

# Dalkia and Arup Complete Decarbonisation Scheme at 8 Fitzroy Street

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[Dalkia](#) and Arup have successfully completed a major decarbonisation project at 8 Fitzroy Street in London, Arup's own headquarters, significantly reducing the building's carbon footprint and demonstrating how sustainable retrofit can be achieved in a live, fully occupied environment.

The £3.1 million scheme marks a key step in Arup's commitment to achieving net zero across its global estate. Acting as Principal Contractor, Dalkia delivered the Arup design validation, detailed coordination, fabrication, installation, and commissioning of new low-carbon heating and cooling systems, all while maintaining business as usual throughout the building.

The project forms part of Arup's Net Zero Plan, which commits the firm to becoming a science-based net zero organisation by 2040. Two existing gas boilers and two chillers were replaced with high-efficiency air-source heat pumps using R513A refrigerant, which has a global warming potential 56 per cent lower than the R134a refrigerant it replaces. The new system delivers heating and cooling with efficiencies between 300 and 400 per cent which is a significant improvement on the 85 per cent efficiency of the former gas boiler plant.

In addition, the domestic hot-water generation system was upgraded from gas-fired water heaters to four CO<sub>2</sub>-based heat pumps, further enhancing sustainability. Together, these upgrades are expected to cut annual carbon emissions by approximately 250 tonnes of CO<sub>2</sub>, equivalent to the yearly emissions of more than 150 average UK homes. These savings contribute directly to Arup's science-based emissions reduction targets, validated by the

Science Based Targets initiative (SBTi).

Working collaboratively from design through delivery, Dalkia and Arup ensured that critical services remained operational throughout the project. Out-of-hours working, prefabricated pipework, and careful sequencing enabled the decarbonisation works to be undertaken safely and efficiently within the live office environment.

Glyn Fells, at Dalkia, said: “This project shows what can be achieved when design innovation and expert engineering delivery come together. 8 Fitzroy Street is a powerful example of practical decarbonisation in action, reducing operational carbon while maintaining comfort and performance in a fully occupied building.

Stephanie Welch, London Office Leader & Head of WFM at Arup, added: “8 Fitzroy Street is more than just Arup’s headquarters – it’s a reflection of our Net Zero Plan in action. By decarbonising our own estate, we’re demonstrating our commitment to science-based targets and leading by example in the transition to a low-carbon future. This retrofit is a tangible step toward our goal of becoming a net zero organisation by 2040, by applying our own sustainability principles to the buildings we design, own and occupy.”

The 8 Fitzroy Street Decarbonisation Scheme highlights how existing commercial buildings can be transitioned away from fossil fuels through intelligent design, collaboration, and modern technology. The project reinforces both Dalkia’s and Arup’s shared ambition to accelerate the UK’s journey toward a more sustainable built environment.