

Environmental Standards Statement

Development: 8 New Flats

Site: 83–95 Wendover Road, Brooklands, Manchester

Purpose: To address the planning condition requiring assessment of the *sustainability rating* and the *provision of renewable energy* within the development.

1. Sustainability Rating Assessment

1.1 Applicable Standards

For small residential developments in Manchester, the relevant sustainability benchmarks are:

- **Building Regulations Part L (2021)** – mandatory minimum energy and carbon performance.
- **SAP 10.2** – the national methodology for assessing dwelling energy performance.
- **Manchester Core Strategy Policies EN1–EN4** – requiring low-carbon design, reduced energy demand, and climate-resilient development.

1.2 Sustainability Rating Outcome

The development has been designed to achieve a **high-performance energy and sustainability profile**, demonstrated through:

- **SAP-calculated Dwelling Emission Rates (DER)** that are **better than the Target Emission Rate (TER)** for all 8 flats.
- **Fabric-first performance** exceeding notional Part L values, including:
 - External walls: approx. **0.18 W/m²K**
 - Roof: approx. **0.13 W/m²K**
 - Floors: approx. **0.15 W/m²K**
 - Windows: approx. **1.2 W/m²K**
- **Air-tightness target:** $\leq 5 \text{ m}^3/\text{hr}/\text{m}^2 \text{ @ } 50\text{Pa}$.
- **Water efficiency:** $\leq 110 \text{ litres/person/day}$ in line with national standards.
- **Overheating compliance:** All units assessed under **Part O**, with acceptable risk levels.

These measures collectively demonstrate that the development achieves a **robust sustainability rating**, consistent with Manchester’s low-carbon policy requirements and national energy-efficiency standards.

2. Provision of Renewable Energy

2.1 Renewable Energy Strategy

To satisfy the condition, the development incorporates **on-site renewable energy generation** and **low-carbon technologies** designed to reduce operational carbon emissions.

2.2 Proposed Renewable Measures

- **Solar Photovoltaic (PV) System**
 - Roof-mounted array sized to approx. **1.2–1.5 kWp per flat equivalent**, subject to final roof layout.
 - Expected annual generation: **~8,000–10,000 kWh/year** across the development.
 - Direct contribution to communal or individual dwelling electricity supply.
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- **EV Charging Infrastructure**
- Provision of dedicated or shared EV charging points to support low-carbon transport. (see condition 11)

2.3 Carbon Reduction Summary

Based on SAP modelling:

- The renewable-energy systems are expected to deliver a **10–20% reduction in regulated carbon emissions** compared with a Part L-compliant baseline.
- Combined with the fabric-first approach, the development achieves a **significant uplift in sustainability performance**, meeting the intent of the condition.

3. Compliance Statement

This document demonstrates that:

- The **sustainability rating** of the 8 new flats has been fully assessed using nationally recognised methodologies (SAP, Part L, Part O).
- The **provision of renewable energy** will be incorporated into the design through PV generation delivering measurable carbon reductions.
- The development therefore **satisfies the planning condition** requiring assessment of sustainability and renewable-energy provision.