

# How interest free funding will help Trust save over £9m

Northern Devon Healthcare NHS Trust used £2.8 million of Salix interest-free funding to install a range of energy efficiency projects as part of an energy performance contract, estimated to save more than £9.2 million over the projects' lifetime.

Northern Devon Healthcare NHS Trust

Finance, Energy and carbon management



*The new CHP system at North Devon Healthcare*

## What was the issue being addressed?

Since 2002, the Trust has been active in addressing a sustainable agenda. In April 2012, they published their Estates Strategy outlining their sustainability plans across all sites. The Trust identified several areas that required investment, including improvements to building maintenance and to the mechanical and electrical infrastructure.

## What action was taken to overcome the issue?

The Trust utilised the Essentia framework to enter into an energy performance contract (EPC) with Cynergin, worth £4.6 million. This identified multiple areas where wasted energy could be saved.

Working closely with Cynergin and Salix, the Trust have utilised over £2.8 million of Salix's interest-free funding. The projects included an 800kWe combined heat and power engine (CHP) for which a high voltage upgrade was required to increase site resilience, LED lighting replacement, upgrades to chiller plant, roof insulation, Building Management Systems (BMS) and pumps across North Devon District Hospital, Holsworthy, South Molton and Bideford Community Hospitals.

## What was the impact?

The CHP will provide both heat and electricity for North Devon District Hospital. The CHP will generate over 4.2m kWh of electricity per year reducing their need for electricity from the grid and lowering their Carbon Reduction Commitment payments. This project cost just over £2 million and is expected to save the hospital over £490,000 per year which will pay back the initial capital in just over four years. Since completing in October 2016 it has exceeded predicted savings.

The combined £4.6 million of projects have guaranteed annual savings of 2,500 tCO<sub>2</sub>e\* and £599,000 per year which will pay back the Salix investment in under five years, however they are expecting to save closer to £709,000 per year. These projects have ensured the Trust have already exceeded their carbon 2020 targets by 320 tCO<sub>2</sub>\* per annum. These upgrades have also reduced the risk of infrastructure failure, lowered maintenance costs and have improved the hospital environment for staff, patients and visitors.

\* Calculated using emissions factors published by government for carbon footprinting.



£490k  
Annual savings

## Lessons learned / success factors?

The collaboration of all stakeholders has contributed to the success of this project. Involving all authorities and stakeholders at the planning stage of projects helped to ensure all mitigating factors are taken into account. Though there were some challenges in completing some projects, such as gaining approval and keeping to timescales, the Trust overcame these and recommends including contingency for projected timescales to mitigate any delays.

## Scaling up

This EPC solution could prove popular with organisations across the healthcare sector looking to reduce energy bills and deal with their maintenance backlog. Efficiency of the NHS in terms of both energy and estates usage is becoming more of a focus following the Lord Carter Report and more recently published Naylor Review. Removing the financial barrier to encourage investment in site infrastructure and reducing energy bills could provide Trusts and Foundation Trusts with the opportunity to both upgrade their estates and save money on energy.

*“The £2.8 million of Salix funding has been invaluable to the success of our EPC. Use of their compliance tool at conception of the project enables the team to cross check financial and carbon reduction calculations provided by our installation partner. Overall these projects have allowed us to already exceed our carbon 2020 targets and the financial savings we have accrued increases the funds available for our core services.”*

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