MITSUBISHI ELECTRIC

M&E Contractor Insights

A low-carbon retrofit overview

Low-Carbon Retrofit is the process of improving a building's fabric and systems with the primary goal of improving energy efficiency and reducing carbon emissions.

TYPICAL LOW CARBON RETROFIT PROJECTS INCLUDE:

REPLACEMENT of end-of-life HVAC with new energy efficient systems

CAT A to CAT B office conversions

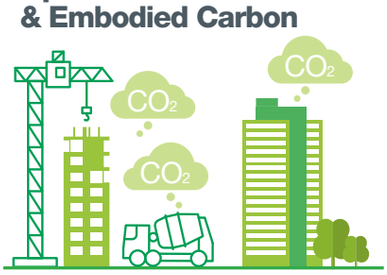
UPGRADING existing HVAC to improve energy efficiency

REPLACEMENT of fossil fuel heating systems with heat pumps

UK has committed to achieving **Net Zero** carbon emissions by 2050

Demand for sustainable commercial space is surging

Energy-efficiency has been the driver – but now the focus is on **Operational Carbon & Embodied Carbon**



UK needs to double the pace of redevelopment to levels seen over the last ten years, while delivering a step change to achieve the

59% REDUCTION in energy use needed by 2050 (UKBC)

80% **of commercial buildings** currently in use will still be here in 2050

70% **of commercial buildings were built before 2000 -** so to realise 2050 targets much of the sector will have to undergo some form of retrofit (UKBC)

Approximately **132,000** **buildings are over 1000m²** and account for 50% of **ALL** non-domestic energy usage

2 FORMS OF RETROFIT

LIGHT RETROFIT

Focus on performance optimisation, basic remodelling, replacement, or adaptation of existing building elements

DEEP RETROFIT

Focus on significant works of size or scale that result in a fundamental change to the building structure and/or services

Why electric is the right solution

A cleaner grid

46% of UK's electricity from green sources

Using a heat pump over a gas boiler for the same heating task reduces carbon emissions by **76%**

CO_2

Over the whole life cycle a heat pump produces **5 times less carbon emissions**

(BASED ON TM65 METHOD FOR CALCULATIONS FOR EMBODIED CARBON)

For an overview of our low-carbon product range, please click here.

Contact the M&E Contractor sales team for more information

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BLOG

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