



CASE STUDY

Decarbonising London

One School at a Time

the Government Public Sector Dec

PUBLIC SECTOR DECARBONISATION SCHEME FOR SCHOOLS IN LONDON AND DUDLEY

Some 60 schools in Barnet and London's Southwark Diocese, and Dudley in the West Midlands, are being equipped with more than 180 Carrier AquaSnap® 61AF air-to-water heat pumps to reduce carbon emissions and energy running costs.

Project description

The project involves installation of 180 Carrier AquaSnap® 61AF air-to-water heat pumps in 60 schools in Barnet and London's Southwark Diocese, and Dudley in the West Midlands.

The aim is to reduce carbon emissions and energy running costs as part of a major decarbonisation project. Asset+, one of the UK's leading independent Energy Performance Contractors, selected the Carrier units for their energy efficiency and reliability.

The project is being financed under the UK's Public Sector Decarbonisation Scheme (PSDS).



- PSDS Schools - Asset+
- London and Dudley
- 2022

Background

The project required close collaboration between project partners Asset+, Carrier, and installer OMNI Heat and Power Ltd.

AquaSnap® 61AF monobloc heat pumps are designed for heating and domestic hot water production in both new and refurbished buildings. They can produce water at up to 65°C, with an extended range that enables them to continue operating when ambients fall as low as minus 20°C.

Based on high-efficiency, quiet-running scroll compressors, they have a compact footprint and low profile, saving valuable space on site.

The design enables rapid installation for contractors, with streamlined pipework and electrical connections, and panels that can be removed quickly for access.

KEY BENEFITS

- Quick and easy installation
- Reduced energy costs
- Lower carbon emissions
- Quiet operation
- Extended range for use in low ambients
- DHW at up to 65°C

Challenges and Solutions

Richard Hall, Senior Project Manager with Asset+, said: "A key challenge was ensuring electrical loads at schools were not exceeded. Heat pumps cut overall energy consumption and carbon emissions by displacing gas heating very efficiently, however they add an additional electrical load. Headroom in relation to school power supply is often a constraint on site, and we had to plan loads carefully to ensure limits were not exceeded."

Richard Hall added: "Carrier heat pumps are highly efficient, which is a major advantage, while other low-energy and renewable technologies, such as photovoltaic panels and LED lighting, contribute to reducing power loads."

Innovative, efficient solutions such as AquaSnap® heat pumps support Carrier's 2030 Environmental, Social & Governance (ESG) Goals of reducing customers' carbon footprint by more than 1 gigaton.



TECHNOLOGIES

- 180 Carrier AquaSnap® 61AF air-to-water heat pumps

