Ashford and St. Peter's Hospitals NHS
NHS Foundation Trust

TRUST BOARD

27th November 2014

TITLE	**Sustainable Development Report**
EXECUTIVE SUMMARY	This paper is an interim progress report of the Sustainable Development Group Action plan. The paper recommends the advantages of pulling a range of energy issues together into a coherent energy strategy.
BOARD ASSURANCE (Risk) IMPLICATIONS	There are financial, reputational and environmental risks in relation to non-compliance with Department of Health, NHS and Environment Agency guidance and regulations. The action plan has capital funding implications and will follow the capital bidding process.
LINK TO STRATEGIC OBJECTICE / BAF	**SO4**: Top Productivity
STAKEHOLDER / PATIENT IMPACT AND VIEWS	A key element of the Trust's Sustainable Management plan is staff communication and engagement. The plan is regularly updated and developed to enable staff ideas and new initiatives.
EQUALITY AND DIVERSITY ISSUES	None known.
LEGAL ISSUES	Compliance with the HTMs and carbon reduction targets within the NHS Sustainability Strategy are mandatory.
The Trust Board is asked to:	Note and obtain assurance from the report.
Submitted by:	Chris Bell, Associate Director of Estates and Facilities on behalf of Valerie Bartlett, Deputy Chief Executive
Date:	27th November 2014
Decision:	For Assurance

Ashford and St. Peter's Hospitals NHS
NHS Foundation Trust

SUSTAINABLE DEVELOPMENT REPORT

1. PURPOSE OF PAPER

This paper presents the Trust Board with an interim progress report from the on the Trust's Sustainable Development Action Plan as part of the Trust's Commitment to Sustainable Development policy. In reporting these matters to the Board, the Trust demonstrates assurance on matters covering corporate social responsibility, environmental cost and regulatory compliance.

2. BACKGROUND

The Trust's policy "Sustainable Development Commitment" and Action Plan were developed in response to government requirements for the NHS Trusts to support key sustainable development priorities. Moreover, Trust annual waste costs amount to £320,000, energy and water costs are £2.6m per year; and environmental-based taxation add a further £300,000. These costs if left unmanaged are guaranteed to increase through market forces and taxation on waste and energy emissions. The Sustainable Development Group is responding to these issues by minimising these environmental and cost impacts and working towards meeting the following national and regional targets.

- NHS England's Carbon Reduction Strategy requires NHS Trusts to achieve a 10% reduction in carbon emissions by 2015 against a 2007/8 baseline.
- Local Authority CO2 reduction planning policies stipulate that new commercial building developments must source at least 10% of their energy demand from renewable, low-carbon sources, or community "decentralised" heat or electricity plants.

3. SUSTAINABLE DEVELOPMENT MANAGEMENT PLAN

The Sustainable Development Group (SDG) has been working through the approved Management Action Plan. This is attached as **Appendix 1**. Progress to date is highlighted below.

3.1 DEVELOPMENT OF AN ENERGY STRATEGY

Notwithstanding growing external cost and risk pressures, internal pressures require the Trust to maintain a strong, adaptable energy infrastructure to allow for expansion and flexibility to accommodate changing service needs. Critically, our electrical back-up systems must also provide sufficient continuity of supply in the event of a grid power failure.

Linking these long-term business planning themes of business continuity, cost effectiveness, and carbon efficiency, the Sustainable Development Group have started the process to develop these issues into what will become an emergent cohesive strategy during 2015. The strategy shall as reasonably possible, consider and account for the merger and the evolving SPH redevelopment master-plan. Below are some of the key initial issues arising from this work so far :

A. BUSINESS CONTINUITY

With funding already allocated to the capital programme over the next two years for their upgrade, work is underway to address the coverage and capacity issues of the electrical standby generators. Due to service expansion, the systems no longer meet the HTM 06-01 standard. Further consideration will also to be given to developing greater flexibility within the high voltage supply network to enhance emergency response, safety and connectivity. With similar objectives, cost effective options to update the electricity transformers stations have also been identified. A project team is now to take forward and implement a technical option as previously highlighted within an appraisal produced by the Trust's designated consultant.

B. SPH REDEVELOPMENT MASTERPLAN

The SPH Master-plan identifies a potential increase in the building floor area of up to 26%. The prospect of the redevelopment of the SPH site presents an opportunity to review and devise a strategic rather than piecemeal solution to the need to heat, cool and provide power to our hospital sites. In doing so, Trust rising costs, emissions and risk could be mitigated. Those issues de-risked would include system performance and reliability, reduced maintenance and renewal of 40-year old infrastructure, and standardisation of equipment.

C. COST EFFECTIVENESS AND CARBON EFFICIENCY

Responding to this, and to local Planning Policy requirements for low-carbon building solutions the Sustainable Development Group commissioned consultants to develop a range of cost-effective technical options within a feasibility and outline business case for the SPH site.

Whilst the existing boilers and heating system are in an overall satisfactory condition, it is cost and carbon inefficient due in the main to oversizing. Whilst the age of the heating system is 45 years old, the age and condition of the boilers makes them less suitable for disposal with at least another 10-15 years of economic life. Accordingly, the Sustainable Development group have directed the consultants to review options to utilise the full extent of boiler capacity to generate electricity as well as heat through a technology called Combined Heat and Power (CHP) . As such CHP would be the most cost efficient method to

meet energy demand, support business continuity and accommodate the requirements of the master-plan and planning requirements.

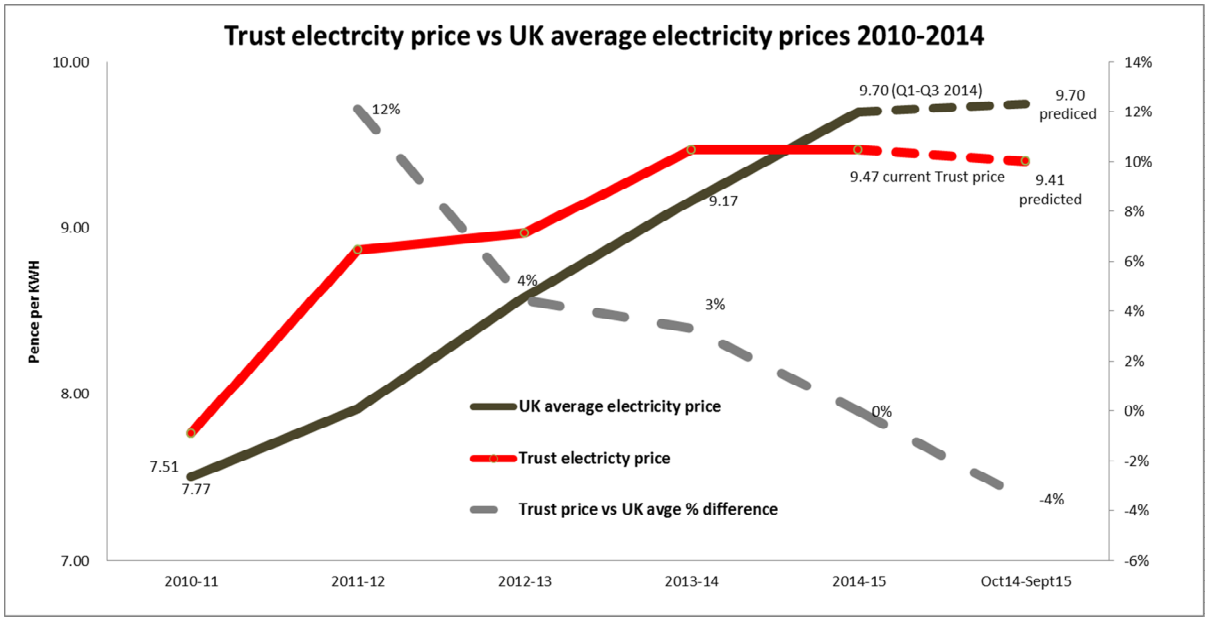
If use of the existing boilers is not technically or financially viable, a site-wide scheme to replace the existing plant could deliver £460,000 annual cost savings, with a return on capital investment of £4.2m within nine years. Outsourcing this to a facilities management company to design and build the facility would remove the capital cost requirement. The net saving for the Trust would be in the region of £90,000 per year over a 15 year agreement. The net cost to the Trust over the project lifetime would be £5.3m. The completed investigation and report recommendations will be published by April 2015.

3.2 DEPARTMENT OF HEALTH FUNDED ENERGY PROJECT

The £1.6m DH capital grant-funded project was completed in August. The funding supported works required to deliver improved safe, sanitary, cost-effect heating, ventilation and lighting. A key outcome was to improve environmental conditions for staff and patients, and reduce plant failures through improved operating controls. The project is on course to deliver £195,000 of annual savings. Further savings are anticipated through iterative improvements to control strategies, and through enabling works to replace and control existing previously defective plant. Once backlog maintenance issues have been resolved, the systems installed have the potential to deliver annual savings upwards of £295,000.

3.3 CARBON AND ENERGY COST

Presently accepting that The Trust is tied to buying grid electricity and gas and that these generally reflect an upward trend, good progress has been made with the comparative cost of energy to the rest of the UK. Until 2013 the Trust was paying more than the UK average, now it is paying 4% less for electricity and for gas 11% less. This savings differential is due to a change in procurement. To demonstrate cost pressures, the Trust electricity price has risen by 22% since 2010; inclusive of green tax the increase is 38.7%. The Trust pays today 9.47 pence per KWh unit, excluding VAT and green taxes. Inclusive of these charges, the real cost to the Trust is increased by 29% to 12.25 pence per unit of electricity.



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3.4 UTILITY COST RECOVERY

Based on last year's consumption figures cost recovery for 2014-15 is forecast to total £293,000 subject to all 3rd parties agreeing the 2014 price review. The price review increases the Trust's cost recovery by £113,975. This extra charge will secure full cost recovery at today's energy and water prices.

	Total cost recovery per year	Revenue review increases against last year
Alliance	£42,298	£26,456
Greenbrook	£44,835	£5,834
Inhealth	£17,548	£17,548
Surrey Borders	£167,440	£58,849
Virgincare	£1,070	£1,070
Viridian	£20,067	£4,218
Grand Total	£293,258	£113,975

3.5 PROCUREMENT

Two main streams of work are being developed by the Sustainable Development Group:

Revenue recovery exercise

The Group are in the process of commissioning a contractor to undertake a retrospective forensic analysis of the Trust's energy and water billing. Whilst bills are checked and validated by the energy manager, the billed unit charges seen and checked on the bill are themselves the sum of a range of sub-component costs. The forensic process scrutinises the suppliers and distributors arithmetical processes and validates these against contract terms and industry regulation. The work is performed at zero cost to the Trust; typically a 25% commission is however paid on any identified and recovered costs.

Whole life cost, compatibility and suitability.

Growth in demand for electrical appliances and air conditioning in particular is placing an upward and pressure on energy consumption-based cost. This growth aided by the decentralised budgets of individual departments or teams - presents a cost pressure; it also presents issues about product efficiency, lifetime cost and compatibility with other building sensors and controls. If allowed to continue unchecked it will inevitably add to energy cost and interfere with building heating and cooling sensors that provide comfort to the rest of the building. The Sustainable Development Group is reviewing opportunities to intervene and support the procurement process so that only efficient and compatible systems are permitted.

3.6 WASTE

Recycling of domestic waste at St Peters has been suspended by waste contractor Grundon. This suspension has been caused by a combination of much stricter limits on contamination introduced at the Materials recycling centre used by our waste contractor.

Hospital recycling is historically difficult to control due to the number of bins, the mix of public and staff areas and the busy nature of the hospitals this year has led to a number of items getting into the stream that shouldn't e.g. gloves, polystyrene, cloth wraps etc…

The matter has created a new cost pressure and a significant reduction in the percentage of waste that is recycled. Rates at St Peters have fallen to 10%. Addressing this issue, work to retender the waste contract has already started. The contract specification importantly includes clauses allow the Trust more flexibility on waste stream contamination.

In response various actions have therefore been taken:

- Cardboard is strictly separated and baled (the heaviest and costliest component of recycling) then recycling
- Problem areas e.g. A & E have been taken off the recycling waste stream
- All areas advised as to what can and what cannot be recycled
- Bin mapping and placement carried out in all areas
- Tighter checks from Portering and housekeeping staff
- Initiatives such as changing bag colours, stands and general retraining and advice are planned

On other waste matters:

- A site waste audit has been booked for mid-December covering areas last audited in 2012. These include Maternity, MAU, theatres and a mix of surgical and medical wards
- Offensive waste segregation – is proving to be a success with the tiger stripe bags being introduced throughout the Trust's clinical areas where appropriate and with the support and advice of Infection control team
- Quality and standard of waste receptacles has also improved over the last year with Hotel services teams again linking in with infection control on ward audits and inspections advising areas and replacing rusting and incorrect bins.

3.7 TRANSPORT

The final travel survey was undertaken this year, as required by SCC through the Trust's S106 legal obligation. The main points arising from this survey are shown below. Overall there has been little change since 2013, although there appears to be notable improvements in single-vehicle car use when compared to 2010.

In addition to the travel survey an evaluation of an electric van and car took place as part of climate week. Cost options for replacement of some of the van fleet were considered, as were measures to select lease vehicles with increasingly lower emissions. Presently the electric vehicle lease costs half as much again as the lease for the diesel equivalent. With this being true, the estate diesel vans are underutilised; the Sustainable Development Group will be reviewing options to lease just one electric or diesel van.

A consultation on bus services is being undertaken by Surrey County Council. The Travel Plan Coordinator is coordinating a response in conjunction with the Head of Capital Development and the Director of Finance and Information.

Travel Survey Results

- *The number of single occupancy vehicle trips has increased by 3.6% over 2013 but there has been an overall reduction of 11% when compared to the 2010 survey*
- *A small reduction of 2.9% in car passengers since 2013*
- *A small reduction of 2.2% in the proportion of people using public transport to the site*
- *The proportion of cyclists access in the site has remained constant at 0.7% since 2012*
- *A small increase of 1.2% in the amount of people accessing the site on foot since 2013*
- *The number of known car sharers remains constant at 33 (pairs).*

3.8 CATERING

The Sustainable Development Group has worked to increase the proportion of food which meets criteria for a recognised animal welfare accreditation scheme. All meat supplies and diary used now have "The Red Tractor" accreditation meaning a guarantee of quality and origin. All fish used in restaurants is also now MSC approved, with OCS looking into sourcing more products through accredited ethical and sustainable sources.

3.9 ENGAGEMENT and COMMUNICATIONS

Following the successes of climate week held in March this year, a new round of staff awareness activities are planned. Besides Climate Week in March 2015, a lighting awareness campaign will be held in December to cut the unnecessary use of lighting, which accounts for a third of the Trust's £1.5m electricity bill.

4. CONCLUSION

There has been significant work delivered through the Sustainable Development Group to improve Trust environmental performance and mitigate cost pressures. Work has started in earnest to formulate a joined-up energy strategy that will pull together all strands of the Trust's infrastructure, cost issues and cost investment opportunities. With increased Trust activity, travel will continue to cause the Trust difficulties; alternative options have been compromised by a lack of external investment and reduction in services in other transport options.

5. RECOMMENDATION

The Trust Board is asked to note and obtain assurance from the report.