Climate & Sustainability Statement: 33 Birkland, Huddersfield

Proposal: Installation of external wall insulation and render, construction of a new entrance porch, installation of a high-efficiency heating system, and integrated water and energy-saving measures.

Energy Efficiency & Fabric-First Approach

The development prioritizes a "fabric-first" methodology to significantly reduce the property's carbon footprint and operational energy demand:

- **Thermal Upgrade:** The application of high-performance external wall insulation (EWI) and high-quality render will dramatically improve the thermal envelope of the existing property. This upgrade will bring the solid/u-performing walls up to current building regulation standards, drastically reducing heat loss.
- **Thermal Buffering:** The introduction of a new entrance porch acts as an effective draught lobby. This creates a thermal buffer zone that minimizes heat loss during entry and exit, helping to regulate and maintain a stable internal temperature.

Mechanical Systems & Low-Carbon Technology

- **High-Efficiency Heating:** The existing heating system will be upgraded to a modern, highly efficient boiler and optimized heating controls. This system will require significantly less gas consumption to achieve the same internal comfort levels, lowering carbon emissions.
- **Smart Lighting:** Energy demand is further mitigated by the installation of Passive Infrared (PIR) sensor lighting within the hallway, ensuring electricity is only consumed when the spaces are occupied.

Water Conservation & Resource Efficiency

- **Water Efficiency:** To address climate resilience and water scarcity, the property will feature high-pressure, low-flow water taps. These fixtures reduce overall water consumption without compromising performance, minimizing the energy required to heat domestic hot water