

Proposal : Change of use from a shop to restaurant / coffee shop (Class E (b)) including retention of front canopy with the installation of a new internally mounted extractor system on the side of the building.

Location 65 Windsor Road, Prestwich, M25 0DB

Energy Statement suitable for planning submissions to demonstrate compliance with **JP-S2** (Energy Efficiency and Carbon Reduction – now commonly applied in several UK Local Plans) for a **change of use from Shop (Class E(a)) to Restaurant (Class E(b))**.

1. Introduction

This Energy Statement has been prepared in support of the proposed change of use from a ground-floor retail unit to a restaurant (Class E(b)). The statement demonstrates how the development complies with **Policy JP-S2**, which requires development to:

- Reduce energy demand.
- Incorporate energy-efficient building services.
- Minimise carbon emissions; and
- Support the transition to a low-carbon economy.

The proposal involves internal fit-out only, with **no new extensions or external alterations**. The energy strategy therefore focuses on thermal improvements (where feasible), efficient services, and low-carbon operation.

2. Existing Building Summary

- Existing use: Retail (Class E(a))
- Construction: The change of use of a ground floor from retail shop to Restaurant / Coffee shop.
- Condition: The building is an existing commercial shell; no fabric works are mandated by the change of use, but energy improvements will be implemented where practical.
- Existing services: *[List—e.g., fluorescent lighting, outdated heating]*

3. Proposed Use and Operational Requirements

The proposed restaurant will include:

- Dining area
- Kitchen and food preparation space
- Customer WCs

Restaurant uses typically have higher energy demands due to cooking, ventilation, and hot-water requirements. This statement identifies measures to reduce this demand and associated carbon emissions.

4. Fabric Efficiency Measures (Demand Reduction)

Where feasible, the development will implement the following upgrades to reduce heat loss and improve efficiency:

4.1 Insulation

- Upgrade ceiling/roof insulation to achieve **U-values compliant with current Part L** (typically $\sim 0.16\text{--}0.18\text{ W/m}^2\text{K}$).
- Add internal wall insulation to any exposed external walls where practicable.

4.2 Air Tightness

- Improve building air-tightness through sealing gaps around openings and services penetrations.

4.3 Glazing

- Replace any single glazing with **double-glazed low-E units** achieving $\sim 1.4\text{ W/m}^2\text{K}$ (where the existing façade allows).

5. Energy-Efficient Building Services

5.1 Heating & Cooling

- Install **high-efficiency electric air-source heat pump (ASHP)** for heating and cooling with expected COP/EER > 3.0 .
- Remove or decommission any gas heating, reducing operational carbon.

5.2 Ventilation

- Kitchen extract system with **variable speed control**.
- Mechanical ventilation with heat recovery (**MVHR**) to public areas to minimise heat loss.

5.3 Hot Water

- Hot water generation via **high-efficiency electric system** (heat-pump water heater or direct electric with timed controls).

5.4 Lighting

- 100% **LED lighting** with occupancy/ daylight sensors in back-of-house areas.

5.5 Controls

- Smart thermostatic controls to optimise energy use.
- Time-clock zoning to separate kitchen, dining, and staff areas.

6. Low-Carbon and Renewable Energy Measures

The following measures are proposed to support compliance with JP-S2:

6.1 Solar PV (If viable)

- Roof mounted **photovoltaic panels** considered. Feasibility will depend on roof structure, shading and orientation.
- If feasible, estimated output: providing on-site renewable electricity.

6.2 Electric-Only Operation

- The restaurant will operate as an **all-electric premises**, aligning with the transition toward a decarbonised grid, with limited gas cooking at the site.

7. Water Efficiency (Supporting Sustainability)

- Low-flow taps
 - Dual-flush WCs
 - Efficient kitchen spray valves and appliances
- This reduces energy used for water heating and supports sustainability objectives.

8. Construction & Fit-Out Sustainability

- All new equipment to have minimum **EPC/ErP ratings** in line with Part L recommendations.
- Construction waste minimisation and recycling plan to be implemented by the fit-out contractor.

9. Carbon Impact Summary

The proposed development reduces regulated energy demand through:

- Fabric upgrades to reduce heating/cooling loads;
- High-efficiency, all-electric building services;
- Potential on-site renewable energy generation;

- Efficient ventilation and lighting systems.

Overall, the development **meets the intent and requirements of Policy JP-S2** by reducing energy use, improving efficiency, and lowering carbon emissions compared to the existing retail use.

10. Conclusion

This Energy Statement demonstrates that the proposed change of use from a shop to a restaurant complies with **JP-S2** through a combination of fabric improvements, efficient mechanical systems, low-carbon technologies, and operational efficiencies. The proposal represents a significant improvement in energy performance relative to the existing condition and supports the local authority's sustainability and carbon-reduction objectives.