



## New River College

Decarbonisation of a city centre school utilising a ground source heat pump and packaged plantroom.



7No  
Boreholes

4 No 15kW  
Kensa Heat  
Pumps

Containerised  
Plantroom  
Manufactured  
Off-Site

### The Project:

New River College is a Special Educational Needs school located in a former Victorian hospital in Archway, Islington. The school is undergoing significant refurbishment works which include an extension to provide new and improved teaching facilities along with renovating the existing building to meet modern standards.





Alongside the improvements for its occupants, Islington council also wanted to carry out works that would reduce the carbon emissions from the building in-line with their decarbonisation goals whilst also providing significant social, environmental and economic benefits.

Ebtech were appointed by Kensa Contracting to design, build and install an energy centre containing 4 No 15kW Ground Source heat pumps to providing energy efficiency heating to the school.

The new packaged plantroom replaced the existing dilapidated building which was in the school's play area. Ebtech played a crucial role in the project by manufacturing and outfitting the packaged plantroom at their facility in East Yorkshire. This off-site construction approach brought numerous benefits to the project, aligning with the goals of efficiency, quality control, and cost-effectiveness.

By manufacturing off-site, the project benefitted from the borehole drilling works taking place on site concurrently with the plantroom fabrication off-site. This approach significantly reduces the amount of installation time, allowing for the swift implementation of the GSHP system. The controlled environment of the manufacturing facility facilitated rigorous quality control measures allowing all testing and inspections to be completed and witnessed by the client before delivery to site.



To comply with planning restrictions, the new structure was equipped with noise reduction panels and cladding. Ebtech liaised with Kensa and the architect to provide samples of the cladding to ensure compliance. Once complete, the packaged plantroom was delivered to site and connected to the boreholes reducing the amount of installation time on site. As part of the ongoing project, final landscaping, internal heat distribution and upgrades to the existing windows are scheduled for completion in future phases.

**"We are incredibly pleased with the exceptional professionalism and reliability demonstrated by Ebtech Energy Systems throughout this project. What truly set them apart was the ability to attend their manufacturing facility for witness testing and inspections. This collaborative approach not only showcased their transparency and dedication but also significantly contributed to the success of the project"**

Mark Hyde Project Manager – Kensa Contracting

