# Promoting a transition with inclusion in India:

## the role of Business Responsibility and Sustainability Reporting (BRSR)

Sangeeth Selvaraju

Policy report

March 2025

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## Acknowledgements

The author is grateful to Anjali Dalmia and Mayank Khurana for their valuable research assistance on this report regarding methodology development and company analysis. He would also like to thank Nick Robins and Leo Mercer from the Just Transition Lab and Grantham Research Institute, Chaitra Nayak of AIGCC, Gaurav Upadhyay of IEEFA, Ojaswa Anand of Ckinetics, Ghislaine Nadaud of Robeco and Meraj Inamdar of NISM for their comments and feedback. Georgina Kyriacou edited the report.



This report was first published in March 2025 by the Grantham Research Institute on Climate Change and the Environment.



**Suggested citation:** Selvaraju S (2025) *Promoting a transition with inclusion in India: the role of Business Responsibility and Sustainability Reporting (BRSR)*. London: Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science.

# Contents

# Summary

## Corporate sustainability disclosures are increasing

A growing number of companies are starting to make disclosures on sustainability as more corporate sustainability disclosure regimes emerge globally. Thus the amount of corporate data on sustainability-related issues is proliferating and the need to have greater standardisation across disclosure regimes is becoming more important.

The Business Responsibility Sustainability Reporting (BRSR) in India is worth highlighting as a disclosure regime from a large emerging market that is growing rapidly, and for its potential role in bringing about an inclusive and just socioeconomic transition. The International Labour Organization (ILO) defines the just transition as a means of greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind.

## Indicators for investors and companies using India's BRSR

We have incorporated several key indicators from the BRSR into a tool for investors and companies to assess and signal their just transition-related activities. **For investors, the tool serves to evaluate the efforts of companies towards sustainable and inclusive growth,** ensuring informed decision-making and actively engaging with companies to advocate for just transition-related actions. **For companies, it offers a reflective lens to gauge their performance on just transition,** enabling them to signal their actions to investors, identify gaps and improve strategies for a fair and equitable transition.

Five of the just transition-relevant indicatorsfrom the BRSR framework are part of the 'BRSR Core' disclosure of the Securities and Exchange Board of India (SEBI). These Core indicators are subject to third-party 'assessment or assurance' to enhance credibility and transparency. Table S1 highlights these five assessed/assured indicators plus two other indicators from the BRSR that are particularly relevant for the just transition.

**Table S1. Just transition-relevant indicators in the BRSR**

| Description | Principle and indicator in BRSR | In BRSR core/assured |
|---|---|---|
| Safety-related incidents | P3, E11 | Yes |
| Total energy consumption | P6, E1 | Yes |
| Water consumption | P6, E3 | Yes |
| Water discharge | P6, E4 | Yes |
| Greenhouse gas emissions | P6, E7 | Yes |
| Input materials sourced from MSMEs* and districts | P8, E4 | No |
| Job creation in smaller towns | P8, E5 | No |

**MSMEs = micro, small and medium sized enterprises*

The above indicators can be an excellent starting point for investors and other stakeholders wanting to engage Indian companies on the just transition: they provide an overview of the transition and just transition-related activities of the company in real time. The indicators can be incorporated by index fund managers and assessors of corporate sustainability in combination with their existing methodologies.

## Sector analysis

Based on 2023–24 BRSR disclosures by companies, we apply our methodology to companies in the steel, cement, power and mining sectors. We analyse how each company demonstrates actions and achievements against ILO just transition indicators, and where they could make improvements, mapped against the relevant BRSR principles. This illustrates how investors and companies could use information from the BRSR to assess relevant corporate just transition-related activities.

### Steel companies

The BRSR report helps to highlight that Tata Steel and JSW Steel both set strong industry standards for workers, creating the conditions for a just transition. Additionally, making this information publicly available works as an incentive for other companies to implement best practice and just transition principles, if they are not already doing so. Both companies ensure the re-usage of slag. However, both companies need to establish better mechanisms for resettlement and rehabilitation for many of their projects and plants. And particularly in the case of JSW Steel, there needs to be a greater focus on ensuring effective training for employees and value chain partners.

### Power companies

All the power companies reviewed have effective occupational safety and health (OSH) policies, grievance mechanisms and worker rights and benefits designed to ensure that a smooth and just transition can take place. They also have large corporate social responsibility (CSR) projects and source many of their products from MSMEs and small producers. The companies also set out just transition goals and roadmaps. However, all the companies within this sector show a below-average performance in worker training schemes.

### Cement companies

The cement sector's drive towards sustainable practices is evident, as companies like UltraTech Cement and Dalmia Bharat, among the world's largest cement producers, continue to adopt measures to enhance energy efficiency, sustainable sourcing and waste management. However, broader sectoral challenges mean substantial investment and innovation are required to decarbonise and hit net zero targets. For the sector to foster a just transition, companies need to support workers with skill development for low-carbon roles, enhance rehabilitation and resettlement for communities, and strengthen supply chain sustainability.

### Mining companies

The mining sector plays a vital role in achieving a just transition, balancing sustainable practices with the high environmental and social impact of its activities. Vedanta is one of the major mining players in India and its efforts underscore progress in sustainable production through initiatives such as a 95% allocation of R&D towards environmental advancements. However, there is room for improvement in areas like renewable energy adoption and Scope 3 emissions management. These steps are vital as the mining industry is not only phasing out coal but also expanding to meet the increasing demand for energy transition minerals, which are essential for low-carbon technology. As the industry pivots towards mining for these minerals, investors hold significant influence in supporting a just transition, using capital allocation and engagement with companies to prioritise community respect, worker safety and regional economic development.

# 1. Introduction

This report highlights key indicators relevant to the just transition from the homegrown Business Responsibility Sustainability Reporting (BRSR) in India and creates a tool that investors and companies can use to signal just transition activities.

### Context: the just transition challenge in India

India is edging towards its net zero target year of 2070 and the transition to a cleaner, greener and more inclusive economy is well underway. It is vital to ensure this transition harmonises environmental sustainability and social equity. A just transition ensures that the shift to a low-carbon economy is inclusive and fair, addressing the concerns of workers, communities and industries affected by the transformation. For India, this transition is especially critical given its reliance on coal and other carbon-intensive industries, which account for a significant share of employment and economic output. Simultaneously, India's demographic profile, characterised by a young and growing workforce, presents a unique opportunity to align decarbonisation efforts with job creation, skill development and industrial innovation. The challenge lies in balancing environmental goals with socioeconomic imperatives, ensuring that vulnerable communities are not left behind in this transformative journey.

A just transition according to the International Labour Organization (ILO) is achieved by:

> "...greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities, and leaving no one behind. It involves maximising the social and economic opportunities of climate action while minimising and carefully managing any challenge – including through effective social dialogue and respect for fundamental principles and rights at work." (ILO, 2015)

The ILO highlights the promotion of decent work, inclusive policies, management of economic and social challenges when transitioning, social dialogue with all the stakeholders and respecting worker rights. Our just transition tool encourages companies to consider their broader impact on society and the environment, aligning with the ILO's emphasis on a holistic and inclusive approach to sustainability and thereby promoting transparency and accountability in corporate sustainability practices. In the context of meeting the UN Sustainable Development Goals (SDGs), in India similar language has also been expressed by many official documents, including the long-term low carbon development strategy (UNFCCC, 2022), and in the Indian Finance Minister's 2024 budget speech (Union Budget of India, 2024).

India's just transition is a multi-faceted challenge requiring active collaboration between the government, private sector and civil society. Indian companies play a dual role as drivers of innovation and as stewards of social equity in this process. Ensuring their access to capital, encouraging transparent disclosures, and leveraging frameworks like the BRSR will be critical for aligning economic growth with climate goals. Indian corporations, especially in carbon-intensive sectors like energy, manufacturing and mining, will be instrumental in achieving the transition. These industries directly influence employment, regional economies and infrastructure, making their transformation essential not only for reducing emissions but also for safeguarding livelihoods. For instance, major coal-dependent regions face economic and workforce restructuring challenges as energy systems shift towards renewables. Companies in these regions are uniquely positioned to lead local economic diversification and sustainable development initiatives, ensuring that vulnerable communities are not left behind (Roy et al., 2019).

The scale of transformation required for a just transition necessitates significant capital. Investments are needed for developing renewable energy infrastructure, repurposing industrial sites, reskilling workers, and implementing community-level support systems. According to recent analyses, financing mechanisms such as green bonds, concessional financing and corporate social responsibility (CSR) spending could be important. Access to global capital markets and innovative financing instruments can

accelerate this transformation, provided companies maintain transparent and credible transition plans. Indian companies will play a key role in the just transition as they chart their transition course in the coming decades. Alongside corporates, international and domestic investors are also looking to allocate capital and engage companies on a just transition (Selvaraju et al., 2024).

The Indian homegrown corporate sustainability disclosure regime, the BRSR framework aligns with global sustainability standards and can serve as a foundation for incorporating just transition. The disclosure requires companies to disclose their policies, risks, and strategies related to environmental and social aspects. This report explores how the BRSR can be used by companies to signal their just transition activities to investors who are looking to allocate and engage companies on just transition.

## Non-financial reporting and just transition

The landscape of Environmental, Social and Governance (ESG) reporting in India has witnessed significant evolution over the years, reflecting both global trends and the country's commitment to responsible business practices. In May 2021, SEBI took a major step by introducing the BRSR framework, which mandates the top 1,000 listed entities in India to disclose their performance against the nine principles outlined in the '*National Guidelines on Responsible Business Conduct*' (NGRBCs) (KPMG, 2023). In 2023, after recognising the increasing significance of ESG disclosures for investors and stakeholders and the importance of transparency and accountability in corporate practices, updates were made to the BRSR known as BRSR Core. The BRSR Core will have to assessed or assured by third-party rating-providers who have been certified by SEBI. (See Section 2 for a more detailed discussion.)

The phased implementation of BRSR as well as its gradual evolution from BRR to NGRBC symbolise India's commitment to aligning business practices with the SDGs and allowing Indian companies to attract international sustainable and green investors.

## Global trends in information disclosure

Non-financial reporting has become a global imperative as companies recognise the environmental and social impacts of their operations: to inform action on net zero targets as part of meeting the Paris Agreement while simultaneously recognising and addressing the social implications of climate change. Institutions like the Sustainability Accounting Standards Board (SASB), the Global Reporting Initiative (GRI), and the Task Force on Climate-related Financial Disclosures (TCFD) have played pivotal roles in establishing and standardising the formats for non-financial disclosures (EY, 2023). Organisations such as the World Benchmarking Alliance (WBA), UN Guiding Principles Reporting Framework, and Climate Action 100+ (CA100+) have been pushing firms to disclose just transition and ESG-related data, while simultaneously publicly benchmarking companies' efforts, performance and disclosure on just transition to transform behaviours and practices.

CA100+, an investor-led initiative, has 11 indicators which assess the world's 150 or so most polluting companies. In 2023, CA100+ released its Net Zero Company Benchmark, which included a disclosure indicator solely dedicated to just transition. This indicator measures a commitment to the principles of a just transition and if companies have disclosed any plans for a just transition. Other metrics providers also provide just transition assessments for companies in sectors like oil and gas, electric utilities, and automotives; for example, the WBA "intends to assess 450 companies by 2023 on their contribution to a just transition by assessing their alignment with the goals of the Paris Agreement alongside their approach to addressing the social challenges of a low-carbon transition" (World Benchmarking Alliance, 2021).

In 2022–23 alone, several disclosure regulations were proposed or updated: in the US, the Securities and Exchange Commission (SEC) proposed climate disclosure regulations; the UK's Transition Plan Taskforce published its guidance for companies, which included just transition (Wang and Robins, 2024), requiring entities to publish their climate transition plans; and the European Union released its detailed Corporate Sustainability Reporting Directive (CSRD), which has a variety of transition and social indicators (see below).

Many of these sustainability disclosure requirements integrate environmental and social dimensions, and therefore help ensure that just transition factors are acknowledged and better understood by companies and investors. Disclosure efforts also assist investors in evaluating company ambition and progress towards net zero, with the goal of mitigating disruption to the economy and protecting long-term value for shareholders, in line with changing stakeholder expectations (Kowalevsky et al., 2023).

The financial community has responded positively to increasing ESG regulations and sustainability disclosures, driven by climate change, societal demands, corporate responsibility trends and ethical practices (Deloitte, 2021). For example, members of the Glasgow Financial Alliance for Net Zero (GFANZ) have developed a framework for financial institutions to catalyse action towards achieving net zero goals by requiring its members to disclose sustainability and ESG measures. This framework aims to provide clear, actionable steps and a holistic business strategy for the transition to a net zero future. It outlines essential approaches for financial institutions to support real-economy transition, including financing the development of net zero technologies, supporting companies already aligned with a 1.5°C pathway, enabling companies to align their business activities with sector-specific pathways, and accelerating the phase-out of high-emitting assets (GFANZ, 2022).

Below we highlight several important regulations from Europe that illustrate the growing emphasis on responsible supply chains and are applicable to some Indian firms, making them relevant for India's BRSR framework. While many large Indian firms that have global operations are already reporting on many of the standards mentioned, the broader Indian corporate ecosystem is yet to catch up to these reporting requirements. By aligning with such standards, Indian companies can enhance transparency, address social and environmental risks, and strengthen their global competitiveness: ensuring compliance with international expectations while enhancing sustainable and ethical business practices.

## The European Union's Corporate Sustainability Reporting Directive (CSRD)

In January 2023, the EU adopted the Corporate Sustainability Reporting Directive (CSRD), which requires EU companies, and some non-EU companies with activities in the EU, to file annual sustainability reports (in line with European Sustainability Reporting Standards [ESRS]) alongside their financial statements. These standards are extremely detailed and have a wide scope. Companies incorporated outside the EU may be subject to the law if they have net annual turnover in the EU of more than €150 million in two consecutive financial years and have at least one EU subsidiary that meets two of the three large company requirements, or an EU branch has a net turnover of more than €40 million. Therefore, some Indian firms exporting to the EU will have to comply with these standards (Norman et al., 2023).

A key difference between the CSRD and the BRSR is the greater reporting requirements under the CSRD, particularly when it comes to double materiality. The CSRD reporting standards integrate just transition principles by requiring that firms perform materiality assessments on each sustainability topic, "applying the double materiality principle taking account of people and the environment" (Cooley, 2023). Double materiality refers to (a) the company's impacts on sustainability matters and (b) how sustainability matters affect the company's own development, performance and position. Some just transition areas included within the 10 topical standards of the ESRS are: circular economy, own workforce, workers in the value chain, affected communities, consumers and end-users, and business conduct. Many of these just transition-relevant indicators are also included in the BRSR but are described differently.

## German Supply Chain Due Diligence Act and European Supply Chain Act

The past few years have seen an important and increasing focus on supply chain governance and accountability, particularly in the EU. Supply chain regulations are an essential part of achieving a just transition, as many of the social and ecological impacts of transitions will have impacts on the supply chain. Such supply chain regulations will be significant for Indian companies as India develops stronger environmental and social regulations to align with international trends and regulations and as Indian companies are often part of supply chains in the EU. The German and EU Acts are good examples of such supply chain regulations.

The German Supply Chain Due Diligence Act (SCDDA) of 2023 requires that companies with at least 1,000 employees must "make reasonable efforts, at their own discretion" to prevent human rights and environmental violations[1] in their own business operations and in their supply chain (Rünz, 2023). This includes production and exploitation of products, provision of services, direct supply chain suppliers, and risk analysis and preventive and remedial measures for indirect suppliers. Companies are required to incorporate risk management, risk analysis, a policy statement on human rights strategy, preventive and remedial measures, and a complaints procedure, with fines of up to €8 million for violations (Government of Germany, 2023). The law is intended to ensure that a company's responsibility and accountability extends to its supply chains by providing legal certainty and sustainable supply chain management.

More recently, the European Supply Chain Act, or the Directive on Corporate Sustainability Due Diligence (CSDDD), was adopted by the EU with the aim of encouraging sustainable and responsible corporate behaviour in operations and global value chains (European Commission, 2024). It is significantly more stringent than the German law and is applicable to EU companies with 1,000-plus employees, and large non-EU companies with a €450 million turnover within the EU (Nave and Bauer, 2022). In addition to addressing human rights, the Directive explicitly requires large companies to adopt climate change transition plans aligned with net zero 2050 goals designed to meet the Paris Agreement temperature targets (European Commission, 2024). It also includes negative impacts on the environment such as environmental pollution and loss of biodiversity. The law requires companies to prevent, mitigate and remedy negative social and environmental impacts, incorporate due diligence, clearly disclose information, and ensure management carefully monitors impacts (EQS, 2024).

## Corporate sustainability metrics and emerging markets

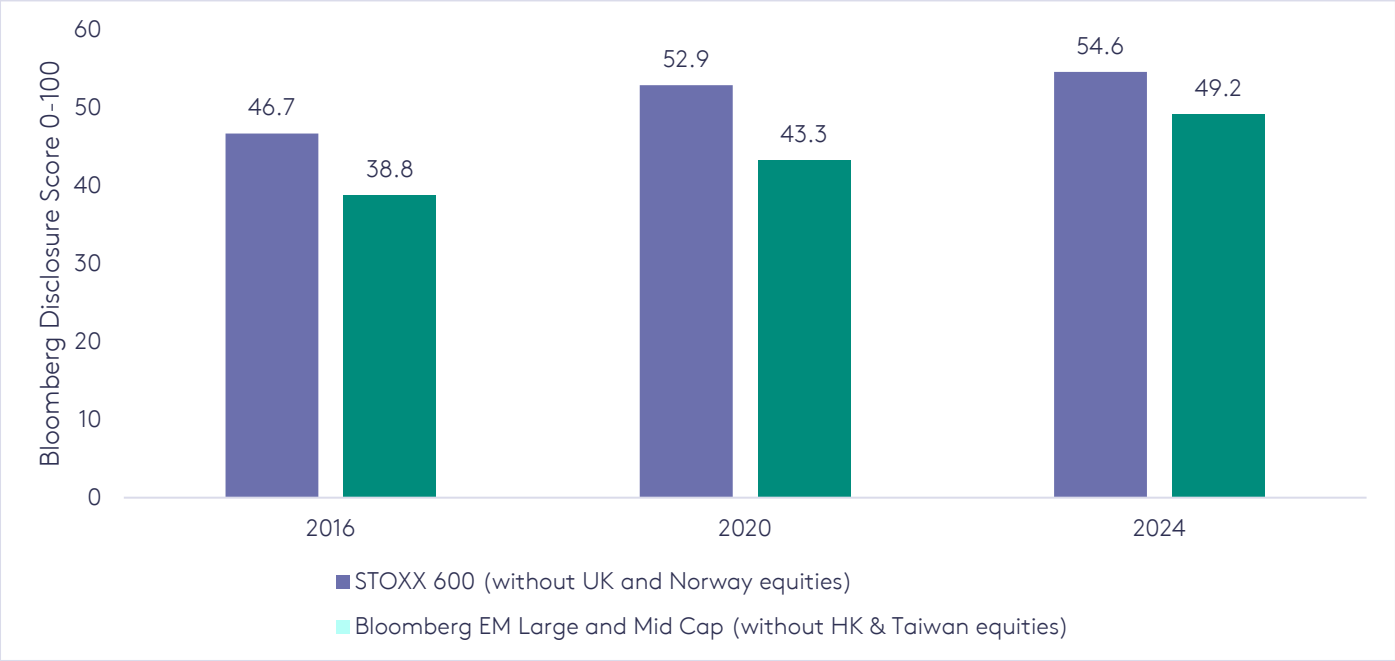
Sustainability disclosures vary significantly between emerging markets and advanced economies, reflecting differences in regulatory frameworks, institutional capacities and economic priorities. While advanced economies benefit from established sustainability reporting standards and stronger enforcement, emerging markets often struggle with fragmented or relatively nascent frameworks that hinder comprehensive disclosures. For instance, emerging markets are frequently categorised as being in the earlier stages of sustainability framework maturity, with less robust practices compared with their advanced economy counterparts, limiting their ability to meet global sustainability standards (Singhania et al., 2023).

Figure 1.1 below shows some of that disparity, measuring the ESG disclosure scores of two equity funds, the STOXX 600 and the Bloomberg Emerging Market Large and Mid-cap funds. The STOXX 600 is an equity fund consisting of European stocks, while the Bloomberg funds hold emerging market stocks. The ESG disclosure score is a composite for the overall fund and averages the scores of all the equities in the fund. The score itself measures how much ESG-related disclosure is available from companies. The gap has reduced slightly since 2016, signifying a directional effect of improvement. However, there remains a significant difference between emerging markets and advanced economies when it comes to the amount of ESG-related disclosure. It is important to note that while more ESG disclosure has been shown to have resulted in better ESG scores, meaning that the more information a company discloses the better their ESG score is (Lopez-de-Silanes et al., 2020), this does not necessarily mean that ESG performance is particularly better in advanced economy companies. Instead, this may simply reflect there being more resources and capacity for ESG reporting and hence more ESG information.

These ESG scores begin to matter when used by investors to screen companies and weight their portfolios. Given the nature of the discrepancy on disclosure, the disadvantage of emerging market companies is only too clear.

[1] Based on core ILO labour standards; and the Minamata Convention on Persistent Organic Pollutants [PoPs] and Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, respectively.

Figure 1.1. ESG disclosure scores of advanced economy vs. emerging market funds



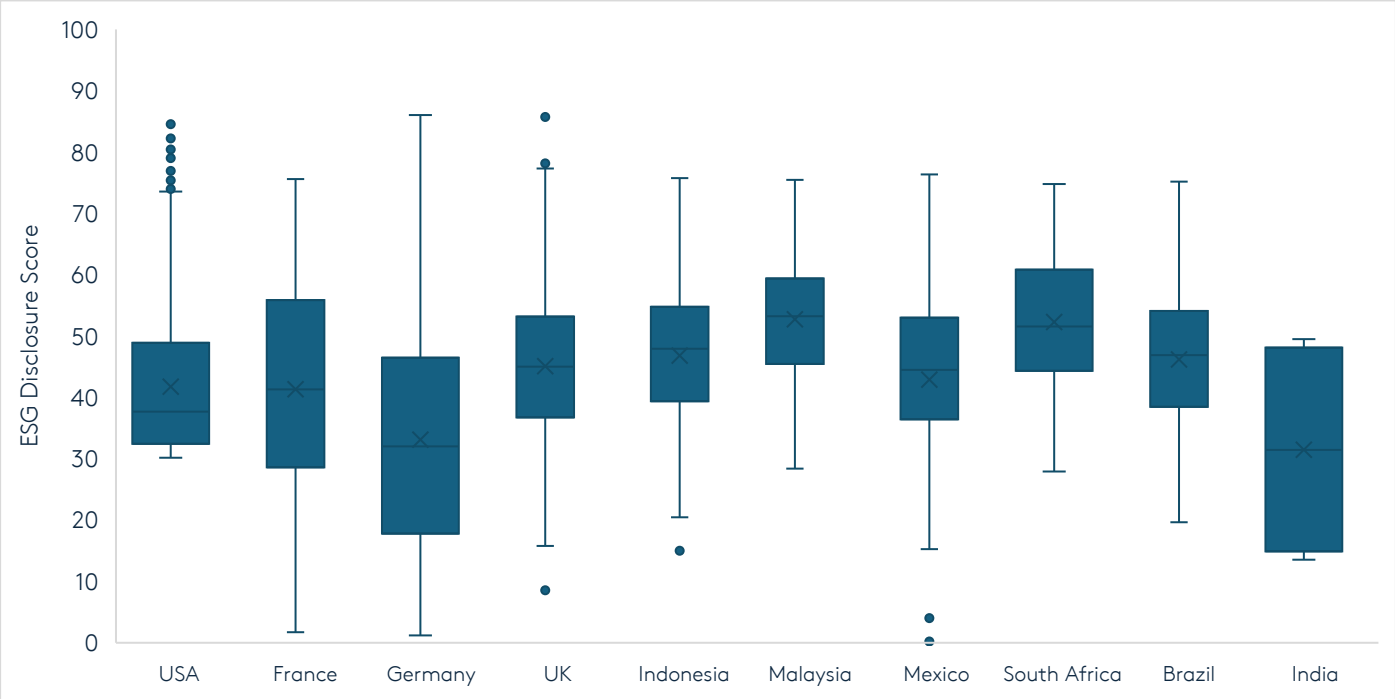

*Source: Bloomberg and LSEG Data*

Bloomberg provides an ESG Disclosure score that measures how much ESG-relevant disclosure a company makes. It does not look at the quality of the disclosure but simply measures if information is disclosed and scores the quantum of disclosure. The method for the Bloomberg ESG Disclosure Score is as follows: Bloomberg's ESG Disclosure Score evaluates the extent of ESG data a company publicly reports, ranging from 0 (no disclosure) to 100 (full disclosure). The score applies consistent topics, data fields and weights across sectors and regions, prioritising industry-agnostic frameworks. ESG pillars are equally weighted, with quantitative fields weighted more heavily than binary fields. The methodology was last updated in 2022 to improve transparency and reflect evolving corporate ESG reporting practices, focusing solely on disclosure extent, not performance.

Disaggregating emerging markets further on ESG disclosure is important to see how the BRSR could play a key role for Indian companies in levelling the playing field in the long run. Figure 1.2 shows the distribution of Bloomberg ESG Disclosure Scores across companies in various countries, highlighting differences in transparency and reporting practices. The USA, with a large dataset, shows a broad range of scores, including high outliers, suggesting a mix of both leading and average performers in ESG disclosure. Countries including France, Germany and the UK display relatively higher and consistent disclosure levels, indicating stronger adherence to sustainability standards. In contrast, countries such as Mexico and South Africa exhibit wider variability, pointing to uneven adoption. India's data, though limited, points to the need for broader adoption of ESG reporting.

The chart has significant sample size issues, particularly when looking at emerging market countries. The fact that only four Indian companies are even given this score is a stark underrepresentation of a very large emerging market economy and likely stems from inadequate publicly disclosed ESG data aligned with global standards, reflecting both underreporting and the nascent stage of standardised practices. However, despite these issues of sample size, which limits definitive conclusions about India's relative performance on ESG disclosure, it is clear that most emerging markets do better than India on ESG disclosure data.

Figure 1.2. Bloomberg ESG Disclosure scores of emerging Markets vs Advanced Economy Corporates




*Source: Bloomberg. Notes: Number above the histogram is the sample size of companies. The sample for India is particularly skewed as Bloomberg only assesses four Indian companies on this score. For further details on this disclosure score please see the method employed by Bloomberg. It is likely that the limited number of Indian companies is due to Bloomberg leaving the Indian market for ESG ratings after new regulatory requirements for ESG rating providers in India. Therefore, this is only illustrative.*

The BRSR is a step in the right direction that will improve the availability of climate, social and just transition-relevant data for Indian companies. It will enable better representation of Indian companies in comparison to their emerging market peers and more accurately assess them relative to advanced economies. The use of the BRSR by domestic and international investors will be a key factor in more ESG-related allocations to Indian companies. With both domestic Indian and international companies using the same ESG disclosure information, it will be possible to get a clearer picture of the just transition corporate landscape in India and aid investors looking to allocate funds for a just transition in the country.

# 2. Evolution of the BRSR

The Securities and Exchange Board of India introduced the BRSR disclosure requirement as an updated version of the 2012 BRR framework (see Table 2.1). The BRSR functions as a non-financial information disclosure framework, with 'Essential' and 'Leadership' indicators. The BRSR was initially mandated for the top 150 firms based on market capitalisation in the fiscal year 2023–24. Its scope is set to expand to encompass the top 1,000 firms by the fiscal year (FY) 2026–27. Additionally, ESG disclosures and assurance for the BRSR Core will be introduced for the value chains of listed companies with certain specified thresholds. Disclosure requirements for the value chain will apply for the FY 2025–26, while 'assessment or assurance' requirements will commence for the FY 2026–27.

**Table 2.1. Evolution from Business Responsibility Report (BRR) to Business Responsibility and Sustainability Reporting (BRSR)**

| | BRR | BRSR |
|---|---|---|
| Scope of reporting | Allowed opt-outs from some NGRBC* principles | All principles made mandatory. Value chain disclosures encouraged. |
| Format | Universal format | Mandatory (Essential) and voluntary (Leadership) indicators |
| Questions | 59 questions | 140 questions: 98 'Essential', 42 'Leadership' |
| Disclosure | Annual Report to SEBI for top 500 entities (since 2015) | Annual Report to SEBI for top 1,000 entities (from 2027)<br>Voluntary 'BRSR Lite' for smaller companies |
| Alignment with global standards | No direct linkages | Allows cross reference with internationally accepted reporting frameworks |

**National Guidelines on Responsible Business Conduct*

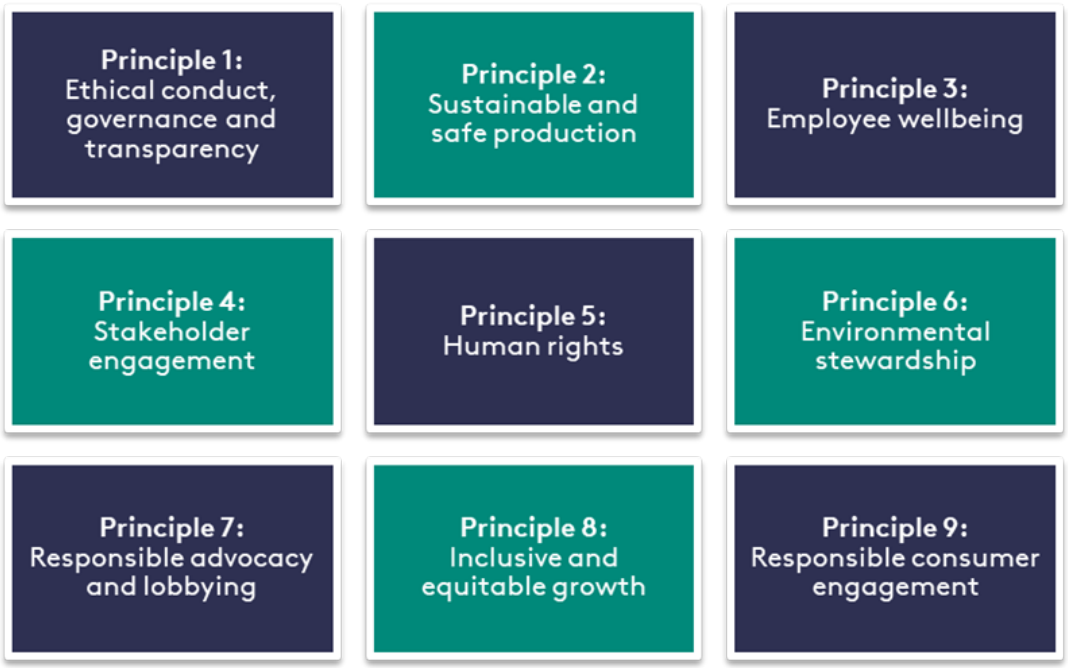
The BRSR is based on the nine principles of the National Guidelines on Responsible Business Conduct (NGRBC) adopted in 2019 by the Ministry of Corporate Affairs (see Figure 2.1). According to an Indian Institute for Corporate Affairs study, the BRR needed to be updated and improved in terms of indicators such as quantitative data requirements (for comparability), value chain engagement, and contractual employees (Ministry of Corporate Affairs, GOI, 2020). The BRSR is better aligned with the Sustainable Development Goals, the 'Respect' pillar of the UN Guiding Principles on Business and Human Rights, and the Paris Agreement, and it also draws from international reporting standards to ensure Indian businesses are on a par with global competitors and investor requirements.

The BRSR is an important facilitator in pushing Indian firms towards globally recognised and desired ESG, climate and just transition goals. It not only stimulates investments but in fact strengthens company resilience by embedding sustainability into core operations and thereby "building a business that lasts longer, outperforms its competitors, and has a higher enterprise value vis-à-vis its peers who are resistant to change" (EY, 2023). Standardised ESG reporting through the BRSR has enhanced transparency and provided a structured framework for assessing a company's environmental and social impact. This enables investors and stakeholders to make informed decisions, benchmark performance across industries, and monitor sustainability progress effectively (PwC, 2024). Some of the main highlights of the BRSR include a drive to maximise business impact, emphasis on training and awareness, a focus on disclosures related to Environmental and Social Assessments, and 'Essential' and 'Leadership' indicators.

It is important to note that the BRSR as an information disclosure tool is a crucial step towards addressing and achieving a just transition in India, but it is only the first step. Information disclosure alone does not guarantee that organisations will shift their operations towards a just transition. The BRSR must be supplemented by important organisational policies, such as policies for skill development and reskilling of workers, adoption of renewable energy sources, implementation of circular economy practices, and robust grievance mechanisms for affected communities.

The BRSR has nine core principles, as shown in Figure 2.1. In Section 3 we explain how we map these principles to just transition indicators.

**Figure 2.1. The nine principles of the BRSR – from the National Guidelines on Responsible Business Conduct**



# 3. Study method: mapping the BRSR to ILO just transition indicators

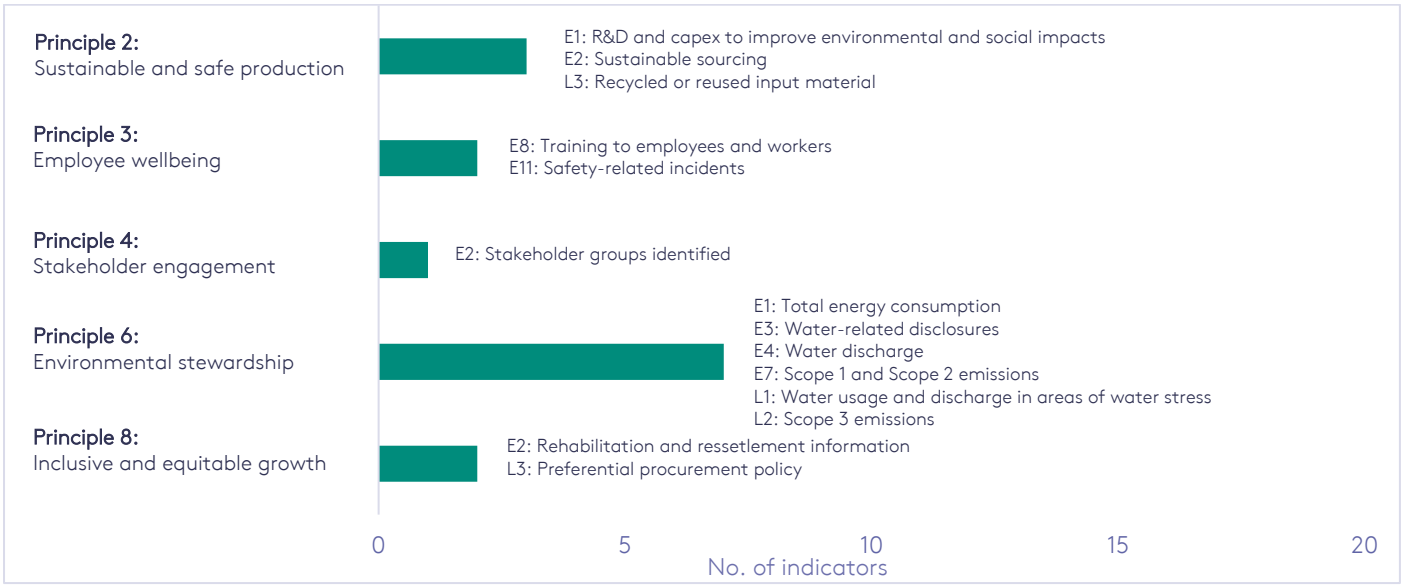
Our objective was to explore how the BRSR contributes to illustrating just transition initiatives, as well as the steps that Indian firms can undertake to meet BRSR requirements and address operational gaps in achieving a just transition in line with the ILO just transition indicators or criteria. To do this, we mapped the indicators in the BRSR Framework and the NGRBC principles against the ILO's Risks-Opportunities-Dialogue (ROD) framework and seven core groups of people mentioned in ILO's just transition guidelines – see Table 3.1 (next page).[2] These groups are: workers, suppliers, communities, consumers, rights' holders/stakeholders, vulnerable/marginalised groups, and future generations.

It is important to note that this mapping was performed via desk-based research and has not been cross-verified with site visits or stakeholder consultation. Additionally, while we mapped the BRSR principles to the ILO just transition criteria to highlight how the BRSR reporting indicators can facilitate the reporting of just transition initiatives, information disclosure via the BRSR in of itself is not the end goal, and does not solely represent progress towards a just transition; the BRSR should be supplemented by other organisational policies. This detailed BRSR-ILO just transition mapping informs the company case studies presented in Section 4.

Table 3.1 indicates that the BRSR is a good tool for enabling mapping companies' progress on the just transition, as it addresses most of the ILO's criteria for a just transition. The BRSR is particularly robust in terms of worker rights, and health and safety.

Figure 3.1 highlights the five BRSR principles that are particularly well aligned with the ILO just transition criteria. Specific indicators from across the BRSR are listed against each of these five criteria. These are the indicators that any third party or the company should focus on to check a company's just transition progress and compliance. We have included climate and transition-related indicators too, as we see the just transition in relation to the climate transition of the firm.

**Figure 3.1. BRSR principles and indicators that align the most with the ILO just transition criteria**




*Note: 'E' = Essential BRSR indicators or mandatory disclosures. 'L' = Leadership BRSR indicators or voluntary indicators in the disclosure regime.*

[2] First, we mapped a summarised version of the BRR/NGRBC published by EY in its report *BRSR reporting and the evolving ESG landscape in India* (EY, 2023) to the various ILO groups and ILO's ROD framework. We then mapped the exact BRSR and NGRBC Indicators, KPIs and measurement units.

Table 3.1. Mapping the BRSR principles (blue column) to the ILO just transition criteria (red rows)

| BRSR Principle | Workers | | | | | |
|---|---|---|---|---|---|---|
| | Anticipating employment shifts | Respecting rights at work | Ensuring dialogue | Developing skills | Protecting health & safety | Providing social protection – pensions, benefits |
| 1 | | ■ | | ■ | ■ | |
| 2 | | | | | | |
| 3 | ■ | ■ | ■ | ■ | ■ | ■ |
| 4 | | | ■ | | | |
| 5 | | ■ | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |

| | Suppliers | | | Consumers | |
|---|---|---|---|---|---|
| | Supporting suppliers in taking account of the social impact | Strengthening local supply chains | Labour, human rights and env. due diligence along the supply chain | Prioritising implications for consumers with inadequate access to sustainable goods and services | Removing barriers to consumers to support their transition |
| 1 | | | | | |
| 2 | | | ■ | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | ■ | | |
| 6 | ■ | | | | |
| 7 | | | | | |
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| 9 | | | | ■ | ■ |

| | Communities | | | |
|---|---|---|---|---|
| | Understanding the spillover effects for communities | Respecting rights around impact and involvement | Focusing on vulnerability | Enabling innovations such as community energy |
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*Note: The BRSR Principles are, in brief: 1. Ethical conduct, governance and transparency ; 2. Sustainable and safe production; 3. Employee wellbeing; 4. Stakeholder engagement; 5. Human rights; 6. Environmental stewardship; 7. Responsible advocacy and lobbying; 8. Inclusive and equitable growth; 9. Responsible consumer engagement. (See Figure 2.1.)*

## BRSR Core and just transition indicators

The Indian regulator SEBI's subset of BRSR indicators, the 'BRSR Core', require either assurance or assessment by a third party. Five of 15 just transition-relevant indicators in the BRSR are a part of the BRSR Core – highlighted in turquoise in Table 3.2.

**Table 3.2. BRSR Core indicators and indication of relevance to the just transition**

| BRSR Core indicators | Description |
|---|---|
| P1, E8 | Accounts payable days |
| P1, E9 | Concentration of purchases and sales |
| P3, E1 | Spending on wellbeing of employees |
| P3, E11 | Safety-related incidents |
| P5, E3 | Wages paid to females |
| P5, E7 | Sexual harassment complaints |
| P6, E1 | Total energy consumption |
| P6, E3 | Water consumption |
| P6, E4 | Water discharge |
| P6, E7 | Greenhouse gas emissions |
| P6, E9 | Waste management |
| P8, E4 | Input materials sourced from MSMEs* and districts |
| P8, E5 | Job creation in smaller towns |
| P9, E7 | Data breaches |

*Notes: green highlighting indicates a just transition-relevant metric. *MSMEs = micro, small and medium sized enterprises. P = principle. E = Essential.*

We have identified all the indicators in Table 3.2 as being relevant to the just transition and would include all of them when assessing a company on just transition; we use all of these in the cases we develop later in the report. However, only the indicators highlighted in turquoise go through the extra verification of the data provided by companies through the assurance or assessment by a third party.

These assessed or assured BRSR Core indicators will form an integral and credible tool for investors. India is among the first countries to experiment with the verification of ESG-related disclosures and linking these to fiduciary responsibilities. The inclusion already of a few of the just transition indicators in the BRSR Core provides investors with important information; this could be improved further if the next iteration of the BRSR Core included a greater number of just transition-relevant indicators.

# 4. Sectoral case studies

Based on 2023–24 BRSR disclosures by companies, this section applies the methodology explained in Section 2 to companies in the steel, cement, power and mining sectors. It shows how investors and companies could use information from the BRSR to assess relevant corporate just transition-related activities.

Below we provide some examples of companies working towards a just transition, as reported in their BRSR disclosures. A crucial limitation across all the examples is that the information is self-reported by companies and not yet verified by any external source. The Indian regulator SEBI has introduced a mechanism for 'assessment or assurance' of BRSR Core disclosures, offering companies the flexibility to undertake third-party evaluation in adherence with standards to be developed by the Industry Standards Forum (ISF) in consultation with SEBI. As this framework is in its initial stages, it is not yet possible to fully discern the extent and manner in which each initiative is being implemented.

Overarching company activities related to the just transition reported as part of the BRSR include:

- Ethics sessions for all employees and supply and value chain partners; training programmes for management and staff covering BRSR Essential and Leadership indicators; and online portals/ e-learning modules to facilitate workers' upskilling. It is also reported that knowledge transfer is being carried out to supply and value chain partners to ensure human rights and health and safety regulations are followed.
- Responsible and sustainable sourcing, with a high level of sourcing from MSMEs (including MSMEs run by women and SC/ST[3] (individuals) and from nearby districts. Some companies carry out life-cycle assessments and non-mandated social impact assessments.
- Various councils, procedures and affirmative action schemes to ensure thorough stakeholder engagement and grievance redressal processes.
- Extensive recycling of steel, water, fly ash and waste gases released during manufacturing processes and operations and significant year-on-year improvement in efficiency.

The following case studies examine how companies have used each principle in the BRSR to demonstrate just transition policies and actions. We have assessed two steel companies, three power companies, two cement companies and one mining company.

### Steel companies

The BRSR report helps to highlight that Tata Steel and JSW Steel both set strong industry standards for workers, including the rights workers receive and the various mechanisms in place to address any grievances that may arise. This creates the conditions for a just transition as there is a high probability that worker voices will be heard and acknowledged during the transition. Additionally, making this information publicly available works as an incentive for other companies to implement best practice and just transition principles, if they are not already doing so.

Both companies' Zero Waste to Landfill models ensure the re-usage of slag. However, our analysis indicates that both companies need to establish better mechanisms for resettlement and rehabilitation[4] for many of their projects and plants. Particularly in the case of JSW Steel, there needs to be a greater focus on ensuring effective training for employees and value chain partners.

[3] Scheduled Castes and Scheduled Tribes, a classification in India for certain groups of individuals who are eligible for affirmative action.

[4] Resettlement and rehabilitation in this context might refer to the closure of plants or expansion of plants, and any change in plant size that would affect communities dependent on that land. (The BRSR does not provide details on the reason for the R&R: it only gives information on R&R activities undertaken.

## Tata Steel

Tata Steel's BRSR disclosure for FY 2023–24 highlights how it engages in effective stakeholder management and how it identifies vulnerable groups. The company conducts extensive training for employees, supply chain partners and value chain partners and has an Affirmative Action preferential procurement policy. TATA Steel has set long-term quantitative targets for reducing its greenhouse gas emissions (targeting net zero by 2045), discloses an internal price of carbon, and discloses the actions necessary to meet its emissions-reduction targets through its Climate Change Report, which is aligned with the recommendations of the TCFD and has detailed disclosures on Strategy, Governance, Risk Management and Metrices and Targets for the Tata Steel Group (Transition Pathway Initiative, 2024a) . Through the BRSR, the company states that it spends 18% of its capex investments on "investments in $CO_2$ and other air emission ($SO_x$, $NO_x$ and dust) reduction, water conservation and effluent treatment, solid waste utilisation, improvement of safety and employee welfare initiatives".

**Table 4.1. Tata Steel's BRSR and just transition-relevant disclosures, FY 2023–24**

| BRSR Principle | Demonstration of just transition indicators | How just transition alignment could be improved |
|---|---|---|
| Principle 2: Sustainable and safe production | • P2, E1 (R&D and capex): Tata Steel invested ₹9.5[5] in R&D, fully aligned with environmental and sustainability projects such as low-carbon transitions, maximising waste value, and establishing a circular economy. Tata devoted 18% of its capex to improving environmental and social impacts and focused on emissions reduction, water conservation, and safety enhancements.<br>• P2, E2 (Sustainable sourcing): Under its Responsible Supply Chain Policy, the company ensures that all partners adhere to high standards in health, safety, environmental protection, and human rights. It is developing a four-step sustainable procurement framework in FY 2025 to integrate sustainability in buying decisions, enhancing supply chain responsibility.<br>• P2, L3 (Recycling inputs): The company reported a 11.3% use of recycled or reused process solid waste (e.g. slag, scrap), up from 10.3% in FY 2022–23. | n/a |
| Principle 3: Employee wellbeing | • P3, E8 (Training to employees and workers[6]): Tata Steel has a comprehensive employee and worker training programme, with 100% | The company could consider disclosing specific impacts of these trainings on facilitating green skills, particularly how |

[5] A unit of value equal to 10 million rupees or 100 lakhs.

[6] The difference between an 'employee' and a 'worker' in India is mandated by government regulation. See point 18.2 and 18.3 in the SEBI guidance annex for details of the distinction (SEBI Guidance Note, Annexure 11, 2021).

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| | participation in health and safety, and skill upgradation across all employee and worker categories. The company supports extensive training programmes that include core knowledge (safety, ethics), functional/technical skills, and transformational skills (digital technology, sustainability). Training modalities include e-learning, virtual reality (VR)/augmented reality (AR) for immersive experiences, and structured programmes for different workforce segments, ensuring tailored development opportunities.<br>• P3, E11 (Safety related incidents): There was a decrease in the Lost Time Injury Frequency Rate (LTIFR) for employees compared with the previous fiscal year. Total recordable work-related injuries were 437 for workers in FY 2024 and there were five fatalities, indicating ongoing safety challenges and areas for improvement. | they prepare employees for a low-carbon economy. |
| Principle 4: Stakeholder engagement | • P4, E2 (Stakeholder groups identified and frequency of engagement): Tata Steel engages a broad spectrum of stakeholders, maintaining transparency and responsiveness. Key engagements include quarterly earnings calls for investors, regular community development meetings for local and marginalised groups, rigorous supplier assessments to ensure sustainable practices, and comprehensive customer engagement strategies. Each interaction is tailored to address specific concerns such as environmental impacts, social infrastructure improvements and ethical business practices. | The company could enhance its just transition approach by explicitly integrating climate change impacts and adaptation strategies into stakeholder discussions, particularly in vulnerable communities where the effects of industrial activities are more pronounced. This would involve addressing immediate community needs but also facilitating long-term resilience against environmental changes. Current disclosures focus more on confirming interactions rather than detailing how input influences policies. Greater specificity in Essential Indicators, not just Leadership Indicators, would enhance transparency. |
| Principle 6: Environmental stewardship | • P6, E1 (Energy consumption): Tata Steel reports energy consumption with a detailed breakdown of renewable vs. non-renewable sources. The percentage of energy consumed from | The company should disclose the specific reasons behind the higher emission intensities in its standalone operations compared with its consolidated operations. |

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| | renewable sources was just 0.02%. It has initiated several measures to increase the energy efficiency of its operations.<br>• P6, E3 (Water-related disclosure): Tata Steel manages significant amounts of water withdrawal and consumption. Water intensity metrics per rupee of turnover (0.000063) and per ton of steel (4.4) improved in FY 2024 compared with FY 2023.<br>• P6, E4 (Water discharge): All water discharged to surface water and groundwater underwent secondary level treatment, reflecting compliance with environmental standards. Discharges to third parties also adhered to treatment protocols, with most receiving secondary treatment.<br>• P6, E7 (Scope 1 and Scope 2 emissions): Tata Steel's emission intensity (emissions per unit of physical output) is higher for standalone operations (3.1) than consolidated operations (2.8). This difference suggests that Tata Steel's international operations might be operating with relatively lower emission intensities, possibly due to more stringent environmental standards or more advanced technologies in use at overseas facilities.<br>• P6, L1 (Water usage and discharge in areas of water stress): Tata Steel monitors water management across global locations with various operations, focusing on areas of water stress. Water withdrawal and consumption decreased compared with the previous year. Also, water discharge was treated to secondary levels before release.<br>• P6, L2 (Scope 3 emissions): Tata Steel reported a total of 15 million tonnes of Scope 3 GHG emissions in FY 2024, up from 13 MT in FY 2023. The company measures end-to-end Scope 3 emissions for all modes of transportation. Tata Steel has also launched a Zero Carbon Logistics programme for its European operations. | Future reports should delineate the specific actions and partnerships the company is implementing to mitigate Scope 3 emissions, particularly in logistics and downstream processes, with clear performance indicators, specific to India. |

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| | • P6, L7 (Value chain partners for environmental impacts): Tata Steel assesses a significant portion of its value chain partners for environmental impacts, with 74% of its Indian operations and 44% in the Netherlands evaluated in FY 2023–24. The assessments focus on health and safety, fair business practices, environmental protection, and human rights. | |
| Principle 8: Inclusive and equitable growth | • P8, E2 (Rehabilitation and resettlement): Tata Steel's Plant at Kalinganagar in Odisha has an ongoing rehabilitation and resettlement (R&R) project affecting 1,234 families, with 97.2% of these families already covered under the R&R plan. In the fiscal year FY 2024, ₹210.5 million was disbursed to the project-affected families (PAFs).<br>• P8, L3 (Preferential procurement policy): Tata Steel's Affirmative Action (AA) Policy prioritises purchases from marginalised groups, specifically SCs, STs and individuals displaced by the company's projects. In FY 2024, 33% of the company's suppliers were local, including 85 AA suppliers, demonstrating its commitment to social equity and inclusive procurement practices. | The company could enhance just transition efforts by disclosing more on the long-term outcomes for affected communities and any ongoing support post-settlement to ensure sustainable development and integration. |

## JSW Steel

JSW Steel outlines its plan to achieve more sustainable practices through its BRSR report, and has claimed to currently allocate capex spending of about 4% to the implementation of environmental sustainability interventions. JSW Steel's decarbonisation pathway targets reaching net zero by 2050.

The company provides its employees with innovative social support systems such as JSW Steel hospitals and specialised safety programmes. It has set long-term quantitative targets for reducing its greenhouse gas emissions, disclosed an internal price of carbon, and incorporated climate change risks and opportunities in its strategy (Transition Pathway Initiative, 2023). In its 2023–24 BRSR disclosure, JSW Steel stated its goal of reducing $CO_2$ emissions by 42% up to 2030 to bring $CO_2$ levels to below 1.95 $tCO_2$/tcs (tons of carbon per ton of crude steel) from a baseline year of 2020. However, the BRSR indicates that JSW Steel could disclose more about whether it is ensuring effective training schemes for employees and value chain partners and if those are aligned with the green skills the company needs.

Table 4.2. JSW Steel's BRSR and just transition relevant disclosures, 2023–24

| Principle | Demonstration of just transition Initiatives | How just transition alignment could be improved |
|---|---|---|
| Principle 2: Sustainable and safe production | • P2, E1 (R&D and capex): JSW Steel dedicated 100% of its R&D efforts to developing new grades of steel that enhance strength, efficiency, and productivity in FY 2023–24. It invested 4.01% of its capex, up from 3.13% in the previous year, focusing on the best available technologies (BATs) that improve environmental and social impacts.<br>• P2, E2 (Sustainable sourcing): It has established procedures for sustainable sourcing, ensuring that 100% of its inputs are sourced sustainably.<br>• P2, L3 (Recycling inputs): Its recycled input material usage rose to 15.23% from 11.94% in the previous fiscal year. | JSW Steel should disclose which specific technologies it has invested in and how these contribute to sustainability. For R&D, detailing how new steel grades improve environmental performance or incorporate green technology would better align with just transition principles.<br>The company could enhance transparency by specifying the criteria used to determine the sustainability of its inputs. Details on how its Raw Material Conservation Policy influences supplier selection and what sustainable practices are expected from suppliers would provide clearer insights into the depth of its sustainability commitments. |
| Principle 3: Employee wellbeing | • P3, E8 (Training to employees and workers): JSW Steel provided comprehensive training in health and safety measures plus skill upgradation for all employees and workers, achieving 100% participation rates for both categories.<br>• P3, E11 (Safety-related incidents): There was a reduction in the Lost Time Injury Frequency Rate (LTIFR) for employees from 0.33 to 0.11 and for workers from 0.19 to 0.09 from the previous year. Total recordable work-related injuries and high-consequence work-related injuries also saw a decline from the previous financial year. | Disclosing more about the content of training programmes, especially regarding how they prepare employees for a low-carbon economy, would be beneficial. The company should disclose if any training is aligned with sustainability or green skills. |
| Principle 4: Stakeholder engagement | • P4, E2 (Stakeholder groups identified and frequency of engagement): The company actively engages with a diverse group of stakeholders including customers, employees, community and civil society, government and regulatory bodies, investors and suppliers. Engagements | The company could improve its just transition strategy by more explicitly addressing how stakeholder feedback, particularly from vulnerable groups, is integrated into business decisions, especially those impacting |

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| | are frequent and customised, ranging from digital communications and surveys to in-person meetings and audits, ensuring ongoing dialogue and feedback across all levels. | environmental and social policies. Current disclosures focus more on confirming interactions rather than detailing how input influences policies. Greater specificity on Essential indicators, not just Leadership indicators, would enhance transparency. |
| Principle 6: Environmental stewardship | • P6, E1 (Energy consumption): JSW Steel reports significant energy consumption from non-renewable sources with only a minimal fraction from renewables. The total energy consumed increased by almost 5% from the previous year.<br>• P6, E3 (Water-related disclosure): The company refers to extensive water withdrawal primarily from surface sources, with detailed reporting on water intensity per rupee of turnover and per physical output, reflecting a decrease in water intensity.<br>• P6, E4 (Water discharge): The company operates as a zero-discharge company, preventing any water discharge to external bodies.<br>• P6, E7 (Scope 1 and Scope 2 emissions): It reports on GHG emissions in detail, showing with an increase in Scope 1 emissions and a decrease in Scope 2 emissions from the previous year. The total Scope 1 and 2 emissions intensity rose from 2.36 $tCO_2$/tcs in FY 2023 to 2.44 $tCO_2$/tcs in FY 2024.<br>• P6, L1 (Water usage and discharge in areas of water stress): It provides detail on water management practices in areas of water stress, with significant water withdrawals and consumption reported.<br>• P6, L2 (Scope 3 emissions): It reported a substantial increase in Scope 3 emissions (80% growth) compared with the previous year.<br>• P6, L7 (Value chain partners for environmental impacts): The company is conducting informal and formal awareness programmes for | Given high recent growth in Scope 3 emissions, future reports should delineate the specific actions and partnerships the company is implementing to mitigate these emissions, particularly in logistics and downstream processes, with clear performance indicators. |

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| | the value chain partners but yet to collect and collate the data and information in the required format. | |
| Principle 8: Inclusive and equitable growth | • P8, E2 (Rehabilitation and resettlement): Not applicable. JSW Steel did not report any ongoing rehabilitation and resettlement projects for the reported period.<br>• P8, L3 (Preferential procurement policy): The company does not have a specific policy for preferential procurement from marginalised or vulnerable groups. It has a Supplier Code of Conduct that incorporates themes of human rights, labour, environment and anti-corruption in alignment with UN Global Compact and ILO standards. | The absence of a preferential procurement policy could be an area for improvement. The company could enhance its just transition efforts by explicitly supporting economic inclusion through its procurement practices. |

## Power companies

All the power companies reviewed have effective Occupational Safety and Health (OSH) policies, grievance mechanisms and worker rights and benefits designed to ensure that a smooth and just transition can take place. Additionally, all the power companies have large CSR projects, designed to have an active impact on local communities, and source many of their products from MSMEs and small producers. The companies also set out just transition goals and roadmaps, with some focusing on reducing emission intensity through technological innovation and others by investing more in solar energy and other renewable sources.

The information collected through BRSR reporting is extremely useful for other organisations within the power sector, as it not only provides benchmarking, but it could also furnish lagging companies with inspiration for their just transition policies and innovations. The BRSR reporting helps to highlight successful just transition policies, which can be implemented throughout the sector to speed up the process.

However, it is important to note that all the companies within this sector show a below-average performance in worker training schemes. Training and awareness programmes are considered imperative under the ILO's just transition framework for ensuring that workers are not simply replaced in the course of the transition. A more systematic focus on upskilling of workers would make this transition smoother.

### JSW Energy

JSW Energy's BRSR disclosure for FY 2023–24 shows that the company has a strong OSH policy, grievance mechanism and worker rights and benefits. Additionally, it has benefitted over 230,000 people through its CSR projects and acquired around 51% of its inputs directly from MSMEs and small producers. The company has set long-term quantitative targets for reducing its greenhouse gas emissions, discloses an internal price of carbon and discloses the actions necessary to meet its emissions-reduction targets (Transition Pathway Initiative, 2023). JSW Energy has also committed to becoming carbon-neutral by 2050, with science-based targets approved by the Science Based Targets initiative, aligning its goals with the Paris Agreement to limit global temperature rise to 1.5°C.

However, the disclosure mentions little regarding training for employees, managers, value chain partners or supply chain partners. Consumer/customer rights are also not clearly incorporated. According to the Transition Pathway Initiative Centre (2024b), JSW Energy does *not*:

- Quantify the key elements of its emissions reduction strategy and the proportional impact of each action in achieving its targets.
- Clarify in its transition plan the role that will be played by offsets and/or negative emissions technologies.
- Commit to phasing out capital expenditure on carbon-intensive assets or products.
- Align future capital expenditures with its long-term decarbonisation goals and disclose how the alignment is determined.
- Ensure consistency between its climate change policy and the positions taken by trade associations of which it is a member.

**Table 4.3. JSW Energy's BRSR and just transition-relevant disclosures, 2023–24**

| Principle | Demonstration of just transition initiatives | How just transition alignment could be improved |
|---|---|---|
| **Principle 2: Sustainable and safe production** | • P2, E1 (R&D and capex): JSW Energy invested 15.51% of its capex into the procurement and construction of renewable projects including wind, solar and hydro, which is a decrease from 26.55% in the previous year. These projects aim to provide clean power, eliminate greenhouse gas and particulate matter emissions, and generate local livelihood opportunities.<br>• P2, E2 (Sustainable sourcing): 100% of its inputs are sourced sustainably by mandating adherence to its Supplier Code of Conduct by all registered vendors and suppliers.<br>• P2, L3 (Recycling inputs): It used 19.69% recycled water, 100% fly ash, and 8.81% waste gases, with a slight decrease in water reuse compared with 23.46% in FY 2022–23. | JSW Energy could provide more specific details on the R&D initiatives it undertakes, if any. For the last two years, it has been at 0%.<br>The company could enhance disclosure by detailing the criteria used within its Supplier Code of Conduct that define sustainable sourcing, including any third-party certifications or standards required for compliance and align sustainable sourcing procedures with international standards/ best practice. |
| **Principle 3: Employee wellbeing** | • P3, E8 (Training to employees and workers): The company provided comprehensive health and safety training to 100% of its employees. Skill upgradation training was given to 79.32% of employees, showing an increase in participation compared with the previous year. However, skill upgradation for workers remains significantly low at 7.27%.<br>• P3, E11 (Safety-related incidents): The company reported a Lost Time Injury Frequency Rate (LTIFR) of 0.15 for workers, a decrease from the previous year. No fatalities or high-consequence injuries were recorded for employees, but there was one worker fatality and one high-consequence injury. | The company should aim to enhance the scope and depth of skill upgradation training, especially for workers, to ensure equitable access to professional development opportunities across all employee categories. Details on the types of skills and the expected impact on job performance or transition to low-carbon technologies would be beneficial. |
| **Principle 4: Stakeholder engagement** | • P4, E2 (Stakeholder groups identified and frequency of engagement): The company engages with various stakeholder groups through diverse channels and frequencies to maintain a responsive dialogue. Stakeholders include | The company could improve its just transition strategy by more explicitly addressing how stakeholder feedback, particularly from vulnerable |

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| | customers, employees, suppliers, investors/ shareholders, institutions and industry bodies, governments and regulatory authorities, and communities and civil society/non-governmental organisations (NGOs). Each group is engaged with tailored communication strategies to address specific needs and concerns, such as regulatory compliance, CSR projects, and company performance updates. | groups, is integrated into corporate decisions, especially those impacting environmental and social policies. Current disclosures focus more on confirming interactions rather than detailing how input influences policies. Greater specificity in Essential indicators, not just Leadership indicators, would enhance transparency. |
| Principle 6: Environmental stewardship | • P6, E1 (Energy consumption): The company reported a significant consumption of energy from non-renewable sources but with a notable amount from renewable sources as well. Energy intensity in terms of physical output was 4.30 GJ/MWh in FY 2024, up from 4.02 GJ/MWh in FY 2023.<br>• P6, E3 (Water-related disclosure): It reported extensive water withdrawals amounting to over 109 million kilolitres (kl), a significant increase from the previous year. The water intensity per unit of turnover remains constant, indicating stable consumption relative to business growth. The usage of seawater and third-party water has increased, particularly in renewable energy operations, reflecting a strategic shift towards more sustainable energy sources.<br>• P6, E4 (Water discharge): The company's water discharge practices show a significant volume of water being managed, particularly seawater, which is primarily used for cooling purposes before being treated to meet ambient levels and discharged back. Total water discharge was over 81 million kl, a substantial increase from the previous year. This includes 481,847 kl to surface water, which is treated domestically and discharged back into rivers, aligning with environmental standards.<br>• P6, E7 (Scope 1 and Scope 2 emissions): Scope 1 emissions were 15.3%, a significant increase from the previous year. Scope 2 emissions also grew by 38.5%. However, the emissions intensity per unit of physical output decreased slightly from 0.68 tons of $CO_2e$/MWh in the previous year to 0.62 ton $CO_2e$/MWh.<br>• P6, L1 (Water usage and discharge in areas of water stress): The company reported substantial water management activities across several high-risk areas including Barmer, Ratnagiri, | The company should provide more detailed forecasts and commitments regarding the integration of renewable energy.<br>Future reports should delineate the specific actions and partnerships it is implementing to mitigate Scope 3 emissions, particularly in logistics and downstream processes, with clear performance indicators.<br>Accelerating the assessments of value chain partners and integrating results into procurement and partnership decisions could significantly strengthen the company's environmental governance, like in the instance of the impact of water usage on local communities. |

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| | Vijayanagar and its hydro power plants. These facilities focus on intensive water withdrawal primarily from surface and seawater sources.<br>• P6, L2 (Scope 3 emissions): The emissions per rupee of turnover remained stable at 0.000015 $tCO_2e$/₹. Emissions intensity decreased from 0.069 to 0.060 $tCO_2e$ per unit of output.<br>• P6, L7 (value chain partners for environmental impacts): Study of these impacts is still in progress. | |
| **Principle 8: Inclusive and equitable growth** | • P8, E2 (Rehabilitation and resettlement): Not applicable as there are no ongoing R&R projects currently undertaken by the entity.<br>• P8, L3 (Preferential procurement policy): Does not have a preferential procurement policy to purchase from suppliers comprising marginalised or vulnerable groups. No specific groups are targeted. | The absence of a preferential procurement policy for marginalised groups suggests an area for improvement. |

## NTPC

According to NTPC's BRSR reporting for financial year 2023–24, the company has a strong OSH policy, grievance mechanism and worker rights and benefits. Additionally, it carried out 16 CSR projects amounting to ₹272 million and acquired 51.64% of its input materials directly from MSMEs. The company sets long-term quantitative targets for reducing its greenhouse gas emissions, reports Scope 1, 2 and 3 emissions which have been verified, and has nominated a board member or board committee with explicit responsibility for oversight of the climate change policy (Transition Pathway Initiative, 2023). However, it makes little mention of training for employees, managers, value chain partners or supply chain partners. Additionally, Principle 2 (sustainable and safe production) and Principle 4 (stakeholder engagement) appear to be particularly undeveloped. Finally, NTPC could strengthen and set more ambitious targets, and is yet to state an intention to phase out coal and other fossil fuels or set a net zero target (World Benchmarking Alliance, 2021).

**Table 4.4. NTPC's BRSR and just transition-relevant disclosures, 2023–24**

| Principle | Demonstration of just transition initiatives | How just transition alignment could be improved |
|---|---|---|
| **Principle 2: Sustainable and safe production** | • P2, E1 (R&D and capex): NTPC invested 100% of its R&D budget on developing green hydrogen and carbon capture and utilisation (CCU) technologies. 31% of capex, up from 21% in the previous year, was directed towards Flue Gas Desulphurisation (FGD), renewable energy, hydro projects, and energy conservation measures.<br>• P2, E2 (Sustainable sourcing): The company does not currently use sustainability as a criterion for sourcing. Most of its procurement is from large public sector untertakings and multinational corporations, which adhere to ESG standards and | Developing explicit sustainable sourcing criteria could further strengthen the company's commitment to sustainability and potentially influence its supply chain to engage in greener and more responsible practices. |

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| | publicly disclose their sustainability performances.<br>• P2, L3 (Recycling inputs): The company reported 25% usage of recycled wastewater, a slight decrease from 30% in FY 2022–23. | |
| Principle 3: Employee wellbeing | • P3, E8 (Training to employees and workers): Training on health and safety was provided to 23.95% of employees and 24.82% of workers, while skill upgradation training reached 2.44% of employees and 1.79% of workers. These numbers are small and the training focus was on safety training over skills development across the board.<br>• P3, E11 (Safety-related incidents): The company reported a decrease in the Lost Time Injury Frequency Rate (LTIFR) for employees from 0.141 to 0.073 and an increase for workers from 0.067 to 0.086. There were five worker fatalities reported, a slight increase from the previous year. | Increasing focus on comprehensive skill development, especially the skills essential for the transition to low-carbon technologies, could further empower the workforce and aid in their professional growth. |
| Principle 4: Stakeholder engagement | • P4, E2 (stakeholder groups identified and frequency of engagement): The company engages with a wide range of stakeholders through various channels tailored to their needs. Specific groups include employees, customers, suppliers, media, government bodies, regulators, communities and NGOs, and investors and lenders. Each group is engaged with strategies designed to address pertinent issues such as professional growth, work–life balance, compliance, policy changes, sustainable practices, and community development. | The company could improve engagement by detailing how feedback, especially from vulnerable groups, directly influences corporate decisions and policies. More explicit integration of stakeholder feedback could enhance the responsiveness to ESG matters. Current disclosures focus more on confirming interactions rather than detailing how input influences policies. Greater specificity in Essential indicators, not just Leadership indicators, would enhance transparency. |
| Principle 6: Environmental Stewardship | • P6, E1 (Energy consumption): The company reported significant energy consumption with a notable increase from renewable sources, at 2,400.52 TJ compared with 343.7 TJ in FY 2022–23, though non-renewable energy consumption still remains the dominant source at 99.9%.<br>• P6, E3 (Water-related disclosure): Total water withdrawal increased significantly. The water intensity per rupee of turnover increased from 0.603 Ltr/₹ to 0.625 Ltr/₹.<br>• P6, E4 (Water discharge): The majority of water is discharged without treatment.<br>• P6, E7 (Scope 1 and Scope 2 emissions): Total Scope 1 and 2 emissions have increased but the | Disclosures should be made within the BRSR on the scaling up of renewable energy sources in NTPC's energy mix. Details on future plans for reducing dependency on non-renewable energy would strengthen its environmental commitment.<br>More aggressive water conservation measures and technologies could be highlighted in the disclosure to demonstrate leadership in sustainable water |

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| | Scope 1 and Scope 2 emissions per unit of turnover have slightly improved.<br>• P6, L1 (Water usage and discharge in areas of water stress): Reports extensive use and management of water in areas with water stress, with most of it being discharged without treatment.<br>• P6, L2 (Scope 3 emissions): Scope 3 emissions intensity significantly reduced in FY 2023-24.<br>• P6, L7 (Value chain partners for environmental impacts): Currently, no value chain partners are assessed for environmental impacts, indicating a potential area for significant improvement. | management in stressed regions.<br>The decrease in Scope 3 emissions was due to a decrease in coal imports. Future reports should delineate the specific actions and partnerships NTPC is implementing to mitigate Scope 3 emissions, particularly in logistics and downstream processes, with clear performance indicators.<br>The company should start to systematically assess environmental impacts across its value chain to promote comprehensive sustainability practices among partners. |
| **Principle 8: Inclusive and equitable growth** | • P8, E2 (Rehabilitation and resettlement): Ongoing R&R activities are being undertaken for projects like NTPC Lara, North Karanpura, Nabinagar STPP, Rammam Hydro Power Project, Tanda STTPP, Khargone, Kanti, and Darlipali STPP[7]. These projects cover thousands of affected families, allocating significant funds for resettlement.<br>• P8, L3 (Preferential procurement policy): The company follows the Public Procurement Policy for MSMEs, with specific targets for procurement from enterprises owned by SC/ST individuals and women entrepreneurs. Procurement from MSMEs was 51.64%, from SC/ST-owned enterprises 0.17% and from women-owned enterprises 0.34%. | n/a |

## Reliance Power

According to Reliance Power's BRSR disclosure for FY 2023–24, the company has provided training to its workforce on BRSR principles and indicators. It has highlighted requirements of sustainable procurement from suppliers, training and redressal structure for safety concerns, training for skill upgradation (covering 73% of employees and 100% of workers), and its stakeholder and community engagement processes. However, the company did not respond on any leadership indicator.

[7] These projects refer to plants and sites where NTPC has existing projects and power generation, and R&R in the regions where these projects are located.

Table 4.5. Reliance Power's BRSR and just transition relevant disclosures, 2023–24

| Principle | Demonstration of just transition initiatives | How just transition alignment could be improved |
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| Principle 2: Sustainable and safe production | • P2, E1 (R&D and capex): Reliance Power does not specify any investments in R&D or capex for the improvement of environmental and social impacts of its products and processes for the reporting year.<br>• P2, E2 (Sustainable sourcing): The company implements sustainable sourcing practices by including Environmental, Health & Safety, and Sustainability clauses in all Purchase and Work Orders. 100% of its procurement adheres to their 'vendor code of conduct', focusing on labour and human rights, health and safety, environmental ethics, and management systems. It also prioritises the construction of sustainable projects using local resources and green technologies.<br>• P2, L3 (Recycling inputs): No information provided on utilisation of recycled or reused input material. | The lack of specified R&D and capex investment in sustainability indicates an area for potential improvement and transparency. This could enhance stakeholders' understanding of the company's priorities in sustainability.<br>Lack of recycling data suggests limited transparency; Reliance Power may consider detailing recycling initiatives for alignment. |
| Principle 3: Employee wellbeing | • P3, E8 (Training to employees and workers): Reliance Power provided health and safety training to all employees and workers. Skill upgradation training was offered to 72.59% of employees and all workers.<br>• P3, E11 (Safety-related incidents): There were no Lost Time Injury Frequency Rate (LTIFR) incidents reported among employees, as in the previous year. However, the LTIFR for workers increased from 0.3764 to 1.5. | n/a |
| Principle 4: Stakeholder engagement | • P4, E2 (stakeholder groups identified and frequency of engagement): The company identifies and engages with a variety of stakeholders including promoters/shareholders, vendors/raw material suppliers, lenders, customers/distribution companies, employees and management, communities and the media. Engagement channels vary from emails, meetings, and telephonic conversations to community activities and press releases. Notably, communities are identified as vulnerable and marginalised groups, with engagements catered to community and social development activities. | This could be improved by detailing how feedback from these engagements, especially from vulnerable groups, is incorporated into business decisions and policies. More explicit integration of stakeholder feedback could enhance the responsiveness to ESG matters. Current disclosures focus more on confirming interactions rather than detailing how input influences policies. Greater specificity in Essential indicators, not just Leadership |

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| | | indicators, would enhance transparency. |
| Principle 6: Environmental stewardship | • P6, E1 (Energy consumption): Almost 80% of Reliance Power's total energy consumption was from renewable sources. The energy intensity per rupee of turnover remained stable at 0.004, reflecting a consistent focus on efficiency despite changes in total energy consumption.<br>• P6, E3 (Water-related disclosure): The company demonstrated significant water management, with total water withdrawals amounting to 73.2 million kl. Most water was drawn from surface sources. The company maintains a water intensity per rupee of turnover at 0.000885, which increased from 0.000882 in 2022.<br>• P6, E4 (Water discharge): The company did not report any water discharge metrics. This absence of data includes no information on the treatment or destination of any potential discharge, leaving a critical gap in understanding the environmental impact of its operations in water management terms.<br>• P6, E7 (Scope 1 and Scope 2 emissions): The company reported a significant reduction in total Scope 1 emissions. No Scope 2 emissions data was reported.<br>• P6, L1 (Water usage and discharge in areas of water stress): No information was provided on water withdrawal, consumption or discharge in areas of water stress.<br>• P6, L2 (Scope 3 emissions): No information was provided on Scope 3 emissions.<br>• P6, L7 (Value chain partners for environmental impacts): No information was provided on the assessment of environmental impacts among value chain partners. | Lack of transparency and data on water discharge practices could be a significant oversight or a missed opportunity to showcase responsible environmental stewardship. Future reports would benefit from including detailed water discharge practices and treatment levels.<br>Absence of Scope 2 emissions data for the current year and the lack of independent verification might raise questions about the accuracy or completeness of the reported data.<br>Future reports should aim to include data for water management in water stressed areas to enhance transparency.<br>The absence of Scope 3 emissions data suggests a significant gap in the company's reporting on its overall carbon footprint.<br>The lack of engagement in assessing environmental impacts across the value chain could undermine the company's sustainability claims. |
| Principle 8: Inclusive and equitable growth | • P8, E2 (Rehabilitation and resettlement): Reliance Power is undertaking an ongoing R&R project for Moher Village in Singrauli, Madhya Pradesh, as part of the Moher & Moher Amlohri Extension Open Cast Coal Mines. The project affects 1,176 affected families, with 84.63% covered by R&R programmes, and ₹3.4 million was paid to these families in FY 2023–24.<br>• P8, L3 (Preferential procurement policy): No information was provided on a preferential procurement policy for marginalised or vulnerable groups. | The absence of a preferential procurement policy could be an area for improvement. Developing such a policy could foster inclusive growth and align the company's procurement practices with a just transition. |

## Cement companies

The cement sector in India plays a crucial role in supporting infrastructure development and achieving net zero targets. The industry's drive towards sustainable practices is evident, as companies like UltraTech Cement and Dalmia Bharat, among the world's largest cement producers, continue to adopt measures to enhance energy efficiency, sustainable sourcing and waste management. UltraTech Cement has committed to the Global Cement and Concrete Association (GCCA) 2050 Cement and Concrete Industry Roadmap, aiming to produce carbon-neutral concrete by 2050 and reduce $CO_2$ emissions by 25% by 2030, while Dalmia Bharat has set an ambitious goal to become carbon-negative by 2040.

However, broader sectoral challenges mean substantial investment and innovation are required to decarbonise and hit net zero targets. While energy efficiency has contributed to emissions reduction (of about 9% in India (CEEW, 2023), it alone is insufficient to meet India's climate goals, especially as demand for cement grows. Additional strategies, such as alternative fuel use and clinker factor reduction, have shown potential to lower emissions further, but they also demand considerable capital investment and reliable logistics. Achieving net zero may ultimately hinge on advanced carbon management solutions like carbon capture, usage and storage (CCUS), which could reduce emissions by up to 67% but at a significant cost increase of up to 107% (ibid.). In this context, UltraTech's efforts to increase sustainable sourcing and Dalmia Bharat's success in achieving 100% sustainable sourcing mark encouraging steps forward. For the sector to foster a just transition, companies need to support workers with skill development for low-carbon roles, enhance rehabilitation and resettlement for communities, and strengthen supply chain sustainability. Comprehensive adoption of these practices could pave the way for a sustainable and equitable transition, setting a standard that can inspire other industries to prioritise environmental and social outcomes.

### UltraTech Cement

Ultra Tech has committed to net zero concrete by 2050 and agreed to an ambitious intermediate goal of preventing 5 billion tonnes of $CO_2$ emissions by 2030. UltraTech's BRSR disclosure for FY 2023–24 outlines its efforts in sustainable production, employee wellbeing and environmental stewardship. With 39.37% of its R&D budget directed towards environmental and social advancements, UltraTech is focused on green concrete, low-water usage and energy efficiency. Notable achievements include sourcing 42% of inputs sustainably and a recycling rate of 20.85% for input materials. Employee safety remains a priority, reflected in decreased Lost Time Injury Frequency Rates, though there is room to increase skill upgradation training, especially for workers. UltraTech has engaged various stakeholder groups to enhance community empowerment, though opportunities remain to broaden preferential procurement policies for inclusive growth.

**Table 4.6. UltraTech Cement's BRSR and just transition-relevant disclosures, 2023–24**

| Principle | Demonstration of just transition initiatives | How just transition alignment could be improved |
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| **Principle 2: Sustainable and safe production** | • P2, E1 (R&D and capex): UltraTech allocated 39.37% of its R&D budget to environmental and social improvements, compared with 23% in FY 2022–23. Focus areas included green concrete, low-water concrete and energy efficiency. Capex allocation for sustainability was 2.44%, down from 12% in FY 2024, aimed at energy efficiency, waste heat recovery, renewable energy, air emission control and safety enhancements. | The company could enhance disclosure by detailing the criteria used that define sustainable sourcing, including any third-party certifications or standards required for compliance and align sustainable sourcing procedures with international standards/ best practice. |

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| | • P2, E2 (Sustainable sourcing): The company has a sustainable sourcing procedure, with 42% of inputs sourced sustainably in the reporting year.<br>• P2, L3 (Recycling inputs): 20.85% of input materials were recycled or reused, including materials from the alumina and steel industries, an increase from 20.60% in the previous year. | |
| Principle 3: Employee wellbeing | • P3, E8 (Training to employees and workers): The company provided health and safety training to 47% of employees, while skill upgradation training reached 84% of employees. Among workers, 76% received health and safety training, and 40% received skill upgradation training.<br>• P3, E11 (Safety-related incidents): The Lost Time Injury Frequency Rate (LTIFR) for employees decreased to 0.12 from 0.21, while the rate remained constant for workers at 0.07. The company recorded five fatalities among workers. There were 44 recordable work-related injuries for workers, with high-consequence injuries totalling 15. | Increasing focus on comprehensive skill development, especially the skills essential for transition to low-carbon technologies, could further empower the workforce and aid in their professional growth. |
| Principle 4: Stakeholder engagement | • P4, E2 (Stakeholder groups identified and frequency of engagement): The company has identified various stakeholder groups, including industry associations, investors, government bodies, employees, communities, customers, suppliers and contractors. Engagement methods include reports, meetings, workshops, surveys and townhalls, tailored to the needs of each group. Engagement with communities, customers, and suppliers focuses on empowerment, satisfaction assessments and adherence to the supply chain code of conduct. | The company could improve its engagement by detailing how feedback, especially from vulnerable groups, is incorporated into business decisions and policies. More explicit integration of stakeholder feedback could enhance the responsiveness to ESG matters. Current disclosures focus more on confirming interactions rather than detailing how input influences policies. Greater specificity in Essential indicators, not just Leadership indicators, would enhance transparency. |
| Principle 6: Environmental stewardship | • P6, E1 (Energy consumption): UltraTech's renewable energy consumption increased significantly to 7,857.78 TJ from 1,244.90 TJ the previous year, but non-renewable sources remained dominant, accounting for 97.5%. Energy intensity per rupee of turnover improved slightly to 451.22 kJ from 462 kJ.<br>• P6, E3 (Water-related disclosure): Water withdrawal totalled 27.7million kl, drawing | Disclosures should be made within the BRSR on the scaling up of renewable energy sources in Ultratech's energy mix. Providing details in future plans for how it will reduce dependency on non-renewable energy would strengthen its environmental commitment. |

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| | from various sources, with water intensity per turnover slightly decreasing, reflecting better water use efficiency.<br>• P6, E4 (Water discharge): The company reported zero discharge to external water bodies.<br>• P6, E7 (Scope 1 and Scope 2 emissions): Emissions intensity remained stable at 0.103 kg $CO_2$ per rupee of turnover, though total emissions increased with operational growth.<br>• P6, L1 (Water usage and discharge in areas of water stress): Plants in water-stressed regions managed a combined withdrawal of 4.6 million kl. Water intensity per rupee of turnover in stressed regions improved.<br>• P6, L2 (Scope 3 emissions): Total Scope 3 emissions increased by almost twice in FY 2024. The emissions per rupee of turnover also increased by over 1.6 times.<br>• P6, L7 (Value chain partners for environmental impacts): 42% of value chain partners were assessed for environmental impacts. | Future reports should delineate the specific actions and partnerships the company is implementing to mitigate Scope 3 emissions, with clear performance indicators.<br>The company should start to systematically assess environmental impacts across its value chain to promote comprehensive sustainability practices among partners. |
| **Principle 8: Inclusive and equitable growth** | • P8, E2 (Rehabilitation and resettlement): Ongoing R&R activities are being undertaken for the Kujota Kotputli project in Jaipur, in rural Rajasthan. 34% of the 540 affected families were covered, with a total payment of ₹60 million.<br>• P8, L3 (Preferential procurement policy): No preferential procurement policy is in place to prioritise marginalised or vulnerable groups. | The absence of a preferential procurement policy for marginalised groups suggests an area for improvement. Developing such a policy could foster inclusive growth and align the company's procurement practices with a just transition. |

## Dalmia Bharat

Dalmia Bharat has stated its intent of becoming a carbon-negative cement company by 2040 and its BRSR disclosure for FY 2023–24 shows that 100% of its R&D budget was dedicated to process improvements in cement manufacturing, including optimising clinker production, enhancing energy efficiency and reducing emissions. This also includes the innovative extension of limestone reserves, which helps lower carbon intensity by improving resource efficiency and incorporating alternative materials in production. Dalmia Bharat also achieved 100% sustainable sourcing and used 23% recycled waste in its input materials in that year. Notably, the company reported incremental efficiency gains in energy use and maintained zero liquid discharge at all plants. However, while health and safety training reached high coverage, there remains a gap in skill upgradation for contract and female workers. Enhanced disclosure on Scope 3 emissions and a potential preferential procurement policy for marginalised groups could further strengthen Dalmia Bharat's sustainability goals.

Table 4.7. Dalmia Bharat's BRSR and just transition-relevant disclosures, 2023–24

| Principle | Demonstration of just transition initiatives | How just transition alignment could be improved |
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| Principle 2: Sustainable and safe production | • P2, E1 (R&D and capex): Dalmia Bharat invested 100% of its R&D budget in processes to improve cement manufacturing, extend limestone reserve life, reduce carbon emissions, and increase renewable energy use, recycled waste, and social value during the assessed period. Capex investment focused on these areas accounted for 9% of total capex.<br>• P2, E2 (Sustainable sourcing): The company has sustainable sourcing procedures, achieving 100% sustainable input sourcing.<br>• P2, L3 (Recycling inputs): Its input materials included 23% recycled waste, 22.5% fly ash, 15.3% slag, 1.9% red mud and 1% chemical gypsum. | The company could enhance disclosure by detailing the criteria used that define sustainable sourcing, including any third-party certifications or standards required for compliance and align sustainable sourcing procedures with international standards/best practice. |
| Principle 3: Employee wellbeing | • P3, E8 (Training to employees and workers): Dalmia Bharat provided health and safety training to 52% of employees and 84% received skill upgradation. Among workers, training coverage was recorded at 235% for health and safety, reflecting repeat sessions or non-unique counts for contract workers. Only 20% of workers and only 8% of female workers received skill upgradation training.<br>• P3, E11 (Safety related incidents): The company reported a slight increase in the Lost Time Injury Frequency Rate (LTIFR) for employees and permanent workers to 0.25, while contract workers saw a decrease to 0.03. There were three fatalities among contract workers. | Increasing focus on comprehensive skill development, especially the skills essential for the transition to low-carbon technologies, could further empower the workforce and aid in their professional growth. |
| Principle 4: Stakeholder engagement | • P4, E2 (Stakeholder groups identified and frequency of engagement): The company identifies stakeholders, including investors, communities, media, trade associations and civil society. Engagement is conducted through earnings calls, CSR reports, newsletters and meetings. Key topics include sustainable development, governance and climate-related concerns. Community interactions focus on social and economic development. | The company could improve engagement by detailing how feedback, especially from vulnerable groups, is directly influencing corporate decisions and policies. More explicit integration of stakeholder feedback could enhance the responsiveness to ESG matters. Current disclosures focus more on confirming interactions rather than detailing how input influences policies. Greater specificity in Essential indicators, not just Leadership indicators, would enhance transparency. |

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| **Principle 6: Environmental stewardship** | • P6, E1 (Energy consumption): Total energy consumption rose from 62,285 TJ in FY 2022–23 to 69,613 TJ, with renewable sources increasing to 4,376 TJ. Energy intensity per physical output showed a marginal improvement, suggesting incremental efficiency gains.<br>• P6, E3 (Water-related disclosure): The company recorded a slight increase in water withdrawal to 4.68 million $m^3$. Water intensity per rupee of turnover improved from 33.87 kl/million ₹ to 31.85 kl/million ₹, indicating better water management practices.<br>• P6, E4 (Water discharge): All plants are zero liquid discharge (ZLD) facilities.<br>• P6, E7 (Scope 1 and Scope 2 emissions): Scope 1 and Scope 2 emissions totalled 14.68 million $tCO_2e$, with a slight decrease in emissions intensity per rupee of turnover from 101 to 100.<br>• P6, L1 (Water usage and discharge in areas of water stress): Plants in Kadapa and Belgaum, areas that face water stress, reported water withdrawals of 352,700 $m^3$ and 234,080 $m^3$, respectively, with zero discharge policies in place for reusing all water within plant operations.<br>• P6, L2 (Scope 3 emissions): Total Scope 3 emissions were recorded at 1.43 million $tCO_2e$, up from 1.32 million metric tonnes in the previous year. Scope 3 emissions intensity remained consistent at 0.052 $tCO_2e$ per tonne of cementitious material.<br>• P6, L7 (Value chain partners for environmental impacts): No data was provided on the percentage of value chain partners assessed for environmental impacts. | Disclosures should be made within the BRSR on the scaling up of renewable energy sources in Dalmia Bharat's energy mix. Details on future plans for reducing dependency on non-renewable energy would strengthen its environmental commitment.<br>Future reports should delineate the specific actions and partnerships the company is implementing to mitigate Scope 3 emissions, with clear performance indicators.<br>The lack of engagement in assessing environmental impacts across the value chain could undermine the company's sustainability claims. |
| **Principle 8: Inclusive and equitable growth** | • P8, E2 (Rehabilitation and resettlement): Dalmia Bharat's ongoing R&R project in the Lanjiberna Limestone & Dolomite Mines area in Sundargarh, Odisha, covers 495 affected families, with 12% of these families currently engaged in R&R initiatives.<br>• P8, L3 (Preferential procurement policy): The company does not currently have a preferential procurement policy for sourcing from marginalised or vulnerable groups. | Expanding R&R coverage to include a higher percentage of affected families could enhance inclusive growth.<br>The absence of a preferential procurement policy for marginalised groups suggests an area for improvement. Developing such a policy could foster inclusive growth and align the company's procurement practices with a just transition. |

## Mining companies

The mining sector plays a vital role in achieving a just transition, balancing sustainable practices with the high environmental and social impact of its activities. Vedanta is one of the major mining players in India and its efforts, highlighted in its BRSR disclosure, underscore progress in sustainable production through initiatives such as a 95% allocation of R&D towards environmental advancements. However, there is room for improvement in areas like renewable energy adoption and Scope 3 emissions management. These steps are vital as the mining industry is not only phasing out coal but also expanding to meet the increasing demand for energy transition minerals (ETMs), which are essential for low-carbon technology. As the industry pivots towards ETM mining, investors hold significant influence in supporting a just transition, using capital allocation and engagement with companies to prioritise community respect, worker safety and regional economic development (Scheer and Robins, 2024). Such investor-driven commitments are necessary to maintain sustainable local outcomes while fulfilling global climate goals.

### Vedanta

Vedanta's BRSR disclosure for FY 2023–24 underscores its substantial efforts in sustainable and safe production, environmental stewardship and inclusive growth. With about 95% of R&D investments directed towards enhancing environmental performance, the company has made strides in sustainability, demonstrated by its zero liquid discharge facilities and dry tailing storage. Vedanta's sustainable sourcing reached 81%, guided by a Supplier Sustainability Management Policy, though recycled input materials remain absent. Its focus on community engagement is noteworthy, supporting marginalised groups, and it has an active rehabilitation programme in water-stressed regions. However, increasing renewable energy adoption, improving Scope 3 emission management, and enhancing worker safety and training initiatives are areas that could strengthen Vedanta's alignment with just transition objectives. Vedanta aims to become net zero by 2050 or sooner.

**Table 4.8. Vedanta's BRSR and just transition-relevant disclosures, 2023–24**

| Principle | Demonstration of just transition initiatives | How just transition alignment could be improved |
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| **Principle 2: Sustainable and safe production** | • P2, E1 (R&D and capex): About 95% of R&D investments focused on enhancing environmental performance across various sites, such as Hindustan Zinc Limited's advancements in mineral recovery and Vedanta Aluminium's efficiency improvements. Additionally, 3.64% of capex was directed towards environmental enhancements, including zero liquid discharge facilities and a dry tailing storage system, while 0.18% of capex focused on social initiatives.<br>• P2, E2 (Sustainable sourcing): Vedanta has established a Supplier Sustainability Management Policy and Supplier Code of Conduct. These policies require suppliers to adhere to standards in anti-corruption, human rights, health, safety, and climate change. In the reporting period, 81% of inputs were sourced sustainably.<br>• P2, L3 (Recycling inputs): The company reported no recycled or reused input materials | The absence of recycled input materials indicates an area for improvement. Integrating recycled materials could reduce resource dependency and enhance Vedanta's environmental stewardship, aligning further with just transition goals. |

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| | in production for both FY 2023–24 and FY 2022–23. | |
| **Principle 3: Employee wellbeing** | • P3, E8 (Training to employees and workers): Vedanta provided extensive health, safety and skill enhancement training to its workforce, including both employees and workers. Training coverage on skill upgradation was notably high, especially among permanent employees. However, for workers it was 66% and for female workers specifically, it was 36%.<br>• P3, E11 (Safety-related incidents): The company's FY 2024 safety record showed an Lost Time Injury Frequency Rate (LTIFR) of 0.52 for employees and 0.63 for workers. Total work-related injuries included 32 incidents among employees and 336 among workers. Fatalities decreased from 12 in FY 2023 to three in FY 2024 for workers. High-consequence injuries included two cases each for employees and workers, specifically related to amputation. | Increasing focus on comprehensive skill development, especially the skills essential for the transition to low-carbon technologies, could further empower the workforce and aid in their professional growth.<br>The high incident rate among workers suggests the need for intensified safety measures for contractors. Prioritising additional safety protocols, and disclosing them as part of the BRSR, especially for high-risk activities, would enhance Vedanta's alignment with just transition goals focused on protecting vulnerable groups in hazardous roles. |
| **Principle 4: Stakeholder engagement** | • P4, E2 (Stakeholder groups identified and frequency of engagement): Vedanta identified key stakeholders, including employees, local communities, investors, NGOs, suppliers and regulators. Engagement methods include town halls, community meetings, surveys and workshops. Monthly or quarterly engagement with each group ensures a responsive approach to their concerns. The company emphasises safe workplaces, community welfare, investor transparency and alignment with sustainability goals in these interactions. | The company could improve its engagement by detailing how feedback, especially from vulnerable groups, is directly influencing corporate decisions and policies. More explicit integration of stakeholder feedback could enhance responsiveness to ESG matters. Current disclosures focus more on confirming interactions rather than detailing how input influences policies. Greater specificity in Essential indicators, not just Leadership indicators, would enhance transparency. |
| **Principle 6: Environmental stewardship** | • P6, E1 (Energy consumption): Vedanta reported a total energy consumption of 648.7 million GJ, with the share of renewables being just over 1%. Energy intensity per rupee of turnover adjusted for purchasing power parity (PPP) was slightly higher than last year.<br>• P6, E3 (Water-related disclosure): The company withdrew 212.4 million kl of water, emphasising surface water use while advancing recycling efforts, with 84.7 million kl reused. Water intensity per rupee of turnover (adjusted for PPP) increased slightly. | Future reports should delineate the specific actions and partnerships Vedanta is implementing to mitigate Scope 3 emissions, with clear performance indicators.<br>The company should start to systematically assess environmental impacts across its value chain to promote comprehensive sustainability practices among partners. |

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| | • P6, E4 (Water discharge): It achieved zero untreated discharge, with treated discharge of surface water at 1.1 million kl and 1.3 million kl of seawater. This reflects a responsible approach to wastewater management, aligning with environmental stewardship and regulatory compliance.<br>• P6, E7 (Scope 1 and Scope 2 emissions): Total Scope 1 and 2 emissions increased by approximately 1% on the previous year, with emission intensity slightly increasing per PPP-adjusted turnover, suggesting ongoing emission control challenges.<br>• P6, L1 (Water usage and discharge in areas of water stress): In water-stressed locations, water withdrawal was 69.3 million kl, with an emphasis on sourcing and recycling water. Consumption per turnover increased in regions of water scarcity.<br>• P6, L2 (Scope 3 emissions): Scope 3 emissions were 34.6 million metric tonnes $CO_2e$, showing a decrease from the previous year, suggesting initial success in managing indirect emissions.<br>• P6, L7 (Value chain partners for environmental impacts): Environmental impacts of 30% of Tier 1 suppliers were evaluated. | |
| **Principle 8: Inclusive and equitable growth** | • P8, E2 (Rehabilitation and resettlement): Vedanta's ongoing R&R efforts includes Vedanta Aluminium – Lanjigarh in Odisha, with full coverage of 261 affected families and a committed amount of ₹1.3 billion, spread across land payments, new colony construction, R&R packages, allowances and skill training.<br>The R&R effort also includes SK Village R&R in Rajasthan, projected to impact around 325 families, though the exact number awaits a detailed survey.<br>• P8, L3 (Preferential procurement policy): The company's preferential procurement policy supports marginalised groups, primarily through initiatives at Cairn India, Talwandi Sabo Power Limited (TSPL) and FACOR, engaging with micro-vendors and women's self-help groups. However, less than 0.01% of the total procurement spend constitutes procurement from marginalised/vulnerable groups. | n/a |

# 5. Limitations to the BRSR

### Data problems

While the BRSR helps to highlight some of the important steps that companies in India are taking towards a just transition, an issue that still exists is the lack of reliable and verified reporting, particularly in the non-BRSR Core indicators. Overall, the quality of current data in the BRSR is weak and inconsistent. The poor quality of data can be attributed to several factors, including the nascent stage of the BRSR framework, varying levels of corporate maturity in ESG reporting, and inconsistencies in units, metrics and methodologies in another challenges.

### Omissions created by updates to the BRSR

In SEBI's 2023 circular, the revised BRSR format under Principle 8 introduced an updated Essential Indicator 4. This now focuses on sourcing inputs directly from MSMEs or small producers and directly from within India. While this revision broadens the geographical scope, it eliminates the earlier emphasis on sourcing from within the district and neighbouring districts, which was a key criterion in the earlier draft. This shift undermines the local economic development aspect and the opportunity to empower local and marginalised communities, which are central to the just transition tool.

SEBI's 2023 circular also introduced the BRSR Core framework. However, within that, Principle 2, Essential Indicator 1, which tracks the percentage of R&D and capex investments in technologies improving environmental and social impacts, was excluded. This omission is a significant limitation. Investments in R&D and capex for sustainable technologies are critical for driving long-term environmental and social impact, especially in industries transitioning to low-carbon or circular production models and the only forward-looking indicator in the BRSR. Additionally, the BRSR faces challenges related to the lack of specificity in certain indicators. For instance, in Principle 8, Essential Indicator 2, which requires information on ongoing rehabilitation and resettlement (R&R) projects, there is inconsistency in how amounts paid are reported. While some companies provide figures in crore rupees, others use absolute numbers, making it difficult to ensure comparability and transparency across disclosures. Addressing these inconsistencies is vital for enhancing the utility and reliability of the BRSR framework for both companies and investors.

### Discrepancies between BRSR results and other benchmarking ratings

The nascent stage of just transition progress by India is evidenced by the analysis of other global benchmarking ratings provided by the likes of the World Benchmarking Alliance, CA100+ and the Global Reporting Initiative, which all show inadequate progress despite many companies' BRSR disclosures stating that they are actively working on various net zero plans and policies and worker training schemes. For instance, NTPC and Dalmia Bharat have both scored 1.3 out of 20 in the just transition assessment by the World Benchmarking Alliance, whereas the BRSR analysis indicates a more nuanced performance taking into account the India climate and development pathway. JSW Steel scored even lower at 0.6 while ArcelorMittal had a relatively high just transition score in 2024 from the same benchmarker. This illustrates the challenge in standarising just transition metrics for companies globally, but using the tool developed in this report can support an accurate comparison. While there are limitations to the BRSR's data, it is, however, in its early stages and we anticipate that data quality will improve over time. In the meantime, data and information from this disclosure should start to make its way into global ratings and investors.

# 6. Recommendations

With this report we have aimed to show that the BRSR can be a vital tool for companies in India to link their overall transition and just transition activities while highlighting them for external benchmark providers and investors. Using the BRSR, companies can signal a commitment to the just transition by signposting the relevant indicators so that external assessors of just transition can properly evaluate these indicators and accurately score and rate Indian companies.

Investors, investor alliances and other stakeholders who engage with Indian companies on just transition expectations can also encourage Indian companies to use the relevant BRSR indicators to demonstrate existing just transition activities and drive further ambition on just transition activities. The BRSR can be used with an accountability tool that has policy backing to further corporate just transition-related activities.

In addition, those investors who are interested in allocating capital to the just transition in India could encourage a voluntary assessment by companies of the just transition-relevant indicators highlighted in this report. Companies would already be having their BRSR Core indicators assured or assessed by third-party ESG rating-providers in India. Those companies that are keen to attract capital and are already carrying out just transition activities can use the indicators we have identified in this report and have them additionally assured by the rating provider. This could give confidence to investors on the credibility of these indicatorsand data while also encouraging companies to use existing reporting requirements to signal to investors. If enough investors show interest and encourage companies on this front, a greater number of companies could opt to voluntarily have their just transition-relevant indicators verified.

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