

SUSTAINABILITY AND CARBON MANAGEMENT

This National carbon reduction action plan has been developed in response to the need to take action on climate change and in consultation with the NHS and other organisations. Widespread support from NHS organisations and staff gives the NHS a mandate to implement this strategy across every aspect of the organisation in England. The NHS has a carbon footprint of 18 million tonnes CO₂ per year. This is composed of buildings (24%) travel (17%) and procurement (59%). Despite an increase in efficiency, the NHS has increased its carbon footprint by 40% since 1990. This means that meeting the Climate Change Act targets of 34% reduction by 2020 and 80% reduction by 2050 will be a huge challenge. This strategy establishes that the NHS should have a target of reducing its 2007 carbon footprint by 10% by 2015. This will require the current level of growth of emissions to not only be curbed, but the trend to be reversed and absolute emissions reduced. Interim NHS targets will be needed to meet the government targets.

NO	KEY ACTIONS	RESPONSIBILITY	PROGRESS	FURTHER ACTION	WHEN	STATUS (RAG)
ENERGY AND CARBON MANAGEMENT- Every organisation should review its energy and carbon management at Board level; develop more use of renewable energy where appropriate; measure and monitor on a whole life cycle cost basis; and ensure appropriate behaviours are encouraged in individuals as well as across the organisation.						
1	Regular Board level reviews of performance in energy efficiency and carbon reduction should be reported annually to staff, the public and other stakeholders.	Director of Compliance & Risk Management	Annual GCC update. Signed up to 10:10 (Achieved 65% redction since 2009)	Statistic production by Environment & Risk Manager, included in ERIC return	Ongoing	Gr
	Carbon measurements should replace energy measurements as the target for reduction	Associate Director of Estates & Facilities / Estates manager - Environment & Risk (EMER)	Reported to GCC from April 2011 onwards.		Ongoing	Gr
	All NHS organisations should create a strategic plan to develop resilient and more renewable energy sources to ensure a guaranteed energy supply, whilst managing their overall carbon footprint. Sustainable sources included in Carbon Management Strategy.	Associate Director of Estates & Facilities / EMER	Emergency generators in place to provide resilience. Combined heat and power plants installed to reduce carbon footprint. Business Continuity Plan in place to ensure resilience and Emergency Planning Officer being appointed.	Consider other forms of renewable energy generation e.g. solar and biomass	Ongoing	Gr

	<p>All NHS capital developments should be assessed to ensure options are evaluated on a whole life cost basis. Low carbon options include more renewable energy, passive cooling, ultra-efficient lighting, sustainable transport and natural environment.</p>	<p>Associate Director of Estates & Facilities / EMER</p>	<p>As of 1st of July 2008, the Department of Health require, as part of the Outline of Business Case approval, that all new builds achieve an Excellent and all refurbishments achieve a Very Good rating under BREEAM Healthcare. Additionally, all projects are required to achieve credit Tra 5 Travel Plan. The Trust has invested in combine Heat & Power on both sites.</p>	<p>Utilise BREEAM methodology for all new capital schemes.</p>	<p>Ongoing</p>	<p>Gr</p>
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	Every NHS staff member should be able and encouraged to take responsibility for energy consumption and carbon reduction.	Associate Director of Estates & Facilities / Estates Manager - Environment & Risk / Head of Development and Training	Green page on Intranet, Green Newsletter issued, Green strapline on Intranet. PC power-down option considered and on-hold pending capital availability. New post being created to support EMER which will include promoting sustainability across Trust. Appointment yet to be made. Annual green newsletter.	Regular staff communications, training scheme being considered.	Ongoing	Am
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PROCUREMENT AND FOOD - Every organisation should consider minimising wastage at the buying stage; work in partnership with suppliers to lower the carbon impact of all aspects of procurement; make decisions based on whole life cycle costs; and promote sustainable food throughout its business. In addition, the carbon footprint of pharmaceuticals within the NHS will need further research and action to produce significant reductions.						
2	The NHS should take every opportunity to manage its operations and procurement efficiently, thereby minimising wastage and carbon from the outset.	EMER / SHP Senior Medical Buyer	Sustainability and Carbon Mgt Strategy in place with associated action plan. Recycling is a significant element of the waste contract awarded 2010. Increase from 12% to 80% recycling of non-hazardous waste. Work in conjunction with SHP - regular review of procurement policies.	Need to consider Toolscope procurement carbon footprint software. Need to set up Pharmacy working group to review medicines waste.	Ongoing	Amber
	Local procurement, whole lifecycle costs and the environmental impact of financial decisions should be considered by all NHS organisations, in preparation for the use of carbon as a currency.	SHP Senior Medical Buyer	Sustainable Procurement Strategy approved by Board. Procurement includes PQQ in whole life costing analysis e.g. document production. Local catering Policy and Plan in place.	Sustainable Procurement Strategy being re-written. Extend sustainable criteria in tenders. Introduce measures of environmental impact.		Amber
	The promotion of sustainable food and nutrition throughout the NHS should become the norm.	Catering Manager - Facilities	Local Sustainable Catering Policy. Initial local sourcing of milk, eggs and spring water. Increase range of Fair Trade products.	Increase local sourcing. Monitor compliance	Ongoing	Green

NO	KEY ACTIONS	RESPONSIBILITY	PROGRESS	FURTHER ACTION	WHEN	STATUS (RAG)
LOW CARBON TRAVEL TRANSPORT AND ACCESS - Every organisation should routinely and systematically review the need for staff, patients and visitors to travel; consistently monitor business mileage; provide incentives for low carbon transport; and promote care closer to home, telemedicine, and home working opportunities.						
3	All Trusts should have a Board approved active travel plan as part of their Sustainable Development Management Plan.	Associate Director of Estates & Facilities / EMER	Green Travel Plan agreed by Board. Lift Share database introduced. Bicycle User Group established Tax efficiency cycle scheme introduced. Improved cycle facilities. Initial meeting held with T&W Council to look at Joint Developments (Mar 2011). Meeting with Shropshire Council April 2011. Transport working group set up.	Further review as part of service reconfiguration (FCHS)	On-going	Amber
	NHS organisations should establish consistent monitoring arrangements so reductions in emissions from road vehicles used for NHS business can be measured.	Associate Director of Estates & Facilities / EMER	In place for SaTH leased vehicles and staff mileage claims. Eco-friendly lease car introduced	Reported annually	On going	Green
	Mechanisms to routinely and systemically review the need for staff, patients and visitors to travel need to be established in all NHS organisations.	Associate Director of Estates & Facilities / EMER	Staff travel survey undertaken. Transport review undertaken of patient / visitor / staff travel.	Further review underway as part of service reconfiguration	Mar-12	Amber
	Healthcare delivery must continue to move closer to the home.	Chief Operating Officer	System-wide plan to reduce hospital admissions.	Need to continue to work with PCTs	On-going	Amber
WATER- Because water usage and heating has a direct impact on carbon, every organisation should ensure efficient use of water by measuring and monitoring its usage; by designing it into building developments; by quite operational responses to leaks; by using water efficient technology; and by avoiding the routing purchasing of bottled water.						
4	Efficient use of water should be integrated into building developments at the design stage.	Associate Director of Estates & Facilities / EMER	BREEAM methodology for all new capital schemes.		Ongoing	Green

	Water costs and consumption should be measured, monitored and reported annually by all NHS organisations as part of their Annual Report to staff, patients and the public.	Associate Director of Estates & Facilities / EMER	Information is available and included in updates to GCC from April 2011. Water use is monitored. Water saving device fitted to mens urinals.	Included in annual reports	Ongoing	Green
	Leaks in NHS infrastructure should be identified and fixed immediately.	Associate Director of Estates & Facilities / EMER	In-place. All pipes visible so immediately detected and regular water audit undertaken.		Ongoing	Green
NO	KEY ACTIONS	RESPONSIBILITY	PROGRESS	FURTHER ACTION	WHEN	STATUS (RAG)
	Water efficiency technology should be adopted as standard across the NHS estate.	Associate Director of Estates & Facilities / EMER	Water saving devices fitted to men's urinals	Need to review additional sub-metering.	Ongoing	Amber
	Routine purchasing of bottled water should be avoided.		Mains fed chilled water installed on both sites in staff and patient areas. Purchase due to individual choice.		Ongoing	Green
WASTE - Every organisation should monitor, report and set targets on its management of domestic and clinical waste, including minimising the creation of waste in medicines, food and ICT and review its approach to single use items versus decontamination options.						
5	Management of domestic, clinical and hazardous waste should be reported at Board level by all NHS organisations as a key part of their sustainability reporting.	Associate Director of Estates & Facilities / EMER	Reported through ERIC. Cradle to grave tracking for clinical waste to allow economic disposal.	Will include in quarterly update to GCC from April 2011.	Ongoing	Green
	Boards should undertake a balanced risk assessment of waste and its associated costs and carbon including those related to single issue, use and disposal policies in contrast to sterilisation and re-use policies.	Associate Director of Estates & Facilities / EMER	Included in CSSD business case. 75% of domestic waste now recycled under the new contract	Further discussions required with Centres, when established regarding waste segregation and collection.	Ongoing	Amber
	All Trusts should ensure they have the necessary skills to manage waste legally, efficiently and cost effectively.	Associate Director of Estates & Facilities / EMER	Appropriately trained and qualified staff in post.			Green
	All Trusts should monitor the quantity and cost of all waste streams and set trajectories to monitor, manage and reduce them over time.	Associate Director of Estates & Facilities / EMER and Head of Pharmacy	Included in new waste contract	Sub group set up with Pharmacy & Finance to effect on 5% reduction in drugs procurement (CO2 reduction of 1036 tonnes). Most significant element of CO2 emissions.		Amber

DESIGNING THE BUILT ENVIRONMENT - Built environments should be designed to encourage sustainable development and low carbon usage in every aspect of their operation. This includes resilience to the effects of climate change, energy management strategies, and a broader approach to sustainability including transport, service delivery and community engagement. A taskforce should be create to develop a blueprint for optimum low carbon healthcare buildings.						
6	All new buildings and major refurbishments should be designed to withstand significant climate change and weather extremes.	Associate Director of Estates & Facilities	BREEAM requirements used for all new capital schemes.		Ongoing	Green
NO	KEY ACTIONS	RESPONSIBILITY	PROGRESS	FURTHER ACTION	WHEN	STATUS (RAG)
	All new healthcare buildings should aim to achieve a target of being low carbon by 2015.	Associate Director of Estates & Facilities	BREEAM requirements used for all new capital schemes.		Ongoing	Green
	All decisions about design and build of healthcare facilities must be explicit about how they encourage a broader approach to sustainability including transport, delivery of services and community engagement.	Associate Director of Estates & Facilities / EMER	BREEAM requirements used for all new capital schemes. Extensive community engagement in Cancer Centre build. Extensive engagement planned for reconfiguration build. Estates working group established to improve energy efficiency / awareness	Consider government grant loans to take forward.	Ongoing	Green
	All NHS buildings need to move quickly to have a significantly lower carbon impact, not only in their construction but also in their lifetime use and in their decommissioning. NHS buildings must be designed to promote sustainable behaviours in staff, patients and visitors, and they must be adaptable to support change towards low carbon patient pathways.	Associate Director of Estates & Facilities / EMER	BREEAM requirements used for all new capital schemes.		Ongoing	Green
ORGANISATION AND WORKFORCE DEVELOPMENT - Every member of the NHS workforce should be encouraged and enabled to take action in their workplace. NHS organisations should support their staff by promoting increased awareness, conducting behavioural change programmes, encouraging home working, low carbon travel, the use of ICT, and by ensuring sustainable development is included in every job description.						
7	Future leadership development should take account of the organisational and individual competencies required to deliver carbon reduction.	Head of Development & Training	Included in some training sessions.	Management development syllabus to be reviewed. To include in training for new Centres. Included in KSF outlines.	Ongoing	Amber

	NHS organisations and SHAs should work in partnership with High Education Institutions to ensure that sustainability and carbon reduction concepts are included in undergraduate and postgraduate curricula.	SHA Deanery N/A				
	NHS organisations should consider including sustainability and carbon governance as a responsibility on all job descriptions for Chief Executives and Director level posts and on all job descriptions for NHS staff.	HR Deputy (Operations)	Not currently included	Paragraph issued to Head of HR for inclusion in March 2011.	Ongoing	Amber
	NHS organisations must ensure their staff have information about, and opportunities to use, low carbon travel options (see travel).	Environment & Risk Manager	Sustainability Pages and Liftshare launched. Eco lease car provided. Improved cycling.	Trust considering shuttle bus and other carbon reduction inter-site options.	Ongoing	Green
	Audio, video and web conferencing technology must be made available by NHS organisations and staff must be trained in these technologies to support a cultural shift away from routine care and other high carbon travel and to encourage more home working where appropriate. This issue being considered by Workforce & Engagement Group.	Head of IT	Limited availability at present. Available for cancer MDT meetings. Trust considering Telehealth projects. Appointed telehealth value stream chief 2011.	Need to review equipment and train staff where appropriate.	Ongoing	Red
ROLE OF PARTNERSHIP WORKING - Every NHS organisation should consolidate partnership working and make use of its leverage within local frameworks including Local Area Agreements, Local Strategic Partnerships and through Comprehensive Area Assessments. Every NHS region should promote and develop a regional network for sustainable development to ensure a broad consistent approach and an action plan across each region to tackle this agenda.						
8	The NHS should use its leverage within local partnership and performance frameworks to promote carbon reduction.	Director of Compliance & Risk Management / EMER	Sustainability Strategy approved by Board. Procurement use Sustainable PQQ approved by ME Feb 2010. Green workshops held for staff. Joint working with local authorities e.g. Cycle Shrewsbury.	Future Partnership approach being considered e.g. transport.	Ongoing	Amber
	Every NHS organisation should pursue climate change action in their Local Strategic Partnership (LSP).	Director of Compliance & Risk Management / EMER	Climate Change Adaption Group in place. CEO membership of LSP		Ongoing	Amber

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<p>GOVERNANCE - Every NHS organisation should sign up to the Good Corporate Citizenship Assessment Model and produce a Board approved sustainable development management plan. The NHS should set itself interim targets and trajectories to meet the provisions of the Climate Change Act. In the first instance, this should be set at 10%, as a minimum, of the 2007 levels by 2015. Carbon reduction and sustainable development are corporate responsibilities and should be an inherent part of each organisation's performance and governance mechanisms. Healthcare regulators should ensure that sustainability and the environmental impact of service are an integral part of quality standards. The Strategic Health Authorities and Regional Government Offices should ensure that: * the NHS delivers carbon reduction through its commissioning frameworks * the NHS delivers on its sustainability commitments within Local Area Agreements * Sustainable development regional networks in the NHS are developed further to deliver on this agenda.</p>						
9	Every NHS organisation should sign up to the NHS Good Corporate Citizenship Assessment Model and produce a Board approved Sustainable Development Management Plan which sets out clear measurable milestones to measure, monitor and reduce direct carbon emissions.	Director of Strategy	GCC Group in-place. Regular meetings. Approved Strategy at Oct 2010 Trust Board.		Ongoing	Green
	Carbon reduction and sustainable development are corporate responsibilities for all organisations and should be an inherent part of each NHS organisation's performance and governance mechanisms.	Director of Compliance & Risk Management	GCC Group established in 2008. Sustainability and Carbon Management Strategy in place and action plan reviewed annually.			Amber
<p>FINANCE - Every organisation should become carbon literate, carbon numerate and ensure appropriate investment to meet the commitments required to become part of a low carbon NHS and in preparation for a carbon tax regime. Partnership working will be required to deliver appropriate incentives, economies and training to support this shift in culture and for the local economy.</p>						
10	NHS organisations should develop carbon literacy and embed carbon reduction in their financial mechanisms.	Finance Director, SHP Medical Buyer		To consider financial implications of investing in low carbon procurement (see Item 2).	Ongoing	Amber
	NHS organisations should take advantage of schemes which support investment in energy efficiency initiatives.	Associate Director of Estates & Facilities / EMER	Installed CHP at both sites including new controls and lighting. IT Power-down scheme submitted SaTH for Invest-to-Save but put on-hold pending capital availability.	Consider investment in internal / external Spend to Save schemes. Explore obtaining government grants to implement.	Ongoing	Amber
	NHS organisations should be involved in local strategic partnership arrangements and regional economic forums in order to play their part in developing a sustainable and resilient health economy.	Director of Compliance & Risk Management / EMER	Member of LSP and Regional Carbon Reduction Scheme.		Ongoing	Green

CONCLUSION - Further development of appropriate metrics to measure and monitor direct and indirect carbon footprints across the NHS are required. Societal and NHS scenarios in a low carbon world need to be developed to understand the different ways, healthcare delivery much be shaped for a low carbon future. The impact this will have on models of care, and how to develop and promote low carbon pathways, must be understood. Low carbon technology must be developed and exploited to enable the delivery of sustainable healthcare.

This strategy sets the ambition for the NHS to play a leading and innovative role in ensuring the shift to a low carbon society. This requires every organisation to develop a Board approved sustainable development management plan and to start measuring and monitoring progress towards a 10% carbon reduction by 2015 on 2007 levels.

There is also a strong financial incentive to address climate change. The Stern Review concluded that the benefits of strong, early and coordinated action against climate change far outweigh the economic costs of doing nothing. It is estimated that the cost of not taking action could be equivalent to losing between %% and 20% of annual global GDP, whereas the cost of taking action can be limited to around 1% of annual global GDP. Failing to take the right action now and over the coming decades risks major disruption to economic and social activity that would be very difficult and costly to reverse

The NHS in England is responsible for more than 18 million tonnes. CO2 each year from heating, cooling and lighting buildings, powering equipment, procuring goods and commissioning services, sending waste to landfill, and patient, staff and visitor travel. This is 25% of total public sector emissions in England and 3.2% of total carbon emissions in England. This Carbon Reduction Strategy is the response of the NHS in England to the need for action. It addresses the mounting scientific evidence of the need for transformational change in the way we deliver health services. This Strategy shows how we can rise to that challenge and demonstrates how the NHS in England can be an exemplar sustainable and low carbon public sector organisation.

We can increase physical activity; promote a better diet; improve mental health; reduce obesity; promote safe travel, improve air quality; and help regenerate local communities and economies through carbon reduction, which in turn leads to safer, healthier, and more fulfilled communities.

In 2006, the NHS Good Corporate Citizenship Assessment Model, a toolkit to help NHS organisations become good corporate citizens, was launched by the Sustainable Development Commission. Over half of all NHS organisations are now registered, although there continues to be wide variation between the regions. An important and urgent part of being a good corporate citizen is to understand what it means to become a low carbon organisation. Carbon literacy, carbon numeracy, and carbon governance need to be taken as seriously as similar responsibilities towards financial probity and patient safety. Carbon governance needs promoting in the same systematic and scrutinised way as we take financial governance and clinical governance.