

### Document Control Report

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# NORTHERN DEVON HEALTHCARE NHS TRUST SUSTAINABILITY STRATEGY



**R.Lowe Deputy Estates Manager  
April 2010**

## EXECUTIVE SUMMARY

“The Northern Devon Healthcare NHS Trust as the major employer and user of resources in North Devon intends to lead by example and take positive action to achieve sustainability and minimise the harmful effects of its work.”

It has long been recognised that carbon is a major component in Green House Gas (GHG) emissions. To address the high levels of GHG Emissions in the atmosphere, the Kyoto Protocol was produced in 1997. This sets binding targets for 37 industrialized countries and the European community to reduce Carbon production and GHG emissions.

The NHS is one of the world's largest organisations, in England it remains the largest public sector user at 25% of the UK resources. The UK government has acknowledged this and placed a clear mandate on the Department of Health (DOH) in respect to its commitment to reducing Carbon Emissions. To assist NHS Trusts the DOH Sustainable Development units (SDU) produced a document “Saving Carbon Improving Health” in January 2009, this document forms part of the guidance for the NHS Carbon Reduction Strategy for England.

To address the government mandate Strategic health authorities require local NHS Trusts to demonstrate that the Sustainable Agenda is a key part of their operating processes and policies. The SDU document consists of ten sections, identifying that the sustainable agenda with carbon saving can only be successful if treated as a Trust wide issue.

The aim of this strategy is to use the findings of the SDU document to identify the way forward ensuring that we use our resources effectively to reduce carbon produced and that carbon reduction remains a key priority in all future development or purchasing decisions.

The Trust Board approved 2002 Environmental strategy ensured that we have been proactive to ensure that where possible our business does not impact on the local environment. The existing Environment strategy does not meet new guidance but it has allowed the Trust to address seven areas, all of which are Facilities based and led. These allowed the facilities team to form clear benchmarks which confirmed:-

- Good practice
- The meeting of legislation
- Peer clarification/comparison within the areas
- Introduction of key performance indicators as targets

Confirmation feedback has been through the DOH Estates ERIC (Estates Reconciliation Information Consortium) data:-

1. **Energy-** The Trust is on track to meet targets set for 2012 by the DOH.
2. **Water-** By Monitoring and Targeting the Trust has reduced consumption & saved money
3. **Waste-** By segregation and recycling we have reduced waste produced & saved money
4. **Procurement-** Contracts and tenders reference the Trusts sustainable approach & demonstrate best value
5. **Transport-** Set up of transport group with staff, NDDC, bus companies, public engagement etc
6. **Sustainable development in new buildings-** New projects/upgrades are subjected to a sustainable assessment carried out using the electronic software BREEM.
7. **Biodiversity-** The Trust will ensure that any biodiversity impact is kept to a minimum.

The Sustainable Development Commission has produced a Good Corporate Citizenship (GCC) Model which contains a self-assessment scoring process for six areas. This assessment

supports the SDU documents approach to the ten key areas listed in “Saving Carbon Improving Health”. A recent application of the GCC model scored the Trust as above the South West Regional average. Attributed to past efforts made by the Trust this is not a cause for complacency as the focus on sustainability within all NHS Trusts remains high.

Reducing the NHS carbon footprint/production and emissions has never been more focused. Through penalties or reward the government has targeted all areas of the sustainable agenda through:

- Landfill taxes will penalise those who do not recycle & reduce their waste production.
- Emission taxes on vehicles that reward those that drive low emission cars
- Carbon levies placed on electricity, gas & oil
- Performance validation on energy usage within buildings
- Refrigeration performance & validation with removal of damaging refrigerants by 2012
- The Carbon Reduction Commitment which penalises all large consumers of electricity and fossil fuels based on carbon produced

The DOH SDU document January 2009 targets ten areas within the sustainable agenda and for the first time it identifies many areas that are not Facilities led or managed:-

1. Energy and carbon management
2. Procurement and food, local sourcing and low carbon purchasing
3. Low carbon travel and transport
4. Water, consumption reduction and management
5. Waste reduction, streaming and recycling
6. Designing a better and more energy conscious Built environment
7. Organisational and work force development, looking at sustainable work methods and accountability
8. Role of Partnership and networks to allow benchmarking, sharing ideas and practices
9. Assurance to the Board, the staff and public that the Trust is tackling the sustainable agenda
10. Finance and risk, ensuring that carbon emissions are part of the decision process and that the risk of penalties and reputation are considered

This will be a surprise and challenge to many departments within the Trust who were unaware of their impact on carbon produced by the Trust. The practicalities to meet the numerous targets will be extremely difficult at the offset especially in areas where there is no awareness or preparation. These departments will need time to understand the impact of the agenda, to network with other Trusts and colleagues, and in some case receive training. It is proposed that in the first year the Trust tackles building related sustainable issues e.g. energy and water reduction, Waste minimisation and recycling etc, as this is an area where we have had good results to date.

Within the first year the remaining areas will be allocated leads that will then prepare and eventually champion the area they are responsible for, finally joining the Trusts proposed sustainable group. To ensure that the Trust improves on its present achievements and the score within the GCC, will require us to target and achieve the quick wins, these will be targeted at energy reduction. This approach will then maintain the Trusts carbon reduction and allow other areas and their champions to get up to speed.

It is of concern that in general the Trust is experiencing an upward trend in energy use and carbon emissions, even though identified energy reduction schemes are being progressed. However it has been identified that new schemes are canceling out such reductions which in turn could see future carbon costs for the Trust. Therefore to ensure that building related carbon

management is addressed the following key action areas have been identified within the document.

Key Actions:-

- Carbon reduction will be considered in all developments and refurbishments.
- By reducing energy use the Trust will limit financial carbon levies on fossil fuels.
- Improve building controls to ensure the Trust reduces its energy to provide heating/hot water
- Maintain space temperatures at a level that is within NHS best practice & guidance documents.
- Encourage appropriate dress codes to avoid the need for over temperature in areas.
- Through water consumption identification, reduce water used and sewerage return
- Provide refrigerated cooling only to areas that have a clinical need or are deemed business critical
- Through its vehicle purchases the Trust will address travel pollution
- Identify key leads for the areas within the Good Corporate Citizenship model
- Set Carbon reduction as part of the annual objectives for key leads and managers
- Regular reports to the executive team to update them on carbon reduction/growth.

The DOH has placed a clear mandate on NHS Trusts to achieve Carbon reduction, financial savings, improve the health of the nation with a carbon free sustainable future for the NHS. In the long term this will only be achieved by engaging staff at all levels within the Trust who must understand where and how the Sustainable agenda should be considered.

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## INTRODUCTION

In 1997 the industrial countries of the world met to discuss ways to address the high levels of Green House Gas (GHG) emissions in the atmosphere. The high levels of GHG in the atmosphere were also recognised as the main cause behind Global warming and the imbalance of the worlds weather structure, a situation that if left unchecked would result in a major impact on the future wellbeing of the human race and the planet. The outcome of this meeting produced the Kyoto protocol. It had long been recognised that carbon is a major component in Green House Gas (GHG) emissions. To address the high levels of GHG Emissions in the atmosphere the Kyoto Protocol set binding targets for 37 industrialized countries and the European community to reduce Carbon production and GHG emissions. The targets set by Kyoto protocol amounted to an average of a 5% saving of carbon against 1990 production levels over the five-year period 2008-2012.

With the Kyoto Protocol running out in 2012 there is an urgent need for a new climate protocol. A conference that took place in Copenhagen in December 2009 was planned to be the next phase in respect to addressing the climate change issue. This conference did not produce the same impact or gain the same support that the Kyoto summit had, but it did raise the profile of climate change issues by debate. What still remains is that the developed countries will be expected to make firm and major commitments to the climate change agenda, thereby supporting the developing nations to develop without unbalancing the earths natural resources. Such support will assist the new developing industrial powers China and India in addressing their future carbon emissions.

Developed countries have acknowledged that the Earth resources are finite, that if they continue their appetite and use of resources the impact for future generations will be drastic. The issue of global warming is with us all now, in 2003 over 15000 people died prematurely during the heat wave in England. Unless we take effective action now, millions of people around the world will suffer hunger, water shortages and coastal flooding as the climate changes.

## BACKGROUND

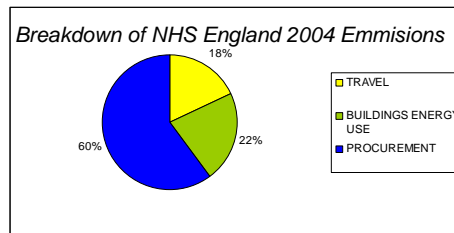
### International requirement

It has been recognised that the current high CHG levels were the result of more than 150 years of industrial activity and that the developed countries were principally responsible. In 1997 the Kyoto protocol placed targets on the developed countries which in recent years have seen the profile of Sustainability increase to a level that is now placing greater pressures on those who can make a difference.

### UK- NHS requirement

In response the UK government has acknowledged this and placed a mandate on all its major energy users with a goal to reduce energy consumption and carbon emissions. The NHS as one of the world's largest organisations has an obligation to reduce its consumption and use of resources, at the same time ensuring that there is no loss in the quality of delivered healthcare services. Although the NHS is only responsible for the 3.2% of the total carbon emissions in England it remains the largest public sector user at 25% of resources. This mandate has now been levied down to Strategic Health Authority and NHS Trust level by the DOH. To assist NHS Trusts the DOH Sustainable Development units (SDU) produced a document "Saving Carbon Improving Health", this is part of the guidance for the NHS Carbon Reduction Strategy for England. This document has reviewed Carbon Production within the NHS and its business activity, identifying the main sources of carbon produced.

The aim being to address the DOH mandate by ensuring that NHS Trusts are aware of the governments aims and how to tackle the Sustainable agenda both strategically and practically within a Trust.



The above chart from the SDU document identifies the key areas of carbon production within a NHS Trust and for the first time it has been recognised that energy use within the Trusts estate is not greatest source of carbon production, that other Trust activities have a large or greater influence.

The SDU document has given the Strategic Health Authorities and NHS Trusts clear guidelines in identifying the following:-

- The areas of carbon production produced within the NHS business.
- Recognised the targets levied at the DOH by the UK government
- Identified the need for Trust wide sustainable awareness
- Provided guidance on the approach a Trust should adopt
- Recognised the key documents and drivers i.e. the Kyoto protocol, the debated Copenhagen outcomes, Defra , Environment agency etc
- Targets which have been cascaded down to the DOH, placing them into a targeted approach to sustainability for the NHS.

### Local requirement

The above chart has also confirmed the Trusts approach to the sustainable agenda will only be achieved by a Trust wide approach of key departments that in the past were unaware of their influence on the Trusts carbon footprint. The aim of this strategy is to use the findings of the SDU document to identify a way forward, through application by:

- Involving key departments within the Trust in the process

- Ensure that the Trusts aims are communicated to staff, the public and stakeholders
- By working with external agencies i.e. councils, local groups and corporate bodies etc
- By ensuring that the Trusts progress is reported to the Board, that staff and the public are made aware through the Trusts communications team.

The Trust's sustainable strategy is about us, the Northern Devon Healthcare Trust (NDHT) and how we are going to plan to achieve our goals, but in doing so we must ensure that local, regional, governmental and international needs are acknowledged and responded to.

#### Governance/Assurance:

The strategic Health authorities and regional government offices are to ensure that:

- the NHS delivers carbon reduction through its commissioning frameworks
- the NHS delivers on its sustainable commitments within local area agreements
- sustainable development regional networks in the NHS are developed further to support Trusts to deliver on its sustainable agenda

#### Boundaries:

In doing so the Trust has to be aware of the boundaries, the SDU document is quite clear and identifies in that it is a Trust wide issue not just a Facilities issues, in doing so it has identified ten areas that Trusts are to address:

1. Energy and carbon management
2. Procurement and food, local sourcing and low carbon purchasing
3. Low carbon travel and transport
4. Water, consumption reduction and management
5. Waste reduction, streaming and recycling
6. Designing a better and more energy conscious built environment
7. Organisational and work force development
8. Role of Partnership and networks
9. Assurance
10. Finance and risk

To address the above areas and meet goals set within the Trusts Sustainable Strategy will require Facilities to lead but also a Trust wide input from key departments, this is explained in more detail within the Strategy document. Within the Trust awareness and understanding of how a person's actions and decisions affect the Trust's carbon footprint is essential, this a term referred to as "carbon literate". Such awareness and understanding amongst decision makers will be paramount.

To meet this agenda the Trust will need to plan and work with many groups internal, external and the public, not only employees. Within the Trust there are already experts, leads and champions in all the above fields, there are groups that already meet and specialise in such areas. By the creation of a focused Sustainable Group will ensure such specialist groups are aware of the Trust's Sustainable agenda, thereby addressing the boundaries within the SDU document "Saving Carbon Improving Health".

## WHERE ARE WE NOW

### The 2002 Environmental strategy

The Trusts Board approved a 2002 Environmental strategy which has ensured that in the past we have been proactive to ensure our business continuity did not impact on the local environment. The existing Environment strategy does not meet new guidance but it has allowed the Trust to address seven areas, all of which are Facilities based and led and all of which allowed the facilities team to form clear benchmarks which confirmed Good practice, the meeting of legislation, peer clarification/comparison within the areas and the Introduction of key performance indicators as targets through the DOH Estates ERIC (estates reconciliation information Consortium) data. The following has been declared:-

1. **Energy-** The Trust is on track to meet targets set for 2012 by the DOH.
2. **Water-** Monitoring and Targeting has enabled the Trust to reduce consumption
3. **Waste-** The instigation of segregation and recycling has reduced waste produced
4. **Procurement-** Contracts and tenders that reference the Trusts sustainable approach
5. **Transport-** Set up of transport group with staff, NDDC, bus companies, the public etc
6. **Sustainable development in new buildings-** New projects/upgrades are subjected to a sustainable assessment carried out using the electronic software BREEM.
7. **Biodiversity-** The Trust will ensure that any biodiversity impact is kept to a minimum.

The above strategy document albeit 8 years old and out of date in respect to new guidance focused the Trust and has been proactive in ensuring that all new designs did not impact on the local environment. This has also been realised in day to day operational issues and decisions through local initiatives to reduce future Carbon production:-

#### Refrigeration

- The installation of comfort cooling will only be provided for clinical areas that fall within the DOH guidance documents (HTM's and HBN's).
- Improved control philosophies to use outside air temperature wherever possible upto 27oC prior to refrigerated support being introduced.
- Comfort cooling in non-clinical areas will not be provided but will involve improved design to make better use of natural cooling.
- Improved control philosophies to use outside air temperature wherever possible to cool equipment when deemed as business critical. This will only be provided to a temperature that it does not affect component age or quality, normally 30oC.
- All projects make use of free cooling/outside air.

#### Ambient temperature influence

- Upgrade to a higher level of building insulation
- Radiator controls to be set to mid position or lower to reduce heat waste.

#### Monitoring and Targeting

- All projects get an energy checks to identify potential energy and carbon growth
- Monitoring and Targeting; All properties to receive energy checks to identify energy and carbon growth with a planned target of a 5% saving on existing energy consumed.

#### Insidious Electrical growth

- Electric heaters will not be used to support heating unless a statement of need is identified, this is to stop the irresponsible use of electric heaters
- All equipment purchases will be challenged to identify increased consumption

## PENALTIES AND REWARDS

The emphasis on reducing the carbon footprint, production and emissions within an organisation has never been greater. Past government targets have been ignored by many corporate bodies and large carbon producers, as they focus on profit not carbon reduction. The government has recognised that carbon reduction can only be tackled by penalising those who do not bother and rewarding those who do. The following have been introduced:

### DECS (Display Energy Certificates)

An annual requirement, every property over 1000m<sup>2</sup> has since 2008 had to display in a prominent place an up to date energy declaration certificate. The certificates declare the properties energy performance based on the previous year and looks similar to those used to declare energy performance on washing machines, fridges etc. The scheme is monitored by the DTI and carries a fine if they are failed to be displayed. The Trust has 9 locations

### Refrigeration

Refrigeration is a large user of electricity, a high carbon producing fuel. In addition to this the refrigerant used is a Hydro fluorocarbon (HFC), which has ozone depleting characteristics if released. By 2011 all users with refrigeration equipment over 12Kw in size will have to a validation certification in place that identifies sound maintenance and controls, from 2010 the HFC R22 will be outlawed. Any repairs to equipment (of which the Trust has many) will only be with reclaimed R22 at a premium cost.

### Carbon Reduction Commitment (CRC)

The CRC is a new mandatory emission trading scheme, announced in last year's Energy White Paper. It is due to start in 2011 and will cover large business and public sector organisations. The CRC will have a significant impact on reducing UK carbon emissions offering the potential to save money through energy efficiency. Qualifying organisations are those using more than 6,000,000 Kwhr's of electricity per annum. This Trust qualifies.

In April each year Trusts will purchase Carbon credits to equal the expected carbon produced by them for the financial year just passed. For this Trust it equates to 6,200 tones and a cost of £75,000. The Trusts performance is then compared to other participating organisations, which enables a league table to be formed. If the Trust performs well within the league table compared to other participants the Trust will receive back its £75,000 contribution plus 10%. If we perform badly then the Trust could receive its £75,000 less 10%.

As the scheme establishes itself the percentage will rise year on year until it reaches 30%, this percentage could then be applied either way dependant upon the organisations performance.

The CRC is endorsing the fact that carbon production is a revenue consequence and those who fail to reduce will be penalised through this scheme. It is of great concern that this Trust is experiencing an upward Trend in energy use and hence carbon emissions, even though actively engaged in reducing energy consumption it has been identified that new schemes and poor housekeeping is canceling out such reductions which in turn could see future carbon costs for this Trust.

## GOOD CORPORATE CITIZENSHIP (GCC) MODEL

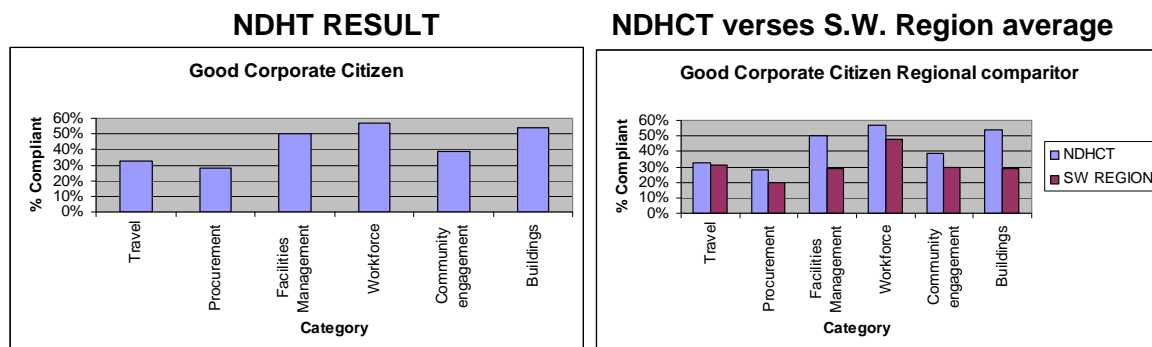
The GCC is another supporting tool for Trusts produced this time by the Sustainable Development Commission, the GCC model contains a self-assessment test of six sections which supports the Trusts approach to the ten key areas listed in the SDU document. This will help the Trust to focus on the key areas of the sustainable agenda by looking at how they buy goods, services, build & manage buildings/land, manage waste, manage transport, employ people working in partnership with others to contribute to healthy local populations. By applying the GCC will allow the Trust to compare against others and demonstrate continual improvement.

Each of the 6 sections was tackled using Trust senior manager leads, the results are as follows:

The test results below are as of September 2009

- |                            |  |
|----------------------------|--|
| 1. Transport -             | Score 18 out of a possible 54 = 33% compliance |
| 2. Procurement -           | Score 15 out of a possible 54 = 28% compliance |
| 3. Facilities management - | Score 27 out of a possible 54 = 50% compliance |
| 4. Employment skills -     | Score 31 out of a possible 54 = 57% compliance |
| 5. Community engagement -  | Score 21 out of a possible 54 = 39% compliance |
| 6. New Buildings -         | Score 29 out of a possible 54 = 54% compliance |

The outcome result has allowed the Trust to be declared individually and in comparison with the South West Regional average



From the above comparator the Trust has scored above the South West Regional average which is an extremely good result. This outcome although recognising past efforts made by the Trust is not a cause for complacency as the focus on sustainability within all NHS Trusts remains high. The above results have been mainly achieved within the facilities directorate and this is now a Trust wide issue. Based on this the average compliance levels are expected to increase dramatically in the next 6 months as the focus increases on the sustainable agenda and other Trusts apply more resources across the ten areas identified within the SDU document. From this self assessment actions plans can be produced to allow Trusts to target areas declaring a poor score.

## WHERE DO WE WANT TO BE

Reducing the NHS carbon footprint/production and emissions has never been more focused. It is clear that the government will achieve this through penalisation or reward, this has been confirmed in the number of direct taxes and levies placed on organisations to comply:-

- Landfill taxes will penalise those who do not recycle & reduce their waste production.
- Emission taxes on vehicles that reward those that drive low emission cars
- Carbon levies placed on electricity, gas & oil
- Performance validation on energy usage within buildings
- Refrigeration performance & validation with removal of damaging refrigerants by 2012
- The Carbon Reduction Commitment which penalises all large consumers of electricity and fossil fuels based on carbon produced

The GCC Model contains a self-assessment scoring process which supports the DOH mandate on NHS Trusts to reduce their carbon footprint and focus on sustainability. This model also allows benchmarking and the ability to demonstrate continual improvement. The SDU document identifies ten clear areas that are required to be targeted and it is key that the Trust must: understand how carbon is produced and can be reduced within these areas. We will address each areas direct and indirect impact on carbon production, understanding that carbon production will have a future cost and must be considered as an important decision maker in any process of selection.

### Key Aims for the Trust

Identified within the SDU document are the following 10 key areas:-

1. Energy & Carbon management;  
To achieve the NHS targets and initiatives set by the Department of Health (DOH)
2. Procurement and food, local sourcing and low carbon purchasing  
The Trust will take every opportunity to minimise wastage, at the buying stage and by understanding the carbon impact of goods procured.
3. Low carbon travel and transport  
Reduce the carbon impact of travel and transport by reviewing the impact the Trust has whilst in the process of delivering its services
4. Water, consumption reduction and management  
To manage and reduce water usage within the Trust as both the supply and disposal of water has a direct impact on carbon production.
5. Waste reduction, streaming and recycling  
To manage, recycle and reduce all its waste streams within the Trust through targeting & monitoring.
6. Designing a better and more energy conscious built environment  
To ensure that all refurbishments and new builds are designed to meet sustainable development and low carbon usage in every aspect of their development.
7. Organisational and Workforce Development  
To ensure that every member of the workforce is encouraged and empowered to reduce waste in their workplace, by ensuring sustainable development is included in every job description.
8. Partnerships and Networks  
Ensure partnership working with internal and external groups to the Trust to tackle the Sustainable agenda. To be part of and support the NHS regional network for sustainable development and take part in workshops and meetings organised to promote this.
9. Assurance

Produce a Board approved sustainable development management plan and interim targets and trajectories to meet the provisions of the Climate Change Act. To provide an annual report outlining the Trust's progress.

#### 10. Finance and risk

The Carbon footprint must be considered and part of all decision processes. That both benefits and penalties of the Carbon Reduction Commitment are understood. In doing so it is accepted as a future cost and revenue issue.

## HOW ARE WE GOING TO GET THERE

The DOH SDU document has targeted many areas that are not Facilities led or managed. This will be a surprise and challenge to many departments within the Trust who were unaware of their impact on carbon produced by the Trust. The practicalities to meet the numerous targets will be extremely difficult at the offset especially in areas where there is no awareness or preparation. These departments will need time to understand the impact of the agenda, to network with other Trusts and colleagues, and in some cases receive training.

It is proposed that in the first year the Trust tackles building related sustainable issues, as this is an area where we have had good results to date. Within the first year the remaining areas will be allocated leads that will then prepare and eventually champion the area they are responsible for, finally joining the Trust's proposed sustainable group, see Structured Approach appendix 1. To ensure that the Trust improves on its present achievements and the score within the GCC, will require us to target and achieve the quick wins, these will be targeted at energy reduction. This approach will then maintain the Trust's carbon reduction and allow other areas and their champions to get up to speed.

The government will penalise those who fail to tackle the sustainable agenda, see Action plans appendix 2 to address this in more detail. The bullet points listed below will act as a reminder of where the Trust will focus in the first year in order to meet this agenda:-

- **The development of a sustainable group to tackle the Sustainable agenda.**
- **All business cases will consider carbon production and impact.**
- **Reduce its waste through waste stream identification, recycling and reduction.**
- **By monitoring & targeting reduce electricity, gas & oil consumption.**
- **Energy Certificates will inform the public on building energy performance.**
- **Electrical consumption will be addressed by identifying new electrical loads.**
- **Ozone damaging refrigerants HFC R22 will replace in all equipment by 2012.**
- **Monitoring usage will reduce water consumption and sewerage return.**
- **Ensure controls are set at optimum levels to reduce fossil fuel consumption.**

The Trust is aware that the above list will grow as the government places a greater emphasis on users to reduce carbon emissions and become more environmentally aware.

## SUMMARY

The Trust is experiencing an upward trend in energy use and carbon production, even though actively engaged in reducing energy consumption. It has been identified that key schemes are canceling out such reductions which in turn could see future carbon costs for the Trust. Therefore to ensure that building related carbon management is addressed the following key action areas have been identified within this document. However unless they are embraced by all, their effect will be limited and the Trust could slip back in the benchmarked data for the SHA:-

- Carbon reduction is considered in all developments and refurbishments.
- By reducing its energy use the Trust will limit financial carbon levies on fossil fuels.
- By applying the electrical saving initiatives this will assist the Trust to reduce its electrical consumption
- Improve controls to ensure the Trust reduces its energy to provide heating/hot water
- Through water consumption identification, reduce water used and sewerage return
- Tackle the issue of refrigeration ozone damaging refrigerants.
- Through waste stream identification, the Trust will further reduce/recycle its waste.
- Through its vehicle purchases the Trust will limit travel pollution
- Regular reports to the executive team will update them on carbon reduction/growth.
- All staff will be made aware of the Trusts Sustainable agenda programme

The SDU document “Saving Carbon Improving Health” has recognised that the sustainable agenda is not just a facilities issue but Trust wide. However it is also recognised that in the first year, energy driven carbon reduction projects will be the focus enabling other departments to get themselves upto speed. To address this the Trust needs a structured approach, this approach has been declared in appendix 1 and recommends a Trust Sustainable Group of key individuals.

By the formation of such a group in the first year will allow the whole sustainable agenda to be communicated to the identified leads within each field. For those leads to be trained, make contact with other groups but mostly to become proficient within the areas they represent. This will then enable feedback and reporting ensuring that the Trust Board, staff and public are kept informed of the Trusts progress on the sustainable agenda.

The DOH has a clear mandate on NHS Trusts to achieve Carbon reduction, thereby producing financial savings, improving the health of the nation and providing a carbon free sustainable future for the NHS. In the long term this will only be achieved by engaging staff at all levels within the Trust who must understand where and how the Sustainable agenda should be considered and by ensuring that it is part of all future decision processes.

## STRUCTURED APPROACH

### Appendix 1

The sustainable agenda covers ten key areas each complementing with the other. To achieve the goals & targets set by the DOH will require a Trust wide input. At the same time promoting the issue of sustainability in decision processes especially the purchasing of goods or services if the Trust is to achieve long term goals and targets set by the DOH.

#### Proposed Sustainable Group

To achieve the wide range of individual targets and goals the Trust needs a sustainable group, the group would be chaired by the Trusts sustainable lead at the offset and then by vote once established, but the membership would be key to its success. It is proposed that within the structure there will be an executive member and a non-executive member, in addition to this senior people capable of influence in their areas as listed below will be asked to attend:

Element	Area	Represented by
1	Energy and carbon management	Facilities
2	Procurement and food, local sourcing and low carbon purchasing	Procurement & Sodexo
3	Low carbon travel and transport	Facilities
4	Water, consumption reduction and management	Facilities
5	Waste reduction, streaming and recycling	Facilities
6	Designing a better and more energy conscious Built environment	Facilities
7	Organisational and work force development	Human Resources
8	Role of Partnership and networks	Communications
9	Assurance	Governance
10	Finance and risk	Finance
	In addition representation from key areas	An exec and non exec, Medicine ward Surgery wards, Women & Children's wards, learning & development, Theatres, Pharmacy, Radiology, OPD, A&E, Pathology, Barnstaple HC, Community hospitals and Devon Partnership Trust

It is anticipated that the group will meet three times per annum and as the group evolves the membership will be reviewed in order to broaden the remit and meet the partnership requirements. The DOH targets will not be achievable unless the Trust forms strong links with other external groups i.e. councils, sustainable groups, public transport operators, cycle to work schemes etc. On an annual basis the group will produce a Board report that will inform them of the Trusts position in regard to meeting the sustainable agenda.

#### Reporting

Within the ten key areas there already exist policies, procedures and protocols for their management. It will be a key part of the above groups remit to ensure that the area they are representing has a sustainable input into these, thereby ensuring that sustainability is interfaced with the long term goal being part of the management and decision processes.

## ACTION PLANS

## Appendix 2

### Energy & Carbon management

### Lead - Facilities management

- Review our environmental impacts and developed an operations plan covering carbon emissions & energy use.
- Meet the DOH and SHA targets levied on the Trust within the timescales set:
  - A 15% reduction on year 2000 by 2012
  - That by 2012 all new builds would achieve 35 to 55 GJ/100m<sup>3</sup>
  - And all existing properties would achieve 55 to 65 GJ/100m<sup>3</sup>
  - Then:-
    - a 10% reduction on year 2007 by 2015
    - a 26% reduction on year 1990 by 2020
    - a 80% reduction on year 1990 by 2050
- Ensure that the CRC is addressed and communicate its impact to the executives and Trust Board
- Communicate plans to staff, patients, visitors and the local community
- Work closely with other parts of the organisation to ensure awareness at all levels
- Confirm progress by external assessment.
- Anticipate the impacts of future policy and legislation and position ourselves to maximise benefits to our organisation

Electrical consumption is a major producer of carbon and therefore electrical equipment will be a key target. By the maintaining of all refrigeration plant and its control it at its most efficient settings and prove by external performance validation, set all air conditioning refrigeration controls to only operate at temperatures of 27oC and above. Where possible all projects to make use of free cooling using outside air. In such cases where refrigerated cooling is provided it will be for clinical areas that fall within the DOH guidance and equipment deemed as business critical. Comfort cooling in non-clinical areas will not be provided. To reduce GHG we will replace all equipment that uses the ozone damaging HFC R22 by 2012. In order to further reduce electrical consumption manage the use of electric heaters where they are not supported by an accepted statement of need. To ensure any possible electrical growth is identified in new projects or equipment purchases.

Fossil fuel consumption, at every opportunity we will consider upgrading to a higher level of insulation to reduce thermal impact and loss. Radiators and local controls are to be set to mid position or lower to reduce heat waste. All projects will get an energy check to identify potential energy and carbon growth with the aim to reduce consumption by 5%. All consultant briefs for all projects will include a requirement to demonstrate inclusion of sustainable design and prove savings. The Trust will inform the public on how good we are at carbon reduction, by displaying the Energy Certificates on all Trust buildings and declaring our building energy performance.

The Trust is aware that the above list will grow as the government places a greater emphasis on users to reduce carbon emissions and become more environmentally aware.

**Procurement and food, local sourcing  
and low carbon purchasing**

**Lead - Procurement & Sodexo**

- Develop a sustainable procurement policy which supports our local community, and minimises environmental impacts, including carbon emissions.
- Engage with those involved in procurement, including clinicians and suppliers,
- Produced a sustainable procurement action plan and communicate it to all staff
- Set ambitious targets to improve our performance.
- Monitor and report the sustainability impacts of the key procurement decisions in our organisation.
- Develop clear evidence that we are minimising environmental impacts and maximising health, social and economic benefits,
- Confirm successes by external assessment
- Consistently challenge ourselves to improve our performance, supporting innovation as a key part of our procurement policy.
- Procurement and food, consider local sourcing and low carbon purchasing

The Trust will take every opportunity to minimise wastage, at the buying stage and by understanding the carbon impact of goods procured. We will work in partnership with suppliers to lower the carbon impact of all aspects of procurement and make decisions based on whole life cycle costs by making carbon impact a consideration issue when purchasing goods or services. The issue of the carbon footprint of pharmaceuticals within the Trust, as with the whole of the NHS will need further research and investigation to produce significant reductions.

**Low Carbon Travel and Transport**

**Lead - Facilities management & Sodexo**

- Ensure responsibility for healthy, sustainable travel is clear in our organisation
- Calculate the carbon footprint of our business travel, fleet and patient transport services, especially the grey fleet.
- Develop a plan with ambitious objectives to reduce travel and traffic, promote active travel and reduce carbon emissions, consistent with the NHS Carbon Reduction Strategy
- Set ambitious targets for carbon reduction and for increasing active travel amongst our staff
- Communicate this plan to staff, patients, visitors and the wider community
- Set a leading example of healthy, sustainable travel for our community
- Demonstrate that our approach contributes to improvements in health, and to meeting our sustainable development objectives, including meeting or exceeding our carbon reduction targets.
- Confirm by external assessment.
- Investigate low carbon travel and transport

Reduce the carbon impact of travel and transport by routinely and systematically reviewing the need for staff to travel. In addition it will consistently monitor business mileage and provide incentives for low carbon transport. Where appropriate encourage home working opportunities. Within healthcare delivery the Trust will promote care closer to home and investigate and encourage the use of telemedicine where appropriate.

**Water, consumption reduction and management****Lead - Facilities Management**

- Review the environmental impacts covering water use
- Set ambitious targets for reducing our water consumption and sewerage disposal.
- Assess the carbon emissions for both water provision & sewerage disposal
- Communicate plans to staff, patients, visitors and the local community
- Work closely with other parts of the organisation to ensure a coordinated approach to water reduction
- Meet the targets as agreed by the Board in 2002:-  
To continually reduce both consumption and sewerage production by a 5% reduction on year 2000 by 2012
- Confirm progress by external assessment.
- Anticipate the impacts of future policy and legislation and position ourselves to maximise benefits to our organisation

Supply and disposal of water has a direct impact on carbon produced, therefore to ensure the efficient use measuring & monitoring of consumptions with quick operational responses to leaks will be adapted. To ensure we have built in efficient use, new innovative design and technology will be adopted to maintain efficient use within a building development. Ensuring that such technology is both water efficient and compliant. To reduce carbon miles through travel by not purchasing bottled water.

**Waste reduction, streaming and recycling****Lead - Facilities management & Sodexo**

- Review and ensure compliance to Waste management Policy guidance
- Identify and monitor all waste streams produced within the Trust
- Implement effective waste segregation within all the Trust properties
- Identify and implement all possible waste recycling/reduction opportunities
- Keep a check on Supplies waste packaging via the stores staff
- Set clear targets and benchmarks
- Confirm progress by external assessment.
- Maintain the Trusts waste monitoring group
- Identify 'Environmental leads' within every ward/directorate

To investigate ways to recycle and reduce its production by reporting on and setting targets on all its waste streams. This will be achieved by identifying methods for recycling and by identifying the waste source. To also look at alternatives especially packaging to minimise the creation of waste in medicines, waste in food and waste in IM&T. Through clinical involvement review its approach to single use items versus decontamination options.

## **Designing a better and more energy conscious built environment**

**Lead - Facilities management**

- Constantly review the Trusts estate performance against energy efficiency
- Ensure as a minimum, we meet the Government's requirement to achieve an Excellent BREEAM Healthcare rating in new buildings and a Very Good rating in refurbishments.
- Develop and apply to all projects an environment assessment for small to medium projects that fall outside the BREEAM criteria.
- Ensure Health and sustainability considerations are a key part in our building and refurbishment projects from planning through to completion and operation.
- Monitor and report on environmental and carbon impacts of our building and refurbishment projects prior to development and after development. To include energy usage and carbon emissions.
- Engage with key partners and suppliers to find ways to improve our performance.
- Aim to find new technology and innovative ways to improve our performance.

To ensure that all refurbishments and new builds are designed to encourage sustainable development and low carbon usage in every aspect of their development. To include resilience to the effects of climate change and incorporating energy management control strategies. At the same time taking into consideration direct and indirect impacts i.e. transport links, service delivery and ensuring community engagement. That all future designs will achieve low carbon healthcare buildings.

## **Organisational and Workforce Development**

**Lead – Human Resources**

- Carry out an impact assessment and use this to develop an employment strategy addressing the Trusts sustainable targets.
- Include sustainable development objectives in our induction process
- Put in place measures to help local, disadvantaged, marginalised and long-term unemployed people access jobs.
- Continually invest in training and development, within our organisation and our community.
- Ensure that sustainable development objectives are included in all job descriptions for Chief Executives, other executive directors and all senior management.
- Ensure that sustainable development is integrated into all staff duties and work and that all staff have sustainable development in their objectives.

To ensure that every member of the workforce is encouraged and empowered to take action to reduce waste in their workplace. Ensure that staff are supported by promoting increased awareness and where appropriate look at alternatives like encouraging home working, the use of IM&T, pursuing low carbon travel options and by ensuring sustainable development is included in every job description.

**Partnerships and Networks****Lead – Communications and Patient Liaison**

- Ensure that the importance of community engagement in supporting our local population build healthy, sustainable lives is understood and in our strategy.
- Assess our work on community engagement and develop an action plan with clear social, economic and environmental objectives.
- Communicate such planning to all of our staff
- Measure and report on the social, economic and environmental benefits of our community engagement, including reducing health inequalities.
- Through such involvement we will build up an evidence base to inform future policy and decisions of our organisation
- Aim to set a leading example of community engagement and empowerment that promotes health and sustainable development.
- Demonstrate that our action plan has helped to empower the local community, reduced health inequalities, and led to other social, economic and environmental benefits, including carbon reduction.
- Encourage innovation in community engagement throughout the Trust.

Ensure partnership working with internal and external groups to the Trust to tackle the Sustainable agenda. To be part of and support the NHS regional network for sustainable development and take part in workshops and meetings organised to promote this.

**Assurance****Lead – Governance**

- The Trust will maintain its membership of the Good Corporate Citizenship Assessment Model to demonstrate continual improvement.
- Produce a Board approved sustainable development management plan.
- The Trust will set itself interim targets and trajectories to meet the provisions of the Climate Change Act. To be set at 10%, as a minimum, of the 2007 levels by 2015.
- Recognise Carbon reduction and sustainable development are corporate responsibilities and should be an inherent part of each organisation's performance and governance mechanisms.
- That sustainability and the environmental impact of services are an integral part of quality standards.
- The trust will remain a member of the NHS sustainable development regional networks to further deliver on this agenda.

Produce a Board approved sustainable strategy and interim targets and trajectories to meet the provisions of the Climate Change Act. Carbon reduction and sustainable development are corporate responsibilities, this will be achieved by working with the Strategic Health Authorities and Regional Government Offices to ensure that the Trust delivers carbon reduction through its commissioning frameworks and on its sustainability commitments within Local Area Agreements.

**Finance & Risk****Lead – Finance**

- The Trust will develop carbon literacy and embed carbon reduction in their financial mechanisms.
- Recognise the need to include carbon production in all developmental and purchasing decision making.
- The Trust will take advantage of schemes which support investment in energy efficiency initiatives.
- Ensure appropriate investment to meet the commitments required to become part of a low carbon NHS
- Understand the penalties and rewards in preparation for a carbon tax regime.
- Encourage partnership working to deliver appropriate incentives, economies and training to support this shift in culture
- Will 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.

The Trusts Carbon footprint must be considered and be part of all decision processes, in particular that both benefits and penalties of the Carbon Reduction Commitment are understood and In doing so it is accepted as a future cost and revenue issue. This will ensure that the carbon impacts on both services and goods are a part of every decision process and decisions will be made understanding the potential impact for the Trust. To achieve a low carbon NHS organisation will require appropriate investment.

### EIA Form (for strategies) – Appendix 3

Equality Impact Assessment Screening Form			
<b>Title</b>	Northern Devon Healthcare NHS Trust Sustainability Strategy		
<b>Author</b>	Robert Lowe		
<b>Directorate</b>	Facilities		
<b>Team/ Dept.</b>	Support Services		
<b>Document Class</b>	<b>Document Status</b>	<b>Issue Date</b>	<b>Review Date</b>
Strategy	Draft for approval	May 2010	May 2013
<b>1</b>	<b>What are the aims of the document?</b>		
	<p>The UK government has raised the profile of Sustainability and placed a mandate on all its major energy users with a goal to reduce energy consumption and carbon emissions. The NHS as one of the world's largest organisations has an obligation to reduce its consumption and use of resources, at the same time ensuring that there is no loss in the quality of delivered healthcare services.</p>		
<b>2</b>	<b>What are the objectives of the document?</b>		
	<p>This Strategy has been produced in response to the government mandate on all UK major users of resources to reduce carbon emissions. The NHS as one of the world's largest organisations has an obligation to reduce its consumption and use of resources, at the same time ensuring that there is no loss in the quality of delivered healthcare services. To address this requirement within the first year this is planned to be met by the following key actions:-</p> <ul style="list-style-type: none"> <li>• Carbon reduction will be considered in all developments and refurbishments.</li> <li>• By reducing energy use the Trust will limit financial carbon levies on fossil fuels.</li> <li>• Improve building controls to ensure the Trust reduces its energy to provide heating/hot water</li> <li>• Maintain space temperatures at a level that is within NHS best practice &amp; guidance documents.</li> <li>• Encourage appropriate dress codes to avoid the need for over temperature in areas.</li> <li>• Through water consumption identification, reduce water used and sewerage return</li> <li>• Provide refrigerated cooling only to areas that have a clinical need or are deemed business critical</li> <li>• Through its vehicle purchases the Trust will address travel pollution</li> <li>• Identify key leads for the areas within the Good Corporate Citizenship model</li> <li>• Set Carbon reduction as part of the annual objectives for key leads and</li> </ul>		

	<p>managers</p> <ul style="list-style-type: none"> <li>Regular reports to the executive team to update them on carbon reduction/growth.</li> </ul> <p>The governments mandate although clearly targeting carbon reduction can change in focus, direction and priority. It is therefore planned that the above actions will be reviewed annually by the proposed Sustainability group and changed accordingly. To ensure that this group has executive representation it is proposed that membership should consist of both an executive and non executive member.</p>
<b>3</b>	<p><b>How will the document be implemented?</b></p> <p>The DOH has a clear mandate on NHS Trusts to achieve Carbon reduction, thereby producing financial savings, improving the health of the nation and providing a carbon free sustainable future for the NHS. In the long term this will only be achieved by engaging staff at all levels within the Trust who must understand where and how the Sustainable agenda should be considered and by ensuring that it is part of all future decision processes. This document sets the foundation for this Trusts journey to achieve that mandate.</p>
<b>4</b>	<p><b>How will the effectiveness of the document be monitored?</b></p> <p>To achieve the wide range of individual targets and goals the Trust needs a sustainable group, the group membership would be key to its success. It is proposed that within the structure there will be an executive member and a non-executive member, in addition to this senior people capable of influence in their areas. In order to broaden the remit and meet the partnership requirements the Trust will form strong links with other external groups i.e. councils, sustainable groups, public transport operators, cycle to work schemes etc. On an annual basis the group will produce a Board report that will inform them of the Trusts position in regard to meeting the sustainable agenda.</p>
<b>5</b>	<p><b>Who is the target audience of the document?</b></p> <p>All staff.</p>
<b>6</b>	<p><b>Is consultation required with stakeholders, e.g. Trust committees and equality groups?</b></p> <p>No</p>
<b>7</b>	<p><b>Which stakeholders have been consulted with?</b></p> <ul style="list-style-type: none"> <li>Waste management</li> <li>Maintenance manager</li> </ul>
<b>8</b>	<p><b>Equality Impact Assessment</b></p> <p>Please complete the following table using a cross, i.e. <b>X</b>. Please refer to the document “A Practical Guide to Equality Impact Assessment”, Appendix 3, on Tarkanet for areas of possible impact.</p> <ul style="list-style-type: none"> <li>Where you think that the policy could have a <b>positive</b> impact on any of the equality group(s) like promoting equality and equal opportunities or improving relations within equality groups, put a cross in the ‘Positive impact’ box.</li> <li>Where you think that the policy could have a <b>negative</b> impact on any of the equality group(s) i.e. it could disadvantage them, put a cross in the ‘Negative</li> </ul>

<p>impact' box.</p> <p>Where you think that the policy has <b>no impact</b> on any of the equality group(s) listed below i.e. it has no effect currently on equality groups, put a cross in the 'No impact' box.</p>				
Equality Group	Positive Impact	Negative Impact	No Impact	Comments
Age			X	
Disability			X	
Gender			X	
Race / Ethnic Origins			X	
Religion or Belief			X	
Sexual Orientation			X	
<p>If you have identified a negative discriminatory impact of this procedural document, ensure you detail the action taken to avoid/reduce this impact in the Comments column. If you have identified a <b>high</b> negative impact, you will need to do a Full Equality Impact Assessment, please refer to the document "A Practical Guide to Equality Impact Assessments", Appendix 3, on Tarkanet.</p> <p>For advice in respect of answering the above questions, please contact the Equality and Diversity Lead.</p>				
9	<p><b>If there is no evidence that the document promotes equality, equal opportunities or improved relations, could it be adapted so that it does? If so, how?</b></p>			

**Completed by**

<b>Name</b>	Robert Lowe
<b>Designation</b>	Deputy Estates Manager
<b>Trust</b>	Northern Devon Healthcare NHS Trust
<b>Date</b>	22 April 2010