GHG Assessment FY 2022-23

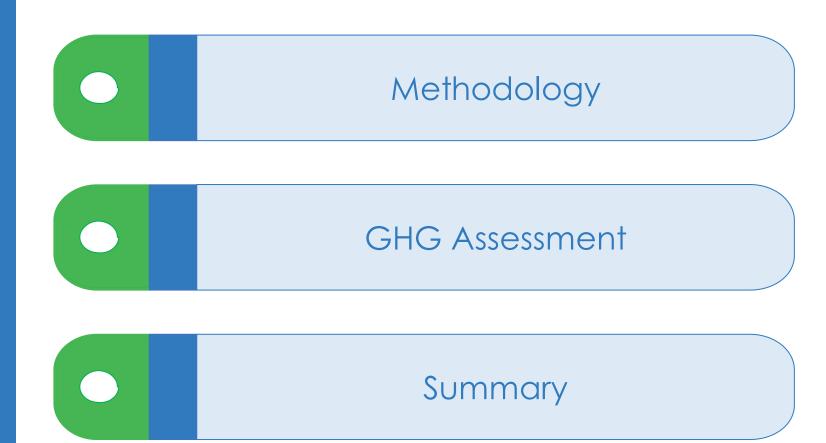














Methodology

Scope & Plan Inventory

Data Collection GHG Inventorization Summarization & Reporting



- Plan out an extensive GHG inventorization plan
- Outline the extent of the organization's responsibility for GHG accounting



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



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



- Finalize data & analyze it with year-on-year GHG reduction
- Report data as needed



Reference Frameworks - GHG Assessment











United States Environmental Protection Agency

Scope 1

GHG Protocol, India GHG Program (2013, 2015), Sector specific guidelines if applicable

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

Scope 2

Emission factors (EF) as per IPCC country-specific recommendations and EEIO guidelines

Scope 3

GHG Protocol, India GHG Program (2013, 2015), Sector specific guidelines if applicable



Data Workflow

Boundary Setting with the team involved for GHG data

Review of process of data collection

Review of quality & consistency of the data

The **filled-in templates**were checked for
correctness and
consistency. Gaps (if any)
were discussed with the
relevant team.



Data Validation



Data Templates preparation for individual units



Data collection by GAEL

Data Summarization

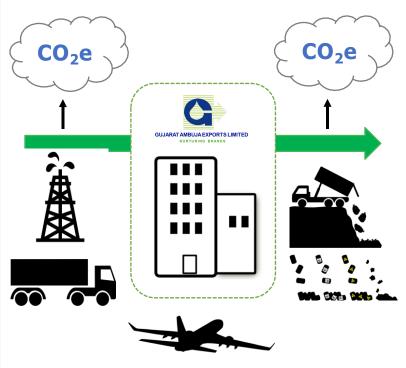
 Templates circulated to the teams



GHG Emissions | Scope of Assessment

Scope 1 Emissions: Directly released into air (eg., CO₂e 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 CO₂e NURTURING BRANDS **Captive Power Plant** THERMAL POWER PLANT

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



Not owned/controlled by GAEL, but indirectly responsible

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



GHG Assessment (1/3)

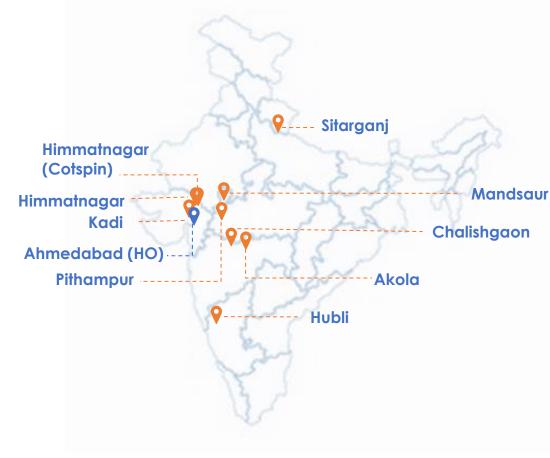
Emission Summary

Summary	FY 2021-22 (TCO2e)	FY 2022-23 (TCO2e)
Scope 1	4,48,619	6,71,895
Scope 2	37,217	24,638
Scope 3	15,552	22,532
Total	5,01,388	7,19,065

Emission Savings

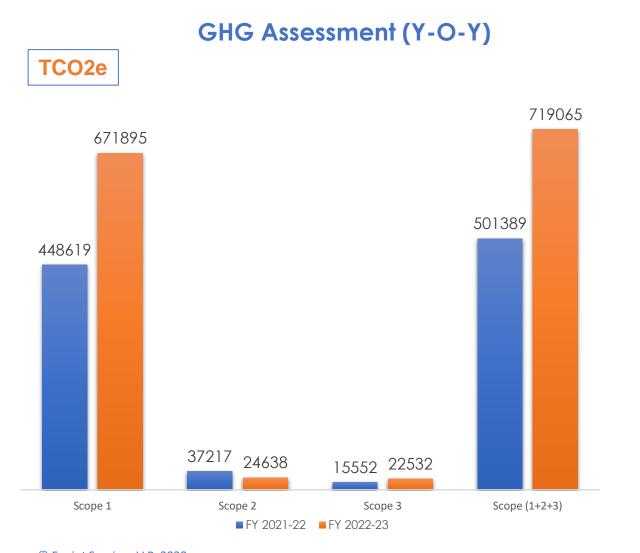
Renewable Energy	FY 2021-22 (TCO2e)	FY 2022-23 (TCO2e)
Solar	1,656	5,735
Wind	2,366	6,572
Biogas	-	15,088
Total	4,022	27,395

GHG Accounting for 9 plants and 1 Corp. office PAN India.

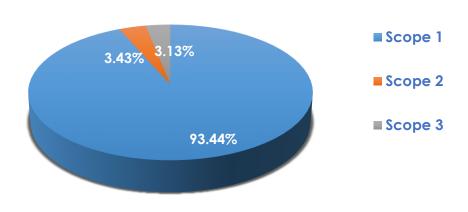




GHG Assessment (2/3)



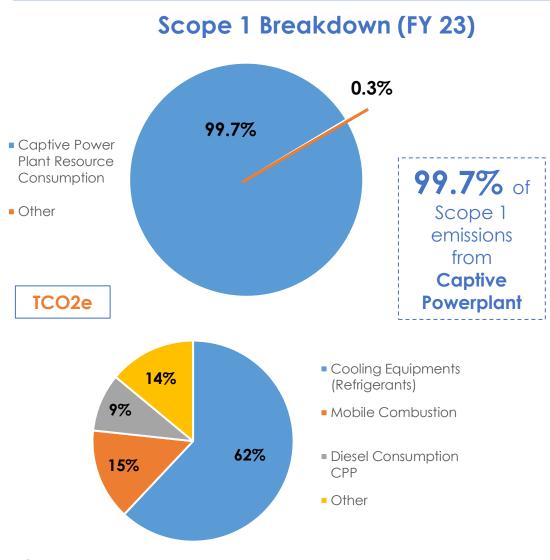
Percentage Breakdown FY 23

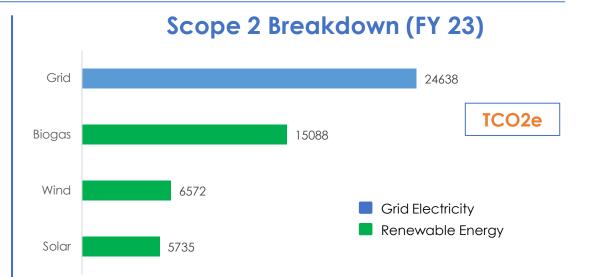


93% of emissions from Scope 1



GHG Assessment (3/3)





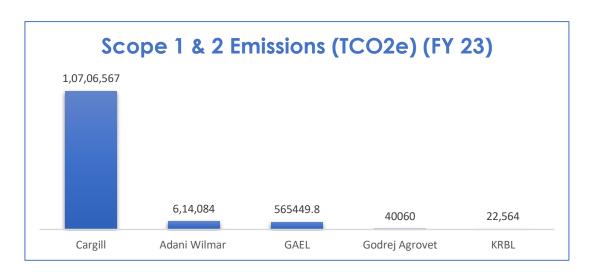
Scope 3 Breakdown (FY 23)





Peer Highlights





Godrej Agrovet

73% energy utilization from clean renewable sources

Adani Wilmar

Deployed **green energy** to draw renewable power from the Adani group

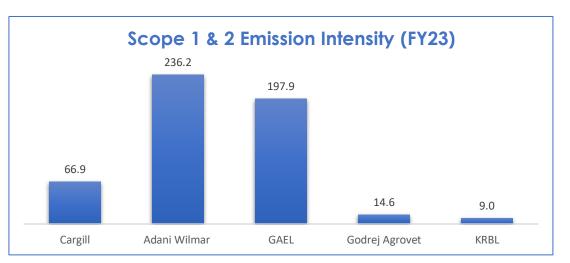


KRBL

144.84 MW renewable energy capacity across vertices

Cargill

Absolute operational GHG emissions reduced by 10.97% in 2022





Summary

7,19,065 TCO2e is equivalent to about:



5,330 Flights from Delhi to New York



20,504 Trains from Kashmir to Kanyakumari

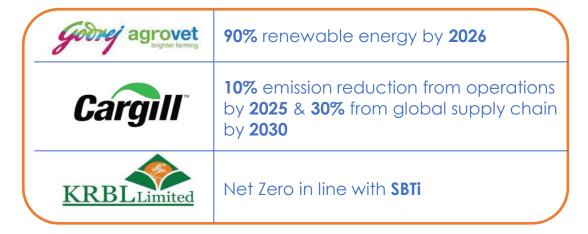


2,87,62,616 trees per year



6,19,88,396 Cubic feet of concrete

Peer targets



Assessment Summary



Next Steps



Enhancements of Reports



Disclaimer

The material in this presentation has been prepared by Envint Services LLP and is intended as general background information about Envint and of the recipient(s), if any as on the date of this presentation. This information is given in summary form and may not be complete. Envint endeavours to keep information accurate and timely, though it does not guarantee accuracy of information as on date or in the future.