National Autoplast

No: A 28, SIPCOT Industrial Growth Centre, Oragadam, Sriperumpudur Taluk,
Kancheepuram District – 602105. Tamilnadu, India.

GHG EMISSION REPORT

Form No : NAP/ESG/690

Issue No : 01

Rev No : 00

Date : 14th April, 2025

NATIONAL AUTOPLAST ORAGADAM 602 105

Prepared By: Mr.S.Narayanan
Designation: DGM HR

Approved By: Mr.N.Venkatesan
Designation: VP Operations

1. Executive Summary

Overview of Organization and Reporting Period

NAP India is a manufacturer of plastic injection moulded components and assemblies, serving automotive and industrial customers. The organization integrates Environmental, Social, and Governance (ESG) principles into its operations. This GHG Emission Report has been prepared in accordance with ISO 14064-1:2018 and the GHG Protocol for the reporting period **1 April 2024 to 31 March 2025**.

Key Emission Results

- **Scope 1 emissions:** 17.39 tCO_2e
- **Scope 2 emissions:** 1,935.00 tCO_2e
- **Scope 3 emissions:** 105,029.40 tCO_2e
  - Upstream Scope 3: 1,891.00 tCO_2e
  - Downstream Scope 3: 103,138.40 tCO_2e
- **Total carbon footprint: 106,981.79 tCO_2e**

Highlights & Reduction Achievements

- Identification of Scope 3 emissions as the dominant footprint driver, mainly from downstream product use and end-of-life.
- Ongoing initiatives in energy-efficient injection moulding machines and process optimization.
- Improved data transparency to support future reduction planning and customer disclosures.

2. Introduction

Purpose of the Report

The purpose of this report is to quantify, document, and disclose NAP India's greenhouse gas (GHG) emissions in a transparent and consistent manner.

Intended Users

- Customers and OEMs
- Management and internal stakeholders
- ESG rating agencies and auditors

Reporting Objectives

- Voluntary sustainability disclosure
- Customer and supply-chain reporting requirements
- Alignment with international GHG standards

3. Organization Description

Company Profile

NAP India manufactures plastic injection moulded components and assemblies using thermoplastic polymers, operating injection moulding machines, auxiliary equipment, and assembly lines.

Organizational Structure

The organization operates under centralized management with functional departments including Production, Quality, Maintenance, EHS, and Supply Chain.

Operations, Facilities, and Boundaries

- Manufacturing plant(s) in India
- Utilities include electricity, DG sets, compressors, and HVAC systems

4. Reporting Boundary

Organizational Boundary

NAP India has adopted the Operational Control approach, accounting for 100% of emissions from operations under its control.

Operational Boundary

Emissions are categorized as:

- Scope 1: Direct emissions
- Scope 2: Indirect energy emissions
- Scope 3: Other indirect emissions

Entities and Locations Covered

All manufacturing and administrative facilities operated by NAP India during the reporting period.

5. Reporting Period

- Start date: 1 April 2024
- End date: 31 March 2025
- Frequency of reporting: Annual

6. GHG Accounting Methodology

Standards Followed

- ISO 14064-1:2018
- GHG Protocol – Corporate Accounting and Reporting Standard

Calculation Approach

GHG emissions were calculated using the formula:

Emissions = Activity Data × Emission Factor

Tools or Software Used

- MS Excel–based calculation sheets
- Internal energy and material consumption records

7. Emission Sources Identification

Direct and Indirect Sources

- Fuel combustion in DG sets
- Purchased electricity
- Raw material production
- Transportation and logistics
- Product use and end-of-life

Scope Categorization

Each emission source has been mapped to the appropriate GHG scope as per the GHG Protocol.

8. GHG Scope Classification

8.1 Scope 1 – Direct Emissions

- Stationary combustion: Diesel used in DG sets
- Mobile combustion: Company-owned vehicles (assumed minimal)
- Fugitive emissions: Refrigerant leakage from HVAC systems (assumed where applicable)
- Process emissions: Not applicable

Total Scope 1: 17.39 tCO_2e

8.2 Scope 2 – Indirect Energy Emissions

- Purchased electricity from the Indian grid

Total Scope 2: 1,935.00 tCO_2e

8.3 Scope 3 – Other Indirect Emissions

Upstream:

- Purchased raw materials (plastic granules)
- Inbound transportation
- Waste disposal

Downstream:

- Distribution of finished products
- Use of sold products (where applicable)
- End-of-life treatment of sold products

Total Scope 3: 105,029.40 tCO_2e

9. GHG Data Collection & Quality

Data Sources & Collection Method

- Electricity bills
- Fuel purchase invoices
- Production and dispatch records
- Industry-average datasets for downstream emissions

Accuracy, Completeness, and Reliability

Best available primary data was used. Where data gaps existed, conservative assumptions and secondary data were applied.

Data Management & Controls

Data is reviewed internally by EHS and Finance teams prior to consolidation.

10. Emission Factors

Sources

- IPCC Guidelines
- GHG Protocol emission factor database
- India Grid Emission Factor (CEA / MoEFCC)
- DEFRA (for logistics and waste)

Units and Justification

Emission factors are applied in kg CO_2e per unit of activity (kWh, litre, kg, ton-km) to ensure consistency.

11. Calculation Results

11.1 Total GHG Emissions (GHG Emission Reporting Frequency: Annually)

Scope	Emissions (tCO_2e)
Scope 1	17.39
Scope 2	1,935.00
Scope 3 – Upstream	1,891.00 tCO_2e
Scope 3 – Downstream	103,138.40 tCO_2e
Scope 3	105,029.40
Total	106,981.79

Gas-wise breakup (Scope 1):

- CO_2: Majority
- CH_4 & N_2O: Minor contributions from diesel combustion

11.2 Emission Breakdown by Source

- Electricity consumption – Major contributor in Scope 2
- Downstream product use and end-of-life – Largest overall contributor
- Raw material production – Key upstream source

11.3 Emission Intensity Indicators (assumed)

- tCO_2e per employee
- tCO_2e per ton of plastic processed

12. Base Year & Trend Analysis

Base Year Selection

FY 2024–25 is selected as the base year, as this is the first year with comprehensive GHG accounting.

Historical Comparison

Not applicable for first-year reporting.

Adjustments

Future recalculations will be performed if significant organizational changes occur.

13. Uncertainty Assessment

Sources of Uncertainty

- Secondary emission factors
- Estimated downstream emissions

Method Used

Qualitative assessment based on data source reliability.

Confidence Level

Medium to high for Scope 1 and 2; medium for Scope 3.

14. Data Quality Assessment

- Activity data: High (Scope 1 & 2), Medium (Scope 3)
- Emission factors: Medium to High
- Internal cross-checks and plausibility checks performed

15. GHG Reduction Initiatives

- Adoption of energy-efficient injection moulding machines
- Preventive maintenance to reduce energy losses
- Optimization of logistics and packaging
- Supplier engagement for lower-carbon raw materials

16. Conclusions

NAP India's GHG inventory indicates that Scope 3 emissions dominate its carbon footprint. While operational emissions are relatively low, significant opportunities exist through product design, material selection, and customer collaboration.

Plan for Next Reporting Period

- Improve Scope 3 data granularity
- Set science-aligned reduction targets
- Evaluate renewable electricity options

17. Appendices

- Detailed activity data tables
- Sample calculation sheets
- Emission factor references
- Definitions and abbreviations

Reference Standards

- ISO 14064-1:2018
- GHG Protocol – Corporate Accounting and Reporting Standard
- IPCC Guidelines