

Brighton General Hospital

Heating decentralisation cuts carbon emissions by more than 30%.



Zenergi was engaged to carry out out a technical feasibility study and financial appraisal co-funded by the Carbon Trust to assess the practical options and energy saving potential from decentralising the outdated steam boilerplant, distribution and condense return systems at Brighton General Hospital.

Implementing the recommendations

Following the detailed survey and analysis, Sussex Community NHS Trust engaged Zenergi to support the implementation of the recommendations by providing detailed mechanical and electrical (M&E) design and project management services.

The programme involved replacing large inefficient central steam boiler plant and distribution systems with high efficiency independent local condensing boilers with a fully automated building management control system to provide centralised heating control across the site.

The domestic hot water calorifier systems were also replaced by a mix of high efficiency plate heat exchangers and point of use water heaters, significantly reducing secondary circulation losses.

Key details

- Major steam decentralisation, boiler replacement and infrastructure upgrade project
- £1.4m project cost delivered over two phases
- Complex project delivered in working hospital
- Annual cost savings of approx. £130,000
- Approximately 1,000t annual CO₂ savings

£1.4m

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in annual cost savings

1,000t

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This project itself has resulted in the site's carbon emissions being reduced by over 30% and has assisted the Trust in exceeding its statutory carbon emission reduction targets and contributed to being awarded 'Winner' in the category of Good Corporate Citizen in the prestigious Health Service Journal awards.

Michael Opone
Engineering Services Manager