



Carbon and Energy Statement

Proposal: Conversion of a Detached Residential Dwelling into a Children's Care Home

Location: 34 Ringley Road, Whitefield, Bury, M45 7LE

Date: 22/07/25

1. Introduction

This Energy Statement has been prepared in support of the planning application for the change of use of a detached residential dwelling into a children's care home. The proposed development falls within the scope of Policy JP-S2 of the Greater Manchester Places for Everyone Development Plan – Carbon and Energy, which requires developments to contribute to carbon neutrality by minimising energy demand and maximising energy efficiency.

In line with this policy, and the requirements of the 2022 Part L of the Building Regulations, the conversion will incorporate energy-efficient measures and sustainable building practices to reduce operational carbon emissions while providing a safe and comfortable living environment for children and care staff.

2. Minimising Energy Demand

The existing property will be upgraded where necessary to reduce energy demand through passive and active measures, including:

- Improved insulation to walls, roof, and floors to ensure thermal performance meets or exceeds current standards.
- Replacement or upgrade of windows and external doors with double or triple-glazed units that meet enhanced U-value performance standards.
- Air tightness improvements through careful detailing, sealing, and draft-proofing of the building envelope.
- Zoned heating systems to ensure efficient use of energy based on room use and occupancy patterns.

These interventions will reduce the building's baseline heating and cooling demand, ensuring energy efficiency is central to the conversion design.

3. Maximising Energy Efficiency

To further improve the building's energy performance and reduce carbon emissions:

- High-efficiency heating system (e.g., condensing boiler or air source heat pump) will be installed or retained where compliant.

- Thermostatic controls and smart heating to allow for room-by-room control and optimisation of energy use.
- Low-energy LED lighting will be installed throughout, both internally and externally.
- Energy-efficient appliances will be specified for communal and staff areas.
- Water-saving sanitaryware and fittings will be used to reduce hot water energy demand.

These measures will help to reduce long-term operational energy use and align with the goals of Policy JP-S2.

4. Renewable and Low-Carbon Technologies

The use of on-site renewable technologies such as solar PV panels or air source heat pumps has been considered. However, at this stage, their inclusion may not be practicable due to budgetary constraints and the existing building layout. Should feasibility or funding allow, these options will be revisited in future upgrade phases.

5. Compliance with 2022 Part L Building Regulations

The conversion will be carried out in full compliance with the 2022 update to Part L of the Building Regulations, including:

- Thermal calculations and SAP assessments to ensure the dwelling's conversion meets required energy performance targets.
- Improved fabric specification and airtightness to meet updated notional building targets.
- Commissioning and certification of all heating and ventilation systems in accordance with Part L guidelines.

All required compliance documentation will be submitted through the Building Control process to verify performance standards are met.

6. Conclusion

The proposed conversion of the existing dwelling into a children's care home has been designed with energy efficiency and carbon reduction at its core, aligning with Policy JP-S2 and 2022 Part L Building Regulations. While this is a change of use, the project will implement both fabric and system upgrades to reduce energy demand, ensure occupant comfort, and contribute to a more sustainable built environment in Bury.