



Fakir Apparels Ltd.

Scope-3 GHG Emissions Science Based Target Setting

Scope Year: 2024

Prepared By: Sustainability Department

SCOPE OF THE PROJECT

This report is prepared to support Fakir Apparels Ltd. for shifting towards sustainable manufacturing through setting Science-Based Targets for Scope 3 emissions including capacity building in resource efficiency and adoption of sustainable practices. In alignment with our climate vision, Fakir Apparels Ltd. has defined a Scope-3 emission target covering:

- Category 1: Purchased Goods & Services
- Category 4: Upstream Transportation & Distribution

The report is generated based on available documents, consultations with the factory staff and management, direct measurements and analysis, and the data generated by the consultants and the factory. In the absence of the metered data, we consulted and collaborations with the supplier factory personnel made the best estimates of the section-wise resource consumption or distribution. The information is time-dependent; and the relevance of data, conditions of the site, and the observations may change. The report presents in good detail the current resource usage, consumption, emission reduction, and outcomes of Fakir Apparels Ltd. through assessments, intervention, and implementation challenges in Fakir Apparels Ltd. The SBTi targets setting process has been based on the following guidelines:

- ❖ APPAREL AND FOOTWEAR SECTOR SCIENCE-BASED TARGETS GUIDANCE
- ❖ SBTi CORPORATE NEAR-TERM CRITERIA
- ❖ SBTi CORPORATE NEAR-TERM TOOL

Science-Based Targets Setting for Fakir Apparels Ltd.

Science-based targets provide a clearly defined pathway for companies to reduce greenhouse gas (GHG) emissions, helping prevent the worst impacts of climate change and future-proof business growth. Targets are considered ‘science-based’ if they align with what the latest climate science deems necessary to meet the goals of the Paris Agreement limiting global warming to 2°C above pre-industrial levels.

Scope 1=35329 tCO₂e

Scope 2=7855 tCO₂e

Scope 3= 97646 tCO₂e

Considering Scope 1, 2, and 3, the total GHG emissions for FAL in 2024 is **140830** tCO₂e.

The following is a breakdown of total emissions:

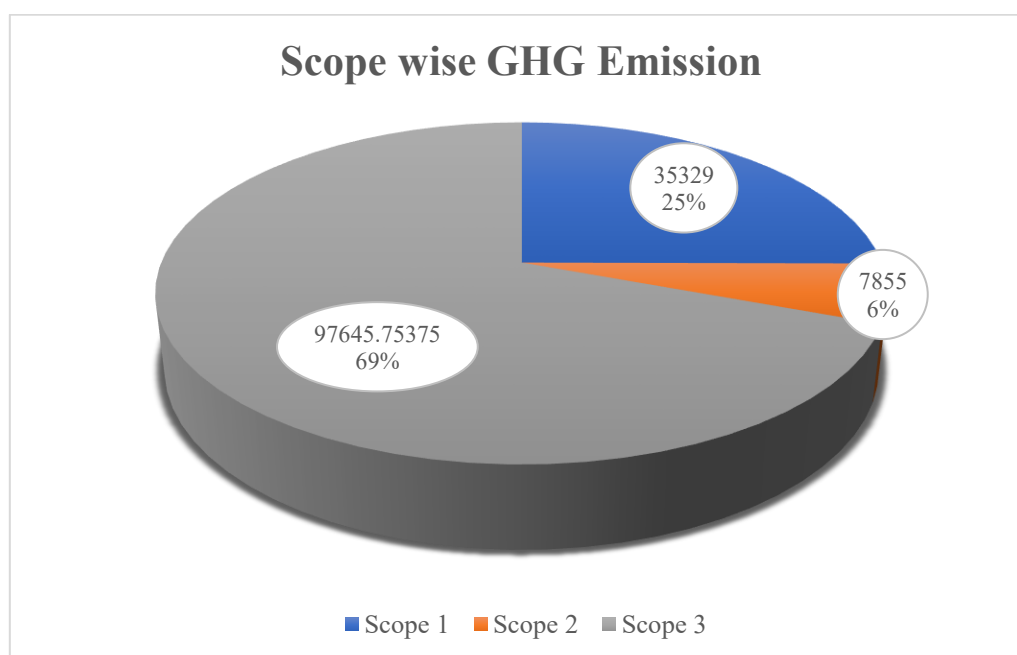


Fig: Scope wise GHG Emission

The company has scope 3 emissions of more than 40%. Abiding by SBTi guidelines, FAL needs to set targets for Scope 3 emissions. The following table shows the targets across the scopes along with the baseline and recent year:

	Baseline Year	Recent Year	Target Year	Reduction Target aligned with 2°C
GHG Emissions Scope 3	2024	2024	2030	25%

Scope 3 Emissions: Overview

Scope 3 emissions refer to indirect greenhouse gas (GHG) emissions that occur in a company's value chain, outside its direct operations. For a textile manufacturing facility, these emissions typically make up the largest portion of its carbon footprint, encompassing activities such as raw material production, transportation, product use, and end-of-life disposal. Addressing Scope 3 emissions is crucial for the textile industry, given its complex supply chains and significant environmental impact. These emissions are categorized into 15 distinct categories, split into upstream and downstream activities (Figure 3).

Upstream Emissions (Before the Company's Operations)

- Purchased Goods and Services – Emissions from the extraction, production, and transportation of raw materials, products, and services bought by the company (e.g., fabrics, dyes, and chemicals in textiles).
- Capital Goods – Emissions from producing physical assets such as machinery, buildings, and equipment used in operations.
- Fuel- and Energy-Related Activities (Not Included in Scope 1 or 2) – Emissions from the production and transportation of fuels and electricity before they are consumed (e.g., upstream emissions from power plants supplying electricity to the facility).
- Upstream Transportation and Distribution – Emissions from transporting goods and materials to the company (e.g., shipping of textiles from suppliers).
- Waste Generated in Operations – Emissions from waste disposal and treatment (e.g., textile waste, chemical waste, and wastewater from production).
- Business Travel – Emissions from corporate travel by air, rail, road, and hotel stays.
- Employee Commuting – Emissions from employees traveling to and from work using personal or public transport.
- Upstream Leased Assets – Emissions from assets leased by the company but not included in Scope 1 or 2 (e.g., leased office spaces, warehouses).

Downstream Emissions (After the Company's Operations)

- Downstream Transportation and Distribution – Emissions from delivering finished products to customers, including retail distribution and storage.
- Processing of Sold Products – Emissions from further processing of sold goods before they reach consumers (relevant in cases where products require additional manufacturing).
- Use of Sold Products – Emissions generated during product use by consumers (e.g., energy use in washing and drying clothes).
- End-of-Life Treatment of Sold Products – Emissions from waste disposal and recycling of sold products (e.g., landfill emissions from discarded clothing).
- Downstream Leased Assets – Emissions from assets owned by the company but leased to others (e.g., rented-out production facilities).
- Franchises – Emissions from franchise operations not included in Scope 1 or 2.
- Investments – Emissions from investments, including financing, loans, and equity stakes in other companies.

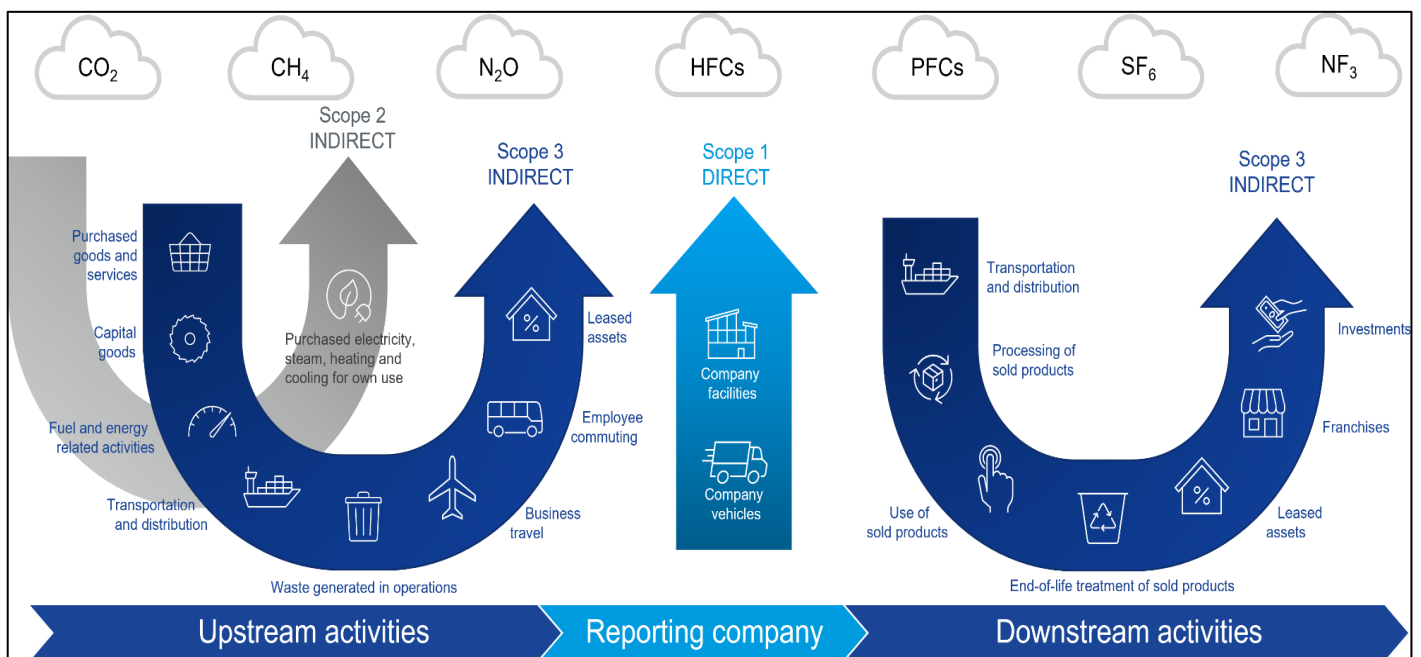


Figure: Scope 3 Emissions Overview (15 Categories)

Scope-3 Emission Calculation Methodology

Framework Alignment

Methodology based on the GHG Protocol – Corporate Value Chain (Scope 3) Standard.

Emission factors sourced from DEFRA 2023, IPCC AR6, Ecoinvent Database, and industry averages.

Hybrid approach: combining supplier-specific primary data (where available) and secondary industry emission factors.

Boundary and Categories Considered

Category 1 (Purchased Goods & Services): Raw materials (cotton, polyester, viscose, trims, packaging, dyes, and chemicals).

Category 4 (Upstream Transportation & Distribution): Freight services (road, sea, air) for inbound raw materials and accessories.

Other categories (use phase, end-of-life) are excluded at this stage but will be considered in future phases.

Data Collection Process

Supplier Mapping: Covered >95% of our supply base by volume.

Classified suppliers by geography, product type, and sustainability credentials.

Purchased Goods Calculation (Category 1):

Collected procurement data (volume, type, weight).

Applied cradle-to-gate emission factors (kg CO₂e/kg material).

Transportation Calculation (Category 4):

Collected data from freight forwarders (mode, tonnage, distance).

Calculated emissions = Weight (ton) × Distance (km) × Emission factor (kg CO₂e/ton-km).

Consolidation:

Aggregated data into total Scope-3 baseline emissions.

Validated internally through cross-checking with material life cycle studies.

Targets Setting for Scope 3 Emissions using SBTi Tool

Section 1. Input data

Enter your company name	Fakir Apparels Ltd.	
Target setting method	Absolute Contraction Approach	Please review the latest version of the SBTi Guidance and Corporate Near-Term Criteria
Base year	2024	Dropdown
Target year	2030	Dropdown
Base year output		
Target year output		
Scope 3 emissions (total or specific categories)	97,646	tCO2e

Section 2. Cross-sector absolute reduction / Absolute contraction approach (ACA)

	Base year (2024)	Target year (2030)	% SBT reduction	
Absolute emissions - WB2C (tCO2e)	97,646.0	73,234.5	25.00%	Near-Term Scope 3 SBT Formulation - WB2C

****Fakir Apparels Ltd. commits to reduce Scope 3 emissions 25% by 2030 from a 2024 base year.**



SCOPE 3 Emissions Reduction ACTION PLAN

Purchased Goods & Services

Description	Details
	 <p>Tackling scope 3 emissions in purchased goods and services</p>
Target	Reduce by 25% by 2030
Approach	<ul style="list-style-type: none"> • Sustainable Sourcing: Prioritize suppliers offering low-carbon, sustainable raw materials, such as recycled cotton, organic fibers, and renewable-based inputs. • Supplier Engagement: Establish a robust supplier engagement program focused on training and incentivizing suppliers to adopt renewable energy, energy efficiency measures, and carbon reporting mechanisms. • Collaborative Innovation: Partner with suppliers to co-develop innovative low-carbon production methods. Examples include waterless dyeing and renewable heat sources. • Supplier Standards: Introduce supplier sustainability scorecards and link procurement contracts to meeting predefined emissions benchmarks.
GHG Emissions (2023)	96,621 tCO ₂ e
Estimated GHG Emissions Reduction by 2030	24,155 tCO ₂ e

Upstream Transportation

Description	Details
<p><i>Tier 2 Suppliers</i></p>	<div> <div> <p><i>Tier 1 Suppliers</i></p> </div> <div> <p><i>Transportation of purchased products</i></p> </div> <div> <p><i>Reporting Company</i></p> </div> </div>
Target	Reduce by 25% by 2030
Approach	<ul style="list-style-type: none"> • Low-Carbon Logistics: Shift to transportation modes using alternative fuels such as electric, biofuels, or LNG-powered trucks. • Route Optimization: Implement advanced route planning software to reduce total travel distance and fuel consumption. • Logistics Partnerships: Partner with logistics companies committed to reducing emissions and adopting net-zero goals. • Load Optimization: Maximize vehicle load capacities to reduce the number of trips required per shipment.
GHG Emissions (2023)	1025 tCO ₂ e
Estimated GHG Emissions Reduction by 2030	256 tCO ₂ e

Monitoring and Reporting Framework

1. Digital Tracking Systems:

- Implement an integrated data management system to track emissions in real-time across all Scope 3 categories.
- Leverage IoT-enabled devices for data collection from transportation, supplier operations, and energy systems.

2. Annual Audits:

- Conduct detailed audits annually to validate reported reductions and ensure compliance with established goals.

3. Stakeholder Reporting:

- Publish annual sustainability reports detailing progress towards Scope 3 reduction targets.
- Collaborate with third-party auditors to enhance credibility and transparency.

4. Continuous Improvement:

- Revise reduction strategies based on audit findings and emerging technologies.
- Encourage feedback from employees, suppliers, and logistics partners to identify new opportunities for reduction.

Conclusion:

By adopting this comprehensive Scope 3 emission reduction plan, Fakir Apparels Ltd. will significantly contribute to mitigating climate change while reinforcing its leadership in sustainable textile manufacturing. This initiative will position the company as a responsible corporate citizen, aligned with global climate action efforts. In addition to the Scope 3 efforts outlined, this report has demonstrated that there are significant opportunities to reduce Scope 1 and Scope 2 emissions within the facility's operations. While we have provided a greenhouse gas (GHG) inventory that details these emissions, specific reduction strategies for Scope 1 and Scope 2 were not covered in this document. By addressing Scope 3, FAL. demonstrates its commitment to a comprehensive environmental strategy, laying the groundwork for future enhancements across all scopes of emissions.