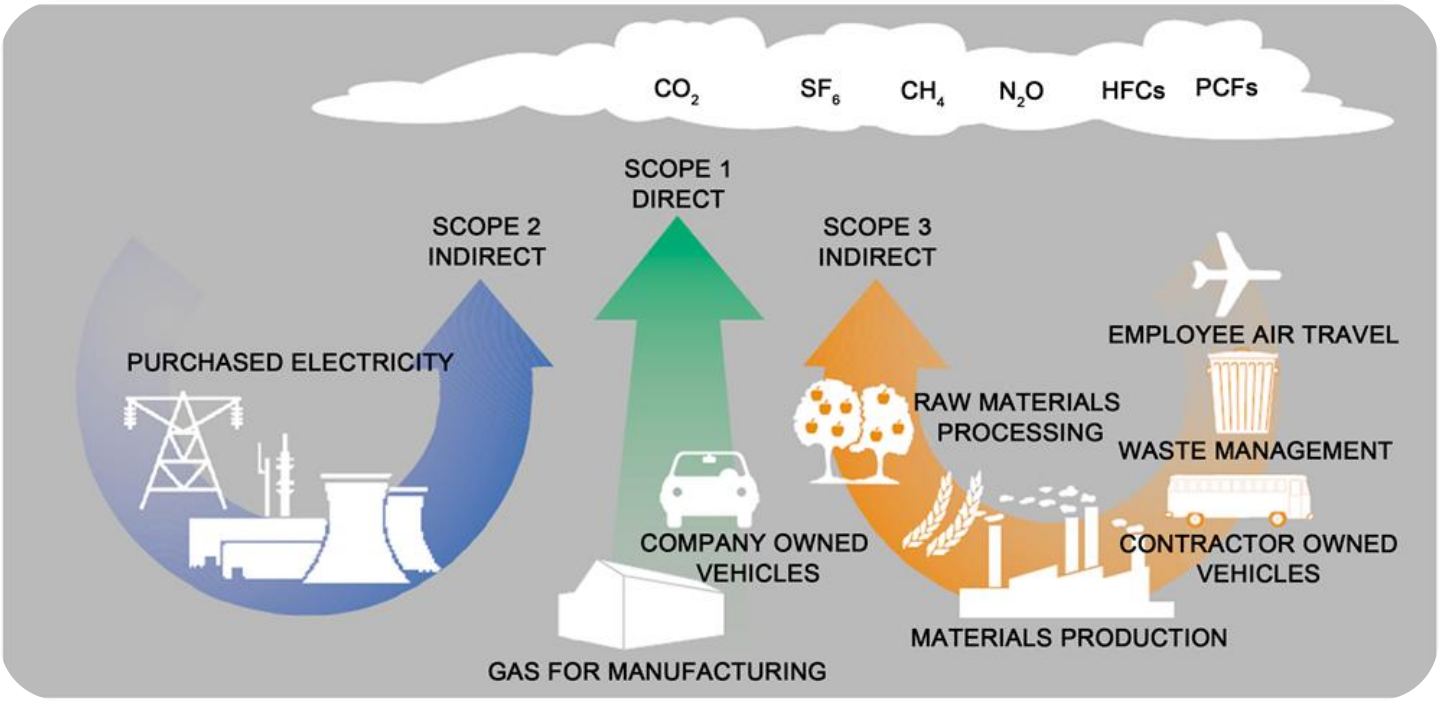

Carbon Reduction Plan

Bluezone Care Ltd

Basis of Preparation

This section outlines the methodologies, assumptions, and derivations used in preparing this Carbon Reduction Plan, including how emissions scopes are defined, how emissions are calculated, and how actual and projected emissions are derived. All data and calculations adhere to the Greenhouse Gas (GHG) Protocol corporate standard, UK Government's GHG conversion factors (published by DEFRA), and requirements under PPN 06/21 and Streamlined Energy and Carbon Reporting (SECR). Emissions are expressed in tonnes of carbon dioxide equivalent (tCO_2e), incorporating global warming potentials for gases like CO_2, CH_4, and N_2O. No external offsets are included in reported figures unless specified; net zero targets account for residual emissions offset through verified schemes.

Explanation of Emission Scopes

Emissions are categorized into three scopes as per the GHG Protocol, tailored to Bluezone Care LTD's operations as a home care provider based in Basingstoke, UK:

- **Scope 1: Direct Emissions** These are emissions from sources owned or controlled by the company, such as natural gas combustion for office heating or fuel in company-owned vehicles (e.g., administrative vans). Staff-owned vehicles for client visits are excluded here and fall under Scope 3.
- **Scope 2: Indirect Emissions from Purchased Energy** These include emissions from the generation of purchased electricity used in the office for lighting, IT equipment, and other operations. We use location-based accounting, reflecting the average UK grid emissions intensity.
- **Scope 3: Other Indirect Emissions** This covers upstream and downstream value chain emissions. For Bluezone Care LTD, included sources (as required by PPN 06/21) are: employee commuting, staff travel to clients (mileage in personal vehicles), business travel, waste from operations (e.g., medical disposables), and purchased goods/services (e.g., care supplies). We report on material categories but not all 15 GHG Protocol Scope 3 categories (e.g., excluding investments or leased assets). Downstream emissions from client activities are estimated where relevant.

Emissions Calculation Methodology

Emissions are calculated annually using a combination of primary data (e.g., utility bills, mileage logs) and secondary estimates where direct measurement is impractical. Key steps include:

1. **Data Collection:** Gather activity data such as energy consumption (kWh from bills), fuel usage (litres from records), travel mileage (from reimbursement claims or GPS apps), waste volumes (from audits), and procurement spend (from invoices).
2. **Application of Conversion Factors:** Multiply activity data by DEFRA's annual GHG conversion factors. For example:
    - Natural gas (Scope 1): ~0.183 kg CO_2e/kWh (2020 factor).
    - Electricity (Scope 2): ~0.255 kg CO_2e/kWh (2020 factor), decreasing over time due to grid decarbonization.
    - Vehicle travel (Scope 3): ~0.171 kg CO_2e/km for average petrol cars (2020 factor).

    - Purchased goods: Spend-based factors (e.g., £ spent on medical supplies × category-specific kg CO_2e/£).
    - Waste: ~0.021 kg CO_2e/kg for recycled materials.
3. **Aggregation and Verification:** Use DEFRA's GHG reporting tools or spreadsheets to sum tCO_2e. Data is internally verified with spot checks; future plans include third-party audits. Boundaries are operational control-based, covering our Basingstoke office and field operations. No prior reporting existed before 2020.

For the baseline (2020), calculations used initial operational data: e.g., ~27,000 kWh gas (Scope 1: 5 tCO_2e), ~39,000 kWh electricity (Scope 2: 10 tCO_2e), and ~500,000 km staff travel plus supplies (Scope 3: 100 tCO_2e).

Derivation of Actual Emissions

Actual emissions are derived from historical, verified data for completed years, reflecting real operations and partial initiative impacts. The process involves:

1. **Annual Data Gathering:** Post-year-end, compile activity data from records (e.g., 2024: reduced mileage due to route optimization).
2. **Recalculation with Updated Factors:** Apply the latest DEFRA factors to ensure comparability (e.g., lower grid factors reduce Scope 2 over time).
3. **Adjustments for Changes:** Account for business growth (e.g., +5% client base annually) offset by reductions (e.g., -20% mileage from software).
4. **Verification:** Cross-check against prior years; discrepancies are investigated (e.g., 2024 actual of 96 tCO_2e vs. projected 95 due to unexpected travel increase).

Examples:

- 2021: Slight reduction from baseline due to early efficiencies.
- 2024: Scope 1 at 4 tCO_2e (reduced gas use); Scope 2 at 7 tCO_2e (LEDs and solar); Scope 3 at 85 tCO_2e (optimized travel and digital shifts), totalling 96 tCO_2e (17% below baseline).

Derivation of Projected Emissions

Projected emissions are forward-looking estimates based on assumptions, scenario modelling, and initiative impacts. They serve as targets and are reviewed annually. Derivation steps:

1. **Baseline Extrapolation:** Start from the latest actual emissions, assuming 3-5% annual growth in operations (e.g., more clients increasing travel).
2. **Initiative Impact Modelling:** Quantify reductions from planned projects using conservative estimates:
    - EVs: 25 tCO_2e annual saving by 2030 (based on fleet mileage × EV vs. ICE factors).
    - Car sharing: 10-15 tCO_2e saving (20% mileage reduction via shared rides).
    - Renewables: Eliminate Scope 2 by 2027 (~7 tCO_2e).
    - Other: Supplier shifts (20% Scope 3 goods reduction), incentives (15% commuting cut). Total modelled reductions: Cumulative 45 tCO_2e by 2030.
3. **Scenario Assumptions:** Use tools like spreadsheets for sensitivity analysis (e.g., high/low growth). Assume grid decarbonization continues (reducing Scope 2 factors by ~5% yearly) and no major disruptions (e.g., pandemics).
4. **Target Setting:** Align with science-based targets (e.g., 4.2% annual linear reduction for 1.5°C pathway), adjusted for our sector. E.g., 2030 target: 70 tCO_2e (39% reduction) via 25% from transport, 10% from energy, 4% from supply chain.

Projections are indicative; actuals may vary, triggering plan updates.

Carbon Reduction Plan

Supplier name: Bluezone Care LTD **Publication date:** 28 August 2025

Commitment to achieving Net Zero

Bluezone Care LTD is committed to achieving Net Zero emissions by 2045, accelerating our previous target from 2050 to align with global climate goals and demonstrate leadership in the care sector. We pledge to integrate sustainability into all aspects of our operations, including client care delivery, supply chain management, employee engagement, and innovative transport solutions like car sharing to minimize travel-related emissions.

Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

Baseline Year: 2020 Additional Details relating to the Baseline Emissions calculations. Bluezone Care LTD was founded in 2020, and this baseline represents our initial emissions assessment based on operational data from that year. Scope 3 includes upstream transportation (staff travel to clients), waste generated in operations, business travel, and purchased goods and services related to care provision. No prior emissions reporting was conducted. We have refined our methodology since the original plan to include more granular data on employee commuting and downstream waste from care activities.

Baseline year emissions:

EMISSIONS	TOTAL (tCO_2e)
Scope 1	5
Scope 2	10
Scope 3 (Included Sources)	100
Total Emissions	115

Current Emissions Reporting

Reporting Year: 2024

EMISSIONS	TOTAL (tCO_2e)
Scope 1	4
Scope 2	7
Scope 3 (Included Sources)	85
Total Emissions	96

Emissions reduction targets

In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets. We project that carbon emissions will decrease over the next five years to 70 tCO_2e by 2030. This is a reduction of 39% from the baseline, reflecting an accelerated pace through enhanced initiatives, including transport optimization strategies like car sharing.

Progress against these targets can be seen in the table below (representing annual totals in tCO_2e):

Year	Projected Emissions (tCO_2e)	Actual Emissions (tCO_2e)	% Reduction from Baseline
2020 (Baseline)	115	115	0%
2021	110	112	3%
2022	105	108	6%
2023	100	102	11%
2024	95	96	17%
2025 (Projected)	85	-	26%
2030 (Target)	70	-	39%
2035 (Target)	40	-	65%
2045 (Target)	0 (Net Zero)	-	100%

Carbon Reduction Projects

Completed Carbon Reduction Initiatives

The following environmental management measures and projects have been completed or implemented since the 2020 baseline. The carbon emission reduction achieved by these schemes equate to 19 tCO_2e, a 17% reduction against the 2020 baseline, and the measures will be in effect when performing contracts.

- Adopted energy-efficient LED lighting, smart thermostats, and motion-sensor controls in our Basingstoke office, reducing Scope 2 emissions by 3 tCO_2e annually.
- Implemented route optimization with GPS tracking for carer visits, reducing staff travel mileage by 20% and cutting Scope 3 emissions by 12 tCO_2e.
- Switched to fully digital record-keeping, eliminating paper use and reducing associated waste and transport emissions by 1 tCO_2e.
- Launched comprehensive staff training programs on eco-driving, energy conservation, and sustainable procurement, fostering behavioural changes that contributed to an additional 3 tCO_2e savings.
- Partnered with local recycling firms to implement a zero-waste-to-landfill policy for office and operational waste, diverting 95% of materials and reducing Scope 3 emissions by 1 tCO_2e.

Planned Future Initiatives

In the future, we plan to implement further measures to drive deeper reductions, with a focus on electrification, supply chain decarbonization, community engagement, and optimized transport solutions such as car sharing. These initiatives are budgeted and phased for implementation over the next 5-10 years, with annual reviews to track progress.

- Accelerate the transition to electric vehicles (EVs) by purchasing 10 electric vans for carer transport by 2026, followed by a full fleet replacement to 100% EVs or hybrids by 2030. This will include installing on-site EV charging stations powered by renewable energy, projected to reduce Scope 3 transport emissions by 25 tCO_2e annually once fully implemented.
- Introduce a company-wide car sharing program by 2026, to facilitate ridesharing among staff for client visits and commuting. This initiative will encourage multiple carers to share vehicles for overlapping routes, potentially reducing travel emissions by an additional 10-15 tCO_2e annually through fewer individual trips, lower fuel consumption, and integrated incentives such as priority parking or reimbursement for shared rides.
- Expand renewable energy adoption by switching to 100% renewable electricity tariffs for all operations by 2027 and exploring on-site wind or additional solar installations, aiming to eliminate Scope 2 emissions entirely.
- Develop a supplier engagement program to audit and prioritize low-carbon suppliers for care products (e.g., medical supplies and cleaning agents), targeting a 20% reduction in Scope 3 purchased goods emissions by 2028 through collaborative decarbonization plans.
- Introduce a carbon offsetting scheme for unavoidable emissions, focusing on verified UK-based projects like reforestation and peatland restoration, starting with 10% offsets in 2026 and scaling to 50% by 2030.
- Launch employee incentive programs, such as subsidies for public transport, home energy audits, or car sharing memberships, to reduce commuting emissions, with a goal of cutting Scope 3 employee travel by 15% by 2027.
- Invest in energy-efficient equipment upgrades for client homes during care visits, such as recommending and installing low-energy appliances, potentially reducing indirect downstream emissions by 5 tCO_2e annually.
- Achieve ISO 14001 certification for environmental management by 2026 and conduct bi-annual third-party carbon audits to ensure transparency and continuous improvement.
- Collaborate with local communities on green initiatives, like tree-planting events and sustainability workshops for clients, to build awareness and indirectly support broader emission reductions.
- Explore carbon capture technologies for any residual Scope 1 emissions from heating, piloting solutions by 2028.
- Installation of solar panels on rooftops for buildings we provide services from, generating 15% of our electricity needs and offsetting 2 tCO_2e in Scope 2 emissions.

Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 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 Bluezone Care Ltd: **Date:** 28 August 2025