

Ty Parc - Carbon Reduction Plan

Ty Parc Care Facility

Reporting Year 2025/26

1. Commitment to Achieving Net Zero

Ty Parc is committed to reducing its greenhouse gas emissions and supporting the transition to a low-carbon future. As a provider of social care services, we recognise our responsibility to minimise environmental impacts while continuing to deliver high-quality care.

This Carbon Reduction Plan establishes our baseline emissions, identifies the key sources of carbon emissions within our operations, and outlines practical actions to reduce emissions over the coming years. Our aim is to achieve continual year-on-year carbon reductions in line with Welsh public sector net zero ambitions and the requirements of Caerphilly County Borough Council.

2. Baseline Carbon Footprint

Reporting Period

Financial Year: 2025/26

Total Carbon Emissions

Emission Source	tCO ₂ e
Scope 1	6.87
Scope 2	8.34
Scope 3	10.64
Total Emissions	25.84

Emissions by Category

Category	tCO ₂ e	% of Total
Buildings	14.17	54.8%
Fleet & Equipment	4.67	18.1%
Waste	7.01	27.1%
Business Travel	0.00	0%
Commuting	0.00	0%

Homeworking	0.00	0%
Total	25.84	100%

3. Carbon Emission Hotspots

Analysis of the carbon footprint identifies three key sources of emissions:

Buildings (14.17 tCO₂e)

The largest contributor to the organisation's footprint is energy and utilities consumed within the premises.

Key consumption figures:

- Electricity: **38,662.8 kWh**
- Water Supply: **650 m³**
- Water Treatment: **624 m³**

Building emissions account for approximately **55%** of total organisational emissions.

Fleet and Transport (4.67 tCO₂e)

Vehicle emissions arise from company-operated vehicles used for care delivery.

Fuel consumed during the reporting period:

Fuel Type	Quantity
Petrol	619.93 litres
Diesel	861.64 litres

Fleet emissions account for approximately **18%** of total emissions.

Waste (7.01 tCO₂e)

Waste is the second-largest source of emissions.

The most significant contributor is:

- Clinical waste sent for high-temperature incineration (6.43 tonnes)

Other waste streams include:

- General waste
- Mixed recycling

- Cardboard recycling
- Food waste composting
- Glass recycling

Waste emissions account for approximately **27%** of total emissions.

4. Carbon Reduction Objectives

Ty Parc will seek to achieve the following objectives:

Short-Term (2026-2028)

- Reduce overall carbon emissions by **10-15%**.
- Reduce building electricity consumption by **10%**.
- Reduce vehicle fuel consumption by **10%**.
- Improve waste segregation and recycling rates.
- Increase staff awareness of energy efficiency and sustainability.

Medium-Term (2028-2030)

- Reduce overall carbon emissions by **25%** from the 2025/26 baseline.
- Transition suitable fleet vehicles to ultra-low emission or electric alternatives.
- Introduce renewable electricity procurement where available.
- Minimise clinical waste volumes through improved waste segregation.

Long-Term (2030 onwards)

- Achieve continual carbon reductions aligned with Welsh public sector Net Zero ambitions.
 - Explore renewable energy generation opportunities.
 - Work with suppliers and contractors to reduce supply chain emissions.
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5. Carbon Reduction Measures

Buildings and Energy

Measures

LED Lighting Programme

- Replace remaining fluorescent and halogen lighting with LEDs.

- Install occupancy and daylight sensors in low-use areas.

Expected Outcome: 5-10% reduction in electricity consumption.

Energy Management

- Regular monitoring of utility bills and meter readings.
- Quarterly review of energy performance.
- Identification of unusual energy use and corrective action.

Expected Outcome: 2-5% reduction in energy consumption.

Heating Optimisation

- Review heating schedules.
- Ensure controls and thermostats are functioning correctly.
- Implement preventative maintenance programme.

Expected Outcome: Reduced energy waste and improved comfort.

Renewable Electricity

- Investigate procurement of renewable electricity tariffs.
- Assess feasibility of rooftop solar photovoltaic panels.

Expected Outcome: Significant reduction in Scope 2 emissions.

Fleet and Transport

Measures

Driver Efficiency Programme

- Promote efficient driving practices.
- Reduce engine idling.
- Optimise journey planning.

Expected Outcome: 5-10% reduction in fuel consumption.

Fleet Replacement Strategy

- Replace end-of-life diesel and petrol vehicles with:
 - Electric vehicles (EVs)
 - Hybrid vehicles where EVs are not operationally suitable

Expected Outcome: Long-term reduction in Scope 1 emissions.

Vehicle Monitoring

- Maintain accurate fuel and mileage records.
 - Monitor fuel efficiency trends.
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Waste Management

Measures

Improved Waste Segregation

- Reduce contamination between recycling and general waste.
- Provide refresher training for staff.

Expected Outcome: Reduction in waste disposal emissions.

Clinical Waste Reduction

- Review clinical waste classification procedures.
- Ensure only genuinely clinical waste enters high-temperature incineration streams.

Expected Outcome: Reduced clinical waste treatment emissions.

Recycling Enhancement

- Increase paper, cardboard, food and mixed recycling recovery.
 - Introduce clear signage throughout the facility.
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Staff Engagement

Measures

Sustainability Awareness

- Incorporate carbon reduction into staff inductions.
- Share carbon performance updates with employees.

Green Champions

- Appoint sustainability representatives within the service.

- Encourage staff-led improvement initiatives.

Behavioural Change

Promote:

- Switching off lights and equipment when not in use.
- Efficient heating practices.
- Recycling and waste reduction.
- Sustainable travel where practical.

6. Planned Carbon Reduction Targets

Year	Target Emissions (tCO ₂ e)	Reduction from Baseline
2025/26 Baseline	25.84	-
2026/27	24.50	5%
2027/28	23.25	10%
2028/29	21.98	15%
2029/30	19.38	25%
2034/35	12.92	50%

7. Governance and Monitoring

Responsibility for delivery of this Carbon Reduction Plan rests with the management team at Ty Parc.

Progress will be reviewed annually through:

- Collection and analysis of energy, fuel and waste data.
- Annual carbon footprint assessment.
- Review of reduction targets and action plans.
- Reporting to stakeholders and Caerphilly County Borough Council where required.

8. Declaration

This Carbon Reduction Plan has been prepared using data from the CCBC Social Care Carbon Emissions Reporting Tool for financial year 2025/26 and reflects Ty Parc's commitment to

continuously reducing greenhouse gas emissions associated with the delivery of social care services.

Baseline Total Emissions: 25.84 tCO₂e

Primary Emission Sources: Buildings (54.8%), Waste (27.1%), Fleet & Equipment (18.1%)

Ty Parc is committed to implementing the actions detailed within this plan and reviewing progress annually to ensure continual improvement in environmental performance.