

## Case Study

# CHP Solution for Canterbury Christ Church University Halls of Residence

**Client: Canterbury Christ Church University**

**Location: Canterbury South East**



### Products/ Services

- **1 x 80kWe CHP unit**
- **Low noise acoustic enclosures**
- **Delivery, off-loading and positioning**
- **System commissioning**
- **CHP maintenance contracts**

## BACKGROUND

In 2018 Canterbury Christ Church University was building a new halls of residence campus for its students. This prosperous university has over 18k of enrolled students all of which are guaranteed accommodation either on campus or around the city.

Mechanical and Electrical contracting firm Michael Nugent secured the project in August 2018. Due to Shenton Group's vast experience in the residential sector for CHP installations and service contracts, when it came to the power requirements of the site, Michael Nugent once again turned to Shenton Group.

## PROJECT OVERVIEW

Shenton Group provided a comprehensive solution from the design phase all the way through to integration on site and commissioning.

To ensure the best ROI for the client, Shenton Group ran a desktop study which analysed different load profiles to help establish the correct CHP size for the site. The study revealed that the originally specified 200kWe CHP would actually be too large for site loads. Shenton Group recommended to downsize to a 80kWe machine as it would be far more cost-effective, whilst still meeting BREEAM and planning conditions. Shenton Group's technical department worked with the redesign consultant who was based in Ireland and had design meetings via Skype to sign off the new solution on behalf of Michael Nugent.



## OUTCOME

The T80 recommended by Shenton Group provides maximised run time and ensures increased cost savings for the client. This CHP solution provides hot water and heating to 418 large en-suite study rooms as well as shared kitchen and living areas. Predicted savings over a 10 year period is £47,901.16 plus the added benefit of reductions in CO2. The CHP is also safeguarded by a Shenton Group maintenance contract.

Thomas McCabe, Project Manager Shenton Group:

**“It was great working with the team from Michael Nugent Ltd on this project. Special mentions to our Senior Design and Applications Engineer Ken Bentley for his expertise in sizing the CHP, and ensuring it met all of the client’s requirements. Successful commissioning, G99 Testing and synchronisation with national grid was led by Shenton Engineer Luke Parker.”**

**“From design to commissioning, this project has gone exceptionally well, and this is due to the hard work and dedication of everyone involved. The client can look forward to cost savings for years to come.”**



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