

Climate Change Mitigation Strategy

The proposed development at 101 New Street, Huddersfield, adopts a holistic approach to sustainability, integrating energy-efficient building practices and climate resilience strategies to minimize environmental impact. The project demonstrates full alignment with Kirklees Council's Climate Change Guidance, the Local Plan, and Building Regulations (Part L: Conservation of Fuel and Power).

Energy Efficiency and Demand Reduction

The strategy prioritizes "fabric-first" principles to significantly reduce operational energy demand:

- **Enhanced Thermal Envelope:** Insulation levels in the walls have been optimized to exceed current Building Regulations, minimizing thermal bridging and reducing space heating requirements.
- **High-Performance Glazing:** Existing single-glazed units will be upgraded to heritage-sensitive double-glazed systems, substantially improving thermal comfort and reducing heat loss.
- **Energy-Optimized Systems:** The development utilizes low-emission heating and energy systems to mitigate air pollution, in accordance with Policy LP51.
- **Smart Technology:** All units are equipped with energy-efficient LED lighting and smart energy metering, empowering residents to monitor and optimize their personal consumption.
- **Passive Strategies:** The design prioritizes natural ventilation and passive cooling techniques, effectively negating the requirement for energy-intensive air conditioning systems.

Embodied Carbon and Circular Economy

- **Adaptive Reuse:** By prioritizing the adaptive reuse of the existing building structure rather than demolition, the project significantly reduces embodied carbon emissions, preserving the inherent value of the existing assets.

Sustainable Transport and Connectivity

The project promotes a low-carbon, active lifestyle, leveraging its strategic town-centre location:

- **Car-Free Lifestyle:** To encourage sustainable mobility, no additional parking is provided on-site.
- **Active Travel Promotion:** Secure, on-site cycle storage is integrated into the design to facilitate cycling as a primary mode of transport.
- **Accessibility:** Situated in the heart of Huddersfield, the development benefits from high-frequency public transport links, with key bus stops and the train station located within easy walking distance.

