

ecojuute™

ECO JUTE PVT. LTD.

# GHG REPORT

## Greenhouse Gas Emissions

CY 2023 | CY 2024 | CY 2025 | CY 2026 (till June)

**REPORTING ENTITY**
Eco Jute Private Limited
Gokna Facility, Baduria, North 24 Parganas
West Bengal, India

**STANDARDS & GUIDANCE**
ISO 14064-1:2018
GHG Protocol Corporate Standard
Scope 2 Guidance · Scope 3 Standard

**REPORTING PERIODS**
CY 2023 · CY 2024 · CY 2025
CY 2026 (1 January – 30 June)
Consolidation: operational control

**REPORT DETAILS**
Scopes 1, 2 and 3
Emissions in tonnes $CO_2e$

# Contents & Report Information

## Contents


| | | |
|---|---|---|
| 1 | Executive Summary | 3 |
| 2 | Company Overview | 4 |
| 3 | Organisational & Operational Boundaries | 5 |
| 4 | Quantification Methodology | 6 |
| 5 | GHG Inventory Summary | 7 |
| 6 | Scope 1 – Direct Emissions | 8 |
| 7 | Scope 2 – Energy Indirect Emissions | 9 |
| 8 | Scope 3 – Other Indirect Emissions | 10 |
| 8.1 | Consumption data | 10 |
| 8.2 | Emissions | 11 |
| 8.3 | Contribution analysis | 12 |
| 9 | Performance Trends & Hotspots | 13 |
| 10 | Conclusion and Intended Use | 14 |


## Report information

| | |
|---|---|
| **Reporting organisation** | Eco Jute Private Limited |
| **Reporting facility** | Gokna Facility – JL No. 60, Village Gokna, Basudevpur, P.O. Jadurhati, P.S. Baduria, PIN 743293, North 24 Parganas, West Bengal, India |
| **Reporting periods** | CY 2023, CY 2024, CY 2025 (January–December) and CY 2026 (1 January – 30 June) |
| **Base year** | CY 2023 (first inventory year) |
| **Standards applied** | ISO 14064-1:2018; GHG Protocol Corporate Accounting and Reporting Standard; GHG Protocol Scope 2 Guidance; GHG Protocol Corporate Value Chain (Scope 3) Standard |
| **Consolidation approach** | Operational control |
| **Reporting unit** | Tonnes of carbon dioxide equivalent ($tCO_2e$) |
| **Website** | www.ecojuteindia.com |

## Understanding the scopes used in this report

### Scope 1 – Direct emissions

Emissions released directly from sources owned or controlled by the facility, such as diesel burned in stationary equipment and in vehicles.

### Scope 2 – Energy indirect emissions

Emissions from the generation of purchased electricity that is consumed by the facility.

### Scope 3 – Other indirect emissions

All other value-chain emissions: purchased goods, transport and distribution, waste, water, business travel, hotel stays and other activities.

# 1. Executive Summary

This report has been prepared to communicate Eco Jute's Gokna Facility greenhouse gas (GHG) emissions performance to internal management, shareholders, customers and other stakeholders. It provides a transparent, data driven account of the Company's emissions across its value chain.

This report presents the greenhouse gas (GHG) inventory of Eco Jute's Gokna Facility for four consecutive calendar years CY 2023, CY 2024, CY 2025 and CY 2026 (till June). It follows the Scope 1, Scope 2 and Scope 3 structure of the GHG Protocol & ISO 14064 and expresses all results in tonnes of carbon dioxide equivalent ($tCO_2e$).

**CY 2023 (base year)**
**8,546.7** $tCO_2e$

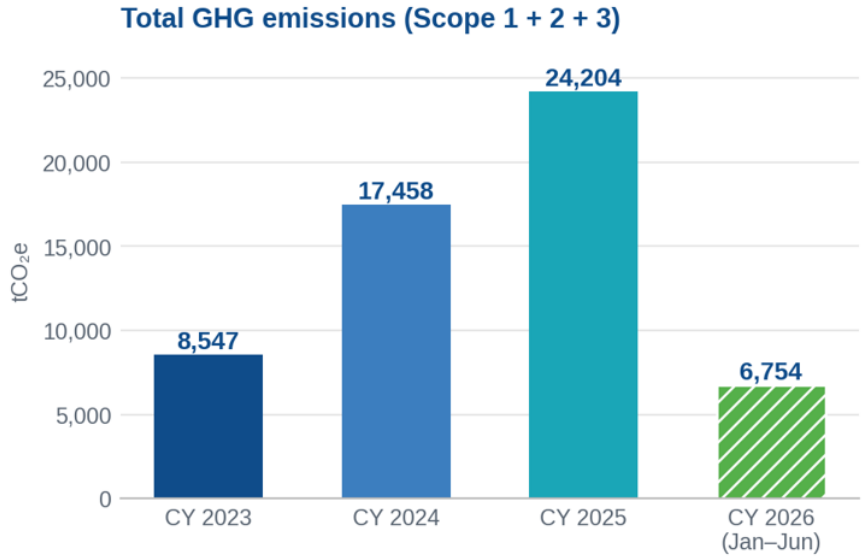
**CY 2024**
**17,458.2** $tCO_2e$

**CY 2025**
**24,203.6** $tCO_2e$

**CY 2026 (Jan–Jun, part-year)**
**6,754.4** $tCO_2e$

## Headline findings

- Gross emissions of the Gokna facility were **8,546.7 $tCO_2e$ (CY 2023)**, **17,458.2 $tCO_2e$ (CY 2024)** and **24,203.6 $tCO_2e$ (CY 2025)**; January–June 2026 stands at **6,754.4 $tCO_2e$**.
- **Scope 3 dominates**, at 97.1%, 98.6%, 99.0% and 98.2% of the total in each period. Purchased goods alone account for 93.1%, 91.8%, 95.5% and 90.7%.
- The rise between CY 2023 and CY 2025 follows the volume of purchased fabric, which grew from 333 to 1,011 tonnes.
- **Scope 1** fell 9.0% (40.1 → 36.5 $tCO_2e$), while **Scope 2** stayed broadly flat (203.6 → 208.6 $tCO_2e$, +2.5%).
- In January–June 2026 the facility generated **82,852 kWh** of renewable electricity, avoiding **58.8 $tCO_2e$**. This is reported separately and is not deducted from Scope 2.
- CY 2026 covers six months only and should not be compared directly with full years.



# 2. Company Overview

## 2.1 About the company

Eco Jute Private Limited is an Indian manufacturer and exporter of eco-friendly, reusable and biodegradable products made primarily from natural fibres such as jute and cotton. Drawing on roughly 75 years of experience in the jute industry, the company was established in 1998 to diversify into international markets. It supplies supermarkets, retail chains, importers, stockists and wholesalers in North America, the United Kingdom, Australia and the Middle East.

## 2.2 Products and services

The portfolio covers jute shopping, grocery, promotional, gift, wine and beach bags; cotton and canvas bags; Juco bags (75% jute, 25% cotton); hessian, burlap and jute sacks; and other made-ups such as cushion covers and aprons. Made-to-order manufacturing, an in-house design team and digital printing support customised products for each buyer.

## 2.3 Manufacturing operations

Production is organised as an integrated set-up in which fabric preparation, lamination, cutting, printing, stitching, finishing and packing take place within one facility, supported by a dedicated Quality Assurance and Control team that checks dimensions, colours, prints and stitching against customer specifications.

## 2.4 Certifications and sustainability

The company reports ISO 9001:2015 and ISO 14001:2015 certification, SMETA 4-Pillar recognition, and GOTS and Fairtrade-related credentials (GRS is also referenced in its product profile). Its products offer reusable alternatives to conventional plastic bags.

### AT A GLANCE

**Established**
**1998 (75+ years in the jute industry)**

**Industry**
**Jute and textile products manufacturing**

**Business model**
**Manufacturing and export (B2B)**

**Main materials**
**Jute, cotton, canvas and Juco**

**Primary markets**
**North America, UK, Australia, Middle East**

**Certifications reported**
**ISO 9001:2015, ISO 14001:2015, SMETA 4-Pillar, GOTS, Fairtrade**

**Assessment site**
**Gokna Facility, Baduria, North 24 Parganas, West Bengal – PIN 743293**

## Manufacturing process flow :

| 01 | 02 | 03 | 04 | 05 | 06 | 07 |
|---|---|---|---|---|---|---|
| Raw material procurement | Fabric preparation & lamination | Fabric cutting | Printing & branding | Stitching & assembly | Finishing & quality inspection | Packing & dispatch |

# 3. Organisational & Operational Boundaries

## 3.1 Organisational boundary

This inventory covers the operations of Eco Jute Private Limited at its Gokna Facility (Baduria, North 24 Parganas, West Bengal), which is the sole reporting site. Emissions are consolidated using the operational control approach: all emissions from sources the facility operates and controls are accounted for in full. The corporate contact office in Kolkata and any other offices, warehouses or facilities lie outside the boundary, so the results must not be read as the consolidated footprint of Eco Jute Private Limited.

## 3.2 Reporting period and base year

- **Full calendar years:** CY 2023, CY 2024 and CY 2025 (1 January – 31 December).
- **Partial year:** CY 2026 covers 1 January – 30 June 2026 only (six months) and is not directly comparable with full-year figures.
- **Base year:** CY 2023, the earliest period in this inventory, is adopted as the base year for tracking future change.

## 3.3 Operational boundary and categories

| Scope | Type of emission | Categories reported in this inventory |
|---|---|---|
| Scope 1 | Direct emissions from sources owned or controlled by the facility | Stationary Combustion (diesel); Mobile Combustion (diesel, large car) |
| Scope 2 | Indirect emissions from purchased energy | Purchased Electricity |
| Scope 3 | Other indirect emissions arising from the facility's value chain | Employee Commute; Food Consumption; Purchased Goods (Chemicals, Clothing); Transmission and Distribution Loss; Upstream Activities; Downstream Activities (cargo ships, freight flights, HGV); Waste Generation; Water Supply; Water Treatment; Business Travel Air; Hotel Stay |

## 3.4 Inclusions and special treatments

- **Employee Commute:** is listed as a category but not quantified: employees live in the same locality or nearby areas and travel on foot or by bicycle, so no motorised commuting activity data exist.
- **Renewable electricity:** generation in CY 2026 and the associated avoided emissions are reported separately in Section 7; they are not deducted from Scope 2 or from the inventory totals.

# 4. Quantification Methodology

## 4.1 Calculation approach

**GHG emissions ($tCO_2e$) = Activity data × Emission factor (kg $CO_2e$ per unit)**

Each source is calculated separately; scope totals are the sum of category results. No offsets, credits or removals are deducted, and results are reported as gross emissions.

## 4.2 ISO 14064-1 reporting principles

| ISO 14064-1 principle | How it is applied |
|---|---|
| **Relevance** | Categories reflect the manufacturing, logistics and purchasing activities of the Gokna site. |
| **Completeness** | All sources with activity data are included. |
| **Consistency** | The same categories, units and method are used in all four periods. |
| **Accuracy** | Activity data are converted with emission factors. |
| **Transparency** | Consumption and emissions are tabulated separately for each scope, with limitations stated. |

## 4.3 Activity data and supporting records

| Data stream | Unit | Supporting records to retain |
|---|---|---|
| Diesel – stationary | litres | Fuel purchase / issue registers |
| Diesel – vehicle | km | Vehicle logbooks |
| Purchased electricity | kWh | Utility bills, meter readings |
| Purchased goods | kg / tonnes | Purchase invoices, receipts |
| Transport and freight | km | Transport and shipping documents |
| Waste | kg / tonnes | Disposal and collection records |
| Water supply / treatment | $m^3$ | Water bills, meter readings |
| Business travel, hotel | km / nights | Travel and hotel bookings |
| Food (beverages) | litres | Canteen / purchase records |

## 4.4 Emission factors

The emission factor for calculating emissions from electricity consumption is sourced from the Central Electricity Authority (CEA), India. The emission factors for all other applicable Scope 1 and Scope 3 subcategories are sourced from the respective DEFRA emission factor datasets, using category-specific factors appropriate to the reported activities.

# 5. GHG Inventory Summary

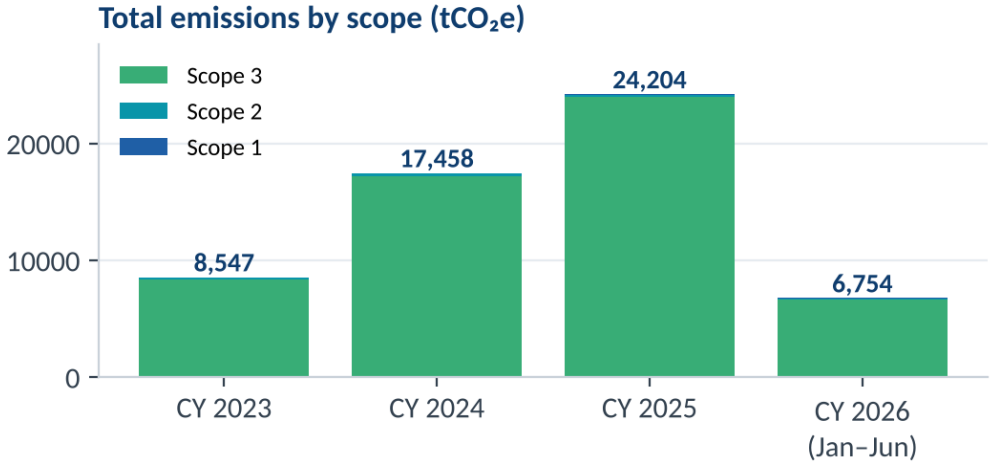
**CY 2023**
**8,546.65** $tCO_2e$
Scope 3 share: 97.1%

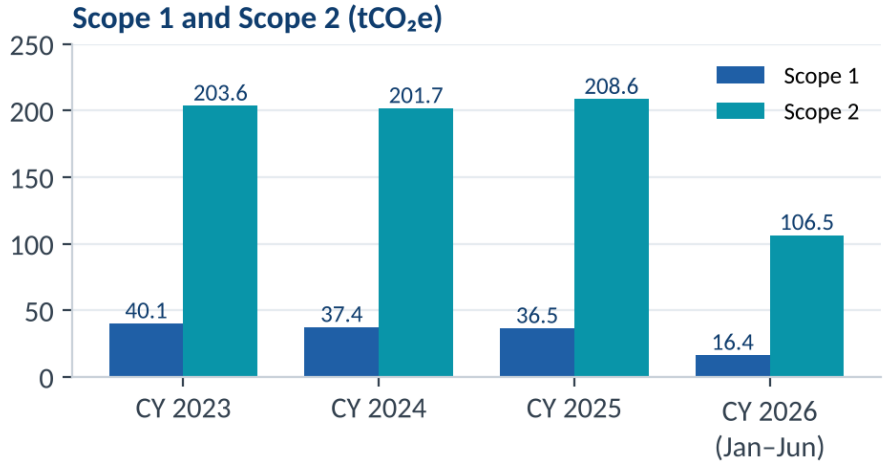
**CY 2024**
**17,458.17** $tCO_2e$
Scope 3 share: 98.6%

**CY 2025**
**24,203.56** $tCO_2e$
Scope 3 share: 99.0%

**CY 2026 (JAN–JUN)**
**6,754.40** $tCO_2e$
Scope 3 share: 98.2%

| Emissions ($tCO_2e$) | CY 2023 | CY 2024 | CY 2025 | CY 2026 (Jan–Jun) |
|---|---|---|---|---|
| Scope 1 – Direct | 40.13 | 37.41 | 36.53 | 16.42 |
| Scope 2 – Energy indirect | 203.56 | 201.74 | 208.56 | 106.49 |
| Scope 3 – Other indirect | 8,302.96 | 17,219.02 | 23,958.47 | 6,631.49 |
| **Total gross emissions** | **8,546.65** | **17,458.17** | **24,203.56** | **6,754.40** |




**Key message** Scope 3 accounts for 97.1% to 99.0% of the inventory in every period. Combined Scope 1 and 2 emissions stayed close to 240 $tCO_2e$ a year (CY 2023: 243.69; CY 2025: 245.09), so the rise in total emissions between CY 2023 and CY 2025 comes from purchased materials and logistics rather than from the facility's own energy use. CY 2026 covers January–June only.

# 6. Scope 1 – Direct GHG Emissions

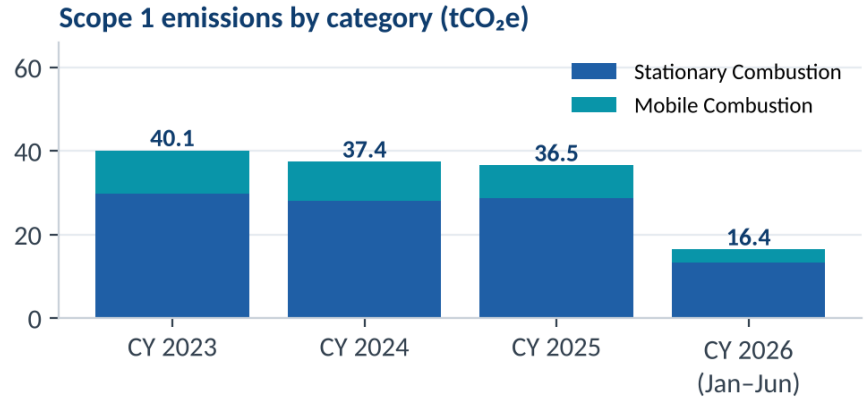
Scope 1 covers direct emissions from sources owned or controlled by the facility: diesel used in DG Set (Stationary Combustion) and diesel used by cars operated by the facility (Mobile Combustion).

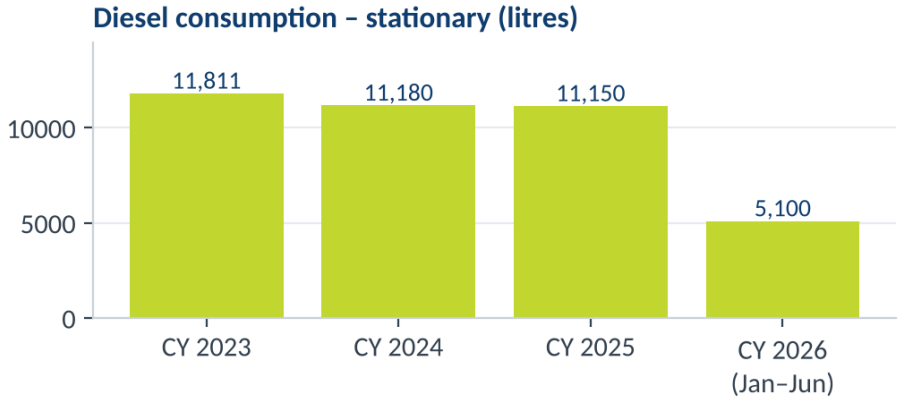
## 6.1 Consumption

| Sr. No. | Category | Sub-category / details | Unit | CY 2023 | CY 2024 | CY 2025 | CY 2026 (Jan–Jun) |
|---|---|---|---|---|---|---|---|
| 1 | Stationary Combustion | Liquid fuels - Diesel (average biofuel blend) | litres | 11,810.73 | 11,180 | 11,150 | 5,100 |
| 2 | Mobile Combustion | Diesel- Large Car | km | 50,250 | 44,940 | 37,450 | 15,500 |

## 6.2 Emissions

| Sr. No. | Category | Sub-category / details | CY 2023 ($tCO_2e$) | CY 2024 ($tCO_2e$) | CY 2025 ($tCO_2e$) | CY 2026 (Jan–Jun) ($tCO_2e$) |
|---|---|---|---|---|---|---|
| 1 | Stationary Combustion | Liquid fuels - Diesel (average biofuel blend) | 29.64 | 28.09 | 28.66 | 13.18 |
| 2 | Mobile Combustion | Diesel- Large Car | 10.48 | 9.32 | 7.87 | 3.24 |
| **Total Scope 1 emissions** | | | **40.13** | **37.41** | **36.53** | **16.42** |




**Observation** Scope 1 emissions fell from 40.13 $tCO_2e$ in CY 2023 to 36.53 $tCO_2e$ in CY 2025 (−9.0%), driven by lower vehicle travel (50,250 km to 37,450 km, −25%). Stationary diesel remained broadly steady and made up about 78% of Scope 1 in CY 2025. January–June 2026 emissions were 16.42 $tCO_2e$.

# 7. Scope 2 – Energy Indirect GHG Emissions

Scope 2 comprises indirect emissions from purchased grid electricity used by the facility for manufacturing machinery, printing, stitching, lighting and other operations and are calculated using the location-based method with appropriate emission factor sourced from CEA ( Central Electricity Authority of India ).

## 7.1 Consumption

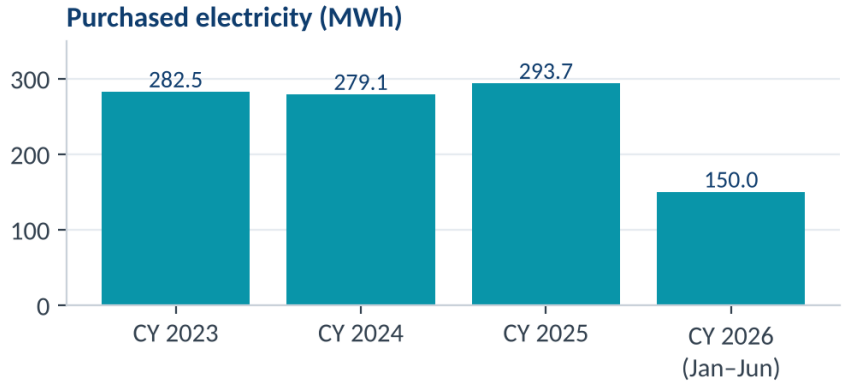
| Sr. No. | Category | Sub-category / details | Unit | CY 2023 | CY 2024 | CY 2025 | CY 2026 (Jan–Jun) |
|---|---|---|---|---|---|---|---|
| 3 | Purchased Electricity | – | kWh | 282,506 | 279,149 | 293,749 | 149,991 |

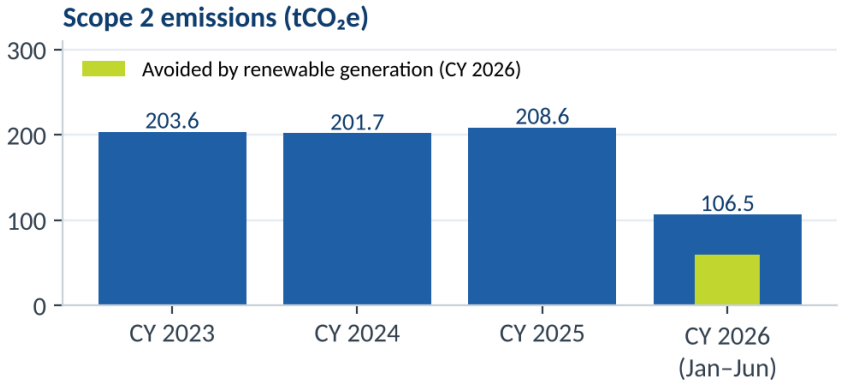
## 7.2 Emissions

| Sr. No. | Category | Sub-category / details | CY 2023 ($tCO_2e$) | CY 2024 ($tCO_2e$) | CY 2025 ($tCO_2e$) | CY 2026 (Jan–Jun) ($tCO_2e$) |
|---|---|---|---|---|---|---|
| 3 | Purchased Electricity | – | 203.56 | 201.74 | 208.56 | 106.49 |

## 7.3 Renewable electricity – avoided emissions (reported separately)

| Sr. No. | Renewable electricity – avoided emissions | Unit | CY 2023 | CY 2024 | CY 2025 | CY 2026 (Jan–Jun) |
|---|---|---|---|---|---|---|
| 1 | Renewable electricity generation | kWh | – | – | – | 82,852 |
| | Avoided emissions | $tCO_2e$ | – | – | – | 58.82 |




**Observation** Purchased electricity was steady at 279,149–293,749 kWh a year; CY 2025 consumption was 5.2% above CY 2024. In January–June 2026 the facility generated 82,852 kWh of renewable electricity, avoiding an estimated 58.82 $tCO_2e$ – about 55% of the 106.49 $tCO_2e$ of Scope 2 emissions in the same period. This is shown for information and is not deducted from Scope 2.

# 8. Scope 3 – Other Indirect GHG Emissions

Scope 3 emissions comprise other indirect emissions across the organisation's value chain, including upstream and downstream activities, purchased goods, food consumption, waste generation, business travel, employee commuting, etc. as applicable.

## 8.1 Consumption (activity data)

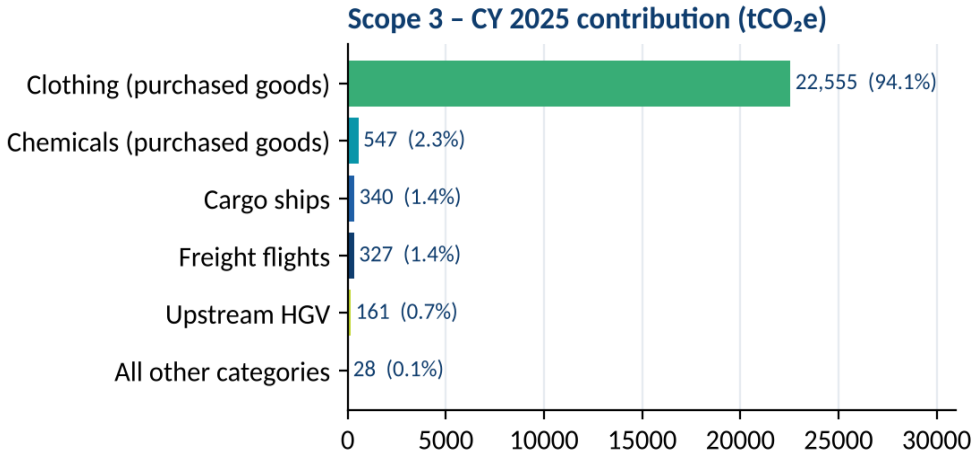
| Sr. No. | Category | Sub-category / details | Unit | CY 2023 | CY 2024 | CY 2025 | CY 2026 (Jan–Jun) |
|---|---|---|---|---|---|---|---|
| 4 | Employee Commute | – | km | *Not quantified – employees live locally and commute on foot or by bicycle* | | | |
| 5 | Food Consumption | Non-alcoholic beverage | litres | 28,228 | 30,175.5 | 27,764 | 16,000 |
| 6 | Purchased Goods | Chemicals | kg | 128,854 | 128,992 | 178,905 | 85,347 |
| 7 | Purchased Goods | Clothing | tonnes | 333 | 703 | 1,011 | 263.5 |
| 8 | Transmission and Distribution Loss | – | kWh | 282,506 | 279,149 | 293,749 | 149,991 |
| 9 | Upstream Activities | HGV-All Diesel | km | 29,280 | 238,390 | 152,085 | 117,310 |
| 10 | Downstream Activities | Cargo ships | km | 2,926,500 | 3,351,900 | 3,809,100 | 964,400 |
| 11 | Downstream Activities | Freight -Flights | km | 81,100 | 452,100 | 680,200 | 117,700 |
| 12 | Downstream Activities | HGV-All Diesel | km | 18,880 | 24,025 | 28,705 | 6,925 |
| 13 | Waste Generation | Refuse - Organic Waste , Refuse - MEE Sludge – Spent Calcium Chloride Liquid | kg | 59,446.94 | 84,332.82 | 75,540 | 29,194 |
| 14 | Waste Generation | Paper , Plastic and Electric items | tonnes | 0.164 | 0.195 | 0.231 | 0.084 |
| 15 | Water Supply | – | cubic metres | 2,126 | 1,068 | 966 | 427 |
| 16 | Water Treatment | – | cubic metres | 1,381 | 677 | 580 | 258 |
| 17 | Business Travel Air | Domestic and International Flights | km | 92,422 | 56,710 | 50,440 | 36,030 |
| 18 | Hotel Stay | – | No. of Nights per Room | 24 | 17 | 15 | 10 |

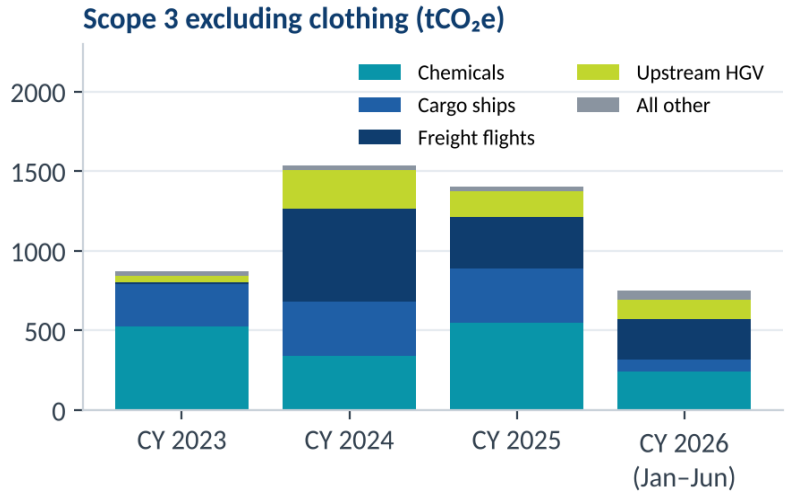
# 8.2 Scope 3 – Emissions

| Sr. No. | Category | Sub-category / details | CY 2023 ($tCO_2e$) | CY 2024 ($tCO_2e$) | CY 2025 ($tCO_2e$) | CY 2026 (Jan–Jun) ($tCO_2e$) |
|---|---|---|---|---|---|---|
| 4 | Employee Commute | – | *Not quantified – walking / bicycle commuting* | | | |
| 5 | Food Consumption | Non-alcoholic beverage | 5.65 | 6.04 | 5.55 | 3.20 |
| 6 | Purchased Goods | Chemicals | 524.06 | 341.53 | 547.36 | 242.75 |
| 7 | Purchased Goods | Clothing | 7,429.23 | 15,683.93 | 22,555.41 | 5,878.69 |
| 8 | Transmission and Distribution Loss | – | 5.31 | 5.25 | 5.52 | 2.82 |
| 9 | Upstream Activities | HGV-All Diesel | 35.64 | 243.90 | 161.26 | 121.01 |
| 10 | Downstream Activities | Cargo ships | 269.42 | 338.73 | 340.02 | 76.27 |
| 11 | Downstream Activities | Freight -Flights | 11.01 | 581.27 | 326.76 | 254.51 |
| 12 | Downstream Activities | HGV-All Diesel | 6.51 | 8.46 | 8.80 | 46.80 |
| 13 | Waste Generation | Refuse - Organic Waste , Refuse - MEE Sludge – Spent Calcium Chloride Liquid | 0.830 | 0.916 | 0.874 | 0.306 |
| 14 | Waste Generation | Paper , Plastic and Electric items | 0.0035 | 0.0013 | 0.0011 | 0.0004 |
| 15 | Water Supply | – | 0.376 | 0.164 | 0.185 | 0.082 |
| 16 | Water Treatment | – | 0.278 | 0.126 | 0.099 | 0.044 |
| 17 | Business Travel Air | Domestic and International Flights | 14.05 | 8.38 | 6.32 | 4.74 |
| 18 | Hotel Stay | – | 0.588 | 0.322 | 0.316 | 0.264 |
| **Total Scope 3 emissions** | | | **8,302.96** | **17,219.02** | **23,958.47** | **6,631.49** |

**Note:** values are in tonnes of $tCO_2e$. Employee Commute is not quantified (see Section 3.4).

# 8.3 Scope 3 – Contribution Analysis




## Top six Scope 3 sources, CY 2025

| Rank | Category | Sub-category | CY 2025 ($tCO_2e$) | Share of Scope 3 | Cumulative share |
|---|---|---|---|---|---|
| 1 | Purchased Goods | Clothing | 22,555.41 | 94.1% | 94.1% |
| 2 | Purchased Goods | Chemicals | 547.36 | 2.3% | 96.4% |
| 3 | Downstream Activities | Cargo ships | 340.02 | 1.4% | 97.8% |
| 4 | Downstream Activities | Freight -Flights | 326.76 | 1.4% | 99.2% |
| 5 | Upstream Activities | HGV-All Diesel | 161.26 | 0.7% | 99.9% |
| 6 | Downstream Activities | HGV-All Diesel | 8.80 | 0.0% | 99.9% |

**Observations** Purchased Goods – Clothing (textile and fabric inputs) is the dominant source at 22,555 $tCO_2e$, or 94.1% of Scope 3 and 93.2% of the total inventory in CY 2025. Chemicals follow at 547 $tCO_2e$ (2.3%). Transport categories together (upstream HGV, cargo ships, freight flights and downstream HGV) contributed 836.84 $tCO_2e$ (3.5% of Scope 3), while Food, Transmission and Distribution Loss, Waste, Water, Business Travel and Hotel Stay together amounted to about 28 $tCO_2e$ (0.1%).

# 9. Performance Trends & Hotspots




| Indicator | CY 2023 → CY 2024 | CY 2024 → CY 2025 | CY 2023 → CY 2025 |
|---|---|---|---|
| Scope 1 emissions | −6.8% | −2.3% | −9.0% |
| Scope 2 emissions | −0.9% | +3.4% | +2.5% |
| Scope 3 emissions | +107.4% | +39.1% | +188.6% |
| **Total emissions** | **+104.3%** | **+38.6%** | **+183.2%** |
| *Clothing purchased (tonnes)* | +111.1% | +43.8% | +203.6% |

## Emission hotspots

- **Purchased clothing (textile inputs):** tonnes purchased rose from 333 to 703 to 1,011. Because the same factor (22.31 $tCO_2e$ per tonne) is applied in every period, Scope 3 growth follows purchasing volume directly.
- **Freight and logistics:** transport categories peaked in CY 2024 at 1,172 $tCO_2e$ (6.8% of Scope 3) and were 837 $tCO_2e$ in CY 2025; freight-flight activity rose from 81,100 to 680,200 km between CY 2023 and CY 2025.
- **Purchased electricity:** 85% of combined Scope 1 and 2 emissions in CY 2025 (208.56 of 245.09 $tCO_2e$), making it the main lever on the facility's own energy footprint.
- **Reading CY 2026:** January–June emissions equal 27.9% of the CY 2025 total. Scope 1 and 2 are tracking at roughly half of last year's level, while purchased clothing in the period (263.5 tonnes) is 26% of CY 2025 volume. Figures should be re-assessed when the full year is complete.

# 10. Conclusion & Intended Use

## 10.1 Conclusion

Gross emissions of the Gokna Facility were 8,546.65 $tCO_2e$ in CY 2023, 17,458.17 $tCO_2e$ in CY 2024 and 24,203.56 $tCO_2e$ in CY 2025, with 6,754.40 $tCO_2e$ recorded for January–June 2026. Scope 3 makes up 97–99% of the total, led by purchased textile inputs, while Scope 1 and 2 have remained stable at around 240 $tCO_2e$ a year.

## 10.2 Intended Use

The report is intended to support internal management review and voluntary disclosure to customers, business partners, and other relevant stakeholders. The reported figures represent the data available at the time of preparation and may be reviewed and updated in future reporting cycles as measurement practices, data coverage, and applicable emission factors continue to evolve.

## Abbreviations

CY – calendar year · GHG – greenhouse gas · $tCO_2e$ – tonnes of carbon dioxide equivalent · kWh – kilowatt-hour · km – kilometre · HGV – heavy goods vehicle · ISO – International Organization for Standardization ·

## Sign-off

| Prepared by: Sustainability / EHS Team | Reviewed by: | Approved by: |
|---|---|---|
|  |  |  |
| *Maitrayee Mukherjee / Operations Head* | *Maitrayee Mukherjee / Operations Head* | *Siddharth Lohariwal / Manageing Director* |