

### **CASE STUDY**

## Commonwealth Games Village

**OPERATIONS & MAINTENANCE** 



#### **PROJECT OVERVIEW**

We designed & built the low-carbon energy system for the 2014 Commonwealth Games development in Glasgow. The 1.68MW CHP energy centre connects to a 28km district heating network and supplies heat and hot water to 704 homes, Emirates Stadium, Sir Chris Hoy Velodrome, a community center, nursery and a 120 bed care home.

We are responsible for operating & maintaining the site to make sure that all equipment is properly maintained and in working order. Our responsibilities include planned and reactive operation and maintenance services of the energy centre, district heating network, Heat Interface Units (HIUs) and smart metering system installed inside individual dwellings and buildings.

#### VITAL SOLUTION

To ensure the site is sufficiently monitored, we have a contracts manager, a team leader, two O&M engineers in Glasgow and a further five O&M engineers located within 30-45 minutes of the site. The team operate 24/7, 365 days per year and assets can be remotely managed from our head office by using our web based, single platform Project

Portfolio Management (PPM) system, Maximo.

Maximo gives a comprehensive view of all assets and schedules, as well as planned and reactive maintenance based around an annual programme. This improves visibility, control and automation of asset and business service processes. We also have a Trend

#### CLIEN

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#### **PROJECT**

Commonwealth Games Athletes' Village

#### TIMESCALE:

2013 - Present

#### **CONTRACT VALUE:**

£580,000

#### THE BENEFITS:

- > Enhanced system knowledge through continuous communication with our internal teams
- > 7 engineers based locally to respond to any planned/reactive maintenance
- > H&V News Awards District Heating Project of the Year 2015
- Planned & reactive maintenance and asset management



The Energy Centre at the Athletes' Village shows the way forward for sustainable living in Glasgow, with reduced carbon emissions and lower heating bills making this new neighborhood something for other developments to aspire to. The connection to the Emirates Arena will make the system even more efficient. This is another example of the preparations for the Glasgow 2014 Commonwealth Games leaving us a legacy, in this case making Glasgow a greener city.

BAILIE LIZ CAMERON, EXECUTIVE MEMBER FOR BUSINESS AND THE ECONOMY, GLASGOW CITY COUNCIL

963/BMS remote interrogation system installed on the network, which allows us to remotely monitor and control the status of the plant equipment, combined with the Multiguard equipment that alerts us of any potential problems. We endeavour to respond to major incidents within 2 hours and for faults identified, our KPIs require us to resolve the issue within 48 hours.

## Close integration of our in-house teams to deliver comprehensive maintenance

We have maintained continuous communication within our internal teams, from design and build, through to operation and maintenance of the site. This allows us to provide a high quality O&M service as we can ensure the

energy centre is performing as designed, which allows better integration and efficiency of the energy scheme.

We monitor the energy supply to the nursery, day care centre and the 700+ homes, and service the HIUs every two years. In addition, we maintain the smart meters inside the resident's homes including software updates, meter reading and report analysis as well as clean, reset and repair the metering equipment.

# Keeping to industry standards and strengthening engagement through tours

Being recognised as an exemplar project, we also help to facilitate tours of the prestigious energy centre where there are generally two tours per week. We also maintain industry standards including Health & Safety -OHSAS 18001, Environment - ISO14001 and Quality -ISO9001.

We have operated and maintained the site since 2013 and our engineers work to KPIs which ensure that we can provide the best service possible and keep any disruption and reactive maintenance to a minimum.