



STRENGTHENING ENVIRONMENTAL REPORTING UNDER BRSR

**Business Responsibility and
Sustainability Reporting (BRSR):
A CSE Guidance Brief**





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1. Introduction

How can a business be judged and assessed as “behaving responsibly” towards environment? Globally, in the last few decades, there has been a movement towards greater transparency in sharing non-financial data. Businesses, organisations and companies have been opening up about what actions they are taking to manage their environmental, social and governance (ESG) risks. In response, stock exchanges and financial regulatory bodies have mandated ESG-related reporting, commonly known as ‘ESG disclosure’.

The scenario is unfolding in India as well. The need for responsible business in the country has been the driver in strengthening sustainable business practices and disclosures. In 2008, the S&P ESG India Index was launched by CRISIL. In 2009 came the National Voluntary Guidelines (NVGs), issued by the Union Ministry of Corporate Affairs (MCA). The aim was to offer businesses an ‘Indian’ approach to inculcate responsible business conduct.

In 2012, the Securities and Exchange Board of India (SEBI) mandated the top 100 listed entities by market capitalisation to file Business Responsibility Reports (BRR) as part of their annual reports, as per the disclosure requirement emanating from NVGs. The requirement for filing BRRs was progressively extended to the top 500 listed entities in 2017. In 2019, the ministry (MCA) released the National Guidelines on Responsible Business Conduct (NGRBC).

In 2021, the term ‘BRR’ was replaced and renamed by SEBI as Business Responsibility and Sustainability Reporting (BRSR), and new guidelines for non-financial disclosure were introduced. The circular notified that the top 1,000 companies will be required to disclose their non-financial data voluntarily from fiscal year 2021-2022, while mandatorily disclosing from fiscal year 2022-2023 onwards as per the format. The listing of the companies is based on their worth on the stock market. This was done to put in place a reporting structure for Indian companies that would match international ESG disclosure frameworks and standards.

THE BRSR FRAMEWORK

There are three separate sections in the BRSR framework: Section A is for general disclosures, Section B for management and process disclosures, and Section C for principle-wise performance disclosures.

Section A seeks information on the fundamental facts and specifics about the listed firm, while Section B mandates businesses to publish disclosures pertaining to their structure, policies and processes in place to adopt the National Guidelines on Responsible Business Conduct (NGRBC). Section C collects information under the nine basic principles of the NGRBC (*see Figure 1*). These nine principles range from encouraging businesses to be ethical and accountable, to enabling facilitation of equitable development and consumer welfare (*see next section for more on the BRSR principles*).

The BRSR framework collects information from businesses on each of these principles. The principles govern how a business should conduct itself and work with respect to environmental and social matters.

To keep up with emerging trends in ESG reporting, the collected information is divided into two sections:

- Essential indicators (mandatory)
- Leadership indicators (voluntary)

Companies must report on specific topics under the ‘essential indicators’. The ‘leadership indicators’, on the other hand, are additional disclosures and are voluntary in nature – although for increased accountability and transparency, it is important that the company reports on leadership indicators as well.

Figure 1: The BRSR framework sections

SECTION A General Disclosures	SECTION B Management and Process Disclosures	SECTION C Principle-wise Performance Disclosures
<ul style="list-style-type: none"> • Details of the listed entity • Details on products/services • Operations • Employees • Participation/inclusion/representation of women • Turnover rate for permanent employees and workers • Holding, subsidiary and associate companies • CSR details • Transparency and disclosure compliances 	<p>NGRBC principles and core elements used in developing:</p> <ul style="list-style-type: none"> • structures • policies and processes 	<p>Essential Indicators (mandatory):</p> <ul style="list-style-type: none"> • Environmental data on energy, emissions, waste, water etc. • Data on awareness programmes conducted <p>Leadership Indicators (voluntary):</p> <ul style="list-style-type: none"> • Data on life cycle assessments (LCAs), conflict management policy, break-up of energy policy etc

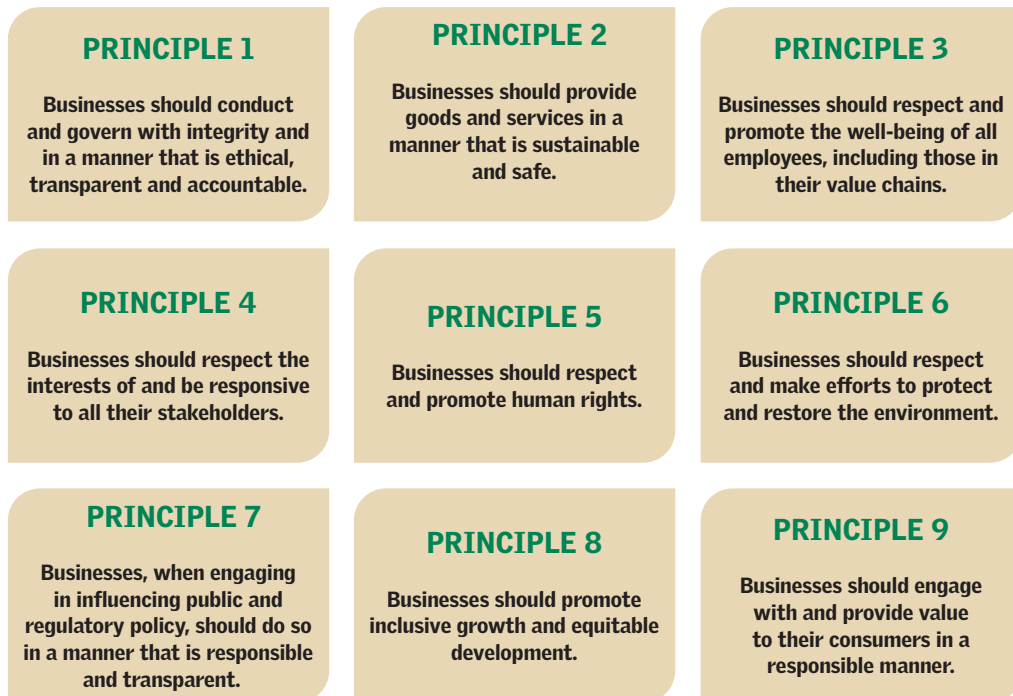
These metrics give a more comprehensive picture of companies’ sustainability efforts and cover details of things such as a company’s efforts to innovate and adopt sustainable and responsible practices; the company’s engagement with stakeholders, including customers, suppliers and communities; and the company’s efforts to promote inclusive growth and equitable development.

GOVERNING PRINCIPLES OF BRSR

The governing principles of BRSR include the nine principles defined by the NGRBC. The principles have been based on different themes (*see Figure 2*):

- Principle 1: Ethical Business Practices
- Principle 2: Product Stewardship (provisioning goods and services in a sustainable manner)
- Principle 3: Employee Well-being and Engagement
- Principle 4: Stakeholder Engagement
- Principle 5: Human Rights
- Principle 6: Environmental Stewardship
- Principle 7: Public Policy Advocacy (complying with regulatory frameworks)
- Principle 8: Inclusive and Equitable Growth
- Principle 9: Customer Focus

Figure 2: BRSR’s governing principles



OBJECTIVES OF THE BRSR FRAMEWORK

The primary objectives behind introducing BRSR into financial markets has been to promote responsible and sustainable business practices, foster transparency and accountability, engage stakeholders, drive performance improvement, and contribute to a more sustainable and equitable future. It is also to understand if companies are inculcating sustainability in their operations, and to equip financial investors with the required knowledge to invest in ESG-responsible businesses.

The framework consists of disclosures related to sustainable sourcing, energy efficiency of the plants, total water usage, air emissions, fuel consumption, use of renewable energy sources, liquid discharge disclosures, greenhouse gas emissions, waste generation and its management, and environmental impact assessment.

Several Key Performance Indicators (KPIs) from international frameworks have been incorporated into India's BRSR to bring it up to par with emerging trends in global ESG reporting, including those pertaining to the UN Sustainable Development Goals (SDGs).

By integrating SDGs into their BRSR, organisations can showcase their commitment to sustainable development, demonstrate how they contribute to global priorities, and provide transparency to stakeholders about their sustainability performance.

THE 2023 BRSR UPDATION: WHAT DOES IT ENTAIL

In July 2023, the BRSR format – including the BRSR Core Framework – was further updated by SEBI for assurance and ESG disclosures for the value chain.

The main updates include:

- In the old format, the question on energy sourcing from renewables and non-renewables was under leadership indicators. An important update was done to include energy sourcing from both renewable and non-renewable sources under essential indicators – this means all companies have to mandatorily provide this information now in their BRSR reporting. This is a positive update.
- In another positive update, the question on water discharge by destination and level of treatment has also been moved to the essential indicators list.
- Reasonable assurance of BRSR Core will now have to be done by an assurance provider. Accordingly, companies have been asked to give the name of the assurance provider as a whole as well as for each indicator. Through this updation, SEBI intends to get an independent assessment of a company's BRSR disclosure by a qualified third-party assurance provider. This will

provide stakeholders with confidence in the credibility and transparency of a company's BRSR performance.

- The listed entities shall mandatorily undertake reasonable assurance of the BRSR Core as per the timelines given by SEBI.

It is mandated that from FY 2023–2024, the top 1,000 listed entities (by market capitalisation) shall make disclosures as per the updated BRSR format, as part of their annual reports.

RATIONALE BEHIND THIS REPORT AND GUIDANCE DOCUMENT

The purpose of this document from Centre for Science and Environment (CSE) is to review the information under BRSR provided by companies during the years 2020-21, 2021-22 and 2022-23. It is also to analyse how the format can be strengthened to get quality data in the public domain, which can then be used by policymakers and investors for more informed decision-making.

The report is largely focused on data provided by companies pertaining to Principle 6 – Environmental Stewardship. The BRSR framework is the first attempt by any regulatory authority or agency in India to mandate the sharing of such detailed environmental performance and compliance data in the public domain – sharing of such data in a transparent manner should be one of the key drivers in decision-making by investors.

CSE experts have reviewed 28 reports from 14 different companies, and prepared an overall assessment. The aim has been to come up with recommendations to strengthen BRSR so that it can lead to rational reporting and investment decisions.

WHAT CSE HAS LOOKED FOR: ENVIRONMENTAL STEWARDSHIP

As CSE has reviewed the data provided by companies only under Principle 6, a thorough understanding – therefore – is required on the kind of information asked/ provided in BRSR reports in order to analyse the pros and cons of the reporting format and to assess the data/information provided.

There are 21 questions under Environmental Stewardship, out of which 12 are under essential and nine under leadership indicators.

Essential Indicators

- **Question 1:** Details of total energy consumption and energy intensity
- **Question 2:** Status of the industries/sites under the company, identified as Designated Consumer (DC) under the Perform Achieve and Trade (PAT) scheme of the Bureau of Energy Efficiency (BEE) and the details regarding the targets set and achieved under the scheme
- **Question 3:** Water-related disclosures – water withdrawal from different sources, total water consumption and water intensity
- **Question 4:** Zero liquid discharge implementation and its details, if implemented
- **Question 5:** Details of air emissions (other than GHG) – information needed for SO_x, NO_x, particulate matter, VOCs etc
- **Question 6:** Details of GHG emissions (Scope 1 and 2)
- **Question 7:** Any projects related to GHG emissions reduction. Details, if yes
- **Question 8:** Details related to waste management
- **Question 9:** Waste management practices adopted and strategies to reduce the use of hazardous and toxic chemicals in products and processes
- **Question 10:** Details of any operations in and around ecologically sensitive areas where environmental clearances are required
- **Question 11:** Details of Environmental Impact Assessment (EIA) of projects undertaken by the company in the current financial year
- **Question 12:** Details of non-compliances if any with the applicable environmental laws, regulations and guidelines in India

Leadership Indicators

- **Question 1:** Total energy consumed from renewable and non-renewable sources. (shifted as Question 1 under essential indicators in new BRSR format)
- **Question 2:** Water discharged by destination and level of treatment
- **Question 3:** Water withdrawal, consumption and discharge in areas of water stress (facility or plant-wise)
- **Question 4:** Details of scope 3 GHG emissions and its intensity
- **Question 5:** Impacts on biodiversity in ecologically sensitive areas (as asked in Q 10 of essential indicator) and prevention and remediation activities
- **Question 6:** Initiatives, technologies or solutions to improve resource efficiency or reduce impact due to emissions, effluent, or waste generated
- **Question 7:** Business continuity and disaster management plan of the company
- **Question 8:** Disclose any significant adverse impacts to the environment, arising from the value chain of the entity
- **Question 9:** Percentage of value chain partners (by value of business done with them) that were assessed for environmental impacts

2. Environmental data reporting

PROFILES OF THE REVIEWED COMPANIES

Under the BRSR format, information on environmental performance – as in the case of most other principles – is asked for two years: the current financial year and previous financial year. CSE has reviewed reports of 14 companies for two consecutive years, 2021-22 and 2022-23, and analysed data for three consecutive years 2020-21 to 2022-23. The names and respective sectors of these 14 companies are mentioned in *Table 1*. The criteria for selection was to have as much diversity as possible in terms of the sector. The selection of the companies is random and is also based on availability of reports.

CSE has analysed the data based on information provided in the domain areas of energy, water, GHG emissions, air emissions and waste.

Table 1: Industries whose BRSR reports were reviewed by CSE

	Name of company	Sector*
1.	Bharat Forge Limited	Metal and metal products
2.	Cipla Limited	Pharmaceuticals, chemicals and wholesale trading
3.	Dalmia Bharat Limited	Cement
4.	Dr Reddy's Laboratories Limited	Pharmaceuticals
5.	Glaxosmithkline	Pharmaceuticals
6.	Indian Oil Corporation Limited (IOCL)	Coke and refined petroleum products
7.	ITC Ltd	FMCG, agri-commodities, paper and paperboards, hotels
8.	JSW Energy Limited	Power
9.	L&T Limited	Engineering, infrastructure, power and hydrocarbons
10.	Lupin Limited	Pharmaceuticals
11.	Orient Cement Limited	Cement
12.	Sun Pharmaceuticals Industries Limited	Pharmaceuticals, medicinal and chemical products
13.	TATA Chemicals Limited	Basic chemicals and specialty products
14.	The Tata Power Company Limited	Power generation, transmission and distribution

*Sector classification is based on information provided in section A of BRSR questionnaire by the companies

ENERGY CONSUMPTION

Energy is the most important resource for industrial operations, and has a significant share in the operational costs of any industry. Energy usage by a company not only exerts a huge impact on its greenhouse gas emissions, but can also lead to air pollution. Companies can mitigate and lessen these impacts by opting for cleaner fuels.

Energy efficiency, thus, is also a pathway for decarbonisation of industrial sectors and a way towards meeting the national target of net zero emissions. Many industries are already trying to transform themselves and reduce their carbon footprints by switching to renewable sources and reducing their use of fossil fuels – it is important at this juncture to report on where these efforts are leading them, so that they can further strategise towards becoming net zero entities.

The BRSR report has three questions on energy consumption, sourcing and efficiency. Question No 1 (under Essential Indicators) seeks information on total energy consumption, fuel consumption and energy intensity (*see Table 2*). The format also asks for details of consumption and intensity in terms of per Rupee of turnover. Information on energy sources – total energy consumed from renewables and non-renewables – have been sought in Question No 1 under Leadership Indicators (*see Table 3*).

Table 2: Energy consumption (Question 1 – Essential Indicators)

Parameter	FY _____ (Current Financial Year)	FY _____ (Previous Financial Year)
Total Electricity consumption (A)		
Total Fuel consumption (B)		
Energy consumption through other sources (C)		
Total Energy consumption (A+B+C)		
Energy intensity per rupee of turnover (Total energy consumption/turnover in rupees)		
Energy intensity (optional) – The relevant metric may be selected by the entity		

Note – Indicate if any independent assessment/evaluation/assurance has been carried out by an external agency (Y/N) If yes, the name of the external agency

Source: Business Responsibility & Sustainability Reporting Format, Annexure I

Table 3: Energy sources (Question 1 – Leadership Indicators)

Parameter	FY _____ (Current Financial Year)	FY _____ (Previous Financial Year)
From renewable sources		
Total electricity consumption (A)		
Total fuel consumption (B)		
Energy consumption through other sources (C)		
Total energy consumed from renewable sources (A+B+C)		
From non-renewable sources		
Total electricity consumption (D)		
Total fuel consumption (E)		
Energy consumption through other sources (F)		
Total energy consumed from non-renewable sources (D+E+F)		

Note – Indicate if any independent assessment/evaluation/assurance has been carried out by an external agency (Y/N) If yes, the name of the external agency

Source: Business Responsibility & Sustainability Reporting Format, Annexure I

Analysis of the information on energy consumption

The information provided with respect to Question 1 by the 14 companies has been reviewed and analysed by CSE. What emerges is as follows:

- **Rise in energy use in most companies:** For the three years from 2020 to 2023, for which there is data, 10 companies have shown an increase in their energy consumption. Only four – Indian Oil, Dr Reddy’s Laboratories, Lupin Limited and Sun Pharmaceuticals – have indicated a reduction. Dalmia Bharat Ltd has not provided any information for one year – 2020-21 – but its overall trend from 2021-22 to 2022-23 indicates a rise.
- **Four companies show decrease:** Lupin Limited, Dr Reddy’s Laboratories and Sun Pharmaceuticals have shown a continuous decrease in energy consumption. Indian Oil’s data indicates an overall decrease – the company’s energy consumption went up between 2020-21 and 2021-22, and then dipped in 2022-23.
- **Companies not giving reasons for their rising or dipping energy use:** The data provided by the companies does not explain why energy use is going up or down. Energy consumption may increase because of more production, addition in capacity or due to poor operation and maintenance. It is important to gather data on why consumption is increasing for some companies and decreasing for others – this would help differentiate between companies that are putting in measures to improve their performance and those that are not.

- Big jump for Glaxosmithkline:** Energy consumption of Glaxosmithkline (GSK) has shot up from 56,512 GigaJoule (GJ) in 2020-21 to 1,08,441 GJ in 2022-23 – a 92 per cent jump. This is substantial and the company should have provided reasons for this.
- Renewable energy sources picking up in some companies:** Data on sourcing from renewable energy shows nine companies have emerged with an increasing trend, while three show a decreasing trend (*see Table 4*). ITC Limited and Sun Pharmaceuticals have reported a high percentage of renewable energy sourcing for the year 2022-23: 43 per cent and 40 per cent, respectively. Their initiative in this direction must be applauded. Sun Pharmaceuticals, for instance, has drawn energy from wind, solar and biomass, and has also used power purchase agreements.

Table 4: Companies' performance on energy consumption and sourcing

Total energy consumption value		Sourcing from renewable energy (in %)*	
Increased	Decreased	Increased	Decreased
Bharat Forge Limited	Lupin Limited	Bharat Forge Limited	JSW Energy Limited
Cipla Limited	Sun Pharmaceuticals Industries Limited	Cipla Limited	Lupin Limited
GSK	Indian Oil Corporation Limited (marginal)	Dr Reddy's Laboratories Limited	Orient Cement Limited
ITC Limited	Dr Reddy's Laboratories Limited	GSK	
JSW Energy Limited		Indian Oil Corporation Limited (marginal)	
Larsen & Toubro Limited		ITC Limited	
Orient Cement Limited		Larsen & Toubro Limited	
Tata Chemicals Limited		Sun Pharmaceuticals Industries Limited	
Tata Power Company Ltd		Tata Chemicals Limited (marginal)	
Dalmia Cement			

*Tata Power Company Limited has not reported on Question 1 of Leadership Indicators in Principle 6; Dalmia Bharat Limited has provided information only for two years.

Source: CSE analysis

- GSK and Tata Power-intermittent or no data provided:** Glaxosmithkline (GSK) and Tata Power have not answered Question 1 under 'leadership indicators' for the year 2020-21. GSK says in 2022-23, it was sourcing 46 per cent of its energy from renewable sources. Strangely enough, Tata Power has not provided any information for 2022-23 as well. CSE researchers find this quite unusual.

- **Lupin Limited-reduced share of energy from renewal sources:** Data shows Lupin Limited has reduced its total energy consumption continuously from 2020-21 to 2022-23. However, its share of energy from renewable sources has also been going down in this period. The reason: Lupin's purchase of agro-based steam – one of its sources of energy – has dipped from 227,605 GJ in 2020-21 to 91,694 GJ in 2021-22, and may become nil by 2022-23. To add to this, energy sourcing from the wind grid has also reduced between 2021-22 and 2022-23. The reason for this could be the fact that agro-based steam may not be a feasible option in the long run for a company the size of Lupin Limited – but the company needs to provide the reason and justifications behind its dip in getting energy from renewable sources.
- **Low share of renewables in some companies:** Companies like Indian Oil, JSW Energy and Tata Chemicals have reported a very low share of energy from renewable sources – less than 1 per cent of their total consumption. While the companies offer no explanation for this, this obviously leaves a considerable scope for improvement. JSW Energy Limited, for instance, claims to have invested heavily in renewables – but it is inconceivable why the share of renewable sources in its total energy use is so less.
- **Others report a rise:** Cipla Limited and Bharat Forge Limited have shown good growth in meeting their energy needs from renewable sources. The share has increased from 15 per cent in 2020-21 to 27 per cent in 2022-23 in the case of Cipla; and from 9 per cent in 2020-21 to 15 per cent in 2022-23 in the case of Bharat Forge. These examples provide a boost to positive competition, especially among players from the same sector.

The PAT scheme

The Perform Achieve and Trade (PAT) scheme is an initiative launched by the Bureau of Energy Efficiency (BEE) in India to promote energy efficiency and conservation in energy-intensive industries (like cement, aluminium, pulp and paper, iron and steel, thermal power plant etc). The scheme aims to incentivise industries to reduce their energy consumption and carbon emissions by using new technologies and innovations and setting energy efficiency targets. With a compliance and target-based framework, the scheme has also provided financial incentives to industries by making energy saving certificates (ESCerts) tradable based on the market.

Overall, by reducing specific energy consumption of industries, the PAT scheme aims to not only bring down carbon emissions, but also contribute towards climate change mitigation efforts by industries. The reduced energy consumption can directly or indirectly result in less fuel consumption, lesser GHG emissions, less

natural resource use and lesser emissions into the environment; this, in turn, would contribute to the fulfilment of India's global commitments.

Question 2 under Essential Indicators focuses on whether any unit of the company is part of the PAT scheme and its performance. The question has some limitations: it simply explores whether the target (Specific Energy Consumption or SEC in million tonne of oil equivalent, or MTOE) has been achieved or not, and remedial actions taken in case the unit was unable to achieve its target.

Analysis of companies' response to the PAT scheme

CSE's review of the reported data shows that seven companies have declared units/facilities which are identified as designated consumers; six have reported that none of their plants come under the PAT scheme. In terms of reporting on PAT performance, there is a wide difference in the way companies have reported.

- **Dalmia claims all units are in compliance, without offering any details:** The company has provided the names of the plants that are designated consumers and have achieved their PAT targets – Dalmia Bharat uses acronyms and abbreviations for these plants; for example, DPM, KPD, MGH, etc.
- **Companies report units meeting targets – but miss out on details:** **Indian Oil Corporation Ltd (IOCL)** reports that eight of its refineries are designated consumers under the PAT VI cycle; these had been given energy reduction targets for 2022-23. Four refineries (Guwahati, Barauni, Mathura and Paradip) have achieved the PAT VI target. Gujarat Refinery is expected to achieve its target after a monitoring and verification audit; IOCL has named the three refineries which have not achieved their targets. What is lacking in the information provided is details about the target that was set, the amount of energy use that was reduced, and any remedial actions for the non-compliant refineries.

Similarly, ITC says that three units of its paper business and 11 of its hotels are covered under PAT – and all have reportedly achieved their energy efficiency targets. However, no data has been offered to substantiate the claim; neither has ITC provided the names of the facilities.

- **Orient Cement Limited (OCL)** names three units as designated consumers under the PAT scheme. However, it reports only its Devapur plant as having surpassed the targets for PAT cycles I and II. No information has been provided about the other two plants – Chittapur and Jalgaon. Neither has the company offered any data about the targets and achieved values of Devapur.
- **The best cases: JSW Energy Limited and Tata Power Company Limited** have provided information comprehensively in a tabular format for ease of understanding. JSW has given details about its Barmer and Vijaynagar plants,

Table 5: Transparency in data sharing

Tata Power Company Limited shows how data is to be presented

DIVISIONS	PAT Cycle II Notified Target (Kcal/Kwh)	Achieved (Kcal/Kwh)	Remedial Action in case target not achieved
Mundra	2,256	2,257	Unit 30 and 50 HP Heaters replacement along with installation of Variable frequency Drive in condensate extraction pump variable was planned and commissioned
Maithon	2,460	2,445	Better than Notified Target
Trombay (Coal ,Oil and Gas)	2,652	2,566	Better than Notified Target
Trombay (Gas)	2,006	2,047	This was not achieved due to lower plant load factor in view of low APM gas availability. This has been taken up with BEE ,however it was not considered for normalization.
Jojobera	2,839	2,836	Better than Notified Target

Source: Tata Power Company Limited, BRSR Report 2022-23

covering targets and SEC achieved for PAT cycles I and II. In the case of its Ratnagiri plant, the company has offered information of only PAT cycle II.

Tata Power's reporting on PAT performance can be held up as an example to be emulated. The company has listed its units neatly, with details of targets and achieved values; and remedial actions in cases where targets were not achieved (*see Table 5*). Such transparency in sharing of data can help companies learn from each other as well as highlight their performance in energy parameters.

WATER CONSUMPTION

Water is another critical resource for industries. Sourcing, consumption, reuse and recycling of water must be sustainable in nature, and the data should reflect companies' initiatives towards reducing their dependence on freshwater.

The BRSR questionnaire captures information on water consumption, wastewater generation and its disposal through two questions each under Essential and Leadership Indicators. These questions are:

- **In Essential Indicators**
 - Question 3: On water withdrawal from various sources
 - Question 4: On implementation of zero liquid discharge in the units
- **In Leadership Indicators**
 - Question 2: On where the treated or untreated wastewater is being discharged
 - Question 3: On water withdrawal, consumption and discharge in areas of water stress (the format asks for unit-wise data here)

SEBI SHOULD ASK FOR UNIT-WISE DATA UNDER SPECIFIC PARAMETERS

In the list of entities prepared by SEBI as its top 1,000 companies, there are companies which have plants or operations at different and multiple locations. For example, Tata Power has 179 plants located across the country – three of these are hydropower facilities, 23 units are of wind power, 135 are solar power units, nine are thermal power plants, and nine are in the transmission and distribution business. Each unit is an independent facility, and the resource requirement of each unit is different. When a unit of Tata Power is taken over by another company, it is only the specific unit that changes hands (and not the whole company).

Tata Power is an exception. The existing format designed by SEBI does not emphasise on unit-wise information from every company. It is only the third question under Leadership Indicators in Principle 6 which asks for unit-wise data related to water withdrawal, consumption and discharge – but this too is only for units located in water-stressed areas.

The question here is, what role does the BRSR format play for the investor in a situation where there is no unit-specific information available. The current format can only offer the investor an idea of the credibility of the company as a whole, but may not be able to help in decision-making – in case the investor is planning to acquire any individual unit of a company. As per CSE's assessment, it is important that SEBI should concentrate on asking for unit-wise information in the BRSR format under PAT targets, air emissions, and water withdrawal, use and discharge. The information can be attached as annexures in a tabular format along with the BRSR report.

Analysis of water consumption data

CSE's review suggests that there is a lack of clarity on what kind of data needs to be provided. As a result, some companies seem to have offered extra information, which makes it difficult to use it either for comparison or for making investment decisions.

- **Consumption is up:** There is an overall increase in water consumption by eight of the 14 companies assessed by CSE; six companies have reported a reduction in consumption during the period 2020-21 to 2022-23.
- **Water intensity – unclear indicator:** The format has introduced an indicator termed as water intensity – this is total water consumption per rupee of turnover. However, it is difficult to understand what this indicator is supposed to say. For example, for the years 2021-22 and 2022-23, water consumption at Cipla Limited, ITC, Tata Chemicals Limited and Tata Power has increased, but the companies' water intensity has gone down – what does this reduction mean? Is the intensity lower because production has increased, which in turn means increase in turnover, or is it because of increase in value of products? This lack of clarity puts a question mark over the utility of the water intensity data asked for in the BRSR report.

- **Water intensity – optional as well:** Besides water intensity per rupee of turnover, the BRSR format also has a water intensity parameter which is optional for companies. The values it asks for are related to specific water consumption per unit of product manufactured by the company. JSW Energy Limited, for instance, has provided water intensity data in terms of m³/MWh (megawatt-hour), apart from information on water consumption per rupee of turnover.

Water intensity should be made a mandatory parameter, and should be asked for in terms of cubic metre of water consumed per unit of production. JSW Energy reports its water intensity as 1.11 m³/MWh in terms of unit of water consumed per unit of power production. Specific water consumption figures are relatively comparable among companies that have the same profile. However, when water intensity is calculated based on turnover, there are a lot of variables and even data of similar companies may or may not be comparable. Data on water intensity per rupee of turnover has its own significance, information on specific water consumption is equally important and should not be made optional.

- **GSK – incomplete data:** GSK has provided information only for water withdrawal in its first report; there is no data on water consumption or water intensity. However, it has provided the information in its 2022-23 report.
- **Tata Power – confusing data:** Tata Power Company Limited has provided details on the water withdrawal from different sources as well as its total water withdrawal. However, instead of providing information on total water consumption which the BRSR format asks for, it has introduced a new parameter: total freshwater consumption. The volume of freshwater consumed forms only a small part of total water consumption; therefore, the water intensity calculated by the company (litre/rupee) is incorrect.

The company reports that its freshwater consumption has almost doubled, from 33,437 million litre in 2020-21 to 64,721 million litre in 2021-22. A review of Tata Power's *Integrated Annual Report 2021-22*, in which the company has provided unit-wise data on water withdrawn and consumed, shows that the freshwater consumption figure of over 64,721 million litre included surface water, groundwater and water provided by tankers (see *Table 6*). This tells us that companies need to be given the scope to clarify the data that they are providing – SEBI must refashion the BRSR format to enable companies to do this seamlessly.

Table 6: Snapshot of data provided by Tata Power in its Integrated Annual Report 2021-22

WATER WITHDRAWAL AND CONSUMPTION BY SOURCE (million Litres)			
Source of Water Withdrawal	Plant	Water Withdrawn	Water Consumed
Surface water	Maithon	16,974	16,974
	Trombay ^{\$\$}	2	2
	IEL Kalinganagar [#]	35	35
	IEL PH #6 ^{\$}	5	5
	Jojobera #	6	6
	Bhira	8,30,621	Nil
	Bhivpuri	2,13,187	Nil
	Haldia	2,415	2,415
	Khopoli	2,30,651	Nil
	PPGCL ^{\$\$}	23,696	25,397
	Total Surface Water	13,17,592	44,834
Groundwater	Solar	271	271
	Total groundwater	271	271
Third Party *	Trombay	668	704
	Jojobera ^{\$\$}	8,946	9,437
	IEL PH6 ^{\$\$}	2,638	2,703
	IEL Kalinganagar ^{\$}	486	6,445
	Wind	3	3
	Solar	102	102
	T&D (Mumbai and Delhi)	222	222
	Total third-party water	13,065	19,616

^{\$}includes Rain water harvested

^{\$\$}Consumption includes recycled water

[#]Rainwater

*Third party water data comprises of water purchased from municipal corporation, third-party treated effluent (e.g. Tata Steel provides clarified /treated water at IEL Kalinganagar) and packaged drinking water .

- JSW Energy – missing links:** JSW Energy has provided information in detail and as asked for in the BRSR questionnaire. However, the company has missed giving the water withdrawal data under one of the sources. This is why its total water withdrawal estimate does not match with its sum total of water withdrawn from different sources for the years 2020-21 and 2021-22. The information is correct for the year 2022-23 where the company has revealed sourcing a small quantity of groundwater as well.
- The case of Lupin Limited:** As a general practice, industries procure water from different sources, and develop storage tanks and reservoirs from where the water is distributed to various points of usage within the premises with or without treatment. The difference in total withdrawal and total water

consumed is not significant. However, the data provided by Lupin Limited shows the company's total withdrawal is less than its total consumption. In the following question, Lupin Limited also informs that five of its plants have a zero liquid discharge mechanism, which means they are reusing the treated/untreated wastewater. While this could be the reason behind consumption being more than withdrawal, it leaves room for ambiguity – simply because the BRSR format does not ask for quantity of treated wastewater recycled or reused within a company's premises (see *Table 7*).

- **Indian Oil:** Information provided by Indian Oil Limited shows that the company sources about 1 lakh kilolitre of water from 'other' sources (as reported in 2021-22). However, it has not defined what 'other' sources mean. In 2022-23, the company has improved its reporting and has informed that 'others' refers to harvested rainwater, among other sources.

Table 7: Data provided by companies on water withdrawal and consumption

Tata Power Company Ltd.

Parameter	FY 2021-2022	FY 2020-2021
	Water withdrawal by source (in million litres)	
(i) Surface Water	13,17,592	12,39,352
(ii) Groundwater	271	194
(iii) Third party water	13,065	17,709
(iv) Seawater/desalinated water	28,58,396	53,66,791
Total volume of water withdrawal (in million litres) (i + ii + iii + iv)	41,89,324	66,24,046
Total volume of freshwater consumption (in million litres)	64,721	33,437
Water intensity per rupee of turnover (litre/ rupee)	0.15	0.10

Lupin Limited

Parameter	FY 2021-2022	FY 2020-2021
	(Current Financial Year)	(Previous Financial Year)
(i) Surface Water	130,614 KL	120,077 KL
(ii) Groundwater	173,300 KL	201,708 KL
(iii) Third Party Water (Municipal water supplies , etc.)	1,357,253 KL	1,492,112 KL
Total Volume of water withdrawal (in kilolitres) (i+ii+iii)	1,661,168 KL	1,813,897 KL
Total volume of water consumption (in kilolitres)	2,369,480 KL	2,559,253 KL
Water intensity per rupee of turnover (Water consumed/turnover)	20.13 KL/INR Mn turnover	

GlaxoSmithKline Pharmaceuticals Ltd.

Parameter	FY 2021-2022 (Current Financial Year)	FY 2020-2021 (Previous Financial Year)
	Water withdrawal by source (in kilolitres)	
(i) Surface Water (By corporate office)	53,562	58,796
(ii) Third Party Water (Municipal Water Supplies) (by Nashik plant)	93,961	87,758
Total Volume of water withdrawal (in kilolitres) (i + ii)	147,523	146,554

JSW Energy Ltd.

Parameter	FY 2021-2022 (Current Financial Year)	FY 2020-2021 (Previous Financial Year)
	Water withdrawal by source (in kilolitres)	
(i) Surface Water	24,824,795	236,88,280
(ii) Groundwater	0	0
(iii) Third Party Water	0	0
(iv) Seawater/desalinated water	653,25,454	570,88,846
(v) Others		
Total Volume of water withdrawal (in kilolitres) (i + ii + iii + iv + v)	94,143,718	82,778,126
Total Volume of water consumption (in kilolitres)	24,824,795	23,688,280
Water intensity per rupee of turnover (Water consumed/turnover)	0.00028	0.00033
Water intensity (optional) – the relevant metric may be selected by the entity	1.11 m3/Mwh	1.11 m3/Mwh

Source: BRSR reports 2021-2022 of respective companies

- Questions on water discharge:** The information provided by the companies points to the limitations they are facing while reporting on water sourcing or withdrawal. Question No 2 under Leadership Indicators is on water discharge by destination and level of treatment. A company has to clearly state how much treated or untreated water is being discharged into different destinations. This is an important indicator: it will highlight how sustainable the treatment and disposal mechanism is and the quantum of untreated wastewater discharged into different destinations.

This Question has been moved to Essential Indicators in the updated BRSR questionnaire. Another bit of information which could be useful is to understand how many big industries are not discharging either treated or untreated wastewater.

- **Companies not discharging wastewater:** CSE's analysis indicates Bharat Forge Limited, Dalmia Bharat Limited and Orient Cement Limited are not discharging wastewater. Bharat Forge has reported that it is recycling the water treated in an effluent treatment plant (ETP). The company says about one-third of the water it uses is sourced from recycled water. No other company in the study has provided any information on what they are doing with treated or untreated wastewater which they are not discharging. It is imperative that the SEBI should ask for this information and include it in the BRSR format.
- **Missing figures on discharge:** Glaxosmithkline, L&T Limited and Tata Power are the three companies that have not provided any data in their first report on water discharge by destination and level of treatment. However, two of the companies have started sharing the information with the second report released in 2023. L&T has clearly mentioned that the company has started partial recording (more than 15 per cent of the project sites) of this data across businesses; the company claims its manufacturing plants are ZLD facilities. Lupin Limited has not shared any data in either of the reports.
- **Glaxosmithkline:** The company has not provided data on water discharged by destination and level of treatment for the years 2020-21 and 2021-22 in response to Question 2 under Leadership Indicators; moreover, the data it has provided for 2022-23 is insufficient. GSK claims to have consumed 79,750 kilolitre (kl) of water in 2022-23, but reportedly discharged only 7,358 kl. The company has included its Nashik manufacturing plant and its corporate office in its BRSR reporting. Since it says that the Nashik site runs on a zero discharge basis, clear and separate information on water consumption by each unit would have helped in understanding the discharge values of the company.
- **Data mismatch:** There is another problem with some of the data provided for water discharge. For example, in the case of ITC, the water discharge quantity is almost double that of the water consumed – which is not possible. In 2021-22, ITC Limited reports having consumed 11.7 million kl of water, but discharged 22 million kl. Similarly in 2022-23, consumption was estimated at 14.5 million kl, while discharge was pegged at 20 million kl. A similar case is that of JSW Energy Limited – the company reported a consumption of 23.7 million kl in 2020-21 and a discharge of 57 million kl. The companies did not provide any explanation for this.

The reason behind this – as the CSE analysis discovered in the case of JSW – was that JSW Energy uses seawater, which it considers in its withdrawal estimates but not as a consumption, since the water is used for cooling or its FGD system and discharged back into the sea after temperature correction (a good practice, according to CSE). In the years 2021-22 and 2022-23, the discharge was 65.9 million kl and 59.5 million kl against consumption of 24.8 million kl and 26.2 million kl, respectively.

This, however, is not the case for ITC Limited; there is no seawater use, and the company does not explain the mismatch in its consumption and discharge. In its *Sustainability and Integrated Report 2022*, the company claims to have created rainwater harvesting potential through investments in integrated watershed development projects – as of March 31, 2022, ITC had created over 46 million kl of rainwater harvesting potential, a figure which is four times the net water consumed by the company’s operations in FY 2021-22. This underscores the fact that companies must report all relevant information diligently; on the other hand, they must be given the space to also offer clarifications on the data they provide. It is imperative that the format captures these details to avoid any data discrepancy – and hence, it needs to be reviewed.

- **Data from pharma companies:** There is also a concern with the information provided by pharmaceutical companies. The percentage of water discharge with respect to total water consumption in the case of Cipla Limited and Dr Reddy’s Laboratories is around 6 and 9 per cent, respectively. It is difficult to understand how the discharge is so low. Experts are of the opinion that the percentage of total wastewater discharged/generated with respect to total water consumption should be around 30-40 per cent for bulk drugs and up to 15 per cent for pharmaceuticals. As the wastewater discharge for a bulk drug industry from the process is generally 10-12 per cent, if the water discharged quantity reported by the companies is only for the process, it can be considered a legitimate figure. This puts a question mark on the quality of the data provided by the companies and also on the need to categorise the usage of water in different applications i.e., process, utility, domestic. BRSR format may ask for the information on water discharge or consumption based on the applications it is used for (process, domestic etc), to bring clarity on the data provided by the companies.
- **On plants located in water-stressed areas:** This is covered in Question 3 under Leadership Indicators. The BRSR report asks for plant-wise water withdrawal, consumption and discharge information. This question is a combination of Question 3 of Essential Indicators and Question 2 Leadership Indicators – but only for plants that are located in water-stressed areas. This is an important disclosure, keeping in mind the growing crisis of availability of water, especially every summer.

Eleven companies have provided data pertaining to water withdrawal, consumption and discharge in water-stressed areas. Orient Cement Limited and Bharat Forge Limited have submitted that they do not have any plant or facility in such areas; Tata Power Company Limited has provided only the names of its plants, without any supporting quantitative information.

Despite SEBI offering a format that facilitates plant-wise reporting, companies have chosen to provide consolidated information – this means that a company has a number of plants, and instead of providing plant-wise information, it has added the data from all the plants and provided it as one. This kind of reporting makes it very difficult to find out which of its plants are located in water-stressed areas. GSK, Sun Pharmaceuticals, Cipla Limited, Dr Reddy's Laboratories and ITC have more than one plant each located in areas that are suffering from acute water distress; but all of them have provided consolidated information (see *Table 8*).

Table 8: Consolidated water consumption and withdrawal figure in areas of water stress: Sun Pharmaceuticals

Parameter	FY 2022-23	FY 2021-22
Water withdrawal by source (in kilolitres)		
(1) Surface water	7200	7200
(2) Groundwater	447394	497240
(3) Third party water	53998	51717
(4) Seawater / desalinated water	0	0
(5) Others	0	0
Total volume of water withdrawal (in kilolitres)	508592	556157*
Total volume of water consumption (in kilolitres)	502284	551733*
Water intensity per rupee of turnover (water consumed /turnover in Rupee Million)	2.46	3.56*
Water discharge by destination and level of treatment (in kilolitres)		
(1) Into surface water		
No treatment	0	0
with treatment-please specify level of treatment	0	0
(2) Into groundwater		
No treatment	0	0
With treatment –please specify level of treatment	0	0
(3) Into sea water		
No treatment	0	0
With treatment - please specify level of treatment	0	0
(4) Sent to third parties		
No treatment	0	0
With treatment - please specify level of treatment	Tertiary treatment (In-house ETP treatment,post which sent to the Municipality sewage drain)-6,308 KL	Tertiary treatment (In-house ETP treatment,post which sent to the Municipality sewage drain)-4.424 KL
Total water discharged (in Kilolitres)	6,308	4,424

Source: Sun Pharmaceuticals' Annual report 2022-23, page no. 107. The company has 5 plants.

- **Reporting – a comparison between Indian Oil and Lupin Limited:** Indian Oil Corporation Limited has followed the BRSR reporting guidelines while providing information. It says it has a plant located in a water-stressed area (as designated by the Aqueduct Atlas of the Water Resources Institute). But since there is no such mapping undertaken as per CGWB notification which is referred to in guidance note for BRSR reporting, the company has not offered any information about the locations. It is, thus, a good example of how a company has reported the information by following the Guidance Note. Simultaneously, it also reflects the need to update the BRSR guidance note to include different sources and methodologies to identify water stressed locations and not rely only on CGWB notification.

Lupin Limited, has conducted a water risk assessment study using the WRI tool and reported that out of its 13 Indian sites, five are located in extremely high water-risk areas. Though Lupin Limited has not followed guidance note but tried to provide relevant information from other sources.

- **Tata Power:** The company has provided the locations of its plants in water-stressed areas – but these are all solar power plants, which do not require much water in their operations. However, since these plants are located in water-stressed areas, the company should have reported consumption of water by these plants from natural sources.
- **Nine companies offer data on water withdrawal in water-stressed areas:** These companies have provided either plant-wise or consolidated data. In the case of Tata Chemicals Limited, Cipla Limited and ITC Limited, water withdrawal has gone up during the two reporting periods. JSW Energy Limited and Tata Chemicals Limited have said they are dependent on seawater/desalinated water – which ensures their dependence on groundwater is less. JSW Energy has provided unit-wise data on water withdrawal, consumption and discharge; all its units are located in water-stressed regions.
- **ITC withdraws surface water:** The company has increased its water withdrawal from surface water in water-stressed areas. Water withdrawal went up from 25 million kl in 2020-21 to 27 million kl in 2022-23. The company needs to explore mechanisms for reducing this dependency on surface water.
- **Cipla Limited goes for groundwater:** The units of Cipla, located in water-stressed areas, are guzzling huge amounts of groundwater. Approximately 37 per cent of the company's water requirement was met through groundwater in the years 2020-21 and 2021-22; the rest came from a 'third party', though it is unclear where this third party was sourcing the water from; there is good reason to believe that a significant amount of the water supplied by third party is sourced from groundwater.

But Cipla Limited is improving its performance. In the new report published in 2023, its sourcing from groundwater stands at about 13 per cent.

- **Sun Pharmaceuticals – unsustainable ways:** The company, which is located in a water-stressed area, sources the majority of its supply from a third party and from surface waterbodies, says its first report published in 2022. Initially, sourcing of groundwater has been reported to be low – 10 per cent in 2020-21 and 12 per cent in 2021-22.

The figures jump up when the company reports again in 2023. The revised figure for groundwater sourcing has become 84 per cent for the year 2021-22 and 88 per cent in 2022-23. These are unsustainably high numbers – the company must ensure its water consumption and its dependence on groundwater go down.

GHG EMISSIONS

One of the most sought-after indicators, GHG emissions is covered by Scope 1 and 2 under Essential Indicators (Question 6) and Scope 3 under Leadership Indicators (Question 4). The GHG emission reporting has different purposes for different stakeholders (investors, governments or the company itself). What needs to be determined here is one, why is the government asking for GHG reporting; two, how is such data important for investors; and three, how will this reporting help companies.

The government is looking for GHG emission information from companies because it wants to encourage companies to reduce their GHG emissions, as well as provide this information to all stakeholders including investors. The government may also use this information for its various schemes such as emission trading schemes, its national and state climate change policies, and for preparation of its national GHG inventories.

Investors constitute another group of key stakeholders who keenly watch how companies are faring in terms of their GHG emissions. They integrate the information with investment decision-making – this has the power to change a company's climate change policies, initiatives or actions. Such information is also useful for the companies themselves to explore opportunities to reduce emissions and energy consumption. Most importantly, this information helps them identify climate risks and thus become a part of the overall national strategies to combat climate change.

Analysis of information on GHG emissions

- Seven companies show a rise:** CSE's data analysis of the 14 companies shows that there is a reduction in GHG emissions (Scope 1 and 2) in the case of six companies – but seven others have indicated a rise. These seven include Bharat Forge Limited, Cipla Limited, ITC Limited, JSW Energy limited, L&T Limited, Orient Cement Limited and Tata Chemicals Limited. Notably, except Cipla Limited, all the others have shown a continuously increasing trend – rising every year from 2020-21 to 2022-23.
- Cipla Limited and Tata Chemicals:** Cipla has stated earlier that it has accounted for only fuel-based emissions in Scope 1; but from its second reporting, it has also included refrigerant-based emissions. Tata Chemicals has not provided any reasons for the doubling of its Scope 1 emissions in 2021-22. The company's Scope 1 emissions, provided in the first report, amounted to 2,295,431 metric tonne of CO₂ equivalent (MTCO₂e); in the second report, the figure was changed to 4,417, 797 MTCO₂e for the year 2021-22.
- Reasons behind the rise:** The percentage change in GHG emissions from the sum of Scope 1 and Scope 2 is an important indicator for investors about the sustainability of companies. Apart from this, what is also important is the reason for the change in the parameter. Increase in GHG emissions could be because of acquisition of a new plant, increasing capacity or a change in the fuel used. Among the companies surveyed, only ITC Limited has provided its reason: during 2021-22, there was an 8 per cent rise in emissions because of a 24 per cent increase in production (*see Table 9*); ITC has provided this information in its first report. However, no explanation has been provided in its second report about why total emissions went up in 2022-23.

Table 9: GHG emissions from ITC Limited

Parameter	Please specify Unit	FY 2021-22	FY 2020-21
Total scope 1 emissions [Break-up of the GHG into CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ , NF ₃ if available]	Kilo tonnes of CO ₂ equivalent	1,258	1,172
Total scope 2 emissions [Break-up of the GHG into CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ , NF ₃ if available]	Kilo tonnes of CO ₂ equivalent	193	168
Total scope 1 and scope 2 emissions per rupee of turnover	Tonnes of CO ₂ /Crore INR	25	28

During FY2021-22 ,ITC's GHG emissions [Scope 1+Scope2] saw an increase of 8% ,despite a 24% increase in production at TC's Paperboards and Speciality Papers Business that accounts for around 80% of ITC'S TOTAL ghg Emissions [Scope 1+ Scope 2]

Source: BRSR report page XXIX

- **Dalmia Bharat Limited:** The company has not given a straight-forward response. In its first report released in 2022, it mentioned “*Please refer to GRI table*”. In the next report, it says “*Please refer to the GCCA indicator table in the report*”. But no page number or table number has been provided for the references.
- **Why have emissions gone down for some:** Dr Reddy’s Laboratories, Lupin Limited, Sun Pharmaceuticals Industries, IOCL, GSK and Tata Power – all have shown an overall dip in their GHG emissions. However, no proper reasons have been offered by most of them on what contributed to the reduction. Only IOCL has said that the reason for reduction in Scope 2 emissions in 2022-23 (compared to the previous year) – despite the growth in energy sourced from the grid – was an updation in the grid emission factor.
- **Little on long-term strategies to reduce emissions:** Although Question No 7 under Essential Indicators (Principle 6) asks about projects related to reducing GHG emissions, the information that can be gleaned from the answers provided is inadequate. Of the 14 companies, only six have provided information on their long-term strategies and goals (*see Table 10*), such as attaining net zero or carbon neutral status by a certain period. The rest have merely mentioned their initiatives. Achievement of India’s net zero target will get an impetus only if different stakeholders – including businesses – put their shoulders to the effort. The BRSR format should detail out what exactly companies need to report under Question 7.

Scope 3: Information on Scope 3 emission has been asked under Leadership Indicators. Scope 3 emissions are those that are not produced by the company itself or are not the result of activities from assets owned or controlled by the company – but by those entities and stakeholders that are indirectly responsible and are part of the company’s value chain. Except Lupin Limited, Cipla Limited, Sun Pharmaceutical Industries and GlaxoSmithKline Pharmaceuticals, all the other companies have provided details on Scope 3 emissions. Bharat Forge Limited and Dalmia Bharat Limited did not provide any information on it in their first report, but have started reporting from their second submission.

ITC Limited has given a detailed explanation on why its Scope 3 emissions increased in 2021-22 in comparison to 2020-21. As a good practice, the company has been progressively increasing the coverage of its Scope 3 emissions by including more supply chain partners within its ambit. Similarly, L&T has also provided data on Scope 3 emissions that sheds light on its initiatives (*see Tables 11 and 12*).

Table 10: Only a few companies reported their long-term strategies

Companies	Projects related to GHG emission	
	2021-22	2022-23
Bharat Forge Limited	Talks about initiatives, but no mention of big plans	19 projects for utilising alternate sources of energy has saved 9,609 tCO ₂ e
Cipla Limited	Carbon neutral by 2025; mentioned projects undertaken	Refer page 99 of natural capital
Dalmia Bharat Limited	Carbon neutral by 2040	Carbon negative by 2040
Dr Reddy's Laboratories Limited	Talks about initiatives and the reduction these have led to. Resulted in total emission reduction of 58,142 MtCO ₂ e	Invested in solar, wind and hydel projects, coal-to-cogen systems, using briquette-based boiler rather than fuel oil. Refer environment section of IAR
Glaxosmithkline	Talks about fuel change, but no long-term strategy	Same as previous year
IOCL	Has talked about initiatives, but no long-term strategy	Mentioned four initiatives and quantified the outcomes/impacts in terms of reduction of CO ₂ emissions in MMTCO ₂ e
ITC limited	50% reduction in specific GHG emission by 2030	50% reduction in specific GHG emissions by 2030
JSW Energy Limited	Mentions activities in detail, but no commitment on its coal-based TPP	Mentions activities in detail, but no commitment on its coal-based TPP
L&T Limited	Carbon neutral by 2040 and water neutral by 2035	Has undertaken initiatives to reduce Scope 1 and 2 emissions. Details provided under Q6 in Leadership Indicators
Lupin Limited	15% reduction of Scope 1 and 2 emissions by 2030; projects mentioned	15% reduction of Scope 1 and 2 emissions by 2030; 12 projects mentioned
Orient Cement	Has talked about initiatives, but no long-term strategy	Has talked about initiatives, but no long-term strategy
Sun Pharmaceuticals Industries Limited	Has talked about initiatives, but no mention of big plans	Major projects mentioned, but no details provided
Tata Chemicals Limited	Has talked about initiatives, but no long-term strategy	Is implementing interventions like solar crystallisation, electrical calcination and WHR. No details provided. In June 2022, it has commissioned a CCU plant in the UK, which captures 40,000 tonne of CO ₂ per year
The Tata Power Company Limited	Carbon net zero before 2045 and phase out of coal-based thermal power plants – but no deadlines	Carbon net zero before 2045 and phase out of coal-based thermal power plants. Please refer to key collaboration section Pg 99 of the integrated report FY23

Source: CSE analysis

Table 11: Scope 3 emission from ITC Limited

Parameter	Unit	FY 2021-22	FY 2020-21
Total Scope 3 emissions [Break-up of the GHG into CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ , NF ₃ if available]	Kilo tonnes of CO ₂ Equivalent	318	237

The company has been progressively increasing the coverage of its Scope 3 emissions by including more supply chain partners in its boundary. The scope of coverage for Scope 3 emission is mentioned in 'Building Climate Resilience' section of ITC sustainability and integrated Report 2022

Source: BRSR report, page XXXIII

Table 12: Scope 3 emission from L&T Limited

Parameter	Unit	FY 2021-22 (current financial year)	FY 2020-21 (Previous financial year)
Total scope 3 emissions [Break-up of the GHG into CO ₂ , CH ₄ , N ₂ O, HFCs, PFCs, SF ₆ , NF ₃ if available]	Metric tonnes of CO ₂ equivalent	4,976,909	-
Total scope 3 emissions per rupee of turnover	Metric tonnes of CO ₂ equivalent /Billion INR	5000	-
Total scope 3 emission intensity (optional)- the relevant metric maybe selected by the entity	-	-	-

#Excluding transit houses ,guest houses ,holiday homes and company owned residential facilities as part of the scope for both FY21-22 and FY20-21

*In FY20-21 the data was not captured by the company

Source: Integrated annual report 246

AIR EMISSIONS

The BRSR format has asked for information on NO_x, SO_x, PM, POP, VOC, hazardous air pollutants etc – but it has not specified any units in which the information should be reported. While Bharat Forge Limited and Cipla Limited have reported their data in mg/Nm³, most other companies have done so in tonne per annum.

- **Glaxosmithkline:** During 2021-22, the company provided information for its corporate office in gm/kWh, while the data for its Nashik plant was given in microgramme per cubic metre (µg/m³). The Nashik plant value seems to be based on its ambient air quality readings. However, in its next report, the company has corrected the units from µg/m³ to mg/m³ (they should have been in mg/Nm³). No clarification is provided by the company about the source and methodology of the values provided for the corporate office (as the BRSR framework guidance note specifies).
- **L&T Limited:** In 2021-22, L&T reported air emissions in terms of tonne per annum. However, in its next report, it changed the unit to mg/m³ and provided the values as a range (probably minimum and maximum values). This shows that some companies are giving their data reporting some thought.

- **Dalmia Bharat Limited:** The company has referred to other reports for its data. For example, in Question 5 of Essential Indicators where it has to provide information on air emission, the company comments “*please refer to GCCA indicators table in the report*”. No link to the report or the relevant page number has been provided. Similarly, when it comes to GHG emissions in Question 6, the company comments, “*please refer to GRI table*”. Again, no link to the report or the page number is offered. The SEBI needs to look into this kind of reporting by the companies. It is easier and more feasible for the companies to provide their information as required in the BRSR format rather than forcing stakeholders to search for reference reports mentioned in the format.
- **Confusion in data reporting:** When companies report their air emissions data in mg/Nm³, they are offering an annual average number for all their units. In such a case, it becomes difficult to gauge whether all the stacks in all units are complying with the statutory norms for all the parameters. This kind of data, thus, is of no use to stakeholders; nor can any analysis be carried out to understand the sustainability or risks of the operations of these companies. If SEBI intends to bring information of environmental emissions into the public domain, a better way would be to ask for unit-wise and stack-wise data.

Companies have also reported air emissions data in tonne per annum. The problem with this is that there are no reference values to understand whether the reported value is high or low in terms of intensity; it is also difficult to decide in such a case if the unit is in compliance with the emission standards. Reporting in mg/Nm³ is a better option as industrial emission standards are available for almost all the industrial sectors – but this information should be given unit-wise. No company has provided any details about how the data has been compiled. As per SEBI’s guidance note, companies are expected to provide details of the standards, methodologies or calculation tools used to compile air emissions data.

MANDATORY REPORTING OF ENVIRONMENTAL COMPLIANCE DATA

One of the appreciable additions in the BRSR report is a section on environmental compliance of companies. This kind of information is rarely available in the public domain; any documentation that is done generally remains restricted to the eyes of the state pollution control boards (SPCB) and industry. While SPCBs are expected to take proactive measures to bring to public notice any incidents of non-compliance by any industry, very few boards are doing so. Notably, neither the Central Pollution Control Board nor any of the SPCBs in the country have ever published any report or document elaborating the environmental compliance performance of industries – something which is a part of their job as environmental

regulators. SEBI, therefore, must be applauded for this bold initiative towards encouraging transparency.

The BRSR report has introduced three questions in this regard:

1. Question No 10 on projects or offices around ecologically sensitive areas, their status of clearance and compliance with clearance conditions
2. Question No 11 on the EIA undertaken for a project and any information regarding dissemination to the public
3. Question No 12 on complaints received or fines/penalties imposed under various environmental acts

Question No 10

This question focuses on operations or offices in and around ecologically sensitive areas where environmental approvals or clearances are required, and also whether the conditions stipulated for granting approval are being complied with. Out of the BRSR reports of 14 companies, seven have reported that they have facilities in ecologically sensitive areas; six say they don't.

Bharat Forge Limited and ITC Limited have not provided the number of their facilities in ecologically sensitive areas, but both claim that all are complying with applicable laws and regulations. Companies have not followed the reporting format; instead, they have chosen to provide information as per their own convenience. SEBI should develop a mechanism to ensure the companies follow its guidelines and answer accordingly.

It is difficult to ascertain the veracity of the information provided by the companies. SEBI should request companies to attach annexures detailing consent conditions given to the plants located in ecologically sensitive areas, along with the names and addresses of these plants. None of the companies have reported any cases of non-compliance.

A review of the responses provided by the companies (*see Table 13*) indicates that there is an issue with the way the question has been put to them. Companies are expected to be compliant with the conditions for environmental approval or clearance before they start operations; this does not tend to change every year. However, it is important for SEBI to ask for historical data on non-compliance since the very beginning of a company's operations, as well as how any cases of non-compliance were dealt with.

Table 13: Responses of companies regarding units in ecologically sensitive areas and their compliance status

Companies	Question 10 answers	
	2021-22	2022-23
Bharat Forge Limited	No mention of numbers, but says impacts are modest	Influence on biodiversity is very modest
Cipla Limited	One and complying	One and complying
IOCL	One and complying	One and complying
L&T Limited	18 facilities and all are complying with all conditions	18 facilities and all are complying with all conditions
Sun Pharmaceuticals Industries Limited	One and complying	One and complying
TATA Chemicals Limited	One and complying	One and complying
The Tata Power Company Limited	One and complying	Details of locations of operations mentioned. Compliance conditions are being met

Source: CSE analysis

Updated information on environmental compliance, public litigation or court cases (if any) needs to be asked for and submitted, with respect to units located in ecologically sensitive areas. SEBI needs to rework on the question and the format and may also ask for a copy of the relevant consent conditions and supporting documents for meeting compliance conditions (*see Table 14*).

Details submitted by companies will also help create a database of those ecologically sensitive areas where industrialisation is happening, which could pose a threat in future. Such information will be of great help to investors.

Table 14: Ecologically sensitive areas: How the question should be asked?

Name and complete address of the plant located in ecologically sensitive areas	Reason for the area to be specified as ecologically sensitive	Year of start of operations	Any show cause/direction received since inception and reason for the same	Any litigation going on in courts/NGT and its status	Whether the conditions of environmental approval/clearance are being complied with? (Y/N). Attach clearance condition certificate

Question No 11

Question 11 seeks information on environmental impact assessments (EIAs) conducted in the current financial year, and whether their details have been shared in the public domain.

When it comes to details that have to be shared in the public domain, there is lack of clarity on what exactly a company has to report on. Out of the 14 companies whose BRSR reports were reviewed, three have undertaken EIAs in the current financial year. Cipla Limited has shared the EC report in the public domain by providing a link. In the case of IOCL Limited, two EIAs were undertaken – but no information has been put in the public domain. One of the IOCL projects is related to LPG storage, while the other one is a pipeline.

It should be mandated that irrespective of whether public consultation was required, companies must provide details of the EIA reports, clearance certificates and other documents on their website for better transparency. In the case of Tata Chemicals Limited, one EIA was undertaken. The company has provided a link where it claims to have placed all the details – but CSE researchers could not find any relevant information on this weblink. Companies need to ensure that they provide the information in the way it has been asked for.

In its response to Question 11, Glaxosmithkline Pharmaceuticals Limited has stated that pharma units are not notified as an industry, and hence do not require EIAs. This is not correct. According to the EIA 2006 notification, EIAs are required for bulk drug manufacturing and its intermediates – only drug formulation units are excluded. SEBI needs to put a process in place where such factual errors and incorrect statements can be identified and the companies informed.

Question No 12

This is the most important question in this section. It asks for the details of complaints related to the applicable environmental laws, regulations or guidelines and the fines and penalties imposed. Most SPCBs in India have been hesitant in putting information regarding complaints against industry in the public domain; the CPCB does release information regarding directions issued to industries.

In the BRSR reports, companies have provided information in different formats. For example, Bharat Forge, Dr Reddy's Laboratories, JSW Energy, Orient Cement and Tata Chemicals have written a few lines stating they are complying with all relevant laws and regulations. Cipla and Lupin Limited have simply said 'Yes' (*see Table 15*).

Table 15: Responses from companies on compliance, fines and penalties

Companies	Response	
	2021-22	2022-23
Dalmia Bharat Limited	Closure order by APPCB dated 29/01/2022 issued to DCBL. Plant resumes operations after clarification by DCBL	AAQ not conforming to standards for PM10, 2.5 for the period Jul-Aug 2021. Penalty of Rs 1,740,000 imposed by NGT. Corrective actions taken
IOCL	Detailed plant-wise information provided on complaints or fines/penalties imposed	Details of non-compliance, fines imposed and corrective actions taken provided in a table
L&T Limited	Detailed information provided on non-compliance, fines/penalties imposed and corrective actions taken	Detailed information provided on non-compliance, fines/penalties imposed and corrective actions taken
Sun Pharmaceuticals Industries Limited	All are complying	Toansa facility in Punjab paid Rs 50 lakh fine for violations under Water Act (such as accidental stagnation of greyish water, or a mix of rainwater, run-off water from the plant area and odour in treated water)

Source: CSE analysis

Only four companies have accepted that they have faced non-compliance. These are Indian Oil, L&T, Dalmia Bharat and Sun Pharmaceuticals. Indian Oil Corporation Limited (IOCL) and L&T Limited have provided details of non-compliance in the BRSR report, but with incomplete information on corrective actions. The CPCB has directed IOCL to close one of its retail outlets – no information has been provided on what action the company has taken in response to the CPCB direction. In contrast, L&T Limited has stated clearly the actions taken as directed by the Delhi Pollution Control Committee when one of its facilities in the capital was found to be non-complying. Sun Pharmaceuticals has reported an incident of non-compliance in its Toansa facility and has also provided details of the penalty paid and corrective actions taken.

Dalmia Bharat has provided the details of closure orders and penalties imposed – however, it does not offer any details of the corrective actions taken.

With respect to 2021-22 and 2022-23, Glaxosmithkline has reported no major non-compliances. However, it has not clarified what does “major non-compliance” mean. The company should have provided the details of the non-compliances whether major or minor, and leave it on the SEBI to evaluate the scale of non-compliance.

In its reply to Question 12, ITC Limited has repeated its response given to Question 10 – “*ITC’s existing operations comply with applicable environmental regulations of the country and operate as per CTO conditions*”.

Environmental regulators such as the Ministry of Environment, Forest and Climate Change, the CPCB and the SPCBs need to complement the initiatives undertaken by SEBI by putting information on non-compliance in the public domain. In the Online Consent Management and Monitoring System (OCMMS) portal, India E-track has displayed information on 17 categories of industries (https://ocmms.nic.in/OCMMS_NEW/mapCategory.jsp). This information has come from a mere 18 of India's 35 SPCBs or committees.

The portal only gives information on the number of industries, their types and whether they are compliant. The information regarding show causes or closure notices has been provided sector-wise only: the portal does not offer any details about the industry, such as names and locations. Moreover, the information that has been provided on the 17 industrial categories is not reliable – for example, Uttar Pradesh, says the portal, does not have any thermal power plants or cement industries, which is completely incorrect. The portal also says that many other states like Bihar, Goa and Tripura have no units that belong under any of the 17 industrial categories: this is also incorrect.

The information collected by SEBI through its BRSR reporting system is critical for documenting environmental compliance status of the top 1,000 companies – this information can then be cross-checked with media reports.

WASTE GENERATION AND DISPOSAL

Waste generation and disposal has been covered in Question 8 of the Essential Indicators under Principle 6. It is an important parameter as the waste of one industry can become the raw material or fuel of another; on the other hand, waste that cannot be used must be disposed of scientifically to avoid contamination to the ecosystem. Data on waste management, therefore, will help in pushing the agenda of circularity (see *Table 16*).

Analysis of the data provided by the companies shows that compiling the information has not been easy. Cipla Limited, Dr Reddy's, ITC and Orient Cement claim they have systems in place to ensure proper waste management and data compilation. According to them, less than 0.5 per cent of the total waste generated by them is unaccounted for – this could be attributed to losses during the handling of the waste.

Due to lack of clarity on the data to be provided, some companies have presented their information twice in the same table. In their second report, Dalmia Bharat Limited and Tata Power Company Limited have provided the same data under

Table 16: The waste management table

Parameter	FY _____ (Current Financial Year)	FY _____ (Previous Financial Year)
Total Waste Generated (in Metric Tonnes)		
Plastic waste (A)		
E-Waste (B)		
Bio-medical waste (C)		
Construction and demolition waste (D)		
Battery Waste (E)		
Radioactive Waste (F)		
Other Hazardous Waste. <i>Please specify, if any.</i> (G)		
Other Non-Hazardous waste generated (H). <i>Please specify, if any.</i> (Break up by composition i.e by materials relevant to the sector)		
Total (A+B+C+D+E+F+G+H)		
<i>For each category of waste generated, total waste recovered through recycling, re-using or other recovery options (in metric tonnes)</i>		
Category of waste		
(i) Recycled		
(ii) Re-used		
(iii) Other recovery options		
Total		
<i>For each category of waste generated, total waste disposed by nature of disposal method (in metric tonnes)</i>		
Category of waste		
(i) Incineration		
(ii) Landfilling		
(iii) Other disposal operations		
Total		

Source: Business Responsibility & Sustainability Reporting Format, Annexure I

two different headings – that of total waste recovered through recycling, reuse or other recovery options, as well as that of total waste disposed of and the nature of disposal method.

A closer look at the table provided by Dalmia Bharat shows the company has tried to ensure the table is self-explanatory: at one place, it says “sold to authorised recyclers” under method of recycling; at another, under waste disposed by nature of disposal method, the company has replaced “other disposal operations” with

the same statement (“sold to authorised recyclers”). Tata Power has done a similar thing in its second reporting. SEBI needs to put in place a data quality checking mechanism to ensure such mistakes are not repeated.

It is important to note here that Principle 2 of the BRSR format has asked two questions as well on waste management. Questions 3 and 4 under Leadership Indicators focus on products and packaging reclaimed by the company; what amount of this is recycled, reused or safely disposed of; and the percentage of recycled or reused material out of the total material used in production. Principle 2 concentrates on the theme that businesses should provide goods and services in a sustainable and safe manner; it is closely connected with Principle 6 which says businesses should protect and restore the environment.

Principle 6 asks for information on total generation of different streams of waste such as plastics, e-waste, bio-medical waste, construction and demolition waste, batteries, radioactive wastes, and other hazardous and non-hazardous wastes. It also wants to know the amount of waste recycled and reused, as well as about the recovery operations. The companies have to provide information on the waste being incinerated, landfilled or disposed of by other means.

But there seems to be a flaw in the reporting format here. Though the quantity of waste is required to be reported as per the type of waste, information on disposal has not been asked for according to type. It is important to understand what type of disposal route has been adopted for a particular stream of waste. When information is provided in totality, it hides details of particular types of waste which may be in a small quantity, but which would need proper handling – for example, hazardous waste or radioactive waste. In fact, Principle 2 asks for material-wise recycled and reused waste, and the amount disposed of each type – something which is missing from the question asked under Principle 6.

3. Conclusion and Recommendations

Business Responsibility and Sustainability Reporting (BRSR) is an initiative towards ensuring transparency in communicating environmental performance by companies. This exercise should be treated with the seriousness it deserves, and should not be taken merely as a compliance tool. What raises hopes is the fact that over the last two years, a large number of companies have released their BRSR reports, despite BRSR being a mechanism that is relatively new to industries.

The BRSR format is at its nascent stages; there is a potential for improvement in terms of utility of the questions asked, their structure and coverage, and provision of seeking clarifications or explanation from the companies on the trends and deviations in their data. The format needs to be strengthened so that the very objective behind introducing this framework is adequately met.

CSE's analysis indicates that the format has not asked some key and relevant questions; others, where asked, have been placed under Leadership Indicators and it is not mandatory for a company to answer them. A review of the disclosure format shows that while it is easy to compare financial data or governance structures across different companies, comparison of environmental data throws up practical problems. A company may have different sectors having different pollution loads; another may have some air polluting units or a few units which pollute water sources, or both; a company also may have units sourcing energy from dirty fuels as well as those sourcing energy from renewables. In such scenarios, comparison between companies is futile; comparisons can be made only among companies from the same sector.

In this third and final chapter, CSE brings together its assessment of the BRSR instrument by offering its findings and a few recommendations that can further sharpen this initiative and make it more effective.

THE FINDINGS

Consolidated company data vs unit-specific data

Consolidated company data is not always useful. An average value which takes into account both good and bad units does not represent the sustainability of a company, says the CSE assessment. Instead, sustainability can be judged if poor or average performing units are identified and a roadmap is prepared for them to improve their performance on various indicators.

In the existing format, SEBI has not focused on unit-wise information from companies, except in one case: Question 3 under Leadership Indicators in Principle 6 asks for unit-wise data related to water withdrawal, consumption and discharge. However, this too is requested specifically for units located in water-stressed areas.

Data without the rationale behind it

The current BRSR format makes it difficult to understand the reasons behind increase or decrease in values of the parameters.

The BRSR report asks for data for two consecutive years. This has been done to help stakeholders understand the trends in resource use. But the manner in which this information is sought leaves room for confusion: for instance, the reporting format requires data which is collated from all the units of a company – this makes it difficult to rationalise the reasons behind increase or decrease in value. For example, an increase in the value of any parameter could be because of increased capacity in a few units of the company; similarly, a decrease could be attributed to the shutting down of any plant for a few months.

These reasons and details are not captured in the report. It thus becomes difficult to understand how this reported data can help investors or readers to understand the sustainability of such companies. Take the case of JSW Energy (*see Table 17*), which has provided some information on its energy sourcing under Leadership Indicators. The information shows that its sourcing of energy from non-renewables has dipped from 157,320 GJ in 2020-21 to 126,000 GJ in 2021-22 – but the company does not provide any reasons for this reduction.

Similarly, in the case of water consumption, Bharat Forge Limited, JSW Energy Limited, Orient Cement, Tata Chemicals and Tata Power report that they have increased their water consumption between 2020-21 and 2022-23 – without clarifying why this increase happened.

Table 17: JSW's energy consumption information under Leadership Indicators

Parameter	FY 2021-2022 (Current Financial Year)	FY 2020-2021 (Previous Financial Year)
From renewable sources		
Total electricity consumption (A)	126,000 GJ	157,320 GJ
Total fuel consumption (B)	0	0
Energy consumption through other sources (C)	0	0
Total energy consumed from renewable sources (A+B+C)	126,000 GJ	157,320 GJ
From non-renewable sources		
Total electricity consumption (D)	52,37,811.86 GJ	4,856,878 GJ
Total fuel consumption (E)	8,66,73,658.45 GJ	7,78,66,806 GJ
Energy consumption through other sources (F)	0	0
Total energy consumed from non-renewable sources (D+E+F)	91,911,470.31 GJ	82,723,684 GJ

Source: Integrated Annual Report 2021-22, JSW Energy Limited, page 190

The performance of a company, therefore, cannot be analysed on the basis of different indicators because of the limited information that is available. For example, it is difficult to comprehend if energy consumption or water consumption has decreased because of closure of a unit in a company, or because of adoption of energy-efficient or water-efficient measures.

Companies tweaking the questionnaire

Companies have often provided data selectively, as per their understanding, and added or deleted rows of information as per their convenience. It should not be left to them to decide how they wish to present the data. Few examples of how companies are moulding the BRSR questionnaire are given here.

1. Tata power added new parameter of freshwater consumption in the table while reporting on water withdrawal by source.
2. GlaxoSmithKline Pharmaceuticals Ltd. reported only the total volume of water withdrawal from different sources and deleted the row asking total water consumption.

Tata Power Company Ltd.

Parameter	FY 2021-2022	FY 2020-2021
	Water withdrawal by source (in million litres)	
(i) Surface Water	13,17,592	12,39,352
(ii) Groundwater	271	194
(iii) Third party water	13,065	17,709
(iv) Seawater/desalinated water	28,58,396	53,66,791
Total volume of water withdrawal (in million litres) (i + ii + iii + iv)	41,89,324	66,24,046
Total volume of freshwater consumption (in million litres)	64,721	33,437
Water intensity per rupee of turnover (litre/ rupee)	0.15	0.10

GlaxoSmithKline Pharmaceuticals Ltd.

Parameter	FY 2021-2022 (Current Financial Year)	FY 2020-2021 (Previous Financial Year)
	Water withdrawal by source (in kilolitres)	
(i) Surface Water (By corporate office)	53,562	58,796
(ii) Third Party Water (Municipal Water Supplies) (by Nashik plant)	93,961	87,758
Total Volume of water withdrawal (in kilolitres) (i + ii)	147,523	146,554

Source: BRSR report 2021-2022 of respective companies

Some important indicators categorised as 'voluntary', not 'mandatory'

Some key indicators such as water withdrawal, consumption and discharge have been placed under 'Leadership Indicators', where companies can share information voluntarily. These can be moved to the 'Essential Indicators' category, which lists mandatory data points that need to be provided mandatorily.

Essential Indicators are those that must be reported mandatorily by a company; reporting on Leadership Indicators is optional. CSE's review of the Leadership Indicators shows that some of them need to be brought under the Essential Indicators category, based on the role they play and the impacts they can exert towards ensuring sustainable practices.

Difficult to understand rationale of intensity parameters

Question 1 under Essential Indicators asks about total energy consumption and energy intensity in relation to a company's turnover. Taking an example of companies in the pharmaceutical sector, Lupin Limited (LL) and Sun Pharmaceutical Industries Limited (SPIL) have reported their energy intensities as 26.53 and 21 GJ/Rs million, respectively. Cipla Limited (CL), on the other hand, has reported an energy intensity of 8.5 GJ/Rs lakh (*Question 1, Principle 6, 2021-22*). The turnovers (from manufacturing of pharmaceuticals and associated products) of these three companies have been reported as 100 per cent for LL and SPIL, and 69 per cent for CL.

It might be difficult for an investor to understand the pharma sector's performance on sustainability benchmarks by using this data from companies from the same sector. There could be different reasons for the low energy intensity value reported by Cipla – ranging from a high market value of its product/s, or less production of a high market value product (which means less energy requirement), to a big share (31 per cent) of wholesale of pharmaceuticals (as opposed to manufacturing) in the company's turnover (which, again, means less energy required). But these reasons do not mean that the company's manufacturing processes are energy-efficient. To bring about uniformity in reporting, SEBI needs to specify the units of measurement that companies can use, as in this case companies are reporting energy intensity in GJ/million Rupees as well as GJ/lakh rupees.

Energy intensity is a critical parameter in view of India's commitment to reduce the emissions intensity of its GDP by 20-25 per cent over the 2005 levels by 2050. SEBI should clarify how energy intensity values can be used to assess the performance of a company and its contribution in achieving this national target – especially as companies are expected to report on GHG emissions intensity separately under the BRSR format.

Important environmental parameters missing

In the BRSR data collection sheet, the section on energy consumption asks for total electricity consumption and total fuel consumption in Giga Joules (GJ) – but it is impossible to understand from this information what type of fuel is being consumed by a company, and whether the company's dependence on dirty fuel like coal and other fossil fuels is increasing or decreasing. Neither does the report offer any questions on the quantity of fuel types being used.

RECOMMENDATIONS

Opt for a sector-specific approach in the BRSR framework

The existing disclosure format conceived by SEBI is generic in nature and does not contain sector-specific guidelines. CSE's assessment indicates that a sector-specific approach – similar to ones followed by international frameworks – might be more useful for analysis and comparison while reporting. Since BRSR is aimed at helping investors finance environmentally responsible companies, a sector-specific format would help them gain an easy, holistic and comprehensive understanding when they prepare to invest in a specific sector.

The BRSR framework should allow industries with different business activities to report according to their businesses. This will facilitate comparison, and would help bring clarity on the environmental stewardship of a company as a whole. To follow the sector-specific approach, CSE recommends the use of any domestically approved and accepted classification (such as NIC).

Mandate specific energy/water consumption data

At present, under Essential Indicators (Questions 1 and 3), there is an optional parameter on energy and water intensity – it is up to the company to report on it. BRSR should ask for specific energy consumption (SEC) data in KW or MW/tonne of the product; and specific water consumption (SWC) figures in m³/tonne of the product. This data will clearly reflect the overall energy and water efficiency of the manufacturing process.

A company may have a large number of products. Instead of collecting SEC or SWC data for all the products manufactured by a company, SEBI can ask for information on only those products that account for 90 per cent of the total manufacturing of the company.

BRSR report format should rework table formats to enable data capture

Companies have often provided data as per their understanding, and added or deleted rows as per their convenience. It should not be left to the companies to decide how they wish to present the data. A proper format with specific tables will help in extracting the required information. For this purpose, SEBI can publish the BRSR questionnaire as a protected spreadsheet with the provision of including the responses from industries, but with no option of editing the format.

CSE has worked out the table formats that could be included at specific places. Given below are the different table formats along with the rationale behind them:

- Table format for disclosure of PAT targets:** In case of data on PAT targets of sites/facilities, for better validation of the information, SEBI should ask for the SEC target given by the Bureau of Energy Efficiency to each unit during each cycle, as well as the actual SEC achieved. It is also recommended to include a ‘remarks’ column where industries can explain their reasons for not meeting the SEC targets (*see Table 18*).

Table 18: Proposed format for seeking data on the PAT scheme

Name and location of the plant	Notified SEC target PAT cycle ____ (MTOE)	Achieved SEC (MTOE)	Reason/s for not achieving the target

- Table format for data on water sourcing and management:** Though the SEBI has taken an initiative for capturing information on water in the BRSR format, the sequencing and coverage of the questions is a concern. There is a scope for simplifying the questions and adding a few more – especially on consumption of treated and untreated water as well as freshwater.

CSE recommends the BRSR report should have two separate questions: one related to water withdrawal and sourcing, and the other on water consumption (*see Table 19*). The information provided in the table would help judge a

Table 19: Proposed table format to capture water performance of a company

A. Details and cost of water withdrawal or sourcing (m ³ /year)				
Source of water	Previous financial year		Current financial year	
	Total water withdrawal (m ³ /year)	Cost of water including cess (Rs/m ³)	Total water withdrawal (m ³ /year)	Cost of water including cess (Rs/m ³)
Surface water (river/streams/ reservoir/ dam/canal/sea water/lake etc)				
Groundwater				
Municipal supply				
Private water tankers*				
Treated sewage water				
Rainwater harvesting				
Treated effluent (recycled/reused)				
Any other source (please specify)				
Total (m ³ /year)		-		-

*The company should also provide the source of water for the private tankers.

B. Details of water consumption (m ³ /year)		
Source of water	Previous FY	Current FY
	Water consumption (m ³ /year)	Water consumption (m ³ /year)
Process water (excluding cooling and DM – demineralised – water)		
Cooling water		
DM water		
Domestic water		
Water used in landscaping or gardening		
Total (m ³ /year)		

company's sustainable performance – it would indicate what percentage of the water that the company withdraws is treated sewage; whether the company has reduced its dependence on groundwater; and whether its total water requirement is decreasing or increasing.

- Table format for data on treated effluent utilisation:** Under Leadership Indicators, there is a question on the quantity of treated or untreated wastewater that is discharged by the company/plant – this is an incomplete question as it does not enquire about the water that is not discharged. The reporting format needs to capture what companies are doing with their wastewater that is not discharged. CSE recommends a table that can help collect this information (*see Table 20*). This table can be an extension to the question – under Leadership Indicators – on water discharge by destination and level of treatment.

Table 20: Utilisation of undischarged treated effluent or untreated wastewater

Details	Previous FY	Current FY
	Quantity (m ³ /year)	Quantity (m ³ /year)
Total wastewater generated from all sources		
Total water discharged		
Total water recycled/reused		
Area of utilisation		
i. Industrial		
ii. Domestic		
iii. Landscaping or gardening		
Percentage of wastewater reused/recycled		

Ensure that companies report on the type of fuel used as well as their utilisation of renewable energy

Sustainability of companies in today's climate-risked world depends a lot on how fast they are moving away from fossil fuels and adopting renewable sources for their energy needs. Under energy consumption, the BRSR format has only asked about the total quantity of fuel used – it is important to also collect information about the types of fuels used by a company, as well as its energy sources.

Lupin Limited can be held up as a positive case in point. The company has gone a step ahead by reporting how much renewable energy it has sourced from solar, wind and steam generated from agro-waste. CSE suggests a revised table format in Question 1 under Essential Indicators (*see Table 21*).

Table 21: Energy consumption (in joules or multiples) and energy intensity

From renewable sources				
Parameter	Previous FY		Current FY	
	Joules/GJ		Joules/GJ	
Total energy consumption (process + power generation)				
Total fuel consumed				
Break-up	GJ		GJ	
Solar				
Hydro				
Wind				
Other fuels	Tonnes	GJ	Tonnes	GJ
Biomass				
Alternative fuels (refuse derived fuel, agro-waste etc.)				
Specify others (if any)				
From non-renewable sources				
Total energy consumption (process + power generation)				
Total fuel consumed				
	Tonnes	GJ	Tonnes	GJ
Coal				
Lignite				
Natural gas				
High speed diesel				
Low sulphur heavy stock (LSHS)				

	Tonnes	GJ	Tonnes	GJ
Specify others (if any)				
Total energy consumption				
Energy intensity (per rupee of turnover)				
Specific energy consumption (for major products accounting up to 90 per cent of production)				

SEBI may ask for quantitative details about GHG emission reduction

In Question 7, SEBI should explore the possibility of asking for quantitative details, specifically pertaining to projects undertaken by the company for reducing its GHG emissions (*see Table 22*).

Table 22: Proposed format for seeking information on GHG-related projects

Serial number	Details of the project	Timelines of completion	Expected GHG reductions by 2050 (tCO ₂ emission)

Non-hazardous and hazardous wastes should be accounted for properly

Though SEBI has asked for data on generation of different types of waste, but when it comes to management and disposal mechanisms, the only information that has been asked is about whether waste is recycled, reused or disposed of. SEBI should also ask for information on waste generation and disposal in the top three waste streams under both hazardous and non-hazardous categories. There should be a separate section as well on plastic waste, e-waste, biomedical waste and other types of waste that do not result from manufacturing operations.

In CSE's view, the question on waste under Principle 2 can be merged with those under Principle 6; the focus would be on the quantities of different wastes and materials categorised as hazardous or non-hazardous which are being generated or reclaimed, and the amount recycled, reused or disposed of for each waste (*see Tables 23*). There is also a need to clarify the data on disposal mechanism and quantity of waste disposed through each mechanism (*see Tables 24*). Accordingly, CSE suggests a revised table format under Principle 6.

Table 23: Proposed table format to collect data on waste/materials and their management

Non-hazardous waste (in metric tonnes)								
Parameter	Previous FY				Current FY			
	Generation	Recycled	Reused	Disposed	Generation	Recycled	Reused	Disposed
Plastic scrap								
Wastepaper								
Metal scrap								
Rubber								
Packaging								
Products and packaging reclaimed	Reclaimed				Reclaimed			
Add rows to specify others (if any)								
Hazardous waste (in metric tonne)								
Chemical waste (solvents, acids, pesticides etc)								
Heavy metals								
Toxic sludge and residues								
Add rows to specify others (if any)								
Other waste								
E-waste								
Biomedical waste								
Construction and demolition waste								
Radioactive waste								

Table 24: Proposed format for details on disposal

Non-hazardous waste (in metric tonne)						
Parameter	Previous FY			Current FY		
	Incineration	Landfilling	Others	Incineration	Landfilling	Others
Plastic scrap						
Wastepaper						
Metal scrap						
Rubber						
Waste clothes						
Packaging						
Products and packaging reclaimed						
Add rows to specify others (if any)						

Hazardous waste (in metric tonne)						
Chemical Waste (solvents, acids, pesticides etc)						
Heavy metals						
Toxic sludge and residues						
Add rows to specify others (if any)						
Other waste						
E-waste						
Biomedical waste						
Construction and demolition waste						
Radioactive waste						

Rework data asked on ZLD and include quality of wastewater as parameter

- Information asked for on ZLD should be reframed:** The question on the mechanism for zero liquid discharge (ZLD) just enquires about the coverage and implementation of the ZLD scheme. SEBI's guidance document is equally limited – it only offers a definition of ZLD without providing any clarity on how the data is to be presented in the reporting format.

What each unit should be asked for is to provide the respective ZLD schematics, and information on the point of utilisation and quantity of the treated water (*see Table 25*).

Table 25: Proposed format for information on ZLD schemes

Parameter	Details	
	Previous FY	Current FY
Data only for ZLD sites (consolidated)		
Names of the sites that have implemented the ZLD scheme		
Water consumed (m ³ /year)		
Wastewater generated (m ³ /year)		
Treated wastewater reused (m ³ /year)		
Industrial		
Domestic		
Landscaping		
ZLD schematic implemented (give as annexure)		

- Ask for information on the quality of wastewater discharged:** The BRSR report offers no scope for providing information on the quality of the wastewater

discharged. Manufacturing industries often use a variety of chemicals to treat wastewater. These chemicals are released into the environment along with the wastewater that is discharged; in such a case, it is also difficult to bring down the BOD or COD levels in the wastewater – which, in turn, contributes to pollution of the receiving waterbody.

As this is a regulatory matter, CSE suggests framing a question that would put the onus on the companies:

Question: Entity to certify that wastewater discharge is as per the prescribed pollution control board norms applicable, or provide a copy of the directions or show cause issued in case of non-compliance with the discharge standard (if any)

Moving important parameters from Leadership Indicators to Essential Indicators

CSE has identified a few parameters which should be included under Essential Indicators, which are mandatory (instead of the voluntary Leadership Indicators).

- **Question 3:** *Water withdrawal, consumption and discharge in an area of water stress.*

Explanation: Climate change, pollution and over-consumption are triggering acute water scarcity in many regions of the country. Companies located in such regions should mandatorily report the number of plants they have, and the amount of water they use and discharge.

- **Question 6:** *If the entity has undertaken any specific initiative or used innovative technology or solutions to improve resource efficiency, or reduced impacts due to emissions/effluent discharge/waste generated, please provide details of the same as well as outcome of such initiatives.*

Explanation: This is a crucial indicator of a company's efforts towards undertaking sustainable industrial operations, and should be mandatorily reported.

Proper clarification on "others" category and space to explain the data is must

Across the BRSR format, information has been asked for under 'Others' category with respect to many parameters (water sourcing, air emissions, waste etc). In some cases, companies have filled in data under this category, without providing any details. The format should mandatorily ask companies to give these details and provide them the space for doing so.

It is also recommended that the BRSR report should provide space immediately after every indicator to enable companies to offer detailed comments on the data reported.

Provide complete details of units whose data is being reported

It has been observed that a few companies have used abbreviations of the unit's name while providing plant-wise data. Since the BRSR format is not an internal document and might be accessed by people other than company representatives, it would be prudent if the names of the plants/units are provided in full along with their locations (name of the state).

Question 3 (Leadership Indicators) is the only question in the format where SEBI has asked for unit-wise details on water consumption, withdrawal, source and wastewater treatment and discharge. This does not include all units under a company, but only those which are located in water-stressed areas.

The BRSR format should focus on providing unit-wise data on PAT disclosure, air emissions (other than GHG) and water withdrawal, consumption and discharge. The consolidated information reported by companies does not offer a clear and transparent picture of actual environmental performance of the individual units – this hinders investors from taking informed decisions. SEBI can include a provision in the format for reporting unit-wise data as annexures.

Include important environmental parameters in BRSR core format

CSE has reviewed the BRSR core format; based on its observations, the following points have been recommended:

- Sourcing and withdrawal of water should be included in the format, as it is an important indicator of how sustainably the company operates.
- Under Question No 3, SEBI should ask for information based on sourcing of energy (renewable or non-renewable). It is also recommended to report on fuels consumed and the related energy. The SEBI should specifically ask for information on the different types of waste being used as fuel in companies. This will reflect companies' initiatives towards promoting industrial waste circularity and reducing emissions by replacing fossil fuels.
- The SEBI should revise Question No 4 in the core format: there is a need to categorise different types of waste as hazardous and non-hazardous. The management and disposal of each type of waste should be reported separately to understand if there are any challenges in managing any particular waste stream; it is also advisable to explore the potential of bringing different types of waste under the circularity regime.

- Water consumption figures should be based only on metering. Calculations based on withdrawal and discharge will not account for water losses due to leakages, evaporation, etc. The SEBI should update this uniformly in all documents of BRSR (guidance document, questionnaire and the core format).

Update the guidance document

SEBI has provided a guidance document for companies to help them report. CSE's assessment indicates that there are certain parameters in which the document has not given sufficient clarification on the information to be provided. A case in point is that of questions that have been asked on air emissions – the guidance document does not offer any directions on how companies should report the data in the format provided.

The BRSR questionnaire and format were reviewed in July 2023, but the guidance document has not been updated alongside. CSE recommends that SEBI could hold stakeholder consultations to encourage companies to offer feedback on the limitations and challenges they are facing with respect to the guidance document, and their expectations from it.

Are businesses behaving responsibly towards environment? Do they share information about what actions they are taking to manage their environmental, social and governance (ESG) risks? In 2012, the Securities and Exchange Board of India (SEBI) mandated that the top listed companies (by market capitalisation) must file what is now called 'Business Responsibility and Sustainability Reports (BRSR), as part of their annual reports. An otherwise progressive and welcome step, this initiative – feels Centre for Science and Environment (CSE) – is yet to live up to its full potential. Through a close look at BRSR reports filed by some of India's top companies, this guidance brief offers an in-depth assessment of the initiative and recommends some measures for course-correction.



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