Extraction of GHG Emissions Data from BRSR Reports

[Click here](#) to access BRSR filings by entities listed on NSE. This link provides access to the BRSR filings in PDF & XML format. The data must be extracted from these PDF / XML files into the format mentioned below:

Company Name	BRSR Filing Date	Unit of Measurement	Scope 1 Emissions	Scope 2 Emissions

Dataset can be found in Principle 6, Essential Indicators, Question 7 of the BRSR filed by the entities. Sample screenshot of data for [Alkem Laboratories - Page 35](#) is as follows for reference:

7. Provide details of greenhouse gas emissions (Scope 1 and Scope 2 emissions) & its intensity, in the following format:

Parameter	Unit	FY 2023-24 (Current FY)	FY 2022-23** (Previous FY)
Total Scope 1 Emissions (Break-up of the GHG into CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, if available) - (HSD, LDO, FO, Coal, Petrol, CNG, Refrigerants)	tCO₂e	19,249	15,773
Total Scope 2 Emissions (Break-up of the GHG into CO2, CH4, N2O, HFCs, PFCs, SF6, NF3, if available) – (Grid electricity, Purchased Liquid Nitrogen, Purchased steam)	tCO₂e	82,319	2
Total Scope 1 and Scope 2 Emissions	tCO₂e	1,01,568	94,274
Total Scope 1 and Scope 2 Emissions Intensity per rupee of turnover (Total Scope 1 and Scope 2 GHG Emissions / Revenue from operations)	tCO2e / million INR	1.04	1.04
Total Scope 1 and Scope 2 Emissions Intensity per rupee of turnover adjusted for Purchasing Power Parity (PPP) (Total Scope 1 and Scope 2 GHG Emissions / Revenue from operations adjusted for PPP)	tCO₂e / million INR	23.34*	23.32*
Total Scope 1 and Scope 2 Emissions Intensity in terms of physical output	tCO2e/MT	2.14	2.02
Total Scope 1 and Scope 2 Emissions Intensity (optional) – the relevant metric may be selected by the entity	-	-	-

Data to be extracted

**Formula for calculating Intensity per rupee of turnover adjusted for PPP = (Emissions/ Revenue) x 22.401. The conversion factor (22.401) is sourced from International Monetary Fund (IMF).

**FY'23 emission figures do not include some of the energy sources (Liquid Nitrogen, Vehicle fuel, and Ozone Depleting Substances) due to limited availability of data.

Submission Requirements

1. Scope 1 & Scope 2 GHG Emissions data of FY24 for BRSR filings done by all entities in excel file.

2. Prepare a slide depicting step-by-step process used to extract the data from the PDF / XML files.

3. For any one sector of choice, conduct benchmarking exercise for Scope 1 & Scope 2 emissions in excel.