

Council's Drive To Reduce Carbon Emissions To Net-Zero



Project Overview

The Council declared a climate and ecological emergency in July 2019 and made a commitment to reduce its carbon emissions to net zero by 2030 from its own operations and estate. The Council team are motivated to achieve this.

Co2 Target were employed to deliver a Pathway towards a Net-Zero future. Co2 Target devised a performance analysis of the operational energy use and carbon emissions associated with the thermal upgrades, together with the removal of the use of natural gas.

IES energy modelling software was used to provide the energy use and thermal performance outputs.

An 80 % reduction for the building's annual energy could be achieved from the fabric element improvements of the building alone. The saving on gas use is 100%. Based on our analysis the following savings could be achieved:

Options	BPER Total Primary energy consumption (kWh/m ² /yr.)	BER Total Carbon emissions (kgCO ₂ /m ²)	EPC Rating	Carbon Reduction over base %
Existing Base Scenario	193	25.9	D 77	0
Fabric upgrades Only	137	15.53	C 41	40%
Fabric, LEDs, solar thermal & ASHP with MVHR + PVs	101	9.22	A 24	64%
Fabric, LEDs, solar thermal & GSHP with MVHR + PVs	74	6.85	A 18	74%
Fabric, LEDs, solar thermal & GSHP with MVHR + PVs Side windows infilled	38	3.56	A 9	86%

Key Project Stats

ANNUAL SAVINGS

kWh/yr
 **715,790**

ENERGY REDUCTION

 **80%**

CARBON REDUCTION

kgCO₂/m²
 **22.34**

CAN WE HELP YOU?

Please contact us on
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