

SUSTAINABLE DEVELOPMENT AND CARBON REDUCTION STRATEGY



2011 – 2013

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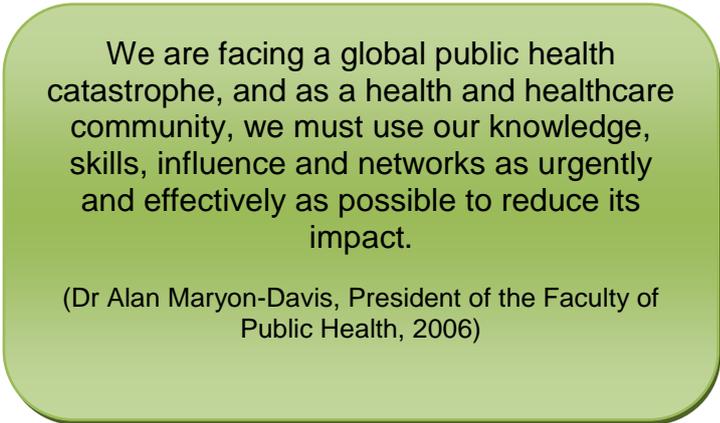
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Climate change is the biggest public health challenge of the 21st century.

(Margaret Chan, Director General, World Health Organisation, 2007)

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We are facing a global public health catastrophe, and as a health and healthcare community, we must use our knowledge, skills, influence and networks as urgently and effectively as possible to reduce its impact.

(Dr Alan Maryon-Davis, President of the Faculty of Public Health, 2006)

Introduction

Urgent action is required to limit the amount of carbon used by the National Health Service (NHS), and reduce dependence on fossil fuels.

In 2009 the NHS Sustainable Development Unit issued the Carbon Reduction Strategy for England, entitled '*Saving Carbon, Improving Health*.'¹ The 2010 Strategy update states that the current contribution of the NHS in England to carbon emissions is estimated at 21 million tonnes CO₂² per year. The Strategy sets out the aim to reduce the NHS carbon footprint by 10% by 2015 (against a 2007 baseline) and is prescriptive with what actions NHS trusts need to take action on in order to achieve this.

Saving Carbon, Improving Health, proposes that every NHS trust should:

 Sign up to the NHS Good Corporate Citizenship Assessment Model

The UK Sustainable Development Commission's NHS Good Corporate Citizenship Assessment Model has been developed to encourage NHS organisations such as Primary Care Trusts to adopt sustainable development and tackle health inequalities through their daily activities involving travel, procurement, facilities management, workforce, community engagement and buildings.

NHS Somerset will use this tool annually in order to benchmark its performance using the NHS Constitution as a reference framework.

 Produce a Board-approved Sustainable Development management plan

NHS Somerset has developed this Sustainable Development and Carbon Reduction Strategy and an associated Action Plan which sets out clear milestones actions to measure, monitor and reduce direct carbon emissions. The action plan also outlines whether the actions contribute to the NHS Good Corporate Citizenship Assessment Model scoring and the responsible lead for each action.

Climate change is one of the greatest threats to our health and wellbeing. It is already affecting health across the globe.

The NHS, as one of the largest employers in the world, has an important role to play in reducing carbon emissions, a key cause of climate change.

(NHS Carbon Reduction Strategy, 2009)

¹National Health Service Sustainable Development Unit. *Saving carbon: improving health* Cambridge: NHS Sustainable Development Unit. Available on line at: <http://www.sdu.nhs.uk/publications-resources/3/NHS-Carbon-Reduction-Strategy/>

² CO₂ equivalent (CO₂e)

Monitor, review and report on carbon

All Trusts should start reporting on sustainable development and carbon reduction.

NHS Somerset fully measure and report, on a quarterly and annual basis, the carbon emissions associated with its building energy consumption, water consumption, business travel and waste. A thorough knowledge of our annual carbon footprint is beginning to take shape which allows us to assess our contribution to government, and our own internal, carbon reduction targets. A transparent monitoring and reporting system will also stand us in good stead for conforming to legislation such as the Carbon Reduction Commitment Energy Efficiency Scheme (CRCEES).

Actively raise carbon awareness at every level of the organisation

A culture of carbon awareness should become an integral part of working for the NHS, particularly as the NHS is the largest single organisation in the UK and one of the largest in the world. It has huge potential to do good, or harm, to the health of the nation and to the cause of sustainable development.

The responsibilities and actions described within this Strategy and accompanying Action Plan are delivered through strong leadership within NHS Somerset. We understand that meeting our objectives and targets requires the commitment of staff resource and finance. As such, carbon reduction and sustainability awareness are a routine part of our operations and our corporate and quality agenda.

NHS Somerset's Sustainable Development and Carbon Reduction Strategy outlines the Trust's key objectives, actions and targets for promoting sustainable development, health and wellbeing. These will enable the achievement of the Climate Change Act targets of a 10% reduction in carbon emissions by 2013 (against a 2007/08 baseline) and an 80% reduction in carbon emissions by 2050 (against a 1990 baseline), set by Government.

Why should NHS Somerset embrace sustainability?

To take action on climate change and become an exemplar Trust

To help the wider NHS achieve the Climate Change Act targets set by Government

Conform to legislation and best practice guidance

Improve the health of the population, patients and employees by recognising that unsuitable behaviour harms health

Make cost savings, leading to a more efficient Trust

Sustainability and Public Health

The Facts

- What is good for the climate is good for health. Policies needed to mitigate climate change will exert health effects by acting on many of the determinants of health and health inequality.
- Reducing greenhouse gas emissions brings about substantial reductions in cardiovascular disease, cancer, obesity, diabetes, stress, road deaths and injuries, and respiratory illness. The health benefits arise because climate change policies impact on two of the most important determinants of health: human nutrition and human movement.
- The fair distribution of health, well-being and sustainability are important social goals. Tackling social inequalities in health and tackling climate change must go together.
- Key actions for NHS Somerset's Public Health Directorate during 2011/12 will include the further integration of the principals of sustainable development and public health.



Strategic Objectives

- To use evidence from best practice case studies where sustainable development principles have been used to increase physical activity and improve mental health and wellbeing. This will include developing and implementing programmes to encourage and facilitate active travel and access to blue (water environment) and green (natural environment) gyms. This will fundamentally contribute to our Healthy Weight, Healthy Workplace and Mental Health and Wellbeing Strategies.
- To embed health within planning processes and decision-making by engaging with the Local Planning Authority to ensure the design of new development and regeneration facilitates health and wellbeing. This will include the promotion of



home zones and 20mph zones, active travel such as walking and cycling and access to green space.

- To continue to be an active member of Local Strategic Partnerships and sustainability/environmental groups and networks across the county.
- To reduce the reliance on residential carbon-based fuels (gas, electricity and oil) through increased uptake of energy efficiency measures, renewable energy technologies and community energy projects. This will be achieved by establishing a signposting/referral mechanism for those most in need of advice and information, particularly to Warm Front and other grant programmes.
- To improve access to locally grown fresh and affordable food through partnership working with Somerset Community Food.



An NHS Somerset Health Walk taking place in Sedgemoor

Energy, Building and Carbon Reduction

The Facts

- Energy consumption within NHS buildings contributes to approximately 22% of the NHS Carbon Footprint.¹
- NHS Somerset fully measures and reports, on a quarterly and annual basis, the carbon emissions associated with its building energy consumption, water consumption, business travel and waste. A thorough knowledge of the Trust's annual carbon footprint is beginning to take shape.
- NHS Somerset has undertaken a series of new Community Hospital builds for which BREEAM (Building Research Establishment's Environmental Assessment Method) is used to assess their environmental performance. Credits are awarded in ten categories according to performance. These credits are then added together to produce a single overall score on the scale of Pass, Good, Very Good, Excellent and Outstanding. The new Minehead and South Petherton Community Hospitals undertook a self assessment using BREEAM and both hospitals were classified as 'Very Good'. They have also both now received their official Energy Performance Certificates with both being rated 'B'.
- The new South Petherton Community Hospital, which opened in June 2011, incorporates a biomass boiler to meet the heating and hot water demand. This has been funded by an £80,000 grant from the Department of Energy and Climate Change (DECC).
- NHS Somerset is initiating a series of changes to 'green' its Information Technology in order to be in receipt of carbon and cost savings.
- NHS Somerset routinely utilises the NHS Sustainable Development Unit's Marginal Abatement Cost (MAC) Curve in order to identify initiatives which are most cost efficient and where the largest CO₂ savings can be made.



South Petherton Community Hospital

Strategic Objectives

- To reduce energy consumption across all NHS Somerset sites.
- To increase the proportion of energy sourced from renewable technologies.
- To meet the required BREEAM 'Excellent' standard for new buildings.
- To ensure that as a landlord of a healthcare estate, the maintenance programme will include investment in building services in order to improve energy efficiency at those sites most in need. By reducing energy consumption and the reliance upon carbon based fuels (electricity, gas and oil), value will be added to the estate.
- To engage with tenants in order to encourage an understanding of the source of their emissions from energy consumption and ways in which they can be reduced in order to be in receipt of multiple benefits.

NHS Somerset Targets

- To achieve a 10% reduction in carbon footprint by year end 2013 against a 2011/12 baseline.
- To achieve a 10% reduction in energy consumed by year end 2013 against a 2011/12 baseline.
- To achieve an 'Excellent' level on the NHS Good Corporate Citizen model in 2011/12.

National Targets

- Climate Change Act target of an 80% reduction in carbon emissions by 2050 (against a 1990 baseline)
- NHS Sustainable Development Unit target of a 25% reduction in energy use by 2015 (against a 2008 baseline).

Low Carbon Travel, Transport and Access

The Facts

- Travel contributes to approximately 18% of the NHS Carbon Footprint.¹
- Increased active travel, such as walking and cycling, can support a wide range of local and national objectives, including:
 - Improving health outcomes
 - Reducing carbon emissions, therefore mitigating climate change
 - Improving air quality and the local environment
 - Improving accessibility and reducing congestion
 - Improving quality of life and better neighbourhoods
- Inactive lifestyles are contributing to an obesity epidemic, a public health crisis that is already costing the economy and the NHS billions of pounds per year.
- Physical activity is critical to good health. It reduces the risk of Coronary Heart Disease, Stroke and Type 2 Diabetes by up to 50% and risk of premature death by 20-30%. It also improves well-being and mental health, particularly beneficial for maintaining independence and good health of older people.³
- Active travel could be included in many people's daily routines as a means of travel from place to place. Active travel, therefore, might be easier in principle to adopt and maintain than other forms of physical activity. Although walking could be a more accessible form of active travel for some people, cycling may be more likely to raise the heart rate sufficiently to improve cardio-respiratory fitness.
- Health professionals are increasingly being urged to encourage their patients to take up cycling.



³ Be Active, Be Healthy - A Plan for Getting the Nation Moving, Department of Health 2009

Strategic Objectives

- To reduce emissions from transportation through facilitating a modal shift away from single occupancy cars, amongst NHS Somerset employees and the public accessing services.
- To establish effective travel plans across the NHS Somerset estate, through working in partnership with Somerset County Council's 'Moving Somerset Forward' team.
- To reduce business mileage expenditure and associated carbon emissions through ensuring that remote meeting facilities (tele and video conferencing) are installed throughout all NHS Somerset new builds. In addition, ensure that training on how to use the equipment is provided for all administrators to ensure there are no barriers to usage throughout the Trust.
- To become involved in transport planning in Somerset to ensure that major planning applications and planning policy documents/ guidance (for example, the Future Transport Plan) support NHS Somerset's sustainable and active travel agenda.

NHS Somerset Targets

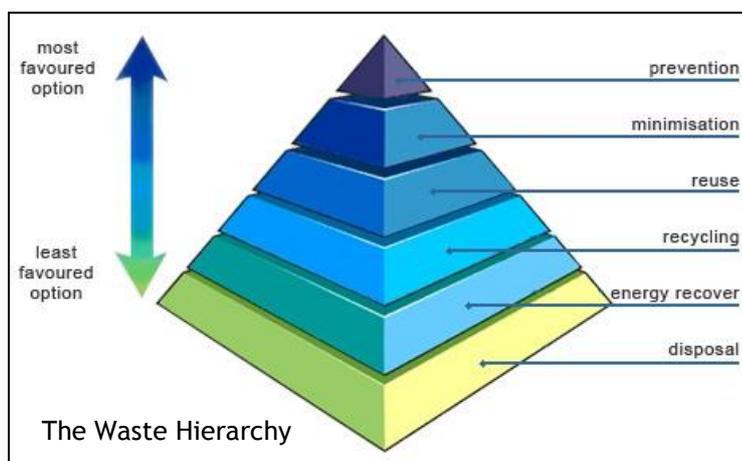
- To achieve a reduction in business travel reimbursement expenditure by 5% by year end 2013 against a 2011/12 baseline.
- To achieve an increase in passenger mileage claims by 5% by year end 2013 against a from 2011/12 baseline.
- To achieve an 'Excellent' level on the NHS Good Corporate Citizen model in 2011/12.



Water and Waste

The Facts

- Water should be considered and managed as a precious resource. In 2007 – 2008, the NHS in England consumed an estimated 38.8 million cubic metres of water and generated approximately 26.3 million cubic meters of sewage at a cost of approximately £145 million.⁴
- Waste in the NHS continues to increase and in 2007 – 2008 waste cost the NHS £71.2 million.
- The management, distribution and disposal of water contributes to the carbon footprint of the NHS.
- As waste created by the NHS continues to rise, both by tonnage and by disposal cost, investment in sound waste management will save money and reduce carbon emissions.
- In February 2011, a new waste management contractor was appointed for NHS Somerset. The new contract has been developed in order to increase the amount of waste diverted away from landfill and towards recycling. The new contract has introduced a new waste stream called Mixed Dry Recycling (MDR) (cardboard, paper, newspapers, plastic films and bottles, steel and aluminium cans). It is envisaged that the new contract will increase the amount of materials recycled from around 30% to 70%.
- The new contract brings multiple benefits to the Trust, including:
 - Legislative compliance
 - Reduction in the Trust's Carbon footprint
 - Improving the Trust's corporate responsibility credentials
 - Contract cost savings (~ £16,000 savings reoccurring annually)
 - Cost savings from a reduction in landfill tax



⁴ Health Technical Memorandum 07-04: Water management and water efficiency, 2008; (HTM) Department of Health: London: HMSO

Strategic Objectives

- To reduce water and waste consumption across all NHS Somerset sites.
- To raise awareness of the 'Waste Hierarchy' amongst all NHS Somerset employees.
- To work with Somerset County Council's Waste Policy Manager to consult upon waste planning issues and options in order to inform the preparation County Strategies.
- To consider innovative waste management approaches such as energy-from-waste.
- To consider innovative water management approaches such rain water harvesting and grey water recycling.
- To ensure as a landlord of a healthcare estate, the maintenance programme will include investment in water efficiency improvements at those sites most in need. By reducing water consumption, value will be added to the estate.
- To engage with tenants in order to encourage an understanding of the source of their emissions from water and waste and ways in which they can be reduced in order to be in receipt of multiple benefits.



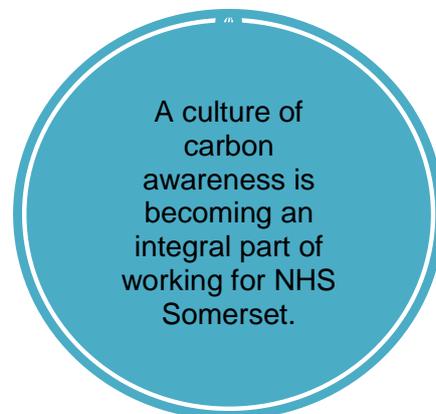
NHS Somerset Targets

- To achieve a 5% reduction in water consumed by NHS Somerset by year end 2013 against a 2011/12 baseline.
- To achieve a 50% increase in waste diverted from landfill by NHS Somerset by year end 2013 against a 2010/11 baseline (pre-new waste management contract).
- To achieve an 'Excellent' level on the NHS Good Corporate Citizen model in 2011/12.

Organisational and Workforce Development

The Facts

- A culture of carbon awareness is becoming an integral part of working for NHS Somerset, particularly as a significant amount of the energy used, travel choices and goods purchased throughout the NHS is in the direct control of individual members of staff.
- The responsibilities and actions described throughout this Strategy are becoming understood at all levels and firmly embedded in the NHS Somerset corporate culture.
- With the recent emergence of legislation such as the Carbon Reduction Commitment Energy Efficiency Scheme (CRCEES), 'carbon literacy', a transparent monitoring and reporting system is becoming increasingly important for all organisations.
- All new employees at NHS Somerset receive a sustainable development and carbon reduction presentation together with question and answer session at their mandatory 'induction day'.
- The NHS Somerset Sustainable Development Working Group meets every six to eight weeks and comprises of the Sustainable Development Manager together with the Trust's Directorate leads. The Group is chaired by the Director of Finance.



Strategic Objectives

- To continue to take a proactive and innovative approach in improving the health and wellbeing of the workforce.
- To ensure that all projects are evaluated in terms of their impact upon sustainable development and carbon reduction, using the Trust's 'Sustainable Development Impact Assessment'.
- To seek opportunities to develop joint initiatives with key partners to improve local health outcomes, economic development, social cohesion and the environment.
- To contribute to local and regional networks to support sustainable development.
- To develop the staff survey to introduce sustainability questions in order to monitor performance by levels of awareness and understanding of sustainable development and carbon reduction.

- To ensure that sustainable development and carbon reduction performance continues to be reviewed quarterly by the Board.

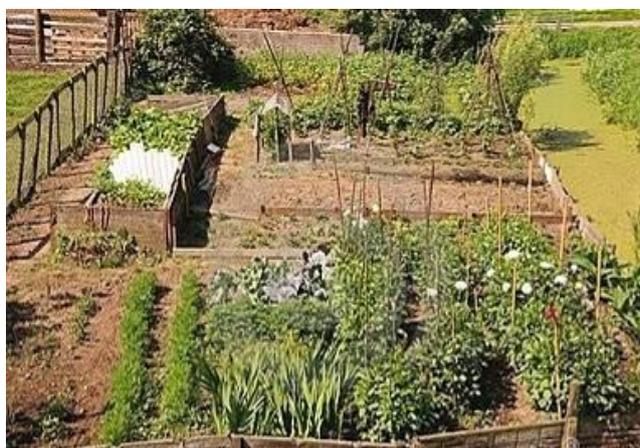
NHS Somerset Targets

- Every new NHS Somerset employee to have sustainability integrated into their work and forward job plans.
- All new employees to continue to have sustainable development and carbon reduction written into their contract of employment.
- All employee annual appraisals to raise the question of individual contribution to the Trust's sustainable development and carbon reduction objectives.
- To achieve an 'Excellent' level on the NHS Good Corporate Citizen model in 2011/12.

Procurement and Food

The Facts

🌱 The NHS in England spends £20 billion every year on goods and services. Emissions from this comprise the largest contribution to the NHS footprint totalling over 11 million tonnes CO₂ per annum: nearly 60% of the total NHS carbon footprint¹.



🌱 Through its commissioning and procurement, NHS Somerset can have a positive influence on environmental, economic and social outcomes in the local area.

🌱 To reduce carbon, NHS Somerset needs to consider its approach to commissioning, sourcing and buying. This will include considering if it needs to be purchased in the first place, the level of usage of each product, appropriate stock levels and reviewing whether an item can be recycled or reused. When considering purchasing an item, understanding the whole lifecycle costs and the potential environmental impact will also be necessary.

Strategic Objectives

🌱 To align to the national best practise guidance ‘Sustainable Procuring for Carbon Reduction’ (P4CR) Flexible Framework, created by the NHS Sustainable Development Unit.

🌱 To ensure that all commissions are evaluated against sustainability principles and the potential to positively influence economic, social and environmental outcomes (‘Sustainable Development Impact Assessment’).

🌱 Where possible, ensure the use of local suppliers.

🌱 To ensure that contractors, providers and suppliers understand NHS Somerset’s commitment and demonstrate their commitment through submission of sustainability/environmental policy and action plan.

🌱 To increase the sustainability credentials of products that are procured using whole life costing methodology where appropriate.

NHS Somerset Targets

- 100% of those staff involved in procurement to be exposed to the NHS Somerset training DVD during 2011/12.
- To complete all Level 1 and 2 actions of the Flexible Framework by year end 2011/12.
- To ensure the substitution of at least one existing supplier with that of a more local supplier by year end 2011/12.