

# Case Study

## Bournemouth & Poole College



# The Client

## Launching the Green Energy Centre

Bournemouth and Poole College has a long history of delivering high-quality vocational training across technical disciplines. But as the UK moves closer to its net zero goals, the college recognised the need to expand its investment in green skills training.

Michael Lock, Director of Learning for Construction, said renewable technologies are transforming industry standards, and students must be ready to meet evolving employer expectations.

To support this, the college has launched its new Green Energy Centre, a state-of-the-art facility designed to prepare learners for careers in sustainable construction and low-carbon technologies. It offers hands-on training in areas such as solar PV, heat pumps, energy storage and EV charging.

“The Green Energy Centre is a landmark moment for the College and the wider region,” Lock said. “By equipping students and employers with the expertise required in renewable technologies, we’re building the skilled workforce of the future.



## The Engagement

Bournemouth and Poole College is leading one of four Dorset projects supported through the Local Skills Improvement Fund (LSIF), which is helping to deliver initiatives aligned with the priorities set out in the Dorset LSIP. As part of this, the college has developed a new Green Energy Centre on its Poole campus to strengthen skills in low-carbon construction and renewable technologies.

The college worked in collaboration with Fusion Project Management, who oversaw the build, and Greendale Construction, who were appointed as the main contractors. This has been a strong example of partnership working between multiple organisations to deliver a high-quality training facility.

Throughout the process, the college, Fusion Project Management and Greendale Construction worked closely to ensure a smooth build and installation – demonstrating how collaboration across several parties can help projects run efficiently and deliver lasting impact.



# Low-Carbon Technologies Supplied & Installed

## 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. Learners can engage with the full lifecycle of an ASHP system.

All the bays contain equipment from leading manufacturer Daikin UK, to ensure training of the future workforce happens on state-of-the-art equipment that is frequently used in industry.



## Three Electrical Ecosystem Training Bays

Fitted with solar PV, battery storage, and EV charging systems, these bays allow learners to understand how different renewable technologies interact.

These setups reflect real-world installations and prepare students for careers in sustainable electrical and building services.



## Supply of Rainwater Harvesting & Solar Thermal Equipment

Quantum also supplied all equipment for a Rainwater Harvesting working bay, and a Solar Thermal working bay, for learners to understand the operations of these systems as well. These systems are being installed by the college staff and students.



# The Impact

## Preparing Students for the Green Economy

Bournemouth and Poole College has officially opened its new £1 million Green Energy Centre, unveiled by Tom Hayes MP.

At the launch, Cllr Andy Hadley discussed the Local Area Energy Plan, highlighting the region's ambitious goals — installing 4,000 EV charge points and 140,000 heat pumps by 2045.

The new facility is already being used by plumbing apprentices, with adult training courses planned to launch in Autumn 2025, supporting the growth of green skills across the region.

The centre also cements Bournemouth and Poole College's role as regional lead for the Green Skills Advisory Panel (GSAP), working with partners to drive skills development and support the region's journey to net zero.



Tom Hayes, MP for Bournemouth East opening the new training Facility

## Train the Green Trainer Client Testimonials

Quantum delivered a two-day 'Train the Green Trainer' programme, which gets arranged with all the colleges Quantum work with to properly introduce the training bays and provide a comprehensive introduction to the renewable & low carbon industry.

The feedback from Bournemouth & Poole College staff about our programme was excellent:

- 'The teaching was super helpful. It's great because some teachers know certain technologies but not others — this way, you get clear teaching on all of them.'
- 'Really informative, and it helped having the books to write everything down.'
- One attendee summed it up perfectly: 'It's fantastic — really, really good!'

One of the lecturer's specifically wrote to Quantum:

"I would also like to mention, if I hadn't already, how beneficial the training from your Trainer was. **All of the staff here thought he was brilliant, and it was clear that he truly understands how important the learners are.** Overall, the training left our team feeling confident, informed, and inspired to bring renewable energy learning into the classroom"

# Q&A Spotlight with Rob, Plumbing Lecturer at Bournemouth & Poole College

**Q:** Who has been using the bays in lessons so far?

**A:** Mainly apprentices have been using the bays. In their third year, they cover renewable technologies like air source heat pumps, solar thermal, and rainwater harvesting — last year this was all theory, but now they can work with the real systems. Senior electricians have also used the EV charging bays with their apprentices, and adult learners are expected to start using them later this year or early next.

**Q:** How have you been integrating the bays into lessons — as enrichment, bolt-on courses, or part of renewable pathways?

**A:** The bays are now part of the main apprenticeship delivery, not just an add-on. We revisited them with fourth-year apprentices, and their reaction was great — *“this is what we install!”* They enjoy seeing systems they work with day to day. Long-term, the aim is for them to be part of a dedicated renewable pathway.

**Q:** How do the bays benefit the learning process related to acquiring new skills?

**A:** Having the systems on-site has been a huge advantage. Before, we relied on theory lessons and occasional mobile demos, but now learners can explore, fault-find, and understand how the technology works in depth. It’s hands-on, peer-led, and far more engaging.

**Q:** How did you attract apprentices to your low carbon training programmes?

**A:** The launch day played a big role. We invited stakeholders, council representatives, and our local MP to see the facilities — it was a great way to showcase the bays and generate interest from employers. For other colleges, getting people on-site early makes all the difference; once they see the facilities, they understand their value.

**Q:** In your experience what are the most popular career paths that your apprentices take?

**A:** This area has always been gas-focused, but there’s now a clear shift toward renewables. Many apprentices are working with air source heat pumps and solar thermal systems. The bays have been key in supporting that transition and giving learners real experience with low-carbon technology.



# 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.

