Pyramid Eco Ltd - Estimated Carbon Footprint (2024)

1. Overview

This document provides a high-level estimation of Pyramid Eco Ltd's greenhouse gas emissions for the calendar year 2024. The calculation is structured across Scopes 1, 2, and 3 as defined by the Greenhouse Gas (GHG) Protocol and aligned with UK government reporting standards (e.g. SECR, PPN 06/21).

2. Key Assumptions

Source Category	Quantity / Notes	Emission Factor (DEFRA 2024)
Company Vans (Scope 1)	2 diesel vans × 15,000 miles/year	0.28 kg CO2e/mile
Depot Electricity (Scope 2)	3,000 kWh/year (non-renewable)	0.19338 kg CO2e/kWh
Office Electricity (Scope 2)	5,000 kWh/year (REGO-backed)	0.00 kg CO2e/kWh
Subcontractor Travel (Scope 3)	10 subcontractors × 10,000 miles/year	0.28 kg CO2e/mile
Material Use (Scope 3)	Aggregate annual mineral wool insulation works (~9 kg CO2e/m^2)	-
Employee Commuting (Scope 3)	2 employees commuting locally, Director uses trains and EV	Mixed estimate: 0.08 kg CO2e/mile
Waste (Scope 3)	2 tonnes mixed insulation offcuts	21 kg CO2e/tonne

3. Annual Emissions Breakdown

Scope 1 - Direct Emissions

- Company Vans: 2 × 15,000 × 0.28 = 8,400 kg CO2e = 8.4 tonnes

Scope 2 - Indirect Emissions (Electricity)

- Depot Electricity: 3,000 × 0.19338 = 580 kg CO_2e = 0.58 tonnes
- Office Electricity: 5,000 × 0.00 = 0 kg CO_2e (REGO-backed tariff)

Scope 3 - Other Indirect Emissions

- Subcontractor Travel: 100,000 × 0.28 = 28,000 kg CO_2e = 28.0 tonnes
- Materials (Mineral Wool): Estimated aggregate use × 9 kg CO_2e/m^2 = 30,240 kg CO_2e = 30.24 tonnes
- Employee Commuting: 2 × 5,000 × 0.08 = 800 kg CO_2e = 0.8 tonnes
- Waste Disposal: 2 × 21 = 42 kg CO_2e = 0.04 tonnes

4. Summary of Estimated Annual Emissions

Scope	Emissions (tCO_2e)
Scope 1	8.4
Scope 2	0.58
Scope 3	59.08
Total	68.06 tCO_2e

5. Key Observations

- Scope 3 remains the dominant category, driven primarily by subcontractor mileage and material usage.
- Scope 1 emissions are moderate and could be reduced further with EV fleet transition.
- Scope 2 emissions are minimal due to green electricity usage in the office.

6. Next Steps & Recommendations

- Formalise monthly carbon tracking via internal reporting or Excel dashboard.

- Start pilot electrification of 1 van to observe carbon and fuel cost savings.
- Ask key suppliers to disclose product CO_2e or EPD (Environmental Product Declaration).
- Develop a 3-year carbon reduction roadmap focused on:
  - Fleet transition
  - Low-carbon material sourcing strategies
  - Route planning and delivery consolidation

Prepared: June 2025

Next Review Due: March 2026 (aligned with financial year-end carbon reporting)