







°O

@

Foreword

We all value our health and the places where we live and recognise that enabling individuals and communities to lead healthy lives also means acknowledging the value of our environmental and social assets. Reducing carbon emissions and preparing for extreme weather events can be achieved whilst protecting natural resources and strengthening social systems. This, in turn, can provide significant short term and priceless long term benefits for our health, communities and services.

Our NHS, public health and social care system is at an important crossroads. Whether we consider our demographics, our use of resources or the financial forecasts, it is widely accepted that the current health and care system is unsustainable without radical transformation. For the first time we are developing an approach to sustainability that embraces the entire health and care system, not just one part of it. Local government, public health, social care, professional bodies and NHS colleagues have contributed to and support this approach. We are clear that we need to work in partnership not only within and across our organisations but also with our communities, to unleash the opportunities and benefits needed to improve genuine health and wellbeing. Unless we make working sustainably a priority all our other priorities could be undermined.

The approach described in this strategy is the result of intensive engagement across the health and care system. It describes the most important principles and opportunities that can be taken to enable a more sustainable health and care system over the next five years. These align with the current policy direction for integrated care closer to home and we know this is what the public expects of us.

Our leadership will be tested in our commitment and ability to bring about the transformations required. We must take these concepts forward in our lives, our jobs, our teams and organisations, and with our communities. We must do so positively and inquisitively, with enthusiasm and with vigour. This agenda creates many positive benefits and it is already generating energy for change in people, organisations and communities. It also demonstrates our responsibility and commitment to a broader and more global perspective of health and wellbeing.



Sir David Nicholson CBE, Chief Executive, NHS England



Duncan Selbie, Chief Executive,Public Health England

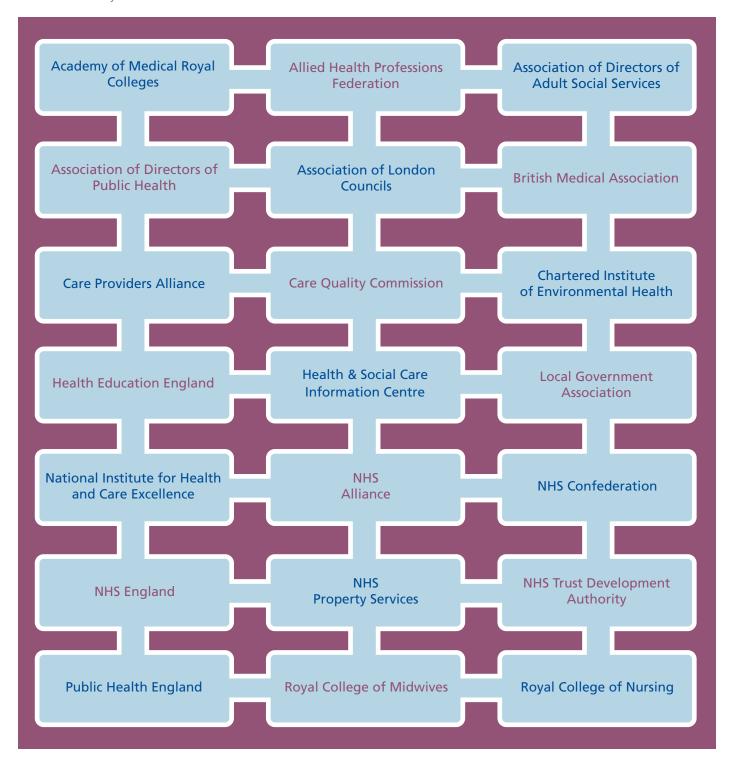
Contents

Foreword	2
Together we can	3
Introduction	4
Vision and goals	5
A sustainable approach	6
A modular approach	8
Diagram of strategy vision, goals and modules	10
How to take this forward	11
What does success look like in 2020?	15
Context	16
The public's views	17
The system's views	18
Carbon footprint of the NHS,	
Public Health and Social Care system	19
Executive summary	20
Contributors	22
Glossary	26
References	27

Together we can

Many organisations, individuals and communities across the health and care system are working together to deliver better outcomes for all and doing so by reflecting the principles of sustainable development. We are indebted for everyone's contribution to the principles and proposals in this strategy. It is encouraging that so many organisations are choosing to transform the approach to health and care whilst minimising environmental impacts and improving social reach.

The following organisations have expressed their support for a more sustainable, resilient and healthy NHS, public health and social care system:



Introduction

The purpose of the health and care system is to continually improve health and wellbeing and deliver high quality care when necessary.

The challenge is how to do this now and for future generations within available financial, social and environmental resources. Understanding these challenges and developing plans to achieve improved health and wellbeing and continued delivery of high quality care is the essence of sustainable development.

Current discussions, including the NHS Call to Action¹, are exploring how to achieve the best possible health and care outcomes within the financial resources available. As these discussions continue, it is equally important that we factor in:

- The environmental impact of the health and care system and the potential health co-benefits of minimising this impact
- How the health and care system needs to adapt and react to climate change, including preparing and responding to extreme events
- How the NHS, public health and social care system maximises every opportunity to improve economic, social and environmental sustainability.

This strategy outlines a vision and three goals based on the challenges outlined above to aim for by 2020. It describes the opportunities to reduce our environmental impacts, improve our natural environment, increase readiness for changing times and climates and strengthen social cohesion. It also explores how this can be taken forward as a system and outlines specific areas of focus that can be used to guide action.

The vision and goals have been developed following an extensive consultation and engagement process with almost 1,000 responses covering all parts of the system. Engagement with the public also demonstrated there is an expectation that sustainable development should be part of the way the health and care system works in the future. The development of the strategy has also greatly benefitted from the advice and assistance of the Department of Health, the Department for Environment Food & Rural Affairs (Defra) and the Department of Energy & Climate Change (DECC).

This strategy is intended to complement the discussions taking place across the NHS, public health and social care about future approaches to improving health and more integrated models of care.

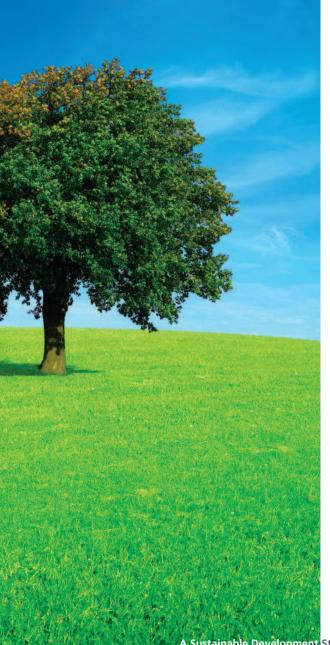
"We need to develop a health and care system that is financially, socially and environmentally sustainable; that does not simply mean we must make the best use of resources; it also means we must improve both the quality of life, and quality of care, experienced by all users of health and care services."

Stephen Dorrell - Chair Health Select Committee

The system

The NHS, public health and social care system can be defined by its shared principle purpose to increase health and wellbeing. It does this by treating those in ill health, caring for those in need, and protecting and promoting the public's health.

The system includes all those who share this purpose. In this strategy "the health and care system" is used as short hand for this "NHS, public health and social care system".



Vision & goals

Our vision of sustainable health and care: A sustainable health and care system works within the available environmental and social resources protecting and improving health now and for future generations.

This means working to reduce carbon emissions, minimising waste & pollution, making the best use of scarce resources, building resilience to a changing climate and nurturing community strengths and assets.

Goal 1:

A healthier environment

A healthier environment can contribute to better outcomes for all. This involves valuing and enhancing our natural resources, whilst also reducing harmful pollution and significantly reducing carbon emissions. Contributing to the Climate Change Act target with a 34% reduction in carbon emissions by 2020 is a key measure of our ambition across the country.

Goal 2:

Communities and services are ready and resilient for changing times and climates

When periods of heat, cold, flooding and other extreme events occur it is vulnerable people and communities that suffer the worst. Those communities and their services bear the responsibility of addressing the consequences of these events. Multi-agency planning and organisational collaboration, underpinned by local plans and assurance mechanisms, provide a better solution to these events than working independently, individually and ineffectively.

Goal 3:

Every opportunity contributes to healthy lives, healthy communities and healthy environments

Every contact and every decision taken across the health and care system can help build the immediate and longer term benefits of helping people to be well and reduce their care needs. There are multiple mechanisms that can support this approach from improved information, more integrated approaches and smarter more aligned incentives that help minimise preventable ill-health, health inequalities and unnecessary treatment. A sustainable system cannot be achieved without taking every opportunity to support communities and people to be independent and self-manage conditions and events.

"Health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity."

World Health Organization Definition

A sustainable approach

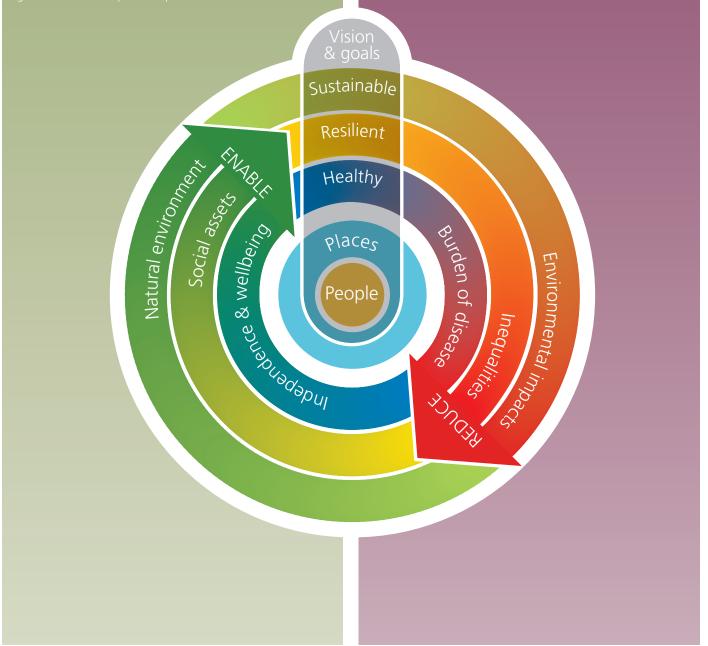
Helping to create **sustainable**, **resilient**, **healthy places and people** needs to be approached both by enabling the positives and by reducing the negatives allowing virtuous cycles to constantly improve outcomes.

Enable the positives

By valuing our physical and social environment, we can restore our natural environment and strengthen our social assets, whilst enhancing our independence and wellbeing at both a personal and community level. By doing so, we improve the quality of care, build strong communities and generate conditions where life is valued in ways that current generations can be proud to pass on.

Reduce the negatives

By radically reducing the harmful impacts of how we currently live we can stop wasting finite resources, reduce the burdens of preventable mental and physical ill health, reduce social inequalities and reduce risks from a changing climate. In addition, many interventions that reduce harmful impacts also promote positive co-benefits and reduce the burden of disease



Sustainable development aims and principles

Sustainable development aims to ensure the basic needs and quality of life for everyone are met, now and for future generations.

Its guiding principles are:

- Ensuring a strong, healthy and just society
- Living within environmental limits
- Achieving a sustainable economy
- Promoting good governance
- Using sound science responsibly

From Sustainable Development in Government³

This document focuses on ensuring a strong, healthy and just society living within environmental limits whilst recognising that achieving a sustainable economy, promoting good governance and using sound science responsibly are inherent pillars that support such a society.

The term sustainability refers to the wider concept as described above and should not be confused with the notion of financial affordability.

"Sustainability is a core component of the quality of care we deliver. I admire the NHS, public health and social care system in England for tackling these issues and would encourage every service to integrate these concepts into their working practices and every organisation to systematically identify ways of doing so."

Don Berwick - *Chief Executive*Institute for Healthcare Improvement



Houghton-le-Spring Primar Care Centre, Sunderland

This new-build primary care centre is a combination of health and social care facilities linked to an existing NHS working together. An exemplary site for low carbon construction technologies, Houghton Primary Care Centre was the first healthcare project to achieve a BREEAM 'Outstanding' rating. The new care centre accommodates traditional healthcare services alongside diagnostics suite, a minor surgery treatment centre and a 24-bed rehabilitation unit. Located adjacent to a leisure centre the facility offers lots of exercise options, from skateboarding and a trim trail to games pitches and bowling greens. A number of structural changes to the building helped to reduce energy consumption with features designed to cool the building in summer and heat efficiently in winter. The building supports a green roof to encourage local biodiversity4.

A modular approach

To support the delivery of the vision and goals of this strategy a number of modules have been developed that focus on specific key areas. Every module explores a different angle to help strengthen action within locally determined priorities.

These modules are available online on the Sustainable Development Unit website⁵ along with accompanying implementation guidance notes.

Leadership, engagement and development

Sustainable and resilient services will only emerge from a culture that understands and values environmental and social resources alongside financial ones. Engagement at all levels with the public, service users, trade unions and staff can provide the basis for positive action at every level. This module covers the following:

- Leadership for sustainable health and care
- Engagement
- Developing a workforce fit for the future

Sustainable clinical and care models

Sustainable models of care can deliver better health and wellbeing by enhancing enabling and integrated approaches to care, building resilience with individuals and their communities and reducing environmental impacts. This module covers the following:

- Sustainability as a factor underpinning high quality care
- Transforming care

Healthy, sustainable and resilient communities

Strong and healthy communities support people to minimise their impact on the environment and be resilient to changes in the world around us. Local level partnerships can be strengthened so they continue to help neighbourhoods flourish. Connected communities will be better prepared for environmental and climatic changes including the impacts of severe weather events such as heat waves, cold snaps, and flooding. This module covers the following:

- Developing local frameworks
- Building resilience to climate change and adverse events

Carbon hotspots

Carbon emissions are an important indicator of environmental impact. The health and care system carbon footprint has identified carbon hotspots that can be targeted to achieve significant reductions.

This module covers the following three:

- Pharmaceuticals, medical devices and gases
- Energy
- Travel and transport

Commissioning and procurement

Commissioning of services and the procurement of products are very powerful levers to influence the delivery of sustainable services. Commissioners can develop and use criteria to stimulate more ambitious and innovative approaches to delivering care that costs less, creates less environmental harm and reduces inequalities.

Equally, the significant procurement budget for goods and products used by the health and social care system provides multiple opportunities to maximise social, economic and environmental value.

This module covers the following:

- Services: The specific role of social care, public health and NHS commissioners
- Products: A whole lifecycle and responsible sourcing approach to procurement of goods

Further modules

The further development of three modules are required to reflect the needs emerging from the system. These will be consulted on during the summer of 2014 and published in January 2015. The three extra modules proposed are:

- **Innovation**: This module summarises the key research themes in implementing a more sustainable health and care sector. It will:
 - identify the opportunities and barriers to ensure the necessary research is performed and implemented
 - summarise the progress possible through technology and innovation
- An integrated metrics approach: This module will be developed by a cross system metrics steering group chaired by Public Health England and convened by the Royal College of General Practitioners (RCGP). The module will consider the data currently collected across different parts of the system and consider how best to highlight progress over time. It will:
 - highlight the existing data that can be used to inform progress on sustainable development
 - highlight measures that can be used across different parts of the system
 - recommend future requirements if necessary
- **Building social capital as a core role of the health and care system:** A working group will be established to develop this module. It will pull together the latest thinking and emerging evidence that can contribute to fostering social value. The module will:
 - provide a definition, vision and a framework for considering the role of social capital across the NHS, public health and social care system
 - clarify how the health and care system can further develop social value within and between its own organisations and communities

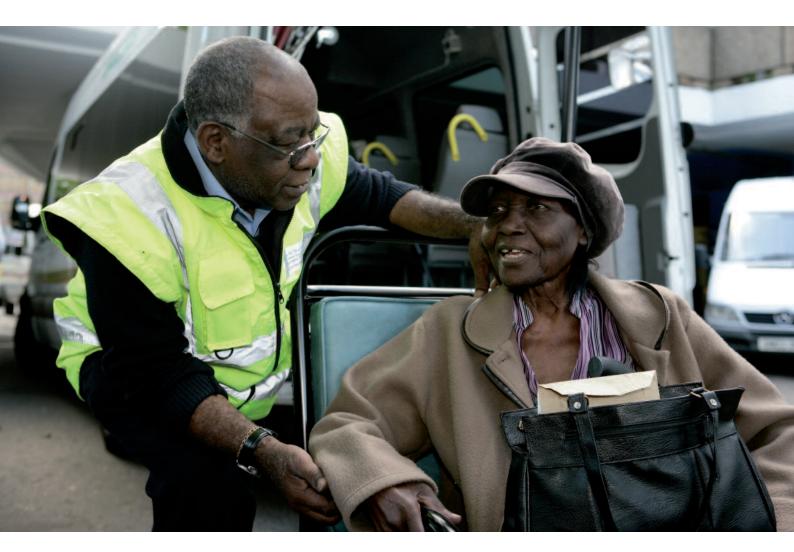
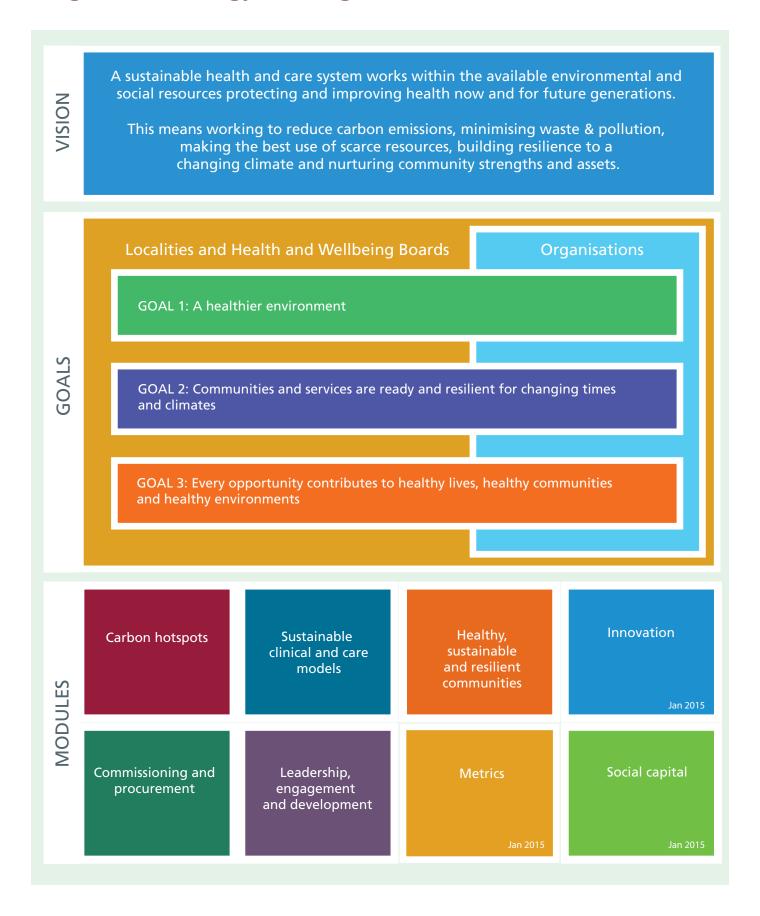


Diagram of strategy vision, goals and modules



How to take this forward

The opportunities described in this strategy and its supporting sections are likely to mean different mechanisms for different parts of the health and care system. The proposals below are highlighted as part of an integrated approach to help support progress. Clearly every organisation and local system will want to consider which approach works best in their locality.

Sustainable development as a component of Health and Wellbeing Strategies

Health and Wellbeing Boards are well placed to take a leadership role in developing a strong and inspiring local vision for sustainability. They have a responsibility to act in the interests of local people to improve health and wellbeing, local accountability, membership from across the health and care system and the ability to align and reinforce activity. They can integrate issues that are core to this agenda including the redirection of existing services to address issues such as the causes of ill-health, life styles, service infrastructure, models of care, health protection and resilience.

Health and Wellbeing Boards can choose to include locality based sustainable development plans as part of their Health and Wellbeing Strategies⁶ and could offer to publish a yearly progress report. A King's Fund⁷ report has found that most Health and Wellbeing Boards have already begun adopting Marmot's six policy objectives⁸, one of which is to "Create and develop healthy and sustainable places and communities".

Joint Strategic Needs Assessments (JSNAs)⁶ for each area represent an ideal opportunity to consider how the principles of sustainable development can help deliver local priorities. A guide to integrating sustainability into JSNAs has been developed by Kent County Council⁹.

Cross system national group

A cross system national group has been established and is working to support sustainable development across the NHS, public health and social care system. This group of representative leaders monitors progress and looks for opportunities for highlighting best practice and considers the barriers to development across the system. The group is likely to publish regular reports of system-wide progress and successful approaches that can be replicated.

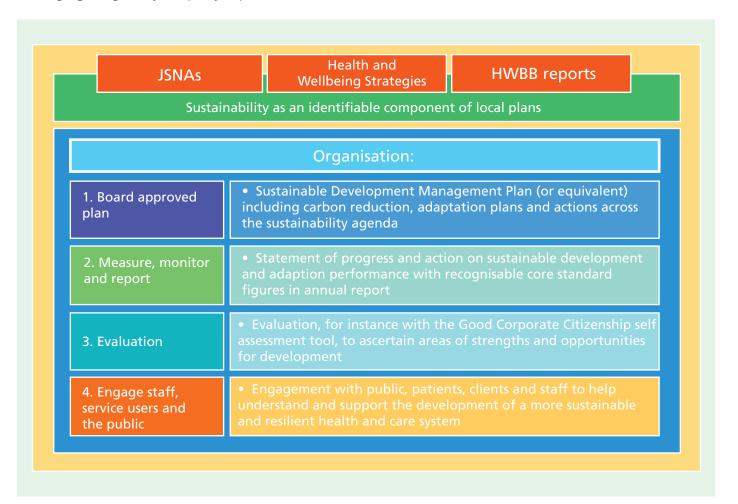


Tackling fuel poverty and reducing winter deaths

Islington London Borough Council and NHS Islington are working together to reduce fuel poverty, seasonal deaths and hospital admissions in winter through the Seasonal Health Interventions Network (SHINE). They set up an easy to access one-stop-shop referral point where residents can access advice and support on a range of issues including health matters, finance and energy saving. The service has operated in Islington since December 2010 and up to the end of October 2013 has processed over 4,150 referrals with 19,100 interventions and resident savings on energy bills exceeding £455,000¹⁰.

Organisational contributions

NHS, public health and social care organisations can consider the following approach to support their assurance in meeting legal, regulatory and policy requirements.



Public Health England will support action for sustainable development across the health and care system by collecting, synthesising and sharing information about the health impacts of environmental and social change and the most effective actions which can be taken to address these. Public Health England will use this to inform the evidence based practical assistance we will provide to local partners.

The Chartered Institute of Environmental Health will work specifically with Public Health England and other partners and continue to stimulate, support, gather and disseminate good practice in environmental health aspects of delivering sustainable development strategies and programmes in local government and business.

NHS England supports high quality care for all, now and for future generations. As such NHS England encourages the collaborative approach to sustainable development highlighted in this strategy and supports the principles by working to align these into existing thinking and processes.

Network of sub-national and local sustainability leads

A network of sub-national and local leads across the health, care and public health systems link local champions, networks, and examples of good practice. This accelerates system-wide progress and supports implementation at a local level. This group identifies and shares best practice, innovation and learning locally both across and between local and sub-national networks. It provides an important communication channel between local action and national policy, facilitating a timely and effective spreading of best practice.

Guidance documents and tools

Guidance, frameworks and tools are being updated to support individuals, organisations and local systems to make progress and share good practice. Guidance and tools accompanying this strategy:

- Implementation notes with a menu of options for organisations and local systems⁵
- Carbon footprinting reports¹¹
- Guidance to develop Sustainable Development Management Plans¹²
- Guidance to develop Adaptation Plan component of Sustainable Development Management Plans¹³
- Good Corporate Citizenship assessment tool¹⁴
- Adaptation Toolkit for the health and care sector to be developed and published by the Environment Agency's Climate Ready support service early 2014¹⁵.

Health sector report on adaptation to climate change

Under the Adaptation Reporting Power provisions outlined in the Climate Change Act (2008) the government have nominated the Sustainable Development Unit with support from NHS England and Public Health England as the reporting authority for the health and care sector¹⁶. A report on adaptation of the health and care sector to a changing climate will be submitted in summer 2015.

Sustainable development considered in all policies, strategies and plans

Sustainable development principles, actions and measurements can be included as an integral part of all policies, strategies and plans, and ultimately become a normal and accepted part of the leadership and organisational culture in every team, department, organisation and local system.

For example, sustainable development and carbon reduction principles and actions can be embedded in business case templates, tenders and contracts, HR processes and as part of impact assessments.

"NICE guidance is designed to help health and social care to get the best outcomes for patients. We recognise the importance of environmental sustainability and so we encourage research into the environmental impact of prevention and healthcare interventions which we will take into account in the development of our guidance in the future. With more consistent measures of environmental impact, we hope in future to produce guidance that will improve the quality of care and the health of current and future populations by taking into account the use of environmental as well as financial resources"

David Haslam - Chair
National Institute for Health and Care Excellence



Be Active is a scheme provided free of charge to all residents living in the Birmingham City Council area. The scheme tackles health inequality and associated deprivation levels by offering access to free physical activity sessions for all 1.1 million citizens of the city. Participants can take part in free swimming, exercise classes or the gym at any Council-run leisure centre during off-peak hours. Funded through a partnership between Birmingham City Council and the local NHS there are over 375,000 people now registered. Within the scheme there is a GP referral exercise programme for people with long term medical conditions called Be Active Plus. Around 2,000 people a year are referred for a twelve week programme of activity with a trained Health and Fitness Advisor¹⁷.

"Economic, social and environmental sustainability are key components of a health sector that works in the interests of patients"

Toby Lambert - *Director of Strategy and Policy* MONITOR

What does success look like in 2020?

As a minimum, the Strategy needs to ensure the health and care system meets the Climate Change Act and related legal requirements. At its best, it needs to ensure that the health and care system is a visible and empowering example in taking sustainable development forward.

Everyone served by the NHS, public health and social care system can benefit from these highly achievable aims:

- 1. Reduced environmental impact: meet or exceed the target of a 34% reduction CO₂e emissions by 2020. This would leave the system well placed to meet the 50% target by 2025.
- 2. Prepared communities: organisations and local communities can be well prepared for the impacts of climate change and have plans in place to deal with events such as heatwaves, flooding and cold snaps. Progress will be highlighted in the Sustainable Development Unit report on adaptation for the health and care sector under the Adaptation Reporting Power¹⁶ as well as a series of actions set out in the National Adaptation Programme¹⁸ published in July 2013.
- 3. Local community leadership: Health and Wellbeing Boards can develop strong and proactive Health and Wellbeing Strategies within new and existing services that integrate the principles of sustainable development to achieve public health and sustainable development outcomes and can be reviewed on a regular basis.
- 4. Embedding sustainability: decision making processes can take account of sustainability in purchasing, investment, operational and strategic decisions, influencing the behaviour of those both inside and outside of the health and care system.
- 5. Improved health outcomes: measurable progress is made against national NHS, Public Health and Social Care Outcomes Frameworks¹⁹.
- 6. Recognition and replication: the public can be proud of our efforts made at a community level; we can truly benefit from the changes, and we can carry that experience into other areas.





The health and wellbeing challenges facing society require new ways of thinking and acting.

Adopting the sustainable development goals of valuing the environment, enabling people and places to be resilient and taking every opportunity to maximise health and well-being can help support this transformation.

Work to achieve service integration, place based approaches, outcomes based commissioning, self-care, enablement and primary prevention are taking place across the country to design economically sustainable solutions. We should all be aware of what initiatives are under way in our locality and be connecting with them.

Knowing about and aligning these solutions with environmental and social sustainability will reinforce more significant cost savings and health improvements.

These challenges have led to increasing support for a sustainable development approach. The key drivers for change can be found in the diagram below. A brief explanation of each driver can be found on the Sustainable Development Unit website²⁰.

Key drivers for change - Including legislative, policy and other drivers for change

Economics of Climate Change - Stern Review 2006	Government Buying Standards	Marmot Review 2010	Principle NHS Constitu	Susta Rep	Treasury inability orting nework	HPA Health Effects of Climate Change 2012
Health Co- benefits Evidence	National Adaptation Programme	Defra Economics of Climate Resilience Report 2013	Health Se Report Adaptatio 2015	on Char	mate nge Act 1008)	Civil Contingencies Act (2004)
Public Health Outcome Framework	Inter- governmental Panel on Climate Change AR 5 2013	Health and Social Care Carbon footprint	Sustaina Developr Unit Ipsos Survey	ment Red	Carbon uction egy 2009	NICE Guidelines - Active Travel
WHO Europe - Social Determinants and the Health Divide	Public Services (Social Value) Act (2012)	NHS Standar Contract SD requirement	Publi	c Aba	Marginal tement Curves	Health 2020 WHO
	and ed	onomic .	nallenging financial vironment	National Policy and Planning Framework		

The public's views

The public clearly believe it is important to use the planet's resources in a way that minimises the negative impact on the wellbeing of others and on the environment.

In public opinion surveys undertaken by Ipsos MORI for the Sustainable Development Unit in November 2011 and again in September 2013 close to 90% of respondents felt it was fairly or very important that the health and care system should make sustainability a part of the way it does its work in the future.

Thirty six per cent of the respondents said the health and care system should act in a more sustainable way even if it would cost more money. Nineteen percent felt sustainability should be a top priority.

Full details of the surveys can be found on the Sustainable Development Unit website²¹.



The system's views

A four month consultation and engagement process with organisations in the health and care system from 29 January to 31 May 2013 received close to 1000 responses. Fifty five per cent of all NHS Trusts, 35% of all CCGs and 31% of all Local Authorities in England contributed to this process.

- 94% of respondents agreed a strategy for sustainable development is needed to coordinate and guide the next phase of action to 2020
- 91% of respondents felt the health and care system should set itself challenging ambitions with regard to sustainability
- Over 75% of respondents agreed that health and care should aim to be a leading public sector sustainable and low carbon system
- Over 75% of respondents agreed or strongly agreed that all the elements of the health and care system should be included in the scope of the strategy.

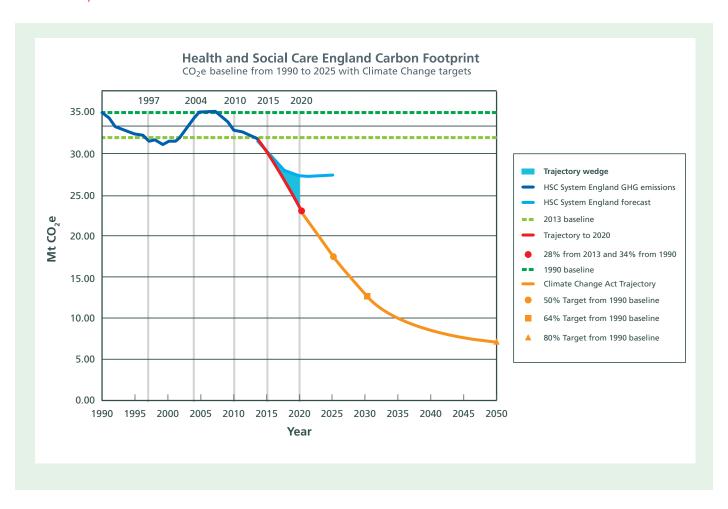
The level of organisational engagement and responses highlighted how many organisations are already engaged in developing more sustainable and resilient systems and their wish to broaden this agenda across communities and in partnership with others.

For additional information on the consultation and engagement process and to see the published summary of responses please visit the Sustainable Development Unit website²².



Carbon footprint of the NHS, Public Health and Social Care system

An ambitious aspiration for the health and care system is to achieve a 34% reduction in carbon dioxide equivalent emissions from building energy use, travel and procurement of goods and services by 2020.



Understanding the impacts that services make on the environment is key to valuing natural resources. Carbon emissions are the best currently recognised measure of this. The carbon footprint of the NHS, public health and all local authority commissioned and provided adult social services in England is estimated at 32 million tonnes of carbon dioxide equivalent (MtCO₃e) in 2012, representing 40% of public sector emissions in England.

The Climate Change Act 2008²³ requires a reduction in emissions of 80% by 2050 based on a 1990 baseline, supported by reductions of 34% by 2020 and 50% by 2025. The graph shows all carbon emissions from 1990 to 2012 with projections to 2025.

The UK targets have been applied to emissions from building energy use, travel and procurement of goods and services.

For additional information on the carbon footprint data please visit the Sustainable Development Unit website²⁴.

Executive summary

The NHS, public health and social care system recognises that the current system is not sustainable without radical transformation. It highlights that environmental and social sustainability can be addressed alongside economic sustainability challenges.

This strategy has been developed following a robust consultation and engagement process with collaboration from all parts of the health and care system. Two public surveys indicate there is also support from the public.

This strategy proposes the vision that a sustainable system protects and improves health within environmental and social resources now and for future generations. This means reducing carbon emissions, minimising waste and pollution, building resilience to climate change and nurturing community strengths.

Three goals have been identified to support this vision:

- 1- A healthier environment
- 2- Communities and services are resilient to changing times and climates
- 3- Every opportunity contributes to healthy lives, communities and environments.

A sustainable approach is proposed that builds on the virtuous cycles of reducing environmental impact whilst enhancing the natural environment. This means reducing inequalities whilst building on social assets and reducing the burden of disease whilst supporting independence and wellbeing. This applies to both people and places.

Five modules support the main document and provide further information on key areas of focus: leadership and engagement, models of care, local communities, carbon hotspots, and commissioning and procurement.

Three further modules will be developed and launched in January 2015: technology and research, metrics and social capital.

The strategy encourages implementation at a local level where health and wellbeing boards play a key role through their needs assessments and strategies.

Organisations can ensure they contribute by having a board approved sustainable development plan, measuring and reporting on progress, evaluating their approach and engaging with staff, service users and the public.

A cross system advisory group is in place to support the process at a national level and a network of local and regional leads are providing support at a local level. Further guidance and tools will be developed to support the system and every policy could include environmental and social sustainability considerations.

The Sustainable Development Unit will coordinate the writing of an adaptation report as part of the July 2015 Adaptation Reporting Power request. This will provide a further opportunity to highlight and support communities and services to be prepared for adverse weather events and climate change.

Key success measures identified for 2020 will be monitored by the Sustainable Development Unit and the National Cross System Advisory Group.

This includes a reduction of the carbon footprint by 34% by 2020. In 2012 the footprint of the health and care system was 32 Million tonnes CO_2 e which represents 40% of the public sector in England.

Further information and implementation notes are available at www.sduhealth.org.uk



Contributors

Through the development of this strategy many forward thinking organisations and individuals have added thought and credence to the strategy development process. We would like to thank everyone for the time and effort that they have so generously given to this process.

The following organisations, groups and networks were part of the consultation and engagement process which informed the development of this strategy:

@UK PLC

Academy of Medical Royal Colleges

Adaptation and Resilience to a Changing Climate Coordination Network (ARCC CN)

Airedale NHS Foundation Trust

Association of Chartered Certified Accountants

Association of Directors of Public Health

Association of the British Pharmaceutical Industry

Audit & Finance Non-Executive Director Forum (AFNED)

Azure PCR Ltd

Barking, Havering & Redbridge University Hospitals NHS Trust

Barnet & Chase Farm NHS Trust

Barnsley Council

Barnsley's Health and Wellbeing Board

Barts Health NHS Trust

Baxter

Bedford Hospital NHS Trust

Berkshire Healthcare Foundation Trust

Birmingham and Solihull Mental Health NHS Foundation Trust

Birmingham Community Healthcare NHS Trust Birmingham Women's NHS Foundation Trust

Bracknell Forest Council

Bradford Teaching Hospitals NHS Foundation Trust

Brighton and Sussex University Hospitals NHS Trust

Bristol City Council & Bristol Public Health Bristol Green Capital sustainable health group. British Association for Community Child Health

British Medical Association

Buckinghamshire County Council Building Research Establishment Ltd.

Cambridge University Hospitals NHS Foundation Trust

Campaign for Better Hospital Food

Carbon Trust
Care Plus Group

Care Quality Commission

Care UK Ltd Carillion PLC

Catherine Max Consulting: The Future Health Partnership

Central London Community Healthcare NHS Trust

Central Manchester University Hospitals Foundation Trust

Centre for Sustainable Healthcare

Cheshire and Wirral Partnership NHS Foundation Trust

Cheshire West and Chester Council Health and Wellbeing Board

Christchurch Hospital, New Zealand

City Of Bradford Metropolitan District Council

Climate and Health Council

Climate UK

CO2Sense CIC

Collaboration for Leadership in Applied Health Research and

Care, Nottinghamshire, Derbyshire and Lincolnshire

Community Solutions partnership Services Ltd

Cornwall Council - Cornwall Health Environment Committee

Countess of Chester Hospital NHS Foundation Trust

Counties Manukau Health, New Zealand

County Durham and Darlington NHS Foundation Trust

Croydon Council

Cumbria Partnership NHS Foundation Trust

Dartford & Gravesham NHS Trust

Departments of Public Health - Nottingham City Council &

Nottinghamshire County Council

Derby City Council Health and Wellbeing Board

Derby Hospitals NHS Foundation Trust

Derbyshire Community Health Services NHS Trust

Derbyshire Healthcare NHS Foundation Trust

Devon Partnership NHS Trust

Doncaster Council

Dorset Public Health

Dudley & Walsall Mental Health Partnership NHS Trust

Durham County Council
East & North Herts NHSTrust

East Kent Hospitals University Foundation Trust

East Lancashire Hospitals NHS Trust

East Midlands LETB

East Midlands NHS SD Network East of England Ambulance Service East Sussex Healthcare NHS Trust

Eddie Stobart

Environment Agency

Faculty of Medical Leadership and Management

Fay Blair Associates

Food for Life Partnership

Forum for the Future

Foundation Trust Network

Friends of the Earth

Frimley Park Hospital NHS Foundation Trust

George Eliot Hospital NHS Trust

Ghent University

Gloucestershire Care Services NHS Trust

Gloucestershire Hospitals NHS Foundation Trust

Greater Manchester West, Mental Health NHS Foundation Trust

Greener Journeys

Growing in Haringey

Guy's and St Thomas' NHS Foundation Trust

Halton Borough Council Health and Wellbeing Board

Hampshire Health and Wellbeing Board Hampshire Hospitals NHS Foundation Trust Harrogate and District NHS Foundation Trust

Health Education England

Health Estates and Facilities Management Association

Health in Balance Healthwatch Derby Healthwatch Hertfordshire

Healthy Planet UK

Hertfordshire County Council - Public Health Directorate Hounslow and Richmond Community Healthcare NHS Trust

Hull and East Yorkshire Hospitals NHS Trust

Hull City Council

Humber NHS Foundation Trust

 ${\bf Imperial\ College\ Healthcare\ NHS\ Trust}$

Isle of Wight NHS Trust Johnson & Johnson

Joseph Rowntree Foundation

Kettering General Hospital NHS Foundation Trust

Kirklees Council - Green Infrastructure Lancashire Care NHS Foundation Trust

Lancashire Teaching Hospital NHS Foundation Trust

Leeds Teaching Hospitals NHS Trust

Leicester City Council

Leicestershire County Council Lewisham Healthcare NHS Trust

Lincolnshire County Council Health and Wellbeing Board

Lincolnshire Partnership NHS Foundation Trust Liverpool City Council - Public Health Directorate Liverpool City Region Local Nature Partnership Liverpool Community Health NHS Trust

Liverpool Community Health NAS Liverpool Heart & Chest Hospital Liverpool NHS Carbon Collective

Living Streets

Living With Environmental Change (LWEC)

London Borough of Havering Health and Wellbeing Board

London Borough of Merton

London Borough of Richmond upon Thames Council

London Climate Change Partnership

London Cycling Campaign Luton & Dunstable Hospital Luton Borough Council

Luton Borough Council (Public Health)
Maidstone And Tunbridge Wells NHS Trust
Manchester Mental Health and Social Care Trust

Marie Curie Medsin Medway NHS Foundation Trust

Mid Cheshire Hospitals NHS Foundation Trust

Mid Essex Hospital Services NHS Trust

Mid Yorkshire NHS Trust

Monitor

Moorfields Eye Hospital NHS Foundation Trust National Institute for Health and Care Excellence

Natural Interest Ltd. NEP Energy Services Ltd

Newcastle Upon Tyne Hospitals NHS Foundation Trust

NHS Airedale Wharfedale and Craven CCG

NHS Alliance

NHS Barnsley CCG

NHS Birmingham South Central CCG

NHS Blood and Transplant NHS Bradford City CCG NHS Bradford District CCG NHS Brighton and Hove CCG

NHS Bristol CCG NHS Bromley CCG

NHS Cambridgeshire and Peterborough CCG

NHS Cannock Chase CCG NHS Central Southern CSU NHS Cheshire and Merseyside CSU

NHS Chorley and South Ribble CCG

NHS City and Hackney CCG NHS Coastal West Sussex CCG

NHS Confederation

NHS Coventry and Rugby CCG

NHS Crawley CCG NHS Darlington CCG

NHS Dartford, Gravesham and Swanley CCG

NHS Direct

NHS Doncaster CCG NHS Dorset CCG

NHS Durham Dales, Easington and Sedgefield CCG

NHS East Lancashire CCG

NHS East Leicestershire and Rutland CCG

NHS East Staffordshire CCG

NHS England NHS Employers NHS Erewash CCG

NHS Fareham & Gosport CCG NHS Gloucestershire CCG

NHS Great Yarmouth and Waveney CCG $\,$

NHS Greater East Midlands CSU NHS Greater Preston CCG

NHS Hartlepool and Stockton-on-Tees CCG

NHS Herts Valleys CCG

NHS High Weald Lewes Havens CCG NHS Horsham and Mid Sussex CCG

NHS Kernow CCG NHS Leadership Academy NHS Leeds North CCG

NHS Leeds South and East CCG

NHS Leicester City CCG

NHS Lincolnshire East CCG

NHS Liverpool CCG

NHS Merton CCG

NHS Milton Keynes CCG

NHS National Performance Advisory Group (NPAG) Sustainability Best Value Group

NHS Nene CCG

NHS North East Essex CCG

NHS North East Lincolnshire CCG

NHS North Norfolk CCG

NHS North Somerset CCG

NHS North West London CSU

NHS North West Surrey CCG

NHS North Yorkshire and Humber CSU

NHS North, East, West Devon CCG

NHS Northumberland CCG

NHS Norwich CCG

NHS Nottingham North and East CCG

NHS Nottinghamshire County

NHS Portsmouth CCG

NHS Property Services - Essex

NHS Property Services Ltd.

NHS Somerset CCG

NHS South East Staffordshire and Seisdon Peninsula CCG

NHS South Eastern Hampshire CCG

NHS South Kent Coast CCG

NHS South London CSU

NHS South Manchester CCG

NHS South Sefton CCG

NHS South West CSU

NHS South West Lincolnshire CCG

NHS Southern Derbyshire CCG

NHS Southport & Formby CCG

NHS Stafford & Surrounds CCG

NHS Supply Chain

NHS Swale CCG

NHSThanet CCG

NHS Tower Hamlets CCG

NHS Wakefield CCG

NHS Wandsworth CCG

NHS West and South Yorkshire and Bassetlaw CSU

NHS West Hampshire CCG

NHS West Lancashire CCG

NHS West Norfolk CCG

NHS Wigan Borough CCG

NHS Wiltshire CCG

Norfolk and Suffolk Foundation NHS Trust

Norfolk Community Health & Care NHS Trust

Norfolk County Council

Norfolk County Council - Network of Green party Councillors and members in mid-Norfolk

North Bristol Trust

North Cumbria University Hospitals NHS Trust

North East Lincolnshire Council

North East London NHS Foundation Health Trust

North Tees & Hartlepool NHS Foundation Trust

North Tyneside Council

North West Ambulance Service NHS Trust

North West London Hospitals Trust

North West London NHS Property Services

Northampton General Hospital

Northamptonshire Healthcare NHS Foundation Trust

Northern Lincolnshire and Goole Hospitals NHS

Foundation Trust

Northumberland County Council

Northumberland Tyne & Wear NHS Foundation Trust

Northumbria Healthcare NHS Foundation Trust

Nottingham University Hospitals NHS Trust

Nottinghamshire Healthcare NHS Trust

Novo Nordisk A/S

Oxford Health NHS Foundation Trust

Patients Know Best

Peterborough City Council

Pharmaceutical Services Negotiating Committee

Physiotherapy Matters Limited

Pirates are Cooler than Ninjas

Plymouth Hospitals NHS Trust

Plymouth University

Population Matters

Portsmouth Hospitals NHS Trust

Public Health Cornwall

Public Health England

Public Health England Centre - Cumbria and Lancashire

Public Health England Centre - East Midlands

Public Health England Centre - West Midlands

Public Health Suffolk

Redcar and Cleveland Council

Resilient Communities

Rotherham NHS Foundation Trust

Rotherham, Doncaster and South Humber NHS

Foundation Trust

Royal Borough of Greenwich Council

Royal College of Anaesthetists

Royal College of General Practitioners

Royal College of Midwives

Royal College of Nursing

Royal College of Obstetricians and Gynaecologists

Royal College of Ophthalmologists

Royal College of Paediatrics and Child Health

Royal College of Physicians of London

Royal College of Psychiatrists

Royal Liverpool & Broadgreen University Hospitals NHS Trust

Royal Orthopaedic Hospital NHS Foundation Trust

Royal Pharmaceutical Society

Royal Society for Public Health

Royal United Hospital Bath NHS Trust

Rutland Health and Wellbeing Board

Salford Royal NHS Foundation Trust

Salix Finance

Sandwell & West Birmingham Hospitals NHS Trust

Social Care in Action (SCA)

School of Pharmacy Keele University

Scottish Managed Sustainable Health Network (SMaSH)

Scottish Public Health Network (ScotPHN)

Sefton Council Health and Wellbeing Board

Shared Lives Plus

Sheffield Children's NHS Foundation Trust

Sheffield City Council

Sheffield Health & Social Care NHS Foundation Trust

Shrewsbury & Telford Hospital NHS Trust

Shropshire Community Health Trust

Social Care Institute for Excellence

Solent NHS Trust

Solent Supplies Team

South Central Ambulance Service NHS Foundation Trust

South East Coast Ambulance NHS Foundation Trust

South Essex Partnership University NHS Foundation Trust

South London & Maudsley NHS Foundation Trust

South Tyneside NHS Foundation Trust

South West Yorkshire Partnerships Foundation Trust

Southend University Hospital NHS Foundation Trust

Southern Health NHS Foundation Trust

Southwark Council

St Helens and Knowsley Hospitals NHS Trust

St Monica Trust

Staffordshire and Stoke on Trent Partnership Trust

Staffordshire County Council Health and Wellbeing Board

Stockport County Council Health and Wellbeing Board

Stockport NHS Foundation Trust

Sue Ryder Foundation

Sunderland City Council Health and Wellbeing Board

Surrey and Borders Partnership NHS Foundation Trust

Surrey County Council Health and Wellbeing Board

 ${\it Sussex} \ {\it Community} \ {\it NHSTrust}$

Sussex Partnership NHS Foundation Trust

Sustainability Indicators Metric Group - SDU led

Sustainable Travel Solutions Ltd

Sustenance and The Green Gardeners Group

Sustrans

Tameside Hospital NHS Foundation trust

Tanzania Poverty Reduction Society

Taunton and Somerset NHS Foundation Trust

Tees, Esk and Wear Valleys NHS Foundation Trust

The British Dental Trade Association

The Christie NHS Foundation Trust

The Forge Clinic

The Green Health Consultancy

The Hillingdon Hospitals NHS Foundation Trust

The King's Fund

The Mersey Forest

The Patients Association

The Princess Alexandra Hospital NHS Trust

The Public Health Registrar Sustainable Development Network

The Robert Jones and Agnes Hunt Orthopaedic Hospital NHS Foundation Trust

The Tavistock and Portman NHS Foundation Trust

Third Sector Assembly Cheshire West

TWI Ltd

UK Faculty of Public Health

UK Health Forum

University College London Hospitals (UCLH) NHS

Foundation Trust

University Hospital of North Staffordshire NHS Trust

University Hospital South Manchester

University Hospitals Birmingham NHS Foundation Trust

University Hospitals Bristol NHS Foundation Trust

University Hospitals Coventry and Warwickshire NHS Trust

University of Brighton

University of York

Uscreates

Wakefield Health and Wellbeing Board

Waldron Office Furniture Ltd.

Waltham Forest Council Health and Wellbeing Board

Warrington and Halton Hospitals NHS Foundation Trust

Warrington Borough Council - Public Health

West London Mental Health NHS Trust

West Midlands Ambulance Service NHS Foundation Trust

West Suffolk Foundation NHS Trust

Western Sussex Hospitals NHS Trust

Weston Area Health NHS Trust

Whittington Health NHS Trust

WHO Collaborating Centre for Healthy Cities and Urban Policy

Willmott Dixon

Wirral Community NHS Trust

Wirral University Teaching Hospital NHS Foundation Trust

\M/RAP

Wrightington, Wigan and Leigh NHS Foundation Trust

WRM Sustainability Ltd

Wye Valley NHS Trust

Yeovil District Hospital NHS Foundation Trust

York Teaching Hospital NHS Foundation Trust

Yorkshire Ambulance Service NHS Trust

Young Fabians



Glossary

Asset: a useful or valuable thing or person. In relation to community assets we mean valuable things and people within that community such as local sports teams, local charities, a strong sense of community spirit or local volunteers. Environmental assets could include things such as green spaces, areas that encourage biodiversity, lakes and rivers or natural resources.

Carbon: Throughout this strategy the word carbon is used as a generic term for carbon dioxide equivalent emissions (CO_2e) , otherwise known as greenhouse gases.

Climate Change Act: The Climate Change Act (2008) was introduced to ensure the UK cuts its carbon emissions by 80% by 2050 (against a 1990 baseline) and to ensure that the Government's programme for adaptation enables the UK to prepare effectively for the impacts of climate change.

Co-benefits: Actions that have benefits across two or more areas. For example: more walking and cycling and driving your car less, is good for health (all the health benefits of physical activity) and good for the environment (less carbon emissions, less air and noise pollution).

CO₂e: carbon dioxide equivalent. It is a way of measuring six different greenhouse gases using one standard unit by comparing them on a like for like basis relative to one unit of carbon dioxide (CO₂). The six greenhouse gases are: carbon dioxide; hydrofluorocarbons; methane; nitrous oxide; perfluorocarbons and sulphur hexafluoride.

Place based approaches: A whole area approach to the design and delivery of public services.

References

- 1 NHS England, 2014. NHS England Call to Action [online] Available at: www.england.nhs.uk/ourwork/qual-clin-lead/calltoaction/ [Accessed 06 January 2014]
- 2 World Health Organization, 1948. WHO Definition of Health [Online] Available at: www.who.int/about/definition/en/print.html [Accessed 06 January 2014]
- 3 Department of Environment, Food, and Rural Affairs, 2011. Sustainable Development in Government. Guiding principles for sustainable development [Online] Available at: http://sd.defra.gov.uk/what/principles/ [Accessed 06 January 2014]
- 4 Building Better Healthcare, 2013. Building Better Healthcare 2012 Winners' Book. Sustainability Class pg. 17
 [Online] Available at: www.willmottdixongroup.co.uk/assets/b/u/building-better-health-awards-writeup-2012-nov.pdf [Accessed 06 January 2014]
- 5 Sustainable Development Unit, 2014. Areas of Focus [Online] Available at: www.sduhealth.org.uk/focus [Accessed 06 January 2014]
- 6 Department of Health, 2011. Joint Strategic Needs Assessment and joint health and wellbeing strategies explained.
 [Online] Available at: www.gov.uk/government/publications/joint-strategic-needs-assessment-and-joint-health-and-wellbeing-strategies-explained [Accessed 06 January 2014]
- 7 Kings Fund, 2013. Health and wellbeing boards. One year on. pg.11 [Online] Available at: www.kingsfund.org.uk/sites/files/kf/field_publication_file/health-wellbeing-boards-one-year-on-oct13.pdf [Accessed 06 January 2014]
- 8 Marmot, M. 2010. Fair Society, Healthy Lives: Strategic Review of Health Inequalities in England post 2010 [Online] Available at: www.instituteofhealthequity.org/Content/FileManager/pdf/fairsocietyhealthylives.pdf [Accessed 06 January 2014]
- 9 Kent County Council, 2013. Joint Strategic Needs Assessment: A Guide to Integrating Sustainability [Online] Available at: www.sduhealth.org.uk/resilience [Accessed 06 January 2014]
- 10 Islington, 2014. SHINE Referral Scheme [Online] Available at: www.islington.gov.uk/services/parks-environment/sustainability/sus_awarmth/Pages/shine.aspx [Accessed 06 January 2014]
- 11 Sustainable Development Unit, 2014. Carbon Footprint Reports [Online] Available at: www.sduhealth.org.uk/report [Accessed 06 January 2014]
- 12 Sustainable Development Unit, 2014. Sustainable Development Management Plan (SDMP) Guidance. [Online] Available at: www.sduhealth.org.uk/plan [Accessed 06 January 2014]
- 13 Sustainable Development Unit, 2014. Adaptation to Climate Change. Planning Guidance for Health and Social Care Organisations [Online] Available at: www.sduhealth.org.uk/plan [Accessed 06 January 2014]
- 14 Sustainable Development Unit, 2012. Good Corporate Citizenship (GCC) Tool [Online] Available at: www.sduhealth.org.uk/gcc/ [Accessed 06 January 2014]
- 15 Environment Agency, 2014. Adaptation Toolkit for the health and care system [Online] Available at: www.sduhealth.org.uk/resilience [Accessed 06 January 2014]
- 16 Department of Environment, Food, and Rural Affairs, 2013. Adapting to Climate Change: Ensuring Progress in Key Sectors. 2013 Strategy for Exercising the Adaptation Reporting Power and list of priority reporting authorities [Online] Available at: www.gov.uk/government/uploads/system/uploads/attachment_data/file/209875/pb13945-arp-climate-change-20130701.pdf [Accessed 06 January 2014]
- 17 Birmingham City Council, 2014. Be Active Plus [Online] Available at: www.birmingham.gov.uk/beactiveplus [Accessed 06 January 2014]
- 18 Department of Environment, Food, and Rural Affairs, 2013. Policy Adapting to climate change [Online] Available at: www.gov.uk/government/policies/adapting-to-climate-change/supporting-pages/national-adaptation-programme [Accessed 06 January 2014]
- 19 Department of Health, 2013. Health and social care outcomes frameworks [Online] Available at: www.gov.uk/government/collections/health-and-social-care-outcomes-frameworks [Accessed 06 January 2014]
- 20 Sustainable Development Unit, 2014. Key drivers for change [Online] Available at: www.sduhealth.org.uk/sds [Accessed 06 January 2014]
- 21 Ipsos MORI, 2011 & 2013. Public Opinion [Online] Available at: www.sduhealth.org.uk/report [Accessed 06 January 2014]
- 22 Sustainable Development Unit, 2013. Summary of Responses to the Consultation on a Sustainable Development Strategy for the Health, Public Health and Social Care System 2014-2020. [Online] Available at: www.sduhealth.org.uk/sds [Accessed 06 January 2014]
- 23 HMSO, 2008 Climate Change Act 2008 (c.27) [online] Available at: www.legislation.gov.uk/ukpga/2008/27/pdfs/ukpga_20080027_en.pdf [Accessed 06 January 2014]
- 24 Sustainable Development Unit, 2014. NHS, Public Health and Social Care Carbon Footprint 2012. [Online] Available at: www.sduhealth.org.uk/report [Accessed 06 January 2014]

Document produced by the Sustainable Development Unit (SDU) which is funded by, and accountable to, NHS England and Public Health England to work across the NHS, public health and social care system.

The SDU supports the NHS, Public Health and Social Care system to be sustainable environmentally and socially. This is done by engaging across the system to identify the frameworks, networks and mechanisms that will encourage a healthier environment, better health and enable communities and services to be resilient to adverse weather events and climate change.

Responsibility for the content of this document lies with the Sustainable Development Unit.

Sustainable Development Unit Working across the NHS, Public Health and Social Care system

The Sustainable Development Unit Victoria House, Capital Park, Fulbourn, Cambridge, CB21 5XB