



# ENERGY PERFORMANCE CONTRACT

**West Middlesex University Hospital commissioned Bouygues Energies & Services, an Equans company, to make significant energy and CO2 reductions through an Energy Performance Contract (EPC), commencing in 2012. The sites' existing and new buildings house 400+ beds and cover a surface area of 43,000m2.**

## The Challenge

Our target was to enhance the energy efficiency and operation of building services systems and plant. We aimed to make savings through improvements to the efficiency of systems and equipment.

The energy works were completed in early 2013. The project earned the Trust an average of £220,000 per annum, presenting a 16% reduction in their annual carbon footprint. A further phase 2 of works was undertaken in 2016 which delivered a further £209,000 per annum in savings, including from the installation of a 520kW CHP.

## Our Solution

We combined heat and power (CHP) unit feeding the Main PFI and East Wing boiler houses.

We also upgraded the lighting to LED throughout the main building, East Wing and Marjory Warren areas, as well as in the carpark.

In addition, we enhanced the AHU control strategy for five main building AHUs, which have high efficiency filters and VSDs to include air pressure monitoring and speed control.

These energy works will guarantee the repayment of the initial investment in 5.2 years.

## Client Benefit

- 5.2 years pay back guaranteed.
- 67% of suppliers were SMEs.
- Electricity consumption reduced by 1.81m kWh per year.
- 29% cost savings against 2012 baseline.

## Our Commitment

You can rely on a partnership with a team of building systems experts, committed to maximising the value of your environmental investment.

To achieve minimal operational costs and maximum productivity of your occupants, we enable seamless communication between various building services like heating, cooling, control of lighting as well as low-voltage energy distribution, making your facilities true high-performance energy-efficient buildings. Our state of the art building automation and energy management solutions enhance the energy efficiency and productivity of your buildings' energy and mechanical infrastructure, producing savings between 15-30 percent. All without compromises on comfort and utilisation

- Smarter energy monitoring of building systems
- Integrating technologies.
- Providing innovative solutions through our building management systems
- Guaranteed energy savings
- Reduced operating costs
- Reduced energy utility costs
- Improved energy efficiency awareness through behavioural change training
- A centralised view of energy use
- A strategic plan for continued carbon reduction
- Options for finance, including gain share

## Key Facts.

- 29% reduction in energy cost by 2020
- 43,000m2 building space
- 1,420 tonnes of carbon avoided per year

