

LCB HEALTHCARE PILOT PROJECT

An Ultra Low Carbon Energy Solution for Nottingham University Hospital, England

January 2011

The project

The project concerns two related requirements:

- a cost effective, ultra low carbon energy solution to replace the existing coal fired boiler plant on the Trust's city site
- a cost effective means to increase the energy efficiency of existing buildings



Nottingham City Hospital

Methodology

The Trust is aware that the goods and services that the Trust needs to address its energy and carbon reduction needs are either not currently available on the market, are too costly or are unacceptable and that a 'business as usual' methodology will not deliver its requirements.

The Trust is therefore adopting the Forward Commitment Procurement approach to identify an optimal solution.

In brief, this involves definition of the problem, or unmet needs, and the requirement; proactive early market engagement; use of outcome based specifications; development of a pro-innovation procurement strategy and specification; and use of the competitive dialogue procedure.

The unmet needs

- The existing coal fired boiler is old and needs to be decommissioned within 5 years and replaced with a new, reliable and sustainable energy solution within this timeframe.
- The NHS has ambitious carbon reduction targets; any new solution will need to be ultra low carbon and with minimal NOx and other emissions.
- The new solution will be commissioned and in operation at a time when energy and carbon costs are set to increase; consequently the Trust needs a solution that uses its primary energy source in the most efficient way to supply heat and power to its facilities and where feasible sell back 'low carbon' energy to the electricity grid.
- The Trusts City Campus has a number of old energy inefficient buildings, some of which are of heritage status. Cost-effective solutions are needed to improve the energy efficiency of these buildings.
- The Trust is not cash rich, novel means to finance these requirements will be needed.

The requirement

The requirement is still being developed ahead of the market sounding so these are 'work in progress'.

Ultra Low Carbon Energy Solution

"The Trust requires its current coal fired boiler to be decommissioned and replaced with a reliable, cost effective, clean and ultra low carbon means of delivering power, heat and cooling to the buildings on the NUH site. Any solution would need to be flexible enough to adapt to changing energy needs of the hospital, ensure business continuity and provide options for commercial arrangements and financing to spread the cost of capital investment".

Energy Efficiency Measures for NHS Buildings

"The Trust requires the technical and financing means to implement a cost effective retrofit programme that increase energy efficiency of its buildings, including heritage buildings."

Key features to date

- FCP Know How training for key staff
- CEO and Board level support
- Strong policy drivers – carbon reduction / energy efficiency
- Coordination with the estates strategy
- Project Board established

Next steps

- Prepare a Market Sounding prospectus and communication plan
- Organise site visit for the supply chain

Project contacts

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