NHS
East Lancashire Hospitals
NHS Trust
A University Teaching Trust

Green Plan

2022 - 2025

Safe | Personal | Effective

Version Control

Version	Date Issued by Trust	Ratification / Description of Key Changes	Date Authorised by Trust
1	06/01/2022	Update provided by Trust leads. Now requires Trust Board approval.	
2	11/01/2022	Amended scope of Plan to cover 2022-2025.	
3	13/01/2023	Green Plan data refresh for financial year 2021/22 and retrospective methodology amendments.	
4	15/03/2024	Green Plan data refresh for financial year 2022/23 and retrospective methodology amendments.	

Contents

Foreword

Since its establishment in 2003, East Lancashire Hospitals NHS Trust (ELHT) has sought to provide high quality acute secondary healthcare for the people of East Lancashire and Blackburn with Darwen. In delivering this care, ELHT also recognises its responsibility to maintain economic, environmental and social sustainability whilst adapting to global challenges such as climate change and pandemics.

As the largest employer in Europe, the NHS is responsible for 4% of the UK carbon emissions. ELHT understands its role as part of the NHS in helping to reduce this impact and is committed to achieving the Net Zero goals of 2040 for controllable emissions and 2045 for emissions it is able to influence, as set out in the Delivering a Net Zero NHS Guidance.
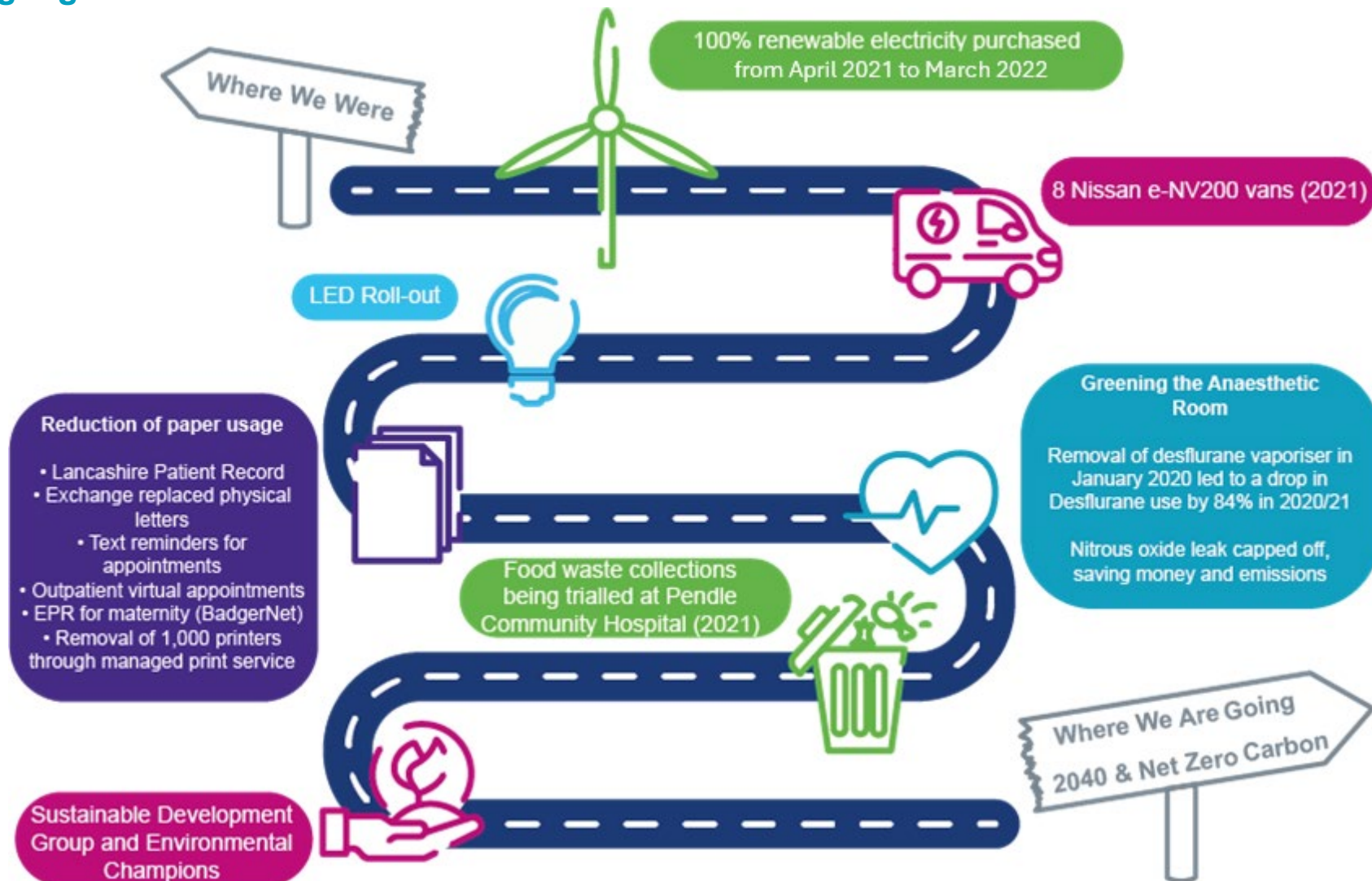
In addition to the Net Zero goals of the NHS, ELHT is committed to supporting its staff, its patients and the wider community in reducing their own emissions, fulfilling its role as an anchor institution. Achieving Net Zero will not only be beneficial to the Trust, it will also benefit those living in the region through improved environmental conditions and improved health.

This ELHT Green Plan sets out our road map to Net Zero through a detailed action plan covering nine areas of focus and is aligned with the Trust's Clinical, Quality, Financial and Estates strategies. The Green Plan will be delivered through key stakeholder engagement across the Trust as well as collaboration with other likeminded organisations including the local Integrated Care System (ICS), social care providers, our supply chain and the wider community through the Local Authorities.

I am pleased to support ELHT's vision to be a leader in the provision of sustainable healthcare across the region through the endorsement of this plan as it is the right thing to do.

Shazad Sarwar,
Chairman, East Lancashire Hospitals NHS Trust.

Highlights

Where We Were

100% renewable electricity purchased from April 2021 to March 2022

8 Nissan e-NV200 vans (2021)

LED Roll-out

Reduction of paper usage

- Lancashire Patient Record
- Exchange replaced physical letters
- Text reminders for appointments
- Outpatient virtual appointments
- EPR for maternity (BadgerNet)
- Removal of 1,000 printers through managed print service

Greening the Anaesthetic Room

Removal of desflurane vaporiser in January 2020 led to a drop in Desflurane use by 84% in 2020/21

Nitrous oxide leak capped off, saving money and emissions

Food waste collections being trialled at Pendle Community Hospital (2021)

Where We Are Going

2040 & Net Zero Carbon

Sustainable Development Group and Environmental Champions

Introduction

"While the NHS is already a world leader in sustainability, as the biggest employer in this country and comprising nearly a tenth of the UK economy, we're both part of the problem and part of the solution.

That's why we are mobilising our 1.3 million staff to take action for a greener NHS, and it's why we have worked with the world's leading experts to help set a practical, evidence-based and ambitious route map and date for the NHS to reach net zero."
Sir Simon Stevens, former NHS Chief Executive

East Lancashire Hospitals NHS Trust (ELHT) is proud to share our Green Plan, which seeks to integrate sustainable development in the way we offer vital healthcare services and help the NHS to become the first health service in the world with net zero greenhouse gas (GHG) emissions.

This Green Plan will provide a useful steer as to what extent the Trust has reached previous goals, and how these will be improved upon over the next three years as we continue our journey towards net zero.

The climate crisis is also a health crisis. Rising temperatures and extreme weather will disrupt care and impact the health of our patients and the public, especially the most vulnerable in our society. ELHT has a central role to play in reducing health inequalities and helping the NHS to reach net zero.

This Green Plan serves as the central document for ELHT's sustainability agenda and provides the rationale for sustainability at the Trust. This Green Plan will allow ELHT to work with our staff, patients and partners to take action on sustainable development and climate change mitigation as part of our commitment to offer the highest quality care to our communities.

The progress will be reported formally to the Trust Board and other key stakeholders annually and updated where necessary to ensure continual improvement.

East Lancashire Hospitals NHS Trust provides a range of acute, community and child mental health services, and operates five hospitals - in Accrington, Blackburn, Burnley, Clitheroe and Pendle.

East Lancashire NHS Trust in 2020/21

Number of employees (FTE): 8,700

Key Services: Acute Hospital Care, Community Care, Child mental health (ELCAS)

Footprint of Sites: 90,000 m2

Hospital services: Accident and Emergency care and emergency surgery; elective surgery in many specialties; Hepatobiliary, Head & Neck, Urology, Cardiology and Neonatal services

Geography: Main clinical sites in Blackburn, Burnley, Accrington, Clitheroe and Pendle

Patient Numbers: 700,000

Number of Sites: 5 (with clinical presence for outpatient services at 35 community sites)

Community services: district nursing, intermediate care, occupational therapy and physiotherapy, community dental services and palliative care

Key Resources

Building Energy
106 GWh

Baseline year for Plan
2020/2021

Waste Arisings
2386 tonnes

Procurement Activity
£80,766,456

Water Supplied
608,159 m³

Business Travel
Including staff commuting
46,620,694 km

Patient/Visitor Travel
46,560,715 km

NHS
East Lancashire Hospitals
NHS Trust
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Organisational Vision

Our Vision
To be widely recognised for providing safe, personal and effective care

Our Values

· We put patients first · We respect the individual · We act with integrity
· We serve the community · We promote positive change

Our Behaviours

· Taking responsibility · Building trust and respect · Working together
· Excellence · Keeping it simple

Our Goals

Deliver safe, high quality care
Secure COVID recovery and resilience
Compassionate and inclusive culture
Improve health and tackle inequalities in our community
Healthy, diverse and highly motivated people
Drive sustainability

System Working

SPE+ Improvement Practice

Delivery Programmes

Supporting Strategies

Clinical Stategy
Quality strategy
People Plan
Resourcing Strategy (estates/Digital/Finance/DERI

Safe | **Personal** | **Effective**

www.elht.nhs.uk

Version 4

Our Green Plan adds further environmental and social dimensions to the delivery of care, especially in terms of the widely accepted climate and ecological crisis.

Our Green Plan Vision

Net Zero: resource consumption and Greenhouse Gas (GHG) emission reductions that align with NHS net zero targets

Climate Resilience: reducing the environmental impact of our activities and provide a basis for us to become a climate change-resilient organisation

Social Value: actions that leverage our role as a place-based anchor institution to accomplish social value

Our Green Plan has nine Areas of Focus that appraise our status and set actions to be achieved within the next three years:

1. Workforce and Systems Leadership
2. Sustainable Models of Care
3. Digital Transformation
4. Travel and Transport
5. Estates and Facilities
6. Medicines
7. Supply Chain and Procurement
8. Food and Nutrition
9. Adaptation

Image: ELHT Signpost. Source: ELHT Library

Our Drivers for Change

ELHT recognises the urgency in becoming a sustainable organisation and the positive impact that this will have on its local communities. We are committed to deliver the NHS Long Term Plan, Standard Contract, the recommendations in the Priorities and Operational Planning Guidance and 'Delivering a Net Zero NHS' report, all of which have informed our Green Plan and shape our Vision.

We will work through this plan to fulfil sustainable development requirements from the NHS (as shown in Figure 2) and other relevant legislation (as listed on the next page in Figure 3) that are aligned with the relevant United Nations (UN) Sustainable Development Goals (SDGs). This includes obligations to minimise adverse impacts on the environment and secure wider social, economic and environmental benefits for our communities.

We are also committed to reviewing and participating in regional partnerships and strategies related to sustainable development wherever appropriate.

NHS England has released a number of documents that will inform the targets set by the Trust in the Action Plans. These are detailed in Figure 1. In addition, international legislation and UK guidance drives climate change initiatives which have been detailed in Figure 2.

Clitheroe Source: ELHT Library

Priority	Link to our Green Plan
NHS NHS Long Term Plan (LTP)	**2.18** Take action on healthy NHS premises.
	2.21 Reduce air pollution from all sources.
	2.24 Take a systematic approach to reduce health inequalities.
	2.3 Improve preventative care.
	2.37 Commission, partner with and champion local charities, social enterprises and community interest companies.
	4.38 Make the NHS a consistently great place to work – promoting flexibility, wellbeing and career development.
	4.42 Place respect, equality and diversity at the heart of workforce plans.
	16 Play a wider role in influencing the shape of local communities.
	17 Lead by example in sustainable development and in reducing use of natural resource and the carbon footprint of health and social care
	18 Create social value in local communities as an anchor institution.
NHS NHS Standard Contract 21/22 SC18	**18.1** Take all reasonable steps to minimise adverse impact on the environment.
	18.2 Maintain and deliver a Green Plan, approved by the Governing Body, in accordance with Green Plan Guidance.
NHS Planning Guidance 21/22 PG	**C1** Where outpatient attendances are clinically necessary, at least 25% should be delivered remotely by telephone or video consultation
NHS Estates 'Net Zero' Carbon Delivery Plan NZCDP	**1.** Making every kWh count: Investing in no-regrets energy saving measures **2.** Preparing buildings for electricity-led heating: Upgrading building fabric **3.** Switching to non-fossil fuel heating: Investing in innovative new energy sources **4.** Increasing on-site renewables: Investing in on-site generation
NHS Greener NHS / Net Zero Plan	Net zero by **2040** for the NHS Carbon Footprint, with 80% reduction by 2028 to 2032. Net zero by **2045** for the NHS Carbon Footprint 'Plus', with an ambition for an 80% reduction by 2036 to 2039.

Figure 1 NHS Environmental Drivers

Legislative Drivers	UK guidance
Civil Contingencies Act 2004	National Policy and Planning Framework 2012
Climate Change Act 2008 (as amended)	Department of Environment, Food and Rural Affairs (DEFRA) The Economics of Climate Resilience 2013
Public Services (Social Values) Act 2012	Department for Environment, Food and Rural Affairs (DEFRA) Government Buying Standards for Sustainable Procurement 2016
Mandatory; those mandated within the NHS	The Stern Review 2006; the Economics of Climate Change
Standard Form Contract requirements	Health Protection Agency (HPA) Health Effects of Climate Change 2012
HM Treasury's Sustainability Reporting Framework	The National Adaptation Programme 2013; Making the country resilient to the changing climate
Public Health Outcomes Framework	Department of Environment, Food and Rural Affairs (DEFRA) 25 Year Plan
International	**Health-Specific Requirements**
Intergovernmental Panel on Climate Change (IPCC) AR5 2013	Delivering a Net Zero National Health Service 2020 and Greener NHS guidance
UN Sustainable Development Goals (SDGs) 2016	Five Year Forward View 2014
World Health Organisation (WHO) toward environmentally sustainable health systems 2016	Sustainable Development Strategy for the Health and Social Care System 2014-2020
World Health Organisation (WHO) Health 2020	Adaptation Report for the Healthcare System 2015
The Global Climate and Health Alliance. Mitigation and Co-benefits of Climate Change	The Carter Review 2016
	National Institute for Clinical Excellence (NICE) Physical Activity; walking and cycling 2012
	Health Technical Memoranda (HTM)'s and Health Building Notes (HBN)'s
	Sustainable Transformation Partnerships (STP) Plans

Figure 2 Legislative Drivers with UK Guidance

The UN Sustainable Development Goals

Our Trust is working meaningfully towards the United Nations (UN) Sustainable Development Goals (SDGs) through our Green Plan, which we have aligned to relevant SDG targets.

The SDGs underpin a global action framework to 2030, adopted by every UN member country to address the biggest challenges facing humanity.

Each goal has targets and indicators to help nations and organisations prioritise and manage responses to key social, economic and environmental issues.

"The NHS belongs to all of us" *

The NHS and its people contribute to multiple SDGs through the delivery of its core functions, for example, target 3.8, to achieve universal health coverage.

Established on 5 July 1948, the UK's National Health Service is the world's first modern fully universal healthcare system, free at the point of use and celebrating its 75th year in 2023.

* Constitution of NHS England

Linking our Green Plan to NHS Net Zero

Contributing around 4% of the country's carbon emissions, and over 7% of the economy, the NHS has an essential role to play in meeting the net zero targets set under the Climate Change Act.

Two clear and feasible net zero targets for NHS England are outlined in the 'Delivering a 'Net Zero' National Health Service'-report (aka NHS Net Zero Report):

- o **The NHS Carbon Footprint** for the emissions we control directly, net zero by **2040**
- o **The NHS Carbon Footprint 'Plus'** for the emissions we can influence, net zero by **2045**.

All NHS trusts are to align their Green Plans with NHS England's net zero ambitions. We have calculated those emissions from all the sources listed in the NHS Net Zero Report to be reduced by approximately 4% year-on-year (akin to Science Based Targets) until each of the target dates, respectively.

Greenhouse Gas Emissions

Greenhouse gas emissions are conventionally classified into one of three 'scopes', dependent on what the emission source is and the level of control an organisation has over the emission source. They are reported in 'tonnes of carbon dioxide equivalent' (t CO_2e).

Scope 1 and 2 emissions are those that we can control and directly influence. Some scope 3 emissions such as waste and business travel can also be directly influenced, while for others such as commissioned health services, we cannot directly control. The emission sources and their 'scopes' are shown in further detail this infographic (Figure 3).

Figure 3 Greenhouse gas emission sources and their 'scopes'
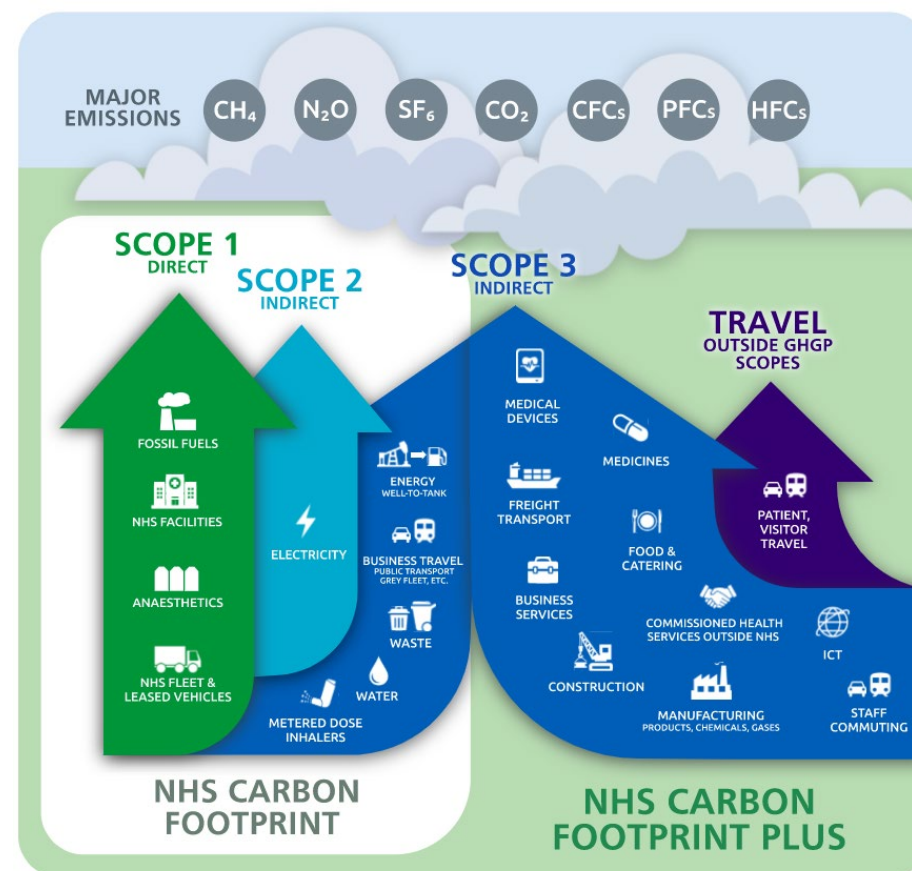
Data and methodology

The result of a GHG emissions calculation varies in accuracy depending on the data set provided. The more accurate the data supplied, the more accurate the result, which will subsequently allow for better targeting of areas where improvements can be made.

Our GHG Emissions footprint was calculated following an internationally recognised methodology for compiling a GHG emissions inventory. This methodology was guided by published reporting and best practise guidance from the UK Government, which is aligned with the GHG Protocol for Corporate Reporting and ISO 14064:1. This methodology has been supported by the detailed carbon factors annex in the NHS's 'Trust Contributions to the NHS Carbon Footprint Plus' document which details the emission factors used by NHS England.

We have calculated our Trust's carbon footprint from 2018/19 to 2022/23 in terms of building energy and delivery of care, travel and our supply chain, as per the categorisations in the NHS Net Zero report.

We have used the following primary data:
- resource consumption (electricity, gas, water) data from utility bills
- waste arisings from data sets from waste contractors
- number of inhalers from our prescribing data
- business miles travelled (by car) from our expenses system
- business travel (by rail, air etc.) from our travel operator system
- published procurement spend

We have used the NHS' Health Outcomes of Travel Tool (HOTT) to estimate emissions from staff commuting, patient and visitor travel and our published procurement expenditure to derive spend-based emission values for categories within our supply chain. We are using 2020/21 as our baseline year to set targets against.

Due to new information from the 'Trust Contributions to the NHS Carbon Footprint Plus' document, emissions for clinical waste and some medicines have been adjusted across all years.

Image: Blackburn labs
Source: ELHT Library

ELHT's Net Zero ambitions

ELHT fully commits to reducing our greenhouse gas emissions to Net Zero to prevent the worst impacts of climate change and meeting NHS Net Zero commitments. This plan outlines high-level emissions reductions and enabling actions for each area of focus.

This means ELHT needs to act now to reduce our emissions from a variety of direct and indirect sources; from our estate to the care that we deliver and beyond, each year from now until we achieve Net Zero.

We are using this Green Plan to improve our Net Zero-related data collation, carbon footprint and reporting capacity over time.

This Includes:

Determining weaknesses in our current reporting processes and taking remedial action to ensure robust data is collected

Developing processes to measure/record emissions we have not previously tracked, such as emissions related to volatile anaesthetics and our supply chain

Identifying reduction actions for categories we cannot yet easily measure

Image: Doctor using medical equipment Source: ELHT Library

An emissions-reduction trajectory for each emission source has been given in each Area of Focus (if applicable) for the next three years until 31 March 2025. To achieve these emissions reductions, we have listed a series of actions in each Area of Focus. Where possible, we have given an indicative emission reduction rating: little, moderate and significant for each action.

The environmental impacts of improving health for all are extremely difficult to detect and measure. However, reduced requirements for inpatient care and carbon-intensive resources will result in a healthier population, along with environmental and social benefits.

Throughout the Green Plan, we are using the metric of 'tonnes of carbon dioxide equivalent (tCO$_2$e).

10.07m

One tonne of carbon dioxide
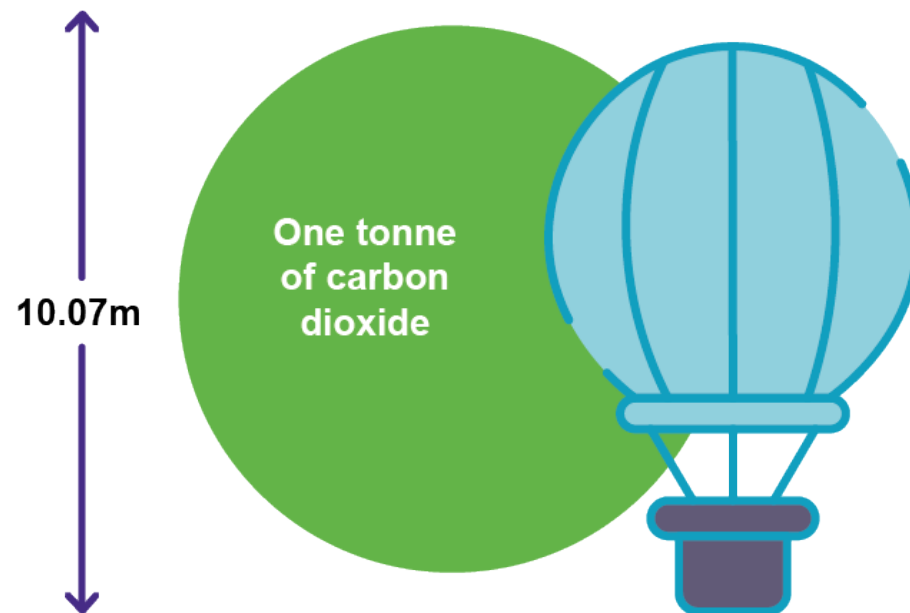
What does one tonne of carbon dioxide look like?

One tCO$_2$e can be visualised as a volume of gas the size of a hot air balloon – a sphere about 10 metres in diameter.

The average 3-bedroom semi-detached home in North West England emits around one tCO$_2$e per year from electricity consumption and almost two tCO$_2$e from the use of natural gas for heating and cooking.

Our Current Position: Baseline year

Our Carbon Footprint in 2020/2021 was **129,361** tCO$_2$e

To meet the NHS Net Zero commitments, we need to avoid around **3,281** tCO$_2$e from all sources each year until 2045.

Similar to the findings in the NHS Net Zero report, most of our emissions (74.5%) came from sources we have little or no control over: 70.3% from our supply chain and commissioned services, and a further 4.2% from patient and visitor travel.

The remaining 25.5% arise from sources we can control or strongly influence: 13.6% of our emissions came from the operation of our buildings, 7.9% from our prescription of inhalers and volatile anaesthetics and 4% from operational travel and transport.

See Figure 3 for the split of each emission category, as per the NHS Net Zero report categorisation.

Patient Travel 3,265 (2.5%)

Visitor Travel 2,198 (1.7%)

Commissioned Health Services 2,181 (1.7%)

Business Travel, NHS & Grey Fleet 613 (0.5%)

Water & Waste 1,193 (0.9%)

Staff Commute 4,505 (3.5%)

Personal Travel 9,968 (7.7%)

Anaesthetic Gases & Metered Dose Inhalers 10,282 (7.9%)

Delivery of Care 28,491 (22%)

Building Energy 16,402 (12.7%)

Business Services 42,567 (32.9%)

Supply Chain 88,721 (68.6%)

Medicines & Chemicals 25,570 (19.8%)

Non-Medical Equipment 11,134 (8.6%)

Medical Equipment 5,093 (3.9%)

Food & Catering 2,028 (1.6%)

Other Procurement 2,329 (1.8%)
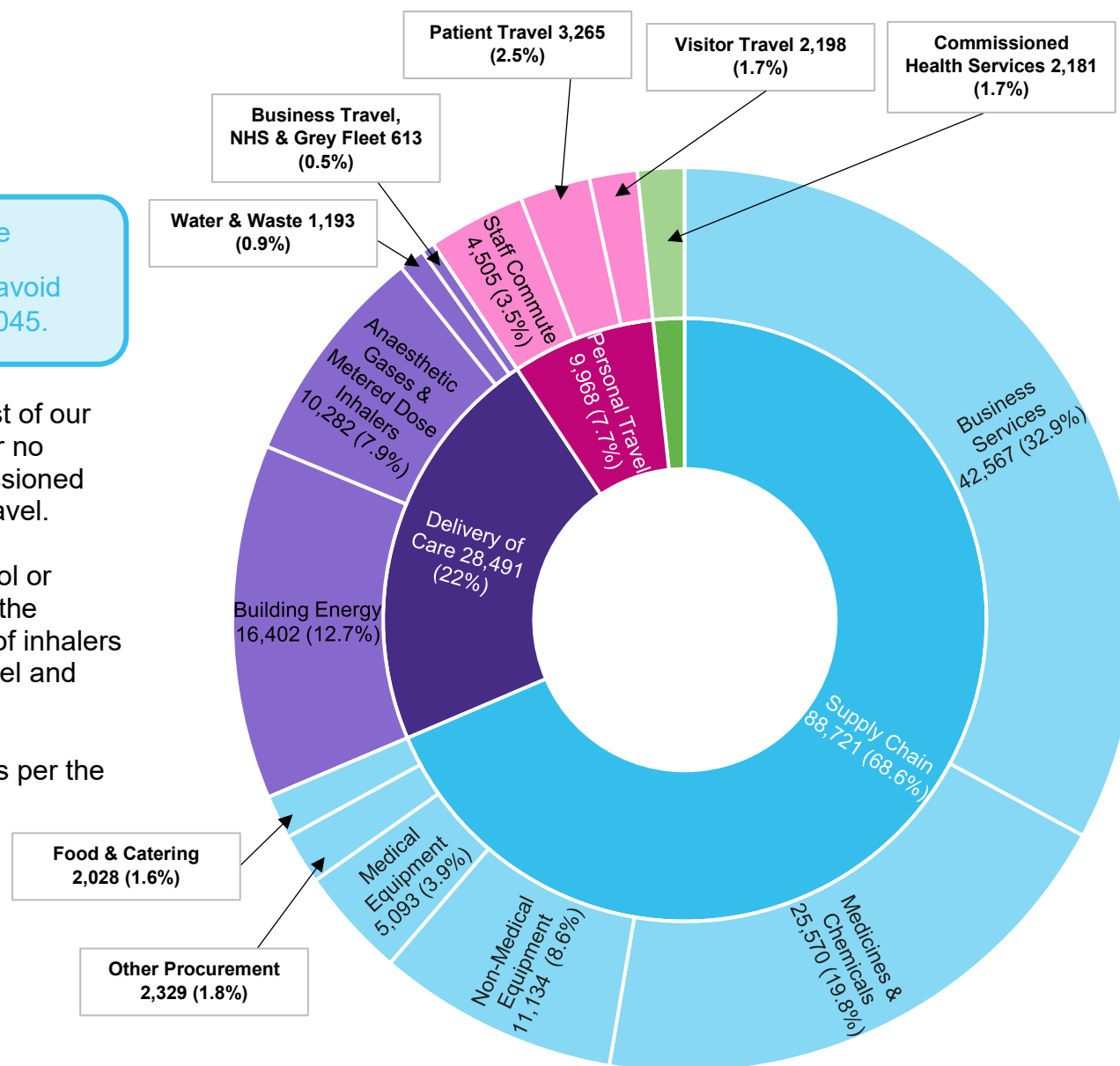
Figure 4 Emissions breakdown for 2020/21

Our Current Position: Current year

Our Carbon Footprint in 2022/2023 was **119,083** tCO$_2$e

This means that emissions have decreased by 10,278 tCO$_2$e since our baseline year.

Similar to the findings in the NHS Net Zero report, most of our emissions (74.14%) came from sources we have little or no control over: 69.84% from our supply chain and commissioned services, and a further 4.3% from patient and visitor travel.

The remaining 25.86% arise from sources we can control or strongly influence: 19.68% of our emissions came from the operation of our buildings, 1.96% from our prescription of inhalers and volatile anaesthetics and 4.13% from operational travel and transport.

See Figure 3 for the split of each emission category, as per the NHS Net Zero report categorisation.
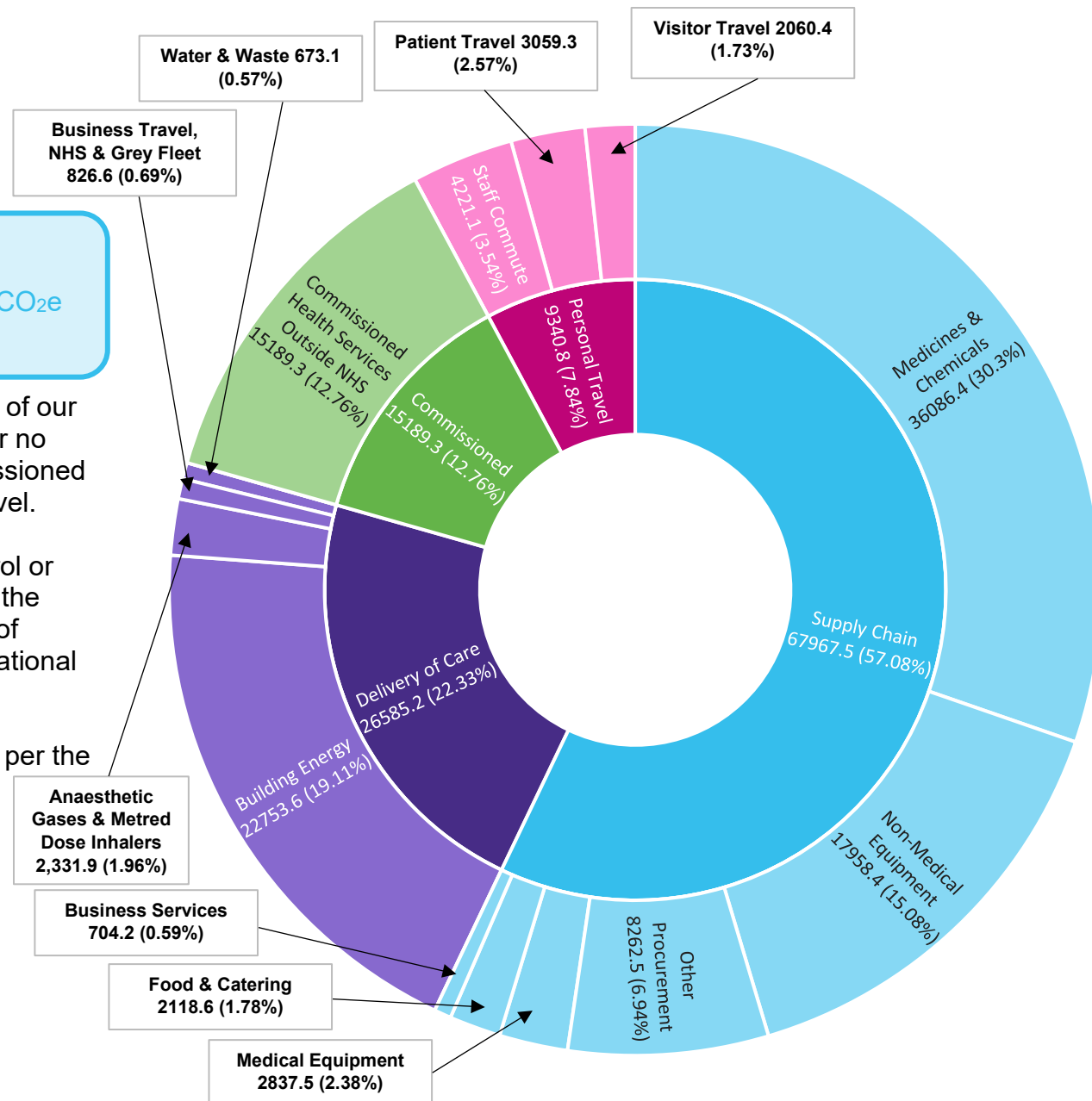
Figure 5 Emissions breakdown for 2022/23

Water & Waste 673.1 (0.57%)

Business Travel, NHS & Grey Fleet 826.6 (0.69%)

Patient Travel 3059.3 (2.57%)

Visitor Travel 2060.4 (1.73%)

Commissioned Health Services Outside NHS 15189.3 (12.76%)

Commissioned 15189.3 (12.76%)

Staff Commute 4221.1 (3.54%)

Personal Travel 9340.8 (7.84%)

Medicines & Chemicals 36086.4 (30.3%)

Supply Chain 67967.5 (57.08%)

Building Energy 22753.6 (19.11%)

Delivery of Care 26585.2 (22.33%)

Non-Medical Equipment 17958.4 (15.08%)

Other Procurement 8262.5 (6.94%)

Anaesthetic Gases & Metred Dose Inhalers 2,331.9 (1.96%)

Business Services 704.2 (0.59%)

Food & Catering 2118.6 (1.78%)

Medical Equipment 2837.5 (2.38%)

Baseline emissions from our built environment are shown in Figure 1, and a more detailed breakdown of emission sources for the financial years 2018/19 to 2022/23 to illustrate trends over this period are shown in Figure 2.

Figure 6 Emissions from our built environment in 2020/21

Clitheroe
1 Site
205 tCO₂e
38% gas
62% electric

Pendle
1 Site
363 tCO₂e
47% gas
53% electric

Accrington
1 Site
936 tCO₂e
75% gas
25% electric

Burnley
1 Site
5437 tCO₂e
76% gas
24% electric

Blackburn
1 Site
7804 tCO₂e
68% gas
32% electric

East Lancashire Hospitals Total
5 Sites
14,746 tCO₂e
86% gas
14% electric
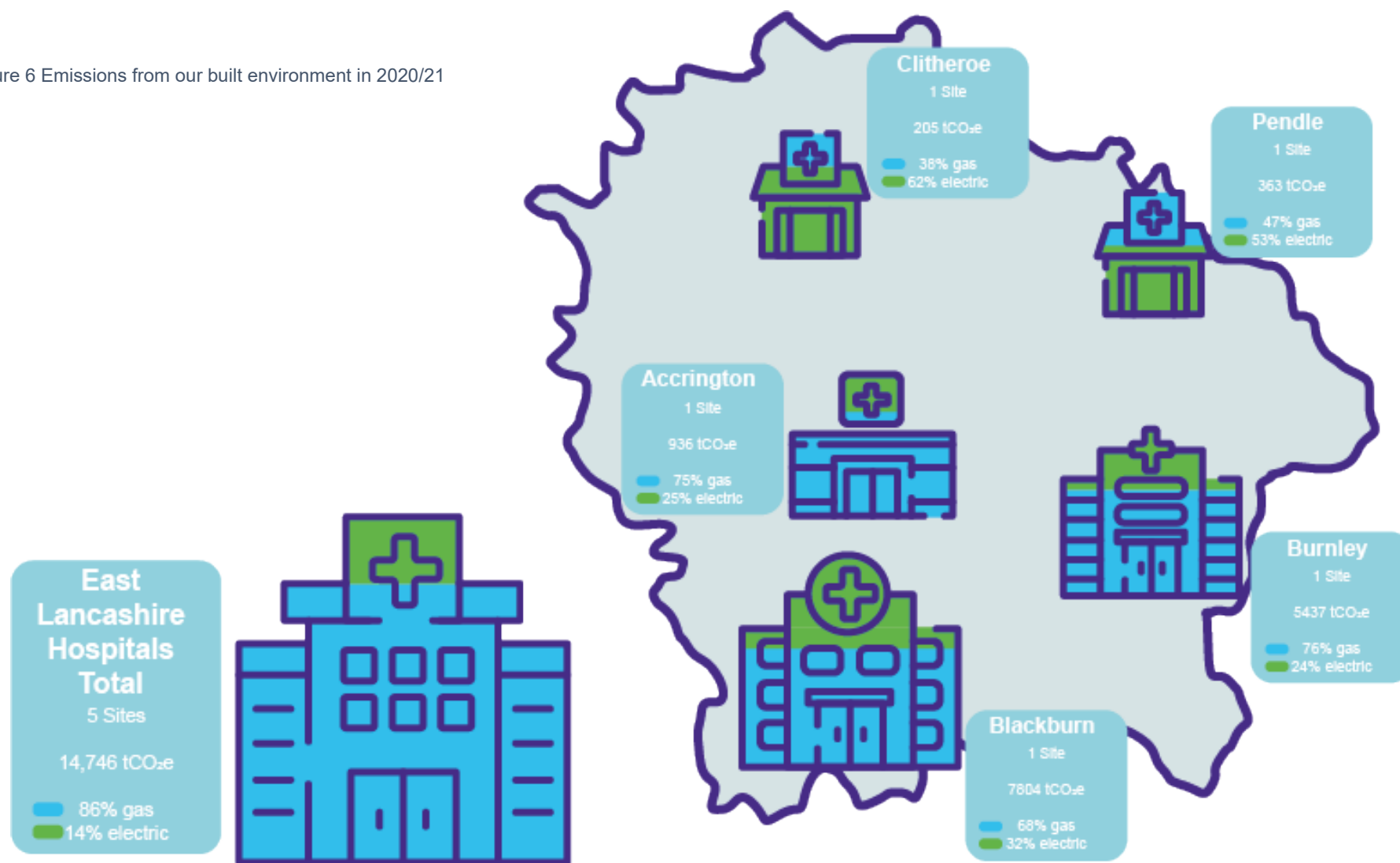
Grouped Emission Source and Metric	2018/19		2019/20		2020/21		2021/22		2022/23	
	Consumption	Emissions (tCO$_2$e)	Consumption	Emissions (tCO$_2$e)	Consumption	Emissions (tCO$_2$e)	Consumption	Emissions (tCO$_2$e)	Consumption	Emissions (tCO$_2$e)
Building Energy (kWh and kWh/th)	86,859,703	22,024	93,552,919	22,348.3	105,961,295	16,402	92,571,788	16,077	90,033,192	22,754
Water Consumption and Treatment (m^3)	306,287	311	317,864	323.1	608,159	618	699,127	285	634,374	119.7
Clinical Waste - Incineration (tonnes)	583.4	280	269.1	242.5	344.7	311	390.8	352	248.9	224.3
Clinical Waste - Alternative Treatment (recycled) (tonnes)	304.2	109	322.1	115.8	435.2	156	480.5	173	475.9	171.0
Offensive waste – Energy from Waste (tonnes)	160.4	16	181.9	18	170.1	78	265	124	242.9	126.4
Dry Mixed Recycling (tonnes)	0	0	265.4	5.7	517.0	11	135	2.9	147.3	3.1
Confidential Waste (recycling) (tonnes)	152.4	3.3	147.4	3.1	205.7	4.4	221.5	4.7	230.8	4.9
General/Domestic Waste (RDF incineration) (tonnes)	1,511.6	32	1,049.2	22.4	710.9	15.2	1,092.4	23	1,095.1	23.3
Food Waste (anaerobic digestion) (tonnes)	0	0	0	0	0.6	0.01	4.7	0.04	6.4	0.1
WEEE Waste (recycling) (tonnes)	15.0	0.3	138.0	2.9	2.2	0.05	13.35	0.28	13.35	0.28
Business Travel (kilometres) inc. staff commuting	44,765,608	4,875	47,357,553	5,434	46,620,694	5,117	47,621,781	5,202	47,718,757	5,047
Patient and Visitor Travel (kilometres)*	46,560,715	5,912	46,560,715	5,676	46,560,715	5,463	46,560,715	5,333	46,560,715	5,120
Inhalers – Metered Dose (No. Prescribed)	Not known	Not known	8,147	370	6,300	281.6	10,114	483.5	7,232	360.6
Inhalers – Dry Powder (No. Prescribed)	Not known	Not known	2,083	1.8	1,752	1.61	2,993	4.0	2,741	1.1
Inhalers – Methoxyflurane (No. of Penthrox™ Inhalers)	Not known	Not known	640	0.01	688	0.01	803	0.01	955	0.02
Anaesthetic Gases – Nitrous oxide (litres of N$_2$O only)	Not known	Not known	11,996,350	5,905	19,327,450	9,515	5,589,100	2,752	3,644,300	1,849
Anaesthetic Gases – Desflurane (No. bottles)	Not known	Not known	3,090	2,759	474	423	13	11.6	31	27.68
Anaesthetic Gases – Sevoflurane (No. bottles)	Not known	Not known	1,742	86	1,216	60.2	1,715	84.9	1,880	93.06
Anaesthetic Gases – Isoflurane (No. bottles)	Not known	Not known	0	0	0	0	4	0.76	0	0
Supply Chain (£ spent)	£59,025,805	70,837	£60,711,897	64,145.9	£80,766,456	90,902	£120,982,786	95,174	£114,351,901	83,157
Total		**104,402**		**107,460**		**129,361**		**126,091**		**119,083**

Figure 7 Summary carbon footprint for 2018/19 to 2022/23   *Distance calculated based on HOTT tool data from a 2018 baseline.

Our Emissions-reduction trajectory

We have grouped emission sources together and calculated yearly emission reduction targets to 2024/25 (Figure 3).

We need to reduce our total emissions by **19,489 tCO₂e** from our 2020/21 baseline, by 2024/25. This roughly equates to **4,872 tCO₂e** per annum. We successfully reduced our emissions by **7,008 tCO₂e** in 2022/23, which means that we are on track with our emissions trajectory.

It is worth noting the drop in emissions associated with 'Building Energy' in 2020/21, despite an increase in overall energy consumption (as shown in Figure 7). This can be attributed to our procurement of 100% renewable electricity in April 2020 and will be discussed later in the Plan.

Emissions Reduction Trajectory (tCO₂e)

	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25
Building Energy	22,024	22,348	16,402	16,077	22,754	14,512	13,931
Water Consumption & Treatment	311	323	618	285	120	547	525
Waste Arisings	442	411	576	680	553	509	489
Business Travel inc. commuting	4,875	5,434	5,117	5,205	5,047	4,528	4,346
Patient & Visitor Travel	5,912	5,676	5,463	5,333	5,120	4,833	4,640
Inhalers & Volatile anaesthetics	0	9,122	10,282	3,337	2,332	9,097	8,733
Supply Chain	70,837	64,146	90,902	95,174	83,157	80,424	77,207
Total Emissions:	104,402	107,460	129,361	126,091	119,083	114,450	109,872

Recorded Data (2018/19–2022/23)   Projected Data (2023/24–2024/25)

Key: Building Energy; Water Consumption & Treatment; Waste Arisings; Business Travel inc. commuting; Patient & Visitor Travel; Inhalers & Volatile anaesthetics; Supply Chain

Figure 8 ELHT's Estimated GHG Reduction Target for three years by activity to meet 'Delivering a Net Zero NHS'

Areas of Focus Contents

The following 'Areas of Focus' give an overview of our current performance/status and an Action Plan.

The Action Plans state individual actions to achieve our Green Plan goals over the next three years. Individual actions are to be monitored and evaluated routinely and progress status changed accordingly.

We have given indicative costs and emission reductions. These are very high-level assumptions. We have also indicated which emissions scopes are being impacted. A key is given below.

Key:

Indicative Cost to achieve:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative Emissions reduction and related emissions scope:

1,2,3 Low or incremental reduction

1,2,3 Moderate reduction

1,2,3 Significant reduction

❌ Not applicable

Progress:

🟥 Not started or limited progress

🟨 Partially complete

🟩 Completed or substantial progress

Workforce and System Leadership

We will build our Green Plan into our strategic planning and governance, including our clinical and operational policies and procedures to ensure sustainable development is a part of our daily work and how we measure success.

Following our work with the Pennine Lancashire Accountable Health and Care Partnership and agreeing new system-governance principles with Healthier Lancashire and Pennine Lancashire partners, our Green Plan provides a sharper focus on how, as a Trust, we can deliver sustainable development.

We have a board-level Net Zero lead, who will oversee the resourcing and delivery of this Green Plan. Adequate budgets are being set aside for energy efficiency upgrades to our buildings, improvements to systems, processes and staff development. We will also seek internal and third-party funding to support the roll-out of Green Plan actions.

This Green Plan is approved by our Board of Directors and will be reviewed (and revised if necessary) at least annually to keep us on track with the NHS net zero and ELHT's own targets. These reviews and our progress against the actions in the Green Plan will be submitted to our Coordinating Commissioner.

Lancashire and Cumbria Integrated Care System / Provider Collaborative

Pennine Lancashire Place-based Partnership

East Lancashire Hospitals NHS Trust

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Review and approve the plan at our Board level, monitoring delivery at Board meetings and relevant committees.	Governance and policy	23/24	🟧	£	❌	Board of Directors	**SC** 18.2
02	Nominate and empower a Net Zero Lead, Climate Change Adaptation Lead and a Health Equalities Lead and keep the Co-ordinating Commissioner informed at all times of the persons holding these positions.	Governance and policy	On-going	🟩	£	❌	Board of Directors	**LTP** 2.24,17 **SC** 18.2.2
03	Identify budgets for the delivery of each 'area of focus' and the Green Plan as a whole.	Governance and policy	23/24	🟥	£	💭 1,2,3	Board of Directors	**LTP** 2.24,17
04	Streamline data collection processes and produce a comprehensive monthly data report with relevant Green Plan metrics	Governance and policy	23/24	🟥	£	💭 1,2,3	Estates and Facilities (E&F)	**NZ** 3.1.1, 3.1.2
05	Produce an annual granular carbon account in line with HM Treasury's 'Public sector annual reports: sustainability reporting guidance', with the intention of widening its scope and data quality when possible, along with an annual review of the progress against the Green Plan actions / emission reduction targets	Core responsibilities	23/24	🟥	£	💭 1,2,3	E&F	**SC** 18.3
06	Ensure staff are resourced to undertake Green Plan duties and nominate a lead person or department for each Green Plan area of focus to develop and coordinate action through the existing Sustainability Working Group.	Governance and policy	23/24	🟥	£	💭 1,2,3	Board of Directors	**LTP** 2.24,17
07	Ensure the Green Plan delivery is reflected in our corporate risk register.	Governance and policy	23/24	🟥	£	❌	Board of Directors	**LTP** 2.24,17
08	Review procurement plan at board level to achieve a net zero supply chain. Fulfilling our role as an anchor institution to achieve social value and wider benefits for our communities, particularly,-for our care groups.	Procurement and Supply Chain	23/24	🟥	£	💭 3	Board of Directors	**LTP** 2.24,17
09	Identify and action ways to engage patients and community in Green Plan delivery, including links between health inequality and climate action.	Working with patients, staff and communities	23/24	🟥	£	💭 1,2,3	E&F/HR/ Comms. and Engagement	**LTP** 2.24,17
10	Identify internal and third-party funding to enable key Green Plan actions.	Governance and policy	On-going	🟥	£	💭 1,2,3	E&F	**LTP** 2.24,17

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
11	Work in partnership with neighbouring NHS trusts and public authorities to enhance the delivery of the Green Plan and share best practice	Governance and policy	On-going	🟥	£	☁️ **1,2,3**	Board of Directors	**LTP** 2.24,17
12	Ensure quarterly Greener NHS Data Collection uploads are made	Core responsibilities	On-going	🟥	£	❌	E&F	**NZ** 3.1.1, 3.1.2

Figure 9 Green Plan actions for system leadership

Indicative cost:
£ No or low cost £ Significantly expensive
£ Moderately expensive

Indicative emissions reduction:
☁️ Low or incremental reduction ☁️ Significant reduction
☁️ Moderate reduction ❌ Not applicable

Workforce

All our colleagues are needed for our Green Plan to be successful.

The NHS is the biggest employer in Europe and the world's largest employer of highly skilled professionals and the NHS Long Term Plan aims to ensure it is a rewarding and supportive place to work.

A 2018 national survey of NHS staff showed that 98% of those surveyed thought it was important that the health and care system works in a way that supports the environment and ELHT will enable our colleagues to lead the way to achieve a greener NHS.

We will inspire and empower our people to actively engage in this Green Plan by providing relevant training and platforms. This Green Plan and progress updates will be widely communicated and accessible to all staff and stakeholders.

This is a shared journey and we ask our colleagues to be a part of it. Therefore, we have committed to training and appointing environment champions, supported by key managers and patient representatives.

A Sustainable Development Group was introduced to enhance the organisation's sustainability capacity. The key function of the group was to ensure that the work we do contributes to the national effort for sustainability in alignment with the Sustainable Development Goals.

Since the beginning of the pandemic, meetings of this group have been suspended. Building on our experience of leading a person-centred trust, we will explore how Green Plan objectives can be embedded within staff workplans and performance reviews to ensure our Green Plan becomes a core driver in the care we deliver.

Healthcare Assistants Source: ELHT Library

NHS LTP 4.1, 4.3, 4.39, 4.42, 4.43, 4.7

NHS SC 13.1 through 13.10

8 DECENT WORK AND ECONOMIC GROWTH **Target 8.5** Full employment and decent work with equal pay

13 CLIMATE ACTION **Target 13.3** Build knowledge and capacity to meet climate change

16 PEACE, JUSTICE AND STRONG INSTITUTIONS **Target 16.B** Promote and enforce non-discriminatory laws and

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Restart the Sustainable Development Group and hold regular meetings to discuss and deliver this Green Plan.	Governance and policy	23/24	🟥	£	❌	E&F/HR	**LTP** 4.1, 4.3, 4.39, 4.42 **SC** 13.1 to 13.10
02	Building on our current practice, review our policies and processes against NHS aims for ensuring: ○ rewarding, flexible and supportive work and ○ positive action on promoting equalities, including through the Workforce Race Equality Standard and new Workforce Disability Equality Standard, and ○ regular reporting against the NHS Model Employer Strategy.	Governance and policy	On-going	🟧	£	❌	E&F/Directorate of Education Research and Innovation (DERI)/HR	**LTP** 4.1, 4.3, 4.39, 4.42 **SC** 13.1 to 13.10
03	Incorporate the Green Plan into the Essential Mandatory Training and Induction policies.	Governance and policy	23/24	🟥	£	🔴 **1,2,3**	E&F/Comms. and Engagement/ DERI	**NZ** 4.2.1
04	Create Green Plan intranet pages for staff access and external webpages for other stakeholders; upload Green Plan content and progress updates accordingly.	Governance and policy	23/24	🟥	£	❌	E&F/Comms. and Engagement	**NZ** 4.2.1
05	Use the Green NHS 'ONE YEAR ON' Communications Toolkit and/or the 'Healthier Planet, Healthier People' Toolkit to create and share communications about our Green Plan.	Working with patients, staff and communities	23/24	🟥	£	🔴 **1,2,3**	E&F/Comms. and Engagement	**NZ** 4.2.1
06	Sign up to the NHS Greener Community and encourage staff to be active participants in this and other fora such as the Greener AHP Hub, Centre for Sustainable Healthcare and related workspaces on the Future NHS platform.	Working with patients, staff and communities	23/24	🟥	£	🔴 **1,2,3**	E&F/HR/ Comms. and Engagement	**NZ** 4.2.1
07	Consult, explore and action how clinical and non-clinical staff can best participate in our Green Plan delivery, ensuring this is incorporated into workplans, work-time allocations, performance reviews and collaborating with other trusts where appropriate.	Governance and policy	23/24	🟥	£	🟢 **1,2.3**	E&F/DERI/HR	**NZ** 4.2, 4.2.1, 4.2.2, 4.3.3

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
08	Provide training related to this Green Plan to build capability in all staff, including on the link between climate change and health and practical actions that staff can take to help achieve net zero	Core responsibilities	23/24		£	🌫️ 1,2,3	E&F/DERI/HR	**NZ** 4.2.1
09	Work with our suppliers to ensure that onsite workers are subject to the Real Living Wage, fair working practices and protections against discrimination.	Procurement and People and OD	23/24		£	❌	E&F/Lancashire Procurement Cluster (LPC)/HR	**LTP** 4.1, 4.3, 4.39, 4.42

Figure 10 Green Plan actions for workforce

Indicative cost:
£ No or low cost
£ Moderately expensive
£ Significantly expensive

Indicative emissions reduction:
🌫️ Low or incremental reduction
🌫️ Moderate reduction
🌫️ Significant reduction
❌ Not applicable

Sustainable Models of Care

The NHS Long Term Plan updates the NHS service model, with a focus on preventative care in communities and tackling health inequalities, now and in the future. This has been linked to emissions reductions and greener activities.

Our Trust provides high quality acute secondary healthcare with a full range of hospital and adult community services for the people of East Lancashire and Blackburn with Darwen.

We have five active sites and a total of 1,069 beds, including Royal Blackburn Teaching Hospital, Burnley General Teaching Hospital, Clitheroe Community Hospital, Accrington Victoria Community Hospital and Pendle Community Hospital.

Additionally, we have seven primary care centres, two clinics, and seven health centres, leased for our use via the Integrated Care Board and are therefore outside the scope of this Plan.

The National Patient Safety Improvement Programmes and the Investment Impact Fund indicators (IIF) provide underpinning principles for sustainable models of care, such as preventative care interventions and reducing health inequalities. Staff training and empowerment, as detailed in the previous sections, are critical to enhancing sustainable models of care.

Staff caring for patient. Source: ELHT Library

Our community outreach and outpatient services allow us to provide excellent preventative care. Adhering to the Getting it Right First Time-programme (GIRFT) helps to avoid additional hospital bed days and patient and visitor travel to our clinics and their associated environmental impacts. Strong interagency partnership working enhances GIRFT, providing a better care package.

Our Same Day Emergency Care programme manages patients that need more care than an outpatient appointment or an A&E attendance, but do not need admitting to an acute ward. We also have a Virtual Ward for patients that do not need to be in an acute bed but do need regular clinical support. These patients will be visited daily by a consultant and have a range of tools available in their home for ongoing monitoring.

Our Trust will commit to link GHG reductions with our delivery of the Long Term Plan sustainable care model.

We will work with our clinicians, patients and community to identify environmental benefit opportunities through sustainable care.

Staff Source: ELHT Library

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Build on current efforts (GIRFT, National Safety Improvement Programme and CMPP) to reduce health inequalities and improve early intervention, linking this work to potential emissions reductions.	Governance and policy	On-going	🟩	£	🟢 1,2,3	Board of Directors and relevant clinical leads	**LTP** 2.26 **SC** 13.9.118.4.2.1 **NZ** 4.1.3
02	Use the Embedding Public Health into Clinical Services Programme's toolkit and Sustainability in Quality Improvement (SusQI) Framework to ensure the best possible health outcomes with minimum financial and environmental costs, while adding positive social value at every opportunity.	Governance and policy	On-going	🟩	£	🟢 1,2,3	Board of Directors and relevant clinical leads	**LTP** 2.26 **SC** 13.9.118.4.2.1 **NZ** 4.1.3
03	Continue to collaborate with other trusts and public authorities on the population's health.	Governance and policy	On-going	🟩	£	🟢 1,2,3	Board of Directors	**LTP** 1.53 **SC** 18.6 **NZ** 4.1.3
04	Appoint a Health Inequalities Lead to coordinate delivery of an updated Health Inequalities Action Plan.	Core Responsibilities	23/24	🟩	£	❌	Board of Directors	**LTP** 2.26 **SC** 13.9.2, 13.10 **NZ** 4.1.3
05	Follow Greener NHS guidance or support the development of GHG emissions reduction metrics linked with sustainable care actions, including establishing links between better health outcomes and reduction in emissions from avoided care and travel.	Core responsibilities	23/24	🟨	£	❌	E&F and relevant clinical leads	**SC** 18.4.2.1 **NZ** 4.1.1, 4.1.2
06	Work to engage suppliers related to sustainable care in relevant emissions reduction and health equalities activities.	Procurement	23/24	🟨	£	❌	E&F/LPC	**NZ** 4.1.3
07	Explore new ways of delivering care at or closer to home, meaning fewer patient journeys to hospitals.	Working with patients, staff and communities	On-going	🟨	£	🟢 1,2,3	E&F/LPC and relevant clinical leads	**NZ** 4.1.1

Figure 11 Green Plan actions for Sustainable care models

Indicative cost:

£ No or low cost   £ Significantly expensive

£ Moderately expensive

Indicative emissions reduction:

🔴 Low or incremental reduction   🟢 Significant reduction

🟡 Moderate reduction   ❌ Not applicable

Digital Transformation

The NHS Planning Guidance and DDaT (Data, Digital & Technology) strategic focus is on seven key aims of Well led, Ensure smart foundations, Safe practice, Support people, Empower citizens, Improve care and Healthy populations.

As ELHT moves into the digital transformation journey following implementation of an electronic health record (her) in 2023, the focus changes to efficient digital systems, supporting staff and patients to access their information effectively and enabling our staff and patients to access health and care at a time and in a method that suits them.

ELHT has a solid foundation to develop digital care as a tool to promote inclusion and increase access to quality care in the East Lancashire region and is committed to ensuring that digital services are tailored to meet the needs of our different specific care groups.

Through the 'eLancs' Programme the Trust is investing in integrated electronic health records and digital systems to enhance patient care, improve efficiency and remove waste from the system.

Adopting cloud first, internet first and resilient systems to ensure a stable infrastructure underpins technology capabilities that enable electronic capture of observations and the transition of operational and clinical activity away from paper, leading to positive impact on both the Trust's carbon reduction ambitions and the local sustainability plans.

The 'What Good Looks Like' framework, sets the standard of ambition for the Trust towards the successful integration of digital care systems to support transformation of clinical and operational pathways.

ELHT Da Vinci Robot and Staff member Source: ELHT Library

Digital Services

Our DDaT services are designed to provide a stable and secure environment supporting patients and staff in their health and care interactions.

We have implemented a core eHR in the acute part of the organisation to complement the exist Community Health and Maternity eHR systems, providing a bedrock foundation upon which to build clinical system.

Working alongside these are the wide body of clinical specialist systems within our laboratory and radiology services, and wider specialisms that enable clinical services to deliver health and care.

At the same time, we have a wide range of corporate systems that support finance, estates, people management and interactions across the trust ranging from video consultations, appointment management to the practicalities of delivery large scale acute and community services.
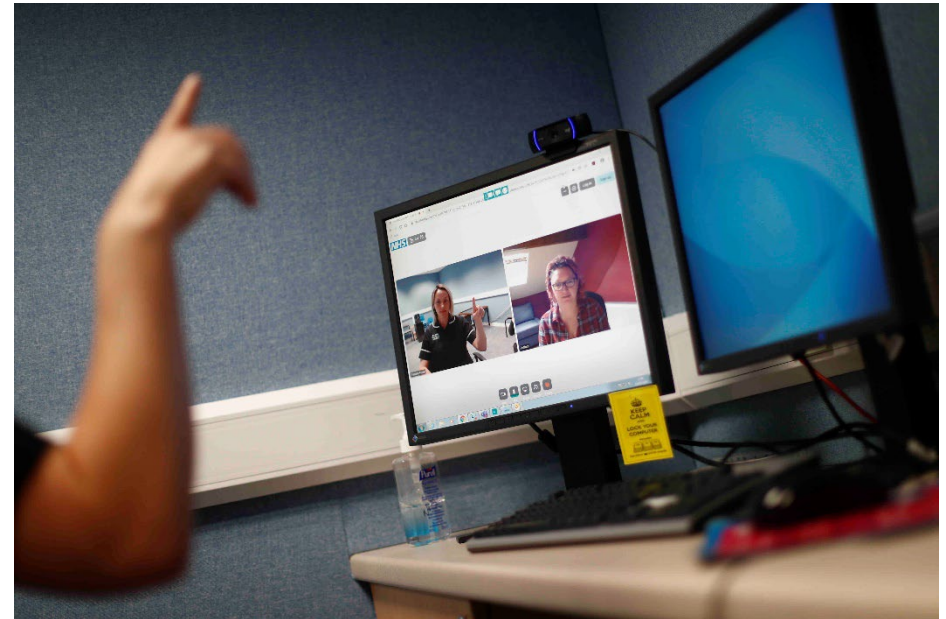
Staff on zoom call. Source: ELHT Library

Not only is the Trust reviewing opportunities to transition away from paper-based methodologies to reduce our carbon and waste footprints, but actively looking at the technology infrastructure.

This will review opportunities to use more sustainable equipment with lower heat, power and resource requirements; cloud approaches to use technology that infuses natural solutions to sustainability (arctic-circle data centres etc) and more efficient and recyclable technologies that last longer to reduce impact on precious minerals and ecosystems.

Finally, the strategic intentions within Lancashire & South Cumbria on collaboration and convergence allow the Trust to seek opportunities to use more resilient and sustainable infrastructure to enable effective health and care.

Patient using digital services. Source: ELHT Library

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Build on our current practice and current online patient guidance, participate in delivery of the Long-Term Plan commitments for digital first primary care and an NHS digital front door, linking this to potential emissions reductions.	Governance and policy	On-going		£	❌	Data, Digital & Technology	**LTP** 1.43, 1.44, 5 **NZ** 4.1.4
02	Follow NHS guidance on information collection, including any subsequent process for GHG emissions reduction metrics linked with digital-first care actions, such as the CSH's Carbon Calculator for Avoided Patient Travel	Governance and policy	On-going		£	❌	Data, Digital & Technology	**SC** 28
03	Offer more digital and remote appointments: set targets against the baseline recorded in June 2021.	Working with patients, staff and communities	21/22		£	☁ 3	Data, Digital & Technology	**PG** C1
04	Use the What Good Looks Like Framework, the Greening Government: ICT and Digital Services Strategy 2020-25 and The Technology Code of Practice as guides to ensure the Trust has robust ICT systems in place to deliver on digital transformation. Ensure all developments are included within the Lancashire and South Cumbria ICB Digital Transformation Investment Plan (DTIP) 2022 – 2027.	Procurement and Data, Digital & Technology	22/23		£	☁ 2	Data, Digital & Technology	**NZ** 4.1.4
05	Build on current practice of engaging staff and care groups in digital care channels, meaning fewer patient journeys.	Working with patients, staff and communities	On-going		£	☁ 3	Data, Digital & Technology	**NZ** 4.1.4 **PG** C1
06	Transfer paper-based systems such as prescribing, bed state, observations, ward state, referrals, expense claims forms to a digital alternative. Replace paper case notes and stored paper documentation with Electronic Document Management Systems (EDMS).	Working with patients, staff and communities	On-going		£	☁ 3	Data, Digital & Technology	**LTP** 1.43, 1.44, 5
07	Planned migration of data systems to cloud based systems. Adoption of staff and patient portals. Continued cyclical replacement programme of IT hardware including the provision of smart phones to all front-line staff.	Working with patients, staff and communities	On-going		£	☁ 2	Data, Digital & Technology	**LTP** 1.43, 1.44, 5
08	Ongoing transformation of services to reduce paper usage and drive functionality within the principal eHR solutions	Data, Digital & Technology	On-going		£	☁ 2	Data, Digital & Technology	**LTP** 1.43, 1.44, 5

Figure 12 Green Plan actions for digital transformation

Indicative cost:

£ No or low cost   £ Significantly expensive

£ Moderately expensive

Indicative emissions reduction:

☁ Low or incremental reduction   ☁ Significant reduction

☁ Moderate reduction   ❌ Not applicable

Travel and Transport

Emissions associated with the Trust's business travel and transport amounted to around 5,117 tCO_2e or 4% of all emissions in 2020/21. Out of this, 307 tCO_2e was emitted by staff undertaking their work duties using their own vehicles (grey fleet), travelling over 1.4 million kilometres.

Our own fleet of vehicles and company cars produced 304.6 tCO_2e, with a combined distance of over 1.2 million kilometres travelled.

Business travel attributed to rail and air transport by staff emitted only 0.1 tCO_2e, a significant drop of 69% compared with 2019/20, reflecting the changes in working practice due to COVID-19.

Using the NHS' Health Outcomes Travel Tool (HOTT), staff commuting gave rise to 4,505 tCO_2e and 5,463 tCO_2e attributed to patient and visitor travel.

Helipad with Air Ambulance. Source: ELHT Library

ELHT Fleet Vehicles - Facilities

We operate a fleet of 59 vehicles ranging from cars to large vans, used for the operation of our estate and community services and 155 company cars for general Trust business. In 2020/21, our vehicles travelled just over 1.2 million kilometres, emitting 305 tCO_2e (down from 338 tCO_2e the previous year). See Figure 13.

We have several large vans, many of which are more than five years old. These vehicles, by their size, are the most polluting we operate.

The new NHS Non-Emergency Patient Transport Services (NEPTS) target is to have:

- From 2023, **50%** of all fleet vehicles to be of the latest emissions standards, Ultra-low Emission Vehicles (ULEVs, such as plug-in electric hybrid), or Zero Emission Vehicles (ZEVs, such as electric cars)
- From 2025, **75%** of all fleet vehicles to be of the latest emissions standards, ULEVs or ZEVs
- From 2030, **100%** of all fleet vehicles to be ULEVs or ZEVs, including a minimum of 20% ZEVs

At present, ULEV and ZEV large vans are limited, though more are coming onto the market.

ULEV and ZEV small vans and cars are becoming commonplace, with many options available. We have already procured eight Nissan e-NV200 electric vans and operate a Bradshaw electric vehicle. These electric vehicles represent 15% of our in-house fleet.

We need to undertake a fleet review to see how our vans and large vans are being used and whether suitable ULEV and ZEVs are available. Additionally, we must review the choice of company cars on offer and change the specifications to reflect the targets within the NEPTS.

If we changed all our fleet vehicles to ZEVs, based on 2020/21 data and using **100% renewable** electricity, we would see a likely 90% drop in emissions (emissions associated with electric vehicles are due to transmission and distribution losses in the national grid). This would result in total emissions dropping to less than 30 tCO_2e per year, with the added benefit of no tail pipe emissions.

Aside from the electrification of transport, we need to reduce emissions from our fleet by 37 tCO_2e by 2024/25, equating to 9.8 tCO_2e per year.

Figure 13 Emissions from fleet vehicles and emissions reduction trajectory to 2024/25

Other Fleet Vehicles

We operate a salary sacrifice lease car scheme, open to all staff. Emissions released on this lease scheme are out of scope for this report.

However, the Trust can limit the availability of vehicles on offer based on their engine size and emissions. Furthermore, we can incentivise staff to choose Ultra Low Emission Vehicles (plug-in hybrid cars) or Zero Emission Vehicles (electric cars).

Grey Fleet

We have an extensive 'grey fleet' within our Trust.

Grey fleet refers to employees' own vehicles and/or hire cars used for business purposes. As a Trust that provides care in the community, emissions associated with our grey fleet are sizeable.

We reimburse staff and bank staff for the fuel used in line with their duties through our expenses system. In 2020/21, we travelled over 1.4 million km reimbursed, which equates to roughly 307 tCO$_2$e.

As the electrification of transport continues, the emissions will reduce accordingly and highlights the issue of providing additional electric vehicle charge points in the future.

Using 2020/21 as a baseline, we aim to reduce emissions from our grey fleet by 28 tCO$_2$e, to 215 tCO$_2$e in 2024/25, as shown in Figure 14.
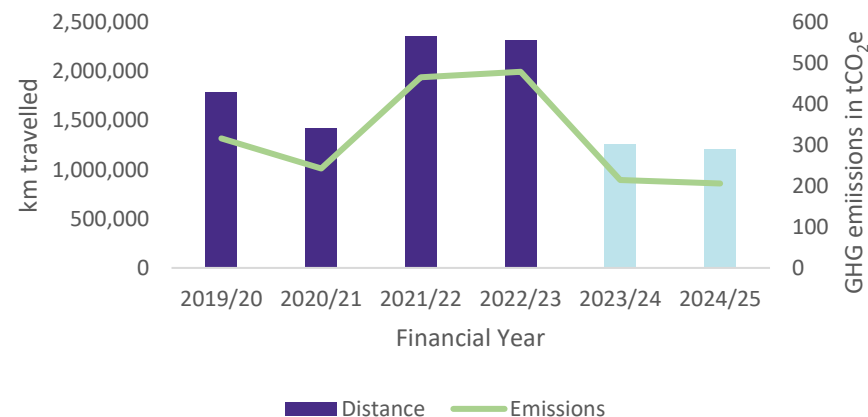
Figure 14 Emissions from grey fleet vehicles and emissions reduction trajectory to 2024/25

Electric Vehicle Charging Infrastructure

We have a total of seven 7kW EV charge points at our Burnley and Blackburn sites. These charge points are for the sole use of our electric estate vehicles at present. We do not have any electric vehicle charge points at our other sites, as we do not have estate vehicles based there.

However, as more staff buy and use ZEV or ULEVs and we increase the proportion of ZEV/ULEVs of our company cars, we will need to install more charge points to accommodate this transition. Furthermore, it will be expected to provide charging facilities to members of the public.

We must be mindful to provide charge points that are appropriate for business use: community teams using electric vehicles and larger estate vehicles will need access to high-power rapid chargers of 50kW or more, to expedite charging times.

Electric Fleet Vehicle Source: ELHT Library

Business Travel (public transport)

Before the pandemic in 2019/20, our staff took 499 train journeys, 597 taxi journeys and 6 flights, emitting an estimated 17 tCO_2e.

This had dropped to 7 train journeys, 422 taxi rides and zero flights in 2020/21 respectively, emitting just 1.4 tCO_2e. Like our fleet and grey fleet travel, the impact of COVID-19 resulted in fewer face-to-face meetings and exemplifies how remote working has had a beneficial impact in terms of carbon emissions and air quality.

The emissions reduction target by 2024/25 for business travel has been altered to a 2021/22 baseline year in this refreshed plan, as it is not possible to set an emission trajectory from the anomalous low figures from 2020/21 due to the COVID-19 pandemic.

We operate a free shuttlebus for staff, that runs from the Royal Blackburn and Burnley hospitals. However, travel data and related emissions are not currently collated for this service.

We have had to use proxies to determine the distance travelled and related emissions, as our expenses system does not capture the to- and from- destinations. Embedding additional criteria in our expenses system is needed to assure a more accurate representation of our business travel.

The increase in emissions in 2022/23 is partially due to distance-based data being unavailable, so a less accurate spend-based methodology was employed.
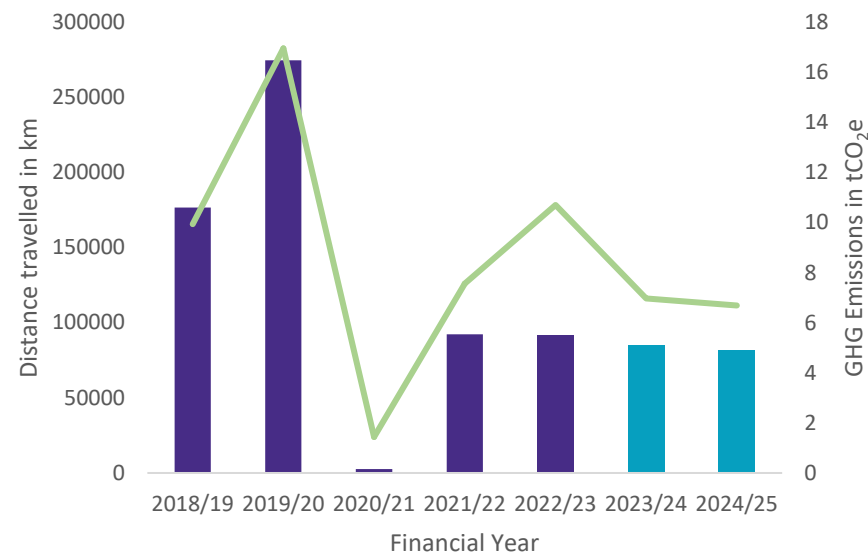
Figure 15 Bar chart to show total emissions from business travel and reduction trajectory to 2024/25

Commuting, Visitor/patient travel

Emissions associated with commuting, visitor and patient travel far outweigh our Trust's transport emissions. We can only influence our staff to commute via less polluting means, such as cycling or car sharing. Enabling home working in 20/21 has reduced travel and risk for staff significantly.

The Trust has a Green Travel plan that is reviewed and monitored by a Sustainable Development Committee with membership across all divisions.[1]

Together with our partners at Blackburn with Darwen and Lancashire County Councils we have put significant effort into highlighting alternatives to single occupier car journeys and launched our first staff car sharing scheme in 2013. There are 25 spaces allocated within car park Q for staff signed up to the scheme.

We utilise the Shared Wheels scheme, which is a free online car sharing database that staff can register with and be matched with potential car sharing partners. We have also worked with the council to ensure that bus routes serve the Trust, to and from the town centre.

The Trust encourages cycling, which is an efficient, healthy and environmentally friendly means of transport. Cycle parking and showers are provided at hospital sites, available to staff. Lockers are available to certain departments and staff members, dependent on their role and duties.

Carpark Source: ELHT Library

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[1] Due to Covid-19, the Travel Plan and its management have been dormant, though we anticipate rectifying this with the publication of this Green Plan.

The Trust provides the government-based initiative 'Cycle2Work', whereby the Trust can provide a tax free 'salary sacrifice' scheme over a 12-month period, for the purchase of bicycles and bicycle safety equipment for cycling to work for all permanent staff.

Increasing the number of cycle parking spaces, improving shower/changing facilities and offering other incentives for active travel will be explored.

Public transport provision to or near our sites remain a vital service to the communities we serve and helps to reduce health inequalities. Public transport also plays an important role in reducing emissions; catching the bus to work instead of driving a car reduces traffic and potentially improves air quality. Therefore, we incentivise staff to use public transport.

Our last Travel Plan survey results showed the over 80% of respondents drive to work by themselves, with only 0.8% cycling and 7% getting the bus. Decreasing the rate of non-single occupancy commuting, whether it be by an increase in cycling or car sharing, will have a large impact on reducing emissions and improving air quality.

In lieu of exact commuting data and distance travelled, we have used the NHS' HOTT Tool to estimate the emissions associated with staff commuting and patient and visitor travel. The HOTT Tool uses national and regional datasets to generate figures for transport mode, distances and emissions from a 2018 baseline and projections into the near future (shown in Figure 16).

However, these figures are indicative and need to be bolstered and verified by local travel plan survey data. Hence, the impacts

of COVID, with less need for commuting, do not fully feature in the results for 2020/21 and the projected 2021/22 data (the sequentially lower emissions are attributed to improvements in vehicle efficiencies and electrification of transport).
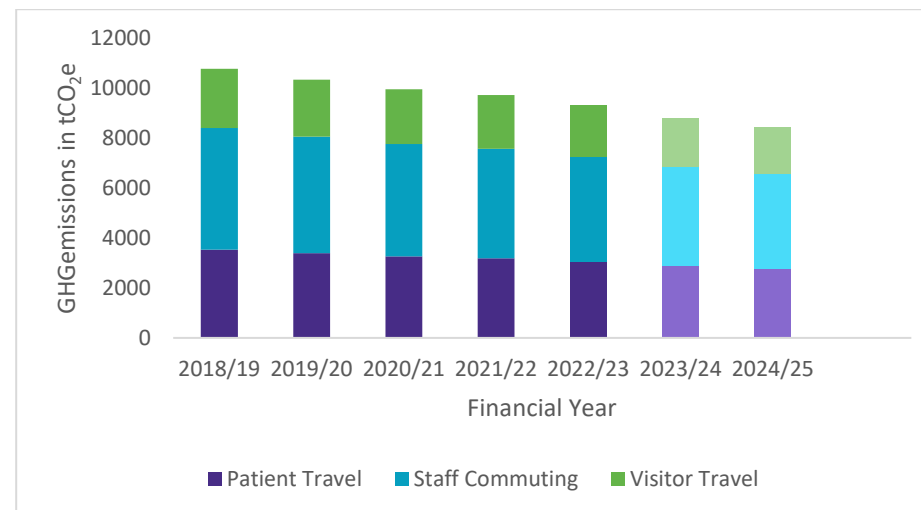
Figure 16 Stacked bar chart to show total emissions from patient, visitor and staff travel

Air Quality

Air quality forms a direct link between climate change and health outcomes, and the NHS Net Zero plan calculates that reaching UK ambitions on emissions reductions in line with Paris Agreement targets could save 38,000 lives with improved air quality.

This issue is particularly pertinent to East Lancashire, as lung cancer is among the top 4 causes contributing to a gap in life expectancy between the most and least deprived areas.

According to the World Health Organisation (WHO), poor air quality leads to over 7 million deaths globally and that 9 out of 10 people worldwide breathe polluted air.

Travel is a key contributor to air pollution and with as many as one in 20 road journeys in the UK attributable to the NHS, our activity has enormous potential impact both on our communities' air quality and our ambition to reduce emissions. Additionally, our gas-fired boilers contribute to air pollution and the decarbonisation of heating will address these pollutants in the future.

We commit to tackling this issue through investment and engagement with staff, patients and our partner local authorities. We will give special consideration to the air quality surrounding our estate and opportunities to improve its impacts on our care groups.

Emergency Vehicles. Source: ELHT Library

No	ELHT Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Embed an updated sustainable travel plan, with new modal shift targets to be supported by an active travel expenses policy and a facilities review.	Governance and policy	22/23	Amber	£ (low cost)	Low reduction (3)	E&F/Finance/HR	**LTP** 2.21, 3.82, 17 **SC** 18.4.1.3 **NZ** 3.2, 3.2.2
02	Restart the Sustainable Development Group (as per 'Workforce') and manage the delivery of the Green Travel Plan	Governance and policy	21/22	Amber	£ (low cost)	Not applicable	E&F	**NZ** 3.2, 3.2.2
03	Conduct annual Travel Plan surveys to quantify staff commuting and visitor travel and verify HOTT Tool outputs.	Working with patients, staff and communities	Annual, ongoing	Amber	£ (low cost)	Not applicable	E&F	**NZ** 3.2, 3.2.2
04	Review existing staff lease scheme and incorporate additional incentives for the uptake of ULEV and ZEVs.	Governance and policy	22/23	Red	£ (low cost)	Moderate reduction (3)	Finance	**NZ** 3.2, 3.2.2
05	Ensure that any new vehicle purchased or leased are ultra-low emission (ULEV) or zero emission (ZEV) from 2023, in line with the latest NHS non-emergency transport guidance.	Core Responsibilities	22/23	Green	£ (significantly expensive)	Significant reduction (3)	E&F/Finance/LPC	**SC**.18.4.1.1, 18.4.1.4 **NZ** 3.2.1
06	Enhance the staff mileage reimbursement system to collate vehicle type/engine size and fuel type data to allow more accurate emissions foot printing, monitoring and reduction targets.	Governance and policy	22/23	Green	£ (moderately expensive)	Not applicable	Finance	**NZ** 3.2, 3.2.2
07	Enhance the business travel expense system to capture to the to- and from- destinations for rail, air, bus, taxi journeys	Governance and policy	22/23	Red	£ (moderately expensive)	Not applicable	Finance	**NZ** 3.2, 3.2.2
08	Improve stores provision and work with our suppliers to consolidate goods orders through better planning wherever possible, reducing transport emissions.	Procurement	22/23	Amber	£ (significantly expensive)	Significant reduction (3)	Finance/LPC	**NZ** 3.2, 3.2.2
09	Work with staff currently home-working under pandemic conditions to explore voluntary blended working.	Working with patients, staff and communities	22/23	Amber	£ (low cost)	Significant reduction (3)	E&F/ICT/Finance/HR	**NZ** 3.2, 3.2.2

Figure 17 Green plan actions for Travel, Logistics and Air Quality

Indicative cost:
£ No or low cost
£ Moderately expensive
£ Significantly expensive

Indicative emissions reduction:
Low or incremental reduction
Moderate reduction
Significant reduction
Not applicable

Estates and Facilities

As an NHS Trust, the carbon footprint of our built environment is significant. Overall, the health and care system in England is responsible for an estimated 4-5% of the country's carbon emissions.

As we provide critical services 24 hours a day, our energy and resource consumptions are substantial. Therefore, we need to optimise energy use in our buildings and move away from using fossil fuels to meet NHS Net Zero goals.

Our estate comprises a mixture of buildings of different types, ages and usage, which presents challenges to retrofitting resource efficiency measures and heating improvements.

We will be following the four-step approach within the NHS' 'Estates 'Net Zero' Carbon Delivery Plan' to address our estate:

1. Making every kWh count: Investing in no-regrets energy saving measures.

2. Preparing buildings for electricity-led heating: Upgrading building fabric.

3. Switching to non-fossil fuel heating: Investing in innovative new energy sources.

4. Increasing on-site renewables: Investing in on-site generation.

Estates & Facilities – Energy

- **16,402 tCO$_2$e** emitted from buildings across our estate in **2020/21.**
- We have procured 100% renewable electricity since April 2020, resulting in a **76%** decrease in emissions compared to 2019/20 (despite more electricity being consumed). We reverted to a non-renewable contract in 2022/23, but will return to 100% renewable electricity in 2023/24.
- We need to reduce energy consumption by just under 5,000,000 kWh per year to achieve the emissions reduction target of **14,512 tCO$_2$e** in **2024/25.**

Energy and emissions

In 2020/21, we had five active sites where we were directly responsible for procuring the energy supply contracts.

Our main hospitals provide critical care and it is essential that there are no disruptions to our power supply. By the nature of medical equipment and care environment, The Royal Blackburn Teaching Hospital is the largest emitter, with 8,697 tCO$_2$e in 2020/21. Burnley General Hospital follows suit with 6,082 tCO$_2$e.

Figure 18 shows the energy consumption and emissions from our five sites as bubble graph. The size of the bubble relates to the combined emissions arising from both gas and electricity use as each site. The 'x' axis represents the amount of gas consumption (mainly used for heating, reflecting the positions of both Royal Blackburn and Burnley hospitals on the graph) and the 'y' axis is electricity use.
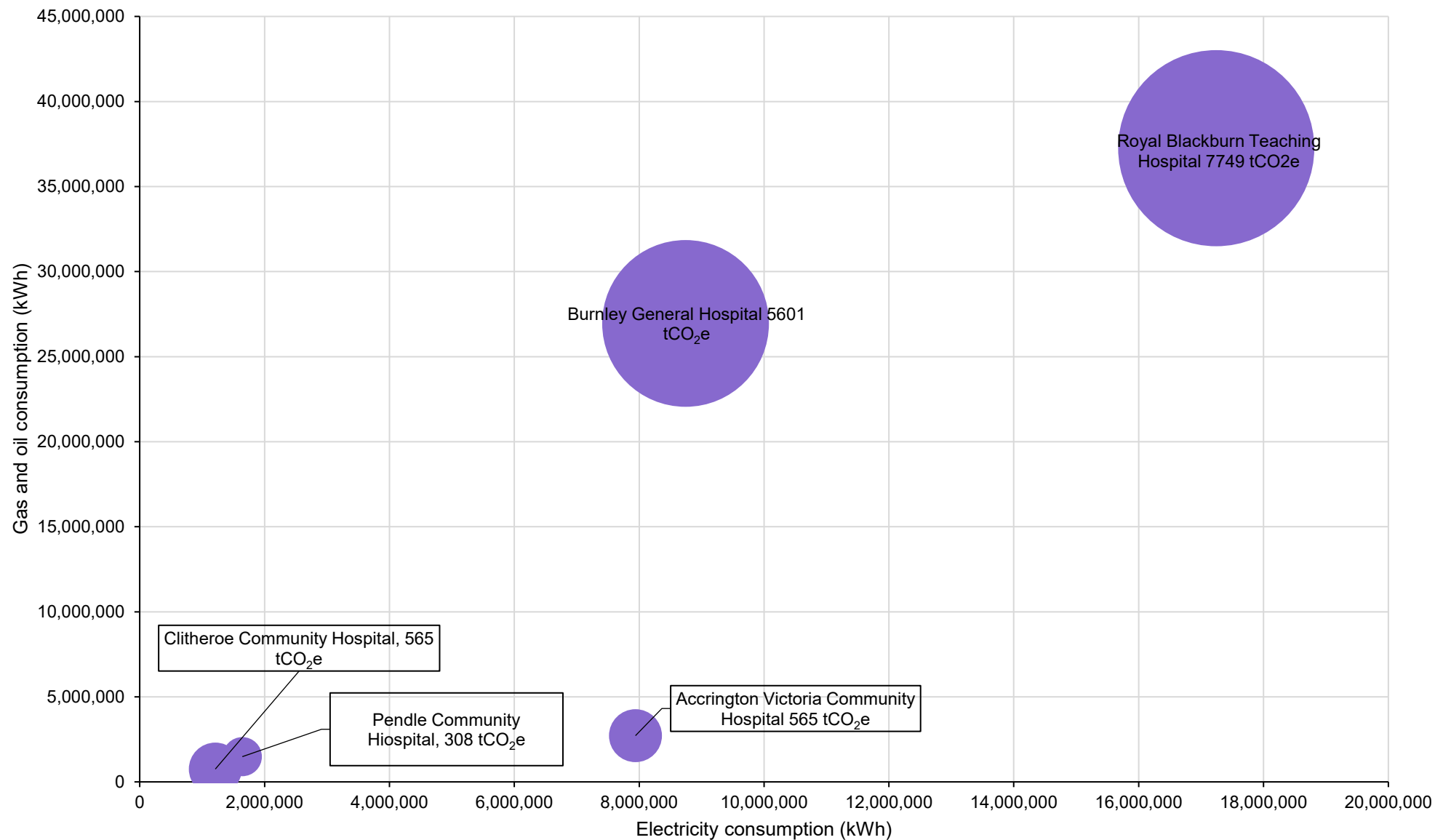
Figure 18 Bubble graph showing building energy consumption at our sites in 2020/21. The size of the 'bubble' is relative to the greenhouse gas emissions

Figure 19 shows the total emissions produced from electricity, gas, heating oil consumption from 2018/19 to 2020/21 and emissions reduction trajectory. We need to reduce emissions by 1,891 tCO$_2$e by 2024/25 from our 2020/21 baseline.

From April 2021 to 2022, the Trust procured 100% renewable electricity, resulting in an 76% reduction in emissions arising from procured electricity. The emission reductions from this and how it affects our future targets is illustrated in Figure 20.

In April 2022 we reverted to a renewable/non-renewable mix but ELHT will be returning to a 100% REGO contract from April 2023 onwards.

In terms of reducing our emissions, gas consumption remains a challenge (see Figure 21). In 2020/21, emissions from gas across our estate equated to 14,348 tCO$_2$e, 90% of all building energy emissions.

We also use heating oil at the Royal Blackburn Teaching Hospital and Burnley General Hospital, emitting at total of 32 tCO$_2$e in 2020/21.
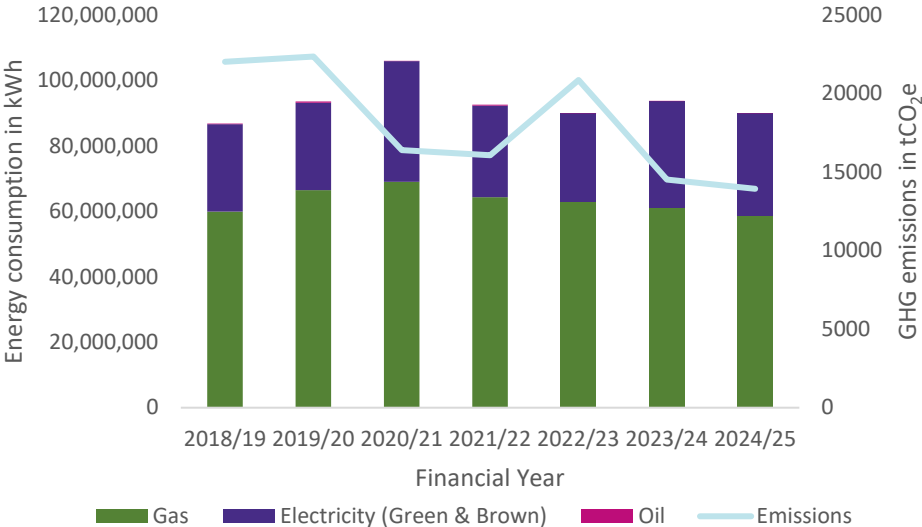
Figure 19 Emissions from energy used in our built environment
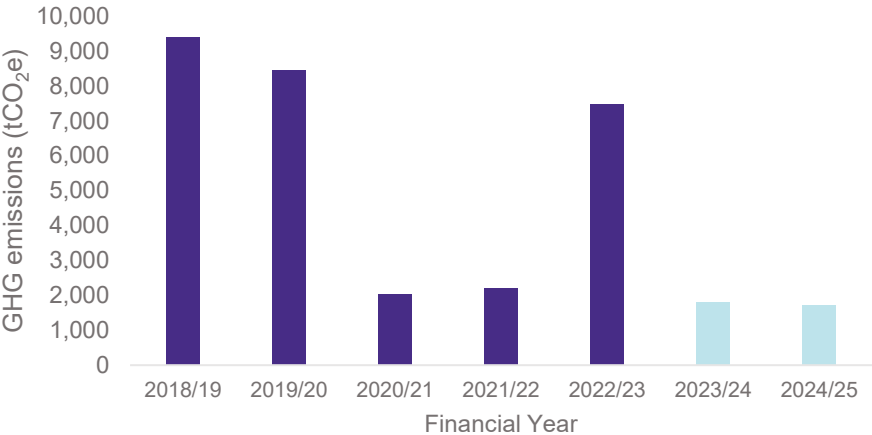
Figure 20 Emissions from electricity consumption and emission reduction trajectory to 2024/25 (note the difference following the procurement of 100% renewable electricity in April 2021 and reversion in April 2022)

Despite the negated emissions from renewable electricity procurement, we must still reduce both our electricity and gas consumption at all our sites, at a rate of 4,000,000 kWh per year.

Further detailed building energy surveys will be needed to provide robust energy efficiency recommendations at each of our sites, building upon the works already completed.

Decarbonising our heating systems shall also be explored during these surveys. This will be the start of developing our Heat Decarbonisation Plan. As a priority, we need to focus on removing oil-fired plant, as this is one of the most polluting forms of heating.

The decarbonisation of heat will entail switching gas and oil-fired systems to electrically powered alternatives. Moving away from fossil fuels is vital to achieve net zero targets: electrically powered heating systems, such as heat pumps and infrared heating, while using a 100% renewable electricity tariff, will result in zero emissions (at point of use).

This transition will inevitably result in much higher electricity consumption and of particular concern is the viability of increasing the electrical site capacity (load in kilovolt-amps) from the electricity grid.

In the future, on-site renewable energy systems, such as solar photovoltaics and integrated large battery storage technologies,

will provide additional resilience to power outages, with the potential to negate using our back-up diesel generators.
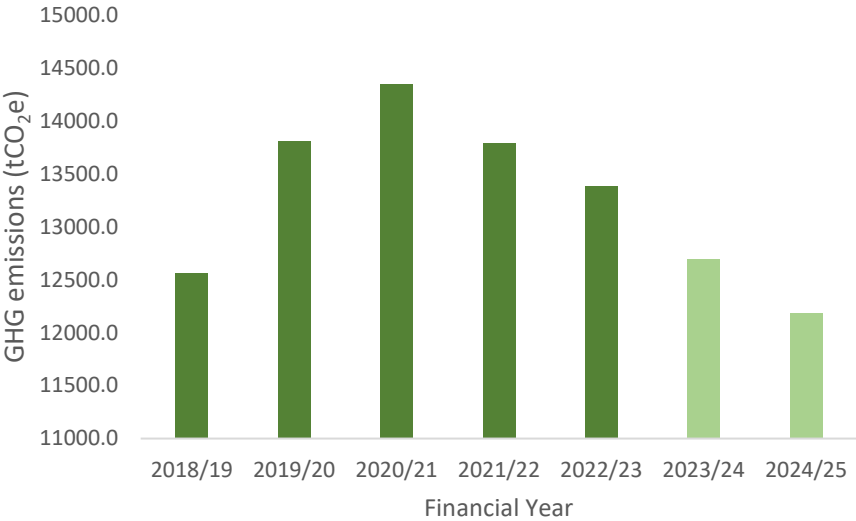
Figure 21 Emissions from gas consumption and emission reduction trajectory to 2024/25

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Enhance Planned Preventative Maintenance (PPMs) of our facilities and assets to be proactively energy-focused and to identify opportunities to upgrade equipment/plant.	Core responsibilities	21/22		£	1,2	E&F	**LTP** 17 **SC** 18.4.2.1 **NZ** 3.1.1, 3.1.2
02	We currently procure 100% of renewable electricity with Renewable Energy Guarantees of Origin (REGO) certificates backed by EDF.	Procurement	21/22		£	2	E&F/LPC	**SC** 18.5
03	Access the NHS Energy Efficiency Fund (NEEF) to upgrade all lighting to LED alternatives.	Core responsibilities	23/24		£	2	E&F/LPC	**LTP** 17 **SC** 18.4.2.1 **NZ** 3.1.1, 3.1.2
04	Follow Estates 'Net Zero' Carbon Delivery Plan guidance on efficiency and decarbonisation protocols for the built environment.	Core responsibilities	21/22 and on-going		£	1,2	E&F/LPC	**NZCDP** **NZ** 3.1.1, 3.1.2
05	Optimise energy use by embedding networked Automatic Meter Readers (AMRs) across the Estate with appropriate controls to reduce energy consumption. Monitor and assess risk from overheating events where room temperature exceeds 26 degrees.	Core responsibilities	22/23		£	1,2	E&F/LPC	**LTP** 17 **SC** 18.4.2.1 **NZ** 3.1.1, 3.1.2
06	Conduct detailed building energy surveys to identify further energy/thermal efficiency opportunities.	Core responsibilities	22/23		£	1,2	E&F/LPC	**LTP** 17 **SC** 18.4.2.1 **NZ** 3.1.1, 3.1.2
07	Develop a Decarbonisation of Heat Plan that focuses on the phaseout of existing gas-fired boilers and replacement with low-carbon alternatives, where feasible.	Governance and policy	On-going		£	1	E&F/LPC	**LTP** 17 **SC** 18.4.2.1 **NZ** 3.1.1, 3.1.2

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
08	Explore the possibility of creating District Heat Networks with neighbouring partners.	Working with patients, staff and communities	On-going	🟥	£	☁ 1	E&F/Electrical and Biomedical Engineering (EBME)	**LTP** 17 **SC** 18.4.2.1 **NZ** 3.1.1, 3.1.2
09	Look to procure 'green gas' through the Green Gas Certification Scheme as and when existing energy contracts are due for renewal.	Procurement	22/23	🟧	£	☁ 1	E&F/LPC	**SC** 18.5
10	Incorporate energy conservation into staff training and education programmes and deliver behaviour-based energy saving campaigns.	Working with patients, staff and communities	22/23	🟩	£	☁ 1,2	E&F/HR/ DERI	**NZ** 3.1.1
11	Develop communication materials for our patients that highlight energy efficiency projects, discuss plans with the local community, including exploring potential community energy projects.	Working with patients, staff and communities	22/23	🟧	£	❌	E&F/HR/ Comms. and Engagement	**NZ** 3.1.1
12	Explore how the Trust can implement an ISO 50001 Energy Management System.	Governance and policy	23/24	🟧	£	☁ 1,2	E&F/LPC	**NZ** 3.1.1

Figure 22 Green plan action table for Energy and Emissions from the built environment

Indicative cost:
£ No or low cost
£ Moderately expensive
£ Significantly expensive

Indicative emissions reduction:
☁ Low or incremental reduction
☁ Moderate reduction
☁ Significant reduction
❌ Not applicable

Capital Projects

The Built Environment of the NHS influences both the quality of our care and our environmental impact.

How we design and construct our buildings in the future will play a decisive role in our collective ability to achieve net zero.

Buildings have significant environmental impacts in terms of emissions resulting from the use of gas, electricity and water. Improving the energy efficiency of a building is pivotal to reducing these impacts. However, there are embodied carbon emissions within materials, such as cements, steel and glass which are used in the construction of buildings. These indirect 'Scope 3' emissions are generally much greater than emissions caused by the operation of a building.

Cement and concrete production on its own accounts for a huge 8% of all global greenhouse gas emissions from all sources, according to the Dutch Environmental Assessment Agency.

Our Trust, furthering a previous commitment to ensure all capital development complies with the Building Research Establishment Environmental Assessment Method's (BREEAM) 'Excellent' or above, ensures that our plans will focus on the reduction of building emissions from all sources.

Estates & Facilities - Capital Projects:

- Building energy efficiency standards for new builds and refurbishments, such as BREEAM 'Excellent' and the Zero Carbon Hospital Standard and on-site renewables.
- Construction supplier alignment to net zero commitments, such as onsite contractor measures on waste reduction, low emission construction plant etc.
- Low carbon substitutions and product innovation, such as lower embodied carbon construction materials.

NHS LTP 16

NHS SC 18.4.2.1, 18.4.2.3

NHS NZ 3.1.1, 3.3.1

8 DECENT WORK AND ECONOMIC GROWTH **Target 8.5** Full employment and decent work with equal pay

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE **Target 9.4** Upgrade all industries and infrastructures for sustainability

13 CLIMATE ACTION **Target 13.1** Strengthen resilience and adaptive capacity to climate-related disasters

Target 13.2 Integrate climate change measures into policy and planning

No	ELHT Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Implement the upcoming Net Zero Hospital Building Standard in any new builds and BREEAM 'Excellent' for any major refurbishments.	Governance and policy	Ongoing		£	1,2,3	E&F	**LTP** 16 **SC** 18.4.2.1 **NZ** 3.1.1
02	Explore options to achieve emissions reductions in smaller works and projects in our acute and primary care estate.	Core Responsibilities	21/22		£	1,2,3	E&F/LPC	**NZ** 3.1.1
03	Ensure capital development accounts for risks identified in climate adaptation plans and addresses these in design/delivery.	Core responsibilities	22/23		£	✖	E&F/LPC	**SC** 18.4.2.3
04	Encourage and measure local subcontractor and supply chain spend as part of our anchor institution approach.	Procurement	21/22		£	3	E&F/LPC	**NZ** 3.3.1
05	Work with our Procurement team to enable specification of low and zero carbon materials and designs, as well as achieving waste reduction and other opportunities through contractor engagement.	Procurement	22/23		£	3	E&F/LPC	**NZ** 3.3.1
06	Continue to ensure our design process is informed by staff, patients and community views for capital projects.	Working with patients, staff and communities	22/23		£	✖	E&F/LPC/HR and clinical leads	**LTP** 16 **SC** 18.4.2.1 **NZ** 3.1.1

Figure 23 Green plan action table for Capital Projects

Indicative cost:
£ No or low cost   £ Significantly expensive
£ Moderately expensive

Indicative emissions reduction:
🌫 Low or incremental reduction   🌳 Significant reduction
🌤 Moderate reduction   ✖ Not applicable

Water Efficiencies

In 2020/21, we used 608,159m^3 of water, which cost at total of £847,866.

There are emission impacts associated with the supply of fresh water and treatment of wastewater, equating to 618 tCO$_2$e in 2020/21 (see Figure 24).

In 2020/21, there was an increase in water consumption of 152%, or 290,295m^3 compared to the previous year. We are aware the above water data includes anomalies which are being resolved with the water supplier. Due to this anomaly, we are using 2019/20 as our water baseline year.

Although the emissions are low compared to those produced by energy use, being water efficient is important to prevent and alleviate water stress.

As a water efficiency and leak preventative measure, we installed Automatic Meter Readers (AMRs) to our water network. This has helped us pinpoint areas of high water usage, understand how and where water is being used, locate leaks and take remedial action. As a result, 2022/23 saw a return to pre-leak water consumption levels.

Water conservation and sustainable drainage shall also be explored. Rainwater harvesters collect rainwater for non-potable purposes, such as for flushing toilets. They will help reduce water stress and potentially alleviate flooding by attenuating surface water run-off in storm events.
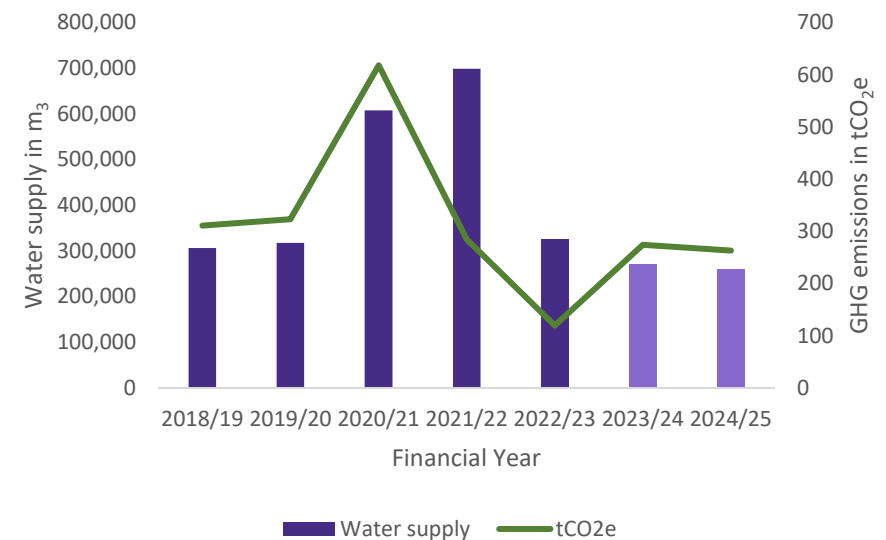
Figure 24 Stacked bar chart to show total water emissions from supply and wastewater treatment and emissions reduction trajectory to 2024/25

Estates & Facilities – Water:

- We used **608,159m^3** of water in 2020/21 – enough to fill 243 Olympic-size swimming pools.
- **618 tCO$_2$e** was attributed to the supply of water and wastewater treatment.
- We need to reduce water consumption by **91,621 m^3** by 2024/25.
- Water efficiency and sustainable drainage will become ever more important in the future.

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Explore and implement water efficiency targets on areas of the highest impact in our estate and delivery of care.	Governance and policy	On-going	🟧	£	☁3	E&F/LPC	**LTP** 17 **SC** 18.4.3.1 **NZ** 3.1
02	Develop new water intensity metrics and incorporate these into our greenhouse gas emissions reporting.	Governance and policy	22/23	🟥	£	❌	E&F/LPC	**NZ** 3.1
03	Install Automatic Meter Readers on the water network in our largest buildings to determine water use patterns and aid leak detection.	Core Responsibilities	22/23	🟩	£	☁3	E&F/LPC	**NZ** 3.1
04	Utilise the most water efficient technologies, such as low flow taps throughout our estate, when replacing equipment and developing new sites	Core responsibilities	22/23	🟧	£	☁3	E&F/LPC	**NZ** 3.1
05	Explore where rainwater harvesting and grey water systems can be installed and utilised.	Core responsibilities	22/23	🟥	£	☁ 1,2,3	E&F/LPC	**NZ** 3.1
06	Look to consolidate the suppliers across the estate to choose one or two that can provide the service, price, and efficiency we expect.	Procurement	On-going	🟧	£	❌	E&F/LPC	**LTP** 17
07	Work with our staff and patients by communicating the importance of water efficiency.	Working with patients, staff and communities	On-going	🟧	£	❌	E&F/DERI/ HR/ Comms. and Engagement	**NZ** 3.1
08	Incorporate water efficiency measures within our climate change adaptation work with the local community.	Working with patients, staff and communities	22/23	🟧	£	❌	E&F/LPC/HR /Comms. and Engagement	**NZ** 3.1

Figure 25 Green plan action table for Water

Indicative cost:
£ No or low cost   £ Significantly expensive
£ Moderately expensive

Indicative emissions reduction:
☁ Low or incremental reduction   ☁ Significant reduction
☁ Moderate reduction   ❌ Not applicable

Waste and Recycling

We collect four main waste types: general, clinical/offensive, dry mixed recycling and waste electrical and electronic equipment (WEEE).

We have collections for other waste streams, such as metal, furniture, fluorescent lamps, waste cooking oil, batteries and so on, though amounts collected are not included in this Report.

Our Waste Management Policy specifies how our waste is managed and collected.

Figure 26 shows our total waste arisings for the previous five years and a waste reduction trajectory to 2024/25.

Estates & Facilities - Waste:

- **2,386 tonnes** of waste were produced, emitting **576 tCO$_2$e** in 2020/21.
- **170 tonnes of offensive waste was converted to energy from waste** in 2020/21, emitting **78 tCO$_2$e (14%** of all emissions from waste).
- Our General Waste is sorted for recyclable materials and Refuse Derived Fuel (non-recyclable materials) is incinerated at an energy-from-waste facility.
- Food waste collections are being trialled at Pendle Community Hospital, with a view to rolling this out at all sites (except Accrington Victoria Community Hospital).
- Recycling rates need to be increased and dedicated dry mixed recycling bins may help this.
- The reuse of PPE should be explored where clinically appropriate.

Despite the impacts of COVID-19 and an increase in the use of single-use disposable items, our total waste arisings (in tonnes) have been steadily decreasing. In terms of emissions, however, there was a significant increase in 2020/21.

Offensive waste is converted to energy from waste in 2020/21. This has been the case since 2018/19.

Some of our clinical waste is incinerated (sharps), whilst other types are ultra-high temperature--processed (alternative treatment) before being further recycled.

We use general waste bins for non-clinical and non-hazardous waste in the buildings we operate and manage. This general waste is segregated at the waste-handling centre, where recyclable materials are extracted and residual waste is sent for incineration at an energy-from-waste facility.

Food waste (kitchen waste and retuned patient meals) is mostly disposed of through macerators in the kitchens into the foul drainage. In 2020/21, only 300kg of food was wasted, which works out at 0.25% of all food served.
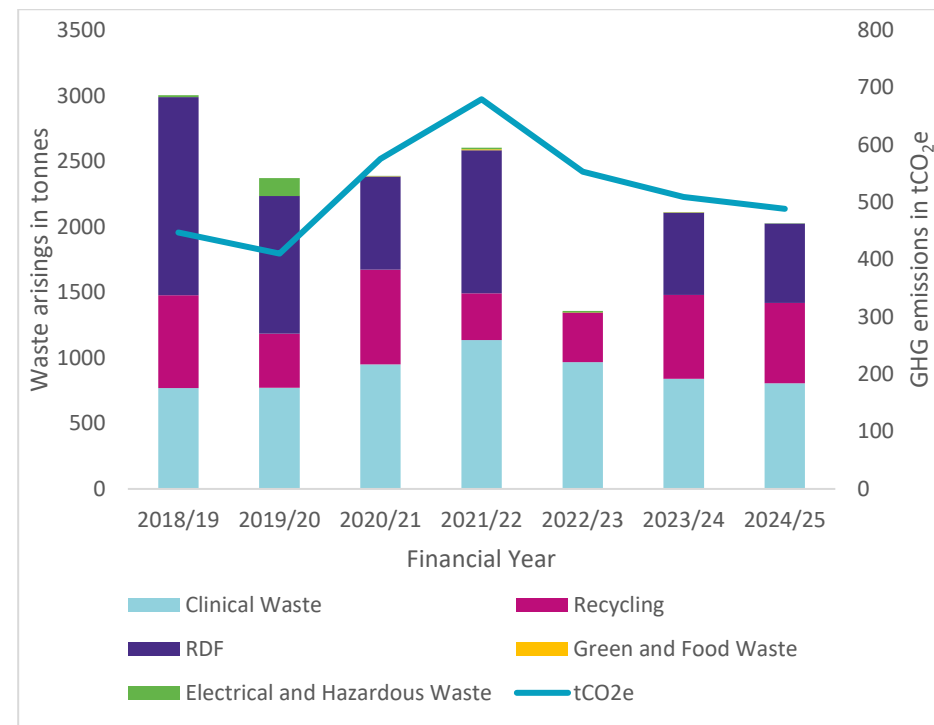
Figure 26 Stacked bar chart to show total waste arisings and emissions reduction trajectory to 2024/25

We have recently started food waste collections at Pendle Community Hospital, where food waste is sent to an anaerobic digestion plant, generating both power and fertiliser.

Disposable catering equipment (knives and forks, cups etc.) are either made from wood or bioplastics. However, these items will be used as Refuse Derived Fuel (RDF) from the general waste stream, as they are currently not recyclable. RDF data for Accrington, Clitheroe and Pendle for 2020/21 was unavailable at the time of issue and will be sourced. This anomaly has simulated an estimated reduction of 5 tCO_2e.

Waste reduction (negation) needs to be our aim. In line with the NHS' net zero plan, we should reduce our waste arisings by 359 tonnes by 2024/25 from our 2020/21 baseline (equating to 87 tCO_2e emission reduction).

We are mindful of the environmental impacts of single-use items throughout their lifecycle, such as the crude oil used in their manufacture to the difficulty in recycling them at the end-of-use.

Innovations are coming on to the market for reusable Personal Protection Equipment (PPE), such as face masks and aprons, that meet the various clinical safety standards. These alternatives should be explored to help reduce waste arisings.

We do refurbish and re-use approximately 5% of walking aids issued by our Occupational and Physiotherapy teams.

Improving our recycling rates is also an important step in reducing emissions and keeping useful materials in circulation. The waste hierarchy of Reduce, Reuse, Recycle, Recovery (energy from waste) before disposal (landfill) must be embedded

to ensure we are maintaining our waste duties of care and circular economic principles.

Staff member using waste bin. Source: ELHT Library

No.	ELHT Green Plan Actions	Trust Area	Target year	Pro-gress	Indicative Cost to Achieve	Indicative Emissions Reduction	Responsible Lead/Dept.	NHS Req.
01	Collate all waste stream data from all sites (including sites we are not responsible for waste collection) and produce monthly reports.	Core Responsibilities	21/22	🟧	£	❌	E&F	**NZ** 3.1
02	Ensure that single use items in catering adhere to current legislation and elect to use sustainable alternatives as listed by NHS Supply Chain,	Core Responsibilities	21/22	🟩	£	☁ 3	E&F/LPC	**LTP** 17 **SC** 18.4.3.1 **NZ** 3.1
03	Install Dry Mixed Recycling (DMR) bins across all sites and start DMR collections,	Core Responsibilities	21/22	🟩	£	☁ 3	E&F/LPC	**LTP** 17 **SC** 18.4.3.1 **NZ** 3.1
04	Install food waste bins across all remaining sites and start food waste collections.	Core Responsibilities	22/23	🟩	£	☁ 3	E&F/LPC	**NZ** 3.1
05	Work with our staff and patients by communicating the importance of waste segregation	Procurement	On-going	🟧	£	❌	E&F/HR/Comms. and Engagement and clinical leads	**NZ** 3.1
06	Explore whether reusable alternatives to single-use PPE items (aprons, wipes, face masks) are clinically appropriate.	Core Responsibilities	22/23	🟧	£	☁ 3	E&F/LPC and clinical leads	**NZ** 3.1
07	Explore how the Trust can implement an ISO-14001 Environmental Management System.	Governance and policy	22/23	🟧	£	☁ 1,2,3	E&F/HR	**LTP** 17 **SC** 18.4.3.1 **NZ** 3.1

Figure 27 Green plan action table for Waste

Indicative cost:
£ No or low cost   £ Significantly expensive
£ Moderately expensive

Indicative emissions reduction:
☁ Low or incremental reduction   ☁ Significant reduction
☁ Moderate reduction   ❌ Not applicable

Biodiversity and Greenspace

"Access to greenspaces has positive mental and physical health impacts and these beneficial effects are greatest for those from socioeconomically disadvantaged groups. However, these groups also have the least access to green spaces." – **Delivering a Net Zero NHS**

Our Trust wants to protect biodiversity within our estate and region and reduce our negative impact on biodiversity, both locally and globally.

Green space and nature are important for the health and wellbeing of patients and colleagues alike. At a global scale, green space affects the planet's ability to absorb carbon dioxide.

Our Trust will promote access to green space, considering areas of operations where this may be lacking.

We will also consider opportunities and risks for biodiversity in the areas we operate, for example priority woodland areas in our region.

Walled Garden Source: ELHT Library

NHS LTP 17

NHS SC 18.4.3, 18.4.3.1 to 18.4.3

NHS NZ 3.1.1, 3.3.2

11 SUSTAINABLE CITIES AND COMMUNITIES **Target 11.6** Reduce the environmental impacts of cities, focusing on air quality and waste

3 GOOD HEALTH AND WELL-BEING **Target 3.9** Reduce illnesses and deaths from hazardous chemicals and pollution

13 CLIMATE ACTION **Target 13.2** Integrate climate change measures into policy and planning

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Review our policies and practices around green space and biodiversity, to ensure that our impact on these is reduced. Identify opportunities to provide safe and easy access to green space, where appropriate.	Governance and policy	22/23	🟩	£	❌	E&F/ Wellbeing and Engagement	**LTP** 17 **SC** 18.1 **NZ** 3.5
02	Engage with regional partners to ensure that adequate green space and identified native species are considered and supported in planning and operations of our estates wherever possible. This includes supporting bees and other pollinators.	Core responsibilities	22/23	🟨	£	☁3	E&F/ Wellbeing and Engagement	**SC** 18.1 **NZ** 2.2, 3.5
03	Work to better understand biodiversity and habitat risks and opportunities in our procurement. Where possible, apply evidenced standards or engage with our suppliers to address issues, such as food production and provenance of meat, avoiding Palm Oil or limiting to RSCO-certified Palm Oil in food and cleaning products.	Procurement	22/23	🟨	£	☁3	E&F/LPC	**SC** 18.1
04	Continue to engage our staff, patients, and communities in green space initiatives.	Working with patients, staff and communities	On-going	🟨	£	❌	E&F/HR/ Wellbeing and Engagement	**NZ** 2.2, 3.5

Figure 28 Green plan action table for Greenspaces

Indicative cost:

£ No or low cost   £ Significantly expensive

£ Moderately expensive

Indicative emissions reduction:

☁ Low or incremental reduction   ☁ Significant reduction

☁ Moderate reduction   ❌ Not applicable

Medicines - Volatile Anaesthetic Gases and Inhalers

In addition to carbon dioxide emissions, NHS' clinical activity and prescriptions, such as using inhalers, nitrous oxide and volatile inhaled anaesthetics like desflurane, contribute a considerable proportion of the NHS' GHG footprint.

The Long Term Plan commits the NHS to reduce GHG emissions from anaesthetic gases by 40% (which on its own could represent 2% of the overall NHS England carbon footprint reduction target that the NHS must meet under Climate Change Act commitments) and significantly reduce GHG emissions by switching to lower global warming potential (GWP) inhalers.

Nitrous oxide

Our use of Equanox™ (50/50 medical grade oxygen and nitrous oxide) and medical grade nitrous oxide, combined, contributed over 9,515 tCO$_2$e in 2020/21, up from 5,905 tCO$_2$e in 2019/20.

ELHT runs 'The Great Escape: The Nitrous Oxide Mitigation Project for East Lancashire'. This project, initiated by our anaesthetists, involved checking nitrous oxide manifolds for leaks, a review of nitrous oxide use from anaesthetic machine data and a survey and evaluation of anaesthetist's clinical use of nitrous oxide.

The project found a huge disparity between the manifold usage logs and clinical use. Clinical nitrous oxide consumption was almost 100,000 times less than the manifold readings. Upon further investigation, a major leak was discovered and the nitrous oxide pipeline capped off, saving both emissions and money.

Medicines: Volatile anaesthetics and inhalers

- We used over 19,000,000 litres of Nitrous oxide, emitting **9,515 tCO$_2$e** in 2020/21.
- Desflurane use emitted **423 tCO$_2$e** in 2020/21.
- We prescribed 688 Penthrox™ (methoxyflurane) inhaler pens in 2020/21, emitting just 12kg CO$_2$e.
- Inhaler prescriptions emitted **283 tCO$_2$e** in 2020/21
  - **22% of all inhalers prescribed were DPIs – just below the NHS target of 30%.**

Prepping for surgery Source: ELHT Library

We now use compact nitrous oxide cylinders attached directly to the back of anaesthetic machines.

There are innovations in capturing and catabolising exhaled nitrous oxide, including 'cracking' devices. Such devices are being trialled by other NHS trusts and if rolled out, will dramatically reduce the amount leaking into the atmosphere.

Furthermore, nitrous oxide use is steadily falling in surgery, as more efficacious anaesthetic and analgesic agents are superseding its use. However, Equanox™ still plays an important role in maternity.

With the decommissioning of our piped nitrous oxide, we will be using cannisters of nitrous oxide going forward, which will significantly reduce our nitrous oxide consumption.

We do use methoxyflurane (Penthrox™) pen-inhalers to treat moderate to severe pain associated to trauma in our Accident and Emergency department. Methoxyflurane can be self-administered under medical supervision, in a similar fashion to nitrous oxide. It has a lower global warming potential (GWP) than nitrous oxide and switching to methoxyflurane would lessen emissions at point-of-use.

However, this comes at a cost, as methoxyflurane is delivered in non-reusable 3ml inhaler pens, creating additional non-recyclable waste. We prescribed 688 inhaler pens in 2020/21, emitting around 12kg of CO_2e.
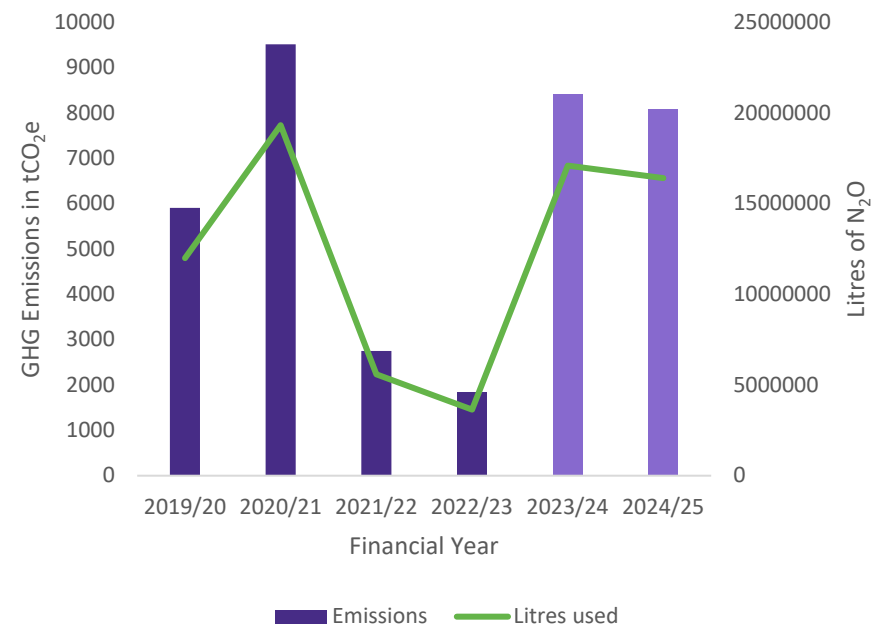
Figure 29 Nitrous Oxide (N_2O) litres consumed and emission reduction trajectory to 2024/25

Desflurane

Desflurane is a fluorinated volatile anaesthetic. Like many fluorinated compounds (such as refrigerants and propellants), it has a very high GWP. Desflurane has a GWP rating of 2,540, which means it is 2,540 more potent as a greenhouse gas than carbon dioxide.

Other volatile anaesthetics, such as sevoflurane and isoflurane have far lower GWP ratings, 130 and 510 respectively. Shifting away from desflurane to these alternatives will significantly reduce emissions. However, both sevo- and isoflurane use will have an impact on the atmosphere.

The NHS Standard Contract and engagement efforts with clinicians have targeted a reduction of desflurane as a percentage of all volatile gas use by volume, from 20% in 2020/21 to 10% in 2021/22 across all NHS providers.

We used 474 bottles of desflurane in 2020/21, emitting 423 tCO_2e, down from 3090 bottles and 2,760 tCO_2e respectively, in 2019/20.

This drop in usage follows innovative work by our anaesthetists whereby desflurane vaporisers were removed from anaesthetic machines in January 2020 (though available upon request). 'Greener Anaesthetic Room' posters were distributed and a green newsletter is now sent out every 6 months.

There was a corresponding initial drop in the use of sevoflurane following the removal of desflurane vaporisers that resulted in a combined saving of over £100,000 in 12 months.

In 2021/22, desflurane use accounts for only 1% of volatile anaesthetics used, with 99% being sevoflurane – exceeding the NHS Standard Contract target.

Surgery Source: ELHT Library

Inhalers

We prescribe both Dry-powder (DPI) and Metered Dose Inhalers (MDI). Metered dose inhalers use fluorinated gases as the propellant: in 2020/21, the prescription of 6,300 MDIs contributed to 282 tCO_2e, whereas the 1,752 prescribed DPIs equated to around 1.6 tCO_2e.

The NHS Standard Contract stipulates that 30% of all inhalers prescribed across NHS England should be DPIs, according to the NHS Net Zero report.

New Impact and Investment Fund (IIF) indicators have been released, which provide an additional steer on prescribing lower-carbon inhalers.

DPIs are an appropriate choice for many patients and contain as little as 4% of the GHG emissions per dose compared with MDIs. Fluorinated gases in MDIs mean that each 10ml to 19ml inhaler cannister has the equivalent emissions of 30 to 80kg of carbon dioxide!

In 2019/20, 20% of all inhalers prescribed were DPIs. In 2020/21, DPIs accounted for 22% of all inhalers prescribed by the Trust. This is a 2% increase compared to 2019/20, and only 8% below the NHS target.

At the end of use, inhalers still contain as much as 20% of high-GWP propellant.

Greener disposal of these items, where residual fluorinated gases are captured and destroyed, is therefore another key priority. Lastly, overuse of inhalers leads to 250,000 tonnes of

equivalent carbon emissions (250 $ktCO_2e$) annually across the UK, according to a new study.

ELHT will work across our Trust to address disposal and overuse and work with our clinical staff and patients through the NICE Patient decision aid to help increase the uptake of low-carbon inhalers wherever clinically appropriate.
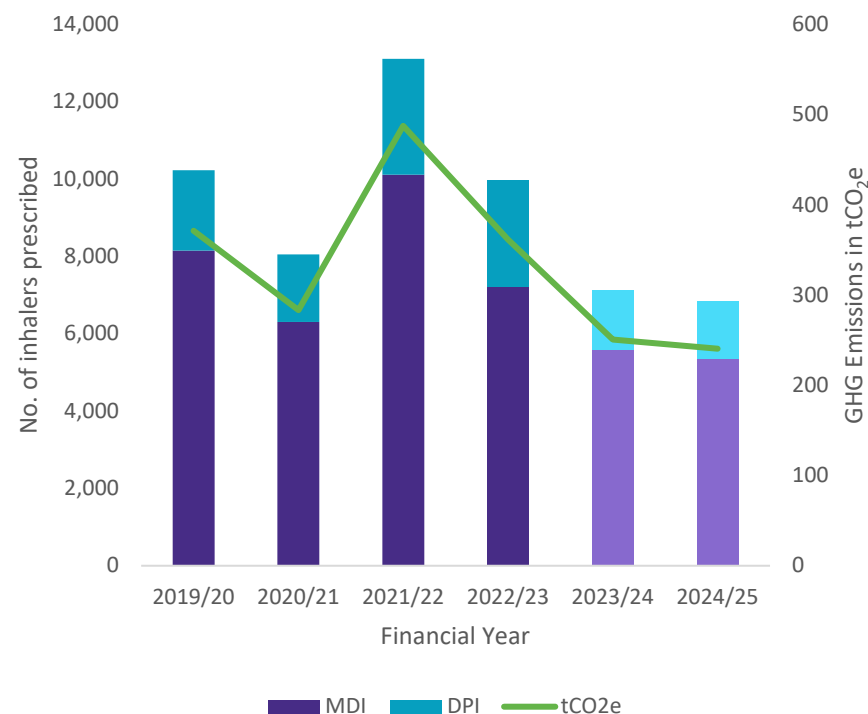

Figure 30 Prescriptions of MDIs and DPIs with 50% total DPI prescription uplift trajectory to 2024/25

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Collate inhaler prescribing data and report quarterly to Medicines Safety and Optimisation Committee (April/July/Oct/Jan)	Working with patients, staff and communities	21/22	🟥	£	❌	Clinical Pharmacy Team	**LTP** 17
02	Collate volatile anaesthetic gas use data and report quarterly to Medicines Safety and Optimisation Committee (April/July/Oct/Jan)	Working with patients, staff and communities	21/22	🟥	£	❌	Clinical Pharmacy Team	**LTP** 17
03	Collate methoxyflurane (Penthrox™) use data and report to Medicines Safety and Optimisation Committee (April/July/Oct/Jan)	Working with patients, staff and communities	21/22	🟥	£	❌	LPC/Clinical Pharmacy Team	**LTP** 17
04	Explore the procurement and use of nitrous oxide 'cracking' devices.	Working with patients, staff and communities	22/23	🟥	£	☁ 1	Procurement	**LTP** 17 **SC** 18.4.2.2 **NZ** 3.4.1
05	Switch to methoxyflurane (Penthrox™) in preference to nitrous oxide analgesia/anaesthesia where clinically appropriate.	Working with patients, staff and communities	22/23	🟥	£	☁ 1	Clinical Pharmacy Team	**LTP** 17 **SC** 18.4.2.2 **NZ** 3.4.1
06	Work with our anaesthetists and pharmacy to significantly reduce the use of desflurane in surgical procedures to less than 10% of total volatile anaesthetic gas by volume.	Working with patients, staff and communities	22/23	🟩	£	☁ 1	Clinical Pharmacy Team	**SC** 18.6 **NZ** 3.4.1
07	Set a target of prescribing at least 50% DPIs for all inhaler types.	Working with patients, staff and communities	22/23	🟩	£	☁ 3	Clinical Pharmacy Team	**NZ** 3.4.1
08	Set a goal to reduce MDIs to 25% of all non-salbutamol inhalers by prescribing DPIs and soft mist inhalers, where clinically appropriate	Working with patients, staff and communities	23/24	🟥	£	☁ 3	Clinical Pharmacy Team	**IIF** ES-01 **LTP** 17
09	Set a goal of reducing the average emissions from salbutamol inhalers to 11.1kg per inhaler, where clinically appropriate.	Working with patients, staff and communities	23/24	🟧	£	☁ 3	Clinical Pharmacy Team	**IIF ES-01** **LTP 17**
10	Work with our clinicians and Clinical Pharmacy Team to enable uptake of alternative inhalers where appropriate.	Governance and policy	On-going	🟥	£	☁ 3	Clinical Pharmacy Team	**SC** 18.6 **NZ** 3.4.1

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
11	Promote greener disposal of inhalers, through a review of our Medicine Management and Waste Policy informing patients and clinicians.	Core responsibilities	22/23	🟥	£	☁ 3	Clinical Pharmacy Team	**NZ** 3.4.1
12	Follow any new Greener NHS / NHS Digital guidance and tools to ensure purchasing enables greener inhaler options and facilitates simple collection of relevant data.	Working with patients, staff and communities	22/23	🟧	£	☁ 3	Clinical Pharmacy Team	**NZ** 3.4.1
13	Work with clinicians and patients to address overuse of inhalers.	Working with patients, staff and communities	On-going	🟥	£	☁ 3	Clinical Pharmacy Team	**LTP** 17 **SC** 18.4.2.2 **NZ** 3.4.1

Figure 31 Green plan action table for volatile anaesthetics and inhalers

Indicative cost:
£ No or low cost   £ Significantly expensive
£ Moderately expensive

Indicative emissions reduction:
☁ Low or incremental reduction   ☁ Significant reduction
☁ Moderate reduction   ❌ Not applicable

Supply chain and procurement

The NHS is a major purchaser of goods and services, with NHS England alone procuring around £30 billion of goods and services annually. Procurement has major potential social, economic and environmental impacts both locally and globally.

This includes the power of using local suppliers, the climate performance of our equipment and estate and preventing modern slavery in supply chains.

ELHT is committed to engage with our suppliers to meet the Green Plan and support the sustainable procurement objectives of NHS England wherever practicable.

Procurement and Climate Action

Our supply chain emissions represent a huge portion of ELHT's overall carbon footprint. We have baselined our estimated supply chain emissions for 2020/21 utilising the GHG Protocol 'Scope 3' spend-based method. Spend-based emissions change yearly with total spend and will not help measure progress initially. However, they will help ELHT to identify our carbon hotspots and plan for actions.

Supply Chain and Procurement

- Emissions from our supply chain were estimated to be **90,902 tCO₂e** in 2020/21.
- A new NHS Sustainable Supplier Framework will be launched in January 2022 and will require all suppliers to publish progress reports and continued carbon emissions reporting by 2030.
- An ISO 20400 Sustainable Procurement Strategy would enhance the Trust's environmental and social performance of its supply chain.
- Ensure tenders adopt the new social value procurement note PPN 06/20 and carbon management PPN 06/21 in major contracts from April 2022 and 2023 respectively.
- Reusable items such as face masks and aprons would reduce waste (as per the Waste section)
- Reclaiming mobility aids and other devices from patients will prevent waste and save money
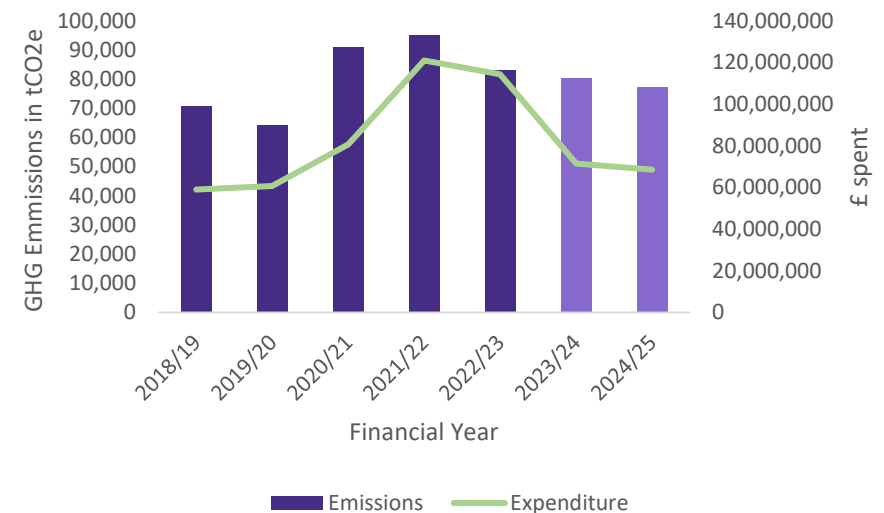

Figure 32 Emissions from our supply chain with reduction trajectory to 2024/25

As a Trust, we procure most items and services through centralised NHS/government frameworks, such as NHS Supply Chain. These centralised frameworks already provide best value through bulk purchasing power and consolidation of orders. We cannot control or influence the sustainability aspects of these routes of procurement and will benefit from the decisions made in how these frameworks operate.

Being fully aligned to the NHS Supply Chain model and logistics service, we maximise opportunities for consolidated deliveries and we will continue to channel the maximum volume of product possible through this route.

However, for more specialised and local service provision, we can look to enhance the environmental and social outcomes of these suppliers through our tendering process.

The NHS, in line with recent government requirements, is mandated to adopt a new social value and environmental standard in the future. A new Evergreen Supplier Framework will be launched in 2023. From April 2022, all NHS tenders have included a minimum 10% net zero and social value weighting (as per Policy Procurement Note 06/20).

From April 2023, contracts above £5 million will require suppliers to publish a carbon reduction plan for their direct emissions as a qualifying criterion (as per Policy Procurement Note 06/21).

By 2030, all suppliers will be required to demonstrate progress in line with the NHS' net zero targets, through published progress reports and continued carbon emissions reporting.

These additional requirements will enable us to determine the carbon and social impact of the products and services we buy more accurately and ensure suppliers are reducing the emissions associated with their operations and products. In the interim, we will explore ways to reduce single-use plastic items and research how we can incorporate reusable items such as masks and aprons.

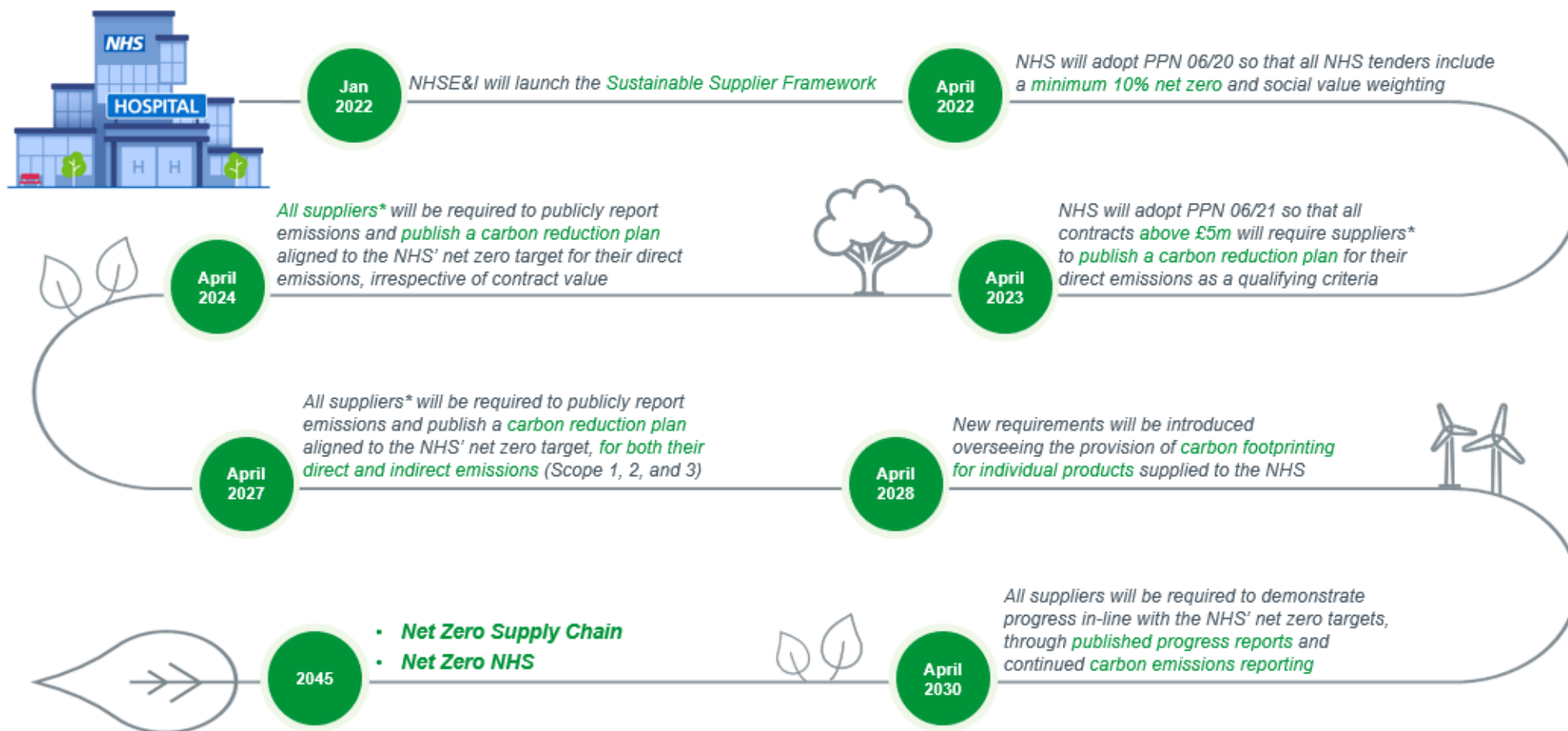Staff member with records Source: ELHT Library

Figure 33 Building net zero into NHS Procurement – shows how NHS England will require all suppliers to provide carbon and social value reporting by 2030

Product retainment and lifecycle extension

Procuring well, ensuring best value for money as well as social and environmental benefits, will remain a core principle for the wider NHS and our Trust.

However, keeping products in service for as long as possible, through maintenance and repair, is fundamental to a circular economy and drives down waste.

Critical care medical products are kept in good working order at our Trust, as per manufacturer's and the Medical and Healthcare Products Regulatory Agency's (MHRA) guidance. Only when an item is no longer supported by the manufacturer, or is beyond economic repair, do we consider disposal.

Most 'obsolete' working medical equipment is sent to an auctioneer, where it is sold on, often abroad, for continued use, which has both social and environmental benefits.

Equipment that is beyond repair is disposed of through the appropriate waste channels and components are recycled.

Mobility aids, such as walking frames, crutches and walking sticks, are given to outpatients where appropriate.

For occupational therapy and physiotherapy in ELHT, approximately 5% of walking aids (frames and crutches) are refurbished and re-used. However, the remaining 95% are not reclaimed and potentially end up in outpatients' domestic waste.

Mobility aids are robust pieces of kit, with long service lives. Reclaiming, cleaning/refurbishing and reissuing more of these mobility aids will negate useful items being scrapped and could

save the Trust money. This can be done in line with the Greener NHS guidance with an individual Trust, regional, or third-party approach.

Medical Equipment Source: ELHT Library

Our role as an anchor trust

In partnership with the Lancashire and South Cumbria Health and Care Partnership, ELHT is pursuing social value and anchor institution opportunities into spend areas, such as waste and food.

This involves identifying opportunities for regional Small and Medium-sized Enterprises (SMEs) and engaging suppliers to ensure wider community benefits are met.

While we cannot reserve spend locally, we do take proactive steps to support inclusive growth, including a policy on the payment of the Real Living Wage for our service suppliers.

ELHT Staff Source: ELHT Library

NHS England Sustainable Procurement Objectives		
Net Zero	**Modern Slavery**	**Social Value**
Achieve the NHS Supply Chain Net Zero Targets.	Eliminate Modern Slavery in the NHS supply chain both domestically and abroad.	Ensure NHS procurement is a force for good helping local economies and improving wider determinants of health.

Figure 34 Official NHS Sustainable Procurement Objectives Source: website

No	ELHT Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Review our sustainable procurement approach to find relevant links that enable our Green Plan and work closely with NHS Supply Chain and NHS Improvement to promote their sustainability programmes.	Governance and policy	Ongoing		£	✖	LPC	**LTP** 6.17, 17
02	Identify wider social, economic and environmental benefits for the local community and population when considering the purchase and specification of products and services, discussed and agreed with the Coordinating Commissioner.	Governance and policy	22/23		£	✖	LPC	**SC** 18.6
03	Adhere to the requirements of the NHSEI Evergreen Supplier Framework.	Governance and policy	23/24		£	☁3	LPC	**SC** 18.6
04	Ensure tenders adopt the new social value procurement note PPN 06/20 and carbon management PPN 06/21 in major contracts from April 2022 and 2023 respectively.	Governance and policy	April 2022		£	☁3	LPC	**NZ** 3.3, 3.3.1
05	Ensure tenders adopt the carbon management PPN 06/21 in major contracts in April 2023.	Governance and policy	April 2023		£	☁3	LPC	**SC** 18.6
06	Ensure the purchase of 100% closed-loop recycled paper.	Core Responsibilities	21/22		£	☁3	Finance/LPC	**SC** 18.6
07	Create a system for cataloguing and reclaiming mobility aids and other devices from patients in line with Greener NHS guidance.	Governance and policy	22/23		£	☁3	LPC/Physio and Occupational Therapy	**NZ** 3.3, 3.3.1
08	Engage a key supplier on plans to align their operations and delivery with NHS Net Zero targets over time. Leverage NHS England and NHS Improvement Supplier Engagement Strategy approach for fostering partnerships.	Core responsibilities	22/23		£	✖	LPC/Trust-wide	**NZ** 3.3, 3.3.1
09	Work to identify impactful future supply chain emissions reductions opportunities and links to climate adaptation and other Green Plan commitments in procurement specifications and through contract delivery	Procurement	23/24		£	✖	LPC/Trust-wide	**NZ** 3.3, 3.3.1

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
10	Work with NHS Supply Chain to address Modern Slavery and domestic and international supply chain environmental, and human rights risks, including those linked to PPE.	Procurement	22/23	🟥	£	❌	LPC	**SC** 18.6
11	Explore the creation of an ISO 20400 Sustainable Procurement Strategy.	Procurement	22/23	🟥	£	☁️3	LPC	**SC** 18.6
12	Enable procurement to support Social Value and Anchor Institution NHS aims, e.g., understanding and increasing local, SMEs and social enterprise spend or collaborating with suppliers to promote positive action in equalities or to collaborate on innovation or climate action.	Working with patients, staff and communities	Ongoing	🟧	£	❌	LPC	**LTP** 18

Figure 35 Table to show green plan actions for supply chain management and procurement

Indicative cost:
£ No or low cost   £ Significantly expensive
£ Moderately expensive

Indicative emissions reduction:
☁️ Low or incremental reduction   ☁️ Significant reduction
☁️ Moderate reduction   ❌ Not applicable

Food and nutrition

Food illustrates the links between climate change and public health. The NHS Long Term Plan commits us to promote plant-forward diets and reduce unhealthy options like sugary drinks on NHS premises. Not only will these actions help prevent obesity and non-communicable disease, but they will also play a role in reducing our greenhouse gas emissions and environmental impact.

Food production accounts for up to 26% of global greenhouse gas emissions[2]. Food and livestock production also has a huge impact on biodiversity and according to research collected by Our World in Data "of the 28,000 species evaluated to be threatened with extinction on the IUCN Red List, agriculture and aquaculture is listed as a threat for 24,000 of them".[3]

While promoting healthier foods and reducing emissions, the NHS can also source more food from local and regional producers where possible, increasing the positive economic impact for our communities and reducing the emissions associated with food transport.

ELHT will work to fulfil Long Term Plan priorities for food provision on our premises, promoting plant-forward diets, higher welfare and more sustainable food options, supporting regional producers wherever we can.

Staff preparing food Source: ELHT Library

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[2] https://ourworldindata.org/environmental-impacts-of-food

[3] Source: Poore, J., & Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers. *Science*, 360(6392), 987-992. Via https://ourworldindata.org/environmental-impacts-of-food

From April 2020 to March 2021, we served 1,080,765 inpatient meals (3 meals per day) and 98,666 patient/visitor meals. Over the same period, we recorded 300kg of food waste being produced (kitchen waste and returned meals), which averages at 25kg per month and only 0.25% of all food served.

Hot meals are cooked fresh on site. We source many local ingredients: 28% of ingredients are sourced from local suppliers and 58% from UK producers. This lessens the number of food-miles generated and bolsters the British rural economy.

We run menu cycles for 2 weeks at a time, offering 5 menu options at the restaurant and 7 options for patients. Currently, vegetarian and vegan options account for 18% of all meals served and we have specific promotions linked to low-carbon menus in the form of 'meat-free' menu days.

As well as adhering to Government Buying Standards for Food and Catering Services, we use Vegware and comply with the CQUIN framework, which reduces the quantity of high-sugar drinks offered, replacing them with healthy alternatives.

Staff member in canteen Source; ELHT Library

NHS LTP 2.18, 17
NHS SC 19.1, 19.2,19.3
NHS NZ 3.3.2

2 ZERO HUNGER **Target 2.2** End all forms of malnutrition (including obesity)

3 GOOD HEALTH AND WELL-BEING **Target 3.4** Reduce mortality from non-communicable diseases and promote mental health

13 CLIMATE ACTION **Target 13.2** Integrate climate change measures into policy and planning

14 LIFE BELOW WATER **Target 14.4** Sustainable Fishing

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Review food and catering to explore opportunities to push forward Long Term Plan plans to address obesity, benefit ELHT's local area, and reach Net Zero emissions.	Governance and policy	On-going	🟧	£	❌	E&F/LPC	**LTP** 2.18, 17 **SC** 19.1, 19.2 **NZ** 3.3.2
02	Phase in more Plant-forward diets and other updated NHS requirements and explore greater seasonal menu changes.	Governance and policy	22/23	🟧	£	☁3	E&F/LPC	**LTP** 2.18
03	Limit sugary drinks sales at our facilities and fulfil other updated NHS requirements.	Core Responsibilities	22/23	🟩	£	☁3	E&F/LPC	**SC** 19.3
04	Explore a digital meal system for at least one NHS site to enable accurate meal planning and reduce food waste.	Core responsibilities	22/23	🟧	£	☁3	E&F/LPC/ ICT	**NZ** 3.3.2
05	Work with NHS Supply Chain to ensure positive impacts from contract management and maintain updates to Government Buying Standards sustainable food criteria.	Procurement	22/23	🟩	£	☁3	E&F/LPC	**SC** 19.3
06	Work with regional partners to identify opportunities for local and SME food producers for ELHT.	Procurement	On-going	🟧	£	☁3	E&F/LPC	**NZ** 3.3.2
07	Ensure all food providers meet or exceed the requirements outlined in Report of the Independent Review of NHS Hospital Food	Core responsibilities	22/23	🟩	£	☁3	E&F/LPC	**SC** 19.3
08	Review internal and NHS strategies for sustainable food procurement, including sustainable fish, elimination of palm oil or limit to RSPC-certified palm oil and Fairtrade items where relevant.	Procurement	22/23	🟩	£	☁3	E&F/LPC	**LTP** 17
09	Continue to work with patients and partners on the link between food, health and obesity, as well as the emissions impact.	Working with patients, staff and communities	On-going	🟧	£	❌	E&F/DERI/ Wellbeing and Engagement and clinical leads	**LTP** 2.18 **SC** 19.1, 19.2 **NZ** 3.3.2

Figure 36 Table to show green plan actions for food and nutrition

Indicative cost:
£ No or low cost   £ Significantly expensive
£ Moderately expensive

Indicative emissions reduction:
☁ Low or incremental reduction   ☁ Significant reduction
☁ Moderate reduction   ❌ Not applicable

Climate Adaptation

Climate change will make extreme weather, such as heatwaves, droughts and flooding, more prevalent. Sea level rise and increased risk of Vector Borne Diseases, such as Lyme's Disease, may also impact our local communities.

The changing climate poses risks for vulnerable populations in our community, but also impacts our Trust's estate, ability to operate and supply chain.

We already engage with other public authorities and partners in tackling extreme weather events, such as heat waves and flooding. We worked with Blackburn and Darwen Borough Councils on the 'Connecting East Lancashire' programme, where climate change adaptation was discussed.

Building on our adverse weather plan, ELHT will analyse climate change risks and develop actions for our care delivery, estate planning and management, including flood risks across our estate and service area.

Thank You NHS Sign Source: ELHT Library

Climate Change Adaptation

"As climate change accelerates globally, in England we are seeing direct and immediate consequences of heat waves and extreme weather on our patients, the public and the NHS. Adaptation is the process of adjusting our systems and infrastructure to continue to operate effectively while the climate changes. It is critical that the NHS can ensure both continuity of essential services and a safe environment for patients and staff in even the most challenging times." - **Greener NHS**

No	ELHT Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Responsible lead/dept.	NHS Req.
01	Appoint a Climate Change Adaptation lead and follow the recommendations of the third Health and Social Care Sector Climate Change Adaptation Report.	Governance and policy	23/24	🟩	£	Board of Directors	**LTP** 17 **SC** 18.4.2.3 **NZ** 1
02	Embed Climate Change as a strategic risk within our corporate risk register and manage appropriately.	Governance and policy	23/24	🟩	£	Board of Directors	**SC** 18.4.2.3 **NZ** 1
03	Create an ISO14090 Climate Change Adaptation Plan including plans for adapting our premises to mitigate climate change and extreme weather risks, using a recognised methodology, that is routinely reviewed considering the changing climate and scientific advancements.	Core responsibiliti es	23/24	🟨	£	E&F	**SC** 18.4.2.3 **NZ** 1
04	Work with NHS Supply Chain to better understand the climate change risks in our supply chain and proactively seek to make our supply chain 'climate-ready'.	Procurement	23/24	🟨	£	LPC/Trust-wide	**SC** 18.4.2.3 **NZ** 1
05	Embed and adapt existing health-related contingency planning, such as adverse weather plans to reflect predicted climate change impacts.	Working with patients, staff and communities	23/24	🟨	£	Emergency Planning/E&F/ Wellbeing and Engagement	**SC** 18.4.2.3 **NZ** 1
06	Incorporate newly emerging climate-related health care risks into our contingency planning, such as the increasing prevalence of Vector Borne Diseases.	Working with patients, staff and communities	23/24	🟨	£	Emergency Planning/E&F/DERI and clinical leads	**SC** 18.4.2.3 **NZ** 1

Figure 37 Table to show green plan actions for climate adaptation

Indicative cost:
£ No or low cost   £ Significantly expensive
£ Moderately expensive

Indicative emissions reduction:
🌱 Low or incremental reduction   🌳 Significant reduction
🌼 Moderate reduction   ❌ Not applicable

Conclusion

This Green Plan is a living document and will be regularly reviewed for progress against the action plans. As such, actions and targets may be revised where necessary.

We will endeavour to allocate adequate budgets and resources to achieve our goals and deliver sustainable care. We will look to achieve the 'quick wins' first, though significant investment is anticipated in future years, especially in making our buildings 'climate-ready'.

Climate Change poses many threats to our care population and how we deliver care. This Green Plan will enable us to become an adaptable and resilient organisation. It will help steer our direction of travel with other local anchor institutions, bolstering our ability to provide a continued critical service.

Our dedicated workforce is core to our care provision and delivery of this Green Plan. With the necessary structures in place, it will be our people and service users who will drive the changes to make us a more sustainable organisation. We will continue an open dialogue with all stakeholders to improve our Green Plan and the care we deliver.

For more information, please contact

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This Green Plan was created for East Lancashire Hospitals NHS Trust in partnership with Inspired PLC.