An Integrated Ultra Low Carbon Energy Solution for NUH

A New Procurement Approach

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http://lowcarbon-healthcare.eu/
Why a new procurement approach?

- Existing solutions and ‘business as usual approaches’ will not deliver what is needed
  - We need new and innovative solutions - or we will fail

- Innovation leaders - both public sector and supply chain - need to set new standards

- The Public Sector approach to procurement needs to stimulate, encourage and enable innovation
  - (Innovation Procurement, Forward Commitment Procurement, Innovation Oriented Procurement)

In practice?
- Identify ‘unmet needs’ - ask for what is needed not what is available
- Market engagement and consultation on the specification and approach
- Outcome based specifications
- Pro-innovation procurement strategies
  - Use of competitive dialogue, forward commitment, whole life costing, pilots within procurement process, develop wider markets in NHS and Europe

What we ask of the supply chain
- To engage and organise to respond
- Be innovative
- Offer tomorrow’s not today’s solutions
Many new products and companies fail at the demonstration and scale up stage. The gap between development and commercial sales is often referred to as the ‘valley of death’ – but in fact it is more a mountain of risk. 

Why a new procurement approach?

- Decreases as the product approaches market and risks increase.
- Risk is at its highest when a supplier needs to commercialise - the risk is high because demand is not visible.
- Information that a real market exists reduces the risk and enables a supplier to invest in anticipation of future revenues.
If there was a demand, we would invest to supply greener products.

**The Buyer Supplier Paradox**

If there were suitable and cost effective green alternatives available, we would buy them.
Procurement of Ultra Efficient Lighting for Future Wards

- **Rotherham NHS Foundation Trust Forward Commitment Procurement project**

- **Supply chain and stakeholder consultation** led to refinement and simplification of the unmet need into an outcome based specification:

  - **Innovative, value added, smart, ultra efficient lighting** systems that can deliver the Trust’s vision for Future Ward lighting, meet the operational requirements and provide added value functionality, in a cost effective way.

- The core requirement outcomes are:
  - **A step change in patient experience**
    - i.e. creating a pleasant healing environment with patients being in control of bed zone lighting levels and ambience and provide the lighting to perform clinical requirements and incorporating measures to reduce the risk of hospital acquired infections;
  - **A demonstrable step change in energy efficiency** with **progressive improvements** in energy efficiency and operational performance over the life of the project;
  - **A fully installed and future-ready** solution.

“**What is great about this process is that it gives us time to plan, build consortia, and bring new solutions forward**”

- **workshop participant**
A ‘pro-innovation procurement strategy’ developed

Key features:

- Outcome based specification
- Competitive Dialogue
- **Emphasis on innovation maintained**
  - e.g. included in the Pre-qualification Questionnaire (PQQ)
- Demanding and committed customers
- Forward commitment
  - over the 8 year programme
- Balanced evaluation criteria
- Whole-life costing
- Stimulating wider demand in NHS

“The key to success was to begin by asking for what was needed – not what we thought was available or affordable. The results have exceeded all expectations. FCP really works”.

*John Cartwright, Director of Estates and Facilities, Rotherham NHS Foundation Trust.*
A pan-European consortium came together to respond

**Sweden**
Fagerhult – Luminaires
Ecophon – Acoustic Tiles

**United Kingdom**
Cundall – Lighting Designers
Austin Smith Lord – Interior Designers
Wandsworth – Nurse Call Systems
Intecho – Lighting Control

**Germany**
OSRAM – LED’s, Lamps, Control Gear

**Sweden**
Lund University,
A future ready, ultra efficient integrated patient experience, improving the efficiency of lighting and energy use within the healthcare environment.
“From the start we said that the solution had to be cost effective and affordable. We have not been disappointed. The outcome shows that better and more sustainable does not have to cost more.”

Steph Holmes, RFT Head of Procurement.

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**The IMI Ward - Design Benefits**
- Personal space and privacy
- Increased storage
- Bio-dynamic lighting
- Intuitive icon lighting control
- Modular and flexible solutions

**The IMI Ward - Construction Benefits**
- Off-site fabrication
- Factory made quality
- Quick Installation
- Same cost as traditional
- Fewer suppliers and trades to coordinate

**The IMI Ward - Operational Benefits**
- Reduced patient anxiety
- Local linen storage
- Easy to clean and maintain
- Reduced energy consumption / cost
- Reduced maintenance time / cost
Innovation procurement v green or sustainable procurement

- Green procurement

- Innovation procurement (future ready)
The unmet need

- The Trust need to procure an **innovative integrated ultra low carbon** energy supply and management solution for its sites that is able to adapt to meet the Trust’s power, heat and cooling needs now and in the future.

- The solution must be capable of operating effectively and reliably with minimal maintenance and down time.

- The solution will need to be **flexible and able to adapt** to changes in demand, building utilisation and patterns of healthcare provision. It should include measures to **progressively increase the energy efficiency** of the Trusts estate and reduce energy demand.

- The solution will need to **demonstrate a significant reduction in carbon and other greenhouse gas emissions**, so will need to be fully monitored and metered.

- Transition to the new energy solution **must be seamless** and there must be continuity of energy supply for the Trust to continue normal operations.

- It should be **cost effective, deliver progressive improvements and be future proofed** ie take advantage of new and emerging technologies and anticipate increases in the cost of energy and carbon and in emissions standards.

- The Trust is interested in exploring **innovative technical, commercial and financial arrangements** with potential suppliers, for example to spread the costs of capital investment and facilitate take-up of emerging technologies.

- The energy solution is required to be fully operational by **January 2015 at the latest** and the Trust will begin formal procurement in 2012.
The procurement process and timetable

Communicate unmet need to the market

Market Sounding

Review response forms

Market consultation

Finalise outcome spec & procurement strategy

RETURN RESPONSE FORMS BY END JANUARY

KEEP IN TOUCH VIA THE WEBSITE

OJEU Advert

Solution on site operational by 2015 (latest)
Refining the specification and approach – what we need to know

- Does the supply chain believe a holistic **approach** to energy is the right solution? Does the supply chain have the appetite for, and it is capable of, delivering this approach?

- What **technical and financing options** are or could be available to enable the Trust to address its needs?

- How, and to what extent, could these solutions contribute to achieving the Trusts requirements?

- Are the solution(s) currently commercially available?

  What role could your organisation play in delivering an integrated low carbon energy solution and the outcomes set out in the prospectus?

- How could the Trust **support the supply chain** to deliver an integrated low carbon energy solution and the outcomes set out in the prospectus?

- Do you anticipate any **barriers** in delivering the Trusts requirement?

- Would a ‘**forward commitment**’ * be useful in enabling the supply chain to deliver a solution to the Trust?