Strategic Approach to Achieving Carbon Reduction for the NHS in London

1. Background

Climate change has been called “the biggest global health threat of the 21st Century”\(^1\). London is already experiencing the effects of climate change and further projected climatic shifts are likely to increase the risk of floods, drought and heat waves which will dramatically affect the health and well-being of Londoners and put services under new pressures.

The Climate Change Act 2008 galvanised a range of national initiatives and policies to mitigate against climate change and adapt to its known effects. In 2009, the NHS’s responsibility for contributing to climate change mitigation was set out in *Saving Carbon, Improving Health: NHS Carbon Reduction Strategy for England*.\(^2\) Most recently, the Department of Health has published its 2010-12 *Climate Change Plan*\(^3\) which provides public leadership to support action within the health and social care sector. At a regional level, the Mayor’s *Draft Climate Change Adaptation Strategy*\(^4\) and *Draft Mitigation and Energy Strategy*\(^5\) highlight the scale of the challenge and need for action across London.

2. Purpose of Strategy Document

This document sets out the case for action by the health sector in London. It highlights the challenges faced by the NHS in London in meeting its carbon reduction obligations, plus other drivers for change. The ultimate responsibility for reducing carbon lies with Trust Chief Executives. However this document presents a regional strategic approach to address areas where regional or cross sector working can best support Trusts’ own work. It also highlights where the NHS can play its role in promoting London as a low carbon world city.

3. Case for Action

3.1 Challenging Targets

The national strategy and its 2010 update\(^6\) set out ambitious targets for reducing carbon dioxide equivalent emissions (CO\(_2\)e) for the NHS, which regions are required to follow:

- A 10% reduction of CO\(_2\)e emissions by 2015 (based on 2007 baseline data) from 21MtCO\(_2\)e to 19Mt CO\(_2\)e
- A 34% reduction of CO\(_2\)e by 2020 from 1990 baseline
- An 80% reduction of CO\(_2\)e by 2050 from 1990 baseline

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These targets cover scope 1 and 2 emissions (on site building energy/ business travel emissions and off site electricity respectively) which can mostly be measured currently but not scope 3 emissions (all other indirect emissions including procurement, patient and visitor travel and staff commuting). These targets may be revised and become more ambitious as ways to measure scope 3 emissions— which represent over 50% of London’s emissions- are developed.

3.2 An Upwards National Trajectory

NHS England is currently on an upwards carbon trajectory, due largely to an increase in NHS service provision (see Figure 1):

Fig. 1: NHS England emissions from 1990 to 2020 against Climate Change Act CO₂e targets

3.3 Baseline regional CO₂/CO₂e Emissions and Energy Consumption

The DH Regional Public Health Group for London commissioned the first regional footprint. Based on 2007 data, it shows that:

- The NHS in London’s CO₂ emissions were 3.35MtCO₂, 17% of the national total.
  - 59% of emissions resulted from procurement, with medical equipment being the largest element within this category
  - 25% of emissions resulted from building energy use (proportionally higher than elsewhere)
  - 16% of emissions resulted from travel (staff, patients and visitor)

- The NHS in London uses 24% of all NHS electricity in England, but only 3.7% of the renewable energy use.

3.4 Baseline regional progress

By end March 2010:
3.5 Meeting Carbon Reduction targets

National modelling has shown the main areas to consider and implications for action over the next few years (see Fig.2).

Figure 2: CO\(_2\)e Reduction Potential for NHS England

This demonstrates that:

- Emission reductions of the scale required by 2020 are technically feasible, but will not be achieved by following a 'business as usual' model
- Building energy and procurement sectors need to lead the way to achieve the required emissions in the next decade
- Beyond 2020: presuming building emissions have been addressed, procurement will be a key area on which to focus.

Reductions on the scale required can also be made without compromises to the quality of care.

4. Other Drivers for Action

4.1 Health Co-benefits
There are many significant health co-benefits to helping tackle climate change. Promoting low carbon technologies can, for example, support active travel, reduce air pollution, improve household energy efficiency and reduce fuel poverty. In doing so, these measures can help improve health outcomes including rates of heart disease, diabetes and respiratory diseases and concomitantly reduce NHS treatment costs.

4.2 Reputation and Support for London as a Low Carbon City

As laid out in the Mayor’s draft climate change strategies, London wants to be a leading low carbon city. The Mayor’s targets for reducing carbon are ambitious, with a 22% reduction in emissions by 2015. Given the size of the NHS estate in London and rising healthcare demands the NHS is being asked to support this vision. The healthcare sector has previously been criticised for failing to act. The national strategy underlined that NHS organisations are placing their reputation “at risk as the public’s consciousness and expectation in the context of global events increases.” There are significant opportunities to work with partners across London on, for example, energy efficiency schemes and to optimise procurement power.

4.3 The Increasing Cost of Carbon

More stringent legal and financial obligations relating to carbon are now being introduced. For example, the CRC Energy Efficiency Scheme is a mandatory emissions trading scheme for organisations that use over 6000MWh of electricity per year, starting in April 2010. Larger Trusts (possibly around 30 in London) will be required to trade within this. While most Trusts know whether they are in or out of the scheme, it is unclear the degree to which Trusts are planning for the financial challenges and opportunities it poses. Reducing energy-related carbon can contribute to reducing Trusts’ financial expenditure over different payback periods. The 2010 national strategy update estimates that the NHS nationally could save at least £180m per year by reducing its carbon. Example marginal abatement cost curves for different types of Trusts have been developed to demonstrate the potential cost effectiveness and magnitude of carbon that could be saved from different carbon reduction measures.

5. Trusts’ Role

5.1 Trusts’ Responsibilities

The ultimate responsibility for reducing carbon emissions lies with Trust Chief Executives. The national strategy and communications from NHS London (NHS-L) have previously highlighted that the below are required from each Trust:

- Capital Investment business cases: All cases must include environmental impact assessments that address carbon reduction (currently being developed by (NHS-L)).
- Carbon reduction Leads: All Trusts should have identified a Board and Operational Lead by March 2010.
- Board-approved strategies: All trusts and PCTs should have a board-approved Strategic Development Management Plans (including the

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monitoring, management and reduction of carbon) by March 2010. Trusts should consider 1) energy and carbon management; 2) procurement and food; 3) low carbon travel, transport and access; 4) water; 5) waste; 6) designing the built environment; 7) organisational and workforce development; 8) role of partnership and networks; 9) governance; 10) finance.

- Sign up to the Good Corporate Citizenship model (version 2)
- Have a clear position in relation to the CRC Energy Efficiency Scheme and to have registered by September 2010 as either being within the trading scheme or submitting information only.

5.2 Monitoring and Reporting

As requested by the NHS Operational Board, each SHA will monitor its regional trajectory and submit information biannually. For 2010/11 this will include:

- The proportion of Trusts with Sustainable Development Management Plans (including travel plans).
- The proportion that have signed up to the Good Corporate Citizenship Model (version 2).
- In November, 2009/10 Estates Returns Information Collection data from Trusts will be amalgamated nationally against 2007 data for energy, waste and water (this covers scope 1 and scope 2 emissions).

In future years, further national measures will be developed as data become available and sufficiently reliable, initially including monitoring of business mileage and wider travel emissions and later significant procurement emissions. Although these scope 3 emissions are not currently included within reporting, given their significant contribution, Trusts are nonetheless encouraged to take action in these areas.

Foundation Trusts report to ‘Monitor’, not NHS-L. In March 2010, ‘Monitor’ concluded its consultation\(^9\) on reporting requirements and it is likely that their annual reporting arrangements will use the same information as that requested for other Trusts. It is hoped that Foundation Trusts will be happy to be included in regional and national joint working and monitoring.

5.3 Addressing Carbon Reduction within Broader Sustainability

Action to reduce carbon emissions should be seen within a wider context of considering and improving overall sustainability of NHS operations, functions and services. This should be seen as constituting a core part of the drive to improve quality. It is outside the scope of this strategy to document what is needed, but Trusts’ sustainable development action plans should consider how their clinical and non clinical operations and business can become more economically, socially and environmental sustainable and good practice in many areas exists. Carbon reduction should be a key element within these plans and may be a useful lever for promoting this broader agenda.


6.1 Overall Approach

The Carbon Reduction Strategy for London’s NHS initially concentrates on achieving a 10% reduction in CO$_2$e emissions (from 2007 baseline) by 2015. It also looks to develop structures to support Trusts to go further and prepare for the longer term and even more challenging targets set out in 3.1.

Achieving the necessary scale of transformational change needed will require leadership and ownership at all levels across NHS organisations and clear guidance regarding what is required. Many opportunities exist to take a regional perspective to strengthen Trusts’ individual work and promote further joint working. Carbon reduction relates to the whole organisation and NHS system. Some of the initial ‘quick wins’ may sit with Estates Departments but over time the changes required to make greater cuts to carbon emissions will involve staff from all parts of the NHS including front line clinical staff.

To help take forward this work, three groups have been established (see section 7 for further information):

- A Carbon Reduction Steering Group with senior representation from NHS London (NHS-L) and other partners, including London Councils and the Greater London Authority
- A Network of Trusts’ Carbon Reduction Officer Leads
- A smaller Executive Group of Officer Leads and other pan-London representatives to help identify and address Trusts’ strategic needs.

Informed by these groups, this regional strategy considers areas where joint working and delivery with other London partners and across sectors and Trusts can help make further progress.

6.2 Aims

The aims of the regional strategy are to:

1. Promote transformational change in the NHS in London to address carbon reduction through demonstrating the co-benefits of reducing carbon and improving health and the NHS’s role in supporting London as a low carbon world city.

2. Equip Trusts to meet the 10% (CO$_2$e) reductions by 2015, and to be on a trajectory to meet the 2020 targets.

3. Help the NHS in London deliver long term efficiency savings

6.3 Themes

The following themes will be used to develop annual work plans at a regional level. The precise nature of where emphasis should lie will partly be informed by a review of Trusts’ sustainability development management plans (to be completed by end July):

Promoting transformational change in the NHS

This strategy aims to:
1. Develop leaders in the health sector who understand the challenge, recognise their responsibilities and are taking action.

2. Embed carbon reduction measures in service planning, commissioning and performance management frameworks

3. Encourage Foundation Trusts to embed carbon reduction measures in their operations


**Equipping Trusts to achieve CO₂-e reductions by 2015 and deliver efficiency savings**

In order to help Trusts develop and implement carbon reduction measures within their sustainable development plans, this strategy will:

5. Develop tools and guidance to support Trusts

6. Provide new opportunities for Trusts to develop sustainable and energy efficient buildings

7. Develop initiatives to help Trusts procure sustainable goods and services

8. Promote sustainable travel to NHS sites and support Trusts to develop sustainable travel plans

9. Encourage region-wide opportunities to increase carbon reduction awareness and promote behaviour change of NHS staff at all levels

**Performance and Monitoring**

This strategy will:

10. Monitor and report regional progress to NHS London, key stakeholders and the NHS Sustainable Development Unit

**6. 4 Strategy Period and Review**

The strategy applies to the period spanning August 2010 to March 2015. Regional level actions will be developed in parallel. The strategy will be reviewed in 2012 to take account of regional and legislative changes and the speed of progress.

**7. Mechanisms for Taking the Strategy Forward**

**7.1 Regional Carbon Reduction Steering Group**

A Carbon Reduction Steering Group (CRSG) with senior representation from NHS-L and other partners will meet quarterly to ensure the development of a
shared regional strategic approach and delivery structure for carbon reduction in the NHS in London. It will:

- Pull together expertise from NHS bodies and other stakeholders who have a significant role in promoting carbon reduction and identify areas that will benefit from action at a sector/regional level
- Provide leadership for carbon reduction at sector/regional level
- Solicit expertise and input from the CRLN and Executive Group (see below) to identify what can be done at sector/regional level to support Trusts in carbon reduction
- Consider possible regional targets and a reporting system, recognising London’s current footprint and the targets outlined within the national strategy.

The CRSG will annually submit for information a summary of progress to the Board lead.

A key piece of work to complete end July 2010 is a review of Trusts’ 2010/11 Sustainable Development Action plans. This will inform areas where further regional support may be helpful.

7.2 Carbon Reduction Leads Network

A Carbon Reduction Leads Network (CRLN) of Trusts’ nominated Officer leads will meet quarterly. It will:

- Embed the principles of the SDU’s ‘Saving Carbon, Improving Health’ in their Trusts
- Ensure that all NHS organisations have up-to-date Board approved sustainable development management plans
- Provide carbon leads with the tools necessary to make changes through sharing information and ideas and sharing best practice
- Promote London’s carbon reduction achievements through leadership and advocacy at regional and national levels.
- Influence national policy content and delivery by responding to consultations

The CRLN’s Executive group will meet quarterly. It will:

- Advise CRSG on the regional direction and activity needed to support Trusts and help shape the regional strategy
- Provide clear structure and direction to the CRLN and use the CRLN to support Trusts
- Support partnership working and learning with other bodies/organisations outside of the NHS
- Identify resourcing opportunities for Carbon Reduction initiatives
- Develop a consistent, standardised, evidence-based approach for measuring and monitoring carbon emissions.

7.3 Support from NHS London

Director and Officer Leads in NHS London have been identified to support this work. They are Dr Simon Tanner (Regional Director of Public Health) and Simon Greenfield (Strategic Estates Advisor, Finance and Investment Directorate)

7.4 Relationship to health service change delivery
An increasing focus on prevention and reconsideration of service design and delivery (including a shift towards GP-based commissioning) has the potential to reduce carbon emissions. Trust Chief Executives, Sustainable Development Board and operational leads and groups supporting the regional plan should seek to build on these opportunities.