

# Green Plan

## 2025-2028

Working together for a healthier future



# Foreword

Climate change is recognised as one of the most significant challenges facing the NHS. As demands on health and care services evolve, sustainability is no longer a specialist concern, it is integral to how we deliver high-quality care, manage resources, and plan for the future.

At Harrogate and District NHS Foundation Trust (HDFT), we are committed to playing our part. The NHS has set a clear goal to become the world's first net zero health service, and this Green Plan sets out how we will contribute over the next three years.

This is our second Green Plan and builds on the foundations laid in 2022-2025. During that time, we've made real progress, from reducing emissions and improving energy efficiency, to removing desflurane from clinical use and strengthening our approach to sustainable care delivery.

While our initial 2022-2025 Green Plan provided a broad foundation, this updated plan sharpens our focus and is centred on acceleration, accountability, and delivery.

Guided by our HDFT Impact continuous improvement approach, this Green Plan showcases our strong commitment to accountability, targeted investments, and forward-thinking strategies throughout our operations, healthcare services and supply chain.

Our aim is not only to reduce environmental impact, but to improve resilience, create long-term value and ensure that sustainability is embedded in everything we do, from frontline care to strategic planning.

We are grateful to the many staff, partners and stakeholders who continue to support this work. Through shared commitment, clear priorities, and sustained action, we can continue to provide safe, effective and sustainable healthcare for the communities we serve.

**Matt Graham**

Executive Director of Strategy  
(Executive Lead for Net Zero)

Harrogate & District NHS Foundation Trust



**This is our second Green Plan and builds on the foundations laid in 2022-2025. During that time, we've made real progress, from reducing emissions and improving energy efficiency, to removing desflurane from clinical use and strengthening our approach to sustainable care delivery.**



# Executive Summary

HDFT is committed to supporting the NHS ambition to become the world's first net zero health service, in line with the national targets of reaching net zero for direct emissions by 2040 and for indirect emissions by 2045, as set out in 'Delivering a Net Zero National Health Service' (NHS England, 2020).

This Green Plan outlines our practical approach to delivering sustainable healthcare across our organisation. It sets clear priorities for reducing carbon emissions, improving resource efficiency, and supporting a healthier environment for patients, staff, and the wider community.

Through targeted actions and ongoing collaboration, with the Integrated Care Board (ICB), local NHS trusts, partner organisations and wider system stakeholders, we aim to meet NHS net zero targets and ensure our services are resilient and environmentally sustainable for the future.



## Our Green Journey

HDFT is delivering measurable, accountable climate action. This updated Green Plan continues our journey and marks a shift from broad foundational ambitions to focusing on targeted acceleration and delivery, anchored to our NHS Net Zero carbon reduction targets.



## Measurable Progress

Since publishing our first Green Plan in 2022, we have reduced our direct (Scope 1 and 2) emissions by over 51% compared to our proxy 1990 baseline. We are well on our way to meeting the NHS interim goal of an 80% reduction by 2032.



## Governance

At the core of our Green Plan is the Green Plan Delivery Group, driving SMART objectives, KPIs and proactive risk management. Guided by our HDFT Impact continuous improvement approach, our sustainability groups can be managed with the same rigour as safety, quality and clinical effectiveness.



## Focused Objectives

In this Green plan cycle, our local objectives are direct, measurable and actionable. We focus on decarbonising heat and electricity, increasing sustainable travel, supply chain sustainability and empowering Green Champions to spearhead sustainability initiatives within nationally themed focus areas.



## System Leadership

Empowering system leadership, this Plan leverages strong governance and the HDFT Impact (the Trust's continuous improvement approach) guiding principles to infuse sustainability across clinical and operational areas. By adopting this holistic approach, HDFT can lead local sustainability efforts and contribute significantly to the broader national objective of establishing a fully sustainable healthcare system.



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# 1. Introduction

Creating a sustainable future for our patients, staff and communities is at the heart of everything we do. This Green Plan sets out our commitment to reducing our environmental impact, meeting NHS net zero goals and working together with partners to deliver lasting, positive change. Every step we take supports a healthier environment and a stronger NHS for generations to come.

HDFT provides acute and community healthcare services to a population of approximately 900,000 people. Our services are delivered across Harrogate and rural North Yorkshire, and extend into County Durham, Darlington, Middlesbrough, Stockton-on-Tees, Gateshead, Sunderland, Wakefield, Cumberland, Westmorland & Furness and parts of North and West Leeds, particularly through our children's public health and community services.

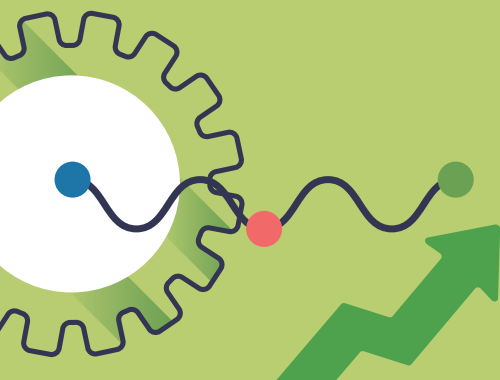
Our main hospital site is Harrogate District Hospital. We also operate from Ripon Community Hospital, and from a network of community and outreach bases. We are the largest provider of children's public health (0-19) services in England and cover one of the most expansive geographical footprints of any NHS Trust.

As a healthcare provider, we acknowledge our vital role in reducing emissions, enhancing our environmental performance and supporting national carbon reduction

commitments. We embrace the opportunities presented by climate action, including boosting service efficiency, future-proofing our infrastructure, and fostering a healthier, more sustainable environment for our patients, staff, visitors and the wider community.

We acknowledge that sustainability is firmly embedded within NHS policy, legislation and strategic planning. The Climate Change Act 2008 mandates the UK's commitment to achieving net zero emissions by 2050. In alignment, the NHS has set ambitious targets to reach net zero for its Carbon Footprint by 2040 and for its Carbon Footprint Plus by 2045.

This Green Plan outlines our commitment to these objectives. It establishes our emissions baseline, clarifies our direct (scope 1 and 2) and indirect (scope 3) emissions and details the strategic actions we will undertake to reduce our environmental impact and enhance our organisational resilience over the next three years.



## 2. Strategic and Legal

Tackling climate change is now an integral part of NHS operations and a statutory requirement for all trusts. At HDFT, minimising our environmental impact is both a legal duty and a core responsibility as a healthcare provider.

The HDFT Green Plan 2025-2028 has been developed in full alignment with national legislation, policy and guidance on responding to the climate emergency.

**Key drivers include:**



### **Climate Change Act 2008:**

Establishes legally binding carbon budgets and commits the UK to achieving

**Net Zero emissions by 2050**

### **Delivering a Net Zero NHS (2020):**

The NHS's national strategy, now statutory guidance, sets clear targets as below:

**80% reduction  
in Scope 1 and  
2 emissions by  
2032**

**Net Zero  
Scope 1 and  
2 emissions  
by 2040**

**Net Zero  
Scope 3  
emissions  
by 2045**

### **Health and Care Act 2022:**

Places a statutory duty on NHS organisations to consider climate change, covering both mitigation and adaptation in all their functions.



### **2025 NHS Green Plan Guidance:**

Requires all NHS trusts to establish measurable carbon baselines, implement formal governance structures, embed sustainability throughout operations, and report progress via NHS England's framework and trust-level Green Plan delivery groups with executive sponsorship.



In line with these national requirements, the **HDFT Green Plan 2025-2028** sets out our comprehensive approach to reducing carbon emissions and managing environmental impacts across every area of the organisation. The plan details our strategic priorities, actions and governance arrangements to ensure we meet the NHS's statutory and policy commitments on climate change.

### 3. Governance and Leadership

At HDFT, sustainability is governed with the same rigour as clinical quality, safety and operational performance. Our approach reflects a shift from compliance to delivery, embedding climate action into corporate governance, improvement and accountability structures across the Trust.

Oversight of our Green Plan is provided by the Trust Board, ensuring strategic alignment and accountability at the highest level. Our Executive Lead for Net Zero, the Trust's Executive Director of Strategy, champions the Green Plan, maintains executive visibility, and drives progress across the organisation.



#### Tactical and operational delivery

Is coordinated through the Green Plan Delivery Group, chaired by the Executive Sponsor. This group includes representatives from Estates, Workforce, Clinical Services, Procurement, Finance, Digital and Sustainability, ensuring a collaborative, Trust-wide approach. Each workstream aligns to a Greener NHS theme, with a named lead and delivery team. This structure supports the Greener NHS agenda and delivers on the ambitions outlined in section 7 of our Green Plan.

Delivery is guided by HDFT Impact, our Trust-wide continuous improvement approach. Environmental performance is integrated into our Board Assurance Framework and regular operational oversight, with objectives structured around SMART goals, monitored through KPIs and risk registers, and linked to resources and impact measures.



#### Engagement

Is delivered through a distributed leadership model, empowering teams across the Trust to lead and contribute to sustainability, while maintaining accountability and engagement via:

- An Executive Lead for Net Zero who chairs the Green Plan Delivery Group and has overall accountability for Green Plan delivery
- A growing network of Green Champions across clinical and corporate teams
- Shared accountability through strategy deployment, performance management and project oversight

Progress is monitored through the bi-monthly Board Assurance Framework and an in depth annual report to the Board, fully aligned with ICS-wide Greener NHS reporting requirements. This ensures transparency for both internal and external stakeholders - from front-line teams to regional partners.



## 4. Green Plan Development Process

The development process was designed to meet ICB and NHSE Green Plan Guidance requirements while ensuring the plan reflects our local context, challenges, and opportunities. This collaborative approach has established strong foundations for implementation, with clear ownership and accountability across all levels of the organisation.



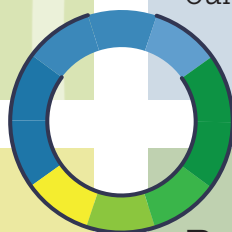
### Stakeholder Engagement

Wide-ranging consultation with the ICB and Partners to understand expectations and opportunities for collaborative action.



### Internal Working Groups

Cross-functional input from clinical, operational, and corporate teams through targeted workshops, surveys and improvement events guided by our HDFT Impact approach.



### Executive Review

Iterative development and refinement with executive sponsor and Board ensuring alignment with Trust strategic objectives and operational delivery plans.



### Board Approval

Formal review and sign-off by the Trust Board, with ongoing oversight through the Green Plan Delivery Group and progress reporting mechanisms.



## 5. Our Carbon Footprint Explained

This section provides a detailed, data-driven analysis of HDFT's carbon footprint. We trace our environmental progress over time and identify key drivers of our emissions. By shining a light on the data, we empower stakeholders to understand our sustainability journey and drive meaningful change.

HDFT's Green Plan follows the emissions framework in *Delivering a Net Zero NHS* (2020), which is statutory guidance under the Health and Care Act 2022 and aligned with the Climate Change Act 2008. Aligning with this national approach ensures that HDFT's sustainability actions support NHS-wide objectives, enable collaboration and shared learning across the health system, and help deliver progress towards a net zero NHS.

This framework distinguishes between two key elements of an organisation's carbon footprint:

### 1. The NHS Carbon Footprint

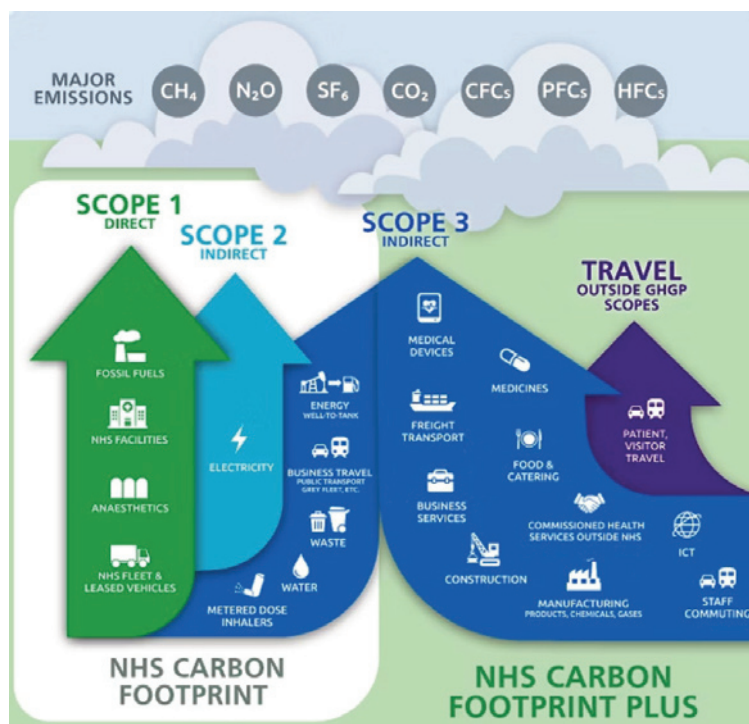
Covers direct emissions from the NHS estate and operations, including energy use, anaesthetic gases and the vehicle fleet (Scopes 1 and 2, plus some measurable Scope 3, such as water and waste).

**Statutory target: net zero by 2040.**

### 2. The NHS Carbon Footprint Plus

Incorporates the wider value chain, including supply chain, staff commuting and patient/visitor travel to NHS facilities (Scope 3).

**Statutory target: net zero by 2045.**



**Figure 5.1:** NHS Carbon Footprint and Carbon Footprint Plus “What We Measure”. Adapted from: Figure 1, “GHGP scopes in the context of the NHS”, *Delivering a Net Zero NHS* (2020), NHS England.

Clearly distinguishing these two emissions categories helps focus action on both direct and indirect sources, ensuring HDFT's Green Plan tackles the full scope of our environmental impact. By aligning with national NHS targets, we maximise our contribution to decarbonisation, locally and across the wider health system.



## 5.1 Carbon Footprint Analysis

### Sources Trends and Current Position

This section covers HDFT's direct carbon footprint, our Scope 1 and 2 emissions, as defined by the Greenhouse Gas Protocol and Delivering a Net Zero NHS. These include emissions from energy use, anaesthetic gases, fuel oils and vehicle fleet.

In accordance with NHS Net Zero reporting requirements and statutory guidance, we monitor our progress against a **1990 baseline**, a standard reference year used across the NHS and other sectors for carbon accounting under the Greenhouse Gas Protocol (GHGP) reporting methodology.

This baseline enables consistent tracking of emissions reductions over time and aligns with national climate commitments, including the UK's Climate Change Act (2008) and the NHS's *Delivering a Net Zero Health Service* strategy.

Like most NHS organisations, HDFT lacks direct emissions data from 1990 due to limited environmental monitoring systems at the time.

To establish a robust baseline, we used **historic sector-wide emission data** from the Department for Environment, Food & Rural Affairs (DEFRA), adjusted to reflect HDFT's operational scale.

We applied the historic conversion factors to our earliest reliable emissions data (2013/14), as published in our 2022-2025 Green Plan. To account for higher levels of energy and operational efficiency we also applied a **10-20% uplift**. This adjustment accounts for:

- **Higher energy consumption** in 1990 due to less efficient infrastructure (e.g., no LED lighting, wide use of variable speed drives or modern building management systems).
- **Outdated operational practices**, such as higher anaesthetic gas use (e.g., halothane and enflurane, which have 20-30 times the global warming potential of modern alternatives like sevoflurane).
- **Lower insulation standards** and inefficient heating, ventilation and air conditioning (HVAC) systems, leading to greater heating/cooling demands.

By reconstructing this baseline, we ensure transparency in tracking progress toward our **net zero targets** (80% reduction by 2032, 100% by 2040).



## Emissions Breakdown by Source

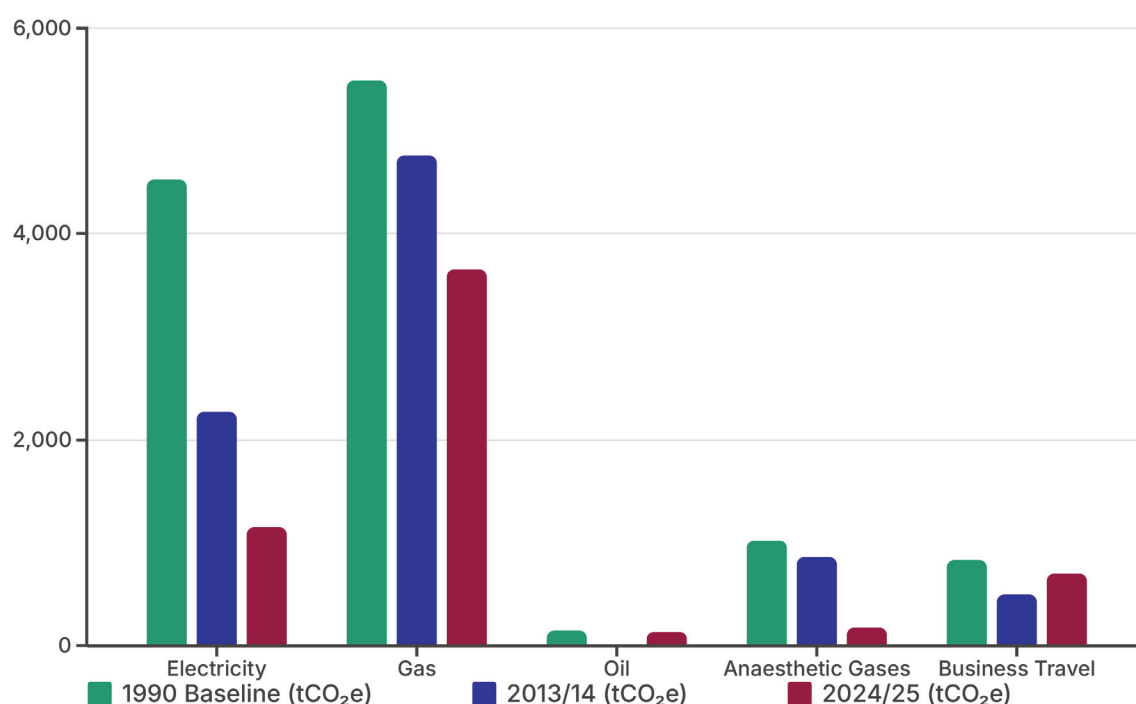
Over the last three decades, HDFT's Scope 1 and 2 emissions have fallen substantially, with notable changes across all major sources. Table 5.1 and Figure 5.2 illustrate our progress and highlight priority areas for further action in this green plan cycle and beyond.

**Table 5.1: Emissions by Source, 1990-2024/25**

Source	1990 Baseline (tCO <sub>2</sub> e)	2013/14 (tCO <sub>2</sub> e)	2024/25 (tCO <sub>2</sub> e)	% Change (1990-2024/25)
Electricity	4,536	2,273	1,158	-75%
Gas	5,485	4,770	3,654	-33%
Oil	149	6	139	-7%
Anaesthetic Gases	1,027	856	184	-82%
Business Travel	834	499	695	-17%
Total	12,030	8,404	5,830	-51.5%

**Table 5.1:** HDFT Scope 1 & 2 emissions by source, 1990-2024/25. For information on calculation methodology and references, contact Harrogate Integrated Facilities - Estates Department.

**Figure 5.2: Breakdown of emissions by source for each reference year**

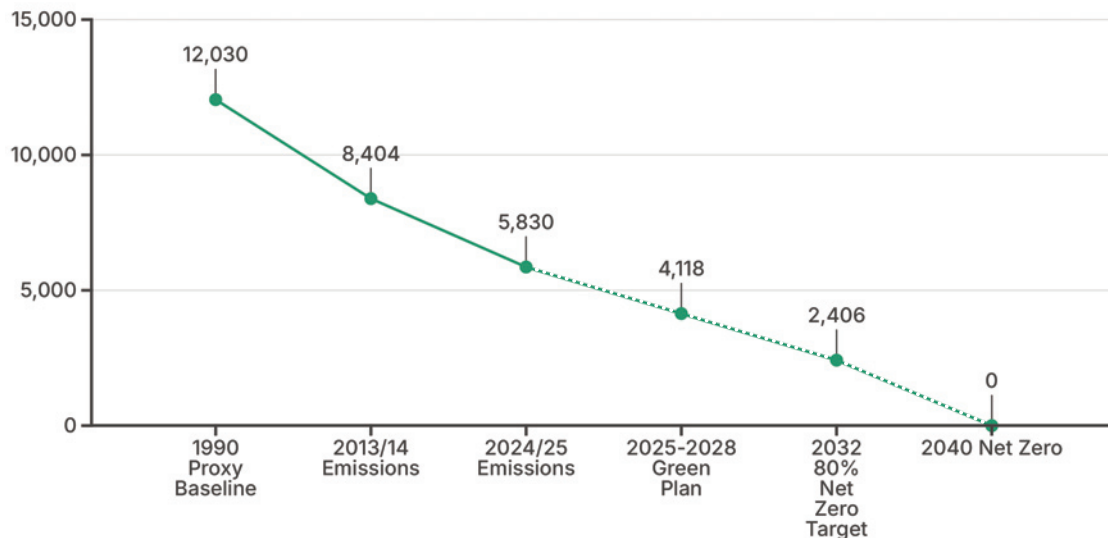


**Figure 5.3:** Changing sources of emissions, electricity and anaesthetic gases down, gas dominant.



## Emissions Breakdown by Source

**Figure 5.3: Total Scope 1 & 2 emissions (1990, 2013/14, 2024/25), with NHS Net Zero 2032 and 2040 target shown**



**Figure 5.3:** Progress towards net zero, HDFT Scope 1 & 2 emissions halved since 1990. HDFT's 1990 baseline is a reconstructed value, developed in line with NHS and DEFRA guidance. We applied a 5% uplift to our earliest reliable data, a conservative adjustment compared to the 20% uplift recommended by national sources, reflecting higher NHS activity and lower building efficiency in 1990. This ensures fair and transparent progress tracking.

### Looking Forward

HDFT's achievements in decarbonising electricity use and clinical gases demonstrate the power of targeted interventions and system change. As we continue our journey to Net Zero by 2040, our main focus will shift to heat decarbonisation, smarter travel and optimising the site's energy use.

Electricity emissions have dropped by nearly 75%, reflecting both national grid decarbonisation and efficiency improvements within our facilities. While this is a significant win, heating now represents the largest single source of direct emissions, highlighting where further investment is needed to decarbonise our main site.

Our work to reduce anaesthetic gas emissions has been particularly impactful,

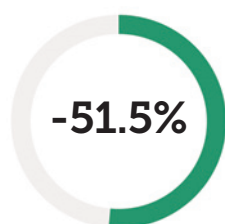
achieving over 80% reductions through targeted clinical actions, including the removal of desflurane, a potent greenhouse gas, from our supply chain.

Tackling these high-impact areas has been crucial to making substantial progress on our overall carbon footprint. We will continue to seek innovative solutions with our clinical teams to reduce our environmental impact even further.

However, we have seen emissions from business travel increase since 2013/14, reflecting the evolving geographical footprint of the Trust and changing care patterns. This demonstrates the need for a targeted approach to reduce the impact of our fleet and business journeys to a minimum.

## Key Insights and Trends

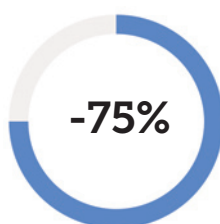
The headlines from our data analysis are presented below across all major sources of emissions.



### Overall

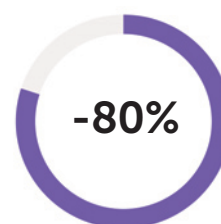
HDFT has cut direct carbon emissions by **51.5%** since the reconstructed 1990 baseline.

A further **5,830 tCO<sub>2</sub>e** reduction is required to meet our Net Zero 2040 target.



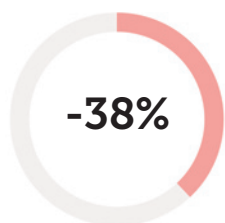
### Electricity

Emissions have dropped by nearly **75%**, reflecting grid decarbonisation and efficiency improvements.



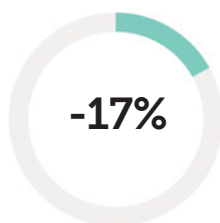
### Anaesthetic gases

Targeted clinical actions have reduced emissions by over **80%**, the largest proportional drop and reflecting work to remove desflurane from our supply chain.



### Gas

Reduction due to usage and energy efficient equipment not a cleaner gas network. Heating now represents the largest single source of direct emissions, highlighting where further investment is needed to decarbonise the main site.



### Business travel

While below 1990 baseline, emissions have increased since 2013/14, showing the impact of evolving work and care patterns.



### 2032 80% Target

We have achieved a 30% reduction since 2013/14, but must reduce our footprint by a further 3,424 tCO<sub>2</sub>e to meet the 2032 target, and by 1,712 tCO<sub>2</sub>e during this Green Plan cycle.

Figure 5.4: Headline reductions in HDFT's Scope 1 & 2 emissions by source, 1990-2024/25.



## 5.2 Carbon Footprint Plus Analysis

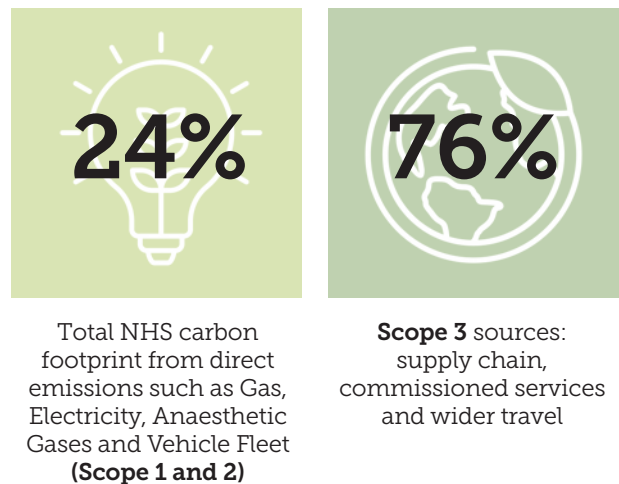
### Sources Trends and Current Position

This section summarises where the Trust's Scope 3 emissions come from, how they are measured and our current position against national benchmarks.

The HDFT Carbon Footprint Plus represents the most comprehensive view of our organisation's climate impact, encompassing not only our direct emissions (Scope 1 and 2) but also the wider indirect emissions across our full supply chain and operations, commonly referred to as Scope 3.

This approach aligns with NHS England's national methodology, which recognises that a significant majority of the NHS's climate impact lies beyond its immediate control, within the goods, services, medicines, equipment, and activities it procures and influences. Table.1 of Delivering a Net Zero NHS provides the NHS Carbon Footprint Plus at 24.9 million Tonnes of Co2e.

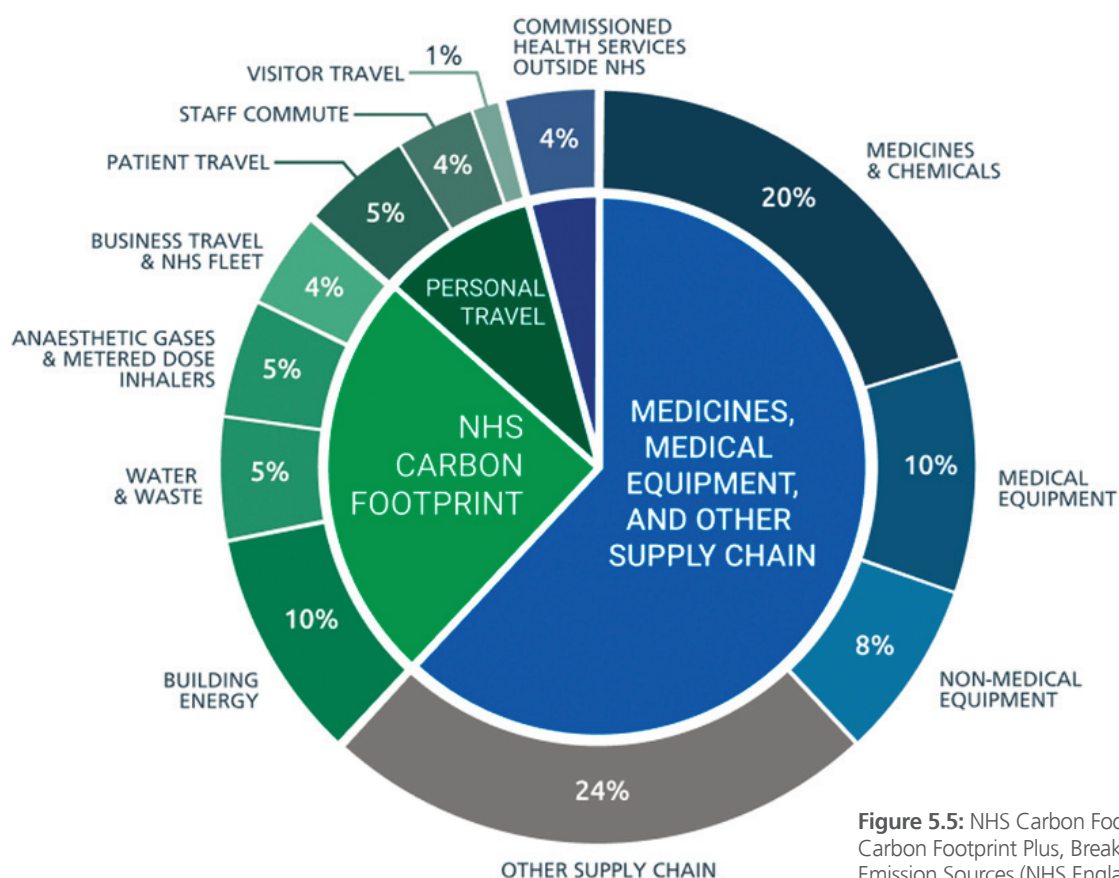
**Figure 2 in "Delivering a Net Zero NHS"** (NHS England, 2020) illustrates this clearly:



#### Our Carbon Footprint Plus therefore includes:

- Our direct carbon footprint (Scope 1 & 2), which we calculate using robust, bottom-up consumption data and emissions factors.
- Our wider supply chain and Scope 3 emissions, estimated using a combination of bottom-up and top-down modelling, following NHS methodology and best practice.

## Sources Trends and Current Position



**Figure 5.5:** NHS Carbon Footprint and Carbon Footprint Plus, Breakdown of Emission Sources (NHS England, 2020)



# Emissions Breakdown by Source

HDFT recognises that data maturity for Scope 3 emissions is not as advanced as for Scope 1 and 2, due to the scale and complexity of supply chain reporting. For Scope 1 and 2, we use robust, bottom-up consumption data (e.g., gas, electricity, fleet fuel) and apply established emission factors. For Scope 3, in line with NHS and international best practice, we combine both bottom-up and top-down approaches to estimate our full carbon footprint.

**Bottom-up Methodology:** Uses measured activity data (kWh, m<sup>3</sup>, tonnes) and multiplies by category-specific emission factors, delivering high-confidence, bottom-up estimates for direct categories (energy, water, waste, business travel, fleet).

**Top-down Methodology:** Is a spend-based, top-down approach modelling the emissions embedded in purchased goods and services, using economic and environmental data to estimate supply chain impacts. This is essential for Scope 3, where direct data is limited.

Emission Source	Emissions (tCO <sub>2</sub> e)	Methodology	Data Source
Scope 1 & 2	5,830	Bottom-up	Scope 1&2, Section 5.1
Scope 3 (Indirect)			
Supply Chain (see non-pay breakdown)	42,242	Top-down	HDFT Non Pay / kg CO <sub>2</sub> e/£ (Scope 3 Attributable) 23/24 Annual Accounts
Water	30	Bottom-up	Measured consumption Data (24/25)
Waste Water	61	Bottom-up	Measured consumption Data (24/25)
Waste	1,492	Bottom-up	Measured Data (24/25)
Subtotal Scope 3	43,825		
Total HDFT Carbon Footprint Plus	49,655		

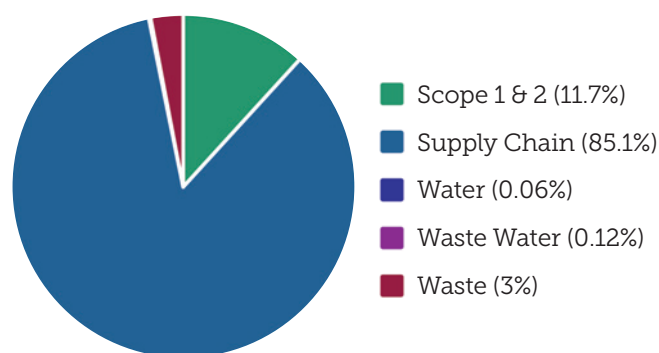
Table 5.2: HDFT Carbon Footprint Plus by emission source, 2024/25.



# Key Insights and Trends

The chart below shows the proportion of HDFT's total carbon footprint contributed by each main source in 2024/25. It clearly demonstrates that supply chain emissions make up the vast majority of our impact, far outweighing direct emissions and other indirect sources such as waste and water.

The chart right visually represents HDFT's Carbon Footprint Plus by emission source. Supply Chain emissions clearly dominate at 42,242 tCO<sub>2</sub>e (85% of total emissions), followed by Scope 1 & 2 direct emissions at 5,830 tCO<sub>2</sub>e (12%). Waste contributes 1,492 tCO<sub>2</sub>e (3%), while water and waste water combined account for less than 1% of the total footprint.



**Figure 5.6:** Proportion of HDFT's total carbon footprint by emission source, 2024/25.

Data sources: HDFT Annual Accounts 2023/24; Measured consumption data (2024/25); Emission factor methodology per NHS England (2020), Delivering a Net Zero NHS; DEFRA 2023 conversion factors. For information on calculation methodology and references, contact Harrogate Integrated Facilities - Estates Department.

## Looking Forward

As we continue our journey toward Net Zero, the most significant opportunities for further carbon reduction now lie within our Scope 3 emissions, particularly the supply chain, which accounts for the vast majority of our total footprint. Looking ahead, our priorities will include:

- Enhancing Supply Chain Engagement:** Working with suppliers to improve emissions data, encourage carbon reduction plans and embed sustainability within procurement processes, in line with the NHS Net Zero Supplier Roadmap.
- Improving Data Maturity:** Moving from spend-based estimates to more activity-based, supplier-specific reporting as national NHS digital tools and supplier disclosures develop.

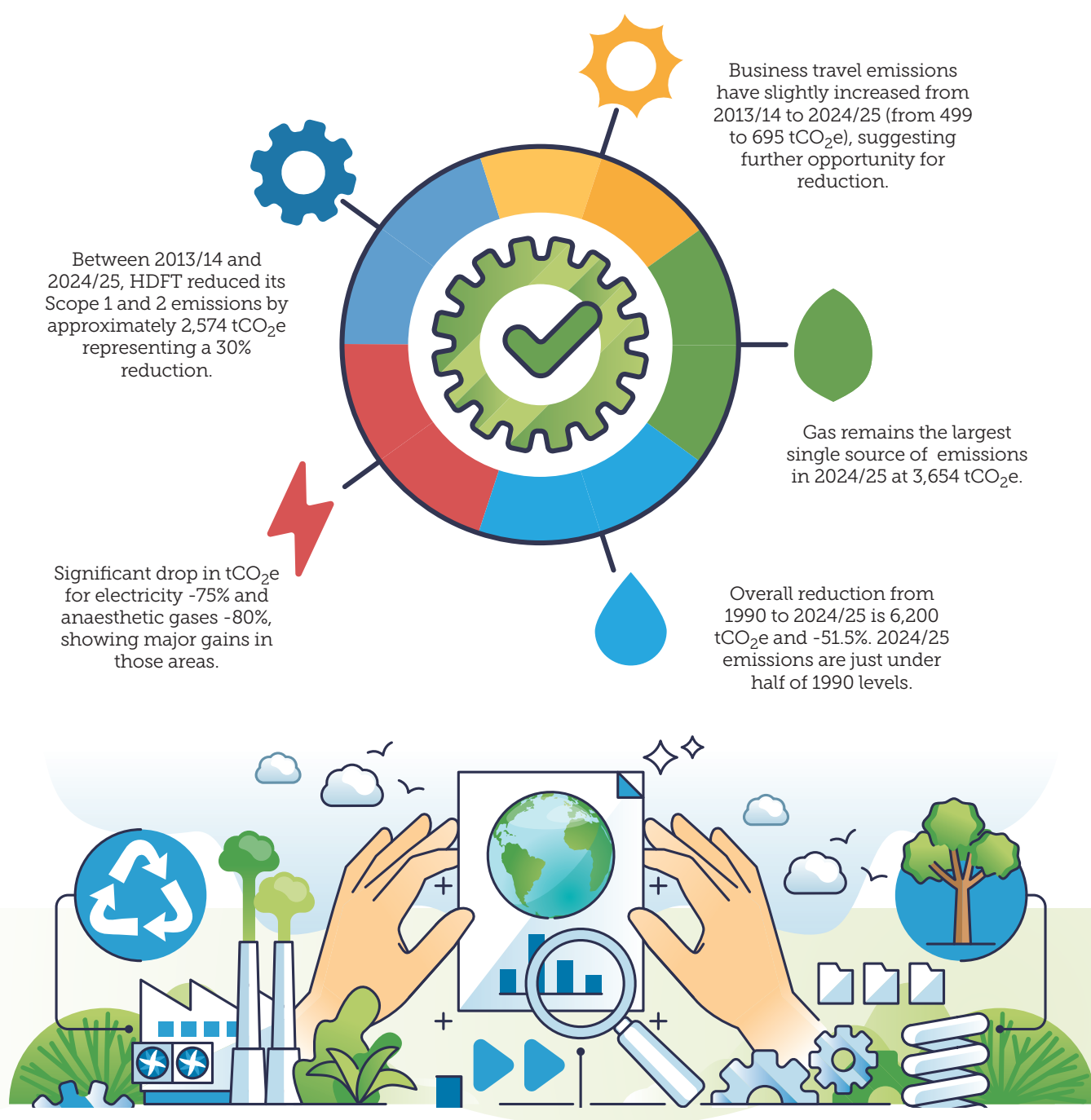
- Targeted Interventions:** Identifying the highest-impact areas within our supply chain and operations where decarbonisation efforts can deliver measurable benefits.
- Continuous Improvement:** Collaborating across the ICS and with NHS partners to share learning, develop best practice, and strengthen reporting methods for Scope 3.
- Governance and Accountability:** Ensuring robust monitoring and Board oversight of Scope 3 progress as part of our Green Plan delivery framework.

These actions will underpin our progress towards the NHS 2045 Net Zero target for the Carbon Footprint Plus and ensure that sustainability remains a core part of how we deliver care.



## 6. Building on our Achievements

HDFT has made significant progress toward its sustainability goals since the launch of our first Green Plan in 2022. Our efforts have included investment in infrastructure, clinical transformation, workforce engagement and improved carbon reporting. These achievements demonstrate the Trust's system-wide commitment to delivering Net Zero healthcare in line with NHS and legal requirements.





These savings were driven by:



### Energy Upgrades and Grid De-carbonisation

£14.1 million in PSDS-funded energy upgrades, including heat pumps, solar PV, windows and roof insulation. £7 million investment in LED lighting and Energy Centre Optimisation. National Grid De-carbonisation and increase in renewable technology nationally.



### Transport Changes

Introduction of Electric Vehicles (EVs) and active travel support, shifting commuting and business travel behaviours.



### Clinical Improvements

Complete removal of desflurane, saving an estimated 800 tCO<sub>2</sub>e annually.



### Digital Transformation

Expansion of virtual consultations, reducing patient and staff travel.



### Governance

Governance improvements, including the launch of a Green Plan Delivery Group, Executive Director Lead and Directorate-level Green Champions.



## 6.1 Staff Voices: Our Green Journey



Our staff are at the heart of our sustainability initiatives. Here are some testimonials from team members who have been actively involved in our green schemes.



The £14.1 million energy upgrade project has marked a significant step toward sustainability. The installation of heat pumps and solar photovoltaic (PV) systems across the HDFT site was not just an infrastructure improvement, but a commitment to creating a sustainable healthcare environment for future generations.

**Andy Colwell**  
Deputy Director of Estates  
and Facilities



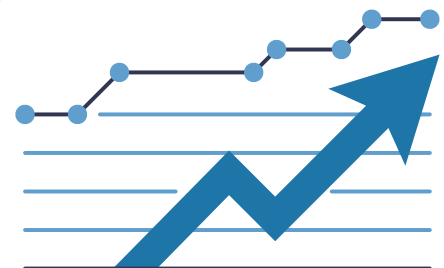
Leading the transition away from desflurane has been incredibly rewarding. Our team embraced the change, knowing we were reducing our carbon footprint while maintaining excellent patient care. Seeing an 82% reduction in anaesthetic gas emissions makes me proud of what we've accomplished together.

**Kate Woodrow**  
Chief Pharmacist



The roll out of multiple Patient Apps has resulted in many of our patients avoiding unnecessary travel, and along with the ongoing reduction in the use of paper notes, is helping to reduce our carbon footprint, while improving access to care.

**Richard Atkinson**  
Head of Digital Delivery



These stories represent just a few examples of how our staff are championing sustainability across different areas of the Trust. Their dedication and innovation are essential to achieving our Net Zero ambitions.

“



**I bought an electric bike last year (named Betty) through the cycle to work scheme. This has allowed me to pedal to work and cycle to see my local patients out in the community.**

Being electric it allows me to engage the turbo when needed so that I do not arrive at patients home all hot and bothered! It does save me time as I hop on my bike at the hospital and off I go. When I use the car I have to walk 10 mins to it and then the same after the visit, so the e bike is time efficient and cost effective.

Each week I now manage to have about 3 days or more where I do not use my car at all so saving costs and the planet. Lastly, the patients are all quite interested when they see the crazy physio arriving at their house on a bike! It's certainly a talking point.

**Pam Bagot**  
Neurological Physiotherapist



”



## 6.2 Sustainability Case Studies: Our Green Initiatives in Action

These case studies highlight key sustainability projects that have contributed significantly to our carbon reduction goals and environmental improvements.



### Solar PV Installation

Our comprehensive solar photovoltaic installation program has transformed our energy consumption profile. Panels installed across multiple Trust buildings now generate renewable electricity, reducing our reliance on grid power and cutting carbon emissions by an estimated 120 tonnes annually.

**Carbon emissions  
reduced by an estimated  
120 tonnes annually**

### Energy Efficient Window Replacement

The Trust-wide window replacement initiative has significantly improved thermal efficiency across our estate. Modern, energy-efficient glazing has reduced heat loss by up to 40% in treated buildings, enhancing patient comfort while decreasing heating demands and associated carbon emissions.



**Heat loss reduced  
by up to 40%**



## Air Handling Unit Upgrades

Our investment in state-of-the-art air handling technology has modernised ventilation systems across critical clinical areas. These energy-efficient units deliver optimal air quality while consuming up to 30% less energy than previous systems, supporting both our sustainability goals and infection control requirements.

**Up to 30% less energy used**

## NHS Forest Initiative

As part of the NHS Forest programme, we successfully planted 80 native trees across our sites. This initiative enhances biodiversity, improves air quality, and creates therapeutic green spaces for patients, visitors and staff, while contributing to carbon sequestration efforts.

**80 native trees planted across our sites**



These projects demonstrate our practical commitment to environmental sustainability and showcase the tangible benefits of our green investment strategy. Each initiative contributes to our overall carbon reduction targets while providing additional benefits for staff wellbeing, operational efficiency, and patient experience whilst providing a strong foundation for accelerated action in our 2025-2028 Green Plan cycle, particularly as we focus on heat decarbonisation, supply chain engagement, and data-driven carbon management.



## 7. Green Plan Priorities 2025-28

### Targeting Interventions for Maximum Impact

At HDFT, we're taking a targeted approach to sustainability. We're laser-focused on the areas that will deliver the biggest reductions in carbon emissions and the greatest benefits for our patients, staff, and community.

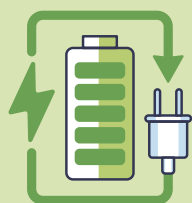
Our strategy is guided by our HDFT Impact continuous improvement approach. We know that a small number of areas are responsible for the majority of our carbon footprint. By concentrating our efforts on these high-impact areas, we can achieve substantial emissions reductions and support NHS England's national targets.

This means prioritising projects and investments that deliver the greatest carbon savings. We will continue to address all nationally mandated themed focus areas, but will adopt a lighter touch in areas with lower potential impact. This approach ensures resources are directed to where they will achieve the most significant carbon reductions.

Our first Green Plan laid the foundation. Now, this updated plan is all about action and acceleration. We're moving beyond business as usual to define targeted, measurable interventions that drive progress toward our 2032 and 2040 Net Zero milestones. And we're doing it in a way that supports care quality, resilience, and value for money.

This approach will enable focused implementation and robust tracking through monthly dashboards, quarterly reviews and regular oversight from our Green Plan Delivery Group and Board.

### 2028 Carbon Reduction Targets



Direct (Scope 1 & 2)  
Emissions  
**1,700 tCO<sub>2</sub>e  
Reduction**



Indirect (Scope 3)  
Emissions  
**10% reduction in  
single use plastics**

## High Impact Areas

Our roadmap for 2025-28 will focus on three high impact areas that will deliver the biggest carbon reductions and enable us to achieve our direct and indirect carbon emissions targets. In addition we will prioritise climate adaptation planning and preparation to increase our resilience and maintain our services in the face of climate change.



### Energy Decarbonisation

**Target:** 1,700 tCO<sub>2</sub>e reduction, 5% energy efficiency improvement

**Actions:** Heat decarbonisation plan (including Geothermal and Waste to Energy); increased onsite renewable electricity generation; modern, more efficient CHP; increased energy efficiency (insulation, upgraded infrastructure)



### Travel and Transport

**Target:** All ULEV and EV business fleet by 2028

**Actions:** Sustainable travel plan by April 2026; zero-emission vehicles transition plan



### Supply Chain and Procurement

**Target:** 10% reduction in single use plastics by 2028

**Actions:** Net zero supplier roadmap, single use plastic reduction plan, reduced carbon products plan



### Adaptation and Resilience

**Target:** Climate adaptation and business continuity plans in place by 2028

**Actions:** Climate adaptation risk assessments; climate adaptation and severe weather plans; EPRR climate adaptation and resilience business continuity plans



## 8. Green Champions Network

### A Social Movement for the Environment and Sustainability!



Everyone at HDFT has a role to play in creating a greener, healthier NHS for our patients, staff and communities.

Alongside our High Impact Areas, our Green Champions will lead work on other workstreams and creating energy and commitment for service and individual level actions to reduce environmental impact and increase sustainability.

#### Sustainable Clinical Pathways

Redesigning pathways and services to reduce carbon and increase sustainability

#### Medicines

Reducing carbon by making more sustainable medicines choices eg reducing nitrous oxide, reducing medium dose inhaler usage

#### Food and Nutrition

Providing and promoting more sustainable meal options for patients and staff; reducing food waste

#### Sustainable and Active Travel

Promoting and enabling staff, patients and visitors to make sustainable and active travel choices

#### Digital

Reducing and, ultimately, eliminating paper through delivery of our Nervecentre Electronic Patient Record and other digital systems

#### Sustainable Clinical Products

Encouraging and supporting staff to make more sustainable choices in their services

### How we will Support and Work with Green Champions

- ✓ Leadership & support
- ✓ Training
- ✓ Workshops – share & learn events
- ✓ Collaboration – across West Yorkshire Association of Acute Trusts (WYAAT), NHS Humber and North Yorkshire ICB, with local voluntary sector etc

## Become a Green Champion

Whether you work on the frontline, in support services, or as a volunteer, your ideas and actions truly make a difference.

Our Green Champions Network brings together staff and volunteers from every area of HDFT who are passionate about making a positive environmental impact and supporting our Net Zero ambitions.



Take part in Trust-wide sustainability campaigns and help organise Green Week events



Share your ideas, big or small, for greener, more efficient ways of working



Encourage your team to reduce waste, save energy and choose active travel options



Identify opportunities for improvement and support local change projects



Champion good practice and inspire others to get involved



Receive regular updates, news, and training from the Green Plan Delivery Group

## Your Ideas Matter

Every action counts, whether you're switching off equipment, supporting recycling, walking or cycling to work, or helping to deliver a new green project. If you have an idea, big or small, we want to hear from you!

**Suggest  
a new  
initiative**



**Volunteer  
for a Green  
Project**



**Nominate  
a Green  
Champion  
in your team**



## Contact Us

If you'd like to become a Green Champion or learn more about sustainability at HDFT, please get in touch:

**Email:** [hdft.sustainability@nhs.net](mailto:hdft.sustainability@nhs.net)

**Visit:** [https://nhs.sharepoint.com/sites/RCD\\_Sustainability](https://nhs.sharepoint.com/sites/RCD_Sustainability)

**Events:** Look out for our next Green Champions event, dates will be announced in staff newsletters

**Together, we can deliver a Net Zero, sustainable future for HDFT and our community.**



## 9. Monitoring and Review

Delivering our Green Plan priorities depends on clear, consistent, and transparent measurement of progress. To drive action and maintain accountability at every level, we track performance through a robust mix of carbon metrics, key performance indicators (KPIs), and regular reviews.

### How We Measure Success

Our progress is measured by:

- **Quantitative carbon reduction targets:** Including headline reductions in Scope 1 & 2 emissions (e.g., achieving a further 1,700 tCO<sub>2</sub>e saving by 2028) and improvements in Scope 3 data quality.
- **Action-based KPIs:** Tracking implementation milestones for each Green Plan priority such as completion of heat decarbonisation projects, transition of fleet vehicles to electric and delivery of targeted supply chain interventions.
- **Supporting metrics:** Covering areas like business travel, digital transformation (e.g., virtual consultations), waste management and workforce engagement.



## Data Collection and Reporting

Progress data is collected from Finance, Estates, Digital, HR, Procurement and clinical teams. This data is brought together in our evolving carbon dashboard, which provides monthly updates on our key indicators and allows real-time tracking of performance by delivery leads and managers.

- **Monthly reviews:** Progress is monitored by delivery leads and the Green Plan Delivery Group, with exception reporting for any areas off track.
- **Bi-monthly Board Reporting:** Green Plan progress is reported to the Board through our Board Assurance Framework ensuring executive and non-executive oversight.
- **Annual NHS submissions:** Each year, we report progress to the ICS / ICB Green Network and NHS England, as required by national Net Zero policy.
- **Public reporting:** Key progress and performance measures are included in the Trust's Annual Report and published on our website, enabling transparency for staff, patients and the wider community.

## Continuous Improvement and Accountability

We recognise that some aspects, particularly Scope 3 emissions, remain challenging to measure precisely. To address this, we are investing in improved data systems and supplier engagement, and we will adapt our approach as NHS digital tools and reporting standards evolve. Independent audit and stakeholder feedback will further strengthen our process.

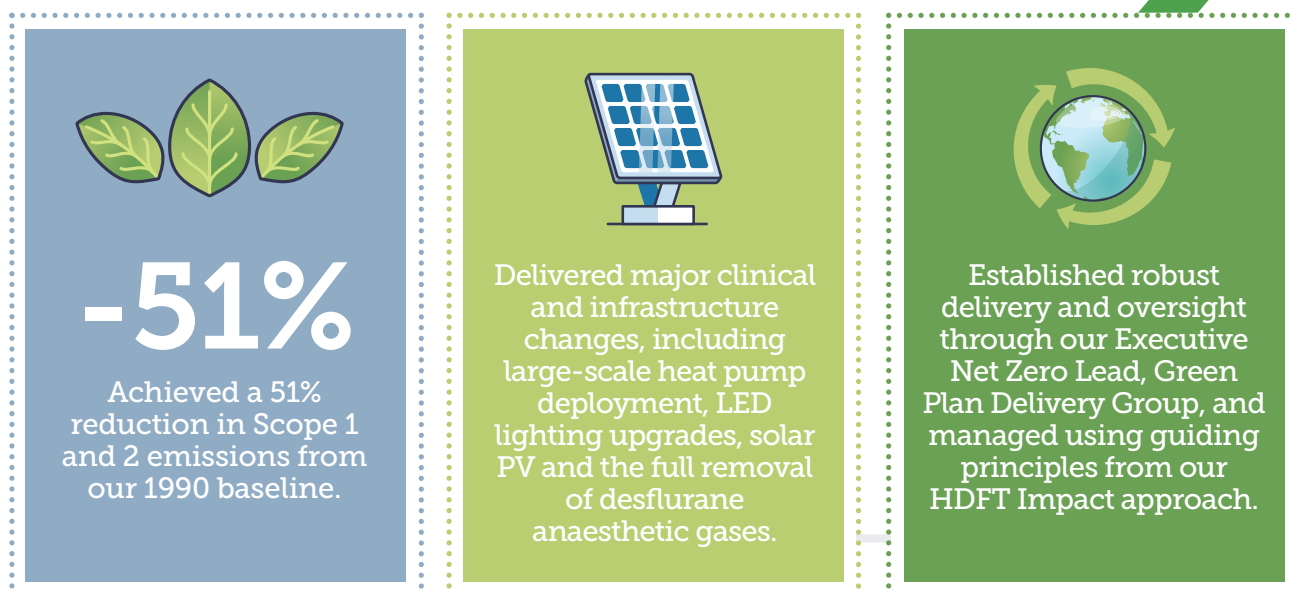
Regular review and continuous improvement are built into our reporting cycle under the Green Plan Delivery Group and other governance pathways. By maintaining this focus on data-driven delivery, we will hold ourselves accountable for progress and ensure our Green Plan remains responsive, credible and effective.



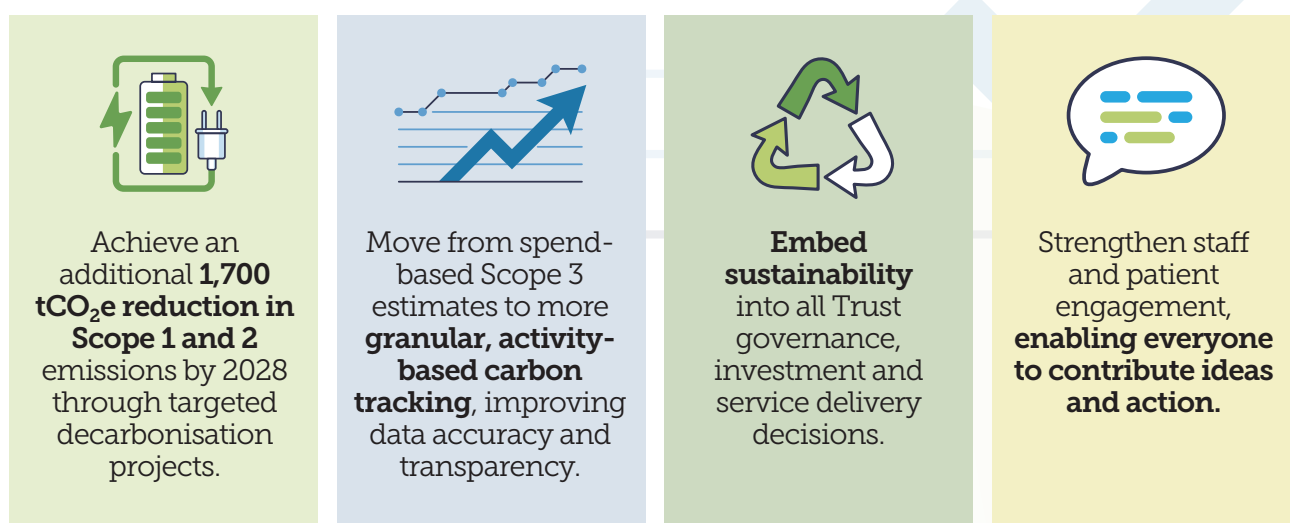
## 10. Conclusion and Next Steps

HDFT is committed to leading the transformation towards a Net Zero NHS, delivering sustainable healthcare that protects both people and planet. This Green Plan sets out a clear, credible pathway for continued progress, built on evidence, strong governance, and a culture of continuous improvement.

### Our Achievements So Far



### Our Priorities for the Next Three Years



## Governance, Accountability and Continuous Improvement



Progress will be tracked and reported through our carbon dashboard, with monthly reviews by delivery leads, bi-monthly Board updates and annual reporting to the ICS and NHS England.



We will formally review progress of our Green Plan each year, adapting priorities and actions in response to, adapting priorities in response to performance data, innovation, new risks and stakeholder feedback.



Transparency and assurance will be maintained through public updates, independent audit and regular engagement with staff, patients, and the wider community.

## Looking to the Future



As we approach 2028, we will undertake a comprehensive review of achievements, challenges and new opportunities to shape the next phase of our Green Plan.



We will continue to learn from national best practice, collaborate with regional and NHS partners and invest in innovation, ensuring HDFT remains a leader in NHS sustainability and climate resilience.

## Call to Action



Delivering on our Net Zero ambition will take the combined efforts of every team, service, and partner across HDFT.



We encourage all staff, service users and partners to become **Green Champions** - sharing ideas, supporting sustainability projects, or championing greener ways of working

**Together, we will deliver a healthier, fairer and more sustainable future for our patients, our community and generations to come.**



# Appendix A: Governance Structure and Roles

## A.1 Green Plan Governance

**Board Lead:** Executive Director of Strategy  
(Executive Lead for Net Zero)

**Delivery Group Chair:** Executive Director of Strategy

**Delivery Group:** Multidisciplinary team with  
leads from:

- Estates and Facilities
- Procurement and Supply Chain
- Clinical Services
- Pharmacy
- HR and Workforce
- Emergency Preparedness
- Finance
- Digital
- Board



## A.2 Governance Responsibilities

Role	Responsibility
Executive Lead for Net Zero	Board accountability and strategic integration
Delivery Group Chair	Performance management, escalations and progress tracking
Theme Leads	Action delivery and monitoring for each NHS sustainability theme
ICB Liaison	Regional alignment and joint delivery opportunities
Green Champions (Directorates)	Local action delivery, engagement and reporting

# Appendix B:

## Engagement and Consultation Summary

### B.1 Internal Contributors (Sub Groups and Departments)

- Estates and Facilities
- Digital Transformation
- Procurement
- Pharmacy / Medicines
- Clinical Directorate Leads
- Green Plan Champions
- Finance and Business Intelligence
- Governance and Leadership (Board, SLT, Workforce)

### B.2 External Stakeholders

- North Yorkshire ICB
- ICS Sustainability Forum
- NHS England Greener NHS Regional Leads
- Local Authorities - Part of Travel Planning and other key workstreams

### B.3 Summary of Engagement Activities

- Workshops and working groups (2025)
- Executive-level working sessions
- Trust-wide and Board level engagement for sustainability priorities
- Local authority coordination for shared travel or estate plans





[www.hdft.nhs.uk](http://www.hdft.nhs.uk)

[www.harrogateintegratedfacilities.co.uk](http://www.harrogateintegratedfacilities.co.uk)