

# **CASE STUDY**

## Paintworks

ENERGY CENTRE, HIU'S & ESCO



### **OVERVIEW**

The Paintworks development originally operated as a paint and varnish factory in the south west of England and was bought by Verve Properties in 2003 for re-development. Vital Energi were appointed for Phase 3 of the £40m project to design and build the community energy scheme and provide 30 years of on-going energy supply and services as the Energy Services Company (ESCo) on the project. Paintworks is a 12 acre regeneration project which, when complete, will consist of residential homes, studios, offices, a café bar and exhibition venue. Our client for this project is Crest Nicholson who are acting as the developer for Phase 3. The scheme we have installed is compliant with the CIBSE Code of Practice for Heat Networks and our ESCo services meet the requirements of the Heat Trust rules.

## THE CHALLENGE

Vital Energi were selected to provide the complete energy solution for Phase 3 of the Paintworks development. The project required a company with a variety of capabilities including design and build, asset management, operations and maintenance and metering and billing. As ESCo, Vital Energi would undertake much of the risk on the project delivering optimum performance of the plant, equipment and fuel procurement to ensure a long-term, secure and viable energy solution which would serve residents for decades to come. CLIENT Crest Nicholson

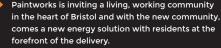
PROJECT Energy centre, HIU's & ESCo

TIMESCALE: Nov 2015 - May 2018

**CONTRACT VALUE:** £1.3 million

#### THE BENEFITS:

- > Cheaper energy bills
- > 30 year warranty
  & ESCo on entire community energy scheme
- Comprehensive customer engagement from the outset
- No estimated bills and remote readings taken each month
- Engineers on hand 24/7
  365 days a year.



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The developers have created a diverse, inclusive and vibrant community in Bristol and we are delighted to have the opportunity to deliver the complete energy solution for them.

ADAM ROCHE, PROJECT TEAM

### THE SOLUTION

We have installed the energy centre which houses eight 250 kWe modular gas boilers to supply the 221 apartments and town houses. We have also fitted a Building Management System (BMS), pumps, a pressurisation unit, the community district heating network and Hydraulic Interface Units (HIU's) & Heat Meters into each of the dwellings. The BMS will control the boiler plant to optimise the performance and energy efficiency of the system as well as raising alerts via the multiguard in the event of plant failure or loss of heat. This multiguard system is programmed to call directly through to the engineer on-call if there is a problem with the system.

Vital Energi is responsible for procurement of the fuel, gas, and supply of heat to all of the properties in the development. We will be operating and maintaining the scheme, with engineers available 24/7, 365 days a year.

Prior to residents moving in, Vital Energi collaborated with Crest Nicholson and their managing agent, Gordon & Co, to deliver a comprehensive programme of customer liaison to educate residents about their new energy solution. We have been active in supporting them by providing presentations, collateral and leaflets for both the Crest Nicholson and their future residents. Additionally, our staff have spoken directly to potential residents about the benefits of district heating and we have also attended an introduction evening for new residents to discuss our energy scheme and how we would provide customer services.

As part of customer engagement, we have created and issued a Welcome Pack for residents explaining the scheme and detailing aspects such as tariff rates, service levels and contact information for our in-house customer service team. This collaborative approach has ensured that all residents are familiar with important aspects of the scheme.

Metering and billing of heat usage is one of the most important features of community energy schemes. Each dwelling has its own heat meter, taking accurate readings and ensuring residents are only charged for the heat they use. These readings are taken remotely and transmitted to Vital Energi who bill each resident accordingly.

As part of the ESCo arrangement, Vital Energi provide a 30 year warranty on the entire scheme, including full maintenance and repair of the HIU's installed in each of the 221 dwellings. We will also ensure that the system performs to expectations, providing residents with reliable and affordable heat and hot water.

#### THE CONCLUSION:

Throughout this project, Vital Energi have been able to demonstrate their wide range of capabilities which allow them to act as an Energy Services Company. It has included one of the largest design departments in the sector, nationwide project installation teams, metering and billing, customer service and long-term operation and maintenance staff. This has allowed all stages of the project to be delivered inhouse and sees each department work together seamlessly, delivering constant communication and ensuring smooth handovers at every stage of the process.