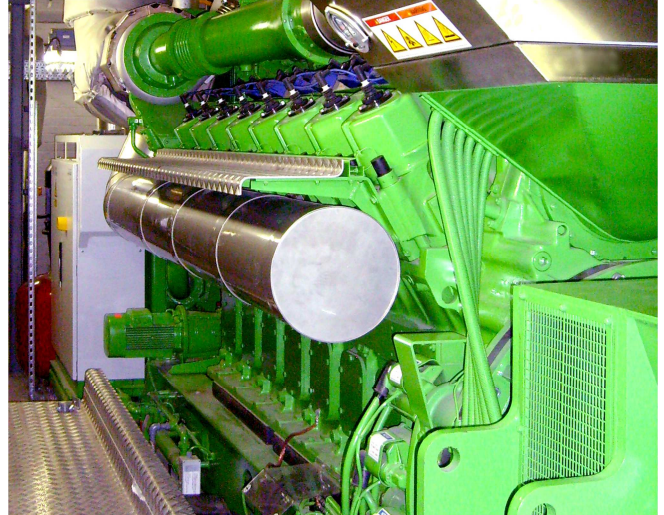
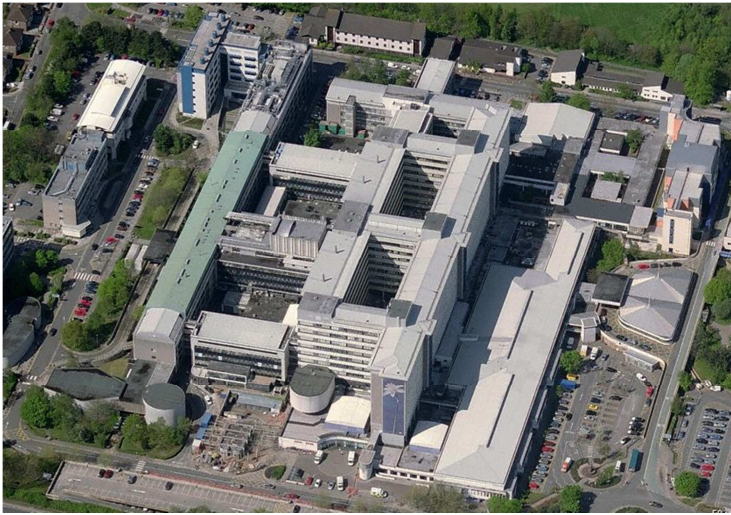


University Hospital of Wales Energy Centre



Client
Cardiff & Vales NHS Trust

Capacity
4.4MW_e & 1.5MW_{th}

Location
Cardiff, Wales

Operational
2009

Manufacturer
GE Jenbacher

Installation by
Clarke Energy

Type
2 x JMS616 GS-NL

Primary Fuel
Natural gas

During 2008 Clarke Energy and Nifes Consulting installed 2 GE Jenbacher JMS616 CHP modules with a Cochran waste heat steam boiler at the University Hospital of Wales.

The hospital previously operated 3 steam boilers and 2 hot water boilers. The new boiler takes on the role of lead boiler and supplies steam primarily to the sterilising units. Both engines feed the twin stream boiler, utilising the exhaust gases with a fuel specification of 12,535kg/hr @ 465C per engine.

The engines low temperature hot water supply feeds into the hospital's existing hot water system to supplement the site hot water and heating requirements via plate heat exchangers and the hot water boilers.

From initial design to commissioning Clarke Energy worked closely with Nifes and the NHS trust to ensure optimal electrical efficiencies and heat recovery as part of the on-going carbon footprint reduction drive embarked on by the National Health Service across the UK.

Clarke Energy is also responsible for the long term operation and maintenance of the installation ensuring a trouble free outlook for the hospital over the next 10 years.

