relevant to everyday business decisions.

The implications of this work are significant. With a simple reporting structure, MSMEs can communicate ESG performance to banks, investors, and large customers. Large companies can collect Scope 3 data more easily, reducing the reporting burden on suppliers. Policymakers gain a path to integrate MSMEs into national SDG and decarbonization efforts without imposing excessive compliance costs. Most importantly, it demonstrates that sustainability is not only for large corporations — MSMEs can lead to change when ESG becomes accessible and business-oriented.

In essence, this work proves that ESG for MSMEs does not need to be complicated. When the language is simple and the expectations are realistic, MSMEs can transition from being invisible in sustainability to being active contributors. ESG becomes not another document to fill, but a way to strengthen trust, improve competitiveness, and build future-ready businesses.



SECTION 3: Ensuring implementation and sustainable translatable practices

Skilling and training are important aspects for making sure that the implementation of the ESG objectives creates the expected successful outcomes. For this, it is also important to consider a broader demographic that includes not only the leadership of industry (large, small, medium or micro) but also address the gap by creating a cadre of skilled professionals who can take this up as a profession.

With this in mind, an 8-hour course has been designed for professionals looking to understand and apply responsible business practices in today's evolving regulatory and market landscape in the context of Environment, Social and Governance (ESG) reporting. Through interactive sessions, real-world examples, and practical exercises, participants will learn how to align business decisions with environmental and social considerations while maintaining strong governance.

The course focuses on how companies can create long-term value by managing risks, improving transparency, and responding to stakeholder expectations. It also explores how businesses in India can meet emerging standards, adapt to global trends, and prepare for future challenges. Whether you're new to ESG or seeking to deepen your understanding, this course provides clear, actionable insights tailored to the Indian industry context.

Here are the key modules and specific concepts that are covered in the course:

Introduction to ESG and its relevance in India

- o Climate change mitigation and sustainability imperatives
- o Evolution of ESG ideas
- o Local and global ESG regulations
- o Materiality assessment and ESG rating process

The ESG pillars covering Environment, Social and Governance

- o Three ESG pillars and why each matters to corporate performance
- o Differentiation among Scope 1, 2 and 3 emissions and brainstorming real-world reduction strategies
- o Recognition of key social and governance topics
- o Application of integrated ESG lens to a business case

ESG reporting and compliance in India

- o Global ESG reporting and BRSR framework
- o ESG disclosures: Principles, leadership indicators and essential indicators
- o Deep dive into Environment aspect of ESG and the specific disclosures therein
- o Common challenges in ESG data gathering and reporting

Scope 3 emissions and ESG implementation challenges

- o Significance of Scope 3 emissions in the context of total corporate carbon footprint
- o Upstream and downstream categories under the GHG Protocol
- o Key challenges in measuring and reporting Scope 3 emissions, especially in the Indian business context
- o Sector-specific good practices to help learners think practically about managing Scope 3 emissions

ESG strategy & integration into business models

- o Evolution of corporate purpose in ESG
- o India's BRSR journey
- o Why ESG matters beyond compliance
- o ESG risk management, green financing, engagement with consumers and stakeholders

Case study - how companies implement

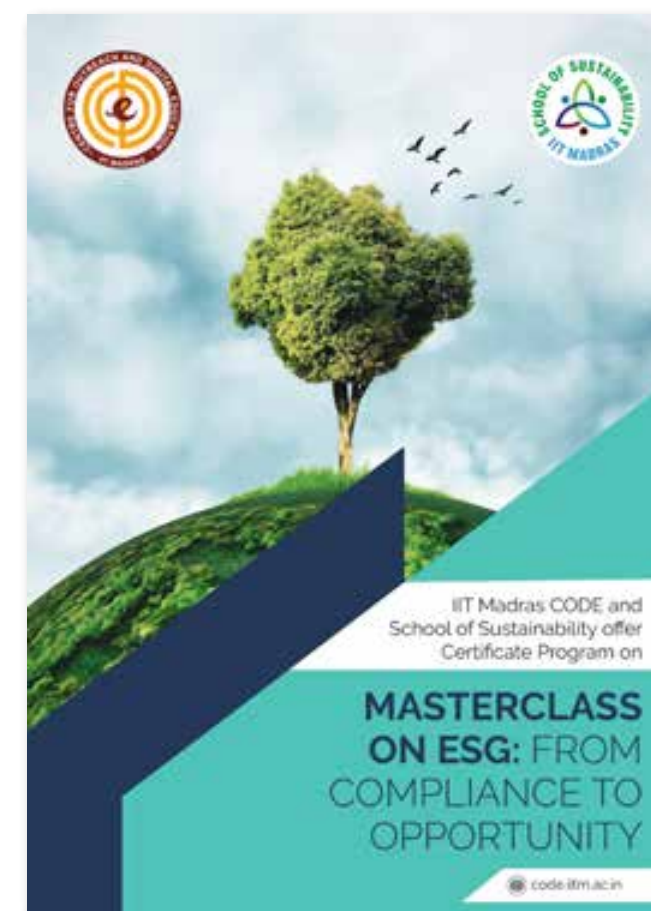
- o Real world case studies of environmental, social and governance strategy of companies
- o A primer on ESG reporting frameworks on local as well as global scales

Practical activities - ESG application & analysis

- o Interpretation of ESG reports of companies
- o Focused discussion on Scope 3 through a critical lens on MSMEs
- o Learning from past: Applying lessons from 6 Sigma

Future of ESG - innovations & global trends

- o Current challenges in ESG
- o Green economy instruments
- o Carbon trading
- o Integration of carbon markets and BRSR reporting



Having already trained close to a 100 participants within the Aug-Oct 2025 timeframe we have worked to create a common understanding of various topics and facilitate discussions that will lead to realization of best practices within organizations and then facilitate the cross-sharing across different disciplines including finance, manufacturing, accounting, environmental & sustainability practitioners, HR, CXOs, investors, shareholders, government.

The next section highlights some of the key insights around specific topics that we have found concerning the entire demographic.

THEME 1: GHG accounting

1. How do companies handle assumptions while calculating Scope 1, 2, and 3 emissions?

Emission calculations always involve assumptions because companies rarely have perfect data across suppliers and value chains. Scope 1 and 2 emissions are mostly based on primary data (fuel use, electricity bills), and assumptions are minimal. Scope 3 requires more estimation, especially when suppliers do not track emissions themselves, so companies use accepted methods such as spend-based, activity-based, or hybrid approaches. The key is transparency: companies should clearly disclose where assumptions were used and how they were calculated.

2. What is the difference between process-based, spend-based, and hybrid methodologies for Scope 3?

A process-based method uses activity data (e.g., liters of fuel consumed, tons transported). A spend-based method estimates emissions based on financial expenditure on goods and services. A hybrid method mixes both, using detailed data for large suppliers and spend-based estimates where data is unavailable. Hybrid is often used because it balances accuracy, cost, and feasibility.

3. How can companies avoid double counting of Scope 3 emissions?

Double counting happens when multiple entities claim the same emissions or reductions. To avoid this, companies must clearly define boundaries (what is Scope 1 vs. Scope 3) and ensure that emissions are not claimed by both suppliers and buyers. Supplier-level data sharing, common emission factors, and alignment to GHG Protocol categories reduce the risk.

4. Can using recycled or low-carbon materials qualify as Scope 4 emissions?

“Scope 4” (avoided emissions) is not recognized in the GHG Protocol. Some companies disclose avoided emissions voluntarily to highlight benefits from sustainable materials, but there is no globally accepted reporting standard yet. The focus remains on accurately reporting Scope 1–3.

5. Which is more credible from an ESG standpoint, carbon sequestration or direct emission reduction?

Direct reduction at source is considered more credible because it reduces emissions permanently. Offsetting (planting trees, carbon credits) is allowed but viewed as secondary and useful only after reduction opportunities are exhausted.

THEME 2: ESG Frameworks, standards, data credibility and ratings

1. Why do ESG rating agencies give different ratings for the same company?

Each rating agency uses its own methodology and weighting system. One may prioritize carbon emissions, while another emphasizes social or governance practices. Until global standards for ESG benchmarking emerge, variation will persist, much like different analysts giving different stock ratings.

2. Do we have an Indian standard for materiality assessments?

Materiality matrices use global frameworks like SASB, GRI, or TCFD. India’s BRSR framework defines principles and disclosures but not a visual materiality matrix. Companies can use BRSR disclosures to determine what is most material from an Indian regulatory standpoint.

3. How can ESG data be verified by independent directors when they don’t have technical expertise?

Independent directors can focus on three checks: a) Whether primary data exists (energy bills, waste receipts, etc.); b) Whether Scope 3 is reported consistently and transparently; and c) Whether improvements are planned when emissions are high

Verification does not need technical computation but it needs questioning of assumptions.

4. How do we standardize ESG reporting when multiple frameworks exist (GRI, SASB, IFRS, BRSR, CDP)?

Companies operating globally adopt GRI or SASB or IFRS. However, India mandates BRSR for top 1,000 listed companies. A practical approach is to use BRSR as the primary structure and map disclosures to global frameworks where required.

THEME 3: BRSR mandates, applicability and MSME implications

1. Is BRSR mandatory for all companies? What about unlisted companies?

BRSR is mandatory only for the top 1,000 listed companies by market capitalization.

Unlisted companies and MSMEs are not mandated to report, but may be asked for ESG data by their customers (Scope 3 supply-chain requests).

2. What happens if a company drops out of the top 1,000 because of demerger or market cap changes?

BRSR applicability is refreshed annually based on market capitalization. If a company exits the list, the mandatory requirement may not apply the following year. However, many companies continue reporting voluntarily due to investor expectations.

3. Will large companies expect MSMEs to share Scope 3 data?

Yes. As BRSR matures, MSMEs will increasingly be asked for energy, fuel, water, safety, and labor data. Large companies cannot meet Scope 3 reporting requirements without supplier participation.

THEME 4: Tools, technology, and market mechanisms

1. Are blockchain or digital traceability tools used for ESG?

Blockchain is being explored globally for supply-chain traceability and carbon accounting. It enables transparency and tamper-proof tracking of carbon attributes. Adoption is slow because monetization models and regulatory clarity are still evolving.

2. Are there renewable purchase obligations (RPO) still applicable in India?

RPO mandates vary by state. They require certain consumers to source a percentage of electricity from renewable energy. Enforcement and visibility have fluctuated, but the policy still exists.

3. Are carbon markets active in India?

Yes. Under the India Carbon Market Framework (2023), trading of carbon credits will be enabled for obligated industries. The framework builds on the earlier PAT scheme and allows companies to generate and trade carbon reduction certificates.

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