

# Clarke Energy®

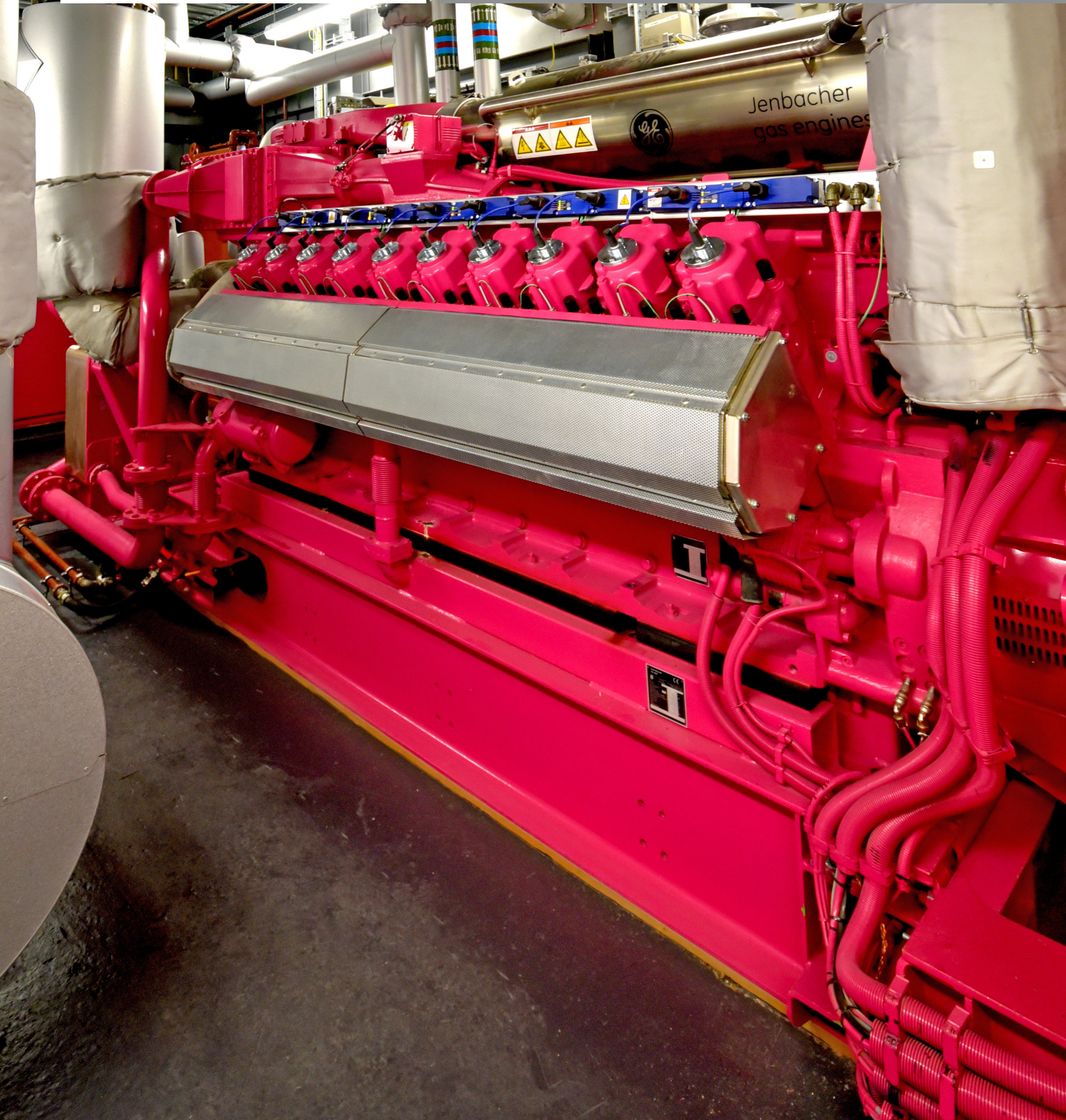
A KOHLER COMPANY

Engineer - Install - Maintain

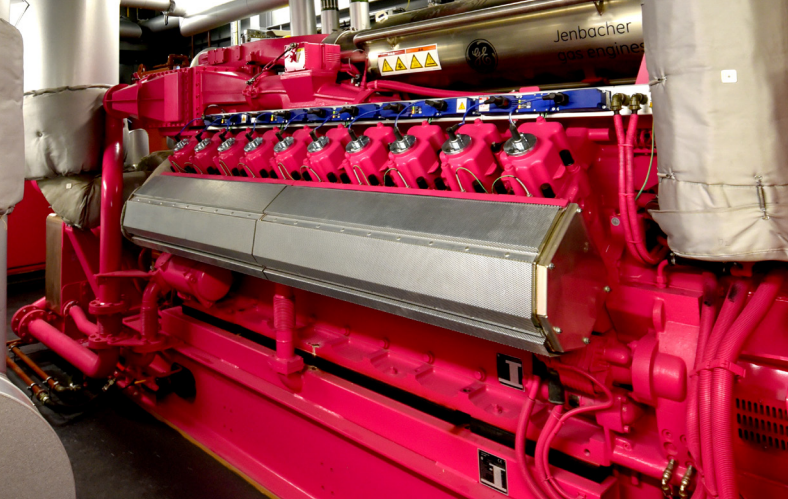
Case Study | Natural Gas | UK

## Barts NHS Trust

1.4MW<sub>e</sub> CCHP plant increases hospital's energy security and efficiency while reducing fuel costs and environmental impacts.







## Key information

### Client

Skanska

### Capacity

1.4MW<sub>e</sub>

### Location

City Of London,  
UK

### Commissioning

April 2016

### Engine Type

Jenbacher J420

### Primary Fuel

Natural gas

### Power

Trigeneration  
CCHP

### Pink Engine

Supporting Breast  
Cancer Research



# Pink Power - Barts NHS Trust

Clarke Energy supplied a high-efficiency CCHP (combined cooling heat and power) plant to Europe's oldest hospital located at Barts Health NHS Trust. The natural gas energy center was built to increase the hospital's energy security and efficiency while reducing its fuel costs and curbing its environmental impacts. Clarke Energy also supplied a 250-kilowatt absorption chiller, which delivers needed cooling water for the hospital and balance of plant equipment.

Skanska, one of the world's leading project development and construction groups, selected Clarke Energy to install a 1.4MW<sub>e</sub> J420 Jenbacher engine at the new energy centre that will provide the hospital with energy, heat and cooling water.

Haydn Rees, Managing Director of Clarke Energy, commented: "The main motive for installing a CCHP plant was to modernise the aging energy and heat supply system, improve the hospital's overall power generation resilience and reducing the environmental impact. If there is ever a natural disaster or interruption of power, Barts Health NHS Trust will be able to endure these external challenges due to the reliability of Jenbacher's cogeneration technology and the Clarke Energy's equipment and services."

The energy centre was built as part of the "Powering Health" collaboration to deliver lower-impact, fully funded CCHP solutions to NHS Trusts, including those that are part of a private finance initiative (PFI) structure. Funded by Sustainable Development Capital LLP (SDCL), the project was the first of its kind under a strategic collaboration between Skanska, SDCL, Clarke Energy, GE and the NHS Confederation.

**"The trigeneration plant will help us boost energy reliability and reduce our costs and carbon emissions. Clarke Energy were selected due to the reduced environmental impact of Jenbacher engines, which is backed by Clarke Energy's excellent services support."**

Fiona Daly, Associate Sustainability Director NHS Trust

Combined cooling heat and power for hospital



Serviced and maintained by Clarke Energy



Output capacity via Jenbacher J420

**1.4MW<sub>e</sub>**

**ClarkeEnergy**<sup>®</sup>  
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