



England

# Net Zero Estates & Facilities

Priorities for environmental sustainability

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# Delivering a Net Zero NHS

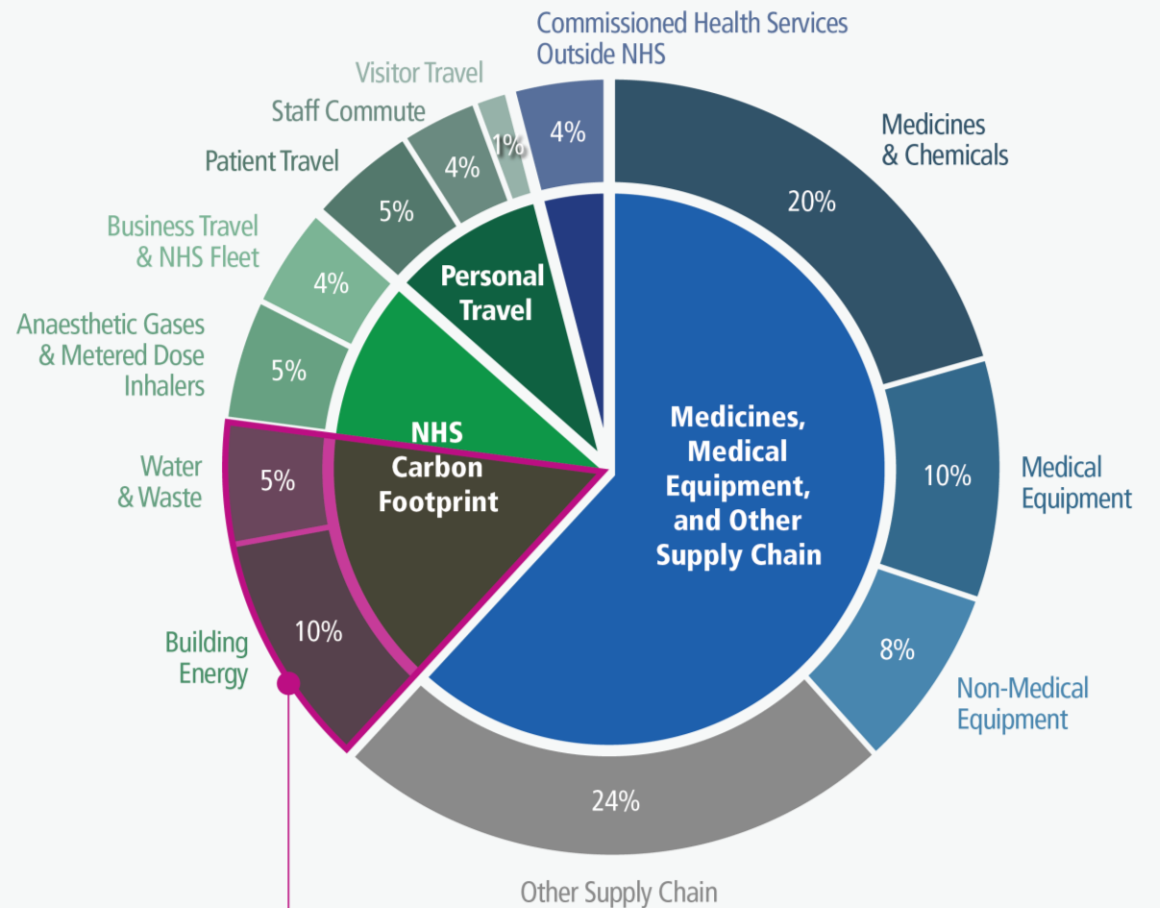
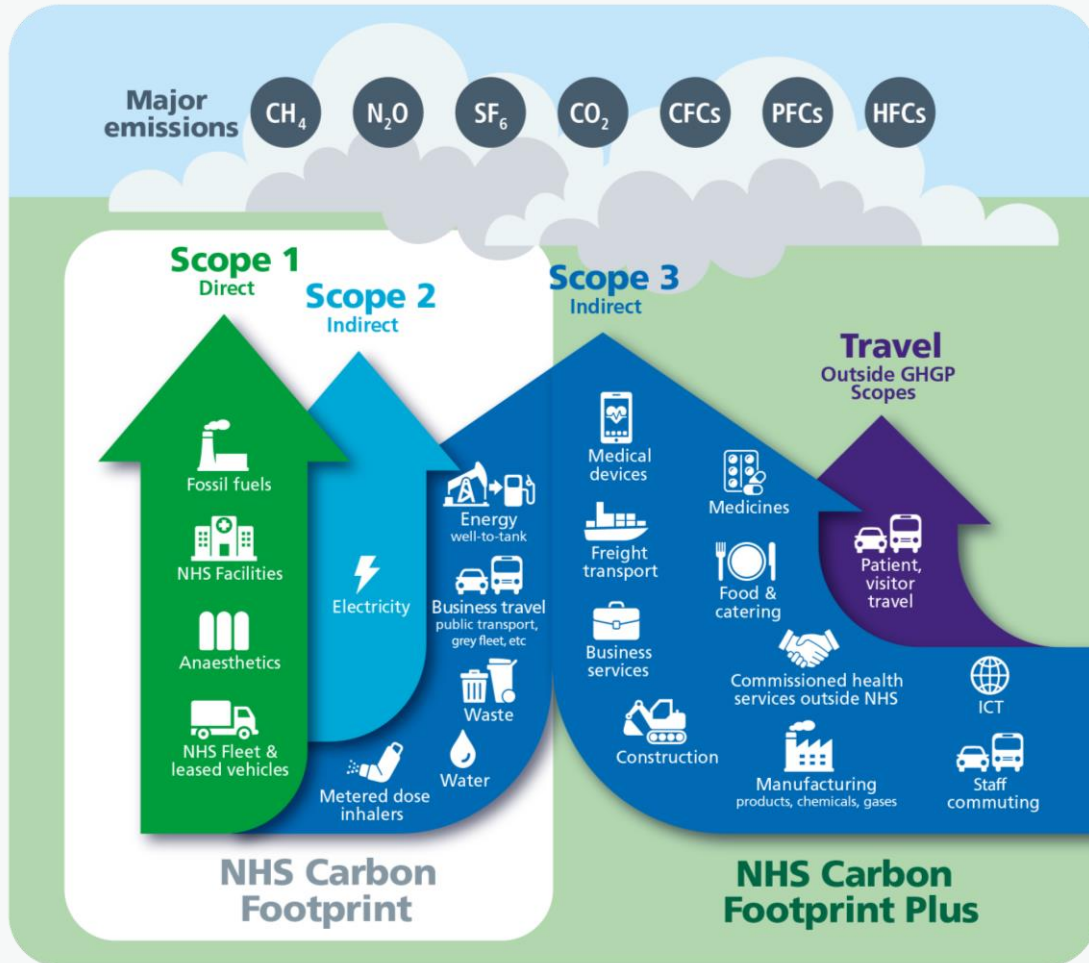
**NHS**

Delivering a 'Net Zero'  
National Health Service



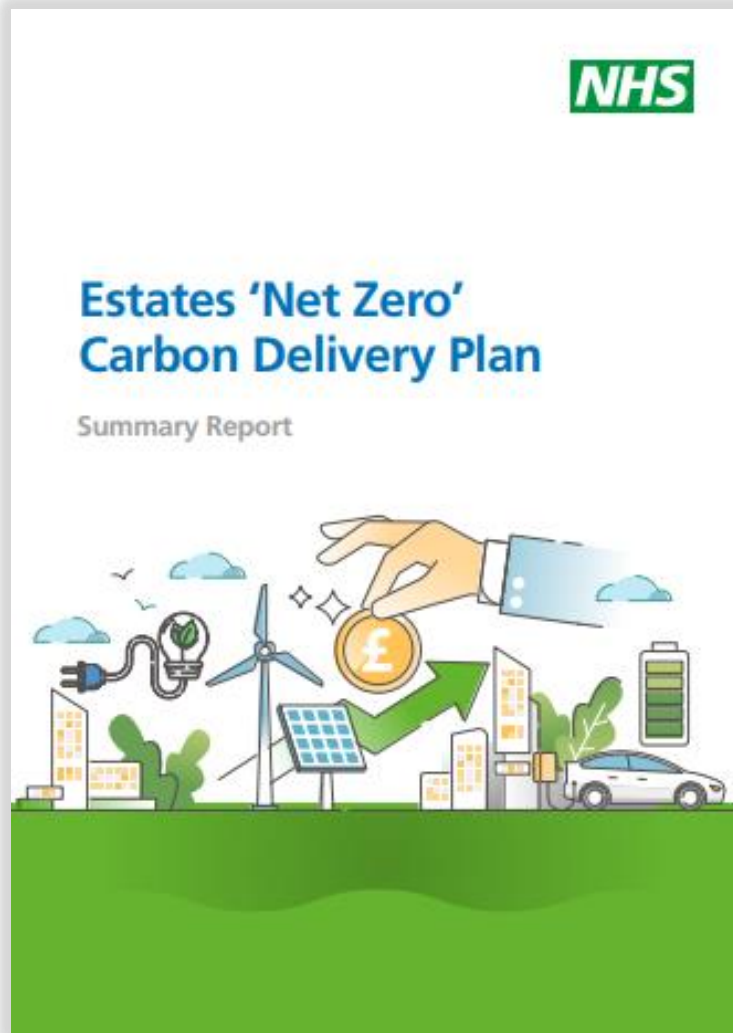
- Climate change is the **biggest and most pressing challenge of our generation**. The climate emergency is a health emergency
- NHS responsible for **5% emissions in the UK**; Estate emissions are a large part of that, making up over a third of public sector energy emissions
- October 2020 **NHS became the worlds first** health service to commit to being Net Zero. It committed to:
  - Net Zero in its directly controlled emissions by 2040 (80% reduction by 2030)
  - Net Zero in its indirect emissions by 2045 (80% reduction by 2039)
- NHS operates in **25,000,000M2 of hospital estate** (1,140 hospitals) plus 7,500 Primary care facilities and 11,000 community pharmacy sites – these need to be **80% NZC by 2032 and 100% by 2040**

# Delivering a Net Zero NHS



60% of NHS direct emissions/carbon footprint

# NHS Estate and net zero



**Our Estates to be Net Zero by 2040**, with an 80% reduction by 2032

In October 2021, NHSE published the Estates 'Net Zero' Delivery Plan - sets out clear route-map and steps to a Net Zero Estate

## Our Core **Aims**:

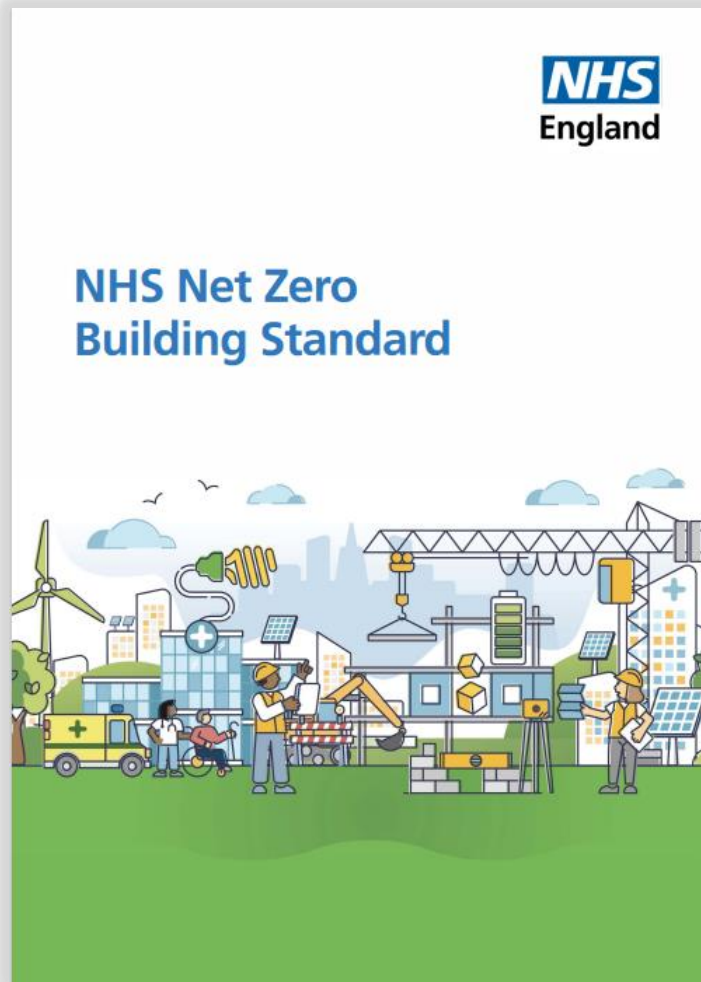
- ✓ Investing in our buildings
- ✓ Driving forward a circular economy
- ✓ Electrifying our fleet
- ✓ Engaging our supply chain
- ✓ Preparing for severe weather
- ✓ Committing to active travel

# 4-step plan for building energy



Figure 1 includes indicative numbers to illustrate the scale of the challenge to decarbonise the NHS estate by 2040. These are not actuals.

# Our New Build Estate



- World-leading Standard for healthcare premises
- Applicable to new builds and major refurb schemes which are subject to HMT controls (>£25M)
- Important step on our road to a Net Zero National Health Service
- Published in February 2023
- Applicable from 1<sup>st</sup> October 2023
- Part of NHS England business case checklist and the fundamental criteria

[NHS England » NHS Net Zero Building Standard Catalogue \(learninghub.nhs.uk\)](#)

# Our leased estate

Guidance for sites with leased estate looking to go green

Core aspects:

- Suite of Provisions: options to increase green credentials of leased properties
- Memorandum of Understanding: to engage with your landlord / tenant to discuss possibilities. For existing leases or agreements
- Clauses: drafted to facilitate detailed discussions with your property or legal teams, as a bolt-on schedule within a new lease or during lease renewal

[NHS England » Green leases framework](#)

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**NHS**  
England

About us Our work Commissioning Get involved

Our advice for clinicians on the coronavirus is here.  
If you are a member of the public looking for information and advice about coronavirus (COVID-19), including information about the COVID-19 vaccine, go to the [NHS website](#). You can also find guidance and support on the [GOV.UK website](#).

Estates technical guidance  
Green leases framework  
Complete list of publications related to NHS estates  
Health building notes  
Health technical memoranda  
ProCure23: A new route to market for NHS capital works  
Other guidance  
National Standards of Healthcare Cleanliness 2021  
NHS Premises Assurance Model

Home > Estates technical guidance > Green leases framework

## Green leases framework

This guidance has been created to help organisations to improve the green credentials of their leased estate. It has been designed with professional legal support from Bevan Brittan and acknowledges that organisations will be at different stages of their green journey.

The guide is comprised of three core sections:

**Memorandum of understanding;** this is designed for organisations wishing to engage with their landlord to discuss the possibilities about greening their estate.

**Suite of provisions;** this is designed for organisations wishing to make changes to improve the green credentials of their leased properties.

**Clauses;** a drafted set of clauses which are designed to facilitate more detailed discussions with your organisation's own property or legal teams.

Specific and specialist advice will need to be sought for any listed leased properties on your estate. You should consult your internal property team(s) in the first instance.

### Memorandum of understanding

Use the [template](#) provided to create your tailored memorandum of understanding with your landlord. Once the document is signed by both parties it acts as a way of allowing organisations to speak openly with the landlord about changes they wish to make across their leased estate and explore feasibility.

The Memorandum of Understanding is intended for use where there is an existing lease or agreement in place. It also provides a useful stepping-stone towards a greater understanding of green leases more generally and allows the green ambitions of landlords and tenants to be aligned. It is intended to be used where the landlord and the tenant have not included green lease provisions in their property arrangements previously. It is not legally binding but instead sets out a framework of intention(s) and co-operation on green issues between the landlord and the tenant.

The document is based on the Better Buildings Partnership (BBP) memorandum. However, specific NHS provisions have been added to aid with basic organisational benefits e.g. the sharing of energy data and

# Carbon reporting of estates emissions

Relatively simple for estates

- Energy: report usage through ERIC and DESNZ provide carbon factors each year
- Waste: NHSE Estates worked with Greener NHS team to get better carbon reporting
- Water: same as energy

Estates Carbon Emission Calculator					
Financial Year	2023/24	2022/23	2021/22	2020/21	2019/20
Volume (kWh)					
<b>Energy</b>					
Electricity - other consumed (kWh)					
Electricity - green electricity consumed (kWh)					
Gas consumed (kWh)					
Oil consumed (kWh)					
Coal consumed (kWh)					
Hot water consumed (kWh)					
Steam consumed (kWh)					
Electricity - trust owned solar consumed (kWh)					
Electricity - third party owned solar consumed (kWh)					
Electricity - other renewables consumed (kWh)					
<b>Total</b>	0	0	0	0	0
Volume (tonnes)					
<b>Waste</b>					
Incineration (clinical waste) volume (Tonnes)					
Alternative Treatment (clinical waste) volume (Tonnes)					
Offensive waste volume (Tonnes)					
Clinical waste (excluding incineration) processed on site volume (Tonnes)					
Clinical waste processed at municipal waste plants volume (Tonnes)					
Domestic waste (landfill) volume (Tonnes)					
Domestic waste (recycling) volume (Tonnes)					
Domestic waste (incineration) volume (Tonnes)					
Domestic waste (food) volume (Tonnes)					
Domestic waste (excluding incineration) processed on site volume (Tonnes)					
Domestic waste (textiles) volume (Tonnes)					
Confidential waste volume (Tonnes)					
WEEE waste volume (Tonnes)					
<b>Total</b>	0	0	0	0	0
Volume (m <sup>3</sup> )					
<b>Water</b>					
Water volume (including borehole) (m <sup>3</sup> )					
Sewerage (m <sup>3</sup> )*					
<b>Total</b>	0	0	0	0	0
*For Greener NHS reporting, a sewerage volume of 80% of water volume is assumed					
<b>Total emissions</b>					
	0	0	0	0	0



# Public Sector Decarbonisation Scheme (PSDS)

## PSDS Phases 1 and 2 provided £1.075bn over 2020-22

- £260m to NHS to deliver 30 projects, including coal removal
- £21m to deliver 8 projects

## PSDS Phase 3a opened 2022

- NHS trusts received £356.5m, 60% of overall grant
- Nine projects over £10m, 36 schemes overall and 28 trusts

## PSDS Phase 3b projects started April 2023, providing £635m

- Sector cap introduced for NHS
- NHS secured £218.6m for 20 projects

## PSDS Phase 3c projects expected to be announced April 2024

- Fund of £565m available in total (NHS max approx. £200m)
- Salix received £1.3bn worth of applications

## PSDS Phase 4 funding has been confirmed

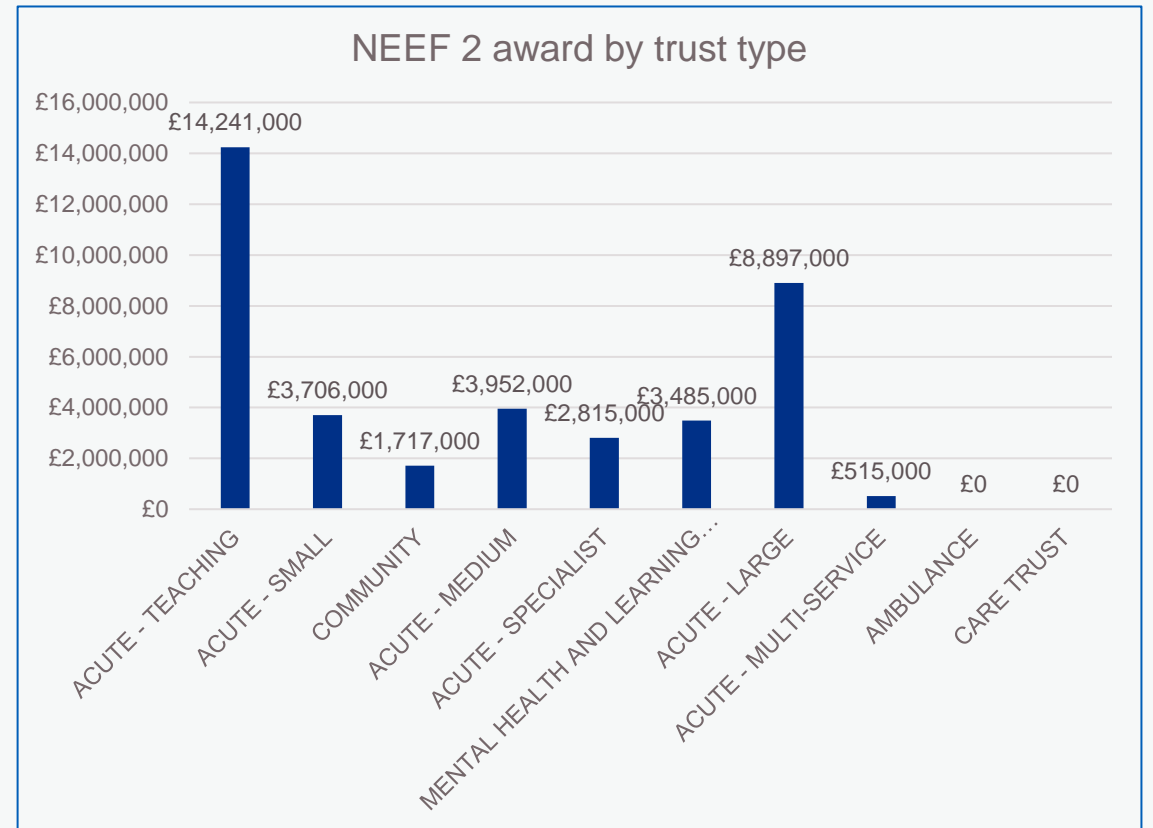
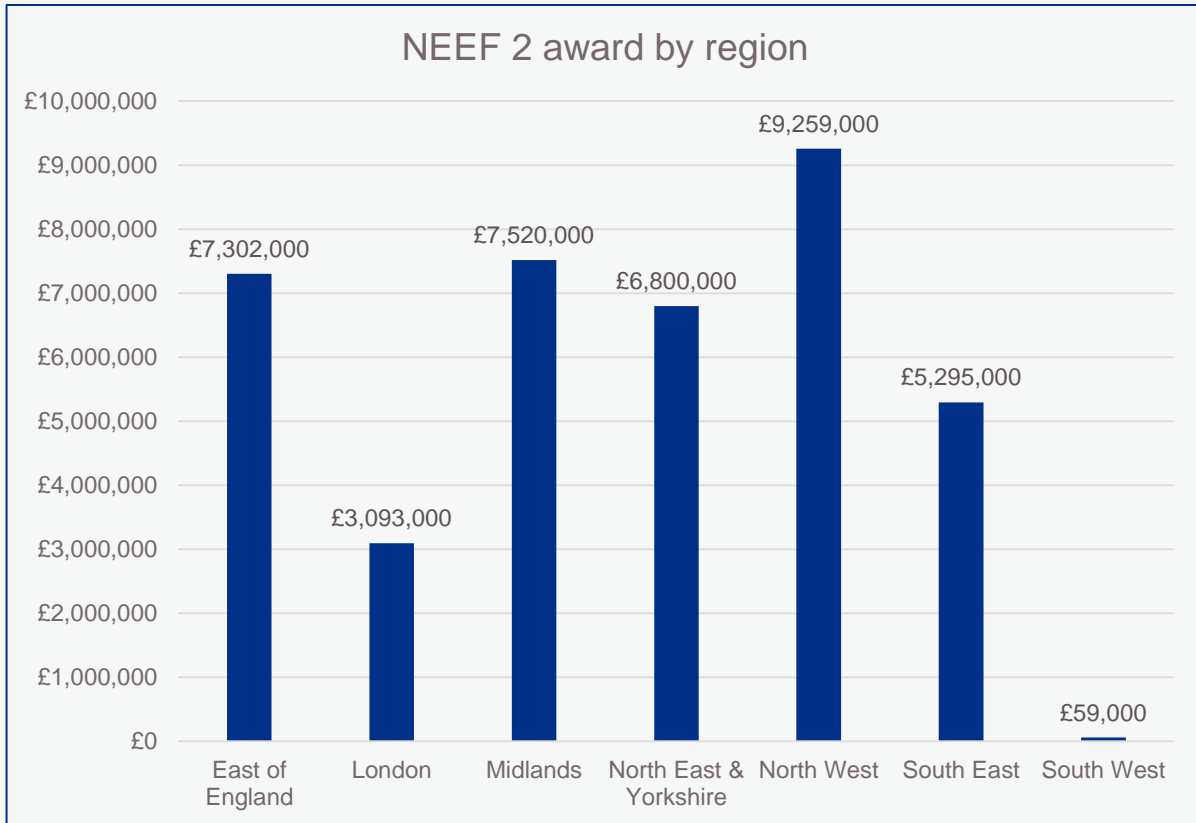


Department for  
Energy Security  
& Net Zero

Green Heat Network Fund  
Low Carbon Skills Fund  
Boiler Upgrade Scheme

# National Energy Efficiency Fund (NEEF) phase 2

- 77 projects awarded £40m
- £84m bids received within three days
- Assessed on delivery confidence, ROI, and carbon
- Importance of business cases ready to go



# Energy Sprint

## 1 NHSE – CCS Framework and Offer

The NHSE – CCS framework and offer contains four key services for NHS Trusts

### **NHS trading Basket**

*A long-term risk buying strategy for energy procurement through CCS trading and access to renewable energy sources*

### **Spend analysis**

*Forensic spend analysis in relation to historical energy charges*

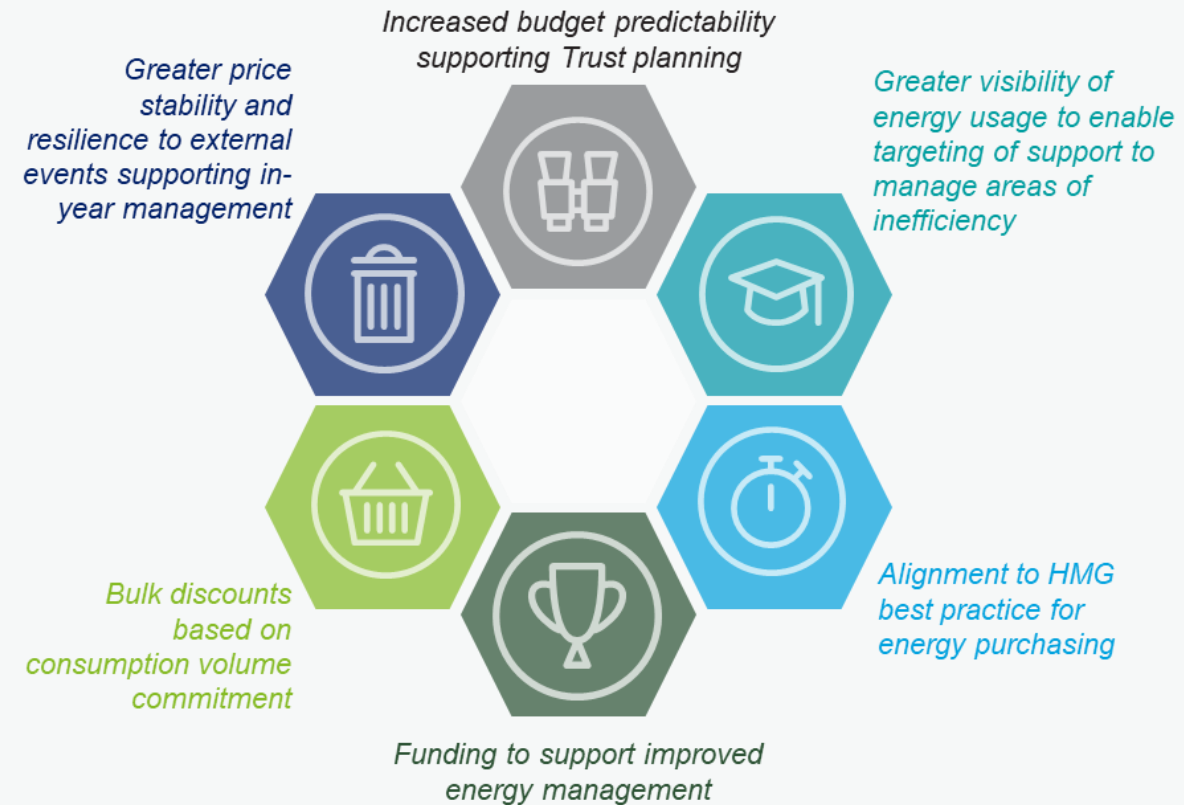
### **Bureau services**

*Support for back-office bill validation and processing, as well as regular market position report summarising the NHS Basket trading and pricing position*

### **Energy management support**

*Provision of subject matter expert support to support energy management, strategy development and sharing best practice*

## 2 Benefits to NHS Trusts



# Financial decisions

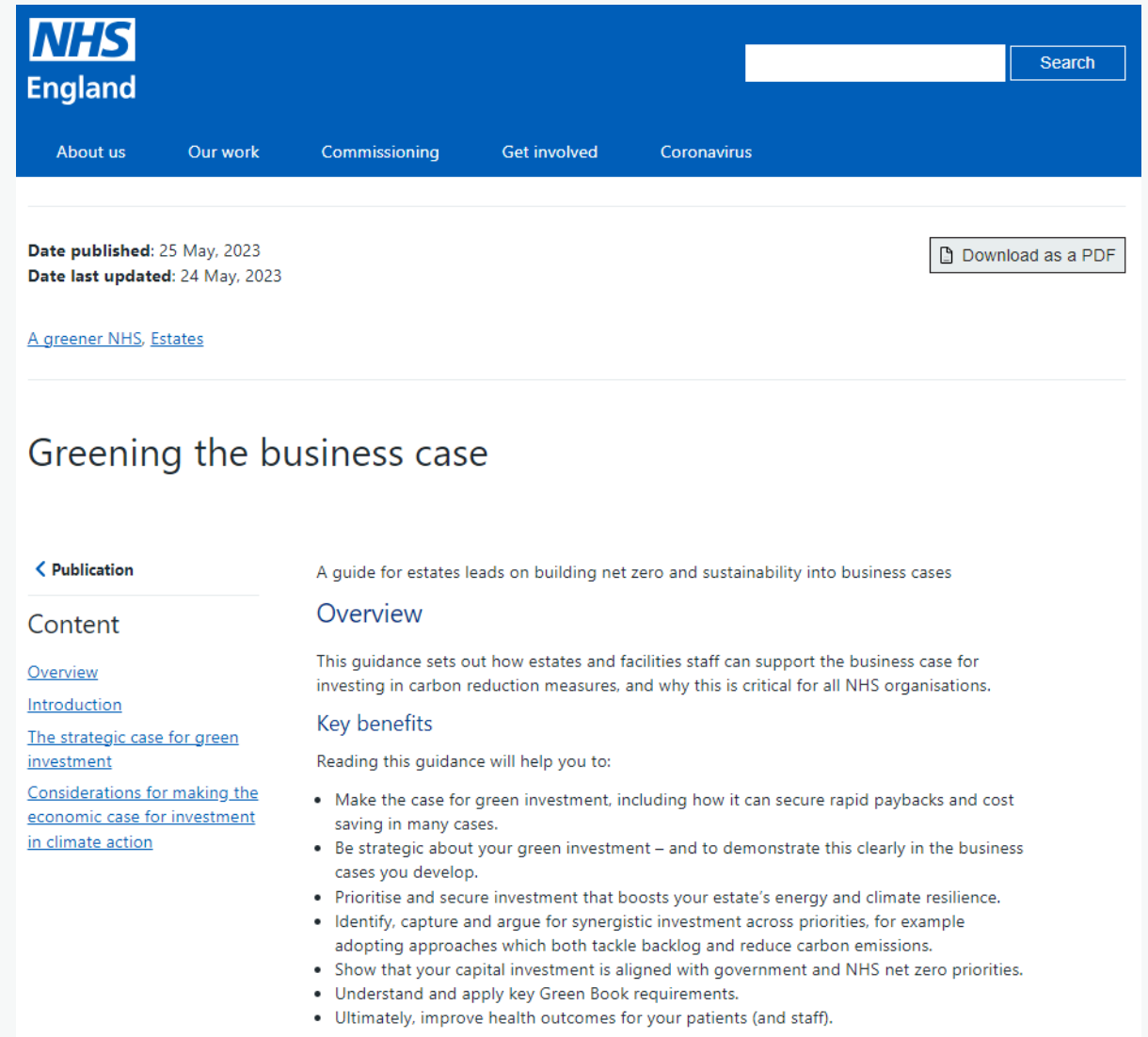
## Strategic case for green investment

- Nine key areas, including improved patient outcomes and reduced backlog maintenance

## Considerations for making the economic case for investment in climate action

- Six key areas, including costs (whole-life, energy, cost of inaction) plus non-financial benefits

[NHS England » Greening the business case](#)



The screenshot shows the NHS England website header with the logo and navigation menu. The main content area features a 'Date published' and 'Date last updated' section, a 'Download as a PDF' button, and a link to 'A greener NHS, Estates'. The main heading is 'Greening the business case'. Below this, there is a 'Publication' section with a 'Content' list containing links for 'Overview', 'Introduction', 'The strategic case for green investment', and 'Considerations for making the economic case for investment in climate action'. The 'Overview' section provides a summary of the guidance and lists 'Key benefits'.

**NHS England**

Search

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Date published: 25 May, 2023  
Date last updated: 24 May, 2023

Download as a PDF

[A greener NHS, Estates](#)

## Greening the business case

< Publication

### Content

- [Overview](#)
- [Introduction](#)
- [The strategic case for green investment](#)
- [Considerations for making the economic case for investment in climate action](#)

A guide for estates leads on building net zero and sustainability into business cases

### Overview

This guidance sets out how estates and facilities staff can support the business case for investing in carbon reduction measures, and why this is critical for all NHS organisations.

### Key benefits

Reading this guidance will help you to:

- Make the case for green investment, including how it can secure rapid paybacks and cost saving in many cases.
- Be strategic about your green investment – and to demonstrate this clearly in the business cases you develop.
- Prioritise and secure investment that boosts your estate’s energy and climate resilience.
- Identify, capture and argue for synergistic investment across priorities, for example adopting approaches which both tackle backlog and reduce carbon emissions.
- Show that your capital investment is aligned with government and NHS net zero priorities.
- Understand and apply key Green Book requirements.
- Ultimately, improve health outcomes for your patients (and staff).

# GSHP Screening Tool

- NHSE, ESC, BGS
- £250k Innovate UK
- 2021 feasibility study, GNHS-funded
- NHS and public sector
- Complete end of March 2024

## Welcome to the GSHP Screening Tool

**Pre-release**

The GSHP Screening Tool is a national-scope screening tool for England which will guide initial feasibility studies for using ground source heat pumps (GSHP) as an option for low carbon heating for individual NHS trust buildings and heat networks.

Before starting using the tool it would be helpful to have some data about the site and the buildings that you wish to evaluate. This includes the building age, use, floor area and periphery. While the tool can estimate both the annual usage and peak demand, this may not be accurate for the particular buildings that you wish to consider. Inputting reliable data for one or both will significantly improve the accuracy of the results. The tool assumes boreholes will be drilled to access ground source heat. The area that is available on the site for drilling holes is needed. This can be an estimate if an exact figure is not known. The land that would be suitable would include car parks or grassed areas of the site.

[Get started](#)

# Developing our future workforce



**NHS Estates and Facilities**  
5,717 followers  
39+ posts

Harry Sandy, a production chef apprentice at [West Suffolk NHS Foundation Trust](#), was encouraged to join the NHS by his mum who works in NHS mental health services.


Harry's first experience of working in kitchens was as a pot washer at his local pub. After about a year, he moved across to the chef side of the kitchen, but then the COVID-19 pandemic stalled his progression.

He says, 'My mum encouraged me to join the NHS, as did the hiring manager who saw my previous experience and interest in being a chef.'

Harry says that the apprenticeship has helped him to develop skills including knife work and organisation, both of which are incredibly important when working to strict deadlines to serve patients.

This year, we're aiming to have 1,000 new apprenticeship starts in NHS estates and facilities, in roles from engineering and plumbing to catering and sustainability.

Find out more about apprenticeship opportunities: [https://lnkd.in/exQZQS\\_W](https://lnkd.in/exQZQS_W)  
[#apprenticeships](#) [#nhs Careers](#) [#apprenticeshipchallenge](#) [#nhs estates](#) [#NAW2023](#)



EFM [Apprenticeship Challenge](#)

[Apprenticeship Toolkit](#)

First cohort of net zero apprentices

Rolling programme for interns

School talks to inspire the next generation

Skills matrix with IEMA

[NHS England » NHS estates sustainability careers – recruitment and career pathways guidance](#)



**Healthcare**  
Apprenticeships

*Helping you prepare, plan and deliver world class apprenticeships*

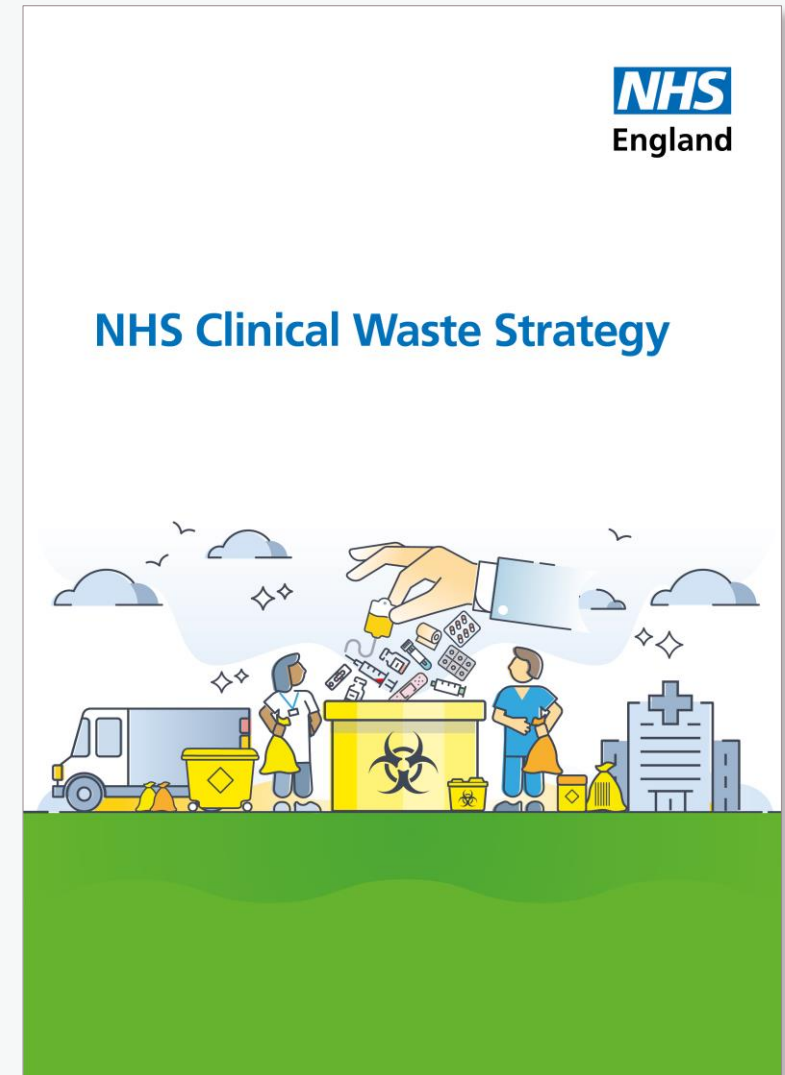


# NHS waste strategy

The NHS Clinical Waste Strategy sets out the roadmap for achieving net zero in waste management by 2040, by:

- Improving segregation and compliance
- Eliminating waste sent to landfill
- Increasing reuse programmes
- Preventing waste in the first place

[NHS England » NHS clinical waste strategy](#)



# Scaling our collective knowledge

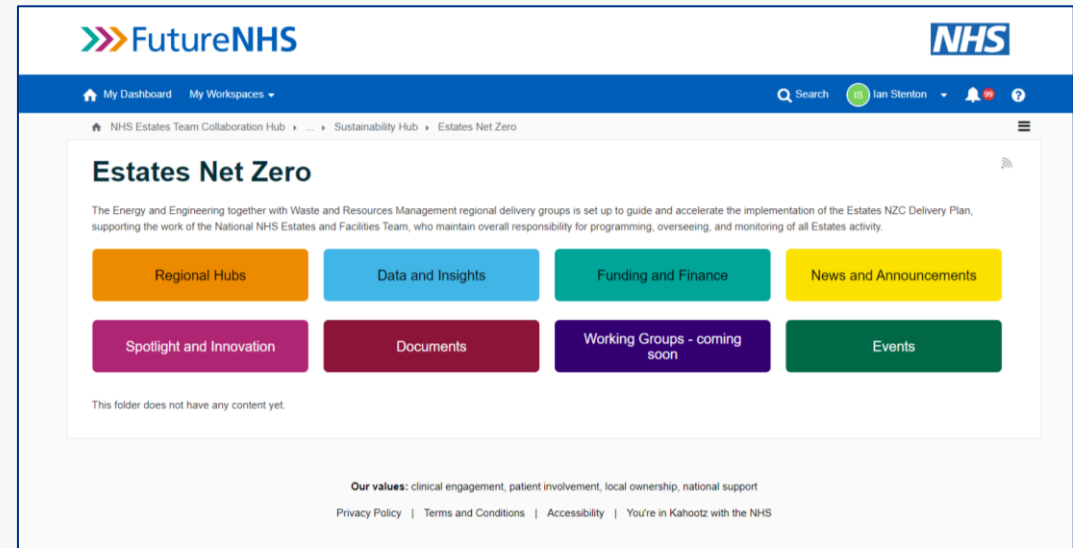
- Established **Regional Estates Net Zero Delivery Groups** to support delivery of the Estates NZ Delivery Plan

## Key areas of Focus:

- Energy and Engineering
- Waste and Resources
- Innovation

## Aims:

- Provide insights from across the region
- Recognise barriers and enablers to net zero estates
- Advocate for estates net zero programmes
- Share and scale best practice
- Drive forward critical plans e.g. heat decarbonisation plans, waste reduction plans



[Regional Delivery Groups - NHS Estates Team Collaboration Hub - NHS Estates and Facilities \(future.nhs.uk\)](#)



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## Thank You



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