

For Immediate Release

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## **CIAT UK Helps Kepier School Achieve Sizeable Energy Savings**

**SUNDERLAND, UK, 4th June 2024** — Kepier School's phased transition to low-carbon <u>CIAT</u> heating technologies has delivered generous energy savings within a year of installation. CIAT worked with partners to initiate the school's journey to net zero in 2022, returning to measure performance and optimise the system. CIAT is a part of Carrier Global Corporation (NYSE:CARR), global leader in intelligent climate and energy solutions.

CIAT worked with BREng Hull Ltd, AA Projects, Quora Group, and Cool Designs Ltd to create a phased decarbonisation plan for Kepier School in Northeast England, aided by the Condition Improvement Fund (CIF). Recognising the challenges faced by many schools, Oliver Sanders, Carrier Commercial HVAC Director, United Kingdom and Ireland, said, "For schools with new gas boilers aiming to reach net zero, it's most costeffective to integrate them into a modernised heating infrastructure, ready for the next transition phase to heat pumps when the boilers reach end-of-life."

The project involved a heating audit identifying the need for new high-efficiency heat emitters. Conventional radiators were replaced with seven surface-mounted high-level CIAT <u>MajorLine</u> and 31 <u>CIAT COADIS</u> fan coil units (FCUs). The seven gas boilers

installed in 2019 were integrated into the new system's infrastructure, enabling them to be replaced as required to improve system efficiency and cost savings.

A subsequent review revealed sizeable energy savings. Gas usage was compared before and after the pandemic to avoid skewed data due to COVID-19 school closures. Findings revealed an 8.6% reduction of 2,824m<sup>3</sup> (~31,446.41 kWhr) from March 2022 to March 2023 compared to the period from March 2019 to March 2020. This achievement reduced the school's carbon footprint and resulted in an 8% annual cost saving of ~£800 (average based on gas price fluctuations between March 2019-2020 and March 2022-2023).

Following commission, CIAT project partners BREng Hull and installer Quora Group returned to the school to optimise system operating gains. "The process doesn't stop once a solution has been designed, installed and commissioned," said Rob Smelt, Managing Director of BREng Hull. "Experience shows that there are often significant additional gains to be made by optimising the system in light of its real-world operation."

The inspection revealed that some areas were imbalanced while others operated at sub-optimal temperatures. These issues were addressed to improve occupant comfort and reduce energy use and running costs.

"The comfort level has improved significantly," said Brian Dixon, Kepier School Estates Manager. "We already gained control over specific rooms and areas, as opposed to the old 'on or off' heating system, and the latest work seems to have improved things even more. Future phases in our decarbonisation plan will yield even greater energy and cost savings for the school."

BREng Hull worked closely with equipment supplier Cool Designs Ltd during the

scoping and specification stages, supported by CIAT application specialists.

Projects like these contribute to Carrier's 2030 Environmental, Social and Governance

(ESG) Goal of reducing its customers' carbon footprint by more than one gigaton.

To learn more, visit:

https://ciat.uk.com/product/coadis-line-900-cassette/

https://ciat.uk.com/product/major-line/

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## Pictures



A room-by-room audit identified the requirements for a new system of highefficiency heat emitters based on modern CIAT fan coil units (FCUs).

The project included removal of conventional radiators and replacement with seven CIAT MajorLine FCUs (above) and 31 CIAT COADIS units (below).

