

Case Study

Northampton College



The Client

Northampton College

Northampton College is one of the leading education providers in the region, with a strong commitment to preparing students for the industries of the future.

With the opening of its new Green Skills Centre, the college has taken a major step towards embedding sustainability into its training programs, in line with Northamptonshire's Local Skills Improvement Plan whereby Green Skills was identified as a priority skills area.

The Centre is designed to give students hands-on experience with the technologies driving the low-carbon economy, including air source and ground source heat pumps, solar thermal systems, solar PV, battery storage, and EV charging systems. The Centre will provide 250 students with daily access to the latest green technologies, reskill adults who want to move into the construction industry and upskill existing professionals in the sector.



The Engagement

Building a Future-Ready Green Training Facility

Northampton College had a vision to become the flagship centre in the SouthEast Midlands for renewable training. They partnered with Quantum Training to bring this vision to life. We worked closely with the college's curriculum teams, Head of Construction, Senior leadership, and facilities staff to design, plan, install, and commission a state-of-the-art learning environment for training in ASHP, Solar PV, battery Storage, EV Charging, Solar Thermal and GSHP.

Throughout the project, our engineers collaborated directly with educators to make sure the Centre would meet today's green skills needs, and remain adaptable for the future.

Building a Comprehensive Low-Carbon Training Facility

Two 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.



Two Solar Thermal Training Bays

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

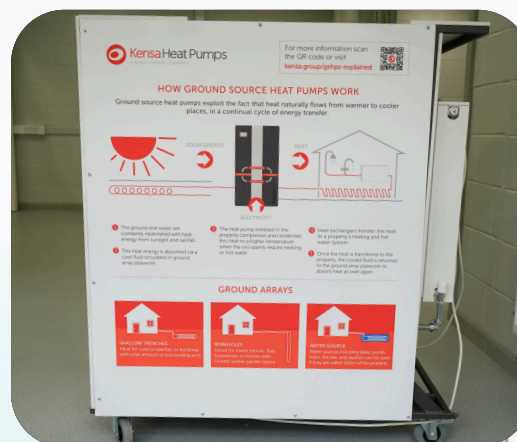


Three Electrical Ecosystem Training Bays:

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.



One Ground Source Heat Pump Demonstration Unit



The Impact

Northampton College

The Green Skills Centre was opened by MP Lucy Rigby and is now officially ready to train hundreds of students in sustainable construction and renewable energy.

By combining practical equipment with flexible learning spaces, Northampton College can offer courses that mirror real-world green technologies and working practices. They are now working with local employers like Castle Climate Control and Thron Electrical to offer master classes and curriculum development, as well as with large manufacturer's like Daikin UK who's heat pumps are featured in the new centre.



Northampton's other curriculum areas such as English, Science, Maths departments have also used the centre to educate a whole range of young students on the topic of Net Zero, giving them the exposure they need to thrive in an evolving green jobs market.

Quantum have also returned on separate occasions to offer further support to the college Curriculum Teams via Quantum's Train the Green Trainer Program and to local school & college students during the Women In Construction event, and 'Ignite the Spark' event.

Client Testimonials

Patrick Leavy, Deputy Principal at Northampton College, said “We tasked Quantum with creating one of the best renewable technology centres in the country for us and they haven’t disappointed.”

He also shared his experience working with Quantum throughout the installation process and the full project journey:

“I met the engineers from Quantum yesterday – they are doing a sterling job with our Green Skills Centre – it is coming together very nicely. Many of our curriculum teams are really interested in it and are exploring how the Centre can support their areas.

“We are very pleased with the Quantum engagement from that first tentative enquiry with you Jade, initial meetings, through to concept design, planning, scheduling, installation and commissioning has been all expertly and professionally managed. Thank you – we look forward to the next phases”





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.

