

Veolia extends energy savings at Royal Berkshire Hospital

3 years ago



Global resource management company, Veolia, is now increasing energy savings at the Royal Berkshire Hospital in Reading following a 15 year extension to the existing contract.

The £9.7 million works have seen the 740 bed Hospital move a step nearer a zero-carbon future by installing hydrogen-ready boilers, believed to be the first use of this technology in the NHS. By installing more efficient boilers, reducing distribution heat losses, and improving control of the heating and hot water systems the hospital will save around 3.8GWh of gas and 850 tonnes of carbon per year.

This highly complex and difficult process, which is self-funding from the energy savings, covered completely removing the existing steam generation and distribution from the site and converting to Low Temperature Hot Water. This involved installing the new network, comprising around 3km of pipework and 44 heat exchangers, whilst the existing system continued to supply vital heating and hot water to the medical facilities.

This challenging project was funded from the Government Health Infrastructure Plan, that required the project to be completed by the close of the financial year. By using Veolia's experienced design and construction team, removal of steam dependence was successfully achieved by the end of March, with additional works extending into April. Site surveys, design of the system and negotiations of the contract amendment were all achieved within three months.

The Royal Berkshire Hospital provides acute medical, surgical and maternity services to West Berkshire and Southern Oxfordshire and the new contract builds on the success of the previous agreement signed in 2012. This provided the design and build of an energy scheme that achieved a 25% carbon footprint

reduction by 2015, and delivered energy savings of £920,000. Under the contract Veolia designed, built and funded a 2MWe CHP unit, a 1MW waste heat boiler, and installed hot water mains and a plant management system to control the energy centre. Fitted in wards and circulation areas, 1,500 low energy lights saved £30,000 a year alone, and the cost of the downstream energy management improvements was repaid through guaranteed performance savings.

Commenting on this latest innovation John Abraham, Chief Operating Officer – Veolia UK & Ireland – Industrial, Water & Energy said:

“Enabling the NHS to become more sustainable through energy efficiency, and helping them to focus budgets on patient care is very important as it enhances facilities, and improves healthcare. This latest project also helps the Trust to move a step nearer the net zero carbon target. We look forward to working in partnership with them, and continuing our joint energy efficiency programmes that can redirect cost savings to healthcare.”

Managing energy in Hospitals since 1938, Veolia now provides secure on-site energy, FM and waste services to over 230 UK hospitals, and this includes over 100 combined heat and power plants. By implementing site wide carbon management strategies the company is at the forefront of delivering significant cost and carbon reductions using proven energy efficient technology, and best practice optimisation, supported by energy awareness campaigns.

For more information on Veolia visit www.veolia.co.uk