



Carbon Energy Statement for New Modular Build Classrooms with associated ancillary at New Kershaw Centre, Bury

In alignment with our commitment to sustainability and reducing our carbon footprint, the modular build units integrated into the existing school site will incorporate energy-efficient and low-carbon technologies. The following measures will be taken to minimise the environmental impact and promote sustainable energy use:

1. **Energy-Efficient Design:** The mobile classrooms will be constructed using materials and designs that enhance energy efficiency, including high-performance insulation, energy-efficient windows, and doors that minimise heat loss and improve thermal performance. The windows themselves are constructed from 80% recycled material whilst the external cladding proposed can be fully recycled at end of use.
2. **Low-Energy Lighting:** LED lighting will be used throughout the mobile classrooms, providing energy-efficient, long-lasting illumination with lower power consumption compared to traditional lighting solutions.
3. **Renewable Energy Integration:** Where feasible, the mobile classrooms will be equipped with rooftop solar panels to harness renewable energy and reduce reliance on grid electricity. This will contribute to lowering the carbon emissions associated with energy consumption.
4. **Energy Monitoring and Management:** Smart energy management systems will be installed to monitor and optimise energy usage in real-time. These systems will help identify and reduce energy waste, ensuring that the classrooms operate as efficiently as possible.
5. **Heating and Cooling Efficiency:** The mobile classrooms will utilize energy-efficient HVAC systems, such as heat pumps, that provide heating and cooling with reduced energy consumption. These systems will be programmed to operate only when necessary, further reducing energy use.
6. **Low Carbon Materials:** Wherever possible, the construction of the mobile classrooms will incorporate low-carbon materials, such as recycled or sustainably sourced building materials, to reduce the embodied carbon in the project.
7. **Carbon Offset Measures:** Any remaining carbon emissions associated with the construction and operation of the mobile classrooms will be offset through certified carbon offset programs, ensuring that the project contributes to the overall reduction of carbon emissions.
8. **Sustainable Site Integration:** The mobile classrooms will be designed to blend with the existing school site, minimising the need for extensive site preparation and preserving existing outdoor spaces, which helps maintain local biodiversity and reduces the carbon footprint of the project.

By implementing these carbon energy strategies, the mobile classrooms will support the school's sustainability goals, contributing to a greener, more energy-efficient educational environment while minimising its impact on the planet.