



**United Lincolnshire
Hospitals**
NHS Trust



Green Plan 2022 - 2025



OUTSTANDING CARE
personally DELIVERED

Contents

Contents	2	Biodiversity and Greenspace	59
Foreword.....	3	Medicines – Volatile Anaesthetic Gases and Inhalers.....	62
Highlights	4	Supply chain and procurement.....	67
Introduction.....	5	Food and Nutrition.....	76
Organisational Vision	8	Adaptation.....	80
Drivers for Change.....	10	Conclusion	83
The UN Sustainable Development Goals	13		
Linking the Green Plan to NHS Net Zero	14		
The Current Position.....	17		
Emissions Reduction Trajectory	19		
Areas of Focus Contents	20		
Workforce and System Leadership.....	21		
Workforce	24		
Sustainable Models of Care.....	28		
Digital Transformation.....	31		
Travel and Transport.....	35		
Estates and Facilities	42		
Capital Projects.....	49		
Water Efficiencies	52		
Waste and Recycling	55		

Foreword

One of the most significant longer-term challenges that the NHS faces is the climate emergency and consequent correlation to a health emergency, with poor environmental health contributing to major diseases, including cardiac problems, asthma and cancer.

In Lincolnshire we are not immune from the health harms and impacts of climate change. As a coastal county some areas of Lincolnshire are at serious threat of flooding from future rising sea levels as a result of climate change, and our service users and staff, face potential risks.

As the largest employer in the County, United Lincolnshire Hospitals NHS Trust (ULHT) recognises its responsibility to reduce our impact on the environment and, by implementing and delivering our Green Plan, will work to protect and improve the health of our communities, patients, staff, residents and public.

The ULHT Green plan will showcase what we have already undertaken to improve our environmental impact, what more we can do and how our contributions will support the NHS to deliver a 'Net Zero' National Health Service by 2040. We are working together with Lincolnshire Partnership NHS Foundation Trust, Lincolnshire Community Health Service NHS Trust and our County and District Council partners to promote the opportunities that a Greener NHS can have on health inequalities and improving social value.

Our Trust believes that the responsibility lies with all of us to make a difference, large or small, and that we need to embrace and invest in changes that have a positive impact on our future sustainable lives. The actions, initiatives and projects we action will reflect increased awareness, knowledge of, and understanding of our objectives and responsibilities, sharing our impact in reducing carbon emissions produced by the Trusts activity.

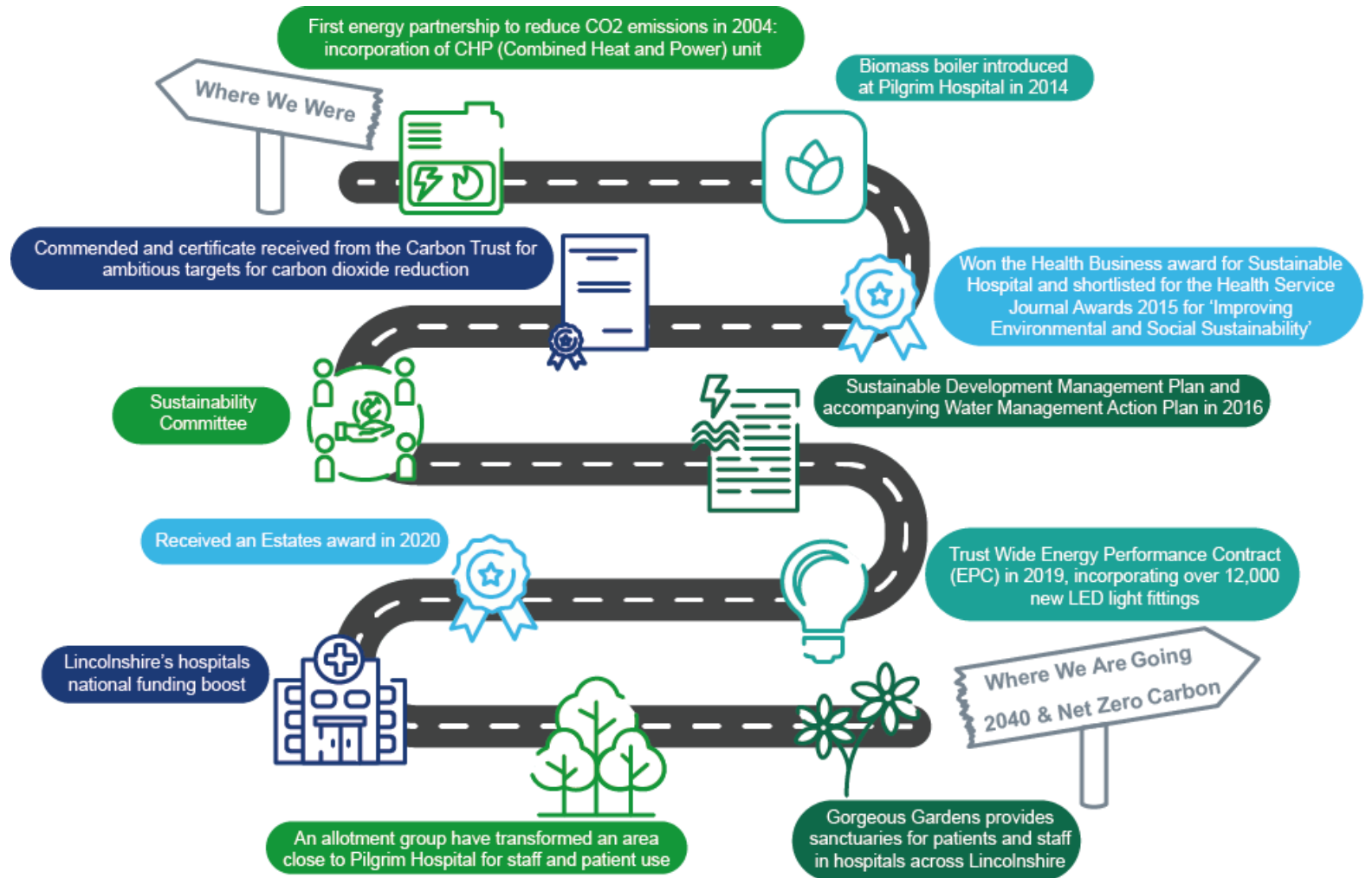
Undoubtedly, we will face challenges – Lincolnshire is the second largest county in the country, and the rurality and transport infrastructure pose their own problems - but we will endeavour to look at every aspect of our business and the services we provide, taking a holistic approach to reducing every aspect of our environmental footprint, whilst working hard towards providing sustainable high-quality services for the present and future generations.



Simon Evans
Chief Operating Officer

Highlights

The Trust has undertaken a number of sustainability initiatives. These include a Health Business Award for a Sustainable Hospital and an Estates Innovation Award following a LED lighting replacement scheme, in addition to a commendation from the Carbon Trust. The Trust strives to continue to lead the way in sustainable healthcare provision, as evidenced in this Green Plan



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

United Lincolnshire Hospitals NHS Trust (ULHT) is proud to share the Trust’s Green Plan, which seeks to embed sustainability and low carbon practice in the way vital healthcare services are offered and help the NHS to become the first health service in the world with net zero greenhouse gas (GHG) emissions.

The climate crisis is also a health crisis. Rising temperatures and extreme weather will disrupt care and impact the health of patients and the public, especially the most vulnerable in society.

People with mental health issues may experience a higher degree of ‘climate anxiety’, and there may be co-morbidities associated with the physical impacts of climate change and a deterioration in mental health.

ULHT 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 ULHT’s sustainability agenda and provides the rationale for sustainability at the Trust. Through this Green Plan, ULHT will work with staff, patients and partners to take powerful sustainable development and climate action as part of the Trust’s commitment to offer the highest quality care to the Lincolnshire community.

The Trust will establish a Sustainability Committee that will meet regularly and project manage the delivery of Green Plan activities by multiple teams. The Green Plan will be incorporated as a part of the Sustainability Committee agenda, reviewed annually, and updated where necessary to ensure continual improvement.

United Lincolnshire NHS Trust in 2020/21

Number of employees (FTE):
8,000

Footprint of Sites:
163,595m²

Key Services:
Acute and specialist services

Geography:
We provide acute hospital care for the people of Lincolnshire from our sites in Lincoln, Boston and Grantham and deliver services from community hospitals and centres in Louth, Gainsborough, Spalding and Skegness.

Specialised Services:
women's health, children and young people, diagnostics, therapies and rehabilitation, pharmacy, outpatients, cancer services, surgery, orthopaedics and ophthalmology, theatres, anaesthetics, critical care and pain, urgent and emergency care, cardiovascular, and specialist medicine

Patient Numbers:
934,000 per annum

Number of Sites:
4 hospitals and
community services at 3
others



Trust Key Resources and Baseline Data



Building Energy
90.4 GWh

Baseline year for Plan
2020/2021



Waste Arisings
508 tonnes



Procurement Activity
£88,290,000



Water Supplied
258,000m³

Business Travel
24,078,162 km



Patient/Visitor/ Communiting Travel
57,290,855 km



Organisational Vision

These core values are embedded within the Trust's 2021/22 Strategic Objectives and are integral to the Green Plan to achieve sustainable, person-centred care in a safe and quality-focused way.

We can all help to grow our Trust

By 2025 we want to achieve 'Outstanding Care Personally Delivered' by improving the quality of care and experience for our patients and the wellbeing of our staff



by living our values



Patient
centred



Compassion



Respect



Safety



Excellence

and by delivering our strategic objectives

For our patients

High quality, safe and responsive services, shaped by best practice and our wider communities

For our people

Our people to lead, work differently and feel valued, motivated and proud

For our services

Sustainable services making best use of resources, technology and estate

For our partners

Improve the health of our populations by implementing integrated models of care

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

Green Plan Vision

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

Climate Resilience: adaptation strategies that strengthen the Trust's ability to maintain quality care and provide a basis for us to become a climate change resilient organisation.

Social Value: actions that influence the collective social wellbeing of patients, staff and surrounding community.

The Green Plan has nine Areas of Focus that appraise the Trust's 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



Staff member. Source: ULHT Library

Drivers for Change

ULHT is committed to deliver the NHS Long Term Plan, Standard Contract, and the recommendations in the Priorities and Operational Planning Guidance and 'Delivering a Net Zero NHS' report, all of which have informed the Green Plan and shape the Trust's Vision.

The Trust 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 communities.

The Trust also commits to review and participate in regional partnerships and strategies related to sustainable development wherever appropriate.



Grantham and District Hospital sign. Source: ULHT Library

Priority	Link to our Green Plan
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 resources and the carbon footprint of health and social care 18 Create social value in local communities as an anchor institution.
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.
Planning Guidance 21/22 PG	C1 Where outpatient attendances are clinically necessary, at least 25% should be delivered remotely by telephone or video consultation
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
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) and Health Building Notes (HBN)
	Sustainable Transformation Partnerships (STP) Plans

Figure 2 Legislative Drivers with UK Guidance

The UN Sustainable Development Goals

The Trust is working meaningfully towards the United Nations (UN) Sustainable Development Goals (SDGs) through the Green Plan, which have been 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 5th 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

ULHT will work to ensure:

- Meaningful alignment to SDG targets within each Green Plan area of focus
- The establishment of effective partnerships for the goals within our region and beyond
- Awareness of and links to the SDG’s global context, wherever appropriate



Linking the Green Plan to NHS Net Zero

Contributing to 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):

- **The NHS Carbon Footprint** for the emissions under direct control, net zero by **2040**
- **The NHS Carbon Footprint ‘Plus’** for the emissions under influence, net zero by **2045**.

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

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 CO₂e).

The emission sources and their ‘scopes’ are shown in the infographic (Figure 4).

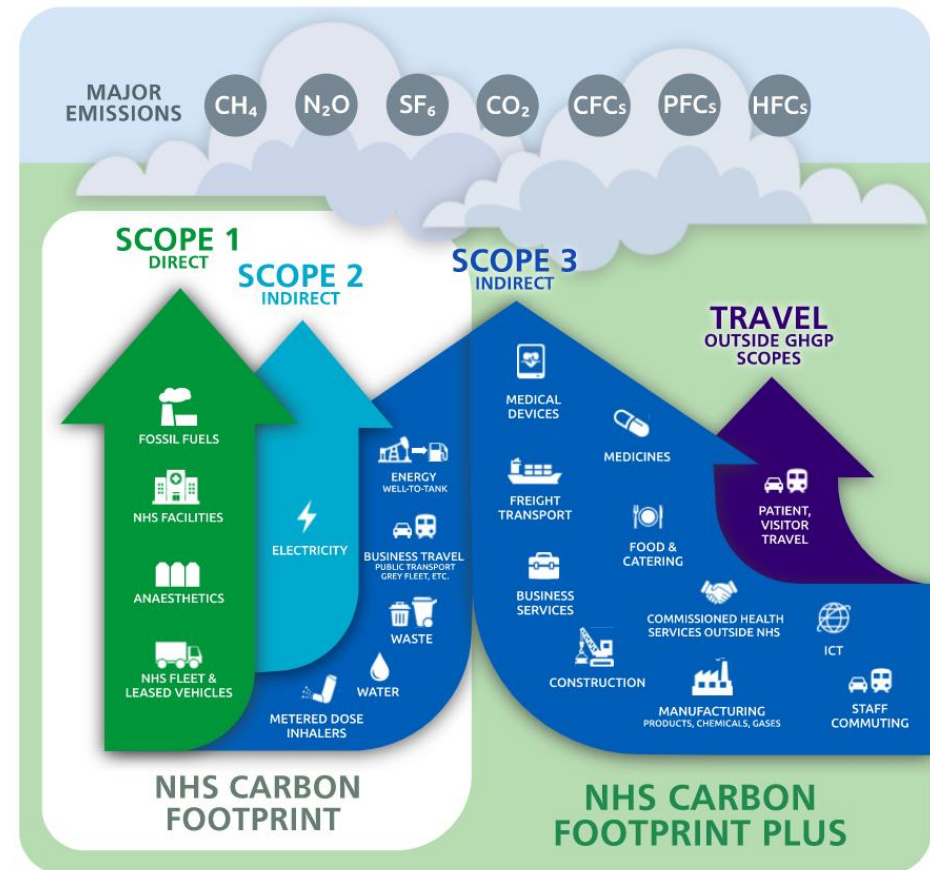


Figure 3 Greenhouse gas emission sources, and their 'scopes'

Data and methodology

The result of a GHG emission 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.

ULHT's GHG emissions footprint has been calculated according to the GHG Protocol for Corporate Reporting and aligned with ISO 14064:1.

The Trust's carbon footprint has been calculated from 2018/19 to 2020/21 in terms of building energy and delivery of care, travel, and the supply chain, as per the categorisations in the NHS Net Zero report. Data for 2021/22 was projected based on these calculations.

The Trust has used the following primary data:

- resource consumption (electricity, gas, water) data from utility bills
- waste arisings from data sets from waste contractors
- fleet vehicle fuel use from fuel reports/receipts
- business miles travelled (by car) from the expenses system
- published procurement spend

Data was unavailable for business travel (rail and air) and for inhaler and volatile anaesthetics, in large part due to pressure from the COVID-19 pandemic. The carbon footprint will record these emissions in the future.

The Trust has used the NHS Health Outcomes of Travel Tool (HOTT) to estimate emissions from staff commuting, patient and visitor travel and published procurement expenditure to derive spend-based emission values for categories within our supply chain.

The Trust is using 2020/21 as the baseline year to set targets against as calculations were made before the 2021/22 financial year was complete.

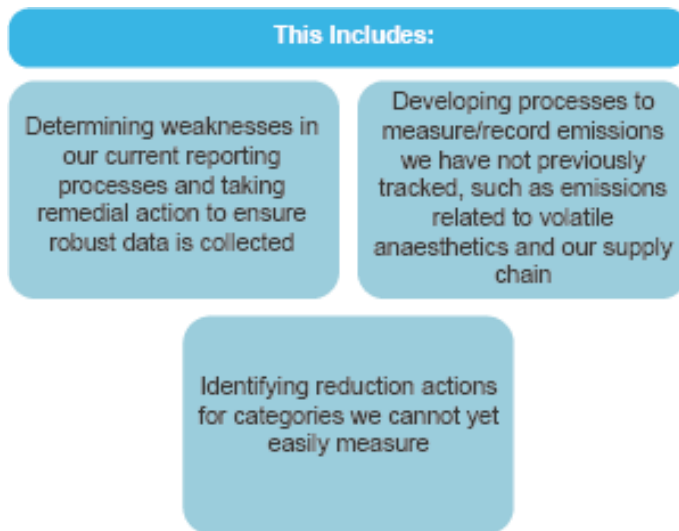


Clinical ward doctors. Source: ULHT Library

ULHT's Net Zero Ambitions

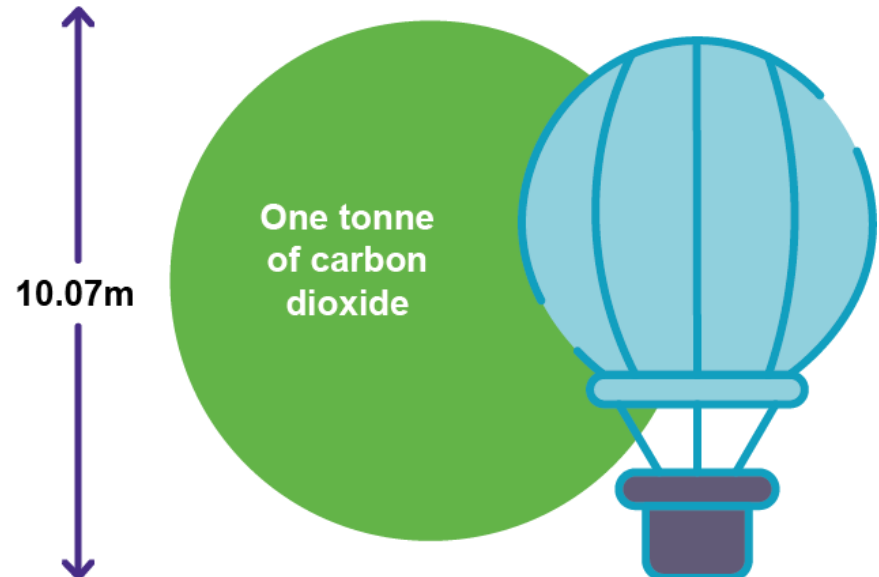
ULHT fully commits to reducing greenhouse gas emissions to Net Zero to prevent the worst impacts of climate change and meet NHS Net Zero commitments. This plan outlines high-level emissions reductions and enabling actions for each area of focus. This means ULHT needs to act now to reduce emissions from a variety of direct and indirect sources; from the estate to the delivery of care and beyond, each year from now until Net Zero is achieved.

The Trust is using this Green Plan to improve Net Zero-related data collation, carbon footprint and reporting capacity over time.



An emissions-reduction trajectory for each emission source has been given in each Area of Focus (if applicable) for the next three years until 31st March 2025. To achieve these emission

reductions, a series of actions in each Area of Focus has been listed. There will be residual emissions at both the 2040 and 2045 target dates, and these will need to be 'offset' or sequestered (which is not in the scope of this Plan).



What does 1 tonne of carbon dioxide look like?

One tCO₂e 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 1 tCO₂e per year from electricity consumption and almost 2 tCO₂e from the use of natural gas for heating and cooking.

The Current Position

The Carbon Footprint in 2020/21 was 99,523 tCO₂e
 To meet the NHS Net Zero commitments, around 3,119 tCO₂e needs to be avoided from all sources each year until 2040/45.

Akin to the NHS Net Zero report, most of the emissions (81%) came from sources not under the Trust's direct control: 69% from the supply chain, a further 9% from patient and visitor travel, and 3% from commissioned health services.

The remaining 19% arose from sources that can be controlled or strongly influenced: 18% of the emissions came from the operation of buildings and 1% from transport associated with the delivery of care (including staff commuting).

See Figure 5 for the split of each emission category, as per the NHS Net Zero report categorisation. Data shown relate to emissions in tCO₂e and their relative proportion of the footprint.

- Key:**
- Delivery of Care:
 - Personal Travel:
 - Supply Chain:
 - Commissioned Services:

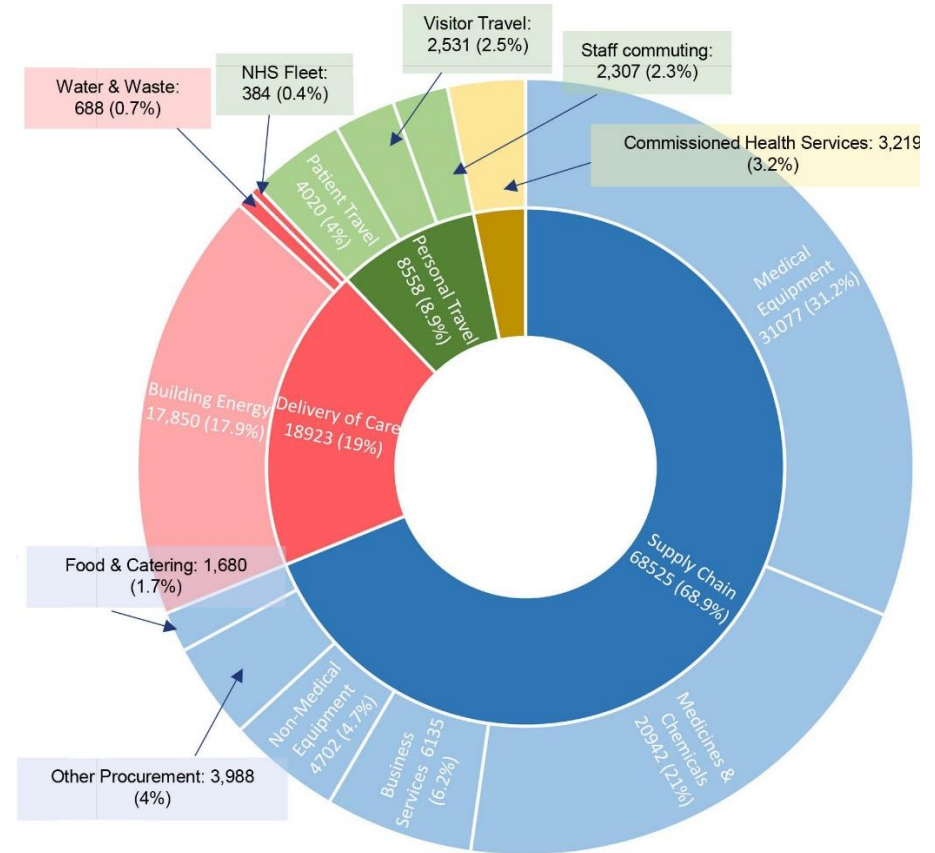
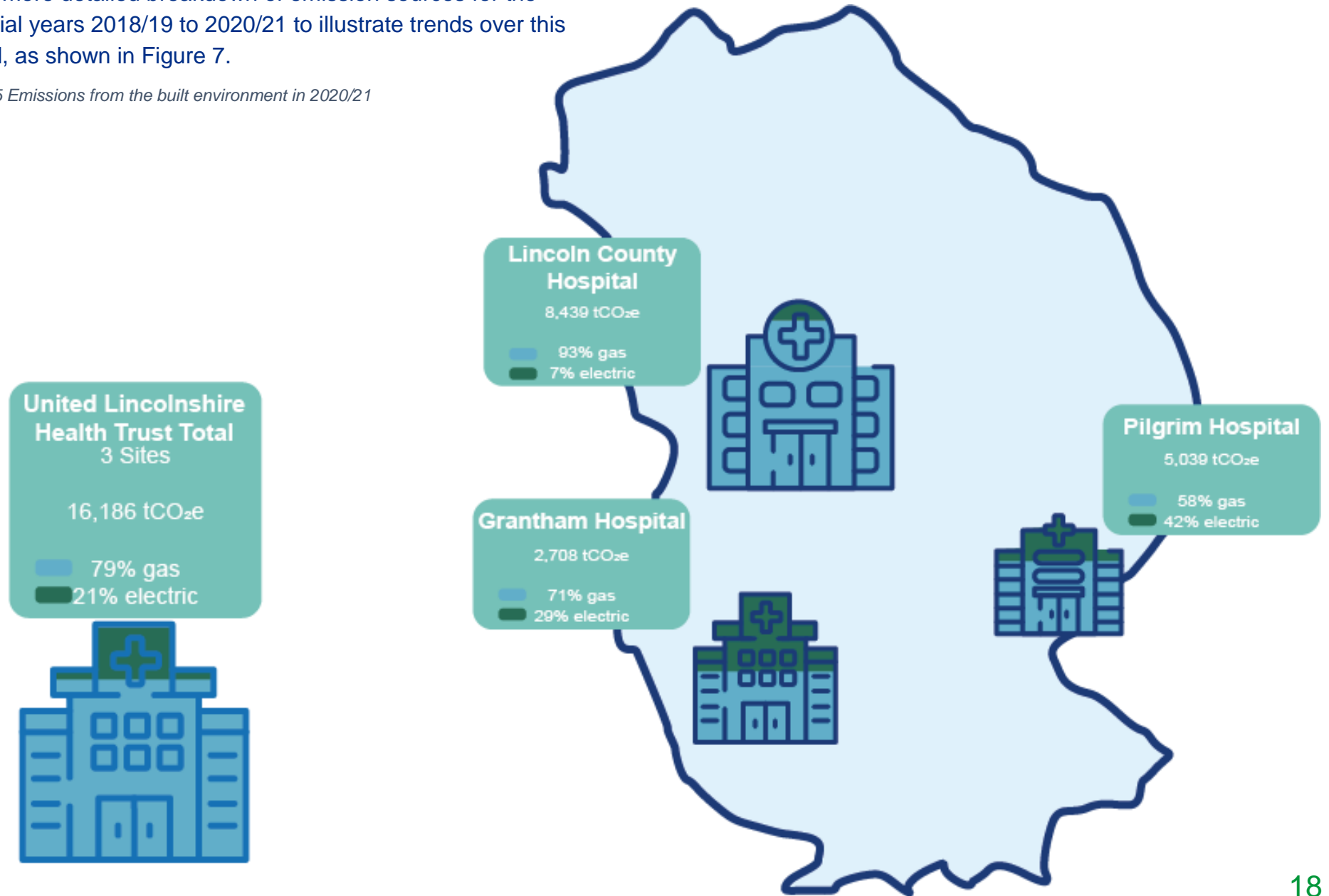


Figure 4 ULHT total carbon footprint breakdown in 2019/20

Emissions from the built environment are shown in Figure 6, and a more detailed breakdown of emission sources for the financial years 2018/19 to 2020/21 to illustrate trends over this period, as shown in Figure 7.

Figure 5 Emissions from the built environment in 2020/21



Emissions Reduction Trajectory

Emission sources have been grouped together and yearly emission reduction targets have been calculated until 2024/25 (Figure 7).

Emissions rose in 2020/21 compared to 2019/20. This is due to the response to the COVID-19 pandemic, entailing a higher procurement spend and additional waste arisings.

Total emissions need to be reduced by 12,476 tCO₂e from the 2020/21 baseline by 2024/25 (taking into consideration the recent procurement of renewable electricity). This roughly equates to **3,119 tCO₂e** per annum.

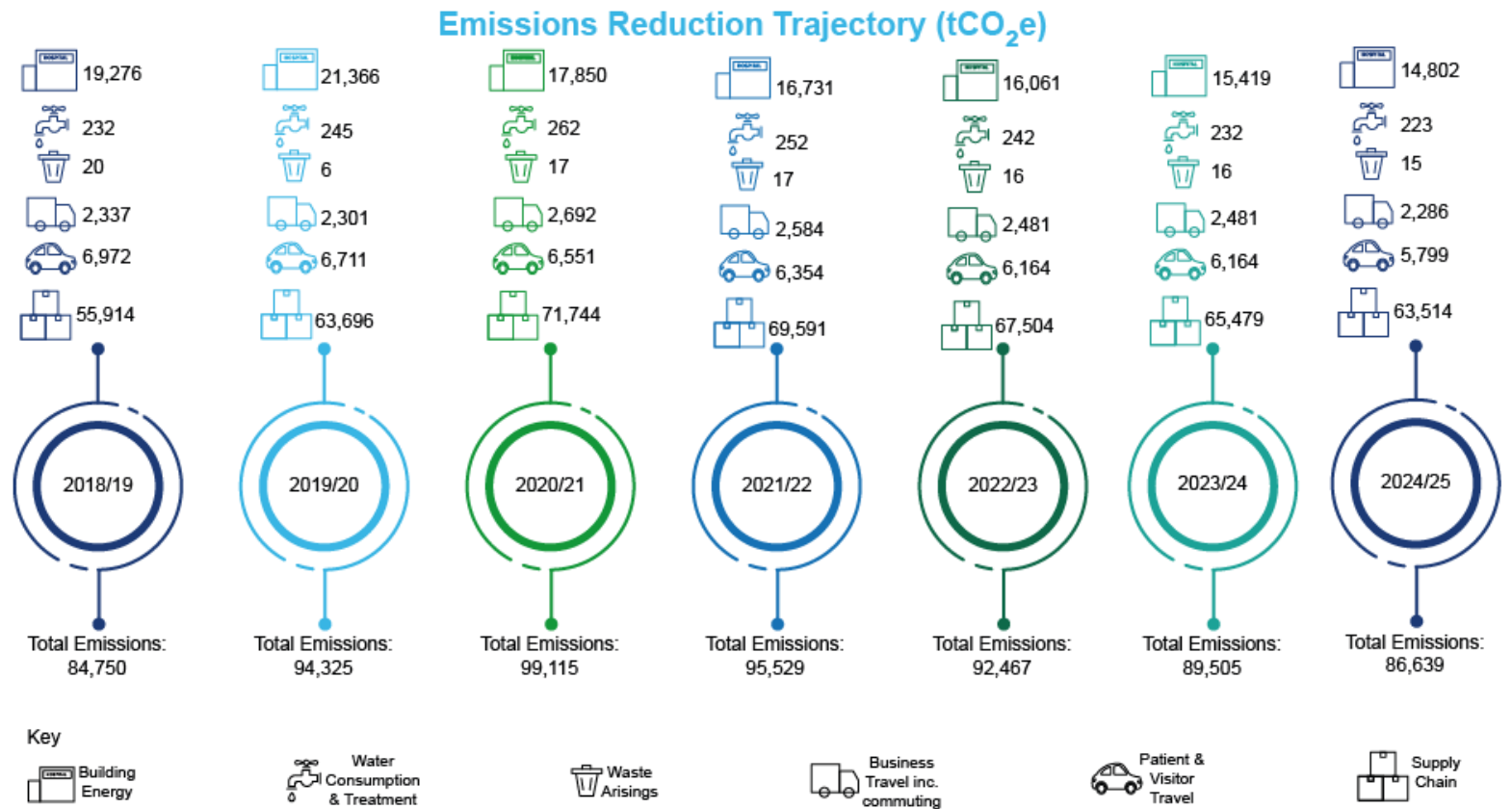


Figure 6 ULHT's Estimated GHG Reduction Target for three years by activity to meet 'Delivering a Net Zero NHS'

Areas of Focus Contents

The following 'Areas of Focus' give an overview of the Trust's current performance/status, each including an Action Plan.

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

Indicative costs and emission reductions are given for each action. These are very high-level assumptions. A key is given below.

Key:

Indicative Cost to achieve:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative Emissions reduction:

 Low or incremental reduction

 Moderate reduction

 Significant reduction

 Not applicable

Workforce and System Leadership

The Trust will build the Green Plan into its strategic planning and governance, including clinical and operational policies and procedures to ensure sustainable development is a part of the Trust's daily work and how success is measured.

The Trust's board-level Net Zero lead will oversee the resourcing and delivery of this Green Plan. Action plans identified by this Green Plan will be reviewed in discussion with Finance and Capital Planning teams to identify suitable budgets. The Trust will seek to identify internal and third-party funding to support the roll-out of Green Plan actions.

This Green Plan is approved by the Trust Board and will be reviewed (and revised if necessary). These reviews and progress against the actions in the Green Plan will be submitted to the Coordinating Commissioner.

Sustainability Committee

The committee will manage and drive sustainable development within the Trust. The Trust plans to identify a number of Sustainability Champions, who will be environmentally conscious volunteers.



Nurses. Source: ULHT Library

LTP 2.24, 17

13 CLIMATE ACTION



SC 13.9, 13.10, 18.2, 18

NZ 4.2.3

Target 13.2 Integrate climate change measures into policy and planning

Target 13.3 Build knowledge and capacity to meet climate change

No	ULHT Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to Achieve	Indicative Emissions Reduction	Responsible lead/dept	NHS Req.
01	Review and approve the plan at the Board level, monitoring delivery at Board meetings and relevant committees.	Governance & policy	On-going		£	✗	Trust Board	SC 18.2
02	Nominate and empower a Climate Change Adaptation Lead and keep the Co-ordinating Commissioner informed at all times of the persons holding these positions.	Governance & policy	22/23		£	✗	Trust Board	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 & policy	22/23		£	☁	Trust Board	LTP 2.24,17
04	Streamline data collection processes and produce a comprehensive monthly data report with relevant Green Plan metrics	Governance & policy	22/23		£	☁	Estates and Facilities	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	22/23		£	☁	Estates and Facilities	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 Steering Group.	Governance & policy	23/24		£	☁	Trust Board	LTP 2.24,17
07	Ensure the Green Plan delivery is reflected in the corporate risk register.	Governance & policy	23/24		£	☁	Trust Board	LTP 2.24,17
08	Review procurement plan at board level to achieve a net zero supply chain. Fulfil the Trust's role as an anchor institution to achieve social value and wider benefits for communities, particularly for the Trust's care groups.	Procurement & Supply Chain	23/24		£	☁	Trust Board	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 & communities	23/24		£		HR	LTP 2.24,17
10	Identify internal and third-party funding to enable key Green Plan actions.	Governance & policy	On-going		£		Estates and Facilities	LTP 2.24,17
11	Work in partnership with neighbouring NHS trusts and public authorities to enhance the delivery of the Green Plan and share best practice	Governance & policy	On-going		£		Trust Board	LTP 2.24,17
12	Ensure quarterly Greener NHS Data Collection uploads are made	Core responsibilities	On-going		£		Estates and Facilities	NZ 3.1.1, 3.1.2

Figure 7 Green Plan actions for system leadership

Workforce

All colleagues are needed for the Trust’s 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 ULHT will enable colleagues to lead the way to achieve a greener NHS.

However, the Trust’s Green Plan needs to be embedded within its culture, with the recognition that people are at the core of the NHS. The Trust will empower staff to deliver this Green Plan at all levels of the organisation. To do this, the team will further utilise the Greener NHS “One Year On” Communications Toolkit, currently used for general messaging and press releases.

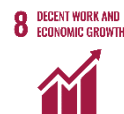
Energy saving and sustainability are to be promoted at future inductions, with mandatory training and team meetings being considered. There is also a plan for the Directorate of People and Organisation Development to produce a Sustainability Strategy.



Maternity ward staff. Source: ULHT Library

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

SC 13.1 through 13.10



Target 8.5 Full employment and decent work with equal pay



Target 13.3 Build knowledge and capacity to meet climate change



Target 16.B Promote and enforce non-discriminatory laws and

No	ULHT Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to Achieve	Indicative Emissions Reduction	Responsible lead/dept	NHS Req.
01	Establish a Sustainability Group and incorporate the Green Plan into its agenda.	Governance & policy	22/23		£	✘	Estates and Facilities	LTP 4.1, 4.3, 4.39, 4.42 SC 13.1 to 13.10
02	Building on current practice, review policies and processes against NHS aims for ensuring rewarding, flexible and supportive work, 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 & policy	On-going		£	✘	People & OD	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 & policy	22/23		£	☁	Education Services	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 & policy	22/23		£	✘	Sustainability Lead	NZ 4.2.1






05	Use the Green NHS 'ONE YEAR ON' Communications Toolkit and/or the ' <u>Healthier Planet, Healthier People</u> ' Toolkit to create and share communications about the Green Plan.	Working with patients, staff & communities	22/23		£		Communications & Engagement	NZ 4.2.1
06	Encourage staff to actively participate in the Greener NHS community and other forums such as the Greener AHP Hub, Centre for Sustainable Healthcare and related workspaces on the Future NHS platform.	Working with patients, staff & communities	22/23		£		Communications & Engagement	NZ 4.2.1
07	Consult, explore and action how clinical and non-clinical staff can best participate in the Green Plan delivery process, ensuring this is incorporated into work plans, work-time allocations, performance reviews, and collaborating with other trusts where appropriate.	Governance & policy	22/23		£		Sustainability Lead	NZ4.2, 4.2.1, 4.2.2, 4.3.3
08	Provide additional 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		£		Training and Development	NZ 4.2.1
09	Work with suppliers to ensure that onsite workers are subject to the Real Living Wage, fair working practices and protections against discrimination.	Procurement & People & OD	23/24		£		Procurement & People & OD	LTP 4.1, 4.3, 4.39, 4.42

Figure 8 Green Plan actions for workforce

Indicative cost:

£ No or low cost

£ Significantly expensive

£ Moderately expensive

Indicative emissions reduction:

Low or incremental reduction

Significant reduction

Moderate 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.

ULHT delivers acute and specialist clinical services to Lincolnshire and neighbouring counties. Services are provided from three acute hospitals in Lincolnshire, including community services, population-screening services, and a comprehensive range of planned and unscheduled secondary care services.







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.

The Trust provides 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 clinics, and their associated environmental impacts. Strong interagency partnership working enhances GiRFT, providing a better care package. A GiRFT report quarterly is produced quarterly and the Trust is in the process of strengthening the reporting process.

The Trust will commit to link greenhouse gas reductions with the delivery of the Long Term Plan sustainable care model.



Nurse with patient. Source: ULH Library

No	ULHT 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 Getting it Right First Time (GiRFT), National Safety Improvement Programme to reduce health inequalities and improve early intervention, linking this work to potential emissions reductions.	Governance & policy	On-going		£		Trust Board and relevant clinical leads	LTP 2.26 SC13.9.118.4.2.1 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 & policy	On-going		£		Trust Board and relevant clinical leads	LTP 2.26 SC13.9.118.4.2.1 NZ 4.1.3
03	Continue to collaborate with other trusts and public authorities on the population's health.	Governance & policy	On-going		£		Trust Board	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	22/23		£		Trust Board	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		£		Estates and Facilities	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		£		Procurement & service providers	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 & communities	On-going		£		Clinical divisions	NZ 4.1.1
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Figure 9 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 Long Term Plan commits all NHS bodies to focus on digital transformation by establishing a 'digital front door', enabling digital first care. The [NHS App](#) is one example of this, providing patients with a simple and secure way to access NHS services on their smartphone.

The NHS Planning Guidance requires that at least 25% of all clinically necessary outpatient appointments should be delivered remotely by telephone or video consultation. Streamlining and digitising administrative functions also reduces paper waste and expedites processes.

ULHT strives to use digital care as a tool to promote inclusion and increase access to quality care across Lincolnshire and is committed to ensuring that digital services are tailored to meet the needs of the different specific care groups. The Government's Greening ICT and Digital Services Strategy 2020-2025 is also taken into consideration when looking at the improvement of the Trust's digital care services. A new Digital Strategy is being produced in collaboration with wider health bodies across Lincolnshire.

The '[What Good Looks Like](#)' framework', designed to guide Trusts towards the successful integration of digital care systems, neatly summarises the Trust's position:

'The pandemic enabled us to achieve a level of digital transformation that might have otherwise taken several years. As we move into the recovery period, it is critical that we build on the progress we've made and ensure that all health and care providers have a strong foundation in digital practice'.



Staff using computer. Source: ULHT Library

Digital Services

The Trust's digital services complement and link to "in-person services". Since the beginning of the pandemic, the number of face-to-face, telephone and video consultations has increased significantly. Approximately 40% of outpatient appointments were delivered remotely in 2020/21. This included 6,429 video consultations and 240,145 telephone consultations in 2020/21. However, there will always be a need for face-to-face appointments and consultations for some patient groups.

The COVID-19 pandemic has led to a blended working approach, especially for office-based staff – for example, a mixture of in office and home-based working. Many staff now work in an agile way, and the Trust is exploring how to embed this as a new sustainable way of working. A number of 'hot desk' facilities have been provided to support this alongside Microsoft Teams and other collaborative tools that are provided for online meetings and such.

Improvements to ULHT's clinical pathways are ongoing to further maximise the opportunities for remote digital care.

The Trust predominantly uses paper patient records, but these have many drawbacks, particularly when attempting to work in an agile way. The planned introduction of Electronic Patient Record (EPR) over the next few years will significantly improve this. In addition, patient correspondence (including appointment and reminder letters) is increasingly being automatically produced and sent by the Trust's Healthcare Communications solution. Furthermore, there is a Community Care Portal that

links the Trust's patient information systems with those of the Trust's Lincolnshire provider partners (including Lincolnshire County Council) to ensure a rich set of information is available to those who are authorised and require it for direct patient care.



Nurse using prescribing hub. Source: ULHT Library

No	ULHT Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to Achieve	Indicative Emissions Reduction	Responsible lead/dept.	NHS Req.
01	Build on 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 & policy	On-going		£	✗	ICT	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 Centre for Sustainable Healthcare CSH's Carbon Calculator for Avoided Patient Travel	Governance & policy	On-going		£	✗	Sustainability manager & Infrastructure services.	SC 28
03	Offer more digital and remote appointments: set targets against the baseline recorded in 2020/21.	Working with patients, staff & communities	22/23		£	☁	Care Groups	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.	Procurement & ICT	23/24		£	☁	ICT	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 & communities	On-going		£	☁	ICT	NZ 4.1.4 PG C1
06	Transfer paper-based systems such as prescribing, bed state, observations, ward state, referrals, and expense claims forms to a digital alternative.	Working with patients, staff & communities	23/24		£	☁	ICT	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 & communities	23/24		£	☁	ICT & Business & Value	LTP 1.43, 1.44, 5

Figure 10 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

The Trust is committed to developing a Green Travel Plan, outlining the aims and objectives related to reducing congestion, single occupancy travel, and CO2 emissions. It will explore how to promote active travel to staff and visitors. In addition, the Trust will produce site-specific plans to focus on the individual challenges of each hospital.

ULHT Fleet Vehicles

The Trust operates a fleet of 71 vehicles that are a mix of pool cars for business use and delivery of patient care in the community, and commercial vehicles that are used for non-patient transport services for the wider health community in Lincolnshire, digital services, diagnostic screening and estates maintenance.

Emissions associated with the Trust's business travel could not be determined due to the unavailability of business expense data. This will be amended in future carbon footprint reporting.

However, using the NHS' Health Outcomes Travel Tool (HOTT), most transport-related emissions (5,616 tCO₂e) can be linked to staff commuting and patient/visitor travel.

In 2020/21, these vehicles travelled just over 714,000 km, emitting 384 tCO₂e.

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 will be coming onto the market.

ULEV and ZEV small vans and cars are becoming commonplace, with many options available.

ULHT needs to undertake a fleet review to see how the vans and large vans are being used, and whether suitable ULEVs and ZEVs are available. Additionally, the Trust must review the choice of company cars on offer and change the specifications to reflect the targets within the NEPTS.

If the Trust changed all of the fleet vehicles to ZEVs, based on 2020/21 data and using 100% renewable electricity, there would be a likely 89% 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 around 12 tCO₂e per year, with the added benefit of no tail pipe emissions.

Aside from the electrification of transport, the Trust needs to reduce emissions from the fleet by 58 tCO₂e by 2024/25, equating to just over 15 tCO₂e per year.

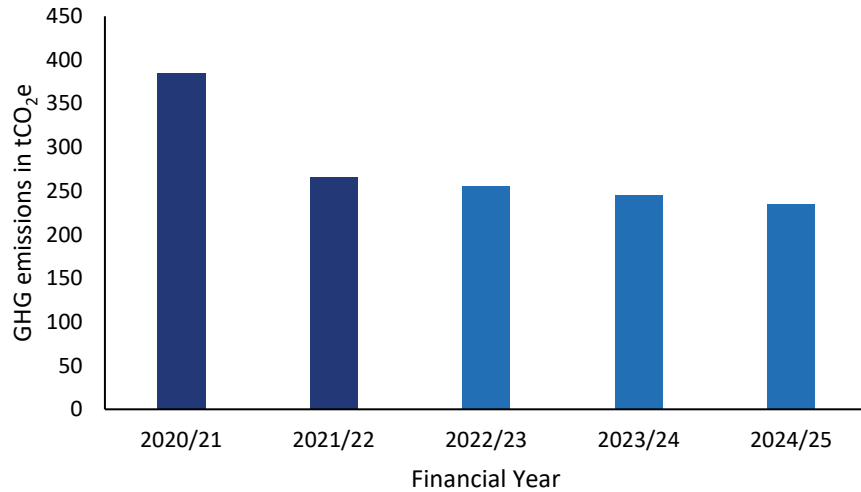


Figure 11 Emissions from fleet vehicles and emissions reduction trajectory to 2024/25

Other Lease Vehicles

Staff have the option to lease personal vehicles through the NHS Fleet Solutions Salary Sacrifice Scheme.

Emissions from these vehicles (used for staff personal use) are outside of the scope of this report (although they do impact on emissions arising from commuting somewhat). However, as a Trust, the availability of vehicles on offer can be limited based on their engine size and emissions. Furthermore, the Trust can incentivise staff to choose Ultra Low Emission Vehicles (plugin hybrid cars) or Zero Emission Vehicles (electric cars).



Porters van. Source: ULHT Library

Grey Fleet

The Trust has a 'grey fleet', which 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 the grey fleet are sizeable.

ULHT reimburses staff and bank staff for the fuel used in line with their duties through an expenses system. However, the grey fleet emissions could not be determined due to the unavailability of expenses data. This will be amended in future carbon footprint reporting.

It is worth noting that in 2020/21, with the changed working styles affected by the pandemic, grey fleet mileage and therefore greenhouse gas emissions are projected to have fallen. This reinforces that there are opportunities regarding these changes in working practice that should be reviewed.

As the electrification of transport continues, the emissions will reduce accordingly. This also brings forth the issue of providing additional electric vehicle charge points in the future.

Electric Vehicle Charging Infrastructure

An EV charging point project is being undertaken with a potential of fifteen charging points across the Trust being installed for staff and visitor use.



Parking sign. Source: ULHT Library

Commuting, Visitor/Patient Travel

The Trust is developing an in-house car share scheme that seeks to discourage single occupancy travel. The subsidised bus fare salary sacrifice scheme offers reduced costs for bus travel in zoned areas and this will be available at Lincoln County Hospital soon.

The Trust operates a salary sacrifice cycle to work scheme and provides covered cycle storage at all three sites for staff, in addition to visitor cycle storage at Pilgrim and Lincoln County Hospitals. Lockers are available for walkers and cyclists and there are on-site shower facilities. There is a hire-bike station with e-bikes at Lincoln County Hospital for staff and visitor use that link to other docking stations in the city. Staff have benefitted from free cycle maintenance sessions and free adult cycle training is available.

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 the sites remains a vital service to the Trust's communities and helps to reduce health inequalities. The Boston site is well connected and includes InterConnect routes to Lincoln and Skegness, in addition to local services. There is also a railway station that is a 30 minute walk from Pilgrim Hospital. Lincoln County Hospital is situated close to Lincoln Central bus station, which is served by an extensive number of routes. In addition, the railway station is a 25 minute walk away. Lincoln is also served by a park and ride facility, and

the possibility of the service being redirected to cover the hospital site is being explored.

The previous travel survey was undertaken in 2019 but was not formally recorded. In lieu of travel plan survey data, which will be collected annually going forward, the NHS HOTT Tool has been used 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 13).

However, these figures are indicative and need to be bolstered and verified by local travel plan survey data. Hence, the impacts of COVID-19, 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).

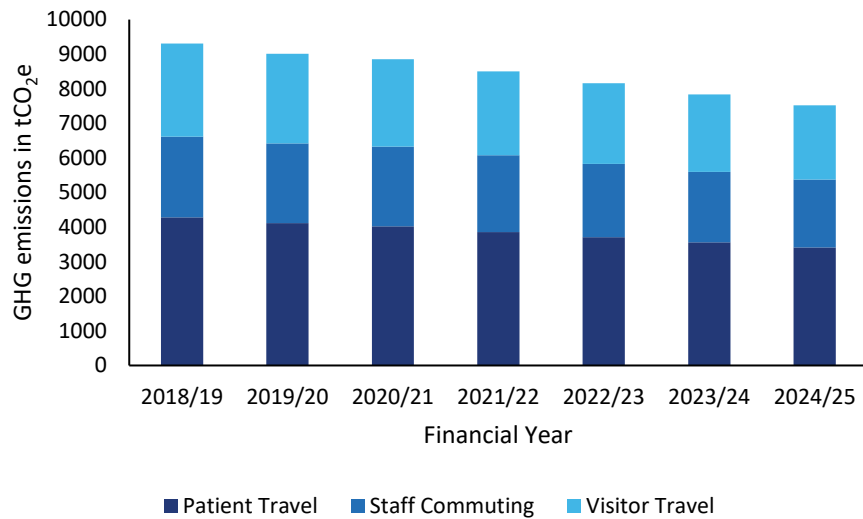


Figure 12 Stacked bar chart to show total emissions from patient, visitor and staff travel and emissions reduction trajectory to 2024/25

Air Quality

Air quality, climate change and health outcomes are highly interconnected, 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.









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 1 in 20 road journeys in the UK attributable to the NHS, the Trust’s activity has enormous potential impact on local communities’ air quality. Additionally, the gas-fired boilers that the Trust uses contribute to air pollution, and the decarbonisation of heating will address these pollutants in the future.

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



Bike Lock up. Source: ULHT Library

No	ULHT 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 & policy	23/24		£		Estates and Facilities	LTP 2.21, 3.82, 17 SC 18.4.1.3 NZ 3.2, 3.2.2
02	Conduct annual Travel Plan surveys to quantify staff commuting and visitor travel and verify HOTT Tool outputs.	Working with patients, staff & communities	Annual, ongoing		£		Estates and Facilities	NZ 3.2, 3.2.2
03	Review existing staff lease scheme and incorporate additional incentives for the uptake of ULEV and ZEVs.	Governance & policy	23/24		£		Finance	NZ 3.2, 3.2.2
04	Undertake a Green Fleet review of the fleet vehicles to ascertain usage and distance travelled, with a view to integrating ULEVs and ZEVs	Governance & policy	23/24		£		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	23/24		£		Estates and Facilities	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 & policy	23/24		£		Finance	NZ 3.2, 3.2.2
07	Enhance the business travel expense system to capture the to- and from- destinations for rail, air, bus and taxi journeys and collate data from expenses.	Governance & policy	23/24		£		Finance	NZ 3.2, 3.2.2
08	Improve stores provision and work with suppliers to consolidate goods orders through better planning wherever possible, reducing transport emissions.	Procurement	23/24		£		Procurement	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 & communities	23/24		£		People and OD	NZ 3.2, 3.2.2
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Figure 13 Green plan actions for Travel, Logistics and Air Quality

Indicative cost:

-  No or low cost
-  Significantly expensive
-  Moderately expensive

Indicative emissions reduction:

-  Low or incremental reduction
-  Significant reduction
-  Moderate reduction
-  Not applicable

Estates and Facilities

As an NHS Trust, the carbon footprint of the 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 the Trust provides critical services 24 hours a day, energy and resource consumptions are substantial. Therefore, there is a need to optimise energy use in buildings and move away from using fossil fuels to meet NHS Net Zero goals.

The Trust's utilised estate includes facilities housed in other organisation's buildings. This presents challenges to retrofitting resource efficiency measures and heating improvements in isolation. ULHT will work with other organisations and the aims of their Green Plans to improve efficiencies at these sites.

ULHT will be following the four-step approach within the NHS' 'Estates 'Net Zero' Carbon Delivery Plan' to address the 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

- 17,850 tCO₂e emitted from buildings across the estate in 2020/21.
- The Trust has procured 100% renewable electricity since April 2021.
- ULHT needs to reduce energy consumption by over 2,771,437 kWh per year to achieve the emissions reduction target of 14,802 tCO₂e in 2024/25.

Energy and Emissions

The Trust has 3 hospital sites for which the energy supply contracts are procured. Buildings under the Trust's ownership will be revised for energy efficiency improvements.

Figure 15 shows the total emissions liberated from electricity and gas use from 2018/19 to 2020/21. ULHT needs to reduce emissions by 3,048 tCO₂e by 2024/25 from the 2020/21 baseline (this includes the reduction in emissions from procuring renewable electricity).

As an example, Pilgrim Hospital energy consumption is significant at 2,093 tCO₂e in 2020/21.

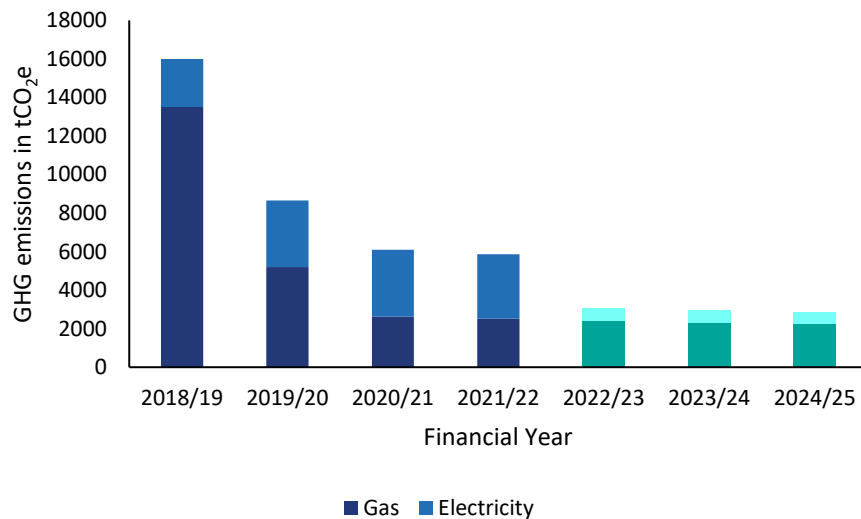


Figure 14 Emissions from the built environment

From April 2022, the Trust will be procuring 100% renewable electricity, resulting in an 80% reduction in emissions arising from procured electricity. The emission reductions from this are illustrated in Figure 16.

Despite the negated emissions from renewable electricity procurement, there is still a need to reduce electricity and gas consumption at all of the sites, at a rate of 2,771,437 kWh per year!

Since 2020, the Trust has delivered energy efficiency upgrades to the Estate, including the installation of 12,000 LED light fittings as part of a Trust-wide Energy Performance Contract (EPC).

The Trust sets out to achieve comfortable room / space temperatures for its service users, employees, and visitors.

Predominantly, target space temperatures range between 18-28°C as set out for general areas in HTM03-01, Part A. Comfort heating and cooling is delivered using various techniques, utilising underfloor heating, radiant ceiling panels, traditional thermostatic controlled radiators, air handing systems, fan coil units, Variable Refrigerant Flow (VRF) systems and split air conditioning systems.

Primary heating systems used within the Trust vary across all sites, but at Lincoln County Hospital and Pilgrim Hospital there has been a renewal of the Combined Heat and Power, (CHP) equipment. The Trust is now exploring ways to replace end of life boilers with new sustainable technology at Grantham Hospital as part of the major building management system (BMS) upgrade.

The Trust has installed and operates a biomass boiler at Pilgrim Hospital, which is fuelled by virgin and recyclable woodchip.

Detailed building energy surveys will be needed to provide robust energy efficiency recommendations at each of the Trust's sites, building upon the works already completed.

The decarbonisation of the Trust's heating systems will become increasingly important to reach net zero emissions. A biomass boiler installed at Pilgrim Hospital, continues to be considered a leading example seven years after its installation. However, transitioning remaining oil and gas-fired boilers to electrical alternatives remains a significant challenge.

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-amperes) from the electricity grid.

Extensive on-site renewable energy systems, such as solar photovoltaics and integrated large battery storage technologies, will help mitigate this, and provide additional resilience to power outages, with the potential to negate using the back-up diesel generators.

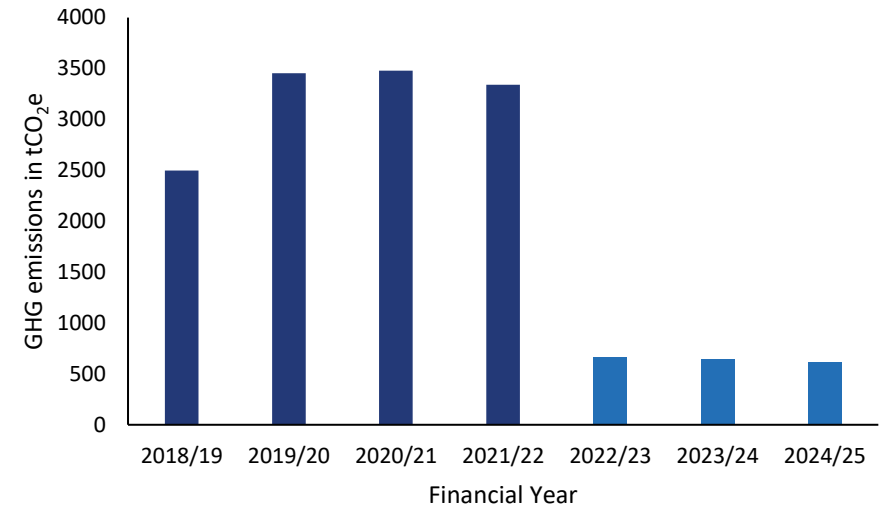










Figure 15 Emissions from electricity consumption and emission reduction trajectory to 2024/25 (note the difference following the expected procurement of 100% renewable electricity in April 2022)

No	ULHT Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to Achieve	Indicative Emissions Reduction	Responsible lead/dept.	NHS Req.
01	Enhance Planned Preventative Maintenance (PPMs) of all facilities and assets to be proactively energy-focused and to identify opportunities to upgrade equipment/plant.	Core responsibilities	22/23		£		Estates and Facilities	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
02	The Trust will procure 100% renewable electricity with Renewable Energy Guarantees of Origin (REGO) certificates backed by Npower.	Procurement	22/23		£		Estates and Facilities	SC 18.5
03	Access the NHS Energy Efficiency Fund (NEEF) to upgrade all lighting to LED alternatives.	Core responsibilities	22/23		£		Estates and Facilities	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	22/23 & on-going		£		Estates and Facilities	NZCDP NZ 3.1.1, 3.1.2

05	Install solar photovoltaic cells and collate a monthly generation report	Governance & policy	22/23		£		Estates and Facilities	NZCDP NZ 3.1.1, 3.1.2
06	Optimise energy use by embedding networked Automatic Meter Readers (AMRs) across the Estate with appropriate controls to reduce energy consumption, and report sub-metered data monthly	Core responsibilities	23/24		£		Procurement	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
07	Conduct detailed building energy surveys to identify further energy/thermal efficiency opportunities, including the installation of heat recovery systems on Air Handling Units (AHUs)	Core responsibilities	23/24		£		Estates and Facilities	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
08	Develop a Decarbonisation of Heat Plan that focuses on the phase out of existing gas-fired boilers and replacement with low-carbon alternatives, where feasible.	Governance & policy	On-going		£		Estates and Facilities	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2






LTP 17
SC 18.4.1.2, 18.5
NZ 3.1.1, 3.1.2



7 AFFORDABLE AND CLEAN ENERGY
Target 7.2 Increase global percentage of renewable energy
Target 7.3 Double the improvement in energy efficiency



13 CLIMATE ACTION
Target 13.2 Integrate climate change measures into policy and planning
Target 13.3 Build knowledge and capacity to meet climate change

No	ULHT Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to Achieve	Indicative Emissions Reduction	Responsible lead/dept.	NHS Req.
09	Explore the possibility of creating District Heat Networks with neighbouring partners.	Working with patients, staff & communities	On-going		£		Estates and Facilities	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
10	Conduct a comprehensive review of the chiller and HVAC systems.	Core responsibilities	22/23		£		Estates and Facilities	NZ 3.1.1
11	Look to procure 'green gas' through the Green Gas Certification Scheme as and when existing energy contracts are due for renewal.	Procurement	23/24		£		Procurement	SC 18.5
12	Incorporate energy conservation into staff training and education programmes and deliver behaviour-based energy saving campaigns.	Working with patients, staff & communities	23/24		£		Training and Development	NZ 3.1.1
13	Develop communication materials for the patients that highlight energy efficiency projects, and discuss plans	Working with patients,	23/24		£		Estates and Facilities &	NZ 3.1.1





	with the local community, including exploring potential community energy projects.	staff & communities					People and OD	
14	Explore how the Trust can implement an ISO 50001 Energy Management System.	Governance & policy	24/25		£		Estates and Facilities	NZ 3.1.1
15	De-steam Lincoln County and Pilgrim Hospitals.	Core responsibilities	23/24		£		Estates and Facilities	NZ 3.1.1

Figure 16 Green plan action table for Energy and Emissions from the built environment

Indicative cost:

-  No or low cost
-  Significantly expensive
-  Moderately expensive

Indicative emissions reduction:

-  Low or incremental reduction
-  Significant reduction
-  Moderate reduction
-  Not applicable

Capital Projects

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

The Trust’s design and construction of buildings will play a key role in the collective ability to achieve net zero carbon emissions.

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](#).

Estates & Facilities: Capital Projects

- Building energy efficiency standards should be considered for new builds and refurbishments. For example, BREEAM ‘Excellent’ rating, the Zero Carbon Hospital Standard, and implementation of on-site renewables.
- Construction supplier alignment to net zero commitments, such as on-site contractor measures on waste reduction and low emission construction plans.
- Low carbon substitutions and product innovation, such as lower embodied carbon construction materials.

LTP 16
SC 18.4.2.1,
18.4.2.3
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	ULHT 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 & policy	On-going		£		Estates and Facilities	LTP 16 SC 18.4.2.1 NZ 3.1.1
02	Explore options to achieve emissions reductions in smaller works and projects across the estate.	Core Responsibilities	22/23		£		Estates and Facilities	NZ 3.1.1
03	Encourage and measure local subcontractor and supply chain spend as part of the anchor institution approach.	Procurement	22/23		£		Procurement	NZ 3.3.1
04	Ensure capital development accounts for risks identified in climate adaptation plans and addresses these in design/delivery.	Core responsibilities	23/24		£		Estates and Facilities	SC 18.4.2.3
05	Work with the 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	23/24		£		Procurement	NZ 3.3.1
06	Continue to ensure that the design process is informed by staff, patients and community views for capital projects.	Working with patients, staff & communities	23/24		£		Estates and Facilities, Procurement & HR	LTP 16 SC 18.4.2.1 NZ 3.1.1

Figure 17 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, the Trust used 258,002m³ of water, which cost a total of £614,867.

There are emission impacts associated with the supply of fresh water and treatment of wastewater, equating to 262 tCO₂e in 2020/21 (see Figure 19).

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, the Trust will look to collate the data from the Automatic Meter Readers water network. This will help us pinpoint areas of high water usage, understand how and where water is being used, locate leaks and take remedial action.

Details of ongoing water efficiency measures the Trust is taking can be found in the Water Management Action Plan.

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.

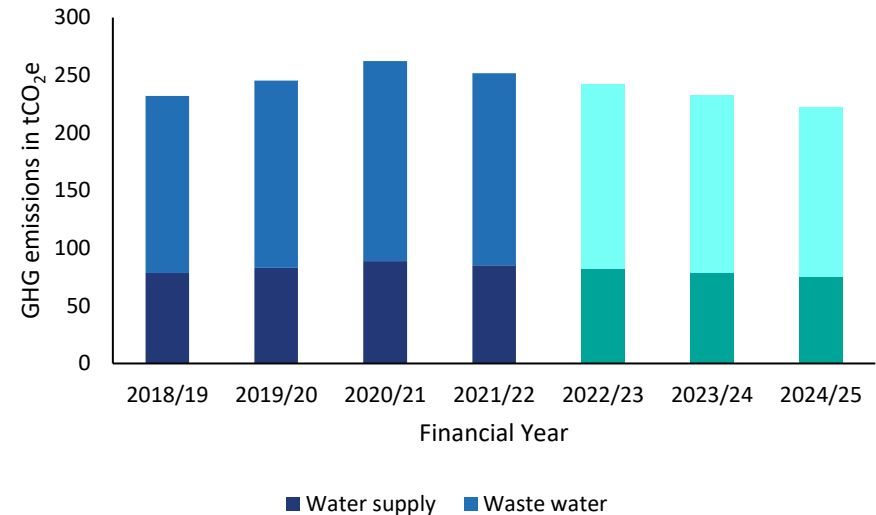









Figure 18 Stacked bar chart to show total water emissions from supply and wastewater treatment, and emissions reduction trajectory to 2024/25

Estates & Facilities: Water

- The Trust used 258,002 m³ of water in 2020/21 – enough water to fill 28 Olympic-size swimming pools
- 262 tCO₂e was attributed to the supply of water and wastewater treatment
- The Trust needs to reduce water consumption by 38,829 m³ by 2024/25
- Water efficiency and sustainable drainage will become ever more important in the future

No	ULHT Green Plan Actions	Trust Area	Target Year	Progress	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 the estate and delivery of care.	Governance & policy	22/23		£		Estates and Facilities	LTP 17 SC 18.4.3.1 NZ 3.1
02	Develop new water intensity metrics and incorporate these into greenhouse gas emissions reporting.	Governance & policy	22/23		£		Estates and Facilities	NZ 3.1
03	Collate water Automatic Meter Reader to determine water use patterns and aid leak detection, and report monthly	Core Responsibilities	23/24		£		Estates and Facilities	NZ 3.1
04	Utilise the most water efficient technologies, such as low flow taps throughout the estate, when replacing equipment and developing new sites	Core responsibilities	23/24		£		Estates and Facilities	NZ 3.1
05	Explore where rainwater harvesting and grey water systems can be installed and utilised.	Procurement	23/24		£		Estates and Facilities	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 the Trust expects.	Procurement	On-going		£		Estates and Facilities	LTP 17
07	Work with staff and patients by communicating the importance of water efficiency.	Working with patients, staff & communities	On-going		£		Estates and Facilities and Communications	NZ 3.1

08	Incorporate water efficiency measures within climate change adaptation work with the local community.	Working with patients, staff & communities	23/24		£	✘	Estates and Facilities	NZ 3.1
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Figure 19 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

The Trust collects five main waste types: general, clinical/offensive, confidential paper, dry mixed recycling and electrical and electronic equipment (WEEE) waste. There are collections for other waste streams, such as metal, fluorescent lamps and waste cooking oil, though amounts collected are not reported.

Figure 21 shows emissions emanating from the waste streams and Figure 22 the total waste arisings (all recorded waste streams).

The increase in waste arisings between 2019/20 and 2020/21 can be partly explained by the increased use of disposable items during the COVID-19 outbreak (with an uplift in waste being incinerated as Refuse Derived Fuel (RDF)). However, the Trust has received more robust data from waste contractors, which may also explain the increase in total waste arisings.

There are a limited number of dry mixed recycling bins, with the majority of non-clinical and non-hazardous waste being disposed of in the general waste bins in the buildings operated and managed by the Trust. This general waste is not further segregated at the waste handling centre and is ultimately sent to landfill.

Some of the clinical waste is incinerated (sharps), whilst other types are ultra-high temperature processed (alternative treatment) before being further recycled. Offensive waste is combined with clinical waste. The Trust provides training to

clinical staff promoting increased use of tiger stripe clinical waste disposal bags where appropriate to ensure clinical waste is segregated correctly. This is included at induction and in mandatory training.

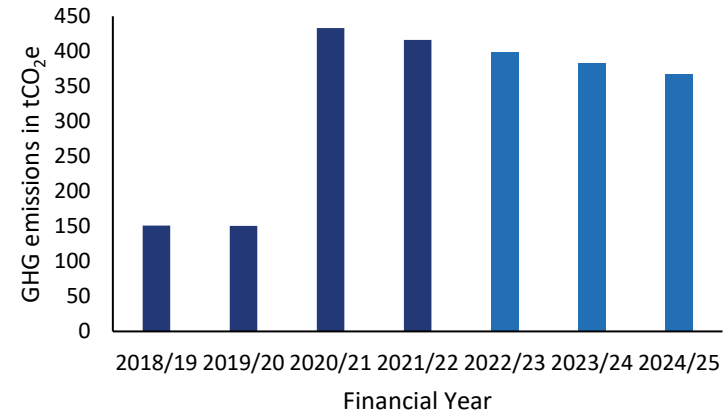


Figure 20 Emissions associated with waste streams and emission reduction trajectory to 2024/25

- 1,125 tonnes of waste were produced, emitting 433 tCO₂e in 2020/21
- 488 tonnes were sent to landfill in 2020/21, emitting 408 tCO₂e (84% of all emissions from waste)
- General Waste is sorted for recyclable materials at some sites, but most goes to landfill
- Food waste bins and collections will ensure food does not decompose in landfill sites, and instead is used for energy and compost generation

Food waste (kitchen waste such as vegetable peelings) is disposed of in onsite macerators located at each unit.

The Trust is aware of the amount of waste destined for landfill and need to segregate waste to improve recycling rates. This issue can be dealt with in two ways: installing recycling bins with clear signage for what can be recycled will improve recycling rates and help reduce waste processing costs; and changing the terms of the waste contract to ensure that general waste is sorted at the waste handling centre, with recyclable materials being segregated and non-recyclable waste incinerated (as Refuse Derived Fuel (RDF)) instead of going to landfill.

The COVID-19 pandemic has led to an increase in the usage of single-use plastic items; a necessary response to managing the crisis. This led to an increase of waste incineration of over 70% in 2020/21 compared to the previous year.

The Trust is mindful of the environmental impacts of single-use items throughout their lifecycle, from the crude oil used in their manufacture to the difficulty in recycling them at 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.

The waste hierarchy of Reduce, Reuse, Recycle, Recovery (energy from waste) before disposal (landfill) must be embedded to ensure that waste duties of care and circular economic principles are being maintained. Recycling rates need to be improved. Shoring up the waste handling processes will

ultimately reduce greenhouse gas emissions from waste treatment, other negative environmental impacts and landfill disposal costs.

Promotion of recycling throughout the Trust has been implemented through segregation training. Training is provided to all staff to ensure maximum recycling across the Trust and conduct audits. The Trust has also removed the excess general waste bins and improved the provision of recycling facilities in public and office areas and is working with suppliers to reduce packaging.

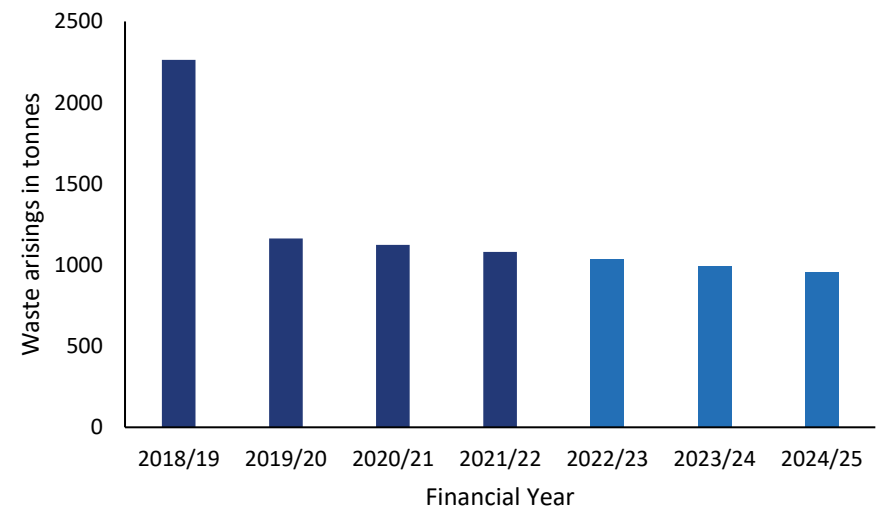


Figure 21 Total waste arisings in tonnes, and weight reduction trajectory to 2024/25

No.	ULHT Green Plan Actions	Trust Area	Target year	Progress	Indicative Cost to Achieve	Indicative Emissions Reduction	Responsible Lead/Dept.	NHS Req.
01	Collate all waste stream data from all sites (including sites where the Trust is not responsible for waste collection) and produce monthly reports.	Core Responsibilities	22/23		£		Estates and Facilities	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	22/23		£		Estates and Facilities	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	23/24		£		Estates and Facilities	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	23/24		£		Estates and Facilities & Catering	NZ 3.1
06	Work with staff and patients by communicating the importance of waste segregation.	Procurement	On-going		£		Estates and Facilities & HR	NZ 3.1
07	Explore whether reusable alternatives to single-use PPE items (aprons, wipes, face masks) are clinically appropriate.	Core Responsibilities	23/24		£		Clinical Teams & Procurement	NZ 3.1
08	Explore how the Trust can implement an ISO-14001 Environmental Management System.	Governance & policy	23/24		£		Estates and Facilities & HR	LTP 17 SC 18.4.3.1 NZ 3.1

Figure 22 Green plan action table for Waste

Indicative cost:

Indicative emissions reduction:

£ No or low cost

£ Significantly expensive

Low or incremental reduction

Significant reduction

£ Moderately expensive

Moderate reduction

Not applicable

Biodiversity and Greenspace

“Access to greenspaces have 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 greenspaces.” –

Delivering a Net Zero NHS

The Trust wants to protect biodiversity within the estate and region and reduce any negative impact on biodiversity, both locally and globally.

Greenspace and nature are important for the health and wellbeing of patients and colleagues alike. At a global scale, greenspace affects the planet’s ability to absorb carbon dioxide.

The Trust will promote access to greenspace, considering areas of operations where this may be lacking.

The Trust will also consider opportunities and risks for biodiversity in its sites, for example priority woodland areas in the region.

As part of the Project Dynamo initiative, there is a Gorgeous Gardens element that has tidied thirty four garden spaces across the three sites. The next phase is to begin renovations in a further eight gardens, to make them more inviting. At each of the three sites, there will be a dedicated patient and staff area.



Trees and lawn outside Pilgrim Hospital. Source: ULHT Library

LTP 17

SC 18.4.3, 18.4.3.1 to 18.4.3

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	ULHT Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to Achieve	Indicative Emissions Reduction	Responsible lead/dept.	NHS Req.
01	Review policies and practices around green space and biodiversity, to ensure that the Trust's impact on these is reduced. Identify opportunities to provide safe and easy access to green space, where appropriate.	Governance & policy	23/24		£		Estates and Facilities	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 the estate wherever possible. This includes supporting bees and other pollinators.	Core responsibilities	23/24		£		Estates and Facilities	SC 18.1 NZ 2.2, 3.5
03	Work to better understand biodiversity and habitat risks and opportunities in procurement. Where possible, apply evidenced standards or engage with 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	23/24		£		Procurement	SC 18.1
04	Continue to engage the staff, patients, and communities in green space initiatives.	Working with patients, staff & communities	On-going		£		Clinical leads & HR	NZ 2.2, 3.5

Figure 23 Green plan action table for Greenspaces

Indicative cost:

- £ No or low cost
- £ Significantly expensive
- £ Moderately expensive

Indicative emissions reduction:

- Low or incremental reduction
- Moderate reduction
- Significant reduction
- Not applicable

Medicines – Volatile Anaesthetic Gases and Inhalers

In addition to carbon dioxide emissions, the NHS clinical activity and prescriptions, such as using inhalers, nitrous oxide and volatile inhaled anaesthetics like desflurane, contribute to 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 which 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

Compact nitrous oxide cylinders attached directly to the back of anaesthetic machines are now used.

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.

Methoxyflurane (Pentrox™) pen-inhalers can be used to treat moderate to severe pain associated with trauma in the 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.



Staff member in Pharmacy. Source: ULHT Library

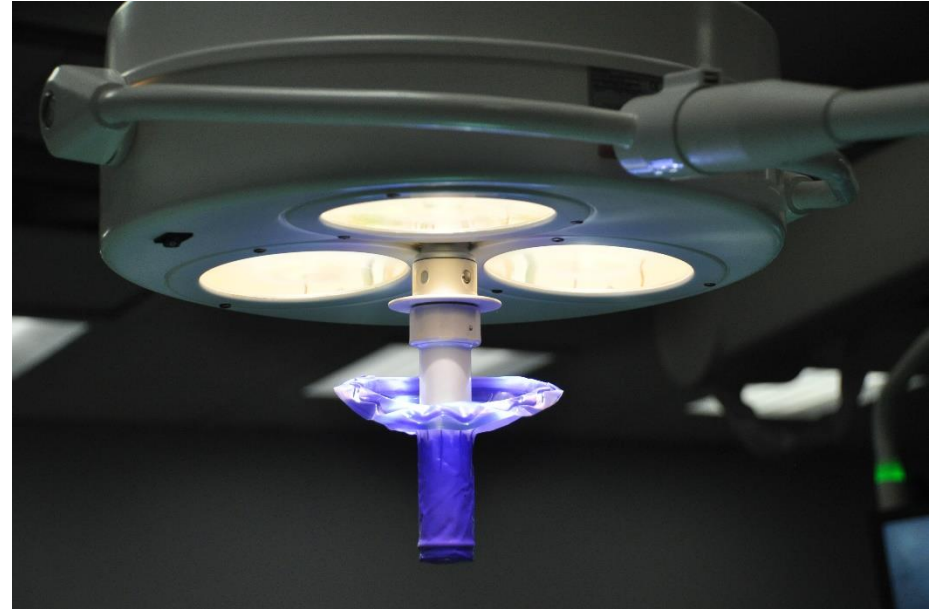
Desflurane

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.

Emissions associated with the Trust's desflurane usage could not be determined due to the unavailability of data. This will be amended in future carbon footprint reporting. There are overarching goals across the NHS to deliver reductions in desflurane usage.



Surgery. Source: ULHT Library

Inhalers

Both Dry-powder (DPI) and Metered Dose Inhalers (MDI) are prescribed. Metered dose inhalers use fluorinated gases as the propellant: in 2020/21, 71% of the inhalers prescribed were MDI's. However, emissions data for inhalers could not be determined due to the unavailability of data. This will be amended in future carbon footprint reporting.

The NHS Standard Contract stipulates that 30% of all inhalers prescribed across NHS England should be DPIs, potentially saving 374 ktCO₂e per year, according to the NHS Net Zero report. The Trust has almost reached this goal, as 29% of prescribed inhalers are DPIs, and endeavours to increase this percentage going forward.

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

Dry-powder inhalers are an appropriate choice for many patients and contain as little as 4% of the GHGs 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!

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 ktCO₂e) annually across the UK, according to a [new study](#).

ULHT will work across the Trust to address disposal and overuse, and work with clinical staff and patients through the [NICE Patient decision aid](#) to help increase the uptake of low-carbon inhalers wherever clinically appropriate.



Pharmacy Nurse. Source: ULHT Library

No	ELTH Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to Achieve	Indicative Emissions Reduction	Responsible lead/dept.	NHS Req.
01	Collate inhaler prescribing data and report quarterly.	Working with patients, staff & communities	22/23		£	✘	Clinical Pharmacy Team	LTP 17
02	Collate volatile anaesthetic gas use data and report quarterly.	Working with patients, staff & communities	22/23		£	✘	Clinical Pharmacy Team	LTP 17
03	Collate methoxyflurane (Penthrox™) use data and report monthly	Working with patients, staff & communities	22/23		£	✘	Clinical Pharmacy Team	LTP 17
04	Work with clinicians and the Clinical Pharmacy Team to enable uptake of alternative inhalers where appropriate.	Governance & policy	22/23		£	💡	Clinical Pharmacy Team	SC 18.6 NZ 3.4.1
05	Explore the procurement and use of nitrous oxide 'cracking' devices.	Procurement; Working with patients, staff & communities	23/24		£	💡	Procurement	LTP 17 SC 18.4.2.2 NZ 3.4.1










06	Switch to methoxyflurane (Pentrox™) in preference to nitrous oxide analgesia/anaesthesia where clinically appropriate.	Working with patients, staff & communities	23/24		£		Clinical Pharmacy Team	LTP 17 SC 18.4.2.2 NZ 3.4.1
07	Work with 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 & communities	23/24		£		Clinical Pharmacy Team	SC 18.6 NZ 3.4.1
08	Set a target of prescribing at least 50% DPIs for all inhaler types.	Working with patients, staff & communities	23/24		£		Clinical Pharmacy Team	NZ 3.4.1
09	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 & communities	24/25		£		Clinical Pharmacy Team	IIF ES-01 LTP 17
10	Set a goal of reducing the average emissions from salbutamol inhalers to 11.1kg per inhaler, where clinically appropriate	Working with patients, staff & communities	24/25		£		Clinical Pharmacy Team	IIF ES-02 LTP 17

Figure 24 Green plan action table for 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 equipment and the estate, and preventing modern slavery in supply chains.

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

Procurement and Climate Action

Supply chain emissions represent a huge portion of ULHT's overall carbon footprint. The Trust has baselined the 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 ULHT to identify the carbon hotspots to plan for actions.

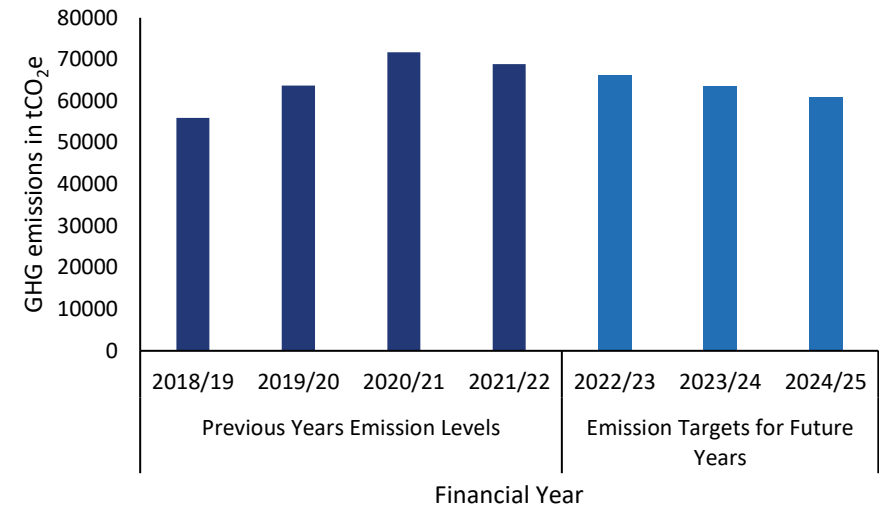


Figure 25 Emissions from the supply chain with reduction trajectory to 2024/25

Supply Chain and Procurement

- Emissions from the supply chain were estimated to be 21,849 tCO₂e in 2020/21 Emissions from the supply chain were estimated to be 21,849 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 environmental and social performance of the Trust's supply chain
- Ensure tenders adopt the new social value procurement note PPN 06/20 and carbon management PPN 06/21 in major contracts in 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

As a Trust, most items and services are procured 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. The Trust cannot control or influence the sustainability aspects of these routes of procurement and will benefit from the decisions made in how these frameworks operate.

In addition, the Trust is a signatory of the NHS Single Use Plastics Pledge since October 2021 and aims to reduce plastic catering consumables by 50 tonnes during 2021/22.

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



Grantham Stores. Source: ULHT Library

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.

PPN 06/020 & PPN 06/021 are procurement policy notices that relate to Central Government Departments, their Executive Agencies and Non-Departmental Public Bodies. However, ULHT as an organisation is not yet directly in scope.

These additional requirements will enable us to determine more accurately the carbon and social impact of the products and services that the Trust buys, and ensure suppliers are reducing the emissions associated with their operations and products.

In the interim, ULHT will explore ways to reduce single-use plastic items and research how reusable items can be incorporated such as masks and aprons into clinical practice.



Porter. Source: ULHT Library

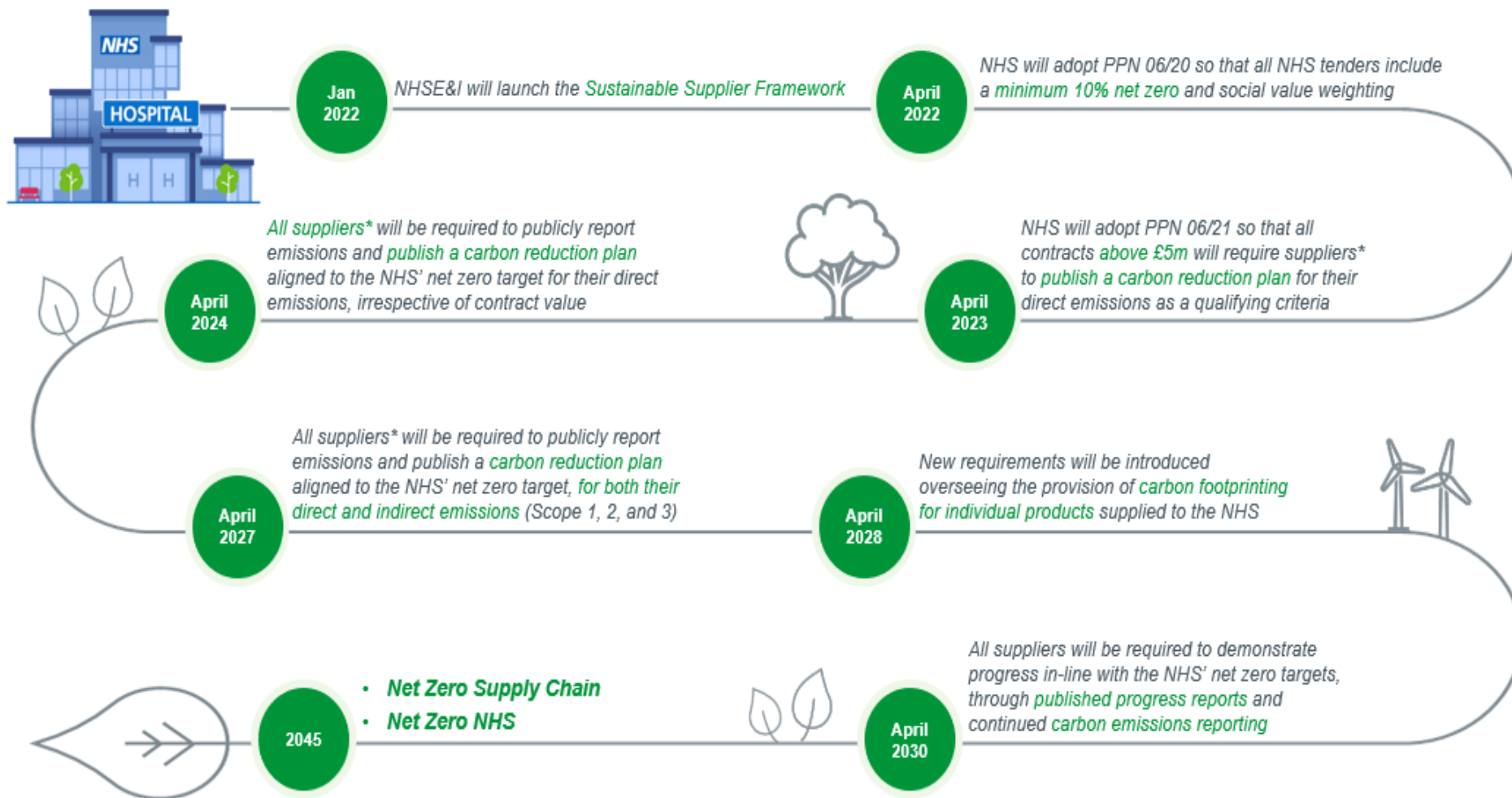


Figure 26 Building net zero into NHS Procurement – shows how NHS England will require all suppliers to provide carbon and social value reporting by 2030

Product retainment and lifecycle extension

Procuring well, ensuring best value for money and social and environmental benefits will remain a core principle for the wider NHS and the 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 the 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, is disposal considered.

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 recycled.

Mobility aids, such as walking frames, crutches and walking sticks, are given to outpatients where appropriate. Unfortunately, once issued, these items are no longer under the Trust's control. Though many outpatients will use mobility aids for the long term, many are only used for weeks or months, and there is no way of reclaiming these mobility aids. Ultimately, these items end up in outpatients' domestic waste. Mobility aids are robust pieces of kit, with long service lives.

Reclaiming, cleaning/refurbishing and reissuing mobility aids will negate useful items being scrapped. However, it is cheaper to buy new items than it is to decontaminate and refurbish at present.



Medical equipment. Source: ULHT Library

Anchor trust role

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

While the Trust cannot reserve spend locally, proactive steps are taken to support inclusive growth, including a policy on the payment of the Real Living Wage for service suppliers.

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 27 Official NHS Sustainable Procurement Objectives Source: website



Lincoln Hospital Main Entrance. Source: ULHT Library

LTP 6.17, 17, 18

SC 18.6

NZ 3.3, 3.3.1

8 DECENT WORK AND ECONOMIC GROWTH



Target 8.3 Promote policies to support job creation and growing enterprises

Target 8.7 End modern slavery, trafficking, and child labour

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Target 12.7 Promote sustainable public procurement practices

13 CLIMATE ACTION



Target 13.2 Integrate climate change measures into policy and planning

No	ULHT Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to Achieve	Indicative Emissions Reduction	Responsible lead/dept.	NHS Req.
01	Review the sustainable procurement approach to find relevant links that enable the Green Plan and work closely with NHS Supply Chain and NHS Improvement to promote their sustainability programmes.	Governance & policy	Ongoing		£	✘	Procurement	LTP 6.17, 17
02	Adhere to the requirements of the NHS Sustainable Supplier Framework.	Governance & policy	January 2022		£	☁	Procurement	SC 18.6
03	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 & policy	April 2022		£	☁	Procurement	NZ 3.3, 3.3.1
04	Ensure tenders adopt the carbon management PPN 06/21 in major contracts in April 2023.	Governance & policy	April 2023		£	☁	Procurement	SC 18.6
05	Ensure the purchase of 100% closed-loop recycled paper.	Core Responsibilities	22/23		£	☁	Estates and Facilities	SC 18.6
06	Identify wider social, economic and environmental benefits for the local community and population when considering the purchase and specification of products and services,	Governance & policy	23/24		£	✘	Procurement	SC 18.6







	discussed and agreed with the Coordinating Commissioner.							
07	Create a new system for cataloguing and reclaiming mobility aids and other devices from patients.	Governance & policy	23/24		£		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	23/24		£		Estates and Facilities	NZ 3.3, 3.3.1
09	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	23/24		£		Procurement	SC 18.6
10	Explore the creation of an ISO 20400 Sustainable Procurement Strategy.	Procurement	23/24		£		Procurement	SC 18.6
11	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	24/25		£		Procurement	NZ 3.3, 3.3.1
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 & communities	Ongoing		£		Procurement	LTP 18

Figure 28 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 promoting plant-forward diets and reducing unhealthy options like sugary drinks on NHS premises. For this reason, the Trust only provides diet drinks in vending machines. Not only will these actions help prevent obesity and non-communicable disease, but they will also play a role in reducing greenhouse gas emissions and environmental impact.

Food production accounts for up to 26% of global greenhouse gas emissions¹. Food and livestock production has a huge impact on biodiversity as well, and according to research collected by [Our World in Data](https://ourworldindata.org) “of the 28,000 species evaluated to be threatened with extinction on the International Union for Conservation of Nature (IUCN) Red List, agriculture and aquaculture is listed as a threat for 24,000 of them”.²

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 Lincolnshire communities and reducing the emissions associated with food transport.

ULHT will work to fulfil Long Term Plan priorities for food provision on the premises, promoting plant-forward diets, higher

welfare and more sustainable food options, and supporting regional producers wherever possible.



LCH Kitchen staff. Source: ULHT Library

From September 2020 until September 2021, the Trust served 1,124,534 meals (3 meals per day), or on average 93,711 meals

¹ <https://ourworldindata.org/environmental-impacts-of-food>

² Source: Poore, J., & Nemecek, T. (2018). [Reducing food's environmental impacts through producers and consumers](https://doi.org/10.1126/science.1250118). *Science*, 360(6392), 987-992. Via <https://ourworldindata.org/environmental-impacts-of-food>

per calendar month. In previous waste audits, it has been ascertained that 4.5% of all meals end up as waste.

The Trust offers a wide choice of meals for inpatients, including vegetarian and vegan options and other dietary requirements.

After signing the NHS' Single Use Plastics Pledge, the Trust has planned to work with the NHS Supply all the single-use plastic products from the catalogue and aspire to work with the Trust's supplier to use Vegware products made from plants. ULHT endeavours to eliminate polystyrene, plastic cutlery, and purchase reusable cups in the near future.

The menu itself is changed annually, with food cooked in house at Lincoln County Hospital and Pilgrim Hospital. The menu is currently paper-based, but digital menus will be explored in the future. Menus for staff are made available weekly on staff social media channels.



PBH Kitchen staff. Source: ULHT Library

LTP 2.18, 17

SC 19.1, 19.2, 19.3

NZ 3.3.2



Target 2.2 End all forms of malnutrition (including obesity)



Target 3.4 Reduce mortality from non-communicable diseases and promote mental health



Target 13.2 Integrate climate change measures into policy and planning



Target 14.4 Sustainable Fishing

No	ULHT Green Plan Actions	Trust Area	Target Year	Progress	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 ULHT's local area, and reach Net Zero emissions.	Governance & policy	On-going		£	✘	Catering Services	LTP 2.18, 17 SC 19.1, 19.2 NZ 3.3.2
02	Explore a digital meal system for at least one NHS site to enable accurate meal planning and reduce food waste.	Core responsibilities	22/23		£	☁	Estates and Facilities & Catering Services	NZ 3.3.2
03	Phase in more Plant-forward diets and other updated NHS requirements and explore greater seasonal menu changes.	Governance & policy	23/24		£	☁	Procurement & Catering Services	LTP 2.18
04	Limit sugary drinks sales at Trust facilities and fulfil other updated NHS requirements.	Core Responsibilities	23/24		£	☁	Catering Services	SC 19.3
05	Work with NHS Supply Chain to ensure positive impacts from contract management and maintain updates to Government Buying Standards sustainable food criteria.	Procurement	23/24		£	☁	Procurement & Catering Services	SC 19.3






06	Work with regional partners to identify opportunities for local and SME food producers.	Procurement	22/23		£		Procurement	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	23/24		£		Facilities & Procurement	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	23/24		£		Procurement	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 & communities	On-going		£		TBC	LTP 2.18 SC 19.1, 19.2 NZ 3.3.2

Figure 29 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

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 Disease, may also impact Lincolnshire's communities. The Pilgrim Hospital site is situated on low level land, which makes flooding a significant risk.

It is therefore important that the Trust examines the potential risks and ensure that buildings, systems and processes are adapted to cope with the possible impacts of increased flooding, heat waves and storm damage. Adaptation planning is an opportunity to ensure a cohesive approach to current and future planning. The process of developing these plans should integrate with the development and refinement of emergency preparedness and business continuity plans.

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

The Trust already engages with other public authorities and partners in tackling extreme weather events, such as flooding. ULHT will analyse these risks and develop actions for care delivery, estate planning and management, including flood risks across the estate and service area.

Climate change has serious implications for health, wellbeing, livelihoods, and society. Its direct effects result from rising temperatures and changes in the frequency and strength of

storms, floods, droughts, and heatwaves — with physical and mental health consequences ([The Lancet, 2017](#))

The NHS Long Term Plan reinforces the requirement to embed resilience and sustainability into the Trust's healthcare services. Climate change adaptation is critical to achieving this. The impacts of climate change on health, services, infrastructure and ULHT's ability to cope with extreme weather events will place significant additional demands on services in the future.

Climate change adaptation in the NHS is about organisational resilience and the prevention of avoidable illness, embracing every opportunity to create a sustainable, healthy and resilient healthcare service. Reducing the Trust's impact on the environment may not only help to mitigate climate change, but reduce the organisational running costs, ensure business continuity, and reduce health inequalities. Above all, it's about ensuring that the NHS and the Trust's buildings, services, staff and patients are prepared for what lies ahead.

United Lincolnshire Hospitals NHS Trust will work with partner organisations and other public sector organisations to develop a climate change adaptation plan to mitigate the consequences of climate change in respect of health and service delivery.

“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	ULHT Green Plan Actions	Trust Area	Target Year	Progress	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 & policy	23/24		£	Trust Board	LTP 17 SC 18.4.2.3 NZ 1
02	Embed Climate Change as a strategic risk within the corporate risk register and manage appropriately	Governance & policy	23/24		£	Business Continuity	SC 18.4.2.3 NZ 1
03	Create an ISO14090 Climate Change Adaptation Plan, including plans for adapting the 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 responsibilities	23/24		£	Business Continuity	SC 18.4.2.3 NZ 1
04	Work with NHS Supply Chain to better understand the climate change risks in the supply chain and proactively seek to make the supply chain 'climate-ready'.	Procurement	23/24		£	Procurement	SC 18.4.2.3 NZ 1
05	Embed and adapt existing health-related contingency planning, such as Flooding Plans to reflect predicted climate change impacts.	Working with patients, staff & communities	23/24		£	Business Continuity	SC 18.4.2.3 NZ 1

06	Incorporate newly emerging climate-related health care risks into contingency planning, such as the increasing prevalence of Vector Borne Diseases	Working with patients, staff & communities	23/24		£	Business Continuity	SC 18.4.2.3 NZ 1
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Figure 30 Table to show green plan actions for climate adaptation

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.

Adequate budgets and resources will be allocated to achieve the Trust's goals and deliver sustainable care. The Trust will look to achieve the 'quick wins' first, although significant investment will be required in future years, especially in making ULHT's buildings 'climate-ready'.

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

ULHT's dedicated workforce is core to its care provision and delivery of this Green Plan. With the necessary structures in place, it will be the people and service users who will drive the changes to make us a more sustainable organisation. The Trust will continue an open dialogue with all stakeholders to improve the Green Plans and the delivery of care.

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This Green Plan was created for United Lincolnshire Hospitals NHS Trust in partnership with Inspired PLC.

