



Project Highlight

Wexham Park Hospital, UK

AMERESCO 

Hospital Receives Efficient,
Reliable Power with Significant
Savings Over the 15-year Term

Technology Type:

Combined Heat and Power (CHP) |
Dual-fuel Low Temperature Hot Water (LTHW) Boilers |
LTHW Distribution Pipework

Grid Electricity Displaced

90%

Energy Project Size

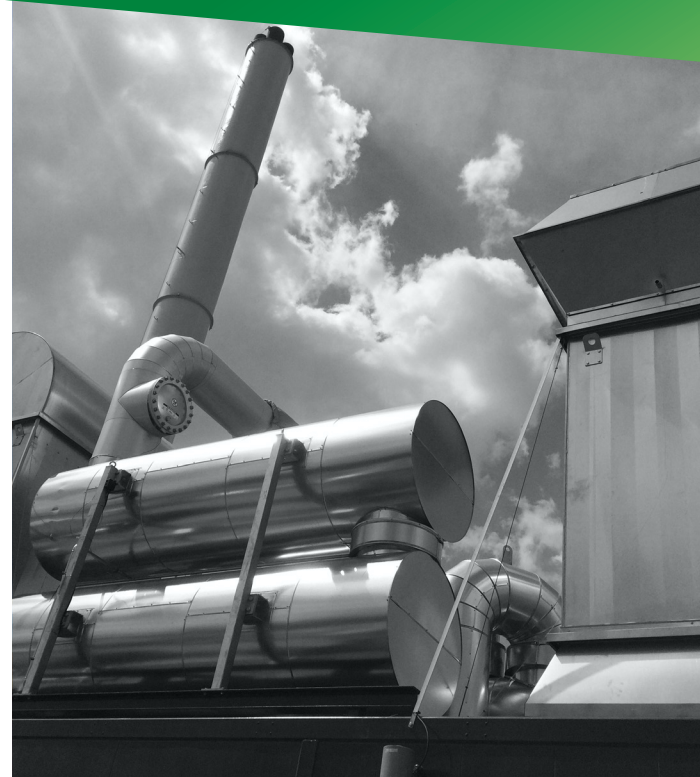
£7.5M

Annual CO₂ Reduction

1,621 te

Annual Total Target Savings

£475K



Summary

Frimley Health NHS Foundation Trust chose Ameresco to ensure reliable power while reducing carbon emissions at Wexham Park Hospital, a 588-bed acute care hospital serving Slough and the surrounding area of Berkshire. Funded by a Salix loan, Ameresco delivered a £7.5M energy infrastructure and maintenance contract with construction completed within 12 months.



Solution

Under the ESPC, Ameresco replaced the hospital's existing 1960s-era steam boilers and distribution system with a high efficiency gas fired 1.5 MWe Combined Heat and Power (CHP) plant. Ameresco continues to provide thorough O&M statistics and research, which allow clients to measure their investment against their carbon reduction goals. The project included the following installations:

- Three 2.5 MWth dual-fuel low temperature hot water boilers
- LTHW distribution pipework connecting over 30 individual plantrooms directly to the energy centre



“Our focus is always to ensure the needs of our patients come first, and this project definitely will afford greater comfort. The energy infrastructure project with Ameresco provides a significantly more reliable and efficient heat and hot water system for the entire hospital and allows us to accommodate the expansion plans currently underway. In addition, the project development scheme was specifically designed to make sure we didn’t have any disruptions in our day-to-day delivery of patient services during implementation of the project.”

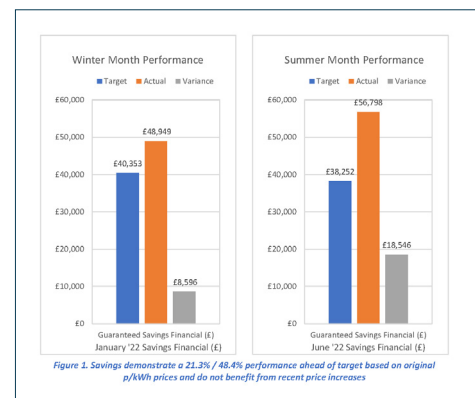
Colin Mapperley,
Director of Estates & Facilities
Frimley Health NHS Foundation Trust



Benefits

The CHP plant displaces 90 percent of grid electricity and provides 75 percent of the hospital's total heat requirement. With the provision on an export agreement, we have been able to operate the CHP at its rated output which has resulted in a c.50% increase in the savings achieved compared to the targeted savings as illustrated by the graph below. Supported by a 15-year operations and maintenance (O&M) contract, Ameresco is targeted to deliver the hospital an estimated £475,000 in annual energy savings over the term. Additionally, the environmental benefits of the project include:

- Estimated carbon emissions reduction of 1,621 tonnes per annum
- The green benefit is roughly equal to 1,918 acres of forest preserved for one year



Ameresco's team of energy experts can assist you in identifying the solution that fits your needs.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please call **1-866-AMERESCO** or visit **ameresco.com**.

