

## Guidance Document – April 2008

### Vision

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To stimulate action for the Public Health role to address climate change and promote sustainable communities to ensure health improvement and reduce inequalities.

### Audience

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Addressing climate change is everyone's responsibility. This Guidance Document is specifically targeted at the role of Public Health in leading and influencing the wider agenda including: Local Authorities, LSPs, PCT commissioners, NHS Trusts, SHA, Public Health communities, Social Services, Employers, Voluntary and Community Sector, and Citizens with an interest in promoting sustainability and addressing climate change.

### Why Climate Change is Important

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**Overview:** Climate change has been a matter for scientific and political concern since the 1980s. But it has gained special prominence in the UK following the release of the Stern Review on the Economics of Climate Change and the recent scientific reports of the Intergovernmental Panel on Climate Change (IPCC), which together provide decisive evidence of the role of human activities in changing the climate, the potential impacts on our society and ecosystems and the urgent need to take action to reduce greenhouse gas emissions, and adapt to these impacts. The risk of not acting now threatens the widening of health inequalities, whereas the benefits of strong and early action results in potential gains to health improvement.

#### Climate change is important for a host of reasons:

**Global issue** – Climate change is global in its causes and consequences, and solving the problem requires an international collective action. It poses increased threats to global food security, social cohesion, conflicts, migration, security, natural disasters (flooding/droughts) and links with the Chief Medical Officer's (CMO's) Global Health Strategy.

**Magnitude** – The impact of climate change is already being felt. The sheer magnitude of the challenge based on predicated climate change models is formidable. It will not affect human health in isolation, but will simultaneously affect ecological, economic, social, political and demographic changes widening health inequalities between rich and poor parts of the world.

**Economics** – It presents a unique challenge for economic strategies: it is the greatest and widest-ranging market failure ever seen. By not acting, the overall costs and risks of climate change will be equivalent to losing at least 5 – 20% of global GDP each year, (Stern Review, 2006).

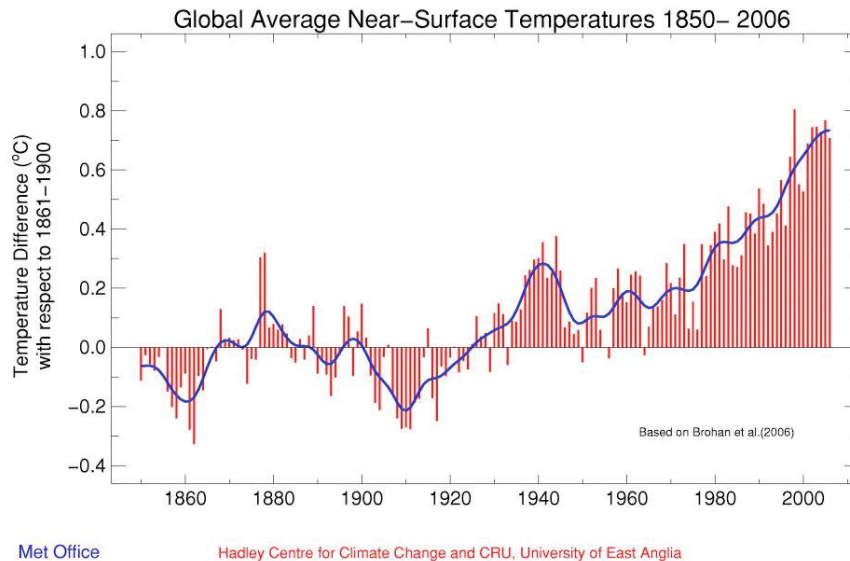
**Health** – If not addressed, climate change will impact negatively, countering the dramatic improvements in health and life expectancy achieved so far. Some of the measures taken to reduce greenhouse gas (GHG) emissions are themselves likely to have a positive impact on health for e.g. promoting active transport resulting in improved physical health and reduced obesity, improvements in air quality leading to reduced respiratory illness.

**Feasibility of solutions** – Tackling climate change is daunting but doable. There are several examples of where Government policy has overcome similar challenges for e.g. the government's Clean Air Act of 1956, in response to the 'Great Smog of 1952' and the '1987 Montreal Protocol' banning chlorofluorocarbons to tackle ozone depletion are evidence to this. However, these problems were simple and technically easy to address compared to climate change. Even so, there is a range of cross cutting mitigation and adaptation options that can make a significant impact on the climate problem; strong, deliberate policy action is required to motivate their take-up.

**Challenges** – Climate change poses unprecedented challenges ranging from global policy challenges to personal and social action; for example, aviation policy contains competing agendas in pushing reduction/maintenance in aviation impacts.

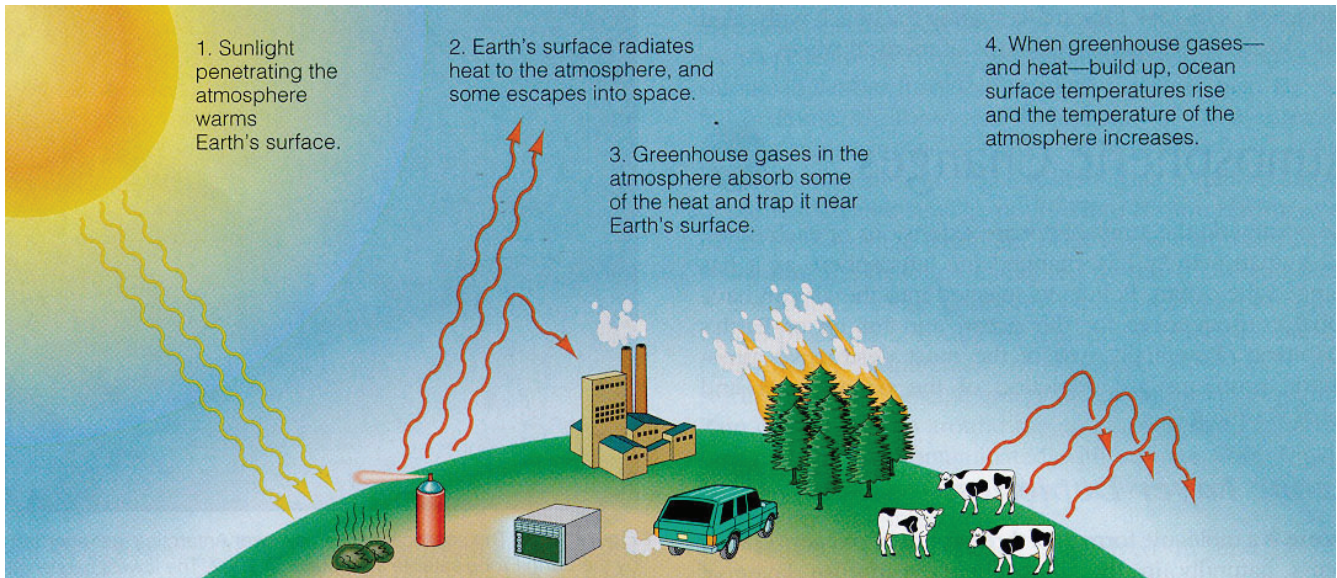
## What is Climate Change?

The climate is changing. Over the past century, global mean temperatures have increased by 0.74°C and signs of this are now evident in many of the Earth's natural systems, including changes in our weather patterns and ecosystems. In the UK, 2006 was the warmest year in the last 348 years.



There is strong evidence that much of the warming seen over the past half century is a result of human emissions of greenhouse gases, predominantly carbon dioxide released from fossil fuel use and deforestation.

Since the pre-industrial period, carbon dioxide levels in the atmosphere have risen by 35%. The accumulation of carbon dioxide, and other GHGs such as methane and nitrous oxide, has a warming effect on the climate through enhancing the natural “greenhouse effect”. More information on this process can be found at [www.climatechallenge.gov.uk](http://www.climatechallenge.gov.uk)



Source: [plaza.ufl.edu/knhuang/project2/cause.html](http://plaza.ufl.edu/knhuang/project2/cause.html)

If emissions continue unabated, temperatures are projected to rise by between 1.1°C and 6.4°C above 1990 levels by the end of the century (see IPCC, 2007). This warming would be accompanied by many other changes, such as rising sea levels, changing weather patterns and an increased prevalence of many types of extreme events, including heatwaves, droughts and flooding. Such changes will have mixed effects on our society, some positive and some negative. However, as temperatures rise, the risks of severe and widespread negative impacts will increase.

## Potential Health Impacts of Climate Change in the UK

Climate change will have the following potential health and wider societal impacts:

- **Heatwave-related health problems:** Heatwaves are projected to become more frequent resulting in increased heat and pollution-related illness & deaths as a result of hotter, drier summers. The very old & young, chronically ill and poor are most susceptible
- **Cold-related illness & deaths:** Cold-related illness, falls, crashes and deaths are likely to decline due to warmer, wetter winters<sup>1</sup>
- **River, coastal flooding & flash floods:** The risk of major flooding disasters caused by severe winter gales, heavy rainfall and coastal erosion will potentially increase contamination of drinking water, increase water borne infections and exposure to toxic pollutants, accompanied with psychological consequences, disruption, injuries and deaths. Later effects of flooding include stress and mental health problems. River floods or storm surges, which can be forecast several days in advance, have fewer casualties compared to flash floods where there is no prior warning
- **Infectious diseases:** Cases of food poisoning (Campylobacter infections, Salmonellosis) and water borne disease (Cryptosporidiosis) linked to warm weather are likely to increase

<sup>1</sup> The IPCC Climate Change 2007: "The Physical Science Basis" policy states that based on current model simulations, it is very likely that the Meridional Overturning Circulation (MOC) of the Atlantic Ocean will slow down during the 21st century. But, it is very unlikely that the MOC will undergo a large abrupt transition during the 21st century. Longer-term changes in the MOC cannot be assessed with confidence. Currently, this can be regarded as a high impact-low probability event, with the potential consequence of the temperature over the UK lowering by 3-5°C. Any such weakening would have the effect of slowing warming rather than leading to cooling.

- **Vector-borne diseases:** (ticks and Lyme disease) may present local problems due to changes in the ecosystem, but the increase in their overall impact is likely to be small
- **Sunburn and skin cancer:** are likely to increase because of greater exposure to warmer weather
- **Possible ancillary health benefits:** such as increased physical activity due to extended warm weather but outcomes could be worse due to extreme heat. Possibly healthier eating if sustainable farming and food policy are adopted
- **Extreme weather-related events (natural disasters, droughts, hurricanes):** leading to social disruption, injuries, deaths, disability, migration, homelessness and food shortages.

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## Evidence of European climate change events and health scenarios

Increases in such impacts have been observed during recent decades and are projected to escalate further with changing climate.

- The heatwave in August 2003 caused over 35,000 excess deaths in Europe
- When the ambient temperature is at least 5°C, Cases of salmonellosis rise by 5-10% for each 1°C increase in mean weekly temperature
- Floods have hit European countries in recent years, causing deaths, injuries, and diseases, and their frequency is expected to increase
- Lyme borreliosis and tickborne encephalitis have spread into higher latitudes (as seen in Sweden) and altitudes (such as in the Czech Republic) in recent decades
- The average length of the growing season of plants with allergenic pollen and other elements causing allergic sensitivity has increased by 10-11 days over the past 30 years.

**Cited by Menne and Bertollini in BMJ Editorial:  
Health and climate change: a call for action, 2005**

The UK is already at the edge of a zone of increased risk of bluetongue virus. This affects sheep and cattle and has spread through southern Europe because of recent climate warming in the region.

**Foresight. Infectious Diseases: preparing for the future. Executive Summary.  
Office of Science and Innovation, London (2006)**

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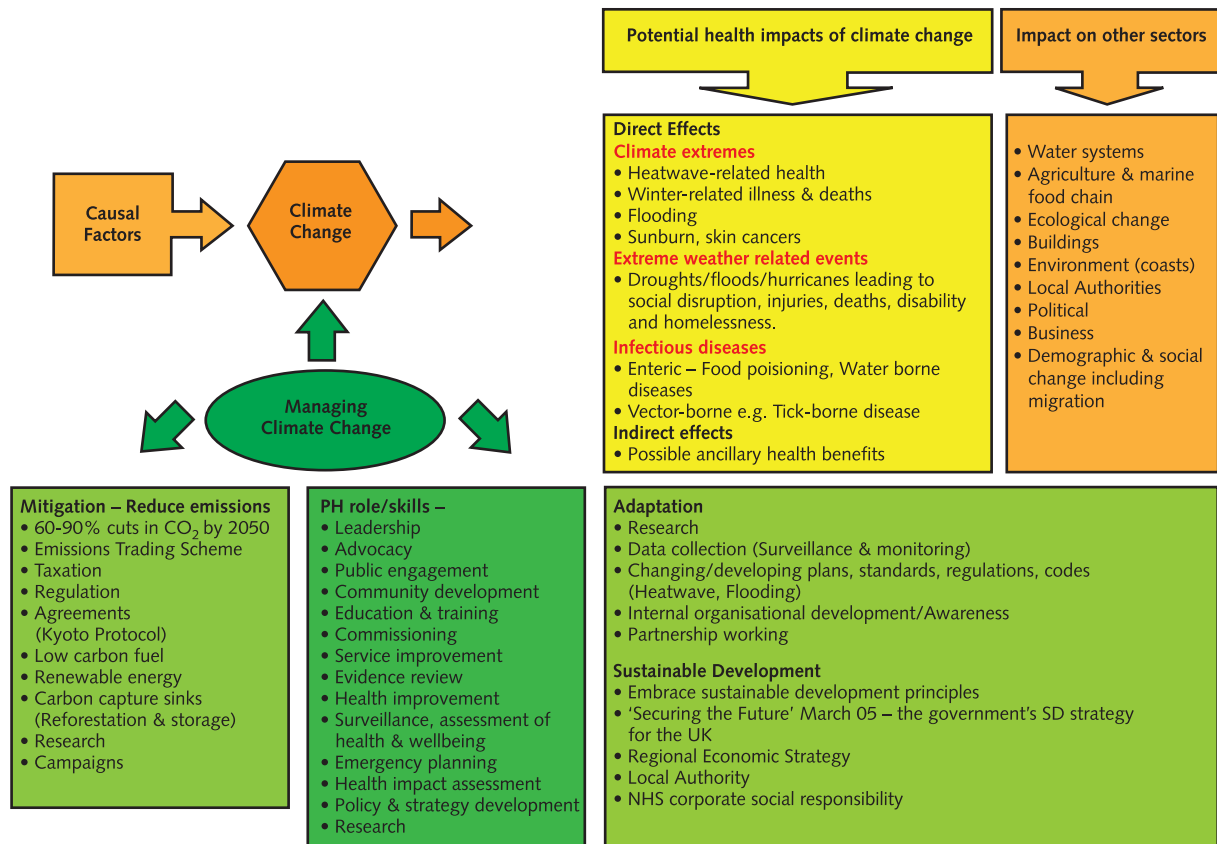
## Major global threats of climate change

Climate change will amplify health disparities between rich and poor parts of the world. Health will be further affected by changes in the water cycle due to drought and flooding. The World Health Organization (WHO) estimates that since the 1970s, climate change is already responsible for over 150,000 deaths each year through increasing incidence of diarrhoea, malaria and malnutrition, predominantly in Africa and other developing regions. The numbers are expected to double to 300,000 deaths each year by 2030.

**Source: WHO (2006) based on data from McMichael et al. (2004)  
cited in the Stern review**

## Coping with Climate Change

Anticipating the impacts of climate change will help reduce the severity on health.



### Climate Change: Managing Health Impact (partly adapted from WHO)

#### What Works

We need to take a two-fold approach to tackling climate change:

**Mitigation** – which will reduce the level of greenhouse gases and thus reduce the likelihood of future dangerous climate change; and

**Adaptation** – to deal with the impacts of climate change that we are already experiencing and cannot avoid in the future due to the inertia of the climate system.

#### MITIGATION POLICIES

These minimise future impacts of climate change by reducing or stabilising GHG emissions. Action is being taken both in the UK and internationally to reduce GHG emissions, to moderate global warming. The UK supports the EU's target to limit warming to 2°C above pre-industrial levels and in line with this, has committed to reducing carbon dioxide emissions by 60% below 1990 levels by 2050. This is a crucial first step towards stabilising the climate. The 2°C target is a realistic precautionary limit, but is not completely risk free and action must be taken to adapt to the impacts of this warming. Further information on the UK's actions to reduce domestic emissions and promote international action can be found at: [www.climatechallenge.gov.uk](http://www.climatechallenge.gov.uk). Financial (taxation), trade, regulatory, technological and behavioural approaches to mitigation policies are signposted within the resources section of this fact sheet.

Historically, the NHS has been subjected to a series of energy targets. As a consequence of the Climate Change Programme in 1998, the DH set mandatory energy saving and efficiency targets on the NHS from 2000 to 2010.

These require the NHS to:

- Reduce primary energy by 15% from 2000 to 2010 or 0.15 MtC (million tonnes carbon)
- Meet an energy efficiency performance target of:
  - 35-55 GJ/100m<sup>3</sup> for new capital developments, major redevelopments or refurbishments
  - 55-65 GJ/100m<sup>3</sup> energy efficiency for all existing facilities

Regulation from the *EU ETS and Energy Performance in Buildings Directive* have additionally been key drivers for reducing carbon emissions and capturing cost savings.

### ADAPTATION POLICIES

These include measures to cope with the unavoidable impacts of climate change. A certain amount of change is inevitable and societies need to adapt to the most severe impacts. This can be done by assessing what the health and non-health impacts might be for the UK and to develop strategies and tools for dealing with them. The UK Climate Impacts Programme (UKCIP) is currently the main source of advice on preparing for climate change. Defra is developing an '*Adaptation Policy Framework*' to ensure that adaptation policies across government sectors are developed in a coherent way. The framework helps identify key risks and opportunities and coordinates approaches common across a range of organisations. The Climate Change Bill will provide a legislative framework for action. It requires the Government to undertake a national risk assessment and develop a programme to respond to those risks, as well as power for the Secretary of State to require public authorities to assess and address the need to adapt to climate change.

A mixture of both mitigation and adaptation approaches are necessary to tackle climate change.

For 'Health and Health Services' the framework would potentially include the following adaptation activities:

<b>A possible adaptation framework for health</b>	
Research	<p><b>Scoping Studies:</b> on the impacts of climate change on health. The 2001 and 2008 DH reports on the 'Health Effects of Climate Change in the UK'</p> <p><b>Health Impact/Adaptation Assessment:</b> include identification of vulnerable groups in order to target adaptation</p> <p><b>Climate Scenarios:</b> UKCIP has published a set of climate change scenarios for the UK (to be updated in 2008 as UKCIP08). Based on these scenarios, the UK is likely to face:</p> <ul style="list-style-type: none"> <li>• Rising sea levels</li> <li>• More extreme events such as heatwaves &amp; torrential downpours</li> <li>• Hotter, drier summers</li> <li>• Warmer, wetter winters, with more frequent storms</li> </ul> <p><b>Risk assessment and communication:</b> of climate risks</p>
Data Collection	<p><b>Surveillance &amp; monitoring climate impacts:</b></p> <ul style="list-style-type: none"> <li>• Provide early warning systems and trend data</li> <li>• Assess the magnitude of the impacts</li> <li>• Provide research data on climate variables, social conditions &amp; health indicators [HPA(infections), Hospitals(acute data), Cancer Registry(Cancer incidence), PHO(admissions), Environment Agency/Met Office (Temperature/Precipitation/Sea-level rise/Storms), PCTs (PH information)]</li> <li>• Improve predictive models to suggest vulnerable regions</li> <li>• Evaluate adaptation strategies</li> </ul>
Changing/ Developing Plans, Standards, Regulations, Codes	<p><b>Changes in infrastructure</b> (e.g. design buildings that stay cool in hot weather, warm in winter &amp; are flood-resilient),provision of post-flood support; Spatial planning – appropriate land use; Planning – incorporating energy efficiency, transport planning</p> <p><b>Plans/guidelines for handling weather related events include:</b>  <i>The Heatwave Plan for England</i> – protecting health and reducing harm from extreme heat and heatwaves  <i>SunSmart</i> – the UK's national skin cancer prevention campaign  <i>Keep Warm, Keep Well</i> – campaign giving information and advice about staying well in winter by keeping warm</p> <p><b>Flooding</b></p> <ul style="list-style-type: none"> <li>• <i>HPA Information for residents whose homes have been flooded</i> – general advice on protecting against infection, and specific advice about returning to a flooded home, food preparation and storage and drinking water.</li> <li>• <i>Flood and coastal defence, April'04</i> – a DTI Foresight report on future flooding identified the biggest health impacts as being from pollutants, foul water and mental health.</li> <li>• <i>Making space for water, July'04</i> – a DEFRA approach on flood prevention, management and adaptation strategies to reduce the impact of flooding.</li> </ul> <p><b>Strengthening Public Health programmes</b>  <i>Health protection</i> through vaccination/prophylaxis programmes for diseases such as tick-borne encephalitis</p>
Organisational Development	Consider actions for Sustainable Development (Good Corporate Citizenship) in Trusts
Partnership Working	Reflect on cross disciplinary working/private/voluntary sector/community/primary care/acute trust/ambulance/local authority
Accept Impacts and Loss/Risks	Include climate risk and costs into health policy; Overarching drivers and constraints; Low investment in Public Health; Culture and values (short-termism v/s longer, silo working v/s partnership, local v/s global)
Exploit Opportunities	Focus on inequalities, labour market impact, efficient supply management, sustainable funding, ancillary health benefits, environmental impact

## The Heatwave Plan for England – protecting health and reducing harm from extreme heat and heatwaves (2007)

The plan was published in response to concerns that climate change will increase the frequency of heatwaves. It details a 'Heat-Health Watch' that operates from June 1 to September 15. Based on regional threshold temperatures (ranging between 28-32°C at day and 15-18°C at night). There are **3 levels** of response:

- **GREEN: Summer Preparedness and Long-Term Planning** – Joint planning, awareness and background preparedness.
- **AMBER: Alert and Readiness** – Triggered when forecasts for threshold temperatures will be exceeded at least 3 days ahead in any region/an 80% chance of extremely high temperatures for 2 consecutive days. Ensure readiness and swift action.
- **RED: Heatwave Action** – Triggered when threshold temperatures are reached in any region. Specific actions are targeted at high risk groups. An Emergency State may be triggered if heatwave severity threatens the integrity of, or extends beyond, the health and social care systems.

### Physiology of heat-related illness:

Thermoregulation is controlled by the hypothalamus, and the body's natural response to heat stress is to return core body temperature to a normal range. Heat related illness occurs when the brain fails to control its own "thermostat". The elderly, chronically ill (e.g. heart conditions, diabetes, respiratory or renal insufficiency, Parkinson's or serious mental illness) and certain medications (e.g. drugs that cause dehydration/electrolyte imbalance, reduce renal function and arterial pressure, interfere with thermoregulation and alter alertness) affect the body's natural response to heat stress.

### Heat related illness:

The main causes of illness and death during a heatwave, are due to increased respiratory and cardiovascular diseases. Part of the increased respiratory disease may be attributable to worsened air pollutant (O<sub>3</sub> & PM<sub>10</sub>) levels. Increased cardiovascular disease occurs because the heart is put under strain, with extra blood circulated to the skin in large volumes in order to cool the body.

- **Heat cramps** – are caused by fluid and electrolyte imbalances, often caused by exertion.
- **Heat exhaustion** – is milder, more common than heat stroke. It occurs both as water or sodium depleted types, with non specific features of malaise, vomiting, and circulatory collapse. Core temperature is between 37-40°C. Left untreated, heat exhaustion may evolve into heatstroke.
- **Heat stroke** – can become a point of no return where the body's thermoregulation mechanism fails. This becomes a medical emergency with symptoms of confusion, disorientation, convulsions, unconsciousness, hot dry skin and core body temperature exceeds 40°C. It can result in organ failure, brain damage or death.

### At risk groups:

- **Older people:** especially women over 75 years old and/or living on their own and socially isolated, or in a care home
- **Chronic and severe illness:** medications can make this group more vulnerable
- **Inability to adapt behaviour to keep cool:** having Alzheimer's, a disability, being bed bound, too much alcohol, babies and the very young, a previous heat stroke
- **Environmental factors:** include the urban heat island effect, living in a top floor flat. Over exposure to heat can occur if homeless or from high levels of physical exertion, especially in the heat of the day.

### Advice and information:

#### Individual behaviour:

- **Stay out of the heat** especially from 11:00am-3:00pm, stay in the shade, wear a hat & light loose fitting cotton clothes, sprinkle clothes with water, limit physical activity & include rest periods
- **Drink plenty of water;** frequent cool showers/ baths, use of a cold compress on the neck
- **Eat cold foods,** particularly salads and fruit, which contain water. Avoid alcohol and caffeine
- **Check on older people** and children

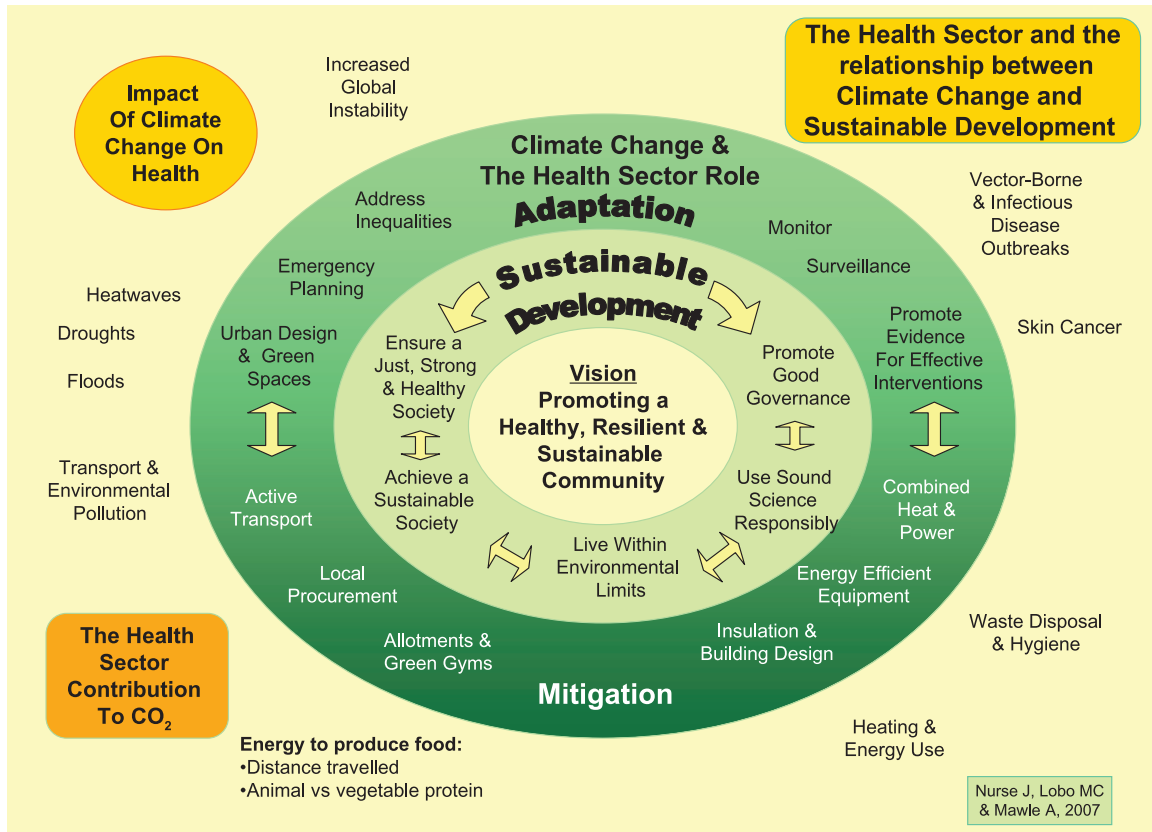
#### Primary care trusts, acute trusts, care homes, voluntary sector and local authorities:

- **Aim to create cool rooms** or areas below 26°C by increasing external shading e.g. vegetation or solar shading, increase internal shading e.g. curtains, shutters, increase ventilation e.g. open windows at night to cool buildings. Cool individuals as suggested above
- **Raise awareness** and cascade updated guidance & leaflets, vigilance for heat illnesses identifying individuals at risk and directing protective measures, check resilience, surge capacity and emergency responses

More information on the Heatwave Plan for England, which also includes advice on long term planning, can be found at: [www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_074539](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_074539)

## Ways Forward

Sustainable development and climate change are interrelated. Aspects of sustainable development contain the solution to addressing climate change, as illustrated in the diagram below. The UK's Sustainable Development Strategy (UK SDS) 'Securing the Future', meets the challenge of moving to a low carbon society through the 5 shared UK principles of sustainable development.



Although adaptation and mitigation are seen as two separate entities, in reality there is overlap between these areas. For example, insulation reduces carbon emissions and also helps stabilise building temperatures and protect against heatwaves.

### What the Public Health workforce can do:

Because of the level of risk and size of the health impact, climate change should be at the core of the Public Health agenda. There are a number of Public Health measures that represent opportunities to address climate change and promote sustainable development:

- Take a lead in mainstreaming climate change, simple changes in lifestyle and advocating the health benefits and financial savings of producing less carbon
- Coordinate policy and legislation related to environment and energy
- Influence the development of future strategies/policies/plans to ensure consistency with reducing the impact of climate change
- Promote partnership working with local authorities, Met Office, NHS trusts, social services, private, voluntary and community sectors on climate change initiatives
- Assess the health impacts of climate change, particularly health inequalities and vulnerable groups to inform adaptation action plans; including risk assessment (identifying costs and benefits) of adaptive strategies
- Integrate climate change effects into health promotion and health protection functions

- Public Health monitoring, better disease surveillance, early warning systems and research
- Use the UK Climate Impacts Programme (UKCIP) scenarios and decision-making tools to inform risk management
- Share expertise and experiences on the integration of climate change into Public Health activities; use conferences as an opportunity for discussion and analysis
- Collaboratively work through networks to coordinate and facilitate approaches to climate change policy development
- Engage with and help individuals and communities understand their health situation with the impact of climate change. Public Health has a role in informing, persuading and ultimately changing behaviour of both professionals and the public
- Guide public participation to encourage sustainable living
- Strengthen Public Health infrastructure including disaster and emergency preparedness
- Commit to the **UK Public Health Manifesto – The Convergence of Health and Sustainable Development** – Public Health sign up to sustainable development
- Ensure that climate change is incorporated into **Joint Strategic Needs Assessments, Integrated Assessments** and **Sustainability Appraisals**

### What Health Organisations can do:

The NHS is the largest energy user in the Government estate, consuming, around 45 million gigajoules (GJs) of energy annually. It emits around 900,000 tonnes of carbon per annum, and has an energy bill of approximately £400 million. But, it can deliver energy savings in excess of 15% by investing in a range of measures with paybacks of less than seven years. This includes measures from *simple good housekeeping no-cost measures* such as resetting controls, switching off computer monitors & lights when not in use, up to those with paybacks of seven years, such as Combined Heat and Power (CHP).

There are several actions the DH has undertaken towards reducing emissions through the DH Estates & Facilities Division (DH EFD) in association with the Carbon Trust:

- Monitoring NHS progress against the energy targets, using the ERIC database (Estates Returns Information Collection System). A recent mid term report "*Statistics on energy performance and carbon and CO<sub>2</sub> emissions*" shows that whilst the energy performance of the NHS is improving with over 70% meeting the mandatory targets of energy efficiency, the NHS is unlikely to meet the overarching energy saving target
- Managing the £100m funding programme to help NHS organisations put in place improvements in electrical efficiency, building insulation and combined heat and power (CHP) installations
- Produced **Health Technical Memoranda 07-02 EnCO<sub>2</sub>de-Making Energy Work in Healthcare**, which provides advice and guidance to trusts on energy/carbon management
- Introduced the **NHS Environmental Assessment Tool (NEAT)** in which the NHS has to achieve score ratings for new builds and refurbishments

### Health services can do several things about climate change

- Create awareness of the scale and unavoidable nature of the problem, the changes we can make to mitigate and adapt to it and debate the health implications of climate change
- Push for concepts such as '**Sustainable Development**' on the health agenda. The Sustainable Development Commission's (SDC) **Healthy Futures** team works with health to

spread sustainability good practice and includes tools and publications on Sustainable development opportunities for the NHS, *Sustainable development and Food, Buildings, Transport, Good Corporate Citizenship and Natural Environment and Well Being*

- Get organisational sign up; identify a '**Carbon Champion**'. Conduct **Energy Audits** for buildings by linking with the *Carbon Trust's NHS Carbon Management (NHSCM) Programme*. Identify practical energy efficiency measures based on audit findings and set a target for becoming carbon neutral. Consider **Total Waste Management** units and **Sustainable Procurement**. Lead by example and share good practice
- Ensure that policies, programmes and plans are climate risk assessed for heatwaves and flooding, to take into account the impacts that unavoidable climate change will have on them. The Heatwave Plan recommends greening hospital grounds to reduce heat and flooding. Additionally, the UK Climate Impacts Programme produces a number of tools to help organisations
- Make the case for reducing obesity & accidents, increasing exercise levels, improving air quality, well-being and a healthier local population through sustainable development
- Persuade health professionals/the public to alter behaviour patterns that contribute to climate change e.g. teleconferencing instead of air travel for international medical conferences, promote active transport and public transport
- Include climate change in the curriculum for health care professionals

### Examples of Good Practice (based largely on the SDC library of case studies)

*North Bristol NHS Trust* – has launched "**Earth Matters**" an environmental awareness campaign to increase understanding on the consequences of wasting energy and water, and improving environmental performance

*East Kent Hospitals Trust* – through the "**Renal Unit Waste Water Reclaim**" project recycled wastewater within the renal unit, reducing water use by 37%

*Cardiff and Vale NHS Trust* – The "**Environmental Management System**" has reduced energy consumption, clinical waste and water usage

*Addenbrooke's Hospital* – "**Travel Plan**" uses a package of measures to promote healthy and sustainable travel – with priority car parking for car sharers, improvements to bus services & pool cars. It has cut car commuting by 40%

### What Local Authorities (LA) can do:

Local authorities have an important role in both mitigation and adaptation, both via their direct activities and in terms of their ability to influence the wider community, as described in the 2006 Local Government White Paper *Strong and Prosperous Communities* (which has an annex devoted to what LAs can do on climate change) and forthcoming guidance pursuant to the Climate Change & Sustainable Energy Act.

Public Health and health bodies can play an important part in their role as partners of local government in Local Strategic Partnerships, and as key communicators and influencers for the public in their areas.

Working on the frontline with communities, local authorities have a crucial role in addressing climate change and are key players in reducing emissions. The UK currently aims to move towards a goal of reducing emissions by 20% below 1990 levels by 2010 (Kyoto Agreement).

### Local authorities can address climate change in several ways:

- Raising climate change at corporate level and signing the **Nottingham declaration on climate change** to address the causes and effects
- Ensuring that climate change features in **Sustainable Community Strategies**. Given the cross-cutting nature of climate change, it can be integrated into a number of appropriate themes within a community strategy, such as *Housing, Transport, Regeneration, the Economy or Environment*. Using tools to measure sustainability within a local area
- Ensuring that the delivery vehicles of the Community strategy – the Local Area Agreements (LAAs) & Local Strategic Partnerships (LSPs) include climate change and sustainable development outcomes
- Mainstreaming climate change into other LA strategies
- Linking with the *Carbon Trust's Local Authority Carbon Management Programme* which provides councils with support and guidance to help realise carbon emissions savings, focusing primarily on buildings, vehicle fleets, street lighting and landfill sites
- Working with the *Councils for Climate Protection (CCP)* who provide guidance, training and good practice studies on the integration of climate protection into the local government improvement agenda
- Seeking help and advice from *UK's climate change programme, UKCIP, LGA, Local Authority Energy Advisory, Greening Government website, Energy Saving Trust, Energy Efficiency Best Practice Programme, the Environment Agency. The I&DeA, (Improvement Development Agency)* helps local authorities create 'sustainable communities' on themes such as *Cleaner, Safer, Greener Environment, Neighbourhood Renewal and Sustainable Development*
- Ensuring that climate change is considered during *Planning and Development Decisions on Infrastructure and Buildings, Flood Prevention Policy, Sustainable Travel Towns, Waste Strategy, Housing Strategy, Education Development Strategy, Publicity Programmes, Air Quality Management, Development and Emergency Plans*

### Examples of Good Practice

[www.opencity.org.uk/article/373](http://www.opencity.org.uk/article/373)

*Woking Borough Council* – slashed CO<sub>2</sub> emissions under its own property by 77% through energy efficiency measures and the pioneering use of low- and zero-carbon technologies. Woking's climate change strategy calls for a “carbon-neutral approach” to all future services

*Southampton City Council* – has acted to address the challenge by a joint Climate Change and Air Quality Strategy making it a statutory responsibility. It employed the first full-time climate change officer

*Suffolk County Council* – waste collection authorities came together to develop a successful recycling consortium with recycling/composting rate of 35-50%, financial savings and harmonised collection methods

*Nottingham City Council* – has reversed traffic growth, has one of the oldest park and ride schemes, and in 2004 opened a 14km tram line that carries 23,000 passengers every weekday

*Wigan Council* – through the installation of 4 CHP units, which provide over 1.3 MWh (£117,962) of free electricity every year and exports any surplus to the National Grid

## Local Area Agreements (LAA)

There are many opportunities for Public Health to influence factors affecting climate change outcomes by working in partnership across the LAAs. Below are examples from the National Indicator Set that can positively influence climate change and health outcomes.

<p><b>National Indicators with a direct impact on reducing climate change and on improving health:</b></p>
<p><b>Environmental Sustainability</b></p>
<p>NI 185 CO<sub>2</sub> reduction from Local Authority operations PSA 27</p> <p>NI 186 Per capita CO<sub>2</sub> emissions in the LA area PSA 27</p> <p>NI 187 Tackling fuel poverty – people receiving income based benefits living in homes with a low energy efficiency rating Defra DSO – <i>insulation and improved central heating reduces CO<sub>2</sub> emissions and reduces winter mortality, hospital admissions, promotes mental health and independent living in elderly</i></p> <p>NI 188 Adapting to climate change PSA 27 – e.g. <i>heatwaves, flooding, infectious diseases</i></p> <p>NI 194 Level of air quality – reduction in NO<sub>x</sub> and primary PM<sub>10</sub> emissions through local authority's estate and operations. PSA 28 – re <i>Respiratory illness</i></p> <p>NI 195 Improved street and environmental cleanliness (levels of graffiti, litter, detritus and fly posting) Defra DSO – <i>increases levels of active transport</i></p> <p>NI 198 Children travelling to school – mode of travel usually used DfT DSO – <i>reducing obesity</i></p>
<p><b>Local Economy</b></p>
<p>NI 158 % decent council homes CLG DSO – <i>addressing fuel poverty</i></p> <p>NI 175 Access to services and facilities by public transport, walking and cycling DfT DSO – <i>reducing obesity</i></p> <p>NI 176 Working age people with access to employment by public transport (and other specified modes) DfT DSO – <i>reducing obesity</i></p> <p>NI 177 Local bus passenger journeys originating in the authority area DfT DSO – <i>increasing walking and reducing obesity</i></p>
<p><b>Indicators with the potential to positively contribute to reducing climate change &amp; benefit health</b></p>
<p><b>Adult Health and Wellbeing</b></p>
<p><b>Any of the below if increased active transport, addressing fuel poverty, promoting green gyms, allotments or green spaces are emphasised:</b></p> <p>NI 119 Self-reported measure of people's overall health and wellbeing DH DSO</p> <p>NI 120 All-age all cause mortality rate PSA 18</p> <p>NI 121 Mortality rate from all circulatory diseases at ages under 75 DH DSO</p> <p>NI 122 Mortality from all cancers at ages under 75 DH DSO NI 137 Healthy life expectancy at age 65 PSA 17</p> <p>NI 138 Satisfaction of people over 65 with both home and neighbourhood</p>

<p><b>Children &amp; Young People</b></p> <p><b>Emphasise the links to increasing physical activity, school travel plans and active transport to improving mental wellbeing and reducing obesity:</b></p> <p><b>Be Healthy</b></p> <p>NI 50 Emotional health of children PSA 12</p> <p>NI 55 Obesity among primary school age children in Reception Year DCSF DSO</p> <p>NI 56 Obesity among primary school age children in Year 6 DCSF DSO</p> <p>NI 57 Children and young people's participation in high-quality PE and sport DCSF DSO</p> <p><b>Make a positive contribution</b></p> <p>NI 110 Young people's participation in positive activities PSA 14 – <i>for example, in community environmental projects</i></p>
<p><b>Stronger Communities</b></p> <p>NI 6 Participation in regular volunteering CO DSO – <i>for example in environmental projects</i></p> <p>NI 8 Adult participation in sport DCMS DSO – <i>emphasise active transport</i></p>
<p><b>Safer Communities</b></p> <p><b>Emphasise the links between safer roads, encouraging active transport and reduced road traffic injuries; areas with cleaner, safer, greener environments increase active transport and improve mental well being and help in reducing the impact of heatwaves:</b></p> <p>NI 27 Understanding of local concerns about anti-social behaviour and crime by the local council and police HO DSO</p> <p>NI 47 People killed or seriously injured in road traffic accidents DfT DSO</p> <p>NI 48 Children killed or seriously injured in road traffic accidents DfT DSO</p>

[www.communities.gov.uk/publications/localgovernment/nationalindicator](http://www.communities.gov.uk/publications/localgovernment/nationalindicator)

## 'Reducing Our Carbon Footprint Code'

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### A sustainable code for the health sector – for hospitals and communities

#### 1. Take a lead in addressing carbon emissions

- Get organisational sign up, identify a Carbon Champion
- Adopt the NHS good corporate citizen toolkit
- Support the adoption of Local Area Agreements that help reduce carbon emissions
- Ensure climate change is incorporated into Joint Strategic Needs Assessments

#### 2. Undertake a carbon audit

- Measure the organisation's current carbon footprint by linking with the *Carbon Trust's NHS Carbon Management Programme*
- Identify practical energy efficiency measures based on audit findings
- Set a target for reducing carbon emissions related to the Climate Change Bill

#### 3. Place energy at the heart of the organisation – Save money, increase efficiency

- Adjust heating controls, upgrade light fittings, use energy efficient bulbs & switch off computer monitors & lights when not in use
- Sign energy contracts with 100% renewable energy providers, consider technology to increase renewable energy use – solar, wind turbines
- Maximise roof, wall and draft insulation in order to reduce fuel use
- Consider electricity & heat generation through Combined Heat & Power (CHP) installations

#### 4. Reduce water consumption and flooding

- Use tap designs and flushes that minimise water consumption
- Encourage use of tap water to drink
- Increase green area to concrete ratio to increase absorption of flood water

#### 5. Make sustainable transport policies

- Promote Travel Plans and transport policy that encourage public or active transport
- Increase 'virtual' meetings & teleconferencing, encourage train use versus flying
- Maintain vehicles to maximise energy efficiency – check tyre pressures and replace existing stock with more energy efficient models

#### 6. Ensure sustainable catering and food procurement policies

- Promote, where possible, local food procurement and cut down on food miles
- Provide healthier, fresh, seasonal menus; increase vegetable to meat protein ratio and reduce use of processed foods
- Recommend the use of green gyms, allotments and city farms

#### 7. Influence sustainable housing and the built environment

- Design sustainable healthcare buildings with green spaces which provide healing views, assist in cooling and in flood run off
- Promote summer cooling by increasing internal and external shading, plant trees and green the surrounding environment
- Work in partnership to increase uptake of fuel poverty grants to insulate houses

#### 8. Develop a carbon neutral waste management policy

- Build environmental awareness, recycling and sustainable printing into the workplace environment
- Implement environmentally friendly waste contracts and procedures

#### 9. Promote local employment & skills

- Boost local recruitment through skills qualifications and "grown your own" workforce
- Adopt flexible work systems that reduce commuting

## References, Resources and Drivers

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### Global Drivers

#### CLIMATE CHANGE

- **The Road Map for Future Action**, Bali Conference December 2007
- **Intergovernmental Panel on Climate Change (IPCC)** established by governments in 1988 to help understand and build some international consensus on the nature of climate change recognising that it was a critical global issue
- **The UN Framework Convention on Climate Change (UNFCCC)**, Rio Earth Summit in 1992, an international treaty negotiated by countries to start combating Climate Change
- **Kyoto Protocol**, in December 1997, agreed GHG emission limits for industrialised countries target (1990 – 2008/12)
- **The Gleneagles G8 Dialogue on Climate Change, Clean Energy and Sustainable Development** – a major signal of renewed political will
- **Montreal UN climate change conference** in 2005
- **Bonn Conference**, in May 2006
- **Clean Energy Investment Framework** co-operation with the World Bank, other multilateral development banks and the International Energy Agency to accelerate the deployment of clean technologies, provide incentives for investment in low carbon technologies and adaptation to climate change in developing countries

#### SUSTAINABLE DEVELOPMENT

- The 1972 Stockholm Conference and the **1987 Bruntland Report** first introduced the concept of sustainability
- **Local Agenda 21 (LA21)**, at the Rio Earth summit, 1992 led to a global sustainability action plan for the 21st century and beyond
- **Millennium Development Goals (MDG), 2000** on *Poverty, Illiteracy, Hunger, Lack of Education, Gender Inequality, Child and Maternal Mortality, Disease and Environmental Sustainability*
- **Doha Development Agenda of the WTO, 2001** agreement to promote trade liberalisation, focusing on the needs of developing countries and progressing the goal of sustainable development
- **Monterrey Consensus on Financing for Development, 2002** agreement to achieve economic conditions for poverty reduction and sustained economic growth
- **World Summit on Sustainable Development, 2002**, in Johannesburg aimed to reinvigorate the global commitment towards the achievement of sustainable development

## European Drivers

### CLIMATE CHANGE

- **EU directive on the energy performance of buildings (2002/91/EC):** to “promote the improvement of the energy performance of buildings within the European Community, considering outdoor climatic and local conditions, as well as indoor climate requirements and cost-effectiveness.”
- **‘Towards a European Strategy for Energy Supply’:** Green Paper (June '02), by the EC stating savings of 100 million tonnes CO<sub>2</sub>/year, equating to a 22% reduction can be achieved, if energy consumption targets in buildings is realised
- **EU Emissions Trading Scheme** and the **Clean Development Mechanism** are key regional and global tools for emissions reductions beyond 2012

### SUSTAINABLE DEVELOPMENT

- The **Gothenburg Strategy of 2001** led to the **EU Sustainable Development Strategy (EU SDS)**. In 2006, a renewed SDS was adopted for an enlarged EU

## National Drivers

### CLIMATE CHANGE

- **Kyoto/Burden Sharing Agreement** requirement to cut GHG emissions by 12.5% by 2008-12 versus 1990 base year
- **Energy Performance Certificates (EPCs):** By October 2008, all buildings that are constructed, sold or rented out will need to have an EPC, which will give an energy rating from A-G and recommendations on how to reduce carbon emissions. Public buildings must get energy ratings and display them to the public from April 2008.
- **UK Climate Change Programme** – combines both regulatory and obligation based measures with fiscal and support measures to attain targets through a combination of energy efficiency in the short term and renewables in the long term
- **UK Government’s Energy White Paper “Our Energy Future – Creating a Low Carbon Economy”** in 2003 set an aspiration for the UK to reduce carbon emissions by 60% and create a low carbon economy by 2050 based on recommendations of the **Royal Commission on Environmental Pollution (RCEP)**
- **Energy Review “Our Energy Challenge: securing clean, affordable energy for the long-term”** – July 2006, looking at progress in achieving the targets
- **Stern Review, October 2006**
- **Climate Change Bill** – will, once enabled make legally binding the UK government's goal of 60% reduction by 2050, with real progress by 2020; through establishment of a “Carbon Committee” and commitments for an adaptation programme and a national risk assessment
- **Climate Change Levy** and agreements, **Renewables Obligation** and **Energy Efficiency Commitment**

## SUSTAINABLE DEVELOPMENT

- **'A better quality of life – A strategy for sustainable development for the UK', 1999** the government's first sustainable development strategy (SDS)
- **'Securing the Future – UK Government Sustainable Development Strategy March'05** is the government's new strategy for the UK
- **'Sustainable Development Action Plans' (SDAPs)** – on the integration of sustainable development into core business by central government departments
- **Choosing Health, 2004** requires the NHS to act as a good corporate citizen

## Regional Drivers

### CLIMATE CHANGE

- **Climate Change Partnership** of public, private and voluntary sector organisations that investigate, advise and inform on the impacts of climate change for the region's economic, social and environmental well-being
- **Regional Climate Change Coordinators** assisted by the UK Climate Impacts Programme to drive forward work on impacts and adaptation in their regions

### SUSTAINABLE DEVELOPMENT

- **Securing the Regions' Futures** – Strengthening delivery of sustainable development in the English regions
- **Regional Development Agencies (RDAs)** are strategic drivers for sustainable economic development, preparing **Regional Economic Strategies (RES)**. Regional Sustainable Development Frameworks (RSDFs), Integrated Regional Strategies (IRS) and Integrated Regional Frameworks (IRF) facilitate this process.

## Resources and References

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**Health Effects of Climate Change in the UK 2008** Published 12/02/08

[www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_080702](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_080702)

**Climate Change and Human Health – Risk and Responses**, 2003 WHO in collaboration with UNEP and WMO ISBN 92 4 159081 5 [www.who.int/globalchange/publications/cchhsummary/en/](http://www.who.int/globalchange/publications/cchhsummary/en/)

**Global health strategy, March 2007**, proposals for a UK government-wide strategy where climate change is a key determinant

[www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_072697](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_072697)

**UK Climate Impacts Programme (UKCIP) of the Department for the Environment, Food and Rural Affairs (DEFRA)** provides climate change scenarios and co-ordinates research on dealing with climate change [www.ukcip.org.uk/](http://www.ukcip.org.uk/)

**Sustainable Development Commission** The Government's independent watchdog on sustainable development [www.sd-commission.org.uk/health](http://www.sd-commission.org.uk/health)

**'Securing the Future' March'05** – the Government's Sustainable Development Strategy for the UK [www.sustainable-development.gov.uk/publications/uk-strategy/index.htm](http://www.sustainable-development.gov.uk/publications/uk-strategy/index.htm)

**Securing the Regions' Futures** – Strengthening delivery of sustainable development in the English regions. [www.sustainable-development.gov.uk/publications/documents/securing-the-regions-futures.pdf](http://www.sustainable-development.gov.uk/publications/documents/securing-the-regions-futures.pdf)

**Climates & Change** The Urgent Need to Connect Health and Sustainable Development, UKPHA [www.ukpha.org.uk](http://www.ukpha.org.uk)

**Department of Health Sustainable Development Action Plan 2006/07**

[www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_079682](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_079682)

**Energy Performance Certificates (EPCs)** The National Home Energy Rating (NHER) scheme

[www.nher.co.uk/pages/insight/eu\\_directive.php](http://www.nher.co.uk/pages/insight/eu_directive.php)

[www.est.org.uk/uploads/documents/housingbuildings/eu\\_buildings\\_directive\\_bn.pdf](http://www.est.org.uk/uploads/documents/housingbuildings/eu_buildings_directive_bn.pdf).

[www.carbontrust.co.uk/climatechange/policy/energy\\_performance\\_certificates.htm](http://www.carbontrust.co.uk/climatechange/policy/energy_performance_certificates.htm)

[www.homeinformationpacks.gov.uk/consumer/2\\_Energy\\_Performance\\_Certificates\\_and\\_your\\_home.html](http://www.homeinformationpacks.gov.uk/consumer/2_Energy_Performance_Certificates_and_your_home.html)

**EU directive on the energy performance of buildings (2002/91/EC)** The Energy Saving Trust

[www.est.org.uk/uploads/documents/housingbuildings/eu\\_buildings\\_directive\\_bn.pdf](http://www.est.org.uk/uploads/documents/housingbuildings/eu_buildings_directive_bn.pdf)

[www.communities.gov.uk/index.asp?id=1002882&PressNoticeID=2394](http://www.communities.gov.uk/index.asp?id=1002882&PressNoticeID=2394)

**Climate Change The UK Programme 2006** sets out policies and priorities for action in the UK and internationally [www.defra.gov.uk/environment/climatechange/uk/ukccp/index.htm](http://www.defra.gov.uk/environment/climatechange/uk/ukccp/index.htm)

**Climate information decision support tool**, to complement an existing heat health warning system, German Weather Service (DWD) [www.euroheat-project.org/dwd/](http://www.euroheat-project.org/dwd/)

**The Carbon Trust** [www.carbontrust.co.uk/climatechange/](http://www.carbontrust.co.uk/climatechange/) and the Energy Saving Trust [www.est.org.uk/](http://www.est.org.uk/) run awareness campaigns on climate change for companies and individuals.

**The Energy Efficiency Best Practice Programme** gives advice on how to reduce energy consumption: [www.energy-efficiency.gov.uk](http://www.energy-efficiency.gov.uk)

**Marches Energy Agency** a leading organisation in the search for a sustainable energy future with a portfolio of innovative and highly successful projects [www.me.a.org.uk/what/](http://www.me.a.org.uk/what/)

**The Environment Agency** to assess vulnerability to climate change and provide advice on other issues: [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

**Behaviour change measures:** include national campaigns such as “Are you doing your bit?” [www.oecd.org/dataoecd/29/19/2397715.pdf](http://www.oecd.org/dataoecd/29/19/2397715.pdf), “Tomorrow’s climate-Today’s challenge” [www.climatechallenge.gov.uk/communicate.html](http://www.climatechallenge.gov.uk/communicate.html), “Save your 20%” [www.energysavingtrust.org.uk/commit/](http://www.energysavingtrust.org.uk/commit/) and “Every Action Counts” [www.everyactioncounts.org.uk/](http://www.everyactioncounts.org.uk/) – encourage changes in human behaviour and action to remove barriers to energy efficiency

“Contraction and Convergence” GCI devised carbon rationing approach based on “Equity and Survival” [www.gci.org.uk/contconv/cc.html](http://www.gci.org.uk/contconv/cc.html)

## Local Authority Related

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Adaptation guidance Local Communities and Climate Change – How prepared are you? helps councils to understand the impact on council services of the changing climate and how services need to adapt

### Local Authority Carbon Management Programme

[www.carbontrust.co.uk/publications/publicationdetail?productid=PAC047](http://www.carbontrust.co.uk/publications/publicationdetail?productid=PAC047)

**Nottingham Declaration** – Local authority sign up to Climate Change to secure maximum benefit from action for their local communities

[www.est.org.uk/housingbuildings/localauthorities/NottinghamDeclaration/EST\\_NDec\\_cert\\_HR.pdf](http://www.est.org.uk/housingbuildings/localauthorities/NottinghamDeclaration/EST_NDec_cert_HR.pdf)

**The IDEa guidance** [www.idea.gov.uk/idk/core/page.do?pagelId=80829](http://www.idea.gov.uk/idk/core/page.do?pagelId=80829)

**The Local Authority Energy Advisory Service** for help and advice on energy efficiency: [www.easiest.org.uk](http://www.easiest.org.uk)

**The Code for Sustainable Homes** sets out standards beyond ‘Building Regulations’ requirements to decrease the environmental impact of housing growth

[www.planningportal.gov.uk/england/professionals/en/1115314116927.html](http://www.planningportal.gov.uk/england/professionals/en/1115314116927.html)

**Planning, Building and the Environment** – For a publication on measures that can be taken to reduce the carbon footprint of the existing housing stock see

[www.communities.gov.uk/publications/planningandbuilding/reviewsustainability](http://www.communities.gov.uk/publications/planningandbuilding/reviewsustainability)

**The Greening Government website** includes practical advice on setting up environmental management systems, promote energy efficiency and buying energy efficient equipment, appliances and vehicles

[www.sustainable-development.gov.uk/government/estates/index.htm](http://www.sustainable-development.gov.uk/government/estates/index.htm)

**The Councils for Climate Protection (CCP)** [www.idea.gov.uk/climate](http://www.idea.gov.uk/climate)

**Community Leadership and Climate Change Guidance for Local Authorities** guidance on a range of opportunities for councils to develop their response to climate change

[www.idea-knowledge.gov.uk/idk/aio/396534](http://www.idea-knowledge.gov.uk/idk/aio/396534) also refer to Annex F of the Local Government White Paper to be found at [www.communities.gov.uk/index.asp?id=1503999](http://www.communities.gov.uk/index.asp?id=1503999)

‘Sustainable Communities – a shared agenda a share of the action’ – a guide published by Defra and the LGA to help local councils improve quality of life, tackle climate change and work towards environmental sustainability.

[www.sustainable-development.gov.uk/publications/documents/sustainable-communities-guide.pdf](http://www.sustainable-development.gov.uk/publications/documents/sustainable-communities-guide.pdf)

## Tools local authorities are using for measuring sustainability:

[www.idea.gov.uk/idk/core/page.do?pagelId=81083](http://www.idea.gov.uk/idk/core/page.do?pagelId=81083)

- *Advice and support for local government – Environmental Management Systems(EMS)* [www.sustainable-development.gov.uk/advice/local/ems\\_regional\\_networks.html](http://www.sustainable-development.gov.uk/advice/local/ems_regional_networks.html)
- *Analysis of the applications of the ecological footprint tool, an aggregated indicator of natural resource consumption* [www.idea.gov.uk/idk/core/page.do?pagelId=81085](http://www.idea.gov.uk/idk/core/page.do?pagelId=81085)
- *Integrated resource management, a new approach, called ‘ecoBUDGET’* [www.idea.gov.uk/idk/core/page.do?pagelId=81089](http://www.idea.gov.uk/idk/core/page.do?pagelId=81089)
- *Local Evaluation 21, an online self-assessment tool for local sustainable development processes* [www.idea.gov.uk/idk/core/page.do?pagelId=90743](http://www.idea.gov.uk/idk/core/page.do?pagelId=90743)
- *Local authority sustainable procurement tool* [www.forumforthefuture.org.uk/](http://www.forumforthefuture.org.uk/)

## NHS Related

**Material Health Report – a mass balance and ecological footprint analysis of the NHS in England and Wales** [www.materialhealth.com/download.htm](http://www.materialhealth.com/download.htm)

**New Environmental Strategy for the NHS, 2002** – NHS Environmental Assessment Tool (NEAT)

**Sustainable development: Environmental Strategy for the NHS, 2005**

[www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_4119710](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4119710)

**Healthy Transport Tool Kit: A guide to reducing car trips to NHS facilities** Transport 2000 Trust, 1998; Sustrans

**Sustainable Communities: Making Safe, Green, and Healthy Environments** (NHS Confederation, 2006)

**Primary Care Trusts and Leadership in Sustainability: How PCTs can contribute to sustainable development in LIFT**

- Sustainability Guidance for PCTs
- The Rapid Community Needs Assessment Tool (RCNA)

**The Future Healthcare Network**, part of the NHS Confederation, offers advice regarding buildings. [www.fhn.org.uk](http://www.fhn.org.uk)

## SDC Healthy Futures

**#1: Sustainable development opportunities for the NHS** – examines how the NHS's food purchasing policies and capital development programmes can promote improved health and stronger, healthier, more sustainable communities

**#2: Food and sustainable development** – promoting sustainable development through decisions about how food is served, prepared, purchased and produced can have a huge impact on the health of individuals, communities and the environment

**#3: Buildings and Sustainable Development** – looks at the impact that the NHS can have on health, the environment and communities by building and refurbishing sustainably

**#4: Are you a good corporate citizen?** Health organisations have a corporate social responsibility and need to build sustainability into everyday business practice. This is a toolkit aimed at influencing good corporate citizenship for NHS organisations, promoting sustainable development and tackling health inequalities

**#5: Sustainable Transport and Active Travel** – explores the NHS contribution to health and sustainable development through its transport policies

**#6: The Natural Environment, Health and Well-being** – explores the connections and opportunities for NHS organisations to promote health through the natural environment

The SDC Toolkit for Good Corporate Citizenship for NHS organisations <sup>1</sup>	
<b>1. Transport</b>	Transport co-ordinators, NHS Active /Green travel plans for visitors and staff -healthier travel options such as walking & cycling, public transport, Trust car/lift sharing schemes/computer package, Fleet transport tyre pressure checks to improve fuel economy, Parking permit assessment system, Bicycle User Group, Safer routes to work, Events to get more people on their bikes, Improvements in cycle parking facilities, Free shuttle buses for staff, and Inter-site health hopper buses, Staff discount on bus fares, Sustrans, ( <a href="http://www.activetravel.org.uk">www.activetravel.org.uk</a> )
<b>2. Energy use</b>	PFI Energy management scheme, Adjusting heating controls, Upgrading selected light fittings, Staff energy awareness training & induction courses, Switching off unnecessary lighting, Better insulation/ventilation, technology to manage energy use –solar energy, Energy & water conservation policies, Energy contracts-sign up to '100% renewable energy providers'
<b>3. Procurement</b>	Promotion of local food procurement, Develop seasonal menus, local organic food, Food procurement action plan, Healthier food, vegetarian & fair trade options
<b>4. Facilities management – water use, waste production and buildings</b>	Recycling, Waste management, Sustainable printers, Using water sensibly, Compliance with ISO 14001 Environment Management System (EMS), Appoint an Environmental Manager to develop the EMS, 'e-learning' package for environmental awareness training, New build healthcare facilities to consider energy efficiency and environmental impact
<b>5. Employment and skills</b>	Employing local people, Boosting recruitment through skills qualifications and work placements for unemployed people, "Grow its own" workforce, Community-based approach to learning and careers Flexible working systems, Career & Employment Coaching project, IWL Childcare schemes
<b>6. Community engagement</b>	Using local businesses for procurement, Regeneration Maximiser Team, active citizenship/volunteering, LAA

The 'Building for Health' toolkit allows Primary Care Trusts and NHS Trusts to build sustainability into the process to procure new health care facilities [www.lho.org.uk/viewResource.aspx?id=10703](http://www.lho.org.uk/viewResource.aspx?id=10703)

The Sustainable Communities Plan recognises the importance of providing housing in a context of creating communities that are healthy and sustainable. The Healthy Urban Development Unit (HUDU) provides advice on spatial planning issues to the health sector in London. [www.lda.gov.uk/server/show/ConWebDoc.1156](http://www.lda.gov.uk/server/show/ConWebDoc.1156)

NHS ProCure 21 from NHS Estates delivers publicly funded buildings and aims to improve procurement standards [www.nhs-procure21.gov.uk](http://www.nhs-procure21.gov.uk)

NHS Carbon Management Programme (NHSCM) – support by the Carbon Trust on carbon management and energy saving options; includes measuring carbon footprint, identifying energy efficiency measures and an implementation plan [www.carbontrust.co.uk/carbon/nhs/](http://www.carbontrust.co.uk/carbon/nhs/)

The NHS Network a Carbon Trust online network to support NHS Energy Officers [nhsnetwork.carbontrust.co.uk/index.php](http://nhsnetwork.carbontrust.co.uk/index.php)

Health Technical Memorandum 07-02: Encode 2006 – making energy work in healthcare – primary guidance on energy efficiency in healthcare facilities [www.carbontrust.co.uk/Publications/publicationdetail.htm?productid=CTC605&metaNoCache=1](http://www.carbontrust.co.uk/Publications/publicationdetail.htm?productid=CTC605&metaNoCache=1)

<sup>1</sup> Good Corporate Citizenship self-assessment sustainable development model for NHS organisations [www.corporatecitizen.nhs.uk/](http://www.corporatecitizen.nhs.uk/).

## The health impact of climate change

**The North West Climate Change Charter** NHS Trusts in the North West region sign up by the Regional Director of Public Health [www.snw.org.uk](http://www.snw.org.uk)

**Corporate Social Responsibility** initiatives related to sustainability/climate change across the NW region involving the NHS and the NWRDA. One strand in this initiative has been an EU regions project which has defined **The Bilbao Agenda** [www.healthcluster.net.org](http://www.healthcluster.net.org)

**Clarifying Approaches to Health Needs Assessment, Integrated Impact Assessment, Health Equity Audit, Race Equality Impact Assessment, HDA 2005** includes cross sectoral development and use of a sustainability/integrated impact assessment (including climate change issues) [www.hda.nhs.uk](http://www.hda.nhs.uk), [www.nice.org.uk](http://www.nice.org.uk)

**Heatwave Plan for England 2007** – protecting health and reducing harm from extreme heat and heatwaves [www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_074539](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_074539)

**SunSmart** – the UK's national skin cancer prevention campaign [info.cancerresearchuk.org/healthyliving/sunsmart/](http://info.cancerresearchuk.org/healthyliving/sunsmart/)

**Keep Warm Keep Well:** information and advice about staying well in winter by keeping warm [www.dh.gov.uk/en/Policyandguidance/Healthandsocialcaretopics/DH\\_4076849](http://www.dh.gov.uk/en/Policyandguidance/Healthandsocialcaretopics/DH_4076849)

**HPA Information for residents whose homes have been flooded** [www.hpa.org.uk/flooding/guidance.htm](http://www.hpa.org.uk/flooding/guidance.htm)

**The Faculty of Public Health – Sustaining a healthy future** – taking action on Climate Change [www.fphm.org.uk/resources/sustainable\\_development/sustaining\\_9\\_healthy\\_future.asp](http://www.fphm.org.uk/resources/sustainable_development/sustaining_9_healthy_future.asp)

Average British Citizen Carbon Scores (tons/year) by Consumer Need

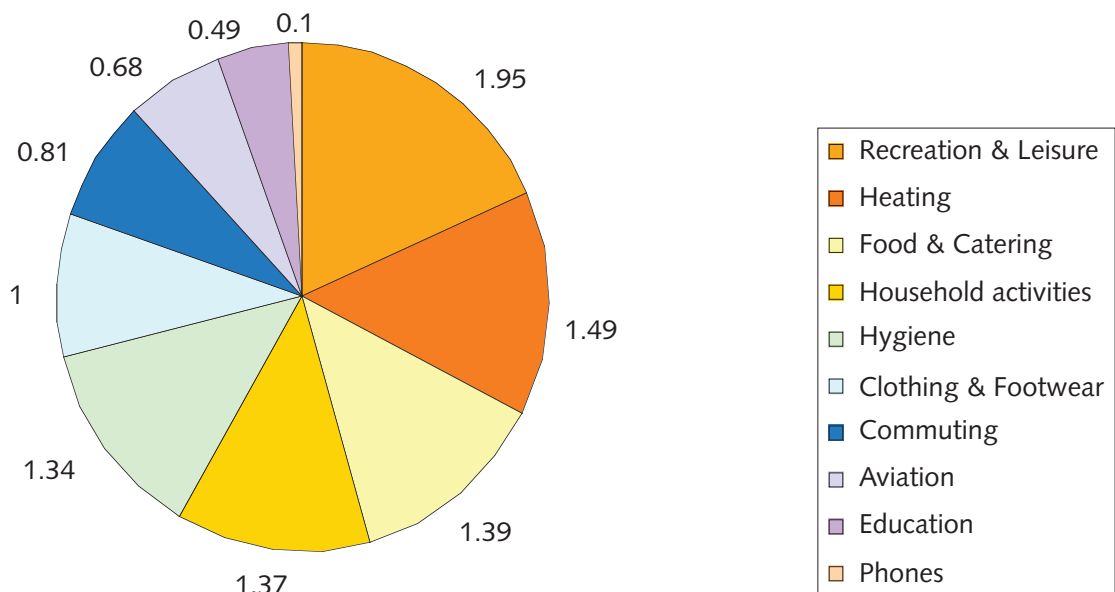


Chart based on data from the Carbon Trust

## Individual Carbon Footprint

The individual impact made on climate change has tended to be diluted by carbon emission figures generated at source. A study by the Carbon Trust puts the annual carbon footprint of the average Briton at 10.92 tons of CO<sub>2</sub>. It takes the overall emission figure generated by the ONS which details emissions at source, and using a University of Surrey model, reallocates them to the point of consumption. The data reveals an annual carbon footprint for each of 10 kinds of consumer need. Leisure and recreation pursuits account for most emissions, followed by heating and food & catering.

Cited in *The Independent-Environment*, 09 December 2006



**FACULTY OF  
PUBLIC HEALTH**



This Guidance Document has been compiled by the Regional Public Health Group based in the Government Office of the South East. It aims to summarise key public health issues based upon evidence, in order to facilitate good practice and improve health at local and regional levels. This is NOT a policy document.

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