

Case Study

Reading College – Activate Learning





At Quantum, we believe the green transition starts in the classroom, by giving students the skills they need to lead the future of energy and construction.



The Client

Activate Learning | Reading College

Activate Learning's Reading College has long been recognised for its strong vocational training in construction and engineering.

With the UK's low-carbon economy expanding, the college saw the need to go even further, by offering hands-on training in renewable energy technologies. Their goal was clear: create a state-of-the-art sustainable training area that would equip students with the skills needed to thrive in the green economy.

Reading College's new low-carbon training facility is designed to give students practical experience with the technologies reshaping our world, including Air Source Heat Pumps (ASHPs), Ground Source Heat Pumps (GSHPs), solar PV systems, battery storage, and EV charging ecosystems.



The Engagement

Building a Comprehensive Low-Carbon Training Facility

Activate Learning approached Quantum Group after hearing of Quantum's work with several colleges during the Strategic Development Fund Projects.

Working closely with Curriculum teams, as well as Crown Interiors (the main contractor at Reading College), we installed low carbon technologies in brand new training bays. The type of technology was chosen based on regional skills priorities, informed by Local Skills Improvement Plans.

Throughout the project, our on-site lead engineer, worked closely with college staff to deliver the installation with minimal disruption to college operations, ensuring an efficient and respectful process.

Building a Comprehensive Low-Carbon Training Facility

Three Air Source Heat Pump (ASHP) Training Bays:

Simulating real-world installations, these bays allow students to learn system design, installation, performance assessment, and maintenance of ASHP systems, one of the key technologies in the UK's renewable heating strategy.



Three Ground Source Heat Pump (GSHP) Training Bays:

Designed to teach the complete Ground Source Heat Pump system journey, from site planning to installation and operation. The GSHP bays support learners in understanding this vital technology for sustainable heating solutions.



Three Electrical Ecosystem Training Bays:

Focused on the integration of renewable electrical systems, students can now work with solar PV, energy storage, and EV charging setups, gaining vital experience for careers in sustainable construction and energy systems.



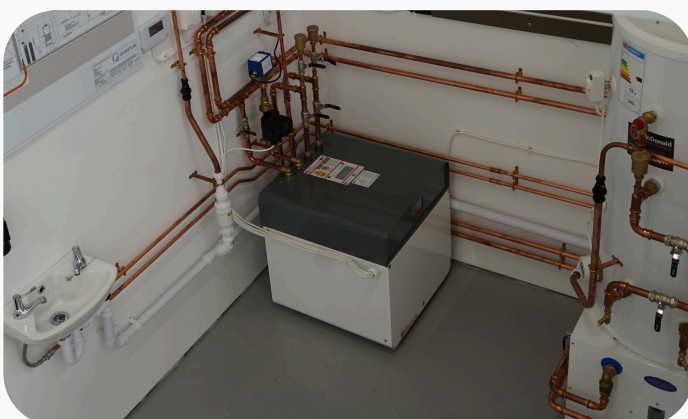
The Impact

Equipping Students for the Low-Carbon Economy

The new sustainable training area is a launchpad for student success in a rapidly evolving sector. By using equipment from leading manufacturers such as Daikin on the air to water heat pumps, Kensa on the Ground Source Heat Pump Demonstration Unit, Solis, GivEnergy and Zappi in the Electrical Ecosystem, Reading College is now better equipped to prepare its students for careers in renewable energy, sustainable construction, and green technologies.

These skills will be essential as the UK moves closer to its net zero targets, and the demand for renewable energy expertise continues to grow.

Thanks to this project, students at Reading College will leave not only with theoretical knowledge but also with the confidence and experience to apply it in the field.



Client Testimonials

John Evans, Curriculum Manager for Construction and Engineering/Technology at Reading College, shared his feedback on the project:

"I am writing to express my sincere gratitude for the outstanding work Quantum has done on our new sustainable area at Reading College. The transformation of the space is truly remarkable and a testament to your team's skill, dedication, and commitment to sustainability."

"In particular, I would like to commend the exceptional work of your Lead engineer. His professionalism, politeness, and willingness to work around our ongoing college activities were truly commendable, he was always informative and helpful, ensuring a smooth handover process. The quality of the workmanship and equipment used throughout the project is evident in the final result and will undoubtedly have a positive impact on our campus community."

"Thank you again for your exceptional work. We are thrilled with the results and look forward to the positive impact this sustainable area will have on our college."





Building the Green Workforce of Tomorrow

At Quantum, we are driven to address the UK's Green Skills shortage by providing world-class training solutions in low carbon technologies, sustainable building practices and retrofitting.



If your institution is ready to invest in building the UK's green workforce, we're ready to help.

