

Calder Example Joinery & Fit-Out Ltd

Prepared in accordance with PPN 006 (UK central government)

PLAN	Carbon Reduction Plan 2024 — Calder Example Joinery & Fit-Out Ltd
REPORTING STANDARD	PPN 006 (UK central government)
DATE OF ISSUE	5 July 2026
BOARD APPROVED	Board of Directors
SIGNED OFF BY	Alex Morgan (Managing Director) · 15 November 2024

This document sets out Calder Example Joinery & Fit-Out Ltd's greenhouse gas emissions baseline, reduction targets and decarbonisation measures, reported in accordance with the published reporting standard for Carbon Reduction Plans, the GHG Protocol Corporate Standard and the UK Government's greenhouse gas conversion factors.

1. Executive Summary

Calder Example Joinery & Fit-Out Ltd has set a Net Zero target year of 2045, with an interim commitment to reduce emissions by 50% against its 2022 baseline by 2030.

The baseline footprint for 2022 stood at 133.9988 tCO₂e in total, comprising 73.2834 tCO₂e from Scope 1 sources, 16.992 tCO₂e from Scope 2 purchased electricity, and 43.7234 tCO₂e from the measured Scope 3 categories. Fleet and mobile combustion is the single largest source within Scope 1, at 47.3031 tCO₂e in the baseline year, while business travel (29.3317 tCO₂e at baseline) and employee commuting (22.2371 tCO₂e at baseline) account for the majority of the measured Scope 3 total. The principal reduction measures address these drivers directly: the transition of seven diesel vans to electric equivalents is under way with an estimated saving of 38 tCO₂e, a timber offcut recycling contract is planned to divert waste from landfill with an estimated saving of 11 tCO₂e, and LED relighting of both workshop bays was completed in 2023 with a saving of 6.2 tCO₂e. Emissions factors are drawn from the UK Government GHG Conversion Factors for Company Reporting (DESNZ/DEFRA).

Highlights

- The 2022 baseline total of 133.9988 tCO₂e gives an intensity of 3.5263 tCO₂e per FTE; by the 2024 reporting year this total had reduced to 120.703 tCO₂e, reflecting early progress across Scope 1, Scope 2, and the measured Scope 3 categories.
- The three identified reduction measures carry a combined potential saving of 55.2 tCO₂e: LED relighting delivered 6.2 tCO₂e in 2023, the planned timber offcut recycling contract targets 11 tCO₂e by 2025, and the ongoing van fleet electrification programme is expected to deliver 38 tCO₂e by 2028.
- Accountability for this plan sits at director level within Calder Example Joinery & Fit-Out Ltd; progress against the 2030 interim target (50% reduction on the 2022 baseline) and the 2045 Net Zero commitment will be reviewed annually and reflected in updated Carbon Reduction Plan submissions.

This Carbon Reduction Plan has been prepared for submission under PPN 006 (Procurement Act 2023) and is signed by a director of Calder Example Joinery & Fit-Out Ltd as the contracting legal entity.

2. Organisation Details

- **Organisation:** Calder Example Joinery & Fit-Out Ltd
- **Trading name note:** This Carbon Reduction Plan covers Calder Example Joinery & Fit-Out Ltd, the bidding supplier. 'Calder Example Joinery' is a trading name only and is not a separate reporting boundary.
- **Companies House number:** 00000000
- **Sector:** Construction — joinery & fit-out
- **Employees:** 38
- **Turnover band:** £632k–£10.2m

3. Commitment to Achieving Net Zero

Calder Example Joinery & Fit-Out Ltd is committed to achieving Net Zero emissions by 2045.

4. Baseline Emissions Footprint

Baseline year: 2022

Methodology: GHG Protocol Corporate Standard (location-based) (factor set 2025)

Scope 2 methodology: Location-based

Emissions scope	Carbon (tCO ₂ e)
Scope 1 (direct)	73.2834 tCO ₂ e
Scope 2 (indirect — purchased energy)	16.992 tCO ₂ e
Scope 3 (other indirect)	43.7234 tCO ₂ e
Total	133.9988 tCO₂e

Intensity: 3.5263 tCO₂e per FTE

5. Current Emissions Reporting

Reporting year: 2024

Methodology: GHG Protocol Corporate Standard (location-based) (factor set 2025)

Scope 2 methodology: Location-based

Emissions scope	Carbon (tCO ₂ e)
Scope 1 (direct)	65.9551 tCO ₂ e
Scope 2 (indirect — purchased energy)	15.2928 tCO ₂ e
Scope 3 (other indirect)	39.4551 tCO ₂ e
Total	120.703 tCO₂e

Intensity: 3.1764 tCO₂e per FTE

6. Carbon Hotspot Analysis

The 2024 inventory for Calder Example Joinery & Fit-Out Ltd totals 120.703 tCO₂e, and the footprint concentrates heavily in two areas: diesel combustion from the company's seven transit vans (42.572779 tCO₂e, representing 35.27% of the total) and natural gas used for space heating and hot water across the workshop and paint shop (23.382288 tCO₂e, 19.37%). Together, these two Scope 1 sources account for well over half the reported footprint. Beyond direct emissions, employee car commuting (19.311264 tCO₂e, 16.00%) and purchased grid electricity (15.2928 tCO₂e, 12.67%) are the next most significant contributors, followed by waste sent to landfill, predominantly untreated timber offcuts, at 10.410654 tCO₂e (8.63%). The remaining quantified categories, covering business travel by car, downstream and upstream transport, employee rail commuting, and water supply, each contribute below 5.30% individually and collectively represent a comparatively small share of the total footprint.

Ranked emissions by category (2024)

Rank	Scope	Category	tCO ₂ e	% of total
1	Scope 1	Diesel — average	42.5728 tCO ₂ e	35.3%
2	Scope 1	Natural gas	23.3823 tCO ₂ e	19.4%
3	Scope 3	Employee commuting - car — average	19.3113 tCO ₂ e	16.0%
4	Scope 2	Grid electricity — UK	15.2928 tCO ₂ e	12.7%
5	Scope 3	Waste — commercial & industrial, landfill	10.4107 tCO ₂ e	8.6%
6	Scope 3	Business travel - car — average	6.3852 tCO ₂ e	5.3%
7	Scope 3	Downstream transport & distribution — van (class III, diesel)	1.7425 tCO ₂ e	1.4%
8	Scope 3	Upstream transport & distribution — HGV (all, average laden)	0.7933 tCO ₂ e	0.7%
9	Scope 3	Employee commuting - rail — national rail	0.7021 tCO ₂ e	0.6%
10	Scope 3	Water supply	0.1102 tCO ₂ e	0.1%

Scope-by-scope commentary

- **Scope 1 (direct):** Scope 1 emissions are driven by diesel consumption across seven company-owned transit vans used for site deliveries and by natural gas consumed for space heating and hot-water provision in the workshop and paint-shop premises.
- **Scope 2 (purchased energy):** Scope 2 emissions of 15.2928 tCO₂e arise entirely from grid electricity purchased for the workshop and office premises, calculated using the location-based UK grid factor from the UK Government GHG Conversion Factors for Company Reporting (DESNZ/DEFRA).
- **Scope 3 (value chain):** Scope 3 emissions are led by employee car commuting at 19.311264 tCO₂e, with additional material contributions from operational waste (principally untreated timber offcuts routed to landfill at 10.410654 tCO₂e) and business travel by car at 6.385176 tCO₂e; upstream and downstream transport, rail commuting, and water supply each contribute below 1.80 tCO₂e.

Recommendations for mitigation

- Accelerate the transition of the seven diesel transit vans to electric equivalents: the in-progress fleet electrification programme targets an estimated saving of 38 tCO₂e and is the single highest-impact measure available to Calder Example Joinery & Fit-Out Ltd, directly addressing the largest category (42.572779 tCO₂e). Prioritising early lease renewals for the highest-mileage vans will bring forward savings within the current reporting cycle rather than waiting until the 2028 completion date.
- Formalise the planned timber offcut recycling contract with a biomass recycler before the 2025 target date: diverting untreated timber waste from landfill addresses the 10.410654 tCO₂e waste category and carries an estimated saving of 11 tCO₂e. Alongside this, introduce on-site waste segregation to separate treated from untreated timber at source, ensuring the recycling route remains available and the landfill fraction is minimised from the outset.
- Reduce natural gas consumption for space heating and hot-water provision, which accounts for 23.382288 tCO₂e: practical near-term actions for a workshop of this scale include improving roof and wall insulation, servicing the boiler to maintain rated efficiency, and fitting time-clock controls to avoid heating unoccupied areas outside working hours. These measures require modest capital outlay and can be implemented without disrupting production.

- Switch the workshop and office electricity supply to a certified renewable tariff: this would reduce the 15.2928 tCO₂e Scope 2 figure materially at low administrative cost and is appropriate for an organisation of 38 employees without requiring a power purchase agreement or on-site generation infrastructure. If the lease permits, an assessment of roof-mounted solar PV on the workshop building would be a logical follow-on step.
- Introduce a simple commuting policy to reduce the 19.311264 tCO₂e employee car commuting figure: for a 38-person workforce, practical measures include a cycle-to-work scheme, a travel survey repeated annually to track modal shift, and a commitment to provide workplace EV charging points as the van fleet electrification progresses, making electric commuting more accessible to staff who also drive to site.

7. Emissions Reduction Targets

Baseline year	Target year	Reduction	Net zero
2022	2030	50% vs baseline	No
2022	2045	100% vs baseline	Yes

Target Credibility Bridge

The table below shows how well the listed carbon reduction measures cover each declared target.

Target year	Required reduction (tCO ₂ e)	Quantified measure savings (tCO ₂ e)	Remaining gap (tCO ₂ e)	Bridge status
2030	67	55.2	11.8	Further quantified measures are needed to fully evidence delivery
2045	134	55.2	—	This long-term Net Zero target will require additional measures

8. Reduction Roadmap

Calder Example Joinery & Fit-Out Ltd has set two absolute reduction targets against a 2022 baseline of 133.9988 tCO₂e: a 50% reduction by 2030 and a 100% reduction by 2045, the latter constituting the company's Net Zero commitment. The current reported position of 120.703 tCO₂e for 2024 reflects real progress already made, including the completed LED relighting of workshop bays, and confirms that the direction of travel is consistent with the 2030 interim target. The planned measures are sequenced to address the largest emission sources first: fleet combustion at 42.5728 tCO₂e and business travel at 26.3985 tCO₂e together represent the dominant drivers of the current footprint, and the transition of the van fleet to electric vehicles is the single highest-impact action in the programme. Scope 3 categories covering waste generated in operations (10.4107 tCO₂e) and employee commuting (20.0134 tCO₂e) are also quantified and targeted through specific measures, giving the plan a grounded, evidence-based character appropriate for a 38-person joinery and fit-out business operating within the construction sector.

Targets & roadmap milestones

- **2023 — Baseline energy efficiency improvement: 6.2 tCO₂e saving delivered:** Complete the LED relighting of both workshop bays, replacing SON and fluorescent fittings with LED luminaires and occupancy sensors. This measure has been completed and delivers an estimated saving of 6.2 tCO₂e, reducing the Scope 2 purchased electricity footprint from its 2022 baseline level of 16.992 tCO₂e. Addressing workshop lighting first was the lowest-cost, highest-certainty action available. It required no change to operational processes, could be delivered within a single financial year, and established a verified reduction that supports the credibility of subsequent, larger commitments.
- **2025 — Waste diversion measure complete: 11 tCO₂e saving delivered from 2025 measures:** Formalise a timber offcut recycling contract to divert untreated timber waste from landfill to a biomass recycler. This planned measure targets the waste generated in operations category, which currently stands at 10.4107 tCO₂e, and is expected to deliver a saving of 11 tCO₂e on completion. Joinery and fit-out operations generate a consistent and predictable stream of untreated timber offcuts. Securing a biomass recycling contract is a practical, contract-based action that does not depend on capital expenditure or technology risk. Completing it by 2025 removes a material waste-related emission source before the more capital-intensive fleet transition reaches its midpoint, keeping the overall programme on pace for the 2030 target.
- **2028 — Fleet electrification complete: 38 tCO₂e saving delivered from 2028 measures:** Complete the replacement of all seven diesel transit vans with electric equivalents as each vehicle reaches its lease renewal point, a programme running from 2024 to 2028. This is the largest single measure in the plan, targeting the Scope 1 fleet and mobile combustion source currently recorded at 42.5728 tCO₂e. Fleet combustion is the largest quantified emission source in the current footprint. Phasing the transition through lease renewals avoids early termination costs and spreads capital exposure across four years, making the programme financially manageable for a business of this size. Completing electrification by 2028 delivers the bulk of the absolute reduction needed to approach the 2030 interim target, and positions the company to address residual emissions in the final years before 2030.
- **2030 — 50% absolute reduction versus 2022 baseline (133.9988 tCO₂e):** By 2030, consolidate the savings from completed measures, continue annual monitoring of business travel (26.3985 tCO₂e in 2024) and employee commuting (20.0134 tCO₂e in 2024), and apply practical travel management measures such as defaulting to rail over private car for site visits and promoting the cycle-to-work scheme. Review the renewable electricity tariff for the workshop to reduce the residual Scope 2 footprint. Identify and begin addressing any remaining data gaps, including refrigerants and fugitive gases, to ensure the inventory is complete ahead of the 2045 commitment. The three confirmed measures together account for a combined potential saving of 55.2 tCO₂e. Reaching the 50% interim target requires that these savings are realised in full and that behavioural and procurement measures contain growth in travel and commuting emissions. The 2030 milestone therefore functions as both a delivery checkpoint and a planning trigger: performance against it will determine what further action is required in the 2030 to 2045 period.

- **2045 — Net Zero: 100% absolute reduction versus 2022 baseline (133.9988 tCO₂e):** Following the 2030 review, develop and implement a second phase of measures to address residual emissions across Scope 1 heating and stationary fuels (23.3823 tCO₂e in 2024), any remaining fleet or travel emissions, and Scope 3 categories that remain data gaps at the point of the review, including purchased goods and services. Transition workshop heating away from fossil fuels as equipment reaches end of life, consistent with the UK's trajectory for heat decarbonisation. Any emissions that cannot be eliminated through direct action by 2045 will be addressed in accordance with guidance current at that time. The 2030 to 2045 period allows time for technology and market conditions to mature, particularly for low-carbon heating solutions and for the grid to decarbonise further, which will reduce the residual Scope 2 footprint without additional capital investment. Sequencing the second phase after the 2030 review ensures that actions are informed by actual performance data rather than projections made more than twenty years in advance, which is appropriate for a business of this scale.

What Net Zero means for this organisation

For Calder Example Joinery & Fit-Out Ltd, reaching Net Zero by 2045 means eliminating, to the fullest extent practicable, the greenhouse gas emissions arising from its workshop operations, owned vehicle fleet, business travel, and the waste generated on construction sites where it works. The company's emissions profile is shaped by the physical nature of joinery and fit-out work: diesel vans transporting materials and operatives to sites, gas or oil heating in the workshop, and timber waste going to landfill. Net Zero in this context is not an abstract accounting exercise; it means those vans run on electricity, the workshop is heated without fossil fuels, and offcuts are diverted to productive use rather than disposal. The 2045 target gives the company sufficient time to align major capital decisions, such as fleet replacement cycles and lease renewals, with lower-carbon alternatives as they become commercially available at the scale appropriate for a 38-person business.

9. Carbon Reduction Projects

Calder Example Joinery & Fit-Out Ltd has structured its decarbonisation programme around the emission sources that matter most to its operations: workshop energy consumption, a diesel-dependent van fleet, and the significant volumes of timber waste generated on site and at client premises. The approach is deliberate and sequenced, beginning with low-capital efficiency measures already completed, moving through fleet electrification currently under way, and extending to waste diversion planned for near-term delivery. Each measure targets a quantified emission source within the company's reported inventory, ensuring that progress can be tracked against the 50% reduction target by 2030 and the net-zero commitment by 2045. Conversion factors applied to estimate savings are drawn from the UK Government GHG Conversion Factors for Company Reporting (DESNZ/DEFRA), consistent with the methodology used across the inventory.

Carbon reduction measures

Measure	Category	Status	Est. saving	Timeline
LED relighting of workshop bays	Energy efficiency	Completed	6.2 tCO ₂ e	2023–2023
Transition van fleet to electric	Fleet	In progress	38 tCO ₂ e	2024–2028
Timber offcut recycling contract	Other	Planned	11 tCO ₂ e	2025–2025

Strategy by category

- **Energy Efficiency:** One measure falls within this category: the LED relighting of both workshop bays, replacing SON and fluorescent fittings with LED luminaires and occupancy sensors. This project was completed in 2023 and is estimated to deliver a saving of 6.2 tCO₂e per year. It directly addresses the Scope 2 purchased electricity footprint of 15.2928 tCO₂e reported for the current period, and represents the most immediately realisable reduction already embedded in the company's performance.
- **Fleet:** Fleet combustion is the single largest source in Calder Example Joinery & Fit-Out Ltd's current inventory, with Scope 1 fleet and mobile combustion reported at 42.5728 tCO₂e. The planned transition of seven diesel transit vans to electric equivalents, timed to coincide with lease renewals between 2024 and 2028, is currently in progress and carries an estimated saving of 38 tCO₂e. This measure will also reduce the downstream transportation and distribution footprint over time as delivery patterns shift. Route optimisation alongside the transition can further reduce fuel consumption in the interim period before full electrification is achieved.
- **Waste:** Waste generated in operations was reported at 10.4107 tCO₂e in the current period, reflecting the volumes of timber offcuts and site waste inherent in joinery and fit-out work. A planned contract with a biomass recycler to divert untreated timber waste from landfill is scheduled for completion in 2025 and is estimated to save 11 tCO₂e. This measure directly targets the waste stream that drives the majority of the operational waste footprint and aligns with the practical waste segregation approach appropriate to a business of this size.

Across all three measures, the total potential saving is estimated at 55.2 tCO₂e, representing a material contribution towards Calder Example Joinery & Fit-Out Ltd's 2030 reduction target against its 2022 baseline of 133.9988 tCO₂e.

10. Supply Chain and Supplier Engagement

Calder Example Joinery & Fit-Out Ltd recognises that its supply chain represents a material source of emissions that sits outside its direct operational control but within its sphere of influence as a buyer of timber, hardware, sheet materials and subcontracted services. Scope 3 Category 4 (upstream transportation and distribution) has been quantified in the current reporting period at 2.5357 tCO₂e, calculated using UK Government GHG Conversion Factors for Company Reporting (DESNZ/DEFRA), and this figure is tracked annually. Scope 3 Category 1 (purchased goods and services) has not yet been quantified; it remains a data gap and a recommended next step for data collection, given that material procurement is likely to be a significant source of embodied carbon in a joinery and fit-out business. Calder Example Joinery & Fit-Out Ltd intends to address this gap by engaging key material suppliers to obtain activity or spend data that would support a first estimate of Category 1 emissions. Sustainable procurement decisions, including preference for suppliers who can evidence their own carbon reduction commitments, will inform purchasing choices as this data becomes available.

Supplier policies

- Calder Example Joinery & Fit-Out Ltd will introduce a simple carbon disclosure questionnaire, issued annually to its most significant material suppliers (by spend), asking them to confirm whether they measure their greenhouse gas emissions, hold a carbon reduction plan or net-zero commitment, and can provide product-level environmental data such as Environmental Product Declarations. Responses will be reviewed and retained to support future Scope 3 Category 1 data collection.
- When placing orders for timber and sheet materials, Calder Example Joinery & Fit-Out Ltd will give preference to suppliers who can demonstrate legal and sustainable sourcing, such as FSC or PEFC chain-of-custody certification, and who consolidate deliveries to reduce the number of part-load vehicle movements arriving at its workshop, directly supporting the reduction of Scope 3 Category 4 upstream transport emissions.

Value-chain decarbonisation steps

- As a near-term data improvement step, Calder Example Joinery & Fit-Out Ltd will map its top material suppliers by annual spend and request basic carbon disclosure information from each. This will provide the activity data needed to produce a first quantified estimate of Scope 3 Category 1 (purchased goods and services) emissions, which is currently a data gap, and will inform future procurement decisions.
- To reduce Scope 3 Category 4 upstream transport emissions, which were quantified at 2.5357 tCO₂e in the current period, Calder Example Joinery & Fit-Out Ltd will work with its main materials suppliers to consolidate deliveries, increase average payload utilisation, and, where practical, shift to suppliers operating lower-emission vehicles or located closer to its workshop. Shipment frequency and load sizes will be reviewed at each major project procurement stage.
- Calder Example Joinery & Fit-Out Ltd will incorporate carbon considerations into its standard supplier selection process by asking new suppliers, at quotation stage, whether they hold a carbon reduction plan. This does not impose a mandatory threshold but creates a consistent record of supplier carbon maturity that can be used to guide future sourcing decisions as the company progresses toward its 2045 net-zero commitment.

11. Governance and Climate Risk

This Carbon Reduction Plan has been approved and is signed by Alex Morgan, Managing Director of Calder Example Joinery & Fit-Out Ltd. Board-level accountability for the plan rests with Alex Morgan, who holds personal responsibility for setting the direction of the company's emissions reduction programme, approving material changes to targets or measures, and ensuring that progress is reviewed at a frequency sufficient to keep the company on track toward its 2030 and 2045 commitments. Given the size of the business, at 38 employees, this accountability is exercised directly rather than through a delegated committee structure. The Managing Director reviews reported emissions data, the status of active reduction measures, and any emerging risks on an annual basis, with the review timed to coincide with the close of each March reporting period so that findings can inform operational planning for the year ahead.

Oversight & accountability

- Annual review by the Managing Director of reported emissions against the prior year and against the 2022 baseline, covering Scope 1 heating and stationary fuels, Scope 1 fleet and mobile combustion, Scope 2 purchased electricity, and the quantified Scope 3 categories, to assess whether the company remains on a path consistent with the 50% reduction target by 2030.
- Annual status check on each active and planned reduction measure, including the electric van fleet transition and the timber offcut recycling contract, to confirm delivery timelines, estimated savings, and any changes to scope or cost that require a decision by the Managing Director.
- Annual update of the Carbon Reduction Plan document to reflect the latest reporting year data, any new or completed measures, and any changes to targets, with the updated plan signed off by Alex Morgan before submission to public-sector clients or publication.

Identified climate risks

- Transition risk: The joinery and fit-out sector relies heavily on timber, sheet materials, and hardware sourced through supply chains that are increasingly subject to low-carbon procurement requirements from main contractors and public-sector clients. As embodied carbon specifications tighten in construction contracts, Calder Example Joinery & Fit-Out Ltd faces the risk that materials currently procured without carbon data may become non-compliant with client specifications, or that lower-carbon alternatives carry a cost premium that affects project margins. The company's current data gap on purchased goods and services (Scope 3 Category 1) means this exposure is not yet fully quantified.
- Physical risk: The company operates workshop facilities and delivers fit-out works on construction sites, both of which are exposed to disruption from more frequent and intense weather events. Prolonged periods of high temperature can reduce productivity in workshop environments that are not climate-controlled, while increased rainfall and flooding events can delay site-based installation programmes, extend project durations, and increase costs. Timber and wood-based materials held in storage are also susceptible to moisture damage if premises are affected by flooding or roof ingress during extreme weather.
- Regulatory risk: The UK government's net zero legislative framework, including the Climate Change Act 2008 and successive carbon budgets, is progressively tightening the requirements placed on businesses operating in the built environment. Procurement policy under the Procurement Act 2023 and associated guidance already requires suppliers bidding for public contracts above relevant thresholds to hold a Carbon Reduction Plan. Future iterations of this policy are likely to require greater Scope 3 coverage, verified data, and more stretching interim targets. Failure to maintain and update this plan, or to expand emissions coverage in line with evolving expectations, could result in exclusion from public-sector tender processes on which the company depends for a portion of its revenue.

12. KPI Framework and Monitoring Strategy

Calder Example Joinery & Fit-Out Ltd tracks its carbon performance against five core metrics, each drawn from the same data sources used to compile this Carbon Reduction Plan. Absolute Scope 1 emissions are derived from metered fuel consumption for heating and stationary plant (23.3823 tCO₂e in the current reporting year) and from fleet fuel records covering the company's van fleet (42.5728 tCO₂e), giving a combined Scope 1 total of 65.9551 tCO₂e. Absolute Scope 2 emissions reflect purchased electricity at the workshop premises, quantified at 15.2928 tCO₂e using the location-based method and UK Government

GHG Conversion Factors for Company Reporting (DESNZ/DEFRA). Absolute Scope 3 emissions of 39.4551 tCO₂e cover the categories quantified in this plan: upstream transportation and distribution (2.5357 tCO₂e), waste generated in operations (10.4107 tCO₂e), business travel (26.3985 tCO₂e), employee commuting (20.0134 tCO₂e), and downstream transportation and distribution (1.7425 tCO₂e). The emissions intensity ratio is expressed as tCO₂e per full-time equivalent employee, with a baseline value of 3.5263 tCO₂e per FTE established against the 2022 baseline year total of 133.9988 tCO₂e; this ratio is recalculated annually using the headcount figure at the close of each reporting period. Percentage reduction versus baseline is measured against the 2022 baseline total of 133.9988 tCO₂e, with interim and long-term targets of 50% reduction by 2030 and net zero by 2045. All five metrics are compiled once per year, aligned to the March reporting period, using utility invoices, fuel card records, mileage logs, waste transfer notes, and a staff commuting survey. The resulting figures are reviewed at the annual management review, at which point progress against the 2030 and 2045 targets is assessed, data gaps for sources currently recorded as unknown are reconsidered, and any corrective actions are agreed for the following year.

Key performance indicators

- Absolute Scope 1 tCO₂e: total of Scope 1 Heating & Stationary Fuels and Scope 1 Fleet & Mobile Combustion, reported annually against the 2022 baseline of 73.2834 tCO₂e and the current year figure of 65.9551 tCO₂e. Tracked using metered gas consumption records and fleet fuel card data, converted using UK Government GHG Conversion Factors for Company Reporting (DESNZ/DEFRA).
- Absolute Scope 2 tCO₂e: purchased electricity at company premises, reported annually against the 2022 baseline of 16.992 tCO₂e and the current year figure of 15.2928 tCO₂e. Tracked using electricity invoices and half-hourly meter data where available, applying the location-based method and UK Government GHG Conversion Factors for Company Reporting (DESNZ/DEFRA).
- Absolute Scope 3 tCO₂e: covering upstream transportation and distribution, waste generated in operations, business travel, employee commuting, and downstream transportation and distribution, reported annually against the 2022 baseline of 43.7234 tCO₂e and the current year figure of 39.4551 tCO₂e. Tracked using supplier delivery records, waste transfer notes, mileage and rail expense claims, and an annual staff commuting survey.
- Emissions intensity ratio (tCO₂e per FTE): total annual emissions divided by the headcount at the close of the reporting period, with a 2022 baseline of 3.5263 tCO₂e per FTE. Recalculated each year to separate genuine emissions reductions from changes driven by fluctuations in business activity or workforce size.
- Percentage reduction versus the 2022 baseline total of 133.9988 tCO₂e: reported annually to show progress toward the 50% reduction target by 2030 and the net zero commitment by 2045. The current year total of 120.703 tCO₂e is used as the most recent data point, with the percentage reduction figure updated each year as new annual data is compiled.

Monitoring review interval: Annual, aligned to the March reporting period close, with metrics compiled and reviewed at the annual management review each year.

13. Offset Strategy

Calder Example Joinery & Fit-Out Ltd treats emissions reduction as the primary obligation, with carbon offsetting reserved for residual emissions that cannot be eliminated through operational changes. The sequence is fixed: reduce first across fleet, energy, waste and travel, then offset only what remains after all planned and future measures have been applied. This approach reflects the mitigation hierarchy and ensures that offset expenditure is not used to defer or substitute for genuine operational change. As the company's reduction programme matures, particularly through the transition of the van fleet to electric vehicles and the diversion of timber waste from landfill, the volume of residual emissions requiring offset treatment will be reviewed annually and updated in line with actual performance against the 2030 and 2045 targets.

Calder Example Joinery & Fit-Out Ltd will procure a volume of verified carbon credits equivalent to the residual emissions remaining after all planned reduction measures have been fully implemented and verified, with that volume reassessed each reporting year as the reduction programme progresses.

Offset project standard: UK Woodland Carbon Code

14. Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 006 and 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 Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

Signed on behalf of the Supplier: Alex Morgan, Managing Director

Date: 15 November 2024

15. Evidence and Methodology Appendix

Emissions are calculated in accordance with the GHG Protocol Corporate Standard. Conversion factors are sourced from the UK Government Greenhouse Gas Conversion Factors for Company Reporting.

Detailed Emissions Activity Log & Data Quality

Baseline-year activity evidence (2022)

Scope 1 direct emissions

Scope	Category	Subcategory	Quantity & Unit	Carbon (tCO ₂ e)	Method	Data Quality	Factor / Source	Data quality basis
Scope 1	Natural gas	—	142,000 kWh	25.9803 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.18296 kgCO ₂ e/kWh	Workshop space + paint-shop heating.
Scope 1	Diesel	average	18,400 litres	47.3031 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 2.57082 kgCO ₂ e/litres	7 transit vans, site deliveries.

Scope 2 indirect emissions (purchased energy)

Scope	Category	Subcategory	Quantity & Unit	Carbon (tCO ₂ e)	Method	Data Quality	Factor / Source	Data quality basis
Scope 2	Grid electricity	UK	96,000 kWh	16.992 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.177 kgCO ₂ e/kWh	—

Scope 3 other value-chain activities

Scope	Category	Subcategory	Quantity & Unit	Carbon (tCO ₂ e)	Method	Data Quality	Factor / Source	Data quality basis
Scope 3	Business travel - car	average	41,000 km	7.0946 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.17304 kgCO ₂ e/km	—
Scope 3	Waste	commercial & industrial, landfill	22 tonnes	11.4517 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 520.5327 kgCO ₂ e/tonnes	Untreated timber offcuts to landfill.
Scope 3	Employee commuting - car	average	124,000 km	21.457 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.17304 kgCO ₂ e/km	Annualised from 31 staff survey responses.
Scope 3	Employee commuting - rail	national rail	22,000 passenger.km	0.7801 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.03546 kgCO ₂ e/passenger.km	—
Scope 3	Downstream transport & distribution	van (class III, diesel)	3,600 tonne.km	1.9361 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.5378 kgCO ₂ e/tonne.km	Third-party courier deliveries of finished joinery items to sites.
Scope 3	Upstream transport & distribution	HGV (all, average laden)	8,200 tonne.km	0.8814 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.10749 kgCO ₂ e/tonne.km	Inbound sheet materials and ironmongery deliveries from key suppliers.
Scope 3	Water supply	—	640 m3	0.1224 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.1913 kgCO ₂ e/m3	—

Current-year activity evidence (2024)

Scope 1 direct emissions

Scope	Category	Subcategory	Quantity & Unit	Carbon (tCO ₂ e)	Method	Data Quality	Factor / Source	Data quality basis
Scope 1	Natural gas	—	127,800 kWh	23.3823 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.18296 kgCO ₂ e/kWh	Workshop space + paint-shop heating.
Scope 1	Diesel	average	16,560 litres	42.5728 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 2.57082 kgCO ₂ e/litres	7 transit vans, site deliveries.

Scope 2 indirect emissions (purchased energy)

Scope	Category	Subcategory	Quantity & Unit	Carbon (tCO ₂ e)	Method	Data Quality	Factor / Source	Data quality basis
Scope 2	Grid electricity	UK	86,400 kWh	15.2928 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.177 kgCO ₂ e/kWh	—

Scope 3 other value-chain activities

Scope	Category	Subcategory	Quantity & Unit	Carbon (tCO ₂ e)	Method	Data Quality	Factor / Source	Data quality basis
Scope 3	Upstream transport & distribution	HGV (all, average laden)	7,380 tonne.km	0.7933 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.10749 kgCO ₂ e/tonne.km	Inbound sheet materials and ironmongery deliveries from key suppliers.
Scope 3	Water supply	—	576 m ³	0.1102 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.1913 kgCO ₂ e/m ³	—
Scope 3	Business travel - car	average	36,900 km	6.3852 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.17304 kgCO ₂ e/km	—
Scope 3	Waste	commercial & industrial, landfill	20 tonnes	10.4107 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 520.5327 kgCO ₂ e/tonnes	Untreated timber offcuts to landfill.
Scope 3	Employee commuting - car	average	111,600 km	19.3113 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.17304 kgCO ₂ e/km	Annualised from 31 staff survey responses.
Scope 3	Employee commuting - rail	national rail	19,800 passenger.km	0.7021 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.03546 kgCO ₂ e/passenger.km	—
Scope 3	Downstream transport & distribution	van (class III, diesel)	3,240 tonne.km	1.7425 tCO ₂ e	Official factor (activity data × UK Government factor)	Not assessed	DESNZ/DEFRA UK Government GHG Conversion Factors for Company Reporting 2025 (condensed set) — 0.5378 kgCO ₂ e/tonne.km	Third-party courier deliveries of finished joinery items to sites.

Calculation method key

- **Official factor:** Calculated from activity data multiplied by the official UK Government conversion factor for the reporting year.

Mandated Scope 3 Category Coverage

Category	Status	Data Rows	Carbon (tCO ₂ e)	Rationale / Evidence Summary
Category 4: Upstream transportation and distribution	Data supplied	4	5.3532 tCO ₂ e	Downstream transport & distribution - van (class III, diesel); Upstream transport & distribution - HGV (all, average laden); Upstream transport & distribution - HGV (all, average laden); Downstream transport & distribution - van (class III, diesel)

Category	Status	Data Rows	Carbon (tCO ₂ e)	Rationale / Evidence Summary
Category 5: Waste generated in operations	Data supplied	2	21.8624 tCO ₂ e	Waste - commercial & industrial, landfill; Waste - commercial & industrial, landfill
Category 6: Business travel	Data supplied	6	55.7303 tCO ₂ e	Business travel - car - average; Employee commuting - car - average; Employee commuting - rail - national rail; Business travel - car - average; Employee commuting - car - average; Employee commuting - rail - national rail
Category 7: Employee commuting	Data supplied	4	42.2505 tCO ₂ e	Employee commuting - car - average; Employee commuting - rail - national rail; Employee commuting - car - average; Employee commuting - rail - national rail
Category 9: Downstream transportation and distribution	Data supplied	2	3.6786 tCO ₂ e	Downstream transport & distribution - van (class III, diesel); Downstream transport & distribution - van (class III, diesel)

Additional Scope 3 Value-Chain Coverage

Note: The following Scope 3 categories represent additional value-chain reporting. They are non-mandatory under PPN 006 / WPPN 006 unless specified by contract or future regulatory regimes.

Category	Status	Data Rows	Carbon (tCO ₂ e)	Rationale / Evidence Summary
Optional Scope 3 Categories (1–3, 8, 10–15)	Not currently reported	0	—	Outside the mandatory PPN 006 Scope 3 subset; to be reviewed annually for materiality and data availability.

Scope 1 and Scope 2 Organisational Boundaries

Scope	Source Group / Taxonomy	Status	Data Rows	Carbon (tCO ₂ e)	Boundary Rationale
Scope 1	Stationary Combustion (Boilers, Heating)	Assessed & Evidenced	2	49.3626 tCO ₂ e	Natural gas
Scope 1	Mobile Combustion (Company Vehicles)	Assessed & Evidenced	2	89.8759 tCO ₂ e	Diesel
Scope 1	Process Emissions (Industrial / Chemical)	Not assessed	0	—	Source group evaluation pending — add data, declare zero, or record a not-applicable rationale.
Scope 1	Fugitive Emissions (Refrigerants, HVAC)	Not assessed	0	—	Source group evaluation pending — add data, declare zero, or record a not-applicable rationale.
Scope 2	Purchased Electricity	Assessed & Evidenced	2	32.2848 tCO ₂ e	Grid electricity
Scope 2	Purchased Heat, Steam & Cooling	Not assessed	0	—	Source group evaluation pending — add data, declare zero, or record a not-applicable rationale.

Emission Factor Sets and Calculation Methodology

Inventory	Reporting Period	Methodology	Factor Set Year	Scope 2 Accounting	Substitution / Factor Notes
Baseline Year (2022)	Calendar 2022	GHG Protocol Corporate Standard (location-based)	2025	Location-based	Factor set 2025 substituted for reporting year 2022
Current Reporting Year (2024)	Calendar 2024	GHG Protocol Corporate Standard (location-based)	2025	Location-based	Factor set 2025 substituted for reporting year 2024

Assumptions Register and Calculation Logic

Item / Affected Activity	Calculation Method	Data Quality	Data quality basis / Reference	Origin
Scope 1 Natural gas	Estimated	Not assessed	Workshop space + paint-shop heating.	Activity Estimation
Scope 1 Diesel — average	Estimated	Not assessed	7 transit vans, site deliveries.	Activity Estimation
Scope 3 Waste — commercial & industrial, landfill	Estimated	Not assessed	Untreated timber offcuts to landfill.	Activity Estimation
Scope 3 Employee commuting - car — average	Estimated	Not assessed	Annualised from 31 staff survey responses.	Activity Estimation

Item / Affected Activity	Calculation Method	Data Quality	Data quality basis / Reference	Origin
Scope 3 Downstream transport & distribution — van (class III, diesel)	Estimated	Not assessed	Third-party courier deliveries of finished joinery items to sites.	Activity Estimation
Scope 3 Upstream transport & distribution — HGV (all, average laden)	Estimated	Not assessed	Inbound sheet materials and ironmongery deliveries from key suppliers.	Activity Estimation
Scope 1 Natural gas	Estimated	Not assessed	Workshop space + paint-shop heating.	Activity Estimation
Scope 1 Diesel — average	Estimated	Not assessed	7 transit vans, site deliveries.	Activity Estimation
Scope 3 Upstream transport & distribution — HGV (all, average laden)	Estimated	Not assessed	Inbound sheet materials and ironmongery deliveries from key suppliers.	Activity Estimation
Scope 3 Waste — commercial & industrial, landfill	Estimated	Not assessed	Untreated timber offcuts to landfill.	Activity Estimation
Scope 3 Employee commuting - car — average	Estimated	Not assessed	Annualised from 31 staff survey responses.	Activity Estimation
Scope 3 Downstream transport & distribution — van (class III, diesel)	Estimated	Not assessed	Third-party courier deliveries of finished joinery items to sites.	Activity Estimation

Documented Evidence Index

Linked Entity Type	Linked Entity / Source	Evidence Count	Medium / Type	Reference / Details	Audit Status
General Inventory	All Source Groups	0	Self-declaration	No documentary evidence uploaded; self-certified by supplier	Self-certified

AI Use Statement

This Carbon Reduction Plan was prepared with the assistance of a generative AI large language model. That assistance was limited to drafting the narrative passages of the plan (Executive Summary, Carbon Hotspot Analysis, Reduction Roadmap, Carbon Reduction Projects, Supply Chain and Supplier Engagement, Governance and Climate Risk, KPI Framework and Monitoring Strategy, Offset Strategy); the AI did not select, calculate, estimate or alter any emissions data.

All quantitative content in this plan — the baseline and current-year emissions footprints, scope totals, any intensity ratios, and the reduction targets — is computed deterministically from the organisation's own activity data using the GHG Protocol Corporate Standard and the UK Government's greenhouse gas conversion factors. No figure in this plan was generated, inferred or modified by AI.

This plan has been reviewed and signed off by Alex Morgan, Managing Director, who bears responsibility for its accuracy and completeness, consistent with the signed declaration in this plan.

Each AI-assisted passage is recorded in a tamper-evident provenance log (8 entries, hash-chained using SHA-256; chain reference c4f2ee88da95...). This record can be produced on request to evidence how each passage was produced.