iTek Packz

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Anjanapura, Kanakapura Road, Bengaluru – 560 062. Karnataka, India.

GHG EMISSION REPORT

Form No : iTek/ESG/190

Issue No : 01

Rev No : 00

Date : 10th April, 2025

iTEK PACKZ
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1. Executive Summary

Overview of Organization and Reporting Period

iTek is an India-based company engaged in printing and service activities related to printing. The organization integrates Environmental, Social, and Governance (ESG) principles into its operations. This Greenhouse Gas (GHG) Emission Report has been prepared in alignment with ISO 14064-1 and the GHG Protocol for the reporting period from **1 April 2024 to 31 March 2025**.

Key Emission Results

The total GHG emissions for the reporting period are **6,512.024 tCO_2e**, categorized as follows:

- **Scope 1:** 3.27 tCO_2e
- **Scope 2:** 618.13 tCO_2e
- **Scope 3:** 5,890.62 tCO_2e
  - Scope 3 – Upstream: 106.24 tCO_2e
  - Scope 3 – Downstream: 5,784.39 tCO_2e

Highlights & Reduction Achievements

- High dependency on grid electricity and downstream value-chain activities identified as key hotspots.
- Initial steps taken toward energy-efficient printing machines and waste segregation.
- ESG-aligned monitoring systems established for structured GHG accounting.

2. Introduction

Purpose of the Report

The purpose of this report is to quantify, document, and transparently disclose iTek's GHG emissions, identify emission hotspots, and support emission reduction planning.

Intended Users

- Internal management and ESG committee
- Customers and business partners
- ESG rating agencies and auditors
- Regulatory and voluntary disclosure platforms

Reporting Objectives

- Voluntary ESG disclosure
- Alignment with ISO 14064-1 and GHG Protocol
- Customer and stakeholder requirements

3. Organization Description

Company Profile

iTek operates printing presses and provides associated printing services, supporting commercial and industrial clients. The company emphasizes quality, compliance, and sustainability.

Organizational Structure

- Top Management
- Operations & Production
- Maintenance & Utilities
- Procurement & Logistics
- ESG & Compliance

Operations, Facilities, and Boundaries

The report covers printing facilities, offices, utilities, and logistics activities under operational control.

4. Reporting Boundary

Organizational Boundary

iTek follows the **Operational Control Approach**, accounting for emissions from activities where it has full operational authority.

Operational Boundary

- **Scope 1:** Direct fuel and refrigerant emissions
- **Scope 2:** Purchased electricity
- **Scope 3:** Upstream and downstream value-chain emissions

Entities and Locations Covered

- Printing facility/facilities in India
- Corporate and administrative offices

5. Reporting Period

- **Start Date:** 1 April 2024
- **End Date:** 31 March 2025
- **Reporting Frequency:** Annual

6. GHG Accounting Methodology

Standards Followed

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

Calculation Approach

GHG emissions are calculated using:

Emissions = Activity Data × Emission Factor

Tools or Software Used

- Internal Excel-based GHG calculation sheets
- Emission factor databases (IPCC, DEFRA, India Grid EF)

7. Emission Sources Identification

Direct and Indirect Sources

- Diesel consumption (DG sets)
- Company-owned vehicles
- Electricity consumption
- Raw material procurement
- Waste generation and disposal
- Logistics and transportation
- Employee commuting and business travel

Mapping of Emission Sources

Emission sources are mapped to production areas, utilities, warehouses, and logistics routes.

Scope Categorization

All identified sources are classified under Scope 1, Scope 2, or Scope 3 as per GHG Protocol.

8. GHG Scope Classification

8.1 Scope 1 – Direct Emissions

- Stationary combustion: DG sets (diesel)
- Mobile combustion: Company vehicles

- Fugitive emissions: Refrigerants from air-conditioning systems
- Process emissions: Not applicable

Total Scope 1 Emissions: 3.27 tCO_2e

8.2 Scope 2 – Indirect Energy Emissions

- Purchased electricity from the Indian grid

Total Scope 2 Emissions: 618.13 tCO_2e

8.3 Scope 3 – Other Indirect Emissions

- Purchased raw materials (paper, inks, consumables)
- Waste disposal (paper waste, ink waste)
- Transportation & logistics (upstream and downstream)
- Employee commuting
- Business travel
- End-of-life of sold products

Total Scope 3 Emissions: 5,890.62 tCO_2e

9. GHG Data Collection & Quality

Data Sources & Collection Method

- Utility bills (electricity, fuel)
- Purchase and logistics records
- HR and travel records
- Waste manifests

Accuracy, Completeness, and Reliability

Best available primary data were used. Where data gaps existed, conservative assumptions aligned with industry norms were applied.

Data Management & Controls

- Centralized ESG data repository
- Management review and cross-verification

10. Emission Factors

Source of Emission Factors

- IPCC Guidelines (2006 & updates)
- DEFRA emission factors
- Central Electricity Authority (India Grid Factor)

Units and Justification

Emission factors are applied in kg CO_2e/unit and converted to tCO_2e for reporting consistency.

11. Calculation Results

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

Scope	Emissions (tCO_2e)
Scope 1	3.27
Scope 2	618.13
Scope 3 Upstream	106.236
Scope 3 Downstream	5784.388
Scope 3	5,890.62
Total	**6,512.024**

Gas-wise breakup (Scope 1):

- CO_2: Major contributor
- CH_4 & N_2O: Minor contributors

11.2 Emission Breakdown by Source

- Electricity consumption – dominant source
- Downstream transportation and product use
- Raw material procurement

11.3 Emission Intensity Indicators *(assumed)*

- CO_2e per employee
- CO_2e per unit of printing output

12. Base Year & Trend Analysis

Base Year Selection

FY 2024–25 is selected as the **base year**, as this is the first structured GHG inventory.

Historical Comparison

Not applicable for first-year reporting.

Adjustments

Future recalculations will be carried out in case of major organizational changes.

13. Uncertainty Assessment

Sources of Uncertainty

- Estimation of Scope 3 data
- Emission factor variability

Method Used

Qualitative uncertainty assessment based on data type and source.

Confidence Level

Moderate to high confidence for Scope 1 and 2; moderate for Scope 3.

14. Data Quality Assessment

Quality Rating

- Scope 1 & 2: High
- Scope 3: Medium

Cross-Checks and Validation

Internal reviews and logical consistency checks performed.

15. GHG Reduction Initiatives

- Energy-efficient printing machinery
- Preventive maintenance of DG sets

- Waste minimization and recycling
- Route optimization and logistics planning
- Employee awareness on energy conservation

16. Future Sustainability Goals

- Reduce Scope 2 emissions through renewable energy adoption
- Improve Scope 3 data accuracy and supplier engagement
- Year-on-year emission intensity reduction targets

17. Conclusions

iTek's first GHG inventory establishes a strong baseline for emissions management. While Scope 3 emissions dominate the footprint, significant opportunities exist in energy efficiency, logistics optimization, and supplier collaboration.

Plan for Next Reporting Period

- Third-party verification
- Expanded Scope 3 coverage
- Integration with ESG and Net-Zero roadmap

Reference Standards Used

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