



Providing energy saving solutions for NHS Foundation Trust

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I The Client

The Robert Jones and Agnes Hunt NHS Foundation Trust (RJAH) is a leading orthopaedic centre of excellence based in Oswestry, Shropshire.

A specialist hospital with a reputation for innovation, the Trust provides a comprehensive range of musculoskeletal (bone, joint and tissue) surgical,

medical and rehabilitation services; locally, regionally and nationally.

Awarded NHS Foundation Trust status in August 2011, the hospital has eight inpatient wards including a private patient ward, ten operating theatres, as well as extensive outpatient and diagnostic facilities.

“Virtus Consult demonstrated why they are fast becoming the energy saving consultants of choice, especially within the healthcare sector, as their wealth of knowledge and experience helped deliver fantastic energy savings for the Trust. They exceeded our expectations, and delivered recommendations quickly, without disrupting the day-to-day operations of the organisation.”

Nick Huband, Associate Director of Estates and Facilities

I The Project

The Robert Jones and Agnes Hunt NHS Foundation Trust commissioned Virtus Consult to deliver energy cost and carbon savings across their portfolio through guaranteed self-funding projects.

Using our expertise and experience gained from undertaking other similar projects, we worked quickly to identify a number of immediate energy saving opportunities, while developing a long-term strategy to improve efficiency.

It was important that effective recommendations were made promptly, without causing any disruption to ongoing services at the Trust – this required our team to conduct quick yet thorough research and analysis of the hospital’s current energy consumption.

The Trust also required an assessment of self-funding or third-party funding options, where possible to help mitigate the upfront cost of any designated improvements.

| The Assessment

Every project we undertake begins with an initial baseline questionnaire, which contains a list of detailed questions, designed to give us an accurate picture of the client's operation.

These questionnaires enable us to gain a better understanding of the client's operational structure, existing knowledge and experience, together with legislative and political drivers.

In the past the answers to our probing questions have helped identify any gaps in understanding (on both sides of the equation) where additional investigation may be required.

In order for us to deliver a successful project and establish suitable recommendations, we must first obtain 'Baseline Information', which provides a clear starting point to the project and a referral point for progress against KPIs.

The information obtained is divided into easily managed sections, which helps shape our recommendations:

Roles & Responsibilities - Understanding the organisation structure, including roles, responsibilities and accountabilities, together with the governance process is critical to the change process.

Base Line Information - Information about the energy consumption, building fabric, systems and operational processes, through consultation with the relevant people within RJAH was important to the survey and the recommendations.

Targets & Aspirations - It was essential we made no assumptions, but understood the existing energy and carbon reduction targets of RJAH and how they were being monitored/administered.

Business Continuity - The successful implementation of this project, required us to understand how the organisation worked, recognising the critical risk areas, to ensure minimal impact on the hospitals' day-to-day operations.

Finance & Funding - To deliver an efficient, cost-effective project, we had to understand the client's financial model options and the availability of capital and or revenue funding.

Timescale Targets & Constraints - The delivery timescales were driven by business engagement, current available information, targets, legislation, business continuity and risk as well as finance and funding model.



| The Work

The project, which focussed on the Trust's entire portfolio, required a range of initiatives to deliver the outstanding savings predicted by our specialist engineering team.

Using our extensive knowledge of current legislation, we were able to deliver and exceed the expectations of RJAH – shaping our solutions and recommendations to overcome potential commercial, technical and political constraints.

A ready-made suite of procurement documents also helped speed up the appointment of contractors to undertake the improvements.

Our experience of running other similar projects ensured the procurement process was efficient and stress-free, with Forrest proving successful in its bid to secure the contract to implement a range of initiatives, as highlighted below:

Initiatives		
Pipe Insulation	BMS Strategy & Controls	Savawatt Controls
TRV Replacement	Ext Lighting	AHU Fans
Loft Insulation	Int Lighting	Pump VSD's
Department Zoning	Solar PV	

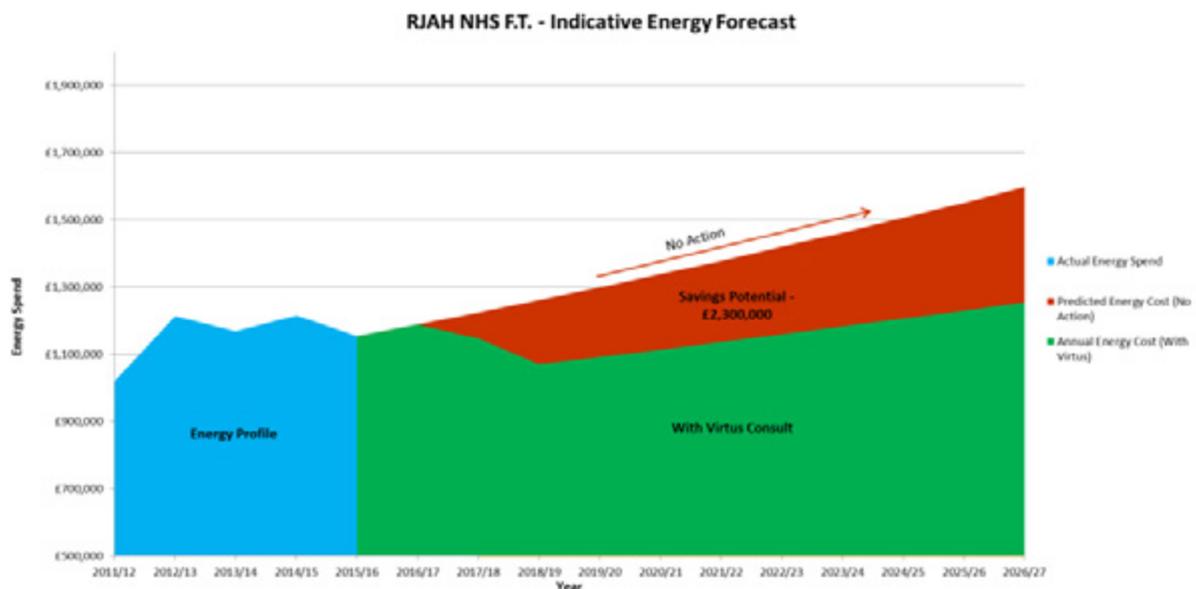
| The Results

After conducting careful analysis, we were able to successfully deliver guaranteed savings of circa £170k annum, with an impressive payback time of just 5.5 years.

With low implementation costs at less than 7% of the capital costs, and completion taking just 6-9 months, our recommendations delivered an estimated saving of around £2.3m after ten years.

Our experience and knowledge enabled us to exceed the expectations and targets of the Trust, delivering recommendations quickly, without disturbing the hospital's ongoing activities.

The unique Virtus Consult approach offers continued improvement through the identification of new initiatives during the six years in the run-up to payback.



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