Carbon Crunch Emission Analysis Report

1. Introduction

This report presents a comprehensive analysis of greenhouse gas (GHG) emissions across various facilities and scopes, as visualized in the Carbon Crunch dashboard. The aim is to identify major contributors and recommend strategies for emission reduction based on observed patterns.

2. Key Findings from Dashboard

Total Emissions (tons): 491.63K

GHG Type-wise Emissions:

GHG Type	Emissions (tons)
CH ₄	174.1K (35.43%)
CO ₂	142.8K (29.05%)
N_2O	174.6K (35.52%)

Top Emitting Facilities (CO₂ focused):

- Adani Green
- Tata Steel
- JSW Energy
- Reliance Industries
- L&T

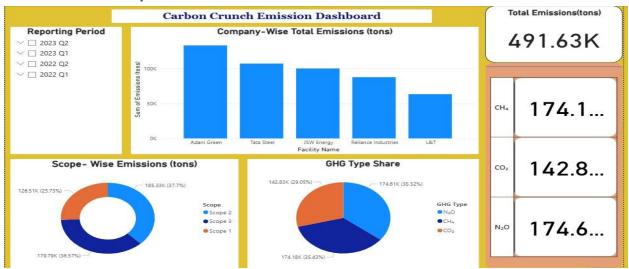
Scope-wise Emissions:

Scope	Emissions (tons)	Share
Scope 1	179.79K	36.57%
Scope 2	185.33K	37.7%
Scope 3	126.51K	25.73%

3. Strategic Recommendations

- Prioritize Scope 2 emission reduction by adopting renewable energy sources.
- Address CH₄ and N₂O emissions through advanced monitoring and control technologies.
- Encourage energy efficiency and process optimization in top emitting facilities.
- Promote transparency in emissions reporting and supplier engagement for Scope 3 control.
- Implement continuous tracking and auditing of emissions with digital tools.

4. Dashboard Snapshot



5. Conclusion

The Carbon Crunch analysis highlights the significant share of CH_4 and N_2O emissions, emphasizing the need for targeted mitigation efforts. Strategic interventions across highemitting scopes and facilities can result in substantial environmental benefits.