



Public Health
England

Protecting and improving the nation's health

Sustainable Development Management Plan 2014/17

Version 1.4: December 2014

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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Foreword

We both welcome and fully support Public Health England's Sustainable Development Management Plan as a means to meet our ongoing commitments to the government's climate change agenda, and the Sustainable Development Strategy for the health, public health and social care system. This document details the practical methods that the organisation will adopt to embed sustainable development into our everyday lives and gives detailed information on how we will reduce our carbon emissions whilst still providing a high level of high quality, science based support to our stakeholders.

It is vital that we are all aware of how our everyday actions can have serious impacts upon our environment; these may not be impacts that we can see straight away, but impacts that will affect our children in their lifetimes and future generations.

As the guardians of our environment, we can all make subtle changes to our activities, thus ensuring our commitment to our sustainable development agenda and a sustainable low carbon economy. Understanding these challenges and developing plans to achieve improved health and wellbeing for our stakeholders is the essence of our commitment.

We wholeheartedly support and promote all of the actions that we are undertaking to reduce the impact that our work has in the sphere of sustainable development and therefore making our environment more sustainable for the future.

While reading this management plan, please consider what actions you personally could take to help PHE meet its sustainable development objectives and targets.

Paul Cosford
Director for Health Protection and Medical Director

and

Kevin Fenton
Director for Health and Wellbeing

Contents

Contents	4
Glossary	5
1. Executive Summary	6
2. Introduction	7
4. Key areas of action	11
5. Energy and carbon management	12
6. Travel and transport	14
7. Waste	17
8. Water	19
9. Procurement	21
10. Built environment	24
11. Health and wellbeing	26
12. Biodiversity	27
13. Adaptation to climate change	29

Glossary

BAP	Biodiversity Action Plan
BREEAM	British Research Establishment Environmental Assessment Methodology
CCEE	Climate Change and Extreme Events
CCRA	Climate Change Risk Assessment
CRDP	Carbon Reduction Delivery Plan
CMP	Carbon Management Plan
DECC	Department for Energy and Climate Change
DEFRA	Department for Environment Food and Rural Affairs
DH	Department of Health
EMS	Environmental Management System
EPRR	Emergency Preparedness Resilience Response
GGC	Greening Government Commitment
HP	Health Protection
HWB	Health and Wellbeing
PHE	Public Health England
PHOF	Public Health Outcomes Framework
NAP	National Adaptation Programme
SD	Sustainable Development
SDEMG	Sustainable Development Environmental Management Group
SDMP	Sustainable Development Management Plan
SPB	Sustainability Programme Board
SP	Sustainable Procurement

1. Executive Summary

Public Health England (PHE) recognises the links between health and the environment and that climate change and the depletion of finite resources are a real and growing threat for the global population. We are committed to a strategic view of sustainable development and will therefore endeavour to take all reasonable steps to ensure we carry out our activities in a sustainable manner, minimising the impact from our actions and implementing policy so as to meet our environmental, social and economic targets.

Sustainable development is recognised as an important issue by many PHE staff. The SDMP is aligned with, and contributes to, meeting the goals of the Sustainable Development Strategy for the NHS, Public Health and Social Care system.

We acknowledge and support the government's commitment to sustainable development and its endorsement of environmental management as one of the tools we can use to ensure a better quality of life for our staff as well as the communities that we both serve and impact upon. This is clearly signalled by recognising the importance of social impacts alongside economic and environmental impacts in decision making.

The organisation is also responsible for fulfilling its legal obligations. Members of staff have a duty of care when interacting with aspects of the environment which could have a significant impact. This document describes PHE's sustainable development management plans and provides a strategic management overview of the objectives and targets that are in place to reduce our impact – environmentally, socially and financially. This will ensure that the principles of sustainable development become embedded into every facet of the organisation.

We will implement this SDMP in a transparent and robust manner that will ensure we deliver environmental, economic and social benefits by:

- meeting and where possible exceeding the 'Greening Government Commitment' targets, by minimising our environmental impact (carbon footprint, travel, water, waste) and ensuring our purchasing activities meet the government's standards for sustainable procurement;
- preparing for, and responding to, the health-related impacts of climate change;
- engaging with staff across the whole organisation on sustainable development;
- providing opportunities for our staff, in the workplace, to lead a sustainable healthy lifestyle;
- meeting our legislative requirements, relative to the aspects associated with sustainable development; and
- monitoring and measuring our progress on all of these activities clearly and openly.

2. Introduction

2.1 Background

This Sustainable Development Management Plan (SDMP) provides a clear roadmap for our members of staff to follow, identifying the approach we will take to improve the organisation's social, environmental and financial performance. The SDMP also aligns with the National Cross System Sustainable Development Strategy for the NHS, Public Health and Social Care System, available at www.sduhealth.org.uk/sds.



This document also gives assurance that PHE, which has responsibility for producing the Public Health Outcomes Framework (PHOF) indicator data set, is meeting its requirements to produce a Board approved SDMP, thus providing an appropriate level of focus on sustainable development within the organisation.

It is hoped that the revision of the PHOF in 2014 will allow the opportunity to include additional indicators that help to reflect progress on developing sustainable approaches across the public health system.

This is a live document and as such will be updated and distributed to all relevant stakeholders bi-annually.

2.2 Definition of Sustainable Development

One of the most used definitions of Sustainable Development was given at the Rio 'Earth Summit' in 1992 by the chairperson Gro Harlem Brundtland. She stated that sustainable development is: ***'Development that meets the need of the present generation without compromising the needs of future generations to meet their own needs.'*** What this statement is articulating is that we should think about how we currently use our natural resources at the expense of our children's future needs.



A better quality of life is what all organisations aspire to for their staff and the communities that they serve and impact. This can be clearly signalled by recognising the importance of considering social impacts alongside economic and environmental impacts in decision making. At the heart of this concept are the five guiding principles for sustainable development, as laid out in the Government's guidance document, 'Securing the Future'.

The Five Guiding Principles

Securing the Future explains that these principles will form the basis for future government policy setting in the UK. For a policy to be sustainable, it must respect all five of these principles, which are ***Living within Environmental Limits, Ensuring a Strong, Healthy and Just Society, Achieving a Sustainable Economy, Promoting Good Governance and Using Sound Science Responsibly.***

The Four Shared Priorities

The four shared priorities, detailed below, were also identified in the 'Securing the Future' strategy document as requiring immediate attention. Although this document was written some time ago the principles still remain strong, therefore we will endeavour to consider and address these shared priorities when we deliver our SDMP.

Sustainable Consumption and Production – Sustainable consumption and production is about achieving more with less. This means not only looking at how goods and services are produced, but also the impacts of products and materials across their whole lifecycle and building on people's awareness of social and environmental concerns.

Climate Change and Energy – The effects of a changing climate can already be seen. We will seek to secure a profound change in the way we use energy across our estate, and in other activities relevant to the health impacts of climate change and extreme events.

Natural Resource Protection and Environmental Enhancement – Natural resources are vital to our existence and that of communities throughout the world. We need a better understanding of environmental limits, environmental enhancement and recovery where the environment is most degraded to ensure a decent environment for everyone, and a more integrated policy framework.

Sustainable Communities – Our aim is to create sustainable communities that embody the principles of sustainable development at the local level. This will involve working to give communities more power and say in the decisions that affect them; and working in partnership at the right level to get things done.

Source: Adapted from Securing the Future, March 2005

2.3 PHE Commitments¹

Corporate sustainable development is defined as “**a process an organisation undergoes to support and embed behavioural change, through improvement in its environmental, social and financial performance, leaving a legacy for future generations**”². Specifically we will implement this SDMP in a transparent and robust manner that will ensure we deliver environmental, economic and social benefits by:

- meeting and where possible exceeding the ‘Greening Government Commitments’ targets, by minimising our environmental impact (carbon footprint, travel, water, waste) and ensuring our purchasing activities meet the Government’s standards for sustainable procurement;
- preparing for, and responding to, the health-related impacts of climate change;
- engaging with staff across the whole organisation on sustainable development;
- providing opportunities for our staff, in the workplace, to lead a sustainable healthy lifestyle;
- meeting our environmental legislative requirements; and
- monitoring and measuring our progress on all of these activities clearly and openly.

We will also be in a position to use these strategic outcomes to drive our business plans and to start to develop measures of performance, based on robust evidence and analytical work.

2.4 Delivery of the SDMP



Delivery of this SDMP will require top level management commitment to ensure that sufficient resources, capability and funding are available. The SDMP will be cascaded across the organisation integrating it into corporate and local business plans, where appropriate. Outcomes from the plan will enable us to measure our performance, achieve a better understanding of the actions that will make the biggest impact and help prioritise our medium and longer term commitments to this agenda.

¹ PHE Environmental Policy (See <http://phenet.phegov.uk/Policies-and-Procedures/Policy%20Documents/Environmental%20policy%20statement.pdf>)

² Defined by PHE’s Head of Sustainable Development and Environmental Management

2.5 Good Corporate Citizen

The Good Corporate Citizen (GCC) assessment tool has been in place for a number of years, and is hosted by the Sustainable Development Unit (SDU), the latest version of which can be found at <http://www.sduhealth.org.uk/gcc/>. The assessment tool can be used to evaluate your journey on the road to being sustainable, from 'Getting There' to 'Excellent'.

By using the tool you can benchmark progress on sustainable development, not just by measuring fuel bills or waste but by evaluating sustainability across the board in financial, social and environmental terms.

This tool can help organisations reduce their negative impact on the environment, take an active role in local sustainable development, improve health and reduce inequalities in health through their day-to-day activities.

This means using the resources of PHE in ways that benefit, rather than damage, the social, economic and environmental conditions in which we live.

By operating as a "good corporate citizen", PHE can contribute to a healthier local population, improved staff morale and reducing our environmental impact.

The Department of Health has identified good corporate citizenship as a priority for every healthcare organisation in its public health strategy.

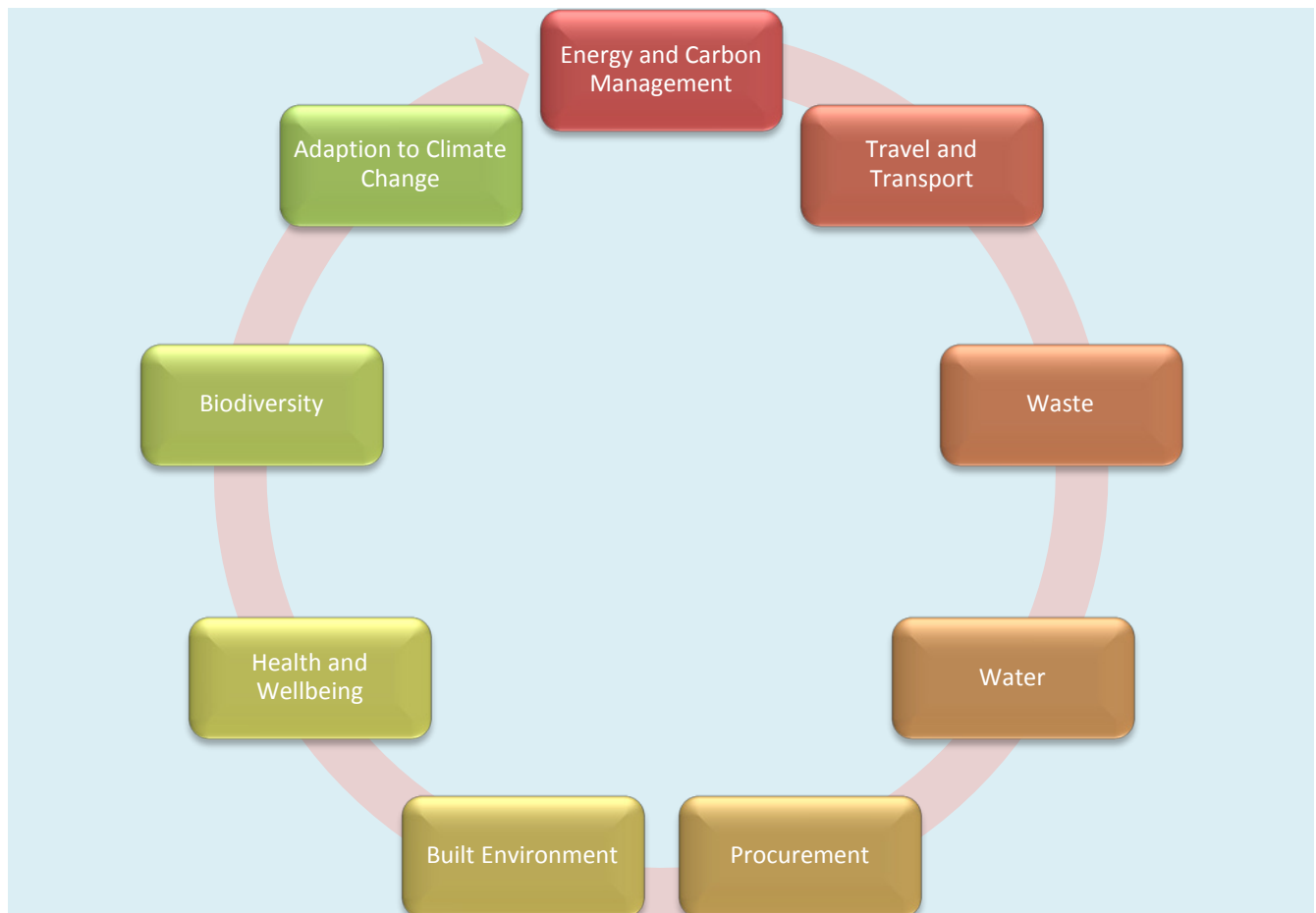
We will undertake the GCC assessment on an annual basis and use the results as a guide to continual improvement in our sustainable development strategy.

The SDU have other resources available on their website to help engage with members of staff be more sustainable in the workplace and at home. <http://www.sduhealth.org.uk/>

4. Key areas of action

The key areas where we will be concentrating our efforts, regarding our SDMP, are detailed in the following chapters. Each of the specific chapters highlights what the organisation aims to achieve in each particular area of concern, how it will be achieved and how it will be measured or monitored.

Press Ctrl and left click on each particular box to be taken to the relevant section.



5. Energy and carbon management

Reducing our Carbon emissions from utility usage* by at least 3% annually, from 23,751 tCO₂e relative to a baseline year of 2013/14 until 2019/20

5.1 What do we want to achieve?

Whilst energy and transport usage, and the production of waste are inevitable, careful management of our estate's utility and resources will help to minimise our carbon footprint and associated costs.

A combination of Scope 1, 2 and 3 emissions are included in our Carbon Management Programme reflecting their significance.

PHE considers carbon emissions that arise from:

- electricity, gas and fuel oil consumption;
- water consumption and effluent;
- waste produced; and
- business travel

Although not within the immediate scope of PHE's Carbon Management Programme it is recognised that our procurement activities potentially contribute significantly to direct and indirect carbon emissions.

PHE's sustainability objectives and targets in relation to Utility usage are to:

- reduce carbon emissions from utility usage* by at least 3% annually, from 23,751 tCO₂e relative to a baseline year of 2013/14 until 2019/20 taking into account growth of the organisation, be this in financial or in WTE numbers.

By reducing our utility use, across the organisation, it follows that we will also benefit financially by meeting this target; a definite win win situation.



(*) Utility usage equates to emissions from Electricity, Natural Gas, Gas Oil and imported Steam

5.2 How will this be achieved?

The objective of carbon management for PHE is to minimise the risks and maximise the opportunities arising from a sustainable low carbon economy and climate change, in the short, medium and long term, against a background of increasing regulation and stakeholder concerns.

To manage this effectively requires a strategic, organisation-wide approach, integrating with existing SD policy objectives³.



Within the constraints of a low carbon economy we will therefore need to embed Carbon Management as a core objective by implementing a sustainable, transparent and robust carbon reduction strategy throughout the organisation.

Achieving a more sophisticated understanding of where we are using energy and resources and what will make the biggest

impact will make it possible to prioritise the delivery plan, and to explain how we will deliver it's mid and longer term commitments. This information will enable us to drive our business plans towards being more sustainable and to start to develop measures of performance, based on robust evidence and analytical work.

5.3 How will we measure and monitor it?

A specific methodology for collating carbon emissions data from across the estate has been approved by the Department of Health (DH) and Department for Environment Food and Rural Affairs (Defra). We collect carbon emissions data from across the organisation, via dedicated site representatives. This data is normalised annually to

³ See PHEnet for all our SD policies and management arrangements

take into account growth in the organisation and will be calculated against the metric of tCO₂e/WTE or tCO₂e/m².

As an Executive Agency of the DH, we are legally bound to report on our carbon emissions, in a set format, every quarter, and which meets the requirements as set out in the GGC initiative. We are also legally bound to report annually via our annual report and accounts.

6. Travel and transport

Reducing our Carbon emissions from business travel by at least 2% annually, from 1,392 tCO₂e, relative to the baseline year of 2013/14, until 2019/20

6.1 What do we want to achieve?

The nature of the work undertaken by PHE requires some of our staff to travel for business purposes. Members of staff may utilise a number of modes of transport according to the nature of their journey. This can range from, for example, the use of private, lease or hire cars, to taxis, trains, planes and buses. All of these modes of transport contribute to greenhouse gas emissions, and therefore climate change.



We have set a target that aims to achieve a reduction in our business travel, limiting journeys where possible and encouraging the use of more sustainable modes of transport. A reduction in our business travel would not only improve local air quality, but support PHE's plan to reduce carbon and benefit the organisation financially.

- reduce carbon emissions from business travel by at least 2% annually, from 1,392 tCO₂e, relative to a baseline year of 2013/14, until 2019/20; taking into account growth of the organisation.

6.2 How can this be achieved?

When arranging meetings, as a priority, members of staff must consider whether there are any practical alternatives to travelling available. These include video,

audio or web-based conferencing eg Microsoft Lync from your desktop. Line managers must set an example and encourage their members of staff to follow their lead and use these alternatives, whenever practicable, they can also consider:

- encouraging members of staff to utilise PHE's 'Cycle to Work' scheme
- consider practical alternatives to taking UK domestic flights; and
- review the amount of non-commercial travel being undertaken by their staff



Where practicable, meeting locations should be selected within close (walking) distance of public transport links (trains and/or buses), and that meeting-times should be chosen to enable staff travelling to the meeting to make full use of public-transport.

For further detail, members of staff, who are required to travel on essential PHE business, should read the guidance document that supports our

Travel Policy and management arrangements; this document is available on PHEnet.

6.3 How will we measure and monitor it?

Business travel undertaken at a Directorate and Divisional level is monitored corporately on a quarterly basis, with their individual business mileage presented in a graphical format so an analytical view can be undertaken by each responsible manager.

Business travel data is collated from the Oracle financial system and our online Travel Booking Agent's Management Information System, for air and rail travel data.

Sustainable Development Management Plan

A travel monitoring spreadsheet is also available for line managers to monitor and measure their department's business travel.

Again this data will be normalised to take into account any fluctuations in the organisation growth.

7. Waste

Reduce our total waste arisings by 2% annually, from 941 tonnes, relative to the baseline year of 2013/14, until 2019/20.

7.1 What do we want to achieve?

A wide variety of waste is generated across the organisation. This chapter covers those types of waste produced directly from our activities and focuses on the management of this waste. Our policy document 'Waste Management Arrangements and Guidance 2013' outlines the framework for good waste management practice, and reinforces the guidance given in the DH document HTM 07-01 'Safe Management of Healthcare Waste'. These documents will give assurance that PHE continues to meet all relevant legislative requirements, best practices and its sustainable development objectives.

Unless properly managed, waste can present significant risks to the health and safety of staff, the public, and the environment.

Poor management of waste could therefore lead to the risk of prosecution and loss of reputation. We will therefore ensure the safe segregation, handling, transport and disposal of all of our waste.

As well as our long-term objective to have no waste sent to landfill. Overall our target is to:

- reduce our total waste arisings by 2% annually, from 941 tonnes relative to a baseline year of 2013/14, until 2019/20, taking into account growth of the organisation



Where the production of waste cannot be avoided, the most sustainable route in line with the waste hierarchy, detailed below, must be used.

7.2 How can this be achieved?

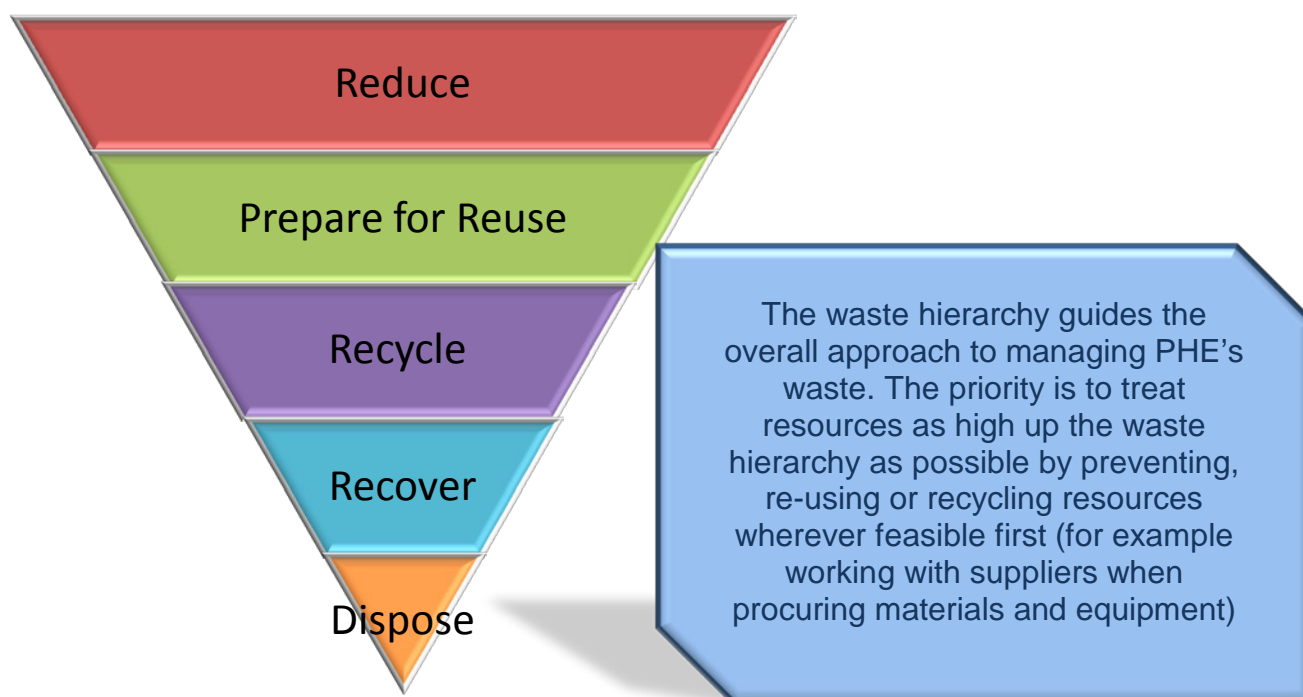
The arrangements for waste management outlined above will be applied across our estate, in accordance with our waste policy, although it is recognised that in some circumstances local plans and procedures may also be required.

All members of staff have a responsibility to comply with all relevant waste procedures, legislation and apply the waste hierarchy, where practicable. (see below)

Where the generation of waste cannot be avoided, with the support of our facilities management providers, we will continue to explore new and innovative ways to reduce the environmental impact of our waste.

7.3 How will we measure and monitor it?

Waste is monitored predominately at our owned sites, and reported as part of the site's quarterly sustainable development return. Where this is not practical, especially where we have embedded members of staff, local sustainability champions can use a variety of methods to monitor their waste. Details are given in the 'Sustainability Champions' handbook, available on PHEnet.



The Waste Hierarchy

8. Water

Reduce water consumption by 2% annually from 190,075 m³, relative to the baseline year of 2013/14, until 2019/20.

8.1 What do we want to achieve?

Water is a precious natural resource that is often taken for granted. Many areas of the country are already water stressed and it is likely that this issue will increase as the impacts of climate change become more pronounced. The energy required for the treatment, supply and heating of water also has an impact on the UK's carbon emissions.



PHE not only uses water for sanitary and domestic purposes, but has a number of operational processes that require significant quantities of water and it is also used as a raw material in the manufacture of pharmaceutical products.

In recognition of the impact that our water use has on the environment, we have set a target to:

- reduce water consumption by 2% annually, from 190,075 m³, relative to a baseline year of 2013/14, until 2019/20; taking into account growth in the organisation.

8.2 How can this be achieved?

To deliver on our objective to reduce water we will:

- raise awareness to staff of the environmental and financial impacts of water use;
- encourage staff not to waste water and turn taps off when not in use
- ensure a continuous maintenance programme is in place to prevent and repair leaks
- work with our facilities and engineering services to explore and develop new and innovative ways to reduce our use of water; and

Sustainable Development Management Plan

- explore opportunities to capture and use rainwater and greywater, in all new builds or major refurbishments

There are a number of other practical actions that can be taken to ensure water is not wasted, these are:

- making everyone aware of the costs and environmental impact of water usage
- getting dripping taps repaired
- checking regularly for leaks in the water system
- making someone responsible for switching off hot water heaters before holiday periods; and
- checking that your hot water control system is set properly to switch off if it's not needed at certain times



8.3 How will we measure and monitor it?

Water use is monitored and metered predominately at our owned sites, and reported as part of the site's quarterly sustainable development return. Where this is not practical, especially where we have embedded members of staff, local sustainability champions can use a variety of methods to monitor their water usage. Details are given in the 'Sustainability Champions' handbook on PHEnet.

Metering of a site's water usage and reviewing utility bills are but one measure we will use to monitor our water usage.

9. Procurement

We will buy more sustainable and efficient products and engage with our suppliers to understand and reduce the impacts of our supply chain

9.1 What do we want to achieve?

As an Executive Agency of Central Government we have a responsibility to procure products and services in a manner which is sustainable. Everything that is purchased by the organisation has an environmental or social impact. Embedding sustainability into the procurement process will enable us to save money, deliver whole life value for money, reduce risks, enable innovative solutions to be developed and act as an example of good practice.



Sustainable procurement covers areas such as the purchase of energy-efficient computers and buildings, office equipment made of environmentally sustainable timber, recyclable paper, electric cars, environment-friendly public transport, healthy food with a lower environmental impact, electricity stemming from renewable energy sources, and air conditioning systems complying with state of the art environmental solutions.

The Public Services (Social Value) Act 2012 requires all commissioners of public services to consider taking into account economic, social and environmental value, not just price, when buying goods and services. Social value may be thought of as the collective gain to the community from commissioning/procurement over and above the direct purchase of goods and services.

The organisation has developed a number of objectives and targets to help meet the 'Greening Government Commitments' for sustainable procurement; these are:

- embed the Government Buying Standards in departmental and centralised procurement contracts, within the context of Government's overarching priorities of value for money and streamlining procurement processes; and
- improve and publish data on our supply chain impacts, initially focussing on carbon, but also water and waste - setting detailed baselines for reducing these impacts

9.2 How can this be achieved?

The aim is to achieve continuous improvement in sustainable practice and performance, make best use of available expertise and resource and encourage sustainable procurement activity consistent with the principles of value and efficiency in public procurement.

Whilst maintaining compliance with the EU Regulations on governing public procurement we will:

- ensure that our procurement activity contributes positively to our overarching Environmental Policy and current Government targets
- ensure that environmental and social concerns are considered when purchasing products or services
- choosing meeting spaces/events that promote good sustainable practice
- consider whole-life costs in the evaluation of tenders ie encourage the consideration of environmental impact of operating costs such as resource consumption (eg. energy, water) and disposal
- encourage our suppliers and contractors to demonstrate a reasonable standard of environmental and social performance



Sustainable Development Management Plan

- engage with our suppliers in order to promote and monitor environmental awareness, legislative compliance, pollution prevention and environmental performance of their activities and products
- support innovation which provides more sustainable solutions and encourage preference for environmentally friendly products and utilisation of sustainable resources at the specification stage of the procurement process; and
- provide support for the development of awareness, understanding and competency in relation to sustainable procurement across all procurement staff across the organisation by providing training and access to appropriate guidance

9.3 How will we measure and monitor it?

Following PHE's sustainable procurement framework, as we progress with embedding sustainable procurement into the organisation, the following measures will be established to help us to monitor our performance:

- key sustainability impacts of procurement activity have been identified
- detailed appraisal of the sustainability impacts of the procurement activity has been undertaken. Measures implemented to manage the identified high risk impact areas;
- sustainability measures refined from general departmental measures to include individual procurers and are linked to development objectives; and
- measures are integrated into a balanced score card approach reflecting both input and output. Comparison is made with peer organisations. Benefit statements have been produced



10. Built environment

10.1 What do we want to achieve?

The built and natural environment are major determinants of health and wellbeing. The design of the built environment, and access to the natural spaces, impacts on health and wellbeing. This has been recognised in a number of recent reports, including the Marmot Review, *Fair Society Healthy Lives*, which dedicates one of its six policy domains to the theme of 'Healthy and Sustainable Places and Communities'.

The National Policy Planning Framework (NPPF), which sets out the government's planning policies for England and how these should be applied, recognises that the planning system can play an important role in facilitating social interaction and creating healthy, inclusive communities.

We are keen to make an early contribution to support a place-based approach to improving health and reduce health inequalities and have identified place-based approaches as one of our priorities.

We have a large and varied owned estate from which we operate, including large campus sites at Porton, Colindale and Chilton. We also operate from rented or leased properties as well as being embedded within other organisations.

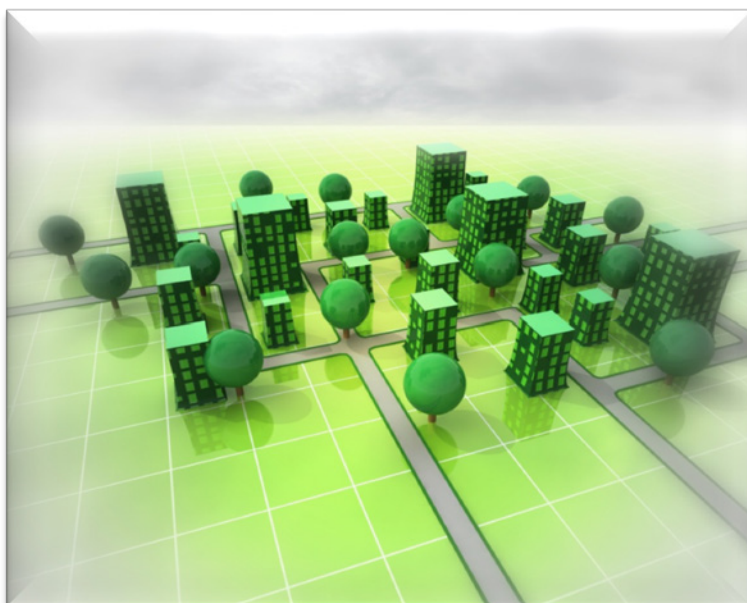


Through our Estates & Facilities Strategy we aim to rationalise and improve the quality of our built estate, wherever practicable.

When making improvements to our facilities we aim to ensure that we are designing the best possible environments for our staff to work in, whilst ensuring that they are sympathetic to the natural environment. Through the SDMP we therefore aim to reduce the environmental impact of our construction and refurbishment projects as well as continued maintenance programmes.

10.2 How can this be achieved?

The reorganisation of the public health system and the new responsibilities which local government has, for the public's health, provide a new context and a strong base for developing good practice in the integration of health, planning and design into the built environment.



With regards to our owned built environment we will ensure that the relevant BREEAM standard is undertaken and that the award of 'Excellent' is achieved in all new builds, where practicable and 'Very Good' for major refurbishments.

10.3 How will we measure and monitor it?

Monitoring of new builds and major refurbishments of PHE's estate will be achieved through the procurement process (see Chapter 9). Monitoring of the buildings environmental impact, whilst in operation, will continue through the resource reporting regimes already in place for energy, water and waste etc.

12. Biodiversity

12.1 What do we want to achieve?

The integrity of our biodiversity is one measure of whether we are living in a sustainable way. Biological diversity encompasses the entire variety of life on the planet from basic micro-organisms to human beings; it does not refer simply to species which are threatened, rare or endangered. Biodiversity is essential to survival, but is also important for our sense of wellbeing; we will therefore manage our grounds and estates in a sustainable manner to reduce and enhance the impacts on biodiversity associated with our work as much as possible.

12.2 How can this be achieved?

To achieve this, we are committed to:

- ensuring adverse effects on biodiversity from our necessary operations are avoided minimised, mitigated and/or compensated for;
- ensuring that all members of staff are aware of their responsibilities towards protecting and enhancing biodiversity; and
- introducing systems that ensure that biodiversity considerations are taken into account in all site developments, relocations and refurbishments



12.3 How will we measure and monitor it?

When new construction projects or major refurbishments are undertaken in PHE properties, a biodiversity impact assessment using the BREEAM assessment process must be undertaken. This process assesses the potential impact on the local area and its biodiversity.

Sustainable Development Management Plan

To meet the BREEAM standard of 'Excellent' the following criteria must be reached:

- at least 75% of the proposed development's footprint is on an area of land which has previously been *developed* for use by industrial, commercial or domestic purposes in the last 50 years
- the site's construction zone is defined as land of low ecological value and all existing features of ecological value will be fully protected from damage during site preparation and construction works
- there is *no negative change* in the site's existing ecological value as a result of development
- a positive increase in the ecological value of the site of 6 species or greater; and
- a landscape and habitat management plan, appropriate to the site, is produced covering at least the first five years after project completion

In the day to day management of our owned estate, we will ensure, where practicable, that our grounds maintenance regimes are sympathetic to the natural environment and where appropriate promote a home for nature.



Biodiversity will also be measured and monitored as part of the healthcare system's sustainability metrics module.

13. Adaptation to climate change

Ensure that the National Adaptation Programme outcomes are embedded into all of our operational plans, where applicable, by 2015/16.

13.1 What do we want to achieve?

The Climate Change Act (2008) requires regular assessment of how the UK sectors (including health) are being affected, positively and negatively, by climate change. The National Adaptation Programme (NAP) aligns risks identified in the Climate Change Risk Assessment 2012 (CCRA) to actions to be undertaken with the necessary timescales according to each theme, and is divided into chapters looking at:

- the built environment
- infrastructure
- **healthy and resilient communities**
- agriculture and forestry
- natural environment
- business and local government



The NAP looks closely at the most urgent risks facing the UK and is supported by an economic annex indicating the costs and benefits of climate change and the impacts of climate change on economic activity.

In its mission to protect and improve public health and reduce inequalities, PHE has a role to play in adaptation to climate change. The basic pathways through which climate change affects health are:

- a. Direct impacts relating primarily to changes of the frequency of extreme weather – heat, drought, and flooding
- b. Effects through the natural systems – disease vectors, water-borne diseases, and air pollution

- c. Effects by human systems – occupational impacts, under nutrition and mental stress

As a Category one responder we aim to ensure that our operations are suitably prepared and resilient to the predicted changes to the climate, enabling us to continue to operate. This will require our Emergency Preparedness and Business Continuity Plans to assess the impacts of climate change and relate to the adaptation plans that will be put in place to meet the NAP requirements.

13.3 How can this be achieved?

The NAP sets high-level objectives in the areas listed above and actions to be taken to meet these objectives up to 2015.



Defra are the lead cross government department for this programme and have produced a number of guidance documents and templates to help with producing adaptation plans. We will support efforts to prepare for and respond to our changing climate and extreme weather events, with the Extreme Events and Health Protection team currently acting as a focal point within PHE for this work.

To achieve this, we are committed to:

- ensuring that the National Adaptation Programme outcomes are embedded into all of our operational plans, where applicable by 2015/16
- encouraging wider engagement and cross sector working to achieve adaptation objectives and resilience; and

Sustainable Development Management Plan

- providing public health guidance to health in a changing climate at national, local and regional levels

13.4 How will we measure and monitor it?

We will have our adaptation plan and associated documentation in place by June 2015 and will have undertaken the following:

- assessed the risks posed by current and future climate change for our estates/facilities/staff
- developed adaptation actions to mitigate any significant risks to identified operations within the organisation
- considered mechanisms for monitoring the impact/effectiveness of adaptation actions; and
- outline progress/stage of development on adaptation planning and actions in the sustainability section of the organisation's annual report