

Ecolane EV Carbon Reduction Plan



Client: XYZ Logistics Ltd *Prepared by Ecolane EV (trading name of Climate Create Limited)*

Report date: July 2026 **Reporting year: 2024 (1 January to 31 December 2024)**

This sample Carbon Reduction Plan is purely illustrative and is built using fictitious but realistic data for a fictitious company XYZ Logistics Ltd. The emissions calculation is based on official UK Government (DEFRA) 2024 conversion factors applied to invented fuel and activity data. For a real client this would be cross-checked against fuel-card, energy use and operational records.

1. Introduction

XYZ Logistics Ltd commissioned Ecolane EV (Climate Create Limited) to prepare this Carbon Reduction Plan (CRP) so the company can bid for in-scope public contracts under PPN 006 and establish a robust baseline for managing its emissions.

The plan collects 12 months of activity data across the business operations (fleet fuel, site energy, freight, waste, business travel and commuting) and calculates kg and tonnes of CO₂e using UK Government (DEFRA) conversion factors for the reporting year.

The key deliverables are this report, the supporting data workbook, a PPN 006-compliant disclosure for publication on the company website, and a menu of reduction measures for board review.

2. Carbon Reduction Plan: regulatory overview

PPN 006 (Procurement Policy Note 006, updated Feb 2025) sets out how UK central government departments, their executive agencies and non-departmental public bodies must evaluate suppliers' carbon reduction commitments in the procurement of major contracts. Where it applies, a Carbon Reduction Plan (CRP) is a condition of participation, and bids that do not include a compliant CRP may be rejected.

A CRP is required, as a condition of participation, where the estimated contract value exceeds £5 million per year including VAT, for in-scope procurements advertised on or after the relevant commencement date. The requirement applies to the bidding entity itself, or in limited circumstances to a Group CRP that meets four mandatory conditions.

What a compliant CRP must contain:

- Confirmation of the supplier's commitment to achieving net zero by 2050 for its UK operations.
- Current emissions for all Scope 1 and Scope 2 sources under the GHG Protocol, plus a defined subset of Scope 3.
- Five mandated Scope 3 categories: business travel (Cat 6), employee commuting (Cat 7), waste generated in operations (Cat 5), upstream transportation and distribution (Cat 4), and downstream transportation and distribution (Cat 9).
- Ecolane EV CRPs also includes Well-to-Tank (WTT) fuel/energy emissions (Cat 3) as standard.
- From 2027, all Scope 3 Categories will be required to be reported under PPN 006.
- Emissions reported in CO₂e for the seven Kyoto Protocol greenhouse gases, using the current UK Government (DEFRA) conversion factors.
- The environmental management measures in effect that support the net zero commitment
- Publication on the supplier's UK website, updated at least annually, and signed off by a director or equivalent.

Reporting follows the GHG Protocol Corporate Standard for Scope 1 and 2, and the Corporate Value Chain (Scope 3) Standard for the Scope 3 subset. Scope 1 and 2 figures should also align with SECR (Streamlined Energy & Carbon Reporting) where the organisation is in scope for that regime.

Application across England and Wales. PPN 006 governs the central government and the wider English public sector. Wales operates a close equivalent, WPPN 006, with materially similar requirements. This report has been prepared to satisfy both regions.

3. Organisational overview

3.1 About XYZ Logistics

XYZ Logistics Ltd is a road freight operator based in Avonmouth, Bristol, providing haulage and last-mile distribution services across the South West and wider UK. This CRP covers the organisation's UK operations for the 2024 reporting year under an operational control boundary.

XYZ Logistics is an independent company and is not part of a wider group; this CRP is therefore an entity-level submission. The company operates from a single depot at Avonmouth, Bristol, employing 34 FTE staff and generating £5.2m revenue in the reporting period, with 22 operated vehicles covering 605,449 km. Company details are summarised in Table 3.1; key contacts are to be confirmed by XYZ Logistics prior to publication.

Table 3.1: Overview of XYZ Logistics

Item	Detail
Legal entity name	XYZ Logistics Ltd
Companies House number	12345678
Registered address	Unit 1, Example Way, Avonmouth, Bristol, BS11 0AA
Primary business activity (SIC)	49410 — Freight transport by road

3.2 Fleet Operations

As a SME, XYZ Logistics operates a small mixed fleet of 22 vehicles: heavy goods vehicles for trunk haulage and light duty vans for local and regional distribution. Five of the 16 vans are now battery electric, the first phase of the organisation's fleet electrification programme.

Table 3.2: Company fleet profile

Vehicle group	Vehicles	Description
HGV, articulated (>33t), diesel	3	2-axle tractor plus 3-axle semitrailer (std 40t artic)
HGV, rigid (>17t), diesel	3	4-axle rigid solo truck (8x2 / 8x4), no trailer
Van, Class III (1.74–3.5t), diesel	8	Long-wheelbase, 2.0L, Euro VI, 1,250kg payload
Van, Class I (up to 1.305t), petrol	3	Compact panel van, 1.0L, Euro 6, 600kg payload
Van, Class III (1.74–3.5t), electric	5	68kWh, 160m range, 1,100kg payload, 7kW charger
Total vehicles and fuel	22	

3.3 Site Operations

XYZ Logistics operates a single site: the Avonmouth depot (BS11 0AA), comprising warehouse, workshop, offices and yard. Site energy use in 2024 was 128,482 kWh of purchased electricity (of which 43,482 kWh through EV charge points), 62,000 kWh of natural gas for heating, 900 kg of LPG

for forklift trucks, and 1,500 litres of red diesel for the yard shunter and standby generator; a 3.5 kg refrigerant top-up was recorded at the annual air-conditioning service. No industrial processes beyond routine vehicle maintenance are operated. Waste from the depot and workshop totalled approximately 33.5 tonnes plus 2,400 litres of waste oil, with around 65% by weight diverted from landfill (Section 5.5).

3.4 Business Travel & Grey Fleet

Four employee-owned cars were used for business travel (grey fleet), covering 9,204 miles in 2024: two medium cars (diesel, 3,222 miles; petrol, 2,650 miles), one small petrol car (1,409 miles) and one large hybrid (1,923 miles). Other business travel comprised 542 passenger-miles by taxi, 4,200 passenger-miles by UK rail, 896 miles in rental cars, 2,000 passenger-miles of short-haul return flights, and 24 hotel nights.

3.5 Employee Commuting & Homeworking

A staff survey covering all 34 FTE employees produced annual commuting distances by mode: 46,800 miles by diesel car, 26,000 miles by petrol car, 5,200 miles each by plug-in hybrid and battery-electric car, 12,500 passenger-km by public transport, and 8,300 miles on foot or by bicycle. Office-based staff average 1.5 home-working days per week, totalling 1,380 FTE home-working hours in the year.

3.6 Transport & Distribution

Upstream, third-party carriers delivered bulk diesel to the depot fuel bunker (dedicated rigid tanker, 1,600 vehicle-km) and inbound parts, tyres and consumables via a consolidated carrier network (85 tonnes moved an average of 220 km, 18,700 tonne-km). No downstream distribution paid for by third parties was identified for the reporting year as this is the XYZ Logistics’ core service (Section 5.8).

4. Carbon reporting overview

4.1 Reporting scope

The reporting period is 1 January to 31 December 2024. The organisational boundary is operational control at entity level, covering all UK operations: the Avonmouth site and all 22 operated vehicles. Table 4.1 summarises the reporting scope.

Table 4.1: Reporting scope and boundary

Item	Detail
Reporting boundary	Operational control, entity-level submission
Reporting period (Baseline year)	1 January 2024 to 31 December 2024
Headcount (FTE)	34
Revenue (reporting period)	£5,200,000
Total fleet distance operated	605,449 km
Sites (1)	Avonmouth depot, Bristol (BS11 0AA) — single site

4.2 Data collection process

Activity data was requested from XYZ Logistics through a structured data-collection workbook covering fleet fuel, site energy, freight, waste, business travel and commuting. A data hierarchy was

applied throughout: metered fuel and energy use was prioritised as the most accurate method; distance-based activity data was used where fuel data was unavailable; and spend-based estimates are reserved as a last resort. No spend-based estimates were required for the mandatory categories this year.

4.3 Emissions Methodology

Emissions are calculated as activity data multiplied by the relevant UK Government (DEFRA) 2024 conversion factor, following the GHG Protocol Corporate Standard for Scopes 1 and 2 and the PPN 006 mandates Scope 3 categories. Scope 1 covers fleet and site fuel combustion and refrigerant losses; Scope 2 covers purchased electricity (location-based); Scope 3 covers the five mandatory categories (4, 5, 6, 7, 9). Results are presented in this report and the accompanying workbook.

- Note that EEV CRP already includes Scope 3 Cat 3: Upstream (well-to-tank) emissions embedded in the fuel and electricity consumed under Scopes 1 and 2: extraction, refining, and transmission losses not captured in the direct combustion or grid-average figures above. Reported here for early visibility ahead of this category becoming mandatory under PPN 006 from 2027; it is also included in the Grand Total in Section 6.
- All other Scope 3 Categories become mandatory from 2027

5. Emissions by operational category

This section of the CRP presents each emissions category calculated for the 2024 reporting year, in the order set out on Tab 13: Emissions & Targets of the supporting carbon model. Figures are calculated using UK Government (DEFRA) 2024 conversion factors applied to fuel and activity data supplied by XYZ Logistics.

5.1 Vehicle Fleet Emissions (Scopes 1, 2, 3: Cat 3)

Fleet activity data is provided by the client and may be reported either as fuel purchased (litres or kWh) or as distance travelled (miles or km). Where both exist for a vehicle, fuel use takes priority as the more accurate method; distance-based factors are applied only where fuel records are unavailable. For 2024, complete fuel and charging records were available for all 22 vehicles, so the fuel-based method is used throughout.

5.1.1 Fleet Data - Fuel Use

As a SME, XYZ Logistics operates a small mixed fleet of 22 vehicles: heavy goods vehicles for trunk haulage and light duty vans for local and regional distribution. Five of the 16 vans are now battery electric, the first phase of the organisation's fleet electrification programme.

Table 5.1: Fleet fuel and energy use by vehicle group

Vehicle group	Vehicles	Fuel/energy used
HGV, articulated (>33t), diesel	3	25,676 litres diesel
HGV, rigid (>17t), diesel	3	19,233 litres diesel
Van, Class III (1.74–3.5t), diesel	8	27,415 litres diesel
Van, Class I (up to 1.305t), petrol	3	9,564 litres petrol
Van, Class III (1.74–3.5t), electric	5	53,399 kWh electricity
Total vehicles and fuel	22	72,124 L diesel / 9,564 L petrol / 53,399 kWh

5.1.2 Fleet Data - Mileage

Mileage was not separately collated for the owned fleet in 2024; the fuel-based method above is used for all vehicles. The mileage table is retained for future reporting years where distance-based reporting may be needed.

Table 5.2: Fleet mileage by vehicle group (fuel-based method used for 2024)

Vehicle group	Vehicles	Miles
HGV, articulated (>33t), diesel	3	—
HGV, rigid (>17t), diesel	3	—
Van, Class III (1.74–3.5t), diesel	8	—
Van, Class I (up to 1.305t), petrol	3	—
Van, Class III (1.74–3.5t), electric	5	—
Total vehicles and fuel	22	—

5.1.3 Fleet Emissions by Fuel Type

Combustion emissions from XYZ Logistics' owned and leased fleet: diesel and petrol burned directly (allocated to Scope 1), plus the electricity drawn by the five battery electric vans (allocated to Scope 2). Both also contribute to Scope 3 Cat 3. Figures are calculated directly from fuel-card and charging records across all 22 vehicles.

Fleet emissions from XYZ Logistics' owned and leased fleet include the indirect emissions associated with the electricity drawn by the five battery electric vans. Figures are calculated directly from fuel-card and charging records across all electric vehicles.

Table 5.3: Fleet emissions by fuel type

Fleet Emissions		Carbon Emissions tCO ₂ e			
Fuel/energy type	Quantity	Scope 1	Scope 2	Scope 3 (Cat 3)	Scope 3 (Cat 4,5,6,7,9)
Diesel (HGV + van)	72,124 litres	191.96	0.00	45.01	0.00
Petrol (van)	9,564 litres	22.51	0.00	5.80	0.00
Electric (Vans)	53,399 kWh	0.00	11.06	2.66	0.00
Total by Scope (tCO₂e)		214.47	11.06	53.48	0.00
Total Emissions (tCO₂e)		279.01			

Quantities shown are combined with official DEFRA emission factors for relevant year to calculate the emissions as presented in the table.

Ref: <https://www.gov.uk/environment/greenhouse-gas-emissions>

5.1.4 Fleet Emissions by Vehicle

In addition to the aggregate emissions as shown in Table 5.3, Ecolane EV CRPs also provide emissions analysis at the vehicle level. Vehicle-level figures below are all-inclusive (Scope 1, Scope 2 and Scope 3 Cat 3), consistent with Figure 6.3.

Table 5.4 lists all 22 operated vehicles with their fuel or energy use and resulting emissions. The analysis confirms that fleet emissions are highly concentrated in a small number of assets. The six diesel HGVs, just over a quarter of the fleet by count, account for 147.53 tCO₂e, or about 53% of total fleet emissions, while the 16 vans together make up the remainder. The single largest source is one rigid HGV (XYZ V50), which burned 14,925 litres of diesel and emitted 49.03 tCO₂e, close to a fifth of the entire fleet footprint on its own; the next largest, an articulated unit (XYZ V10), emitted 39.44 tCO₂e.

By contrast, the light fleet is far less material per vehicle. The eight diesel vans contribute approximately 89.4 tCO₂e and the three petrol vans approximately 28.3 tCO₂e, spread across similar-sized assets. The five battery-electric vans produce no tailpipe (Scope 1) emissions at all; their footprint is the indirect Scope 2 emissions from the grid electricity used to charge them, 11.06 tCO₂e, plus 2.66 tCO₂e of well-to-tank and transmission losses, giving 13.72 tCO₂e or around 2.7 tCO₂e each. This illustrates the emissions benefit already being realised from the early stage of the company's van electrification programme.

Table 5.4: Fleet emissions by vehicle

Fleet Emissions		Carbon Emissions tCO ₂ e			
List of all vehicles	Quantity	Scope 1	Scope 2	Scope 3 (Cat 3)	Scope 3 (Cat 4,5,6,7,9)
XYZ V97 (Van, diesel)	3,087 litres	8.22	0.00	1.93	0.00
XYZ V98 (Van, diesel)	3,622 litres	9.64	0.00	2.26	0.00
XYZ V99 (Van, diesel)	2,952 litres	7.86	0.00	1.84	0.00
XYZ V100 (Van, diesel)	3,269 litres	8.70	0.00	2.04	0.00
XYZ V101 (Van, diesel)	3,656 litres	9.73	0.00	2.28	0.00
XYZ V102 (Van, diesel)	3,617 litres	9.63	0.00	2.26	0.00
XYZ V103 (Van, diesel)	3,743 litres	9.96	0.00	2.34	0.00
XYZ V104 (Van, diesel)	3,269 litres	8.70	0.00	2.04	0.00
XYZ V105 (Van, petrol)	3,056 litres	7.19	0.00	1.85	0.00
XYZ V106 (Van, petrol)	3,004 litres	7.07	0.00	1.82	0.00
XYZ V107 (Van, petrol)	3,504 litres	8.25	0.00	2.13	0.00
XYZ V108 (Van, electric)	11,324 kWh	0.00	2.34	0.56	0.00
XYZ V109 (Van, electric)	10,895 kWh	0.00	2.26	0.54	0.00
XYZ V110 (Van, electric)	10,598 kWh	0.00	2.19	0.53	0.00
XYZ V111 (Van, electric)	9,887 kWh	0.00	2.05	0.49	0.00
XYZ V112 (Van, electric)	10,695 kWh	0.00	2.21	0.53	0.00
XYZ V1 (HGV artic, diesel)	7,115 litres	18.94	0.00	4.44	0.00
XYZ V10 (HGV artic, diesel)	12,004 litres	31.95	0.00	7.49	0.00
XYZ V20 (HGV artic, diesel)	6,557 litres	17.45	0.00	4.09	0.00
XYZ V30 (HGV rigid, diesel)	2,970 litres	7.90	0.00	1.85	0.00
XYZ V40 (HGV rigid, diesel)	1,338 litres	3.56	0.00	0.83	0.00
XYZ V50 (HGV rigid, diesel)	14,925 litres	39.72	0.00	9.31	0.00
Total by Scope (tCO₂e)		214.47	11.06	53.48	0.00
Total Emissions (tCO₂e)		279.01			

Quantities shown are combined with official DEFRA emission factors for relevant year to calculate the emissions as presented in the table.

Ref: <https://www.gov.uk/environment/greenhouse-gas-emissions>

For a fleet manager, this vehicle-level view is more actionable than the aggregate totals. Because emissions are so concentrated, reduction effort is best directed first at the highest-emitting HGVs, where measures such as driver efficiency training, route and load optimisation, or a switch to certified renewable diesel (HVO) deliver the greatest absolute savings. The same data supports fleet-renewal and electrification planning (route dependent) by identifying which vehicles to prioritise for replacement, and provides a per-vehicle baseline against which future-year performance can be tracked. Each vehicle's well-to-tank and transmission emissions are reported separately in Table 5.4

(Scope 3, Cat 3) and are included in the figures above; across the fleet they account for 53.48 tCO₂e of the 279.01 tCO₂e total.

5.2 Site Operations (Scopes 1, 2, 3: Cat 3)

Stationary combustion at the Avonmouth depot: natural gas for office and workshop heating, LPG for forklift trucks, red diesel for the yard shunter and standby generator, plus a small refrigerant top-up during annual air-conditioning servicing.

5.2.1 Site Operations Data

Table 5.5: Site combustion and refrigerant data

Source	Quantity	Unit
Natural gas (depot heating)	62,000	kWh
LPG (forklift trucks)	900	kg
Red diesel (yard shunter / generator)	1,500	litres
Refrigerant top-up (R-410A, air-con)	3.5	kg

5.2.2 Site Operations Emissions

Table 5.6: Site operations emissions

Site Emissions		Carbon Emissions tCO ₂ e			
Fuel/energy type	Quantity	Scope 1	Scope 2	Scope 3 (Cat 3)	Scope 3 (Cat 4,5,6,7,9)
Natural gas (heating)	62,000 kWh	12.73	0.00	2.10	0.00
LPG (forklift trucks)	900 kg	2.67	0.00	0.32	0.00
Red diesel (yard shunter / generator)	1,500 litres	4.11	0.00	0.96	0.00
Refrigerant top-up (R-410A)	3.5 kg	6.73	0.00	0.00	0.00
Total by Scope (tCO₂e)		26.25	0.00	3.38	0.00
Total Emissions (tCO₂e)		29.63			

Quantities shown are combined with official DEFRA emission factors for relevant year to calculate the emissions as presented in the table.

Ref: <https://www.gov.uk/environment/greenhouse-gas-emissions>

5.3 Purchase of Electricity, Heat and Cooling

Purchased grid electricity across the depot, offices, and EV charging points, calculated on a location-based method using the UK grid average factor. XYZ Logistics does not currently hold Renewable Energy Guarantee of Origin (REGO) certificates or a verified green tariff, so the market-based figure defaults to the same value pending supplier-specific data (see Section 6.2 assurance note). No district heating or purchased steam is used.

5.3.1 Purchased Electricity & Heat Data

Purchased electricity is metered at the Avonmouth site across the depot, offices, maintenance workshop and EV charge points. Table 5.7 shows 2024 consumption by meter group.

Table 5.7: Purchased electricity by meter group

Source	Quantity	Method
Electricity — Depot / garage	45,000 kWh	Location-based (Grid average, DEFRA 2024)
Electricity — Offices	18,000 kWh	
Electricity — Maintenance workshop	22,000 kWh	
Electricity — EV charge points (company vehicles)	41,117 kWh	Reported in Fleet (Section 5.1)
Electricity — EV charge points (public / employee)	2,365 kWh	
Total purchased electricity	128,482 kWh	

5.3.2 Purchased Electricity & Heat Emissions

Location-based emissions apply the UK grid-average factor to purchased electricity. Electricity used by company-vehicle charge points (41,117 kWh) is already reported under Vehicle Fleet (Section 5.1) and is excluded here to avoid double counting.

Table 5.8: Electricity & heat emissions (location-based)

Purchased Energy Emissions		Carbon Emissions tCO ₂ e			
Fuel/energy type	Quantity	Scope 1	Scope 2	Scope 3 (Cat 3)	Scope 3 (Cat 4,5,6,7,9)
Grid electricity (depot, offices, workshop, EV charging)	87,365 kWh	0.00	18.09	5.96	0.00
EV charging (counted in 5.1)	41,117 kWh	—	—	—	—
District heating / steam	0 kWh	0.00	0.00	0.00	0.00
Total by Scope (tCO₂e)		0.00	18.09	5.96	0.00
Total Emissions (tCO₂e)		24.05			

Quantities shown are combined with official DEFRA emission factors for relevant year to calculate the emissions as presented in the table.

Ref: <https://www.gov.uk/environment/greenhouse-gas-emissions>

5.4 Upstream Transportation & Distribution (Scope 3 Cat 4)

Emissions from goods and materials transported to XYZ Logistics by third-party carriers: bulk diesel deliveries to the depot fuel bunker, and inbound parts, tyres and consumables via a consolidated third-party carrier network.

5.4.1 Upstream Transport & Distribution Data

Table 5.9: Upstream transport & distribution flows

Flow	Vehicle / method	Activity
F1: Bulk diesel deliveries to depot fuel bunker	HGV rigid (>17t), vehicle-km	1,600 km
F2: Parts, tyres and consumables (third-party carrier)	HGV articulated, tonne.km	85t x 220km = 18,700 tonne.km

5.4.2 Upstream Transport & Distribution Emissions

The two identified upstream freight flows are combined with DEFRA road-freight factors to give the emissions in Table 5.10. Both are third-party HGV movements: bulk diesel delivered to the depot bunker (calculated on a vehicle-km basis) and inbound parts and consumables (calculated on a tonne-km basis). Together they account for 4.56 tCO₂e including 0.89 tCO₂e of well-to-tank and transmission emissions, reported within Category 4. Emissions are modest because both flows are low-volume and short-haul.

Table 5.10: Upstream transport & distribution emissions

Scope 3 Cat 4 Emissions		Carbon Emissions tCO ₂ e			
Transport activity	Quantity	Scope 1	Scope 2	Scope 3 (Cat 3)	Scope 3 (Cat 4)
Bulk diesel deliveries (rigid tanker, vehicle-km)	1,600 km	0.00	0.00	0.00	1.94
Inbound parts & consumables (artic, tonne-km)	18,700 tonne-km	0.00	0.00	0.00	2.62
Total by Scope (tCO₂e)		0.00	0.00	0.00	4.56
Total Emissions (tCO₂e)		4.56			

Quantities shown are combined with official DEFRA emission factors for relevant year to calculate the emissions as presented in the table.

Ref: <https://www.gov.uk/environment/greenhouse-gas-emissions>

5.5 Waste generated in operations (Scope 3 Cat 5)

Emissions from disposal and processing of waste generated at the depot and workshop: waste oil and tyres from vehicle servicing, general mixed waste, hazardous workshop waste, and materials sent for recycling. Approximately 65% of waste by weight is diverted from landfill via recycling or energy-from-waste.

Table 5.11: Waste data by stream

Waste stream	Quantity	Unit
Waste oil (engine/transmission)	2,400	litres
Tyres (end of life)	4.5	tonnes
General mixed waste (depot/office)	18.0	tonnes
Hazardous waste (workshop chemicals)	1.2	tonnes
Recycled materials (metal, cardboard, plastics)	9.0	tonnes
Batteries (lead-acid, recycled)	0.8	tonnes

5.5.1 Waste Emissions

Factors are applied per waste stream and treatment route; recycled streams carry the DEFRA recycling factor. Waste oil and hazardous waste currently carry no factor in the workbook and are excluded pending factor assignment (see assurance note 6.2).

Table 5.12: Waste emissions by stream

Scope 3 Cat 5 Emissions		Carbon Emissions tCO ₂ e			
Waste activity	Quantity	Scope 1	Scope 2	Scope 3 (Cat 3)	Scope 3 (Cat 5)
Tyres (end of life)	4.5 tonnes	0.00	0.00	0.00	0.03
General mixed waste	18.0 tonnes	0.00	0.00	0.00	3.28
Recycled materials (metal, cardboard, plastics)	9.0 tonnes	0.00	0.00	0.00	0.06
Total by Scope (tCO₂e)		0.00	0.00	0.00	3.37
Total Emissions (tCO₂e)		3.37			

Quantities shown are combined with official DEFRA emission factors for relevant year to calculate the emissions as presented in the table.

Ref: <https://www.gov.uk/environment/greenhouse-gas-emissions>

5.6 Business travel & grey fleet (Scope 3 Cat 6)

Emissions from employee travel on transport not owned by XYZ Logistics: taxis, UK rail, rental cars, short-haul flights, and hotel stays for driver relays and meetings. No long-haul air travel was undertaken in the reporting period.

Table 5.13: Business travel activity data

Travel type	Quantity	Unit
Taxi / private hire	542	passenger-miles
Rail travel (UK)	4,200	passenger-miles
Rental car	896	miles
Short-haul flights (return)	2,000	passenger-miles (return)
Hotel nights	24	nights

5.6.1 Business Travel & Grey Fleet Emissions

Grey fleet emissions are calculated per vehicle from the mileage in Section 3.4; other modes use DEFRA passenger-distance, vehicle-distance or room-night factors as appropriate.

Table 5.14: Business travel & grey fleet emissions

Scope 3 Cat 6 Emissions		Carbon Emissions tCO ₂ e			
Travel mode/activity	Quantity	Scope 1	Scope 2	Scope 3 (Cat 3)	Scope 3 (Cat 6)
Grey fleet (4 vehicles)	9,204 miles	0.00	0.00	0.00	3.07
Taxi / private hire	542 pass-miles	0.00	0.00	0.00	0.16
Rail travel (UK)	4,200 pass-miles	0.00	0.00	0.00	0.30
Rental car	896 miles	0.00	0.00	0.00	0.31
Flights (short-haul, return)	2,000 pass-miles	0.00	0.00	0.00	0.42
Hotel nights (UK)	24 nights	0.00	0.00	0.00	0.25
Total by Scope (tCO₂e)		0.00	0.00	0.00	4.51
Total Emissions (tCO₂e)		4.51			

Quantities shown are combined with official DEFRA emission factors for relevant year to calculate the emissions as presented in the table.

Ref: <https://www.gov.uk/environment/greenhouse-gas-emissions>

5.7 Employee commuting & homeworking (Scope 3 Cat 7)

Estimated emissions from all 34 FTE employees travelling between home and their regular workplace, based on a staff commuting survey covering average distance and transport mode split, plus office-based home-working.

Table 5.15: Commuting and homeworking data

Item	Value
Employees (FTE)	34
Average one-way commute distance	9.5 miles
Car (diesel) — annual distance	46,800 miles
Car (petrol) — annual distance	26,000 miles
Car (plug-in hybrid) — annual distance	5,200 miles

Item	Value
Car (fully electric) — annual distance	5,200 miles
Public transport — annual distance	12,500 passenger-km
Walking / cycling — annual distance	8,300 miles
Home-working	1.5 days/week; 1,380 FTE hours/year

5.7.1 Commuting & Homeworking Emissions

Car commuting uses DEFRA average-car factors by fuel type; public transport uses local bus factor as a conservative proxy; homeworking uses the combined office-equipment and heating factor.

Table 5.16: Commuting & homeworking emissions

Scope 3 Cat 7 Emissions		Carbon Emissions tCO ₂ e			
Travel mode/activity	Quantity	Scope 1	Scope 2	Scope 3 (Cat 3)	Scope 3 (Cat 7)
Car (diesel)	46,800 miles	0.00	0.00	0.00	15.91
Car (petrol)	26,000 miles	0.00	0.00	0.00	8.80
Car (plug-in hybrid)	5,200 miles	0.00	0.00	0.00	1.16
Car (fully electric)	5,200 miles	0.00	0.00	0.00	0.49
Public transport (bus proxy)	12,500 pass-km	0.00	0.00	0.00	2.02
Homeworking (equip+heat)	1,380 FTE hours	0.00	0.00	0.00	0.46
Total by Scope (tCO₂e)		0.00	0.00	0.00	28.84
Total Emissions (tCO₂e)		28.84			

Quantities shown are combined with official DEFRA emission factors for relevant year to calculate the emissions as presented in the table.

Ref: <https://www.gov.uk/environment/greenhouse-gas-emissions>

5.8 Downstream Transportation & Distribution (Scope 3 Cat 9)

No downstream transportation and distribution paid for by third parties has been identified for 2024. PPN 006 requires this category to be reported.

5.8.1 Downstream Transport & Distribution Data

Table 5.17: Downstream transport data

Flow	Vehicle / method	Activity
No downstream distribution identified — NIL entry	—	—

5.8.2 Downstream Transport & Distribution Emissions

Table 5.18: Downstream transport & distribution emissions

Scope 3 Cat 9 Emissions		Carbon Emissions tCO ₂ e			
Transport activity	Quantity	Scope 1	Scope 2	Scope 3 (Cat 3)	Scope 3 (Cat 9)
No downstream distribution identified — data gap	—	0.00	0.00	0.00	0.00
Total by Scope (tCO₂e)		0.00	0.00	0.00	0.00
Total Emissions (tCO₂e)		0.00			

Quantities shown are combined with official DEFRA emission factors for relevant year to calculate the emissions as presented in the table.

Ref: <https://www.gov.uk/environment/greenhouse-gas-emissions>

6. CO₂e emissions summary

Reporting period: 1 January 2024 to 31 December 2024.

Total emissions across all PPN 006 mandatory sources for the 2024 reporting year are 311.15 tCO₂e: Scope 1 is 240.72 tCO₂e (77.4%), Scope 2 (location-based) is 29.15 tCO₂e (9.4%), and the five mandatory Scope 3 categories total 41.28 tCO₂e (13.3%).

The footprint is dominated by fleet fuel, consistent with a road freight operator running its own vehicles. A further 62.82 tCO₂e of well-to-tank and transmission losses (Scope 3 Cat 3, mandatory from 2027) is reported for visibility but excluded from the mandatory total. These figures supersede earlier drafts following data updates and the corrections set out in the assurance note below.

Table 6.1: Emissions summary by operational category and scope

Scopes 1, 2 & 3 Emissions	Carbon Emissions tCO ₂ e				
Operational category	Scope 1	Scope 2	Scope 3 (Cat 4,5,6,7,9)	Scope 3 (Cat 3)	Scope 3 Cats
Fleet Emissions	214.47	11.06	0.00	53.48	3
Site Combustion & Processes	26.25	0.00	0.00	3.38	3
Electricity, Direct Heat & Steam	0.00	18.09	0.00	5.96	3
Upstream Transport & Distribution	0.00	0.00	4.56	0.00	4
Waste Generated In Operations	0.00	0.00	3.37	0.00	5
Business Travel & Grey Fleet	0.00	0.00	4.51	0.00	6
Employee Commuting & Homeworking	0.00	0.00	28.84	0.00	7
Downstream Transport & Distribution	0.00	0.00	0.00	0.00	9
Total by Scope (tCO₂e)	240.72	29.15	41.28	62.82	—
Total Emissions (tCO₂e) PPN Mandatory Reporting	311.15 tCO₂e				—
Total Emissions (tCO₂e) EEV CRP Reporting	373.97 tCO₂e				—

PPN mandatory total (Scope 1 + Scope 2 + Scope 3 Categories 4, 5, 6, 7, 9 = 311.15 tCO₂e). Fuel- and electricity-related WTT/T&D (53.48 + 3.38 + 5.96 = 62.82 tCO₂e) is reported under Scope 3 Category 3. This category is optional under PPN 006 until 2027; it is included here in preparation for the 2027 requirement to report all Scope 3 categories, giving an all-inclusive total of 373.97 tCO₂e.

DEFRA Ref: <https://www.gov.uk/environment/greenhouse-gas-emissions>

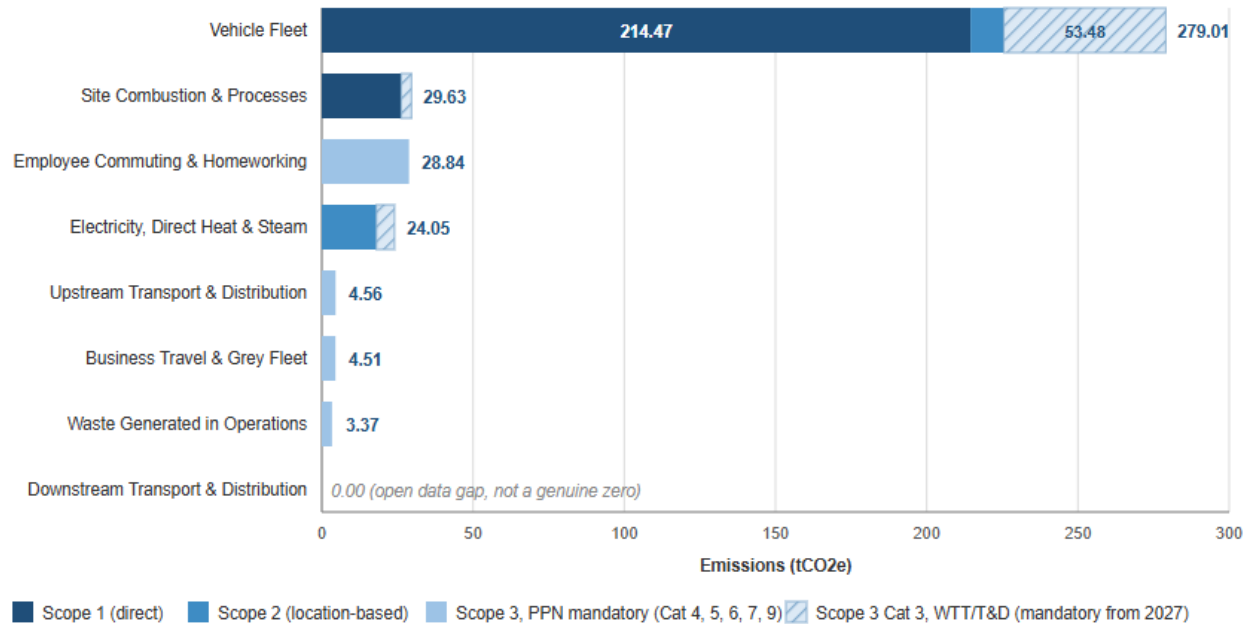
6.1 Discussion of results

Figure 6.1 sets out the 2024 footprint by operational category, with each bar split by scope. It answers two questions at once: which parts of the business generate the emissions, and which reporting scope they fall into. The picture is heavily concentrated. Vehicle fleet emissions of 279.01 tCO₂e account for around three-quarters of the all-inclusive total, and together with site combustion and purchased electricity make up 89% of it. The four remaining value-chain categories, upstream

transport, waste, business travel and downstream transport, contribute 12.44 tCO₂e between them, barely 3% of the total. Employee commuting is the exception worth noting: at 28.84 tCO₂e it is the single largest mandatory Scope 3 item, representing 70% of that column and the only material non-fleet lever available. The chart also makes the PPN 006 boundary legible at a glance, since the solid segments sum to the mandatory total of 311.15 tCO₂e and the hatched Category 3 segments add the 62.82 tCO₂e of well-to-tank and transmission losses that become mandatory from 2027.

Figure 6.1: Total CO₂e emissions by operational category, 2024

XYZ Logistics Ltd, tCO₂e, PPN 006 mandatory scopes plus Scope 3 Category 3 (WTT/T&D)



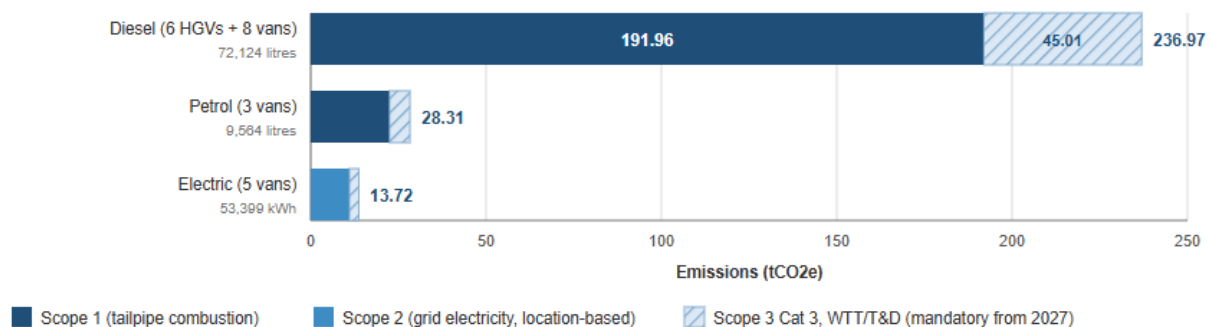
PPN 006 mandatory total (Scope 1 + Scope 2 + Scope 3 Cat 4, 5, 6, 7, 9): 311.15 tCO₂e. Including Scope 3 Cat 3 (WTT/T&D, 62.82 tCO₂e): 373.97 tCO₂e.

Source: Table 6.1, DEFRA 2024 conversion factors. Categories ordered by total emissions. Scope 3 mandatory segments include the WTT element of Cat 4, 6 and 7.

Figure 6.2 breaks the fleet down by fuel. Diesel accounts for 236.97 tCO₂e, or 85% of the fleet footprint, against 28.31 tCO₂e for petrol and 13.72 tCO₂e for electricity. The insight lies in the per-vehicle comparison rather than the totals: the five battery electric vans are nearly a quarter of the fleet by count but under 5% of its emissions, averaging 2.7 tCO₂e each against roughly 11.2 tCO₂e for each diesel van. The first phase of electrification has therefore delivered close to a fourfold reduction per vehicle. This both quantifies the benefit already banked and indicates the scale of what remains available across the 11 diesel and petrol vans still in service.

Figure 6.2: Vehicle fleet CO₂e emissions by fuel type, 2024

XYZ Logistics Ltd, tCO₂e, 22 operated vehicles, fuel-based method



Fleet total: 279.01 tCO₂e (Scope 1: 214.47, Scope 2: 11.06, Scope 3 Cat 3: 53.48). The fleet carries no mandatory Scope 3 (Cat 4 to 9) emissions.

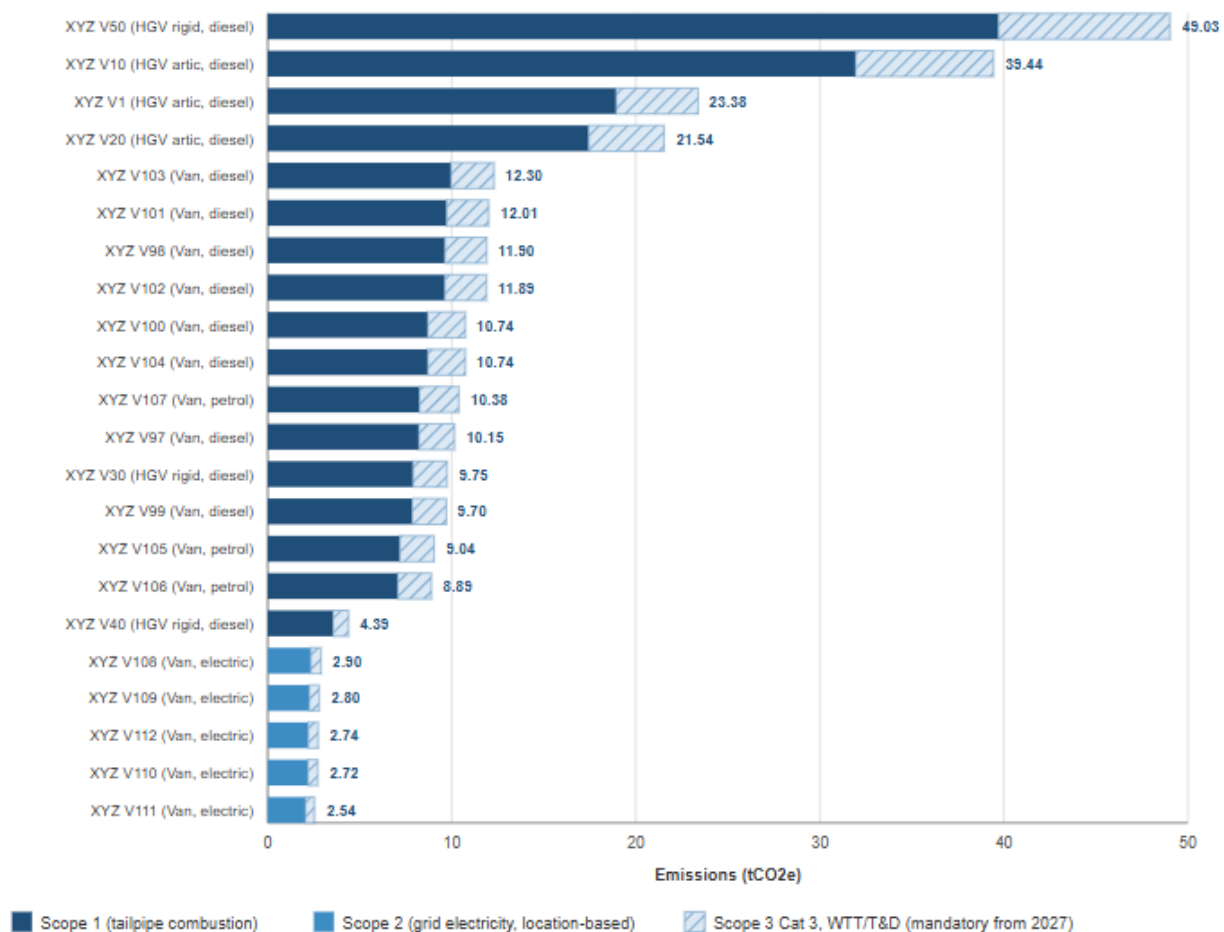
Source: Table 5.3, DEFRA 2024 conversion factors. Electric vans have no tailpipe emissions; their footprint is grid electricity plus transmission losses.

Figure 6.3 goes to individual asset level, ranked by total emissions, and this is the view a fleet manager can act on directly. Emissions are strikingly concentrated: two vehicles, the rigid HGV XYZ V50 and the articulated unit XYZ V10, produce 88.47 tCO₂e between them, 32% of the entire fleet footprint. The six diesel HGVs together account for 147.53 tCO₂e, or 53% of the fleet, from just over a quarter of the vehicles. The practical consequence is that measures such as HVO, driver efficiency training and route optimisation applied to the top handful of assets will deliver considerably more than the same effort spread evenly across all 22.

The ranking also shows that vehicle class alone does not determine impact. XYZ V40, a rigid HGV, emitted 4.39 tCO₂e, less than any diesel or petrol van in the fleet, because it did comparatively little work during the year. Utilisation rather than vehicle type drives the ordering, which is why per-vehicle data is a sounder basis for replacement and electrification planning than fleet averages, and why it provides a baseline against which future-year performance can be tracked asset by asset.

Figure 6.3: Vehicle fleet CO₂e emissions by individual vehicle, 2024

XYZ Logistics Ltd, tCO₂e, all 22 operated vehicles, ranked by total emissions



Fleet total: 279.01 tCO₂e. The six diesel HGVs are 27% of the fleet by count but produce 147.53 tCO₂e, or 53% of total fleet emissions.

Source: Table 5.4, DEFRA 2024 conversion factors. The two highest emitters, V50 and V10, together account for 88.47 tCO₂e (32% of the fleet footprint).

6.2 Data assurance note

The figures in this report have been cross-checked against XYZ Logistics' underlying fuel-card, energy, waste and travel records and against the calculation workbook (MASTER v3.4).

Five corrections were applied in this report and should be carried back into the workbook: (1) taxi and rental-car emissions are recalculated directly from the recorded passenger-miles and miles — the workbook formulas still convert from £ spend and hire-days; (2) electricity used by company-vehicle charge points (41,117 kWh) is excluded from site electricity to avoid double counting against fleet charging records; (3) the workbook's Category 7 subtotal omits homeworking (0.46 tCO₂e), which is included here; (4) waste oil (2,400 litres) and hazardous waste (1.2 tonnes) carry no emission factor in the workbook and are excluded pending factor assignment; (5) the workbook's Emissions & Targets tab shows superseded totals and should be refreshed to match this report (grand total 311.15 tCO₂e).

Table 6.2: Notes and information

Scope 2 market-based: no supplier-specific or REGO-backed renewable electricity data is currently held, so the market-based figure defaults to the location-based figure (29.15 tCO ₂ e, including EV charging) pending contractual evidence.
Category 9 (downstream transport) is reported as 0.00 tCO ₂ e because no distribution data has yet been submitted for this category, not because XYZ Logistics has no downstream distribution activity. This should be treated as an open data gap, not a genuine zero.
The Scope 3 total covers only the five PPN 006-mandatory categories. Category 1 (Purchased Goods & Services), which for a capital-intensive fleet operator typically includes vehicle purchase/lease, tyres, parts and maintenance, is not calculated here as it remains optional until 2027. Including it would likely increase the Scope 3 and Grand Total figures materially.
Business travel figures for taxi, rental car and flights are estimated from spend and trip-count data using documented conversion assumptions (£2.50/mile taxi rate; 40 miles/day rental car; 1,000 km short-haul and 6,000 km long-haul return flight distances), as mileage was not directly recorded for these categories.

7. Emission reduction measures (for consideration)

The measures below illustrate the type of fleet and site decarbonisation actions available to XYZ Logistics, based on the emissions profile calculated in Section 5. The reduction ranges shown are generic industry indicators, not figures modelled against XYZ Logistics' specific fleet and operations. This list is a starting menu for XYZ Logistics' management to review, prioritise and commit to; it is not a statement of measures already adopted.

Sequencing. Operational and behavioural measures (driver training, route optimisation, anti-idling) are typically low cost with fast payback and would logically come first, helping build the case and funding for higher-capital measures such as further fleet electrification and depot renewable energy infrastructure.

Table 7.1: Recommended emission reduction measures

Measure	Indicative reduction	Applicability to XYZ Logistics
Eco-driving and driver training	5–10% fuel	Structured training with in-cab telematics feedback across all 22 drivers
Telematics-led route optimisation	5–15% distance	Dynamic routing and scheduling to cut empty running across the HGV and van fleet

Measure	Indicative reduction	Applicability to XYZ Logistics
Anti-idling policy and monitoring	2–5% fuel	Idle alerts and driver feedback through the existing telematics system
Load consolidation and backhaul	5–10% per tonne-km	Better scheduling to raise load factors on the 3 articulated and 3 rigid HGVs
Expansion of battery electric vans	Displaces diesel/petrol mileage	Building on the 5 vans already electrified; assess remaining 11 diesel/petrol vans for replacement
HVO or certified renewable diesel	Up to ~90% well-to-wheel vs mineral diesel	Applicable to the 6 HGVs where full electrification is not yet viable
Depot solar PV and renewable electricity tariff	Reduces Scope 2 to near-zero	Avonmouth depot electricity currently location-based grid supply
Depot overnight/rest-period EV charging infrastructure	Enables further fleet electrification	Aligned to driver duty cycles and dwell time at the Avonmouth depot
Supplier engagement on upstream/downstream transport	Varies	Targets Scope 3 Categories 4 and 9, both currently thin on data

This table has not yet been reviewed or approved by XYZ Logistics. Measures that are agreed should be moved into Section 8 (Carbon reduction projects) with a committed target year and estimated tCO2e saving, per PPN 006 requirements.

END OF REPORT

8. Carbon Reduction Plan (Official PPN 006 template)

This section is completed to the PPN 006 template (February 2025). Reporting year figures are drawn from the calculations in Sections 5 and 6. Baseline year, targets, completed/planned initiatives and board sign-off require input from XYZ Logistics before this report can be published, and are marked accordingly below.

Commitment to achieving net zero

XYZ Logistics Ltd is committed to achieving net zero emissions by 2050.

Baseline emissions footprint: 2022

Baseline emissions are a record of the greenhouse gases produced prior to the introduction of any strategies to reduce emissions. XYZ Logistics' baseline year is 2022. Baseline year figures have not yet been calculated in the supporting carbon model and require the same twelve tabs of 2022 activity data as the 2024 reporting year before this table can be completed.

Emissions	Total (tCO ₂ e)
Scope 1	[TO BE COMPLETED]
Scope 2	[TO BE COMPLETED]
Scope 3 (five mandatory categories)	[TO BE COMPLETED]
Total emissions	[TO BE COMPLETED]

Current emissions reporting: 2024

Scope 1, 2 and 3 emissions for the 2024 reporting year, calculated as set out in Sections 5 and 6 of this report.

Emissions	TOTAL (tCO ₂ e)
Scope 1	240.72
Scope 2 (location-based)	29.15
Scope 3 (five mandatory categories)	41.28
Total emissions	311.15

Emissions reduction targets

In order to continue progress towards net zero, XYZ Logistics will adopt the following carbon reduction targets. Beyond the overarching Net Zero by 2050 commitment, specific interim targets require sign-off from XYZ Logistics' management before publication.

Target	Baseline year	Target year	Target
Net Zero commitment (entire organisation)	—	2050 (or earlier)	Net Zero
Scope 1 near-term reduction target	[TBC]	[TBC]	[TO BE COMPLETED BY CLIENT]
Scope 2 near-term reduction target	[TBC]	[TBC]	[TO BE COMPLETED BY CLIENT]
Fleet electrification milestone	[TBC]	[TBC]	[TO BE COMPLETED BY CLIENT]
HVO / alternative fuel adoption target	[TBC]	[TBC]	[TO BE COMPLETED BY CLIENT]
Science Based Target (SBTi) submission date	[TBC]	[TBC]	[TO BE COMPLETED BY CLIENT]

Carbon reduction projects

Completed carbon reduction initiatives

No completed initiatives have yet been logged against the 2022 baseline in the supporting carbon model (tab 14). PPN 006 requires the CRP to state the cumulative tCO2e saving from all completed initiatives, as a total figure and as a percentage reduction against the baseline year, once available.

Future carbon reduction initiatives

Selected from the measures reviewed in Section 7, to be confirmed by XYZ Logistics management:

- [TO BE COMPLETED BY CLIENT — select and commit to specific measures from Section 7]

Declaration and sign off

This Carbon Reduction Plan has been completed in accordance with PPN 006 and the associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Protocol Corporate Standard (Scope 1 and 2) and Corporate Value Chain (Scope 3) Standard. UK Government (DEFRA) 2024 conversion factors have been used throughout.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements where applicable, and the required subset of Scope 3 emissions has been reported in accordance with the GHG Protocol's Scope 3 Calculation Guidance.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body). [SIGN-OFF PENDING]

Signed on behalf of the supplier:

.....

Name:

Role:

Date: