

MAPPING GREENER HEALTHCARE

CASE STUDIES

FROM THE SOUTH EAST

Interim Report

14 May 2009

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EXECUTIVE SUMMARY

Climate change presents the biggest challenge for healthcare in the 21st century by threatening the health and wellbeing of current and future generations. There is still a chance to minimise the extent and effects of global warming but swift action over the next five years is vital.

The NHS is the biggest employer in Europe and emits 18 million tonnes of carbon dioxide a year, 25% of the public sector total. As an organisation whose purpose is the improvement of the population's health, the NHS has a uniquely important role not only to adapt to Climate Change, but also mitigate it.

The NHS in the South East recognized the importance of sustainability in their South East Regional Health Strategy for 2008. As a result the two Regional Directors of Public Health, John Newton and Yvonne Doyle, commissioned the Campaign for Greener Healthcare to map activities in sustainable development, good corporate citizenship or 'greening'.

A web-based questionnaire, <http://map.greenerhealthcare.org>, has been created to allow trusts to share experiences in the implementation of sustainable projects. This resource also allows trusts to develop networks, tools and programmes to support each other across the various domains: energy and carbon management, procurement and food, transport and travel, water use, waste management, designing the built environment, workforce development, partnership and networks, finance and governance.

Of the 50 trusts in the South East Region, 23 trusts have at this point entered 46 projects on the mapping website. Fifteen trusts of the South East Coast Strategic Health Authority have entered 21 projects and 8 trusts of South Central contributed 26 projects. The majority of projects are led by departments of estates and facilities.

The highest number of projects, 17 (37%), fall into the area of carbon and energy management, 12 (26%) in the area of travel and transport, 5 (11%) in procurement and food, 4 (9%) in waste management, 4 (9%) in governance, 2 (4%) in design the built environment, 1 (2%) in water and 1 (2%) in organisational development.

Reduction of energy consumption and carbon emissions seems to be the main driving force for the implementation of sustainable projects. On the other hand, good publicity and a positive impact on staff and the working environment were a common theme amongst positive outcomes quoted. Figures for financial savings and carbon savings and implementation costs were mostly estimates and varied reflecting the broad spectrum of projects.

It is unlikely that this mapping exercise has to date uncovered the full extent of sustainable activity across the Region. Some 50% of trusts have entered projects in this area on the mapping website. It can be expected that the website will be populated more comprehensively as it proves of use in signposting existing work and sharing information on what has worked and what hasn't. The website was set up to enable this ongoing networking and, with continued support from the region, the aim is to engage 100% of Trusts in this important and increasingly urgent work.

1. INTRODUCTION

Climate change presents the biggest challenge for healthcare in the 21st century by threatening the health and wellbeing of current and future generations. There is still a chance to minimise the extent and effects of global warming but swift action over the next five years is vital.

The NHS is the biggest employer in Europe and emits 18 million tonnes of carbon dioxide a year, 25% of the public sector total. As an organisation whose purpose is the improvement of the population's health, the NHS has a uniquely important role not only to adapt to Climate Change, but also mitigate it.

With the launch of the Carbon Reduction Strategy at the end of January the NHS has started to show a strong commitment to make sustainability part of its core business. The NHS will be able to combat climate change, save money and achieve health benefits on many levels by simultaneously tackling issues such as obesity and health inequalities by reducing carbon emissions and encouraging healthier lifestyles. As a good corporate citizen, the NHS must play a leading role in protecting and promoting the health of the communities it serves.

2. BACKGROUND

The NHS in the South East recognized the importance of sustainability in their South East Regional Health Strategy for 2008. As a result the two Regional Directors of Public Health in the South East, John Newton and Yvonne Doyle, commissioned the Campaign for Greener Healthcare to map activities in sustainable development, good corporate citizenship or 'greening' in the South East Region.

The work of mapping sustainable development activities is intended to provide a resource for the Strategic Health Authorities (SHAs) and health organisations to identify good practice and share information on what works and what doesn't. The SHAs will also use it to develop networks and support programmes across the various domains identified by the NHS Sustainable Development Unit, namely: energy and carbon management, procurement and food, transport and travel, water use, waste management, designing the built environment, workforce development, partnership and networks, finance and governance.



The project provides a great opportunity for the trusts to share their experiences and encourage each other to give sustainable development the vital role it deserves. It also provides a baseline against which future activities can be compared.

3. DATA COLLECTION

An online questionnaire was developed to acquire information on projects in the South East region relating to sustainability. The questionnaire allows individuals within trusts to describe their projects and share their experiences in implementing their projects. Having the questionnaire on the web makes it possible for more than one person in a trust to enter projects, which is important because sustainability covers such a wide range of

functions across the organisation. It also enables the projects to be easily updated. The print version of the questionnaire is shown in *Appendix 1: Data Collection Questionnaire*.

The project information entered on the questionnaire was formatted as a report and made publicly available on the mapping website <http://map.greenerhealthcare.org>.

An attempt was made to capture information from all trusts in the South East. The trusts were initially registered on the web-site by the Campaign for Greener Healthcare, and the sustainability leads for each trust was given the role of administrator for their trust. Administrators were allowed to edit the trust's details and change the membership arrangements for the site. All members of the trusts were allowed to enter projects. A description of the implementation method and timeline is provided in *Appendix 2: Implementation and Timeline*.



The 'mapping' website is easily accessible and open to the public. Projects are presented as case histories constructed from the information entered on the questionnaire. Trusts registered, projects entered, projects per trust and types of projects can be viewed at the click of a button. To view the current project reports, and for more information generally, see <http://map.greenerhealthcare.org>.

4. RESULTS

4.1 PROJECTS BY SHA AND TYPE OF TRUST

The South East Region covers two Strategic Health Authorities (SHAs): South East Coast SHA and South Central SHA. In total there are 50 trusts in the South East Region, with 26 in South East Coast SHA and 24 in South Central SHA. The distribution of the different types of trusts between the two SHAs is shown in Table 1: Types of trusts in the two SHAs.

Table 1: Types of Trusts in the Two SHAs

Type of Trusts	Number in South East Coast	Number in South Central	Total
Acute	13	10	23
Primary	8	9	17
Mental Health	3	3	6
Other	1	1	2
Ambulance	1	1	2
Total	26	24	50

To date, 23 trusts have contributed information on 46 projects. Fifteen of the 23 contributing trusts are from South East Coast, and 8 are from the South Central SHA.

Of the 46 projects, 21 were contributed by South East Coast trusts and 25 by South Central trusts. It is notable that 18 projects within the South Central SHA have been entered by only two trusts, one PCT and one mental health trust.

Looking at the type of trusts providing project information, it shows that 12 acute, 6 primary care trusts, 1 ambulance trust, 3 mental health trusts and one other trust (community services) added projects.

Looking at the distribution of projects amongst different types of trusts, 22 projects have been entered by acute trusts, 13 by mental health trusts, 8 by primary care trusts, 2 by ambulance services and one by a community trust.

4.2 PROJECTS IN SUSTAINABLE HEALTHCARE ACCORDING TO KEY AREA

The 46 projects have been categorized according to the ten key areas for sustainable development as laid out in the NHS Carbon Reduction Strategy: Saving Carbon, Improving Health:

1. Energy and Carbon Management
2. Procurement and Food
3. Travel and Transport
4. Water
5. Waste
6. Designing the Built Environment
7. Organisational and Workforce Development
8. Partnerships and Networks
9. Finance
10. Governance

The 46 projects cover seven of the key areas. The highest number of projects, 17 (37%), have been implemented in the 'energy and carbon management' area. The projects are very varied from energy awareness raising campaigns to changes in the energy infrastructure, e.g. the installation of solar panels, a combined heat and power unit, waste heat recovery. For an overview of the different projects, please see Table 2.1 Energy and Carbon Management.

In the area of 'travel and transport' the trusts contributed 12 (26%) projects. One third of the projects were looking at travel plans and another third at greening the various fleets

The trusts added 5 (11%) projects in the area of 'procurement and food'. Three of the projects focussed on the growing or provision of local food. The other two projects were looking at sustainable procurement in more general term.

In the area of 'waste' and in the area of 'governance' 4 (9%) projects have been entered. In the area of governance trusts have focussed on developing sustainable management plans. Two of the trusts have used the 'Good Corporate Citizenship Assessment Model' as a guide.

Two (4%) projects were added in the area of 'designing the built environment', 1 (2%) in the area of 'water' and 1 (2%) in the area of 'organisational and workforce development'.



Table 2.1 Energy & Carbon Management

Key Area of Project	Project	Name of Trust	Type of Trust	Name of SHA
Energy & Carbon Management	Energy Controls	Brighton and Sussex University Hospitals NHS Trust	Acute	South East Coast
	Energy Awareness Campaign	Buckinghamshire Hospitals NHS Trust	Acute	South Central
	Steam driven absorption chiller	East Kent Hospital University NHS Trust	Acute	South East Coast
	Solar panels for domestic hot water services to the WC	East Kent Hospital University NHS Trust	Acute	South East Coast
	Energy Conservation at Eastbourne DGH	East Sussex Hospitals NHS Trust	Acute	South East Coast
	Identification of Capital Sustainable Improvement	Hampshire Partnerships NHS Trust	Mental Health	South Central
	Energy Saving Measures	Hampshire Partnerships NHS Trust	Mental Health	South Central
	Catering Department Heating and Ventilation	Maidstone and Tunbridge Wells NHS Trust	Acute	South East coast
	Primary energy reduction	Maidstone and Tunbridge Wells NHS Trust	Acute	South East coast
	Heat Recovery and Water usage reduction	Maidstone and Tunbridge Wells NHS Trust	Acute	South East coast
	CIBSE Low Carbon Performance Award	Medway NHS Foundation Trust	Acute	South East Coast
	Lighting and Lighting Controls	Milton Keynes PCT	Primary Care	South Central
	NHS Carbon Management Programme	Oxfordshire and Buckinghamshire Mental Health NHS Foundation Trust	Mental Health	South Central
	Variable Speed Drives for Pumps and Fans	Royal Surrey County Hospitals NHS Trust	Acute	South East Coast
	Decentralisation of Steam Boiler Plant at Brighton General Hospital	South Downs Health NHS Trust	Other	South East Coast
	Working with the Carbon Trust	Surrey & Borders Partnership	Mental Health	South East Coast
	Building Energy Use	Winchester and Eastleigh Healthcare NHS Trust	Acute	South Central

Table 2.2 Food and Procurement

Key Area of Project	Project	Name of Trust	Type of Trust	Name of SHA
Procurement & Food	Procurement of Local Food	Hampshire Partnerships NHS Trust	Mental Health	South Central
	Sustainable Procurement	Hampshire Partnerships NHS Trust	Mental Health	South Central
	Grow Your Own Scheme	Hampshire Partnerships NHS Trust	Mental Health	South Central
	Sustainable Catering	Winchester & Eastleigh Healthcare NHS Trust	Acute	South Central
	Improving Sustainable Procurement	Winchester & Eastleigh Healthcare NHS Trust	Acute	South Central

Table 2.3 Travel and Transport

Key Area of Project	Project	Name of Trust	Type of Trust	Name of SHA
Travel & Transport	Sustainable Transport Plan	Dartford & Gravesham	Acute	South East Coast
	Travel Plan for Eureka Park	Eastern & Coastal Kent PCT	Primary Care	South East Coast
	Walking Bus	East Sussex Downs & Weald PCT	Primary Care	South East Coast
	Implementation of Health Transport Plan	East Sussex Hospitals NHS Trust	Acute	South East Coast
	Smarter Driving Initiative	Hampshire Partnerships NHS Trust	Mental Health	South Central
	Green Fleet Review	Hampshire Partnerships NHS Trust	Mental Health	South Central
	Review of Grey Fleet Travel	Hampshire Partnerships NHS Trust	Mental Health	South Central
	Greening the Lease Car Scheme	South East Coast Ambulance Service NHS Trust	Ambulance Service	South East Coast
	Greening the Front Line Vehicle Fleet	South East Coast Ambulance Service NHS Trust	Ambulance Service	South East Coast
	Green Travel Plan	Winchester & Eastleigh Healthcare NHS Trust	Acute	South Central
	Andover Shuttle Bus	Winchester & Eastleigh Healthcare NHS Trust	Acute	South Central
	Improving Fleet Management	Winchester & Eastleigh Healthcare NHS Trust	Acute	South Central

Table 2.4 Water

Key Area of Project	Project	Name of Trust	Type of Trust	Name of SHA
Water	Water Usage – Dual cistern flush valves	Milton Keynes PCT	Primary Care	South Central

Table 2.5 Waste Management

Key Area of Project	Project	Name of Trust	Type of Trust	Name of SHA
Waste Management	On-the-go Recycling	Frimley Park Hospital NHS Foundation Trust	Acute	South East Coast
	Increase Trust Recycling	Hampshire Partnerships NHS Trust	Mental Health	South Central
	Paper Policy	West Kent PCT	Primary Care	South East Coast
	Reduce/ Reuse/ Recycle	Winchester and Eastleigh Healthcare NHS Trust	Acute	South Central

Table 2.6 Designing of the Built Environment

Key Area of Project	Project	Name of Trust	Type of Trust	Name of SHA
Designing the Built Environment	New Ward and Endoscopy Unit	Milton Keynes Hospital NHS Foundation Trust	Acute	South Central
	Redevelopment of Queen Alexandra Hospital	Portsmouth Hospitals NHS Trust	Acute	South Central

Table 2.7 Organisational and Workforce Development

Key Area of Project	Project	Name of Trust	Type of Trust	Name of SHA
Organisational and Workforce Development	Formation of Environmental Review Group and Recruitment of Trust Green Carbon Champions	Hampshire Partnerships NHS Trust	Mental Health	South Central

Table 2.8 Governance

Key Area of Project	Project	Name of Trust	Type of Trust	Name of SHA
Governance	Environmental Impact Assessment of Trust Activities	Eastern and Coastal Kent PCT	Primary Care	South East Coast
	Draft Production of Trust's Sustainable Development Plan	Hampshire Partnerships NHS Trust	Mental Health	South Central
	Sustainable Development Management Plan	Hampshire PCT	Primary Care	South Central
	Working with the Carbon Trust	Surrey & Borders Partnership	Mental Health	South East Coast
	Sustainability Programme	West Sussex PCT	Primary Care	South East Coast

Appendix 3: Trusts and Their Number of Projects in Each Category lists the number of projects in each key area according to trust.

4.3 RESPONSIBLE PERSON

Thirty-two projects were the responsibility of Facilities and Estates personnel, five of the Environmental Department, two were the responsibility of Public Health, one of the Deputy Medical Director, one of the Procurement lead and four of members of the Development of Services department. These figures are summarised in Table 3: Department of person responsible for the project.

Table 3: Department of Person Responsible for the Project

Department of Responsible Person	Number of Projects
Estates and Facilities	32
Environment	5
Public Health	2
Medical	1
Procurement	1
Development of Services	4

4.4 INCENTIVES AND POSSIBLE DETERRENDS: LOOKING AT REASONS, TOOLS, PARTNERS, BARRIERS AND NEGATIVE OUTCOMES

The main reasons given for implementing projects in the 'energy and carbon management' area are to reduce energy consumption, energy costs and carbon emissions. 'Barriers' and 'Negative Outcomes' seems to have been used interchangeably. They have been mentioned only for a few projects. No 'theme' could be identified.

In the area of 'procurement and food' 'reasons for implementing the project' were given only in two cases. The questions about 'barriers' and 'negative outcomes' have not been answered for any of the projects.

'Carbon/ emissions reduction' was given as the main reason for projects in the area of 'travel and transport'. For other 'reasons' see Tables 4.1 to 4.8. The question on 'barriers' was answered for two-thirds of the projects with 37.5% mentioning the staffs' attitude as a barrier.

In the area of 'water', 'waste', 'design the built environment', 'organisational and workforce development' and 'governance' only a small number of projects have been entered which made it difficult to identify main reasons, barriers and negative outcomes.

'Tools' were used in 2 of the 46 projects: NEAT for energy/building aspects and the Sustainable Development Self-assessment Audit for the sustainability programme of a PCT.

Tables 4.1 to 4.8 present the reasons for the project, partners, barriers and negative outcomes for each project in each of the Key Areas. Where there is a '-', no answer was given to the question.

Table 4.1: Energy Projects: Reasons for Project, Partners, Barriers and Negative Outcomes according to Key Areas

Energy				
Project Title	Reason for Project	Partner in Project	Barriers faced	Negative Outcomes
Energy controls	To reduce carbon emissions, save money on utility bill	Yes?	-	-
Energy Awareness Campaign	To reduce energy usage	No	-	Takes up a lot more time than expected
Steam driven absorption chiller	Environmental initiative for existing plant replacement programme	Design services done in-house by Trust's Design & Construction Services together with Climate Equipment Ltd. Lead contractor: Greenwood Contractors Ltd.	Space restrictions posed limitations with regards design and capabilities	Space restrictions posed limitations. Once overcome, changeover of systems and the integration online of the new absorption chiller
Solar panel hot water services to WC facilities	Sustainable and environmentally friendly design and build project	Crispin & Borst	-	no
Energy Conservation at Eastbourne DGH	Reduce carbon emissions and site energy costs	DoH Energy and Sustainability fund Kier Group, P21 partner	Maintaining services whilst decommissioning old plant & installing and commissioning new plant	-

Table 4.1 continued

Energy				
Project Title	Reason for Project	Partner in Project	Barriers faced	Negative Outcomes
Identification of Capital Sustainable Improvement	Carbon reduction	-	-	-
Energy Saving Measures	-	-	-	-
Catering department heating and ventilation	A lot of extraction plant on continuously & some plant oversized and/or redundant	No	-	no
Primary energy reduction	Electricity consumption rising	No	-	No
Heat recovery and water usage reduction	Estimated 47% over consumption of water and currently no energy recovery	No	-	No
CIBSE Low Carbon Performance Awards Campaign	Reduce carbon footprint	-	-	-
Lighting and Lighting Controls	Refurbishment of existing lighting with more efficient luminaires	External contractor	-	Users coming to terms with the automatic light sensors
NHS Carbon Management Programme	Anticipation of carbon trading & need to develop CRS, rise in energy costs, opportunity for new build, scope to change working practices, opportunities to learn from experiences elsewhere	Carbon Trust	-	-
Variable speed drives to pumps and fans	Energy control	No	-	No
Decentralisation of steam boiler plant at Brighton General Hospital	To reduce the site's carbon footprint	P21 procurement, funded by DH Energy and Sustainability Fund	Trust was unable to provide additional funds to complete project during the course of the phase 1 works	-
Working with the Carbon Trust	-	Carbon Trust	-	-
Building energy Use	Reduction in electricity consumption	Yes?	-	-

Table 4.2: Procurement and Food: Reasons for Project, Partners, Barriers and Negative Outcomes according to Key Areas

Procurement and Food				
Project Title	Reason for Project	Partner in Project	Barriers faced	Negative Outcomes
Procurement of Local Food	To increase the trust's use of locally grown/ sourced/produced food	Food Matters	-	-
Sustainable Procurement	-	PASA, Pro-Cure, Supply Chain & other procurement/ supply agents	-	-
Grow your own scheme	To make Joan Brock devised Southfield project more sustainable	-	-	-
Sustainable Catering	-	NHS Pro-Cure Hospital Caterers Association	-	-
Improving Sustainable Procurement	-	Yes ?	-	-

Table 4.3: Travel and Transport: Reasons for Project, Partners, Barriers and Negative Outcomes according to Key Areas

Travel and Transport				
Project Title	Reason for Project	Partner in Project	Barriers faced	Negative Outcomes
Sustainable Transport Plan	Carbon reduction, car park capacity	Kent County Council	Main barrier is management capacity	-
Travel Plan for Eureka Park	To address parking and green travel options	MLM Transportation Consultants	Limited on-site parking. Offsite parking & shuttle bus Little exploration with cycling and walking.	The Travel Plan is pending consultation with the council
Walking Bus	To support school travel plan and sustainable travel work	No	Not all schools enough volunteers to staff walking bus Not all schools suitable walking bus routes	no
Implementation of Healthy Transport Plan	To make staff, patients and visitors consider more environmentally friendly travel options, which would reduce emissions and benefit the individual as well as the environment.	East Sussex County Council, bus operators, Eastbourne and Hastings Borough Councils	People's attitudes, resistance to change, alternatives not always feasible, e.g. bus services, geographical - one hospital at top of steep hill, partnership-dependence on others-buses, local planners, limited funding	
Smarter Driving Initiative	To teach staff who transport service users, use trust owned vehicles, community staff and high mileage drivers to drive more safely and fuel efficiently	Energy saving trust	-	-

Table 4.3 continued

Travel and Transport				
Project Title	Reason for Project	Partner in Project	Barriers faced	Negative Outcomes
Green Fleet Review	To reduce travel emissions, make financial savings & improve health & safety	Energy Saving Trust	-	-
Review of Grey Fleet Travel	To reduce the trust's exposure to risk linked to Grey Fleet Travel, but also consider policy including carbon emissions reduction	-	-	-
Greening the Lease Car Scheme	Reduce Carbon Emissions	No	Perception by staff that their individual choice was being restricted	no
Greening the Front Line Vehicle Fleet	Reduce the emissions profile of the front line fleet	Vehicle manufacturers and converters	none	no
Green Travel Plan	To reduce impact trust has on local environment	Trust board executive managem. team, Staff negotiating committee, Trust transport group, Bicycle user group	Change had not been popular, staff might have left and goodwill lost. Vast majority have adapted and manage change without difficulty.	No
Andover Shuttle Bus	To remove inequity in accessing healthcare	Test Valley Borough Council Hants County Council, AMK Chauffeur Drive Ltd., Southampton and Winchester Health Supplies, Test Valley Passenger Forum	Identifying funding sources	No
Improving Fleet Management	Fleet due for replacem., Savings opportunities in terms or operating costs and emissions	Energy Savings Trust NHS Pro-cure	Costs of alternative fleet vehicle may be prohibitive, NHS terms and conditions for business mileage may need to be revised at national level	-

Table 4.4: Water: Reasons for Project, Partners, Barriers and Negative Outcomes according to Key Areas

Water				
Project Title	Reason for Project	Partner in Project	Barriers faced	Negative Outcomes
Water Usage	To save water consumption	External Contractor	-	no

Table 4.5: Waste: Reasons for Project, Partners, Barriers and Negative Outcomes according to Key Areas

Waste				
Project Title	Reason for Project	Partner in Project	Barriers faced	Negative Outcomes
On the go recycling	Approached by REMADE	RECOUP REMADE Surrey County Council Coca-cola Enterprises Ltd.	Fire safety regulations on bin specs, infection control, space for multiple bins, providing 25% funding, communicating change to staff, raising awareness	Some reluctance from a few members of staff (minimum) to segregate
Increase Trust's Recycling	To increase the trust's recycling	-	-	-
Paper Policy	Part of carbon reduction – simple to do and effects every one	No	Winning hearts and minds, getting senior figures on board – too busy to think	no
Reduce/Reuse/Recycle	-	Yes ?	-	-

Table 4.6: Designing the Built Environment: Reasons for Project, Partners, Barriers and Negative Outcomes according to Key Areas

Designing the Built Environment				
Project Title	Reason for Project	Partner in Project	Barriers faced	Negative Outcomes
New Ward and Endoscopy Unit	Modernisation of Endoscopy and additional bed capacity	Integrated Health Projects (P21 PSCP)	-	no
Redevelopment of Queen Alexandra Hospital		The Hospital Company (Consortium of Carillion plc & Royal Bank of Scotland)	-	-

Table 4.7: Organisational and Workforce Development: Reasons for Project, Partners, Barriers and Negative Outcomes according to Key Areas

Organisational and Workforce Development				
Project Title	Reason for Project	Partner in Project	Barriers faced	Negative Outcomes
Formation of Environmental Review Group and Recruitment of Trust Green Carbon Champions	To drive the trust's sustainable agenda forwards	-	-	-

Table 4.8: Governance: Reasons for Project, Partners, Barriers and Negative Outcomes according to Key Areas

Governance				
Project Title	Reason for Project	Partner in Project	Barriers faced	Negative Outcomes
Environmental Impact Assessment of Trust Activities	To demonstrate commitment to the NHS sustainability agenda	Energy and waste team at Kent and Medway shared services	Getting needed information from right people initially, word 'sustainability' sounds as if you are giving people work on top of their day jobs, huge awareness raising programme is required in all areas of business.	-
Draft Production of Trust's Sustainable Development Plan	To help trust operate as a sustainable low carbon organisation	-	-	-
Sustainable Development Management Plan	Growing awareness within PCT of importance of sustainability and reduction of carbon use Release of SDU strategy	Olive consultancy	Lack of resources	no
Sustainability Programme	A growing awareness within the organisation on environmental issues	No	Culture change, rural so public transport or non car transport a challenge	Difficulty engaging all staff with recycling process

4.5 IMPORTANT INFORMATION: IMPLEMENTATION COSTS, SAVINGS, CARBON SAVINGS AND OTHER POSITIVE OUTCOMES

It is difficult to categorize positive outcomes as the projects were very different. Nonetheless, good publicity, a positive impact on staff and the working environment are a general theme found in a majority of the projects.

Implementation costs, savings and carbon savings are very varied reflecting the variety in projects. It is also important to note that most figures are just estimates not actual costs.

Tables 5.1 to 5.6 describe the 'positive outcomes', 'savings', 'carbon savings' and 'implementation costs' in more detail within each of the key topic areas.

Table 5.1: Energy and Carbon Management: Positive Outcomes, Savings, Carbon Savings and Implementation Costs

Energy and Carbon Management				
Projects	Positive Outcomes	Savings (£)	Carbon Savings (CO ₂)	Implementation Costs (£)
Energy Awareness	Making the staff feel empowered to do something about their environment	£25,000 for each 1% reduced	200t for each 1% reduced	
Steam driven absorption chiller	Ability to cope with laundry service expansion and increased steam output	Estimated £000's pa		140k
Solar panel: hot water services to WC facilities	Life cost payback anticipated within 10-12 years			£8-10
Energy conservation at Eastbourne DGH	Replacement of plant reaching the end of its useful life	£454,529 est. (excl. capital charges)	3100t est.	
Catering department heating & ventilation	Working environment will improve	£7,200 est.	6t	£4,000 est.
Primary energy reduction		£41,780 est.		£50,00 est.
Heat recovery & water usage reduction	Will also reduce effluent	£75,000est.		£70,000 est.
CIBSE Low Carbon Performance Awards Campaign		£2,575 pa 200 low energy lamps in nurses' accommodation		
Lighting and lighting controls	Properties are more welcoming especially in winter	Still being evaluated		£199,000
NHS Carbon Management Programme	Staff engagement, improved working environments, good publicity	Not yet known	Not yet known	Not yet known
Variable Speed Drives	Reduced running temperatures	£20.2k	244	£120k
Decentralisation of Steam Boiler Plant at Brighton General Hospital	Happier staff, good publicity and staff awareness	£129k est.	1084t est.	£1.3m est.
Building Energy Use	-	-	2,043 t	-

Table 5.2: Transport and Travel: Positive Outcomes, Savings, Carbon Savings and Implementation Costs

Transport and Travel				
Projects	Positive Outcomes	Savings (£)	Carbon Savings (CO ₂)	Implementation Costs (£)
Sustainable Transport Plan	Less people travelling to work by car		Not known	£10,000
Travel Plan for Eureka Park	Less travelling to work by car			
Walking Bus	Fewer children and staff travelling to school in single occupancy cars.	Not known	Not known, but trust's Environment Group is working on CO ₂ strategy	Negligible
Implementation of healthy transport	Reduction in cars (public and staff) accessing the site, increases in use of cycles, walking and buses, healthier lifestyle		Not known	£60,000
Smarter Driving Initiative	Reduction in fuel consumption, less wear and tear and fewer accidents	-	-	-
Greening the Front Line Vehicle Fleet	Good pr, feel good factor, real measurable contribution to CC	nil	Min. 15 metric tonnes	nil
Greening the Lease Car Scheme	Good PR. Staff feel good factor, making positive contribution	nil	Min. 65 metric tonnes	nil
Green Travel Plan	Reduction in onsite staff parking, improved access for patients	-	178t est.	£32,000 pa est.
Andover Shuttle Bus	Community engagement, reduction in patient miles, good publicity	-	24t est.	£58,000 actual

Table 5.3: Water: Positive Outcomes, Savings, Carbon Savings and Implementation Costs

Water				
Projects	Positive Outcomes	Savings (£)	Carbon Savings (CO ₂)	Implementation Costs (£)
Water usage	-	Still being evaluated	-	-

Table 5.4: Waste: Positive Outcomes, Savings, Carbon Savings and Implementation Costs

Waste				
Projects	Positive Outcomes	Savings (£)	Carbon Savings (CO ₂)	Implementation Costs (£)
Paper Policy	Less stress, more time feel good	£10,000 est.	10t est.	zero
On the go recycling	Reduction in clinical waste, staff awareness of recycling, cost savings	Unsure yet	Unsure yet	£9,500 actual

Table 5.5: Designing the Built Environment: Positive Outcomes, Savings, Carbon Savings and Implementation Costs

Designing the Built Environment				
Projects	Positive Outcomes	Savings (£)	Carbon Savings (CO ₂)	Implementation Costs (£)
New Ward and Endoscopy Unit	-	Being assessed	Being assessed	£5,272,608 est.

Table 5.6: Governance: Positive Outcomes, Savings, Carbon Savings and Implementation Costs

Governance				
Projects	Positive Outcomes	Savings (£)	Carbon Savings (CO ₂)	Implementation Costs (£)
Sustainability Programme	More staff lift sharing, good publicity, more staff engagement, less parking issues, more staff exercise	Not yet known, hoping to be £2k+	Not yet known	£10k est.
Environmental Impact Assessment of Trust Activities	Establish a continual environmental improvement programme			
Sustainable Development Management Plan	Staff engagement, good publicity, highlighting the sustainability issues within the trust	-	No direct savings, will come via action plans	£4,700 actual

5. DISCUSSION

The first 6 months of the mapping project has produced some very positive results which indicate the range of activity taking place across the region. It is an excellent beginning to an ongoing process and we expect that the website will be better populated and more representative as it becomes widely known and as sustainability becomes increasingly recognised as a critically important aspect of healthcare.

The mapping information provided suggests that the majority of sustainable activity is led by estates and facilities personnel, and have been carried out either in the area of 'energy and carbon management' or in the area of 'travel and transport'. Together they comprise 63% of entered projects. As energy use and travel together are responsible for only 40% of the NHS carbon emissions it would be important for more projects to tackle the area of procurement, which is responsible for 60% of NHS carbon emissions.

So far only two Trusts have entered projects in sustainable procurement on the mapping website with a total of five projects, two of these focusing on the purchase of local food. It is more difficult for Trusts to reduce the carbon footprint of procurement as it is not under the direct control of the NHS Trust staff on site but requires tackling the embedded carbon from the production and delivery of goods and services. This requires the cooperation of producers and suppliers, but is not impossible and many of these suppliers are also concerned about sustainability and are very willing to engage in efforts to change. Apart from its complexity, procurement has also been an area in which, so far, less help has been offered to the Trusts.

A further focus for future work is the area of implementation costs, savings and carbon savings. Hardly any actual costs and savings figures were obtained from Trusts in their reporting of projects. The reason for this may be that the person entering the project on the website did not know any of the financial data; or it might have taken too much time to retrieve it. However, Trusts will need to be able to make a business case for sustainable projects in the future and it will therefore be important both internally and in networking to have more data on the costs and savings of different interventions to help Trusts in taking decisions.

Only a relatively small percentage of Trusts are registered with the Good Corporate Citizenship Assessment Model and before this year sign up to the Carbon Trust's NHS Carbon Management Programme, was low. We hope that the proactive contact with Trusts may continue to encourage others to sign up to this very well structured programme and to bring other external expertise into helping them with this important work.

The mapping work to date shows that there is an interest in sustainability among the Trusts in the region, but that a continued proactive approach is required to achieve more comprehensive and detailed coverage. Providing tools alone will not be sufficient to make sustainability part of how each Trust does all their business.

APPENDIX 1. DATA COLLECTION QUESTIONNAIRE

MAPPING GREENER HEALTHCARE

- SOUTH EAST

Best Practice in Sustainable Development, Good Corporate Citizenship and Greener Healthcare

Please print out the questionnaire, fill it in and send it to:

For Primary Care Trusts:

Jackie Spiby
Deputy Director Public Health NHS London
Consultant in Public Health South East
Regional Public Health Group
Southside
105 Victoria Street
London
SW1E 6QT

For All other Trusts:

Ingeborg Steinbach
The Campaign for Greener Healthcare
Summertown Pavilion
Middle Way
Oxford
OX2 7LG

Projects

We would like to find out more about your projects in sustainable development. Please provide descriptive information for planned, ongoing and completed projects intended to reduce costs, reduce carbon footprint, or increase efficiency, for example in the areas of Transport, Facilities Management, Procurement, New Buildings, Community Engagement and Employment & Skills. We are also looking at projects which were intended to improve health but whose co-benefits contribute to sustainable development.

Please complete one form for each project

1) Project Name:

Organisation: _____

2) Description:

3) Responsible person

3a) Name:

3b) Position:

3c) E-mail:

3d) Telephone:

4) Location/ Site of project:

5) Status of project: planned, ongoing, completed (*Please circle*)

N/A

Planned

Ongoing

Completed

6) Start date (or planned start date):

7) End date (or anticipated end date):

8) What were the reasons for starting the project:

9) Actual or estimated implementation costs (£):

9b) Is this figure actual or estimated (*please circle*)

actual

estimated

10) Actual or estimated savings per year (£):

10b) Is this figure actual or estimated (*please circle*)

actual

estimated

11) Actual or estimated savings per year in carbon or CO₂ (kg), if known:

11b) Is this figure actual or estimated (*please circle*)

actual

estimated

12) Other positive project outcomes assessed (e.g. reduction in clinical waste, less people travelling to work by car, reduction in obesity, good publicity, happier staff etc):

13) Were there any negative project outcomes (*Please circle*)

N/A

Yes

No

13a) If yes, please describe:

14) Did you use a tool to help your organisation implement the project? (*Please circle*)

N/A

Yes

No

14a) If yes, what tool?

15) Did you have an internal and/ or external partner in implementing the project?

N/A

Yes

No

15a) If yes, who?

16) Did you publish a report of the project internally or externally, e.g. on the intranet, in the annual report, a press release or a scientific paper?

N/A

Yes

No

16a) If yes, please provide reference.

17) What barriers did you face in implementing the project?

18) Comments (please include whom to contact for more information if different from above):

19) Please detail any follow on plan for this project.

Thank you very much for your time. If you have any further questions or comments, please don't hesitate to contact me.

Ingeborg Steinbach
Campaign for Greener Healthcare

APPENDIX 2. IMPLEMENTATION AND TIMELINE

To get all the trusts on board an initial e-mail went out to the trusts' chief executives in the South East on behalf of the two Regional Directors of Public Health to inform them about the mapping. It was followed up with an e-mail by the Campaign for Greener Healthcare providing more detailed information on the technicalities of the project.

As a first step the chief executives (CEOs) were asked to submit the names of their good corporate citizens/ sustainability leads. This would be the person the Campaign for Greener Healthcare liaises with for the mapping. The CEOs were also asked to circulate the invitation to the mapping to relevant people in their trusts who have done projects in the area of sustainability.

As the initial response rate was very low phone calls to the chief executive offices were made to gather relevant names.

Once the names of the good corporate citizen leads were received they were entered on the 'Mapping Greener Healthcare' website, which generated an automatic invitation to the website.

As the response was still slow, another e-mail has been sent out directly to the good corporate citizen lead and, if other relevant names available, to other staff who might be responsible for 'greening' projects. It was followed up later by a follow-up on the phone and another e-mail setting a deadline for the first phase of the project.

Timeline

Timeline of Communication (?)	Date	Response rate
e-mail from Yvonne Doyle to all South East Coast CEOs informing about the mapping.	14 th November 2008	No response expected.
e-mail from John Newton to all South Central CEOs informing about the mapping.	14 th November 2009	No response expected.
e-mail from Campaign for Greener Healthcare to CEOs of South East Coast and South Central asking for a lead for project and for circulation of e-mail to all relevant people in trust who have/are planning to implement projects in greening/good corporate citizenship/sustainable development to ask them to enter projects.	17 th and 18 th November 2009	Less than half the trusts sent in name of a (sustainability) lead for the project, 4 projects have been entered in Nov and Dec.
Telephone call to CEO offices to register a (sustainability) lead for the mapping project.	January 2009	At end of Jan sustainability leads for 86% of trusts registered, 1 project entered at the end of Jan.
E-mails to sustainability leads to encourage them to enter projects or to ask relevant people in trust to enter projects.	4 th – 6 th February 2009	11 projects were entered in February.
Phone call to sustainability leads.	Beginning of March 2009	Mostly not able to speak to sustainability lead, but to PA. The majority of projects were entered in March (30).
e-mails from SHAs setting deadline for mapping	9 th March	The majority of projects were entered in March (30).

APPENDIX 3. PROJECTS BY TRUST

Table 3: Trust and Their Number of Projects in each Category

Trust Type	Name of Trust	No of Projects										
		Total	Energy & Carbon Management	Procurement & Food	Transport & Travel	Water	Waste	Design the Built Environment	Organisational & Workforce Development	Partnerships & Networks	Finance	Governance
Acute	Brighton and Sussex University Hospitals NHS Trust	1	1									
	Buckinghamshire Hospitals NHS Trust	1	1									
	Dartford & Gravesham	1			1							
	East Kent Hospital University NHS Trust	2	2									
	East Sussex Hospitals NHS Trust	2	1		1							
	Frimley Park Hospital NHS Foundation Trust	1					1					
	Maidstone and Tunbridge Wells NHS Trust	3	3									
	Medway NHS Foundation Trust	1	1									
	Milton Keynes Hospital NHS Foundation Trust	1						1				
	Portsmouth Hospitals NHS Trust	1						1				
	Royal Surrey County Hospitals NHS Trust	1	1									
	Winchester and Eastleigh Healthcare NHS Trust	7	1	2	3		1					
	Primary Care	Eastern and Coastal Kent PCT	2			1						
East Sussex Downs and Weald PCT		1			1							
Hampshire PCT		1										1
Milton Keynes PCT		2	1			1						

