

MEP CARBON, CONTROLLED

A refurbishment-first route to lower impact and better building performance

Retain intelligently | Specify efficiently | Deliver circularly | Commission rigorously



510 tCO_2e
MEP upfront carbon, A1-A5

2 Retained
400 A busbar risers

51 $kgCO_2e/m^2$
MEP carbon intensity

7.49 tCO_2e
Estimated pallet benefit

THE MCS DELIVERY MODEL

Across seven floors and associated critical areas, MCS embedded sustainability into coordination, procurement, logistics, installation, controls, commissioning and handover. Carbon reduction was treated as an engineering and delivery discipline, not a reporting exercise.

1
RETAIN
Protect useful infrastructure.

2
OPTIMISE
Right-size routes and systems.

3
CONTROL
Match operation to demand.

4
VERIFY
Turn design intent into performance.

THE STANDOUT EMBODIED-CARBON ACTION

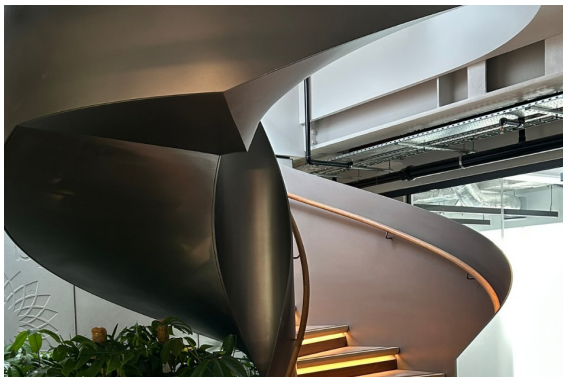
1.3-3.2 tCO_2e
Screened avoided carbonbenefit

Two existing 400 A busbar risers retained

Avoided replacement of the busbar bodies, with further unquantified value from associated boards, accessories, installation and disposal.

DELIVERED IN PRACTICE

MCS MEP SUSTAINABILITY



Carbon, efficiency, circularity and performance controls combined in one coordinated MEP package.

LOWER OPERATIONAL DEMAND

Low-SFP FCUs, low-pressure terminals, heat recovery, variable speed and 50/40°C LTHW reduced demand.

INTELLIGENT CONTROLS

DALI, occupancy and daylight control, BMS/EMS integration and metering enabled demand-responsive operation.

RETENTION & COORDINATION

Retained infrastructure, base-build integration and optimised routes reduced replacement and rework.

CIRCULAR LOGISTICS

Take-back, reduced wrapping, off-cut reuse, controlled ordering and just-in-time logistics prevented waste.

QUALITY & COMMISSIONING

Testing, balancing, controls integration and progressive handover protected intended performance.

HEALTHY, RELIABLE SPACE

Fresh air, clean installation, water hygiene, acoustics and maintainable access supported wellbeing.

MCS CIRCULAR DELIVERY AT SCALE

962
Pallets linked to take-back

237kg
Single-use plastic avoided

1,250
Approximate deliveries managed

MCS PERFORMANCE ASSURANCE

118
IEQ sensors

18
VRF points

72
Integration checks

7
Lighting areas

MCS: Evidence before order | Retention before replacement | Commissioning before handover