

Case Study



Christie Hospital CHP



Combined heat and power supplied to one of the UK's leading research hospitals

| Client | Capacity | Location | Operational |
|-------------------------|--|-------------------------------|-------------|
| Dalkia Utility Services | 1409kWe – 756kW HT water at 93°C 1100kg steam | Christie Hospital, Manchester | August 2004 |

| Manufacturer | Packager | Type | Primary fuel |
|--------------|-----------------------|---------------------------|--------------|
| GE Jenbacher | Clarke Energy Ltd, UK | 1 x 1.4MWe JMS 420 GS-N.L | Natural Gas |

SITE DESCRIPTION

The continued success of the GE Jenbacher JMS420 1.4MW gas engine within numerous UK Hospitals CHP schemes led to the installation of the 1.4MW unit at the Christie Hospital Energy Centre in Manchester.

To provide heating, hot water and electricity to the Christie Hospital the 40 year old heating boilers were replaced by the Jenbacher 1.4MW combined heat and power unit coupled to a waste heat boiler and two 4.5 tonne per hour gas fired boilers.

The Christie NHS trust, by utilising funding through a PFI scheme, were able to focus their capital budget on patient care and gain climate change levy exemption through the use of CHP.

As part of the package Clarke Energy also provide a 15-year operation and maintenance agreement for the engine. The Christie Hospital installation follows on from similar JMS420 CHP installations for Lincoln and Hartlepool hospitals, 1MW installation at Ormskirk Hospital and a 2.2MW JMS616 installation at Broadgreen Hospital in Liverpool.



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