

Case Study

Butchers Pet Care Reduces CO₂ Emissions & Energy Costs With CHP



Client: Butchers Pet Care
Sector: Industrial – Food & Drink
Location: Northampton



Products/ Services

- 1 x Quanto 1,560kWe CHP
- Exhaust Recovery Steam Boiler
- Design
- Environmental permitting assistance
- Grid application support
- Planning support
- Civil works
- Delivery, off-loading and positioning
- Installation
- Mechanical and electrical integration
- Commissioning
- CHP maintenance contract
- G99 relay
- G99 application process and witness testing

BACKGROUND

Butchers Pet Care were keen to reduce operating costs with a carbon-reducing energy solution. After reviewing the options available, Combined Heat and Power (CHP) provided electrical and thermal benefits that no other solution could provide. The CHP offered carbon savings coupled with significant operational savings and a short Rate of Return on investment. The client needed an Engineering, Procurement and Construction (EPC) contractor to take full responsibility for the project, allowing them to focus on core business (Pet Food Production). This project took place at the height of the COVID19 pandemic, where site demands had increased. As a result, Butchers Pet Care selected Shentong Group as the EPC partner to ensure the smooth delivery of the project.



PROJECT OVERVIEW

From the point of contract signature, Shenton Group took full responsibility for the design, installation, commissioning and maintenance of the CHP package. Throughout the delivery, we strived to value engineer the install optimising the benefit and ensuring all useable energy was captured.

Shenton Group oversaw the G99 process and the on-site witness testing, liaising with the DNO throughout to ensure approval and successful set up in synchronising the CHPs to the National Grid. We also worked with the sites gas provider and network operator to ensure suitable supply volumes with zero disruption to site.

As the EPC contractor, Shenton Group took responsibility for obtaining all necessary environmental permitting and permissions.

Working alongside a 24/7 factory required significant planning. Critical times including HV shut-downs were fully coordinated by Shenton Group and the site with the DNO. Knowing there was no planned outage meant Shenton Group provided backup generators





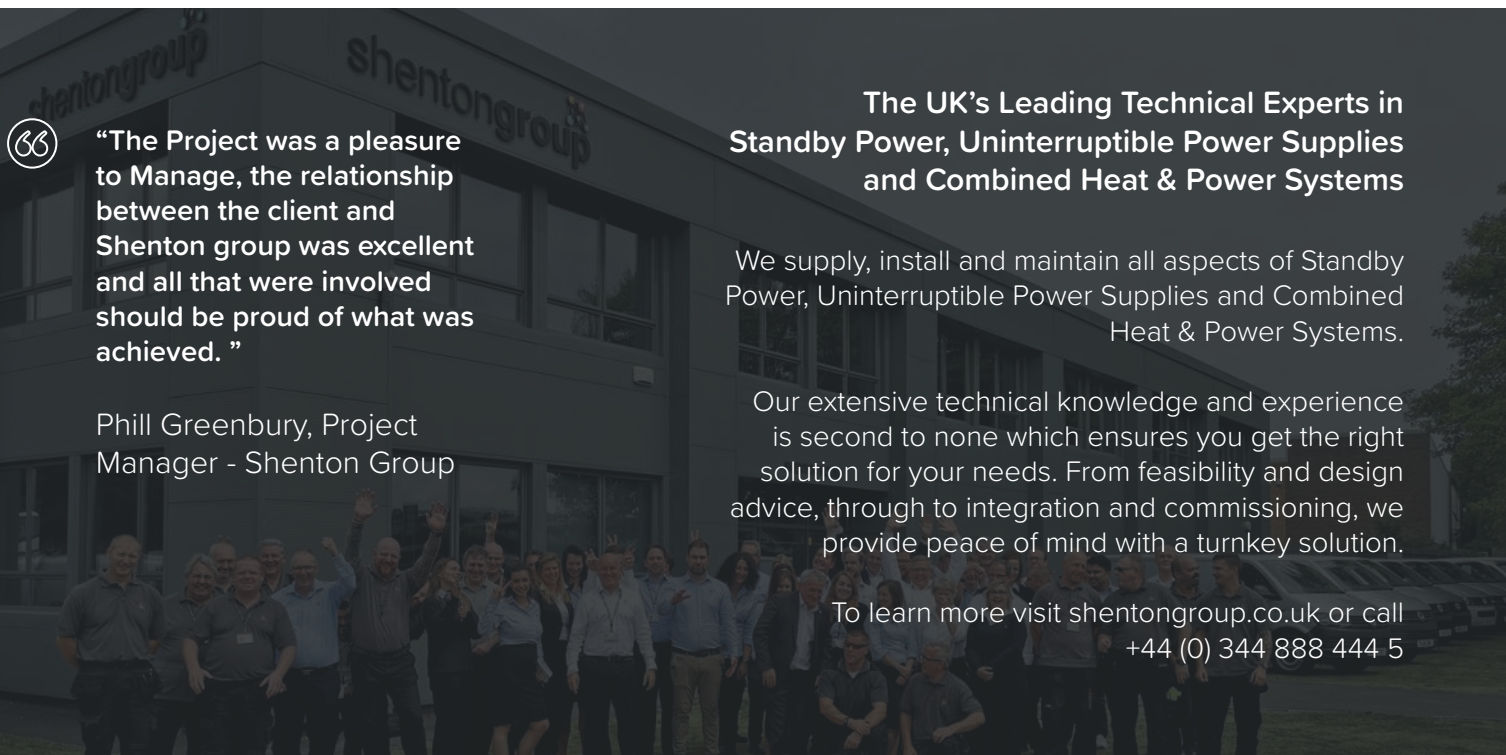
for the HV mains shut-down period while Western Power Distribution and our contractors carried out works to the factory supply.

The mechanical installation was also planned in order to maintain site thermal services throughout the energisation of the CHP. As a result, the site had steam and low-temperature hot water throughout the installation phase.

OUTCOME

Shenton Group installed a Quanto 1600 (1,560kWe) Combined Heat and Power solution with Exhaust Recovery Steam Boiler, HV Installation including HV switchgear and Transformer, a true turnkey installation.

The project was a success, delivered on time and within budget. Thanks to the excellent project management and site installation works, Shenton Group has built a strong relationship with Butchers Pet Care and thus securing an ongoing operation and maintenance contract for the CHP unit.



36 “The Project was a pleasure to Manage, the relationship between the client and Shenton group was excellent and all that were involved should be proud of what was achieved.”

Phill Greenbury, Project Manager - Shenton Group

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