

GHG Assessment FY 2023-24



GUJARAT AMBUJA EXPORTS LIMITED
NURTURING BRANDS

Envint
Business for Better

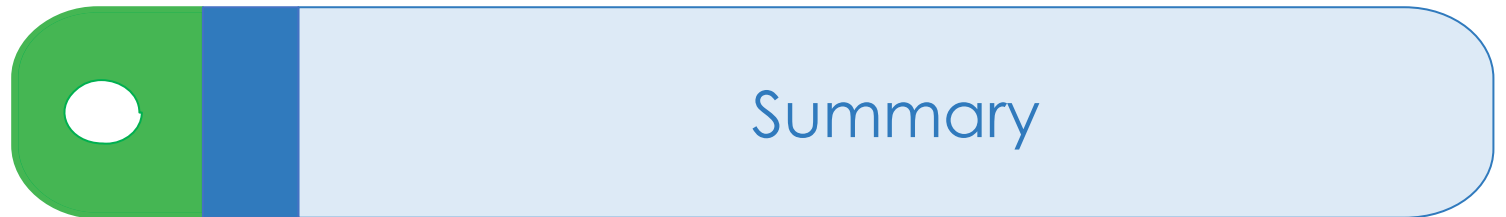
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Methodology



GHG Assessment



Summary

Methodology



- Plan for extensive GHG inventorization
- Outline the extent of the organization's responsibility for GHG assessment



- Identify data requirements and preferred methods for data collection
- Validate the data to avoid discrepancy



- Formalize data collection procedures and document process
- Calculate with the applicable standards and guidelines



- Finalize GHG assessment
- Report data as needed

Reference Frameworks - GHG Assessment



Scope 1

GHG Protocol, DEFRA, Sector specific guidelines if applicable

Emission factors (EF) and Global Warming Potential (GWP) as per IPCC country-specific recommendations and EEIO guidelines

Scope 2

Location-based average emission grid factor

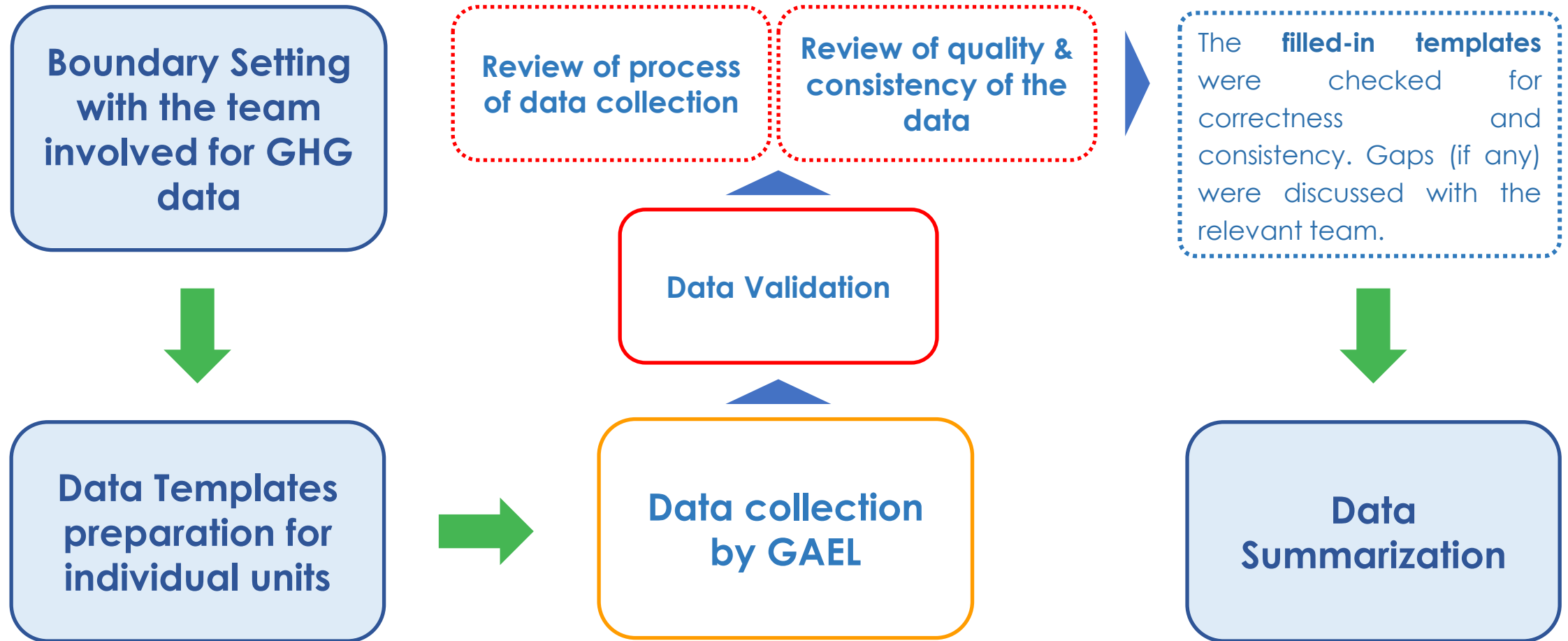
Emission factors (EF) as **CEA, IPCC country-specific recommendations and EEIO guidelines**

Scope 3

GHG Protocol, EPA, Sector specific guidelines if applicable

Preliminary checks with other sources based on the GHG Protocol

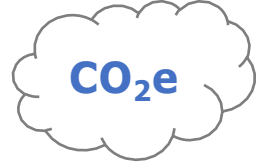
Data Workflow



- Templates circulated to the teams

GHG Emissions | Scope of Assessment

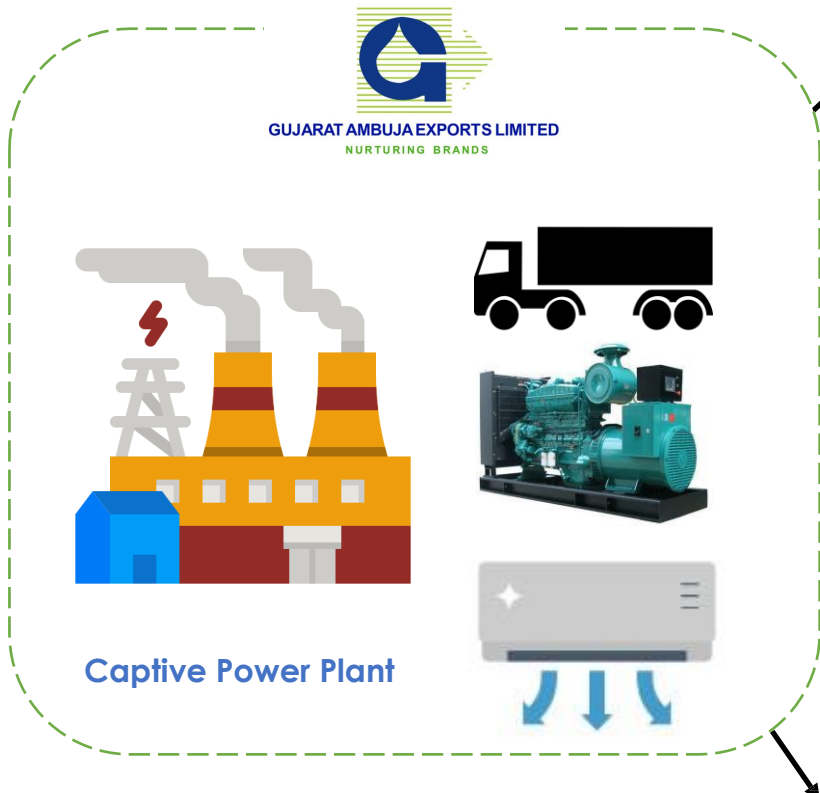
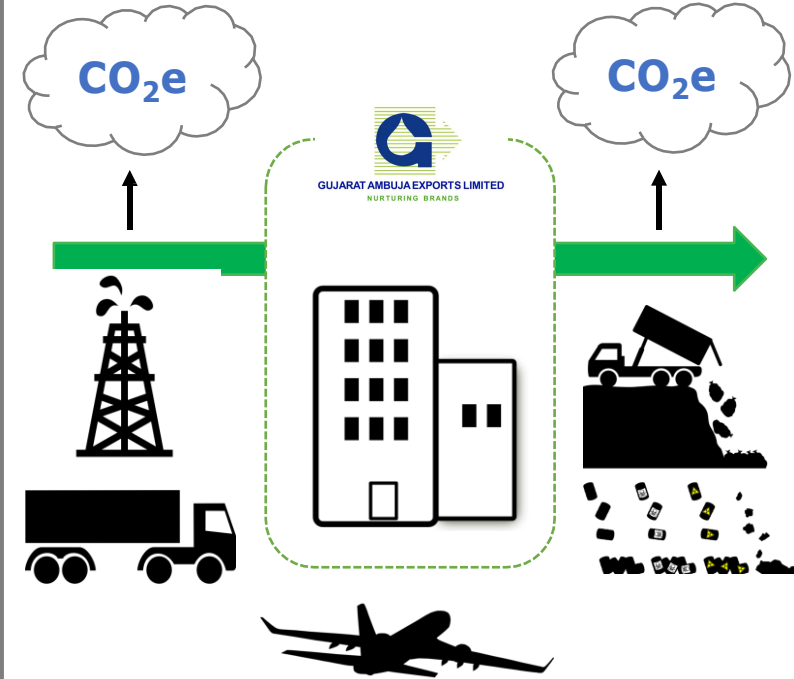
Scope 1 Emissions: Directly released into air (eg., GHG emissions from manufacturing, DG sets, vehicles, AC's owned/controlled by GAEL



Scope 2 Emissions: Indirect emissions released at power plant for power consumed by GAEL



Scope 3 Emissions: Indirect emissions released through value chain operations outside the business boundaries of GAEL



Business boundary (organization, operational)
Includes activities which GAEL owns or controls

Not owned/controlled by GAEL,
but indirectly responsible

GHG Assessment (1/3)

Emission Summary

Summary	FY 2022-23 (MTCO ₂ e)	FY 2023-24 (MTCO ₂ e)	Variation (%)
Scope 1	6,71,895	7,63,528	14%
Scope 2	24,638	23,940	-3%
Scope 3	22,532	23,447	4%
Total	7,19,065	8,10,915	13%

Emission Savings

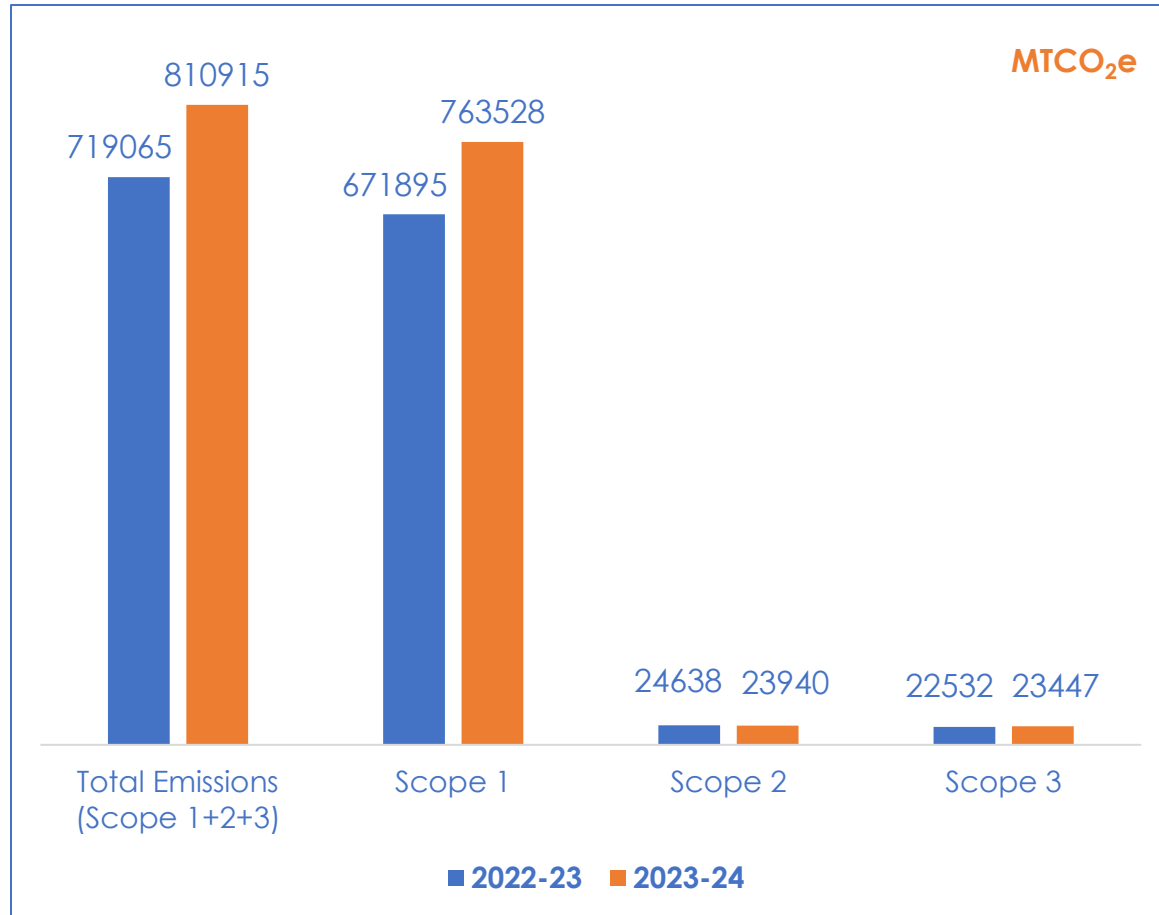
Renewable Energy	FY 2022-23 (MTCO ₂ e)	FY 2023-24 (MTCO ₂ e)
Solar	5,735	6,566
Wind	6,572	6,063
Biogas	15,088	12,386
Total	27,395	25,015

GHG Accounting for 10 manufacturing plants and 1 Head office PAN India.

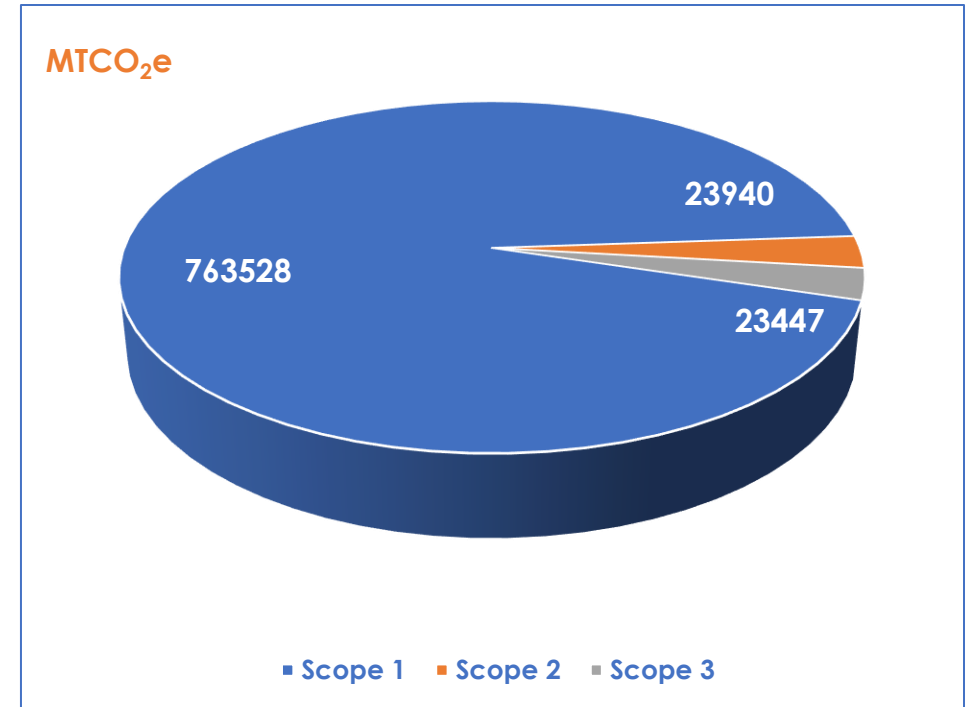


GHG Assessment (2/3)

GHG Assessment (Y-O-Y)



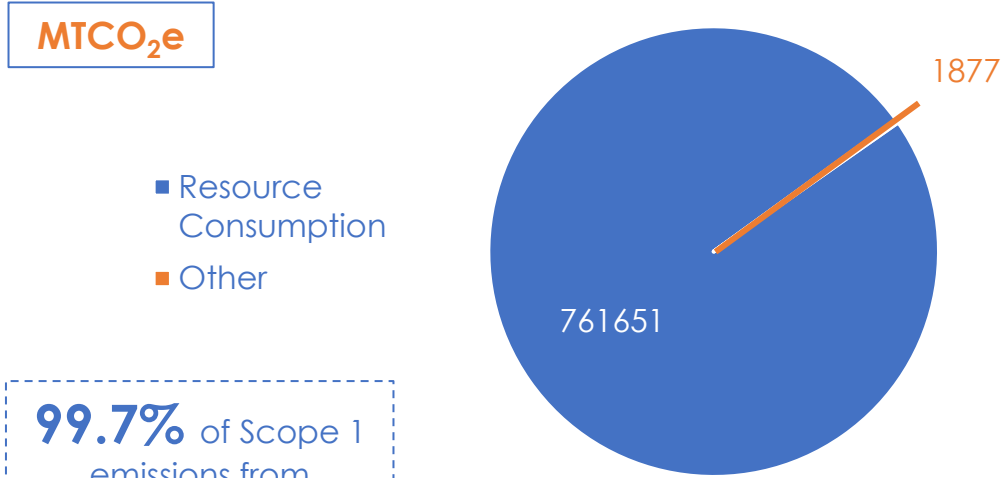
Emission Breakdown FY 24



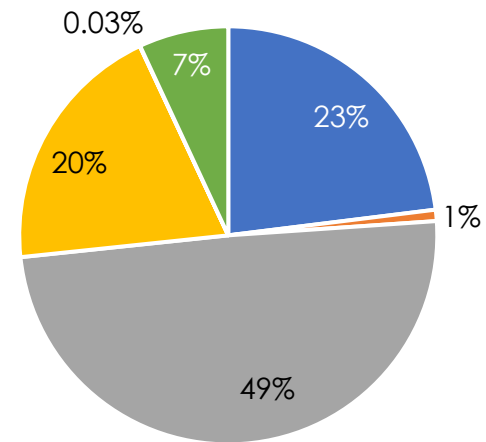
94% of total emissions from **Scope 1**

GHG Assessment (3/3)

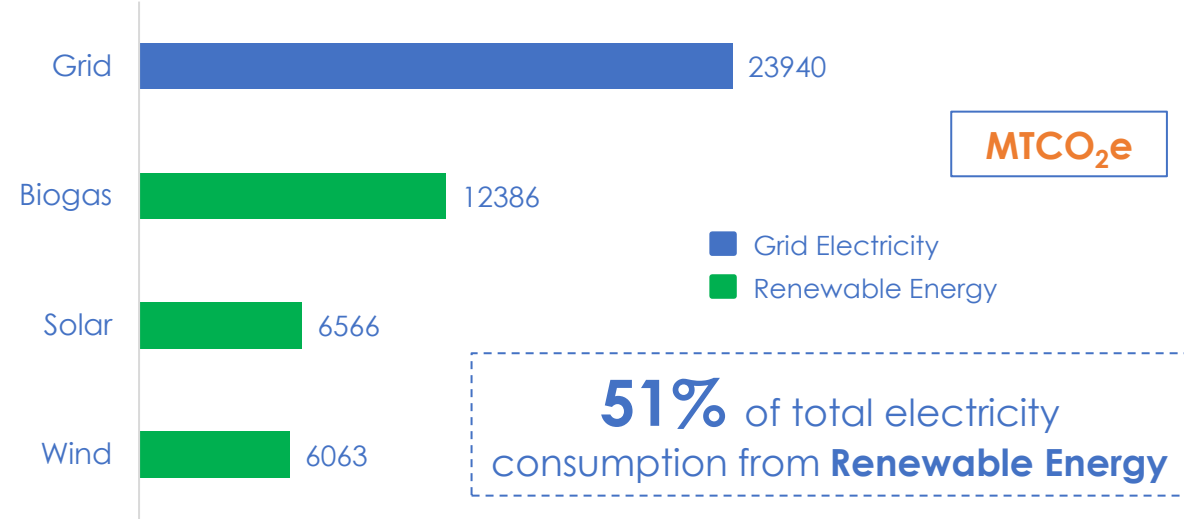
Scope 1 Breakdown (FY 23)



99.7% of Scope 1 emissions from **Captive Powerplant**



Scope 2 Breakdown (FY 23)



51% of total electricity consumption from **Renewable Energy**

Scope 3 Breakdown (FY 23)



98.1% of Scope 3 emissions from **Downstream Transportation**

Energy-Emissions Index (1/2)

Emission Intensity per INR crore of turnover

Particular	GHG Emissions (MTCO ₂ e)		Total Turnover (Crores)		Intensity (MTCO ₂ e/Crore rupee)	
	Activity	FY 2022-23	FY 2023-24	FY 2022-23	FY 2023-24	FY 2022-23
Scope 1	6,71,895	7,63,528	4908.99	4926.92	136.87	154.97
Scope 2	24,638	23,940			5.02	4.86
Scope 3	22,532	23447			4.59	4.76
Scope 1+2+3	7,19,065	8,10,915			146.48	164.59

Emission Intensity per ton of production

Particular	GHG Emissions (MTCO ₂ e)		Total Production (MT)		Intensity (MTCO ₂ e/Production)	
	Activity	FY 2022-23	FY 2023-24	FY 2022-23	FY 2023-24	FY 2022-23
Scope 1	6,71,895	7,63,528	1056595	1225168	0.63	0.62
Scope 2	24,638	23,940			0.02	0.02
Scope 3	22,532	23447			0.02	0.02
Scope 1+2+3	7,19,065	8,10,915			0.68	0.66

Energy-Emissions Index (2/2)

Energy Consumption

Particular	Total Consumption (MWh)		Total Consumption (GJ)	
	Activity	FY 2022-23	FY 2023-24	FY 2022-23
Electricity from renewable sources (kWh)	38.52	34.94	138.90	125.78
Electricity from non-renewable sources (kWh)	34.70	33.44	124.93	120.37
*Total fuel from non-renewable sources	2273128.87	2577679.22	8144784.45	9565397.11

* Includes fuel consumed such as Coal, Biomass, LPG, Diesel, Petrol & Fuel Oils

Initiatives In-Place

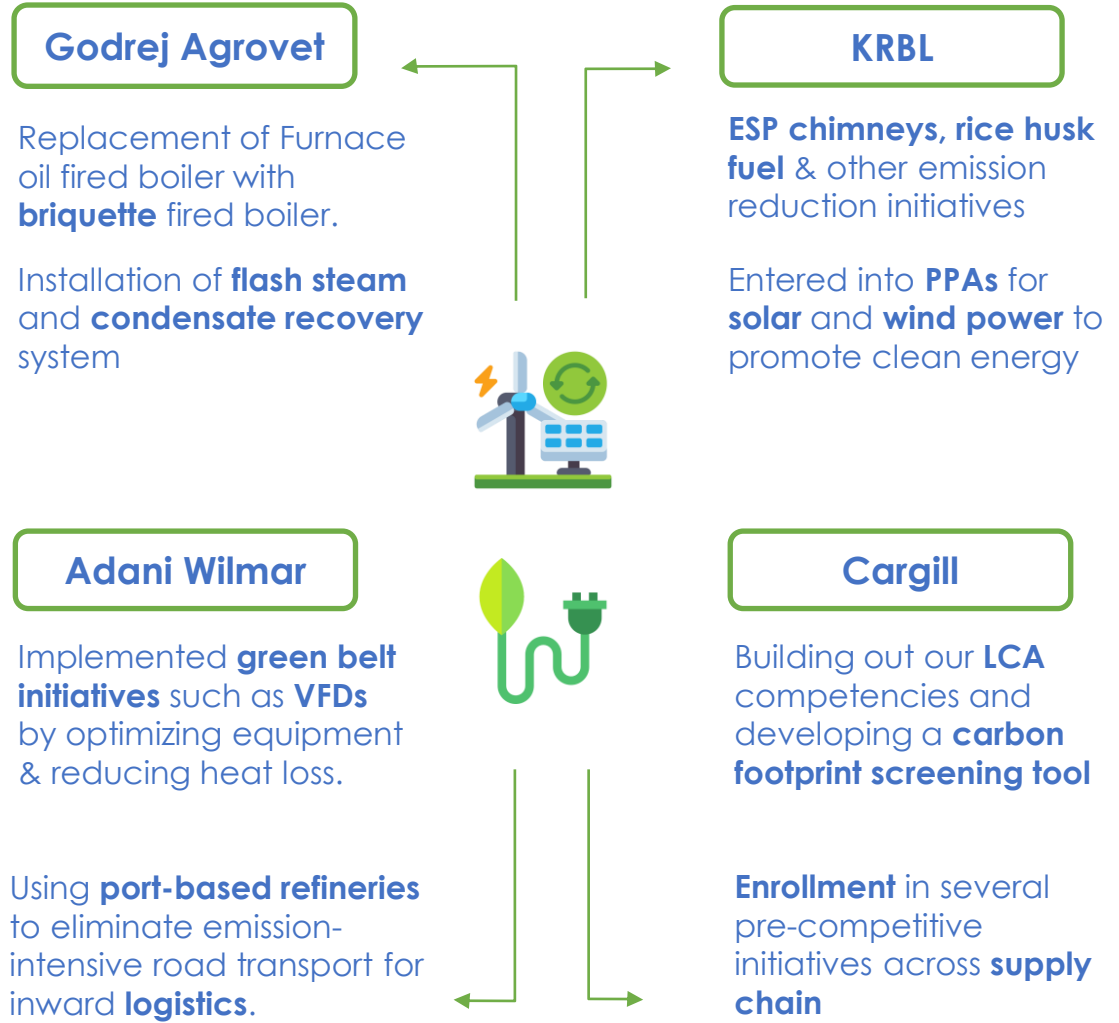
Sr. No.	Topic	Initiatives
1	Alternative fuel sources	The organization generates solid waste such as ETP sludge, spent earth, soya danthal, mitti dust from soya seeds , and coal ash from the boiler .
2		Increase in the use of biogas engines, biomass boilers , and other energy-efficient technologies.
3		Usage of by-products like soya danthal, maize cobs , and dust as boiler fuel to reduce carbon emissions.
4	Machine upgradation	Upgraded existing machinery and other energy-saving equipment, and is transitioning to renewables in a phased manner.

Peer Highlights



Targets

	37% overall reduction and 16% in Scope 3 by 2035 as per SBTi .
	Reach4Reduction & SBTi initiative to reduce Scope 1 & 2 emissions by 10% by 2025 and Scope 3 emissions by 30% by 2030.
	Ensuring 99% of packaging materials are recyclable by FY26 to become Net Zero



Summary

8,10,915 MTCO₂e is equivalent to about:



6,011 Flights from Delhi to New York



23,123 Trains from Kashmir to Kanyakumari



3,24,36,618 Trees per year



6,99,06,504 Cubic feet of concrete

Phase-by-Phase Transition

Phase I

Scope 1&2
Computation



GHG Training

Phase II

Scope 1&2
Computation



Scope 3 Inclusion
+ CDP Report

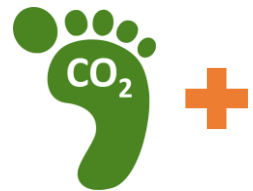
Phase III

Scope 1,2,3
Computation



Sustainability
Disclosures

Assessment Summary



BRSR



Company's Footprint

Reporting

Next Steps



GREENHOUSE
GAS PROTOCOL

Inclusion of Additional
Scope 3 categories



SCIENCE
BASED
TARGETS

Setting & monitoring of
baseline targets



BRSR GRI



Enhancement
of Reports

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