



The Leeds
Teaching Hospitals
NHS Trust

The Green Plan

2025-28

(Blue Box) Agenda Item 14.3(i)

HEALTHIER PLANET
HEALTHIER PEOPLE



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Foreword

As the executive lead for sustainability, I am delighted to introduce our Green Plan, which details how The Leeds Teaching Hospitals NHS Trust will support the NHS to become the world's first net-zero health service.

The Trust's vision is to be the best for specialist and integrated care and improve the health of our patients through the provision of high-quality care. We acknowledge that high quality care is also low carbon care, and this is now reflected in our newly established corporate commitment on sustainability and greener care.

We recognise that if we are to provide the best possible care to our patients and improve their quality of life, we need to significantly reduce our impact on the environment. In 2019, Leeds City Council declared a climate emergency; since then, organisations and individuals across Leeds have come together to work towards a collective goal of making Leeds a zero carbon, nature friendly and socially just place to live, under the name Climate Action Leeds.

This Green Plan builds upon the previous two Green Plans we have published and identifies a framework of interventions that are needed to help us become one of the greenest NHS hospital Trusts in the UK and, as an Anchor Institution, play a vital role in reducing carbon emissions across Leeds.

With the NHS contributing 5% of all UK carbon emissions, we must recognise that we are a significant part of the problem and that we can also be a significant part of the solution.

Reaching net-zero is a key agenda at present, and the Trust has incorporated sustainability measures into the day-to-day running of our hospitals for several years. We know that to reach our target of becoming net-zero by 2040, we will have to make some tough decisions and introduce radical changes. The key to our success will be our people and ensuring everyone understands the important role they can play both individually and within their CSUs.

This work has not been done in isolation and requires strong collaboration between a large number of disciplines. I'd like to express my personal thankyou to the Strategic Sustainability Group and the many colleagues across our organisation actively engaging in our Greener Care Network, and finally a special thanks to our dedicated Sustainability & Lean 2 Green leads.



Craig Richardson
*Executive Director:
Estates & Facilities*

Introduction

Sustainability at LTHT

The Leeds Teaching Hospitals Trust (LTHT) aspires to become one of the greenest NHS Trusts and has set a clear commitment to improving sustainability throughout our organisation and the wider region.

At LTHT, we recognise the enormous challenge climate change presents to Leeds and the impacts it is having and will continue to have for our patients. We have therefore undertaken significant work to reduce our contribution to climate change in recent years, including publishing a Carbon Management Plan (CMP), Sustainable Development Management Plan (SDMP), Estates Decarbonisation Strategy (EDS), Travel Plan, Greener Care Plan (GCP), and now three iterations of our Green Plan. We have also undertaken a Climate Change Risk Assessment (CCRA) and have developed a Climate Change Adaptation Plan (CCAP), which will be published soon.

The Trust has a sustainability team within Estates and Facilities (E&F) which delivers our core environmental services. The Lean 2 Green (L2G) team has expanded over recent years, working collaboratively with a Quality Improvement (QI) Specialist and Clinical Sustainability Leads. We work to progress the sustainability agenda throughout the organisation and implement the aims, ambitions and objectives of previous strategies and within this Green Plan.

Why is the Green Plan Needed?

Climate change poses a significant threat to our environment, increasing the intensity and frequency of extreme weather events for the UK. Many organisations including the UK Parliament and Leeds City Council (LCC) have therefore declared a climate emergency.

Climate change has been deemed the greatest threat to health of the 21st century. The increase in storms, floods, droughts, and heatwaves poses a significant threat to health, increasing cases of cancer and other diseases, and exacerbating the already existent burden on the healthcare sector. The interdependencies between climate and health are widely supported by the medical community, leading the World Health

Organisation (WHO) to state that 'climate change is a health emergency'. The need for healthcare to act on climate change is urgent.

The NHS contributes approximately 4-5% of UK carbon emissions, meaning the role we play in supporting a transition to net-zero is immense. In 2020, NHSE released the ["For a Greener NHS"](#) campaign, which set all NHS organisations two targets to achieve: net-zero by 2040 for the NHS Carbon Footprint, and net-zero by 2045 for the NHS Carbon Footprint Plus. The ["Delivering a Net Zero National Health Service"](#) report was also published, establishing at a high level the services from which carbon emissions must be reduced.

Values, Vision & Objectives

Our Values



Patient Centred

- Climate change is a health emergency.
- We aim to deliver changes which can improve patient care, efficiency and our environmental impact.
- We make patient centred decisions to create holistically sustainable care models.



Fair

- Ensure equitable access to care and treatment, regardless of individual circumstances.
- We seek to understand the perspectives of others, respecting and embracing our differences.
- We champion inclusivity by prioritising fairness and equality.



Collaborative

- We aim to lead by example on sustainability.
- We work in partnership with other Anchor institutions.
- We work with our patients, colleagues, partners and supply chain to support our greater goals.



Accountable

- We provide honest reporting of our environmental impacts.
- We take accountability for action on climate change mitigation and adaptation.
- We take responsibility for addressing our impacts and aim to make sustainability integral to everything we do.



Empowered

- We educate our colleagues to empower them to take action on climate change.
- We support and celebrate the successes of our colleagues in improving sustainability.

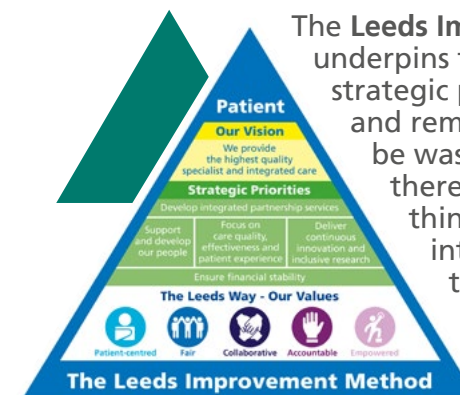
Our Vision

Our vision is to become one of the greenest NHS Trusts in the UK by improving our environmental performance and becoming a holistically sustainable organisation, to provide greater quality care for the communities we serve. Underpinning this vision are our key sustainability **objectives**:

1. Achieve net-zero carbon for our direct emissions by 2040, with an 80% reduction from our baseline year by 2032 at the latest.
2. Achieve net-zero carbon for our indirect emissions by 2045, with an 80% reduction from our baseline year by 2039 at the latest.



This year, we are delighted to be able to say that we have included sustainability as one of our **7 Commitments** at the Trust. Reducing the Trust's carbon footprint supports both environmental sustainability and patient wellbeing. Whether it's the environment around us, future health risks or the wellbeing of our staff and patients, we acknowledge and understand that sustainability has the power to shape the future of our Trust and the communities we work with. We can improve efficiency and patient experience by reducing energy use and waste, aligning not only with national healthcare sustainability goals but also helping prepare the trust for climate-related challenges. With a new focus on greener patient pathways, we are calling upon all colleagues to think about ways in which we can make patient pathways more efficient and sustainable.



The **Leeds Improvement Method (LIM)**, see Figure 1) underpins the Trust's long-term vision and all its strategic priorities. LIM should be used to identify and remove waste in all its forms. Whether this be wasted paper, energy, food or even time, there are always opportunities to improve and think about how we deliver our services. All interventions and projects we undertake at the Trust are measured using LIM, so that we can seek to make sustainability related improvements in the ongoing delivery of our services.

Figure 1: The Leeds Improvement Method (LTHT Strategic Triangle)

Policy Context

The Leeds Teaching Hospitals NHS Trust is committed to achieving net-zero for our NHS Carbon Footprint by 2040 and for our Carbon Footprint Plus by 2045. Delivering this Green Plan in line with National and NHS requirements will ensure we minimise the impacts of our services on the environment and secure wider social, economic and environmental benefits for the community. We also commit to review and participate in regional strategies related to sustainable development wherever appropriate. The Green Plan builds on work already achieved by the Trust since the previous Green Plan, providing an updated position on our achievements and objectives, targets and actions in line with the latest NHS and Government guidance.

National Drivers

In line with the [Climate Change Act 2008](#) (amended 2019), the UK have set a legally binding target to reduce national carbon emissions to net-zero by 2050. Since then, various strategic plans and frameworks have been introduced outlining how this goal can be achieved.

At present, the Labour Government has in place their [Environmental Manifesto](#) which holds the overarching goal of transforming Britain into a 'clean energy superpower'. Some priority areas in which pledges have been made include:

- Zero-carbon electricity system by 2030.
- End all new oil and gas licenses and ban fracking.
- UK as a leader in clean energy and green finance.

The focus of current Government policy is on a movement away from high carbon energy consumption and towards the use of cleaner energy and public and active transport.

NHS Drivers

The NHS has recently published its new 10 Year Health Plan for England, '[Fit for the Future](#)', shortly before the 77th anniversary of the foundation of the NHS. Amongst stressing the importance of financial sustainability and economic growth in protecting the health of the population, the Plan sets out the expectations of hospitals to reduce environmental impact, increase resilience to climate risk, and achieve net zero by 2040 in line with the climate change duties set out in the [Health and Care Act 2022](#).

In 2020, the NHS launched its [For a Greener NHS](#) campaign to address its role in the climate health emergency. This set the two net-zero targets herein described and aims to support Trusts and staff to reduce their emissions and stay on track to achieve net-zero carbon emissions. The [Delivering a Net-Zero National Health Service](#) report was released later that year, providing a practical route to achieving net-zero targets. This outlines the immediate actions all Trusts must take to ensure they achieve net-zero.

More recently, HM Treasury have established requirements for NHS organisations to report, in line with the [Task Force on Climate-Related Financial Disclosures \(TCFD\)](#), their approach to the governance and management of climate change risks, including the setting of appropriate metrics and targets. NHSE have since published its [Climate Adaptation Framework](#), which provides an approach for trusts to build capability in preparing for and responding to climate change.

The [NHS Standard Service Contract](#) outlines the targets and objectives of the NHS regarding sustainability to help assist in reaching goals and ensure organisational resilience in the future. The [NHS Operational Planning and Contracting Guidance](#) document sets out priorities of the NHS for the upcoming year and provides guidance on the actions required. For 2025/26, the guidance emphasises a need to improve the efficiency of patient care, enhance productivity, ensure financial stability, and support system-wide reforms through integrated care systems (ICSs).

Other Drivers

In addition to National and NHS legislation, there are financial, societal, environmental and health drivers for this Green Plan:

Financial

- Reduced energy costs.
- Cost-effective contracts.
- Increased NHS capacity.

Societal

- Sustainable healthcare is expected by surrounding communities.

Environmental

- Protect the environment.
- Prevent the over-exploitation and consumption of natural resources.

Health

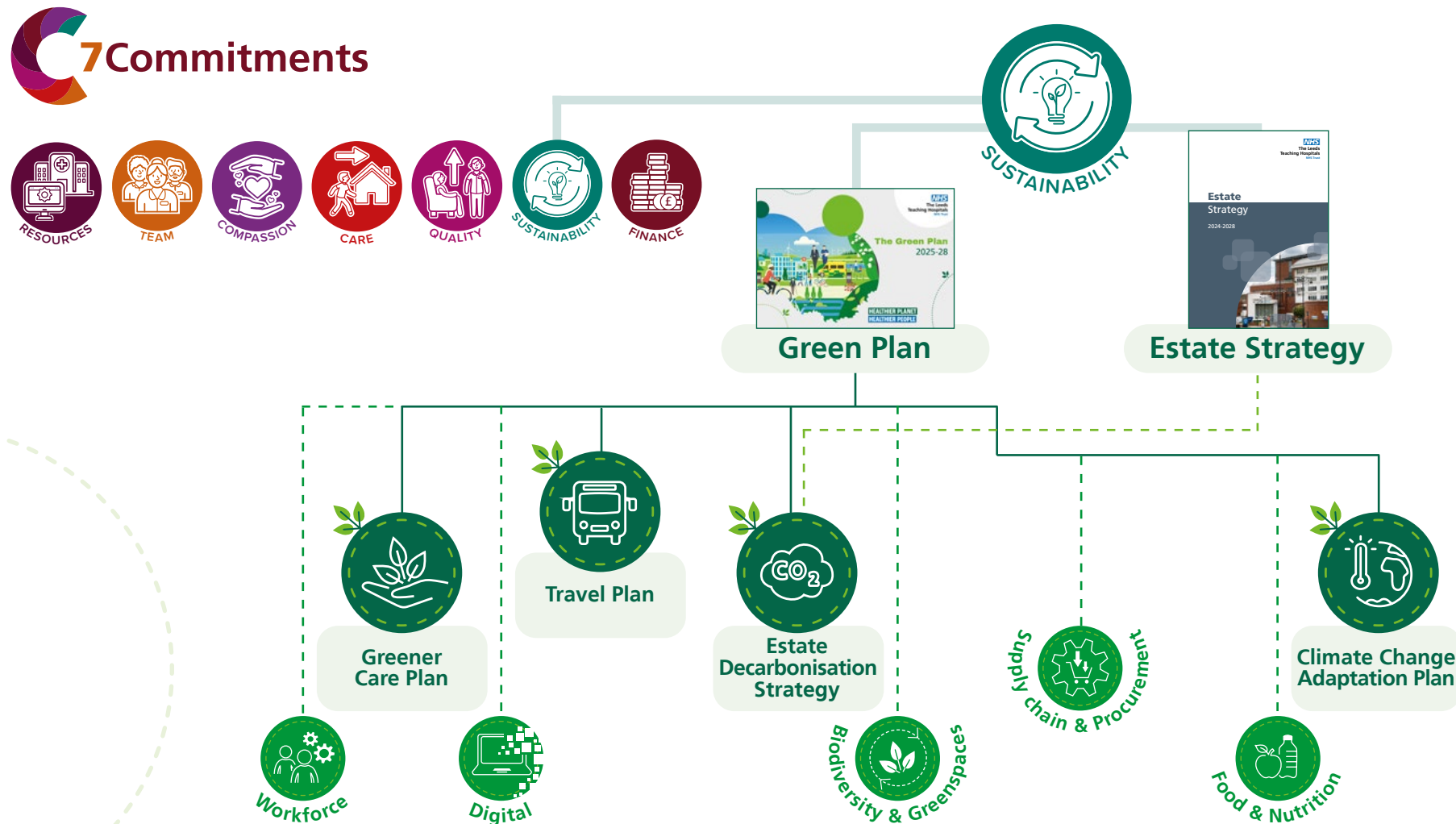
- Climate change impacts health, so tackling this will decrease health inequalities.

LTHT Strategic Drivers

LTHT now has a corporate commitment on sustainability and the provision of greener care. We own and operate several strategies with which our Green Plan aligns. These include:

- Estate Strategy: sets out six strategic goals on how we will achieve a modern, fit for purpose estate. Becoming one of the UK's greenest trusts is of central importance to our plans.
- Estates Decarbonisation Strategy: provides a roadmap to achieve net zero carbon emissions for our operational energy consumption.
- Travel Plan: establishes a framework for facilitating the transition towards sustainable travel modes for staff, patients and visitors.
- Greener Care Plan: details our approach to reducing the carbon impact of our care models and pathways.
- Climate Change Adaptation Plan: provides an assessment of climate change risk and a plan for increasing long-term organisational resilience.

7 Commitments



Our Carbon Footprint

Scope

Our carbon footprint has been developed in accordance with the **NHS Carbon Footprint**. This includes emission sources which can be directly controlled and strongly influenced by the Trust, encompassing the following scopes and aspects:

Scope 1	Scope 2	Scope 3
Gas	Electricity	Inhalers
Oil		Water
Anaesthetic Gases		Non-Clinical Waste
Fleet & Leased Vehicles		Clinical Waste
		Business Travel

For the emissions from these sources, the Trust is required to achieve **net-zero by 2040**, with an **80% reduction** from our baseline year by **2032**.

The **NHS Carbon Footprint Plus** includes the emissions from the above sources, in addition to those from the supply chain, such as the procurement of medicines. For these emissions, the Trust is required to achieve **net-zero by 2045**, with an **80% reduction** from our baseline year by **2039**.

The Trust does not yet report its Carbon Footprint Plus. Work has been undertaken to calculate our emissions for standalone years, but variations in methodologies and the limited provision of data by suppliers means we are currently unable to accurately report our emissions from these sources. We are continuing to develop methods to monitor these aspects and understand our wider emissions profile.

Methodology

The Trust's carbon footprint is measured by recording annual emissions of carbon dioxide equivalent (CO₂e). Our CO₂e emissions for the year 2013-14 are currently used as the baseline year against which we are monitoring progress towards our carbon reduction targets, as this is the earliest year in which we have been able to obtain a full data set. We acknowledge the Climate Change Act 2008, on which The Health and Care Act 2022 is based, requires us to achieve our carbon reductions from a baseline year of 1990. We therefore believe we have made further progress on our net-zero targets than is currently presented within our Green Plan and are currently developing a methodology to enable us to calculate our historical emissions between 1990 and 2013.

The data used for our carbon footprint has been taken from measured resource consumption. Our emissions data has been calculated by multiplying actual consumption data (e.g. kWh electricity) by a carbon emissions conversion factor. All carbon conversion factors are sourced from the Department for Energy Security and Net-Zero (DESNZ), Office of National Statistics (ONS) greenhouse gas emissions intensity by industry, and peer-reviewed academic research. The result provides the annual CO₂e emissions for each source within the monitoring framework. The unit of tonnes of carbon dioxide equivalent (expressed as tCO₂e) is used, which includes all greenhouse gases (not just carbon dioxide) and expresses it as a single unit.

Since the publication of our previous Green Plan, we have revised our carbon footprint to include data on several aspects which had previously not been recorded. This includes nitrous oxide (pure and Entonox) and dry powder inhalers (DPIs), meaning the emissions given in this Green Plan (2025-28) will differ from those published in previous years.

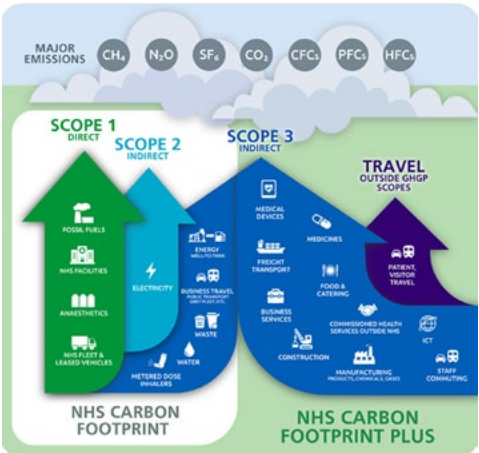


Figure 2: NHS Carbon Footprint & Carbon Footprint Plus

In our baseline year of 2013-14, we produced 91,892 tonnes of CO₂e (tCO₂e). Scope 1 emissions were the greatest contributor to this, accounting for 72,199 tCO₂e and making up 79% of total emissions. We produced 7,942 tCO₂e of Scope 2 emissions and 11,751 tCO₂e of Scope 3 emissions in the baseline year.

During the baseline year, gas consumption made up 58% of total emissions at LTHT and anaesthetic gas use contributed to 20% of our total emissions during this year. The sum of other utilities (electricity, water and oil use) amounted to 23% of total emissions, and business travel made up 5% of the total. Additionally, waste including both clinical and non-clinical waste streams made up a total of 6% total emissions. Inhalers and fleet vehicles individually accounted for less than 2% of total emissions during our baseline year.

Carbon Performance

The Trust has undertaken a significant programme of interventions since 2011 to reduce our carbon footprint and improve our overall environmental impact. With the adoption of our SDMP in 2017 and Green Plans in 2020 and 2022, we have had a renewed focus on tackling these emissions, reducing air pollution and minimising waste. The interventions taken have led to an overall reduction in the Trust's total annual emissions, which is supporting our ambition to become net-zero by 2040. This section discusses our overall progress since our baseline year of 2013, and details the carbon performance of each key aspect.

Year	Carbon Footprint (tCO ₂ e)	Percentage Change Against Previous Year (%)	Percentage Change Against Baseline Year (%)
2013 - 14	91,892	0.0	0.0
2014 - 15	93,867	2.1	2.1
2015 - 16	94,471	0.6	2.8
2016 - 17	90,065	-4.7	-2.0
2017 - 18	83,058	-7.8	-9.6
2018 - 19	78,654	-5.3	-14.4
2019 - 20	71,816	-8.7	-21.8
2020 - 21	62,945	-12.4	-31.5
2021 - 22	60,453	-4.0	-34.2
2022 - 23	60,445	0.0	-34.2
2023 - 24	59,101	-2.2	-35.7
2024 - 25	59,055	-0.1	-35.7

Table 1: Reduction in Carbon Emissions since the 2013 Baseline Year

As shown in Table 1, the Trust has achieved a 35.7% reduction in total annual emissions since the baseline year of 2013-14, from 91,892 tCO₂e to 59,055 tCO₂e. Whilst this reduction resembles great progress, it is evident that our carbon performance in recent years has plateaued, with a reduction of only 2.3% in the last 3 years. When our previous Green Plan was published, we were on track to meet the targets of an 80% reduction by 2032 and net-zero by 2040. Our Trust is now not on track to meet these (see Figure 4). Our newly reported misalignment with the required trajectory is expected, as decarbonisation progress is not always linear, the ability to deliver emissions reductions is reliant on the availability of external funding (which varies annually), and reducing emissions will become more challenging as we approach 2040. Driven by increased demand for our services, the Trust's estate and clinical activity has also grown significantly over the past few years, with the opening of new facilities resulting in higher gas and electricity consumption. Therefore, whilst at an organisational level the Trust's carbon footprint has remained the same for several years, our patient-based carbon footprint has decreased, from 46 kgCO₂e per patient in 2022-23 to approximately 42 kgCO₂e per patient in 2024-25. Our work to calculate our historical emissions from a 1990 baseline will also support our belief that we have made far greater progress than presented within this Green Plan. This, as well as our planned and existing decarbonisation projects, give us the confidence that we will be able to return to our aspired trajectory to achieve our net-zero targets.

Figure 3 shows LTHT total annual emissions since the baseline year (2013-14), by emissions source. Emissions from gas consumption make up the largest proportion of total emissions for each reporting year, accounting for 69% of total emissions in 2024-25 (41,003 tCO₂e). The Trust has achieved a reduction of 12,538 tCO₂e in gas-related emissions since the baseline year, a further 528 tCO₂e reduction compared to 2023-24. The second largest emissions source at LTHT for the years reported is anaesthetic gases including desflurane (now ceased), sevoflurane, isoflurane, nitrous oxide (pure) and Entonox. In 2024-25, emissions from this source accounted for 8% of the total carbon footprint, equivalent to 4,784 tCO₂e. Although they account for the second greatest proportion of our carbon footprint, this source has seen the greatest overall reduction since the baseline year, with a 74% reduction since 2013-14. Electricity consumption was the next greatest emissions source in 2024-25, accounting for 7% of total emissions. All other emissions sources account for 6% or less of the total emissions in 2024-25.

LTHT Total Annual Emissions tCO₂e

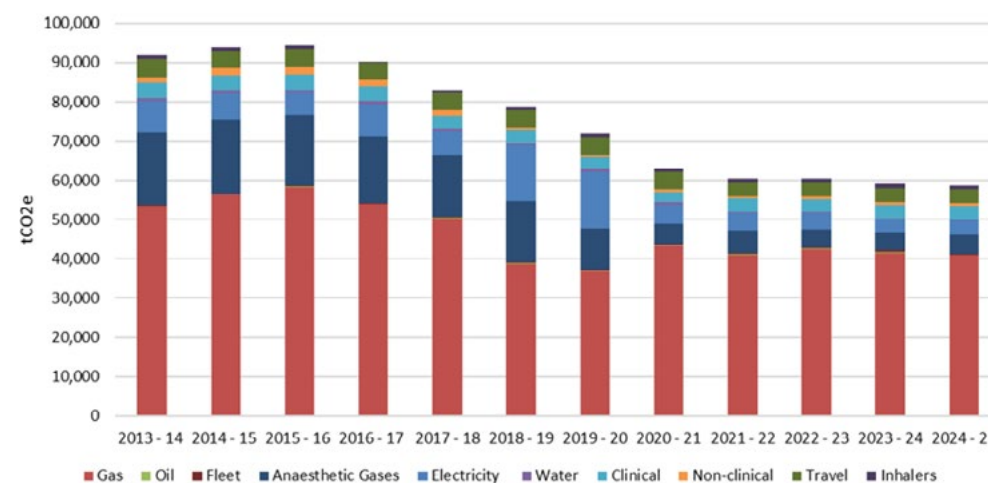


Figure 3: LTHT Total Annual Carbon Emissions since the 2013 Baseline Year by Source

Pathway to Net-Zero

Reducing our carbon footprint to net-zero whilst continuing to provide high quality care to more patients presents a substantial challenge for the Trust. Whilst, until 2022, we were on track to meet our net-zero targets, progress has since slowed (see Figure 4). Our ability to deliver on necessary emissions reductions is heavily reliant on external funding, to ensure sufficient resources and expertise can be accessed. The successful delivery of this Green Plan (2025-28) will shape the success of our efforts.

There are various projects we are set to introduce, which we believe will steer us back onto our aspired trajectory:

- A major development which will be completed this financial year will be the transition away from piped nitrous oxide systems to local, non-piped solutions. We anticipate this will save an estimated annual 1,311 tCO₂e (see Figure 5).
- The implementation of our Estates Decarbonisation Strategy (EDS) will significantly contribute to reduced operational energy-related carbon emissions. The Trust has been successful in securing c. £29m funding for Phases 1, 3a and 4 of the Public Sector Decarbonisation Scheme (PSDS). These projects have focused on introducing building improvements, the integration of renewable technologies, and connections to the low-carbon heat network at SJUH. All these schemes, implemented between 2021 and 2027, are anticipated to save a cumulative 6,233 tCO₂e per year.
- The implementation of the Hospitals of the Future (HoTF) project, including the building of a new low-carbon hospital at LGI and disposal of existing infrastructure (excluding Jubilee Wing), is expected to reduce the Trust's reliance on fossil fuels such as gas from 2039-40 onwards (see Figure 5).
- The Trust will work alongside the University of Leeds (UoL) to identify decarbonisation opportunities for Generating Station Complex (GSC), a power station shared between the Trust and the University (see Figure 5).

It is important to note that the emissions reductions forecast in Figure 5 pertain only to the projects listed above. There are many other interventions we are currently running and plan to run, the carbon benefits of which will accrue over time but are not yet known. The implementation of an inhaler recycling scheme, the transition towards the use of electric vehicles for our fleet, and various other interventions will all support the Trust to achieve its net-zero targets.

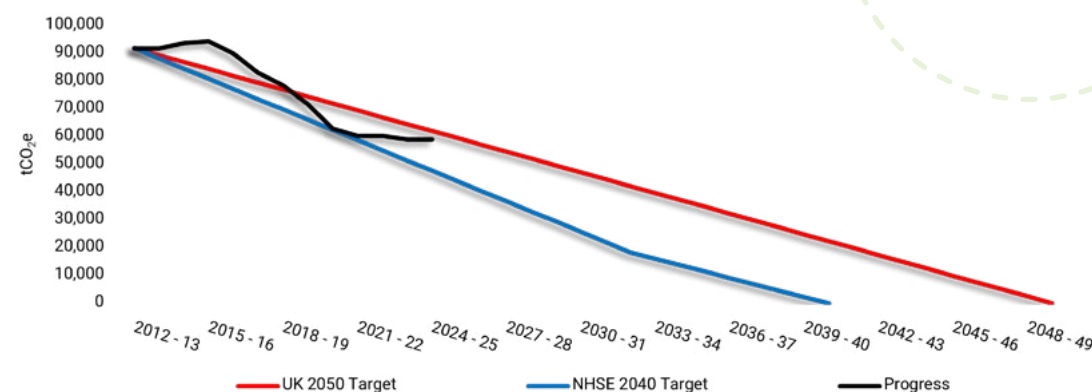


Figure 4: Carbon Emissions since the 2013 Baseline Year against Targets

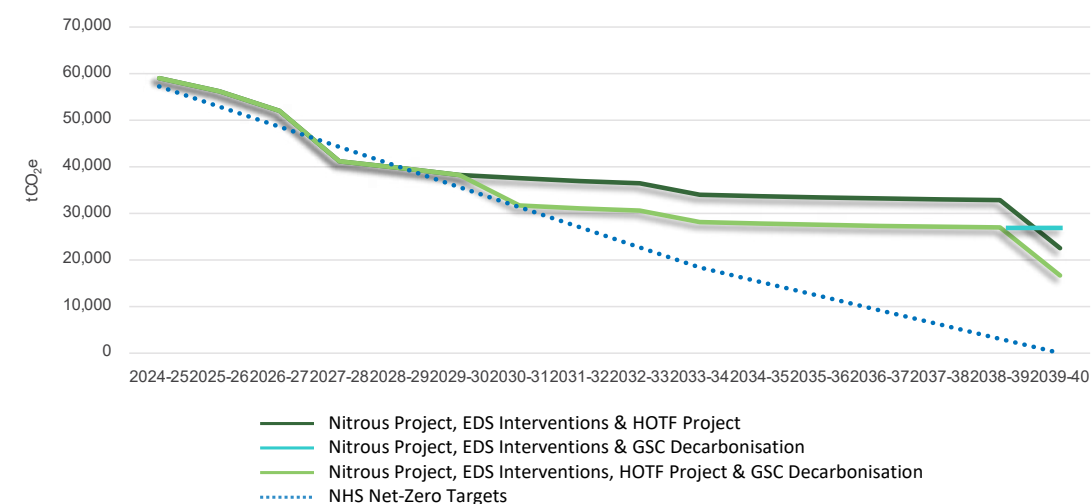


Figure 5: Carbon Emissions Forecast against Targets

Our Challenges & Risks

1. Dependence on Infrastructure Projects, Funding and Backlog Maintenance

Approximately 69% of our reportable carbon footprint is associated with the consumption of gas. Our ability to deliver on emission reduction targets therefore depends heavily on the successful implementation of infrastructure projects across the Trust. However, these projects require a significant amount of investment, so there is a growing financial risk associated with the costs of adapting our systems, services and infrastructure. The current financial constraints faced by the Trust restrict our ability to implement changes. We currently have backlog maintenance costs of approximately £250 million, and the financial resources we do have will always be prioritised on addressing critical infrastructure risks, business continuity and patient safety. Moreover, although we have been successful in our bids for funding so far, it has been announced by the UK Government that the PSDS funding which has been available to support our decarbonisation in recent years is scheduled to be unavailable from 2027. A significant amount of additional investment is needed for us to achieve net-zero by 2040. The Trust will be developing a net zero modelling tool this year to generate costed scenarios for our decarbonisation plan, which will help to identify what the true capital and operational costs of net-zero are anticipated to be. The UK Government have also now confirmed the New Hospital Programme will be delivered through waves of investment, and the Trust has been placed in Wave 2. With the construction of our new hospital unable to commence until 2033, we do not expect to be able to obtain the energy efficiency and carbon benefits until 2039 at the earliest. This presents a significant risk to the Trust in being able to achieve net-zero by the 2040 target date.



2. Climate Change Risk

There is growing risk associated with the increased frequency and intensity of climate events like heatwaves. This will affect service delivery and the ability to manage and maintain the Trust's estate. The Trust's Emergency Planning, Resilience and Response (EPRR) team recognise the risk from climate change, and this is formally recorded on the Trust risk register. Climate change poses significant risks to the Trust and all its services, encompassing our buildings, workforce, and patient safety. Failure to improve our resilience to climate change could limit our ability to provide safe and effective care for patients. In recognition of these risks, we have developed a Climate Change Risk Assessment (CCRA) and Adaptation Plan (CCAP) which has assessed the risks and prepares the Trust for change. The plan contains a list of agreed climate adaptation options to be implemented and be monitored by a newly formed Climate Change Risk Preparedness group (CCPG). We have also undertaken a physical vulnerability assessment to understand how to future-proof the Trust's estates and facilities.

3. Reliance on the Action of Suppliers

The delivery of our services relies on the procurement of a huge variety of goods, works, and services. Medical devices and equipment, medicines, ICT, construction, manufactured products and commissioned healthcare services, although essential, each contribute to our scope 3 emissions as part of our Carbon Footprint Plus. Our progress towards net-zero relies heavily on our suppliers reducing their carbon impact to ensure the goods and services we procure produce the smallest impact possible. This risk increases in cases where the Trust has already signed onto long-term contracts and agreements which do not currently consider carbon reduction, and which will therefore make the implementation of changes challenging.

In response to this risk, we have signed onto the [NHS Evergreen Framework](#), which requires all procurements to include a minimum 10% net-zero and social value weighting. We are also working in line with the [NHS Net-Zero Supplier Roadmap](#) and request carbon reduction plans from clinical suppliers for contracts of any value. In situations where suppliers fail to improve their sustainability, it is important we look elsewhere where possible to source items from more environmentally conscious suppliers.

Our Sustainable Action Plan

The Trust has developed a comprehensive **Sustainable Action Plan (SAP)** which requires us to implement a range of actions between 2025 and 2028. This builds upon the actions taken in our previous Green Plans and has been updated to ensure actions are SMART and material to our strategic objectives.

The implementation of the SAP will help the Trust drive continual, incremental reductions in carbon emissions and improvements in our performance on broader sustainability issues, to support our overall ambition to become one of the UK's greenest trusts.

The SAP is split into 9 'areas of focus', in line with NHS England's Green Plan guidance.

- [Workforce & System Leadership](#)
- [Net-Zero Clinical Transformation & Medicines](#)
- [Digital Transformation](#)
- [Travel & Transport](#)
- [Estates & Facilities](#)
- [Biodiversity & Green Spaces](#)
- [Supply Chain & Procurement](#)
- [Food & Nutrition](#)
- [Adaptation](#)

The SAP has been developed through an extensive exercise of engagement with colleagues and wider stakeholders to understand the opportunities for improvement and best practice which can be scaled up across the Trust. The SAP is also aligned to our ICS Green Plan and Greener NHS requirements.

Due to the detailed nature of the SAP, it is not presented fully within this document. Instead, it will act as an internal framework which the Trust will use to guide and monitor the implementation of our actions. An overview of each of the key strategic objectives for each area of focus is presented across the following pages.



Workforce & System Leadership

Engaging, developing, and supporting our workforce and system leaders to learn, innovate and embed sustainability into everyday actions.



Net Zero Clinical Transformation & Medicines

Ensuring high-quality, preventative, low-carbon care is provided to patients at every stage, including reducing "point of use" emissions whilst improving patient care and reducing waste.



Digital Transformation

Prioritising sustainability in the procurement, design and management of digital services and harnessing technology and systems to streamline service delivery, optimise resources and reduce carbon.



Travel & Transport

Working to reduce carbon emissions from travel and transport through the provision and promotion of sustainable travel modes, while providing cost saving and health benefits.



Estates & Facilities

Reducing the carbon emissions arising from the organisation's buildings, infrastructure, and facilities, including sustainability considerations for capital projects, waste, and utilities.



Biodiversity & Greenspaces

Improving the quality, quantity and access to our greenspaces, and improving our monitoring of biodiversity across the estate.



Supply Chain & Procurement

Embedding circular solutions, such as using reusable, remanufactured or recycled solutions by engaging with our suppliers on our sustainability and net-zero commitments.



Food & Nutrition

Delivering high-quality, healthy and sustainable food and minimising waste.



Adaptation

Working with our partners to build resilience and adaptation into business continuity and longer-term planning to avoid climate-related service disruption.

Workforce & System Leadership



Case Studies

Carbon Literacy Training

Following the completion of [Carbon Literacy \(CL\)](#) training by Estates and Facilities (E&F) colleagues, LHTT became the first NHS Hospital Trust to achieve Carbon Literacy Organisation (CLO) status. CL training is an externally accredited training programme designed to educate individuals on climate change and carbon emissions and empower them to take actions to reduce their individual and organisational impact. CL training has now been provided to a significant number of senior E&F colleagues, as well as groups of staff in theatres and anaesthesia, intensive care, procurement, and other high-impact CSUs. To mark COP29, our CEO Phil Wood held a presentation at one of our Team Briefs entitled 'LHTT in Solidarity with a Greener World'. Additionally, in collaboration with the [University of Leeds](#) as part of the [HealthTech Research Centre in Accelerated Surgical Care](#), CL training has been delivered to suppliers and patients to promote the importance of sustainability amongst the stakeholders we need to support us in our aims. The trust has now committed to delivering CL training to staff on a monthly basis, and this year, we plan to ensure the Trust's Board undertakes CL training. Examples of the various pledges made by our staff from our training sessions over the years can be seen in Figure 6.

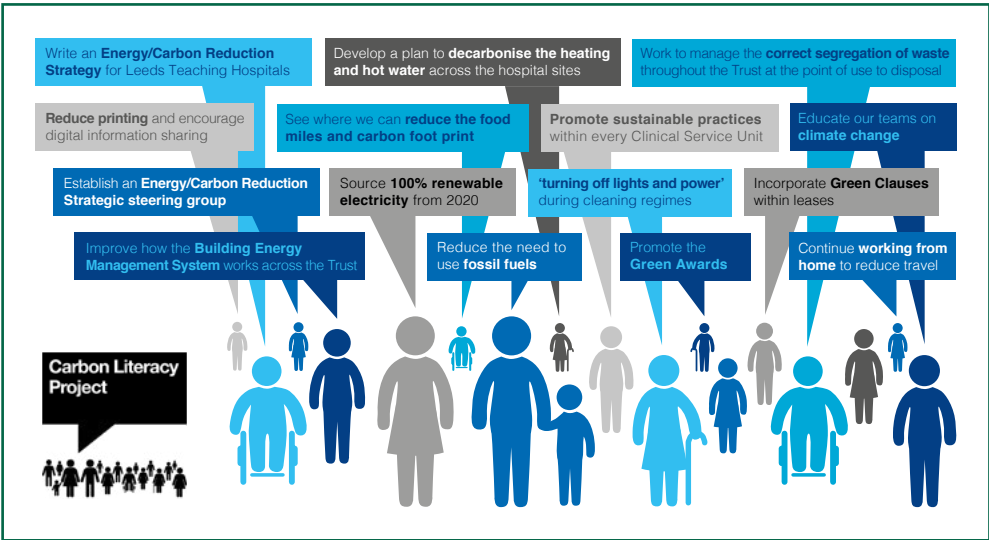


Figure 6: Carbon Literacy Pledges made by LHTT Staff



Figure 7: Carbon Saved (kgCO2e) by LHTT Staff between July 2024 and May 2025

Greener Care Rewards

Multiple behavioural change campaigns have been developed over time to encourage a cultural shift towards greener care provision. Colleagues have successfully led several environmental improvement initiatives in areas including waste, energy, water and travel. Campaigns have encouraged colleague involvement in environmental schemes, across all departments and levels.

The [Greener Care Rewards](#) scheme was introduced as a programme to promote sustainable behavioural change by providing opportunities for staff engagement and recognition. Actions include the likes of switching off equipment when not in use, travelling actively and by public transport, eating meat-free meals, and using reusables instead of single-use items. Over 600 colleagues are now part of this growing campaign, and so far, their actions have avoided approximately 53,901 kgCO2e. This is the equivalent of powering over 23,200 UK-based homes for an entire day – about the same number of staff who work for LHTT!

Achievements

- We became the first NHS Hospital Trust in the world to achieve Carbon Literate Organisation (CLO) status, with E&F holding CLO Silver accreditation.
- Over 150 colleagues are now certified as Carbon Literate.
- We deliver waste training sessions to colleagues on a regular basis to improve the segregation of waste by staff.
- Our Strategic Sustainability Group (SSG), which meets every two months to monitor the progress made against the Green Plan, have been successful in implementing a total of 83 actions from our previous Green Plan (2022 – 25).
- In 2023, we presented our Green Plan and progress at Yorkshire Sustainability Festival, engaging stakeholders across the region in our carbon reduction journey.
- We have successfully engaged many staff, patients, and visitors in the Trust's green agenda by hosting a promotional stand in Gledhow Wing of St. James University Hospital on annual E&F Day for 3 years running.



What do we want to achieve by 2028?

1. In line with our new **7 commitments**, engage the wider workforce with our ambitions for sustainability, including developing leadership for the sustainability agenda within care provision, models, and pathways.
2. Integrate sustainability in staff wellbeing initiatives.
3. Collaborate with our partner organisations to deliver broader sustainability goals.



How will we achieve it?

- Continue to provide sustainability and climate change training throughout the Trust, to colleagues and organisational leaders.
- Expand colleague engagement opportunities in sustainability e.g. through Greener Care Network participation, providing virtual rewards and recognition such as badges and a Time to Shine award category, and promoting best practice.
- Continue to listen to and act upon the views of our stakeholders on our sustainability aims, objectives, and plans.
- Work with our suppliers to facilitate more sustainable choices by staff.
- Highlight the importance of integrating social and environmental aspects into external engagement programmes.
- Using our clinical sustainability team, actively develop resource to undertake sustainability projects.
- Support student placements and identify educational opportunities to ensure future employees understand sustainability.
- Continue to assess the carbon impact of our projects and include them in our reporting.

How will we measure it?

- Through the **Leeds Improvement Method (LIM)**.
- % of staff and leaders completing Carbon Literacy training.
- % of staff involved in the Greener Care Network and Rewards scheme.
- % of staff aware of the Green Plan and sustainability governance routes.
- Number of sustainability projects completed by staff.
- Response rates to stakeholder surveys.

Net-Zero Clinical Transformation & Medicines



Case Studies

Surgical Tray Rationalisation Scheme

In collaboration with researchers, multidisciplinary theatre team at LHT carried out a project to rationalise the number of instruments used on surgical trays for laparoscopic appendicectomy operations, successfully reducing the number of instruments from 119 to 49. Using these streamlined trays, the time of a typical surgical procedure decreased from an average of 26 minutes to 18 minutes. These trays are sterilised at high temperature, so more can be sterilised together by making them smaller, and transporting lighter trays produces less carbon emissions. These trays are now routinely used across the Trust, saving a total of 418.4 kgCO₂e per surgery.

Cool Metal Sticks as a Replacement for Ethyl Chloride

Ethyl Chloride has been used by LHT to test the effectiveness of local anaesthetic in procedures such as c-sections and upper limb surgeries. However, it has a high carbon footprint and is a costly single-use resource. In 2023, LHT trialled cool metal sticks in the hand surgical and obstetrics units at Leeds General Infirmary (LGI). This led to the adoption of 70 metal sticks, which have nearly eliminated ethyl chloride use in theatres and anaesthesia. Pharmacy have since stopped ordering ethyl chloride, with savings of £38,400 and 27.13 tCO₂e annually from substituting 1,600 bottles with just 40 reusable sticks.

Walking Aid Recycling

LHT is now collecting and reusing aluminium crutches and zimmer frames and partnering with Leeds City Council to improve our recycling rates. Over 7 months of this project, we successfully collected and recycled a total of 686 walking aids, saving approximately £5,500 and 7,000 kgCO₂e. The Trust is now exploring further opportunities and planning new recycling points across its hospitals and the wider city region.



Achievements

- Developed a **Greener Care Plan** to inspire the engagement of our clinical staff on sustainability and carbon reduction.
- LHT had completely phased out the use of Desflurane by March 2022, saving the Trust an annual approximate 4,052 tCO₂e. Following this cessation of its use, in the last 3 years the remaining bottles have been exhausted and safely disposed of.
- Implemented the **Lean2Green** initiative, led by QI/LIM and clinical leads at the Trust, which has successfully introduced a variety of cost-and-carbon-saving projects. These include:
 - **Medicines Returns:** this project, which aims to ensure other waste types are not disposed of in receptacles designed for medicine returns, saved the Trust an estimated total of £432,507 and 6.5 tonnes CO₂e in 2024. Three new pharmacy support technicians have been recruited to support greener medicines.
 - **Inhaler Switch:** this project, which aims to change prescribing habits away from metered dose inhalers (MDIs) towards more sustainable respiratory care options such as dry powder inhalers (DPIs) with updated guidelines, ePMA protocols and education, saw a total of 1,191 inhalers collected in 2024, with a carbon saving of 9.9 tCO₂e.
 - **Nitrous Oxide Optimisation:** £35,000 of funding has been secured for the closure of the nitrous oxide manifolds across the Trust. Nitrous will soon be supplied in localised canisters where required. Our work will massively reduce the wastage of nitrous oxide, as well as saving money on future pipeline maintenance and saving approximately 1,311 tCO₂e.

What do we want to achieve by 2028?

1. Support carbon reduction through reduce, re-use, recycle principles.
2. Provide holistically sustainable care models and patient pathways.
3. Utilise low-carbon and sustainable preferences for clinically equivalent interventions.

How will we achieve it?

- Review, reduce, and optimise the consumption of paper, single-use plastics, and medical items.
- Use sustainable alternatives to single-use items and increase recycling in clinical areas.
- Reduce the carbon footprint and optimise the use of medical gases.
- Promote sustainable practices by fostering environmental awareness amongst staff through targeted campaigns and training.
- Reduce and optimise the consumption of energy in clinical areas.
- Encourage CSUs to optimise and lean clinical pathways in a green way.
- Engage and influence local and regional levels in green medicines initiatives to scope opportunities for continuous improvement and funding.
- Appraise and implement the recommendations from the RPS guidance (where appropriate).
- Progress Northeast & Yorkshire greener medicines carbon reduction initiatives such as Insulin, Pentrox and Inhalers.
- Explore procurement opportunities for greener medicines.
- Ensure resource is available to support the implementation of the Greener Care Plan.

How will we measure it?

- % increase in recycling rates across clinical waste streams.
- Carbon emissions from anaesthetic gases, inhalers, medicines and medical gases (tCO₂e).
- Number of case studies published on green projects and funding opportunities secured.
- Number of members registered to the Greener Care Network (GCN).



Example: The Greener Care Network

Historically, the Trust has run a green champions programme. In 2024, we made the decision to re-brand and re-launch the programme after staff stated they no longer felt it reflected the aims and objectives of the Trust. This has now become the 'Greener Care Network' (GCN) and has re-mobilised the support needed from our staff towards our sustainability and carbon reduction objectives.

The GCN will be the primary body through which staff will be engaged to support the Trust's progress towards sustainable care provision. Sustainability now features at least annually at the Chief Executive's team brief. To promote colleague engagement in sustainability, the Trust has promoted 6 meetings per annum, providing opportunities for colleague contribution and dissemination of initiatives.

Digital Transformation



Achievements

- The Trust operates an Attend Anywhere system. This allows patients to access appointments via phone or video call rather than travelling to our sites to receive services. The movement to virtual appointments has reduced patient travel and associated emissions and air pollution.
- In 2023/24, we replaced 12,000 laptops and PCs with new, more energy efficient alternatives.
- Nurse documentation and medical records have been digitised to improve efficiency for our nursing colleagues, saving the procurement and use of paper, the generation of waste, and consequently, carbon emissions.
- A tool has been set up by our Greener Care Rewards programme to help Trust colleagues calculate their personal carbon footprint saving in their role. This includes monitoring the carbon impact of working from home compared to the Trust.
- We have migrated the application PPM+ to Azure from being run using on-premise servers.
- The Trust's CCIO team have worked to reduce the use of paper forms.
- Work has been undertaken to reduce colour printing and mobile phones provided by the Trust.

What do we want to achieve by 2028?

1. Support remote work for colleagues to reduce the impact of commuting.
2. Optimising the use of telemedicine where possible, to offer greater flexibility to patients and reduce travel time.
3. Continue transitioning to a digital system to drive efficiency and minimise resource consumption from paper, printing and postage.
4. Minimise the potential environmental impacts of the digital transformation.

How will we achieve it?

- Continue to invest in infrastructure to facilitate hybrid meetings and increase access to work from home for colleagues.
- Provide technology to improve speed of administration tasks to free up time spent with patients.
- We shall comply with the Technology Code of Practice which will set out criteria for the sustainable procurement and development of technology.
- Provide digital services and tools to give people more control over their own health and the care they receive from the NHS and extend the NHS app to everyone. This can be used to inform patients about their health, allow them to book appointments and view test results online and provide medical advice and consultations.
- Work to reduce our printer-related footprint through our working group, changing our digital systems to prevent reliance on paper and reducing colour printing.
- Support paperless note taking in departments still utilising paper to take notes.
- Work with data centre suppliers to support them in minimising their carbon impact.
- Consider the lifecycle impacts of digital products and services we are considering purchasing and review the disposal procedures of equipment.
- Explore the potential of Artificial Intelligence (AI) to streamline services and reduce our associated carbon footprint.

How will we measure it?

- Number of remote patient consultations delivered.
- Carbon emissions from paper consumption (tCO2e).
- % digital products replaced with sustainable alternatives.
- Number of services streamlined using AI tools.



Travel & Transport



Case Study

West Yorkshire Mass Transit

Our Travel Steering Group (TSG) recently took part in a public consultation run by [West Yorkshire Combined Authority \(WYCA\)](#) on the region's new West Yorkshire Mass Transit (WYMT) project. The focus of the engagement was to ensure the Trust's views on sustainable travel and easier access to the Trust for staff, patients and visitors were carried through into project plans. The Government has recently allocated £2.1 billion to WYCA to fund the Mass Transit system, which will see a Leeds line run from St James's University Hospital (SJUH) through the city centre to the White Rose Shopping Centre, while another line will connect Bradford and Leeds city centres. The funding is a significant boost for the proposed plans for Mass Transit in Leeds and will boost WYCA's aspirations to commence construction of the first part of the system in 2028.



Achievements

- In 2023, the trust's Travel Plan was published. The Plan provides a site-by-site overview of current active and low-carbon travel options and recommendations for improvements, including the installation of active travel hubs at two of our sites. This plan exceeds the NHS England target for Green Travel Plans to be published by trusts by 2026.
- Travel Plan Coordinator appointed to oversee the Travel Steering Group (TSG) and coordinate bi-monthly meetings between internal and external stakeholders.
- Awarded Silver Cycle Friendly Employer by We are Cycle UK, the international benchmark for active travel culture and infrastructure in the workplace.
- 100% of Trust shuttle buses are low or ultra low emission.
- Business travel emissions have reduced by 942 tCO₂e since the 2013-14 baseline year.
- Annual active travel campaign in place to promote cycle to work schemes across the Trust.
- Two additional cycle stores have been provided at St. James University Hospital (SJUH) near Trust Headquarters and the new Pathology building to promote active transport.
- Salary sacrifice cycle to work scheme in place which offers discounted bike locks, helmets, and other cycling equipment.
- Working with the Step Up a Gear campaign and liaising with WYCA to lobby for better public transport links, such as the West Yorkshire Mass Transit (WYMT) system.
- Staff shuttle bus provides links to all hospital sites, including linking to Leeds Train Station.
- Staff parking permits limited so only colleagues travelling more than 8 miles can access a permit. This aims to encourage staff who live closer to their work site to choose active and public transport modes.
- The findings obtained from our recent travel survey show that approximately 14% of the staff who commute to the Trust by car, use an electric vehicle.
- Advice on personal safety for active transport, and active transport routes, are available for staff on the intranet and are now included in new starter inductions.
- Actively engaged in discussion of the new cycle highway along Great George Street.
- Corporate Metro cards, save £10 p/m on first commuter club, Arriva employee travel club all available for staff.

What do we want to achieve by 2028?

- Encourage active and sustainable travel and improve local infrastructure.
- Improve cycling infrastructure and staff facilities.
- Increase uptake of public transport.
- Decrease vehicle use and promote car sharing.
- Increase electric vehicle uptake and improve EV charging infrastructure.
- Improve parking infrastructure and permit regulations.
- Engage with local and regional stakeholders.
- Improve the quantity and quality of transport related data.

How will we achieve it?

- Undertake annual surveys on staff travel and parking (cars, bicycles, and electric vehicles).
- Partake in awareness initiatives to promote the health benefits of active travel.
- Undertake a green fleet review to identify any areas for action and encourage the adoption of active travel to reduce emissions.
- Continue to work with our local partners to improve active and public transport routes and connections between LTH sites and links to transport hubs, including Leeds Train Station.
- Continue to provide shower and changing facilities to encourage active travel.
- Facilitate the use of electric bikes e.g. by installing electric-bike points, Leeds City Bike stations, or e-cargo bikes for distribution between sites to reduce reliance on taxis.
- Create incentives to promote car sharing as a commuting option.
- Offer only zero-emission vehicles through vehicle salary sacrifice schemes from December 2026 onwards and for fleet and leased vehicles from December 2027.
- A variety of other actions as detailed within our **Travel Plan**.

How will we measure it?

- Annual travel survey for staff, patients, and visitors.
- Number of staff using the cycle to work scheme.
- Number of EV charging points at each site.
- Number of staff accessing discounted public transport passes.
- Number of on-site active travel facilities.



Estates & Facilities



Case Studies

Capital Projects

Sustainability impact and benefits are considered when assessing financial investments into new capital projects. The Trust's business case template has been amended to include criteria around carbon reduction and sustainability. All projects must now be assessed against the Trust's EDS and Green Plan, and the Trust's environmental and sustainability stakeholders should be consulted to validate a project's impact. Projects over the financial threshold of £50,000 are also required to have a carbon and energy assessment undertaken.



Wharfedale Solar Canopy

The Trust has installed a solar photovoltaic canopy over the car park at our Wharfedale Hospital site. The project has cost approximately £1.1 million to install 617 solar panels with the goal of reducing carbon emissions by 43.7 tCO₂e per year, saving the Trust £75,000 annually. The renewable power generation reduces our reliance on the national grid, providing 15% of the hospital's annual operational electricity consumption and contributing environmental and health benefits for the community. The project was made possible through funding from the PSDS.

Leeds PIPES

The Leeds PIPES network is a low-carbon district heating system in Leeds that uses a network of underground pipes to deliver heat and hot water to homes, businesses, and public buildings. It is a key initiative of Leeds City Council aimed at reducing carbon emissions and tackling fuel poverty in the city. In 2023, the scheme as a whole was responsible for an approximate 6,000 tCO₂e reduction in carbon emissions and provided around 430 green jobs across the region. The network primarily utilises heat generated from the city's Recycling and Energy Recovery Facility (RERF) by burning non-recyclable waste, to which LHT now sends its waste instead of landfill. The Trust was successful in securing £22m from PSDS Phases 1 and 3a, which involved disconnecting our steam supply to the Beckett Wing and establishing a bulk transfer connection into the SJUH Low-Carbon Heat Network. The low-carbon heat network now provides heat from multiple sources, including Leeds PIPES, waste heat captured from our CHPs, and heat pumps, to 17 buildings across the SJUH estate, with a further £6.5m funding secured from PSDS Phase 4 to connect 2 additional buildings. This notably includes Bexley Wing, a large specialist Oncology centre amongst other specialist clinical services, and will be delivered over the next 2 years to further reduce our reliance on fossil fuels for the generation of heat and hot water. Connecting SJUH to this network is a key example of LHT's commitment to carbon reduction goals.

Achievements: Estates

- One of the main historical achievements of the Trust has been the refurbishment of our Combined Heat and Power (CHPs) units which supply heat and electricity to SJUH and LGI, improving efficiency and reducing gas consumption, producing less carbon. This is now linked to the Low-Carbon Heat Network to utilise the process' low temperature hot water (LTHW).
- The Trust has secured approximately £29 million in funding through the Public Sector Decarbonisation Scheme (PSDS) for the upgrade of our estate.
- The combined impact of PSDS projects is forecast to reduce our annual carbon emissions by 6,233 tCO₂e.
- The Trust has installed £720,000 worth of LED lighting across our estate.
- Shortlisted for the HSJ Award 'Towards Net-Zero' for our progress and Highly Commended at the IHEEM Awards for Sustainability Project of the Year for our Low-Carbon Heat Network.
- Installed double-glazing to windows, roof replacements, building fabric improvements, and renewable technologies.



Achievements: Facilities & Waste

The total annual CO₂e emissions of clinical and non-clinical waste at the Trust have decreased from 4,039 and 1,458 tCO₂e in 2013-14 to 3,380 and 618 tCO₂e in 2024-25 respectively.

We have a dedicated Waste Manager and team, who in 2024 won an award for Waste Management Team of the Year at The Awards for Excellence in Waste Management.

We have introduced arrangements for the management of the offensive waste stream, and all clinical waste produced is now recorded and reported in line with [NHS England Waste Strategy](#) requirements.

We have implemented upgraded waste streams in line with the [UK Government's Simpler Recycling legislation](#). To ensure successful adoption of this by LHTT colleagues, the Estates and Facilities team have received a briefing surrounding the legislation and the role they play in ensuring its success.

We are taking steps to align our waste management with the NHS England's 20:20:60 rule. This means 20% of waste should be sent for High-Temperature Incineration (HTI), 20% Alternative Treatment (AT), and 60% the Offensive Waste (OW) stream. In the reporting year 2024-25, 14% of waste was HTI, 28% AT, and 58% OW (see Figure 8). We are therefore making good progress towards achieving the waste segregation rule.

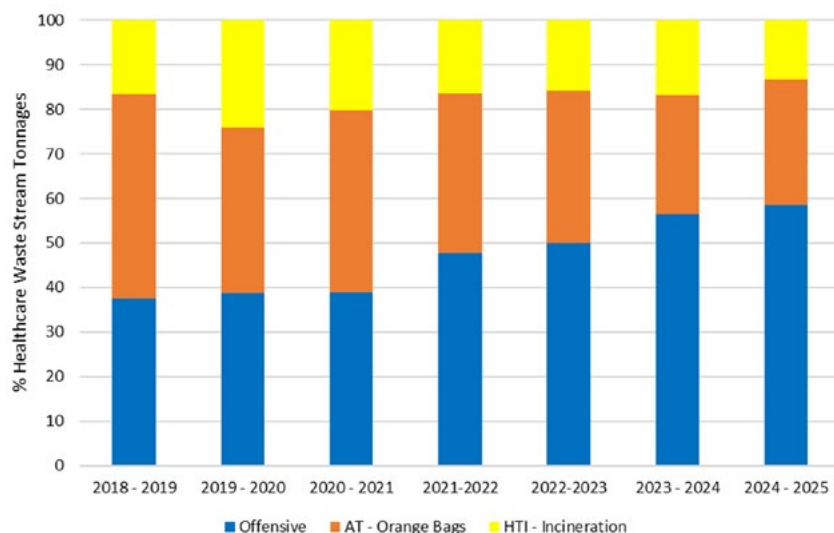


Figure 8: LHTT Performance against the NHSE 20:20:60 Sustainable Waste Segregation targets.

What do we want to achieve by 2028?

1. E&F will continue to drive the Green Plan and take leadership of the sustainability agenda.
2. Deliver PSDS 4 and integrate sustainability and low carbon design in capital projects.
3. Improve the energy efficiency of the estate and promote efficient energy use.
4. Drive reductions in clinical and non-clinical waste throughout the organisation.

How will we achieve it?

- Invest in no-regrets energy saving measures and prepare for electricity-led heating, such as through renewable power generation e.g. heat pumps.
- Develop a net-zero modelling tool to generate an updated roadmap with costed solutions.
- Consider the environmental impact of our CHPs and explore alternative options with carbon and financial benefits to reduce fossil fuel reliance and work with the University of Leeds to identify decarbonisation options for the Generating Station Complex (GSC).
- Review options to install energy metering and establish a programme to install metering where feasible to identify carbon hotspots and target these areas with specific interventions.
- Review heating controls to enable more flexibility for colleagues to control the temperature of specific wards or rooms to reduce energy consumption.
- Ensure all applicable new building and major refurbishment projects are compliant with the [NHS Net Zero Building Standard](#).
- Continue to provide recycling points around the Trust which can be used for cans, paper, plastic etc. by staff, patients and visitors.
- Continue to improve waste segregation and compliance by aiming for a 20-20-60 waste split – 20% incineration (yellow bag) waste, 20% infectious (orange bag) and 60% offensive waste.

How will we measure it?

- New builds and refurbishments assessed against relevant standards.
- Total energy use (kWh) and waste generated (tonnes).
- Carbon emissions from energy use and waste treatment (tCO₂e).

Flagship Project: Hospitals of the Future

Building the Leeds Way (BtLW) is a long-term vision to transform the way healthcare is provided across LTHT. Our planned new hospital building at Leeds General Infirmary (LGI), 'Hospitals of the Future' (HoTF), subject to the UK Government's commitment on the New Hospitals Programme is scheduled to open in 2039/40 and will include a new adults' hospital, a new home for Leeds Children's Hospital, and one of the UK's largest single-site maternity and neonatal centres. HoTF will be net-zero in design, build, and operation. It will prioritise sustainability by integrating eco-friendly designs, optimizing energy and resource use, and adopting circular economy principles. The benefits brought by this project will include reduced carbon emissions and waste, and environments which help to connect patients with nature. LTHT is one of the largest providers of specialist hospital services in the country, so our new facilities will bring these sustainability benefits to patients based locally, regionally, nationally, and globally.



Biodiversity & Green Spaces



Case Studies

Wellbeing Garden at St James's University Hospital

In collaboration with The Royal Horticultural Society (RHS), we have been transforming a garden at SJUH Headquarters for patient recovery and staff wellbeing that will demonstrate the power of nature in healthcare. The garden, designed by renowned landscape designer and RHS Ambassador Adam Frost, will provide a space to relax and reflect for those working in or visiting the hospital. The design of the garden involved the input of our staff and will include a range of new seating areas, an all-weather shelter with green roof and pollinator-friendly planting. The existing mown lawn will be transformed into a complex garden habitat with over 200 square metres of mixed beds. In addition, new trees and specimen shrubs will be planted, comprising a mix of native and non-native species selected for maximum benefit to wildlife. Ahead of its opening this year, a gardening club is being set up which will be made up of residents and staff, who will ultimately look after the gardening spaces around the hospital, alongside the hospital estates team. To ensure the ongoing sustainability of the garden and to support staff wellbeing, the RHS Community Outreach team will run workshops onsite, with sessions including bulb planting, willow weaving and making bee homes. The project will improve physical and mental health outcomes for all.

Recovery Garden at Chapel Allerton Hospital

In 2024, Chapel Allerton hospital received a £200,000 grant to create a new garden for patients and staff. The wellbeing garden is a place for individuals to go and reconnect with nature. The RHS garden is home to thousands of plants and four large trees, featuring plants for pollinators, rocks, dead wood and plants for wildlife habitats. This garden provides a space for patients to heal and escape from hospital life.

Maggie's Cancer Centre at St. James's University Hospital

This wellbeing garden provides pollinator-friendly planting to boost biodiversity; new trees suitable for local habitats; raised moveable growing beds for easy access; and seating to ensure communal spaces. This garden features native English species of plants and areas of evergreen to provide warmth for the building. Visitors are encouraged to help take care of the 23,000 bulbs and 17,000 plants on the site.

Take Heart Rooftop Garden at Leeds General Infirmary

A group of volunteers at the Trust have recently worked in collaboration with the charity [Take Heart](#) following a generous £300,000 donation to develop a new rooftop garden on the 5th floor of Jubilee Wing at LGI. The garden, situated close to the Trust's intensive care wards, includes dozens of plants and offers our patients an escape and therapeutic environment as they recover from major operations, helping to reconnect them with the world and aiding them psychologically with the healing process. It also allows our visitors and staff to take a break from the intensity of the hospital. The garden has been placed in an area where patients can view from the heart of the ward, and a non-slip flooring has also been installed to allow better year-round access to garden for all.



Achievements

- In 2022, the Trust joined the NHS Forest, a tree planting alliance run by the Centre for Sustainable Healthcare (CSH) working to transform green spaces across the NHS estate. As part of this project, 60 colleagues across the Trust volunteered to plant trees across SJUH.
- Trust improved biodiversity by maintaining grass and wildflower areas and planting over 1,100 trees.
- Nominated for a Green Heart Hero Award for the implementation of a wellbeing garden at SJUH.
- In February 2024, [Biodiversity Net Gain \(BNG\)](#) became mandatory in the UK. Prior to the rollout of the requirement, LTHT liaised with environmental consultancy firms and key property and land management stakeholders in Leeds to understand how the new legislation was to be best prepared for. BNG is now a consideration in any new development the Trust commissions.



What do we want to achieve by 2028?

1. Maintain and protect healthy habitats across our estate to promote biodiversity.
2. Maximise the provision of accessible green space within our estate to encourage the wellbeing of colleagues, patients and the community.
3. Work to understand how to minimise the impact of our supply chain on global biodiversity.

How will we achieve it?

- Develop a Greenspace and Biodiversity Strategy. The board will be regularly updated with the progress of the strategy and the quality and accessibility of our green spaces.
- Work to understand the impact of our supply chain on global biodiversity and ecosystems.
- Include educational plaques or signs within our greenspaces to highlight the work that has been carried out to engage staff and patients.
- Capture city-wide work on green spaces and identify how we can contribute to these spaces.
- Continue to apply the requirement of a minimum 10% biodiversity net gain (BNG) to new builds.
- Continue to monitor the effect of increasing greenspace on biodiversity at the Trust. This can be measured by looking at the number of species found, the number of invasive species and other parameters.

How will we measure it?

- Map the distribution of green space across the Trust to assess how accessible areas are.
- Conduct a species survey to assess overall biodiversity in existing green spaces.
- Conduct a questionnaire for patients and colleagues to complete on their experiences with green space across LTHT. This will help gain understanding of the accessibility, quality and quantity of green space
- Establish a metric to track our progress towards our aim of enhancing the biodiversity of our buildings and land.

Supply Chain & Procurement



Case Studies

Sustainability in Tenders

The Trust's Sustainability Team have become increasingly involved in the development and evaluation of tenders. For high value contracts and for those which pertain more closely to the sustainability agenda, there is now a sustainability section and criteria for invitations to tender (ITTs). This section assesses the responses issued by suppliers surrounding sustainability, and discusses the marks awarded with procurement colleagues. Suppliers are required to outline how they will source local/UK based products where possible and how they will focus on adding social value to local communities in line with the NHS procurement target of 10% net-zero and social value weighting.

In 2023, we updated our furniture procurement tender guide to incorporate sustainability and net-zero requirements. Key standards which would be advantageous for a supplier to have to show their commitment to sustainability were outlined in the procurement tender guidance, and the requirement of a supplier to align with the Trust's commitments to net-zero is given within the procurement statement of requirements. Additionally, we incorporated a section within the quality criterion for a tender for Legionella services regarding environmental benefits. This requires service providers seeking to provide LHT with consultancy in the control of Legionella bacteria in water systems to outline how their services are aligned with the Trust's Green Plan.

Dolly Lane

The Trust has consolidated deliveries to a singular central warehouse at Dolly Lane. Instead of each supplier delivering to five sites, suppliers now deliver to one site in a truck, and then LHT transports items in electric vehicles (EVs) to our hospital sites. Following delivery to our sites, cardboard waste is sent back to Dolly Lane via EV transport. The warehouse has a bailing machine which processes this cardboard to produce 1/2 tonne blocks which are then sent away and made into new products. This has reduced annual deliveries from approximately 18,000 in 2021 to just under 9,000 currently and reduced the overall annual carbon emissions associated with the transportation of goods and treatment of waste packaging by 55 tCO₂e.

Achievements

- All our procurements now include a minimum 10% weighting on net-zero and social value.
- A small proportion of our drapes and gowns which were previously single-use are now reusable.
- We now require all clinical suppliers to provide carbon reduction plans for contracts of any value.
- 16 members of the senior procurement team have completed the Carbon Literacy Training course.
- Suppliers are required demonstrate their alignment with and support of our Green Plan.



What do we want to achieve by 2028?

1. Engage with suppliers to accelerate sustainable changes across the supply chain.
2. Integrate sustainability into all procurement practices.
3. Optimise our operational processes to reduce unnecessary procurement.
4. Assess the carbon impact of our supply chain and address carbon hotspots.

How will we achieve it?

- We will continue to engage with the [NHS Net-Zero Supplier Roadmap](#) and NHS Supply Chain to promote access to a greater range of sustainable products and clear guidance on the impacts of individual items.
- We will work to reduce our reliance on single use products and plastics.
- We will meet the [NHS Long Term Plan 2028](#) target to review existing vehicle contracts and develop a standard framework for regional procurement.
- We will continue to ask suppliers for their Carbon Reduction Plans, including Scope 1, 2 and 3 emissions from April 2027 in line with the Net Zero Supplier Roadmap.
- We will use our purchasing power to lobby suppliers to address their environmental impacts, and we will cease use of any suppliers who fail to do so.
- We will work with other Trusts to discuss sustainability with manufacturers and consider use of remanufactured devices.
- We will work to identify items which can be easily swapped for items with lower environmental impacts.
- We will work to increase our proportion of re-usable drapes and gowns.
- We will ask suppliers to provide carbon footprints for their products from April 2028. This will support the accurate measurement of our Carbon Footprint Plus.

How will we measure it?

- Number of suppliers engaged with on sustainability.
- Carbon emissions from procurement (tCO₂e per GBP£ spent).
- Spend on consumables (GBP£)



Figure 9: NHS England's Net-Zero Supplier Roadmap

Food & Nutrition



Case Studies

Single-use Plastics

The Trust has undertaken work to reduce the single use packaging associated with our food services. We have replaced pre-packaged sandwiches with sandwiches prepared in house and packed in compostable materials. We have also worked to reduce single-use disposable foil packaging by using large reusable trays for heating food where possible, and we continue to monitor new innovations in packaging to reduce the amount of waste we produce. Additionally, our retail partners no longer use single-use plastic for cutlery, cups and containers.

Food Menus

We have removed processed meats from all but one main menu and significantly reduced the number of red meat options including lamb and most of beef options. As 90% of our patients eat off our main menu, this has created a significant reduction in the amount of high carbon foods being consumed during main meals and has helped in promoting a balanced diet. The use of red meat and local food sources is reviewed twice annually when menus are refreshed. We also offer a digital meal ordering system for patients to enable more accurate meal planning and reduce food.

Too Good To Go

Both our retail companies use 'Too Good To Go' for products, allowing people to purchase food about to go out of date, at a reduced cost. This has reduced food waste. By December 2024, the scheme had saved a total of 480 meals through 13 items across the Trust, and within the year of 2024, a total of 233 meals were saved.



Achievements

- The [UK Government's Simpler Recycling legislation](#) has now come into force, and following a successful trial at Chapel Allerton Hospital, all our sites now have a food waste stream.
- Twice-per-year menu changes identify products which can be cooked in catering pods in reusable trays to reduce the need for single-use foils.
- Work has been undertaken with alongside nutrition colleagues to update menus and offer healthier lower carbon options such as venison.
- Meat free Mondays are offered on the core menu and all processed foods aside from ham sandwiches have been removed.



What do we want to achieve by 2028?

1. Minimise the amount of food waste produced and manage it according to the [Simpler Recycling Legislation](#).
2. Reduce the use of single-use food packaging.
3. Provide nutritious and low carbon food options for patients, colleagues, and visitors.

How will we achieve it?

- Ensure food waste bins are in place at all locations in line with new regulation and analyse processing options.
- Provide education to facilities staff on the importance of disposing of food waste in a responsible manner.
- Identify and implement a simpler way of monitoring the volume of food waste produced e.g. using waste returns.
- Review single-use packaging and explore alternatives to disposal or the option to switch to re-useable.
- Develop a method to assess the food miles, consumption and disposal of food supplied at the Trust.
- Increase the quantity of patient menu ingredients sourced from the UK and specifically Yorkshire.
- Continue to review and adapt menus to offer healthier, seasonal, lower carbon options for patients, staff and visitors.

How will we measure it?

- Quantity of food waste produced (tonnes).
- Mapping miles from food suppliers to site.
- Carbon emissions from food waste disposal (tCO₂e).
- Carbon emissions from food procurement (tCO₂e per GBP£).
- % uptake of low carbon menu options.

Adaptation



Case Studies

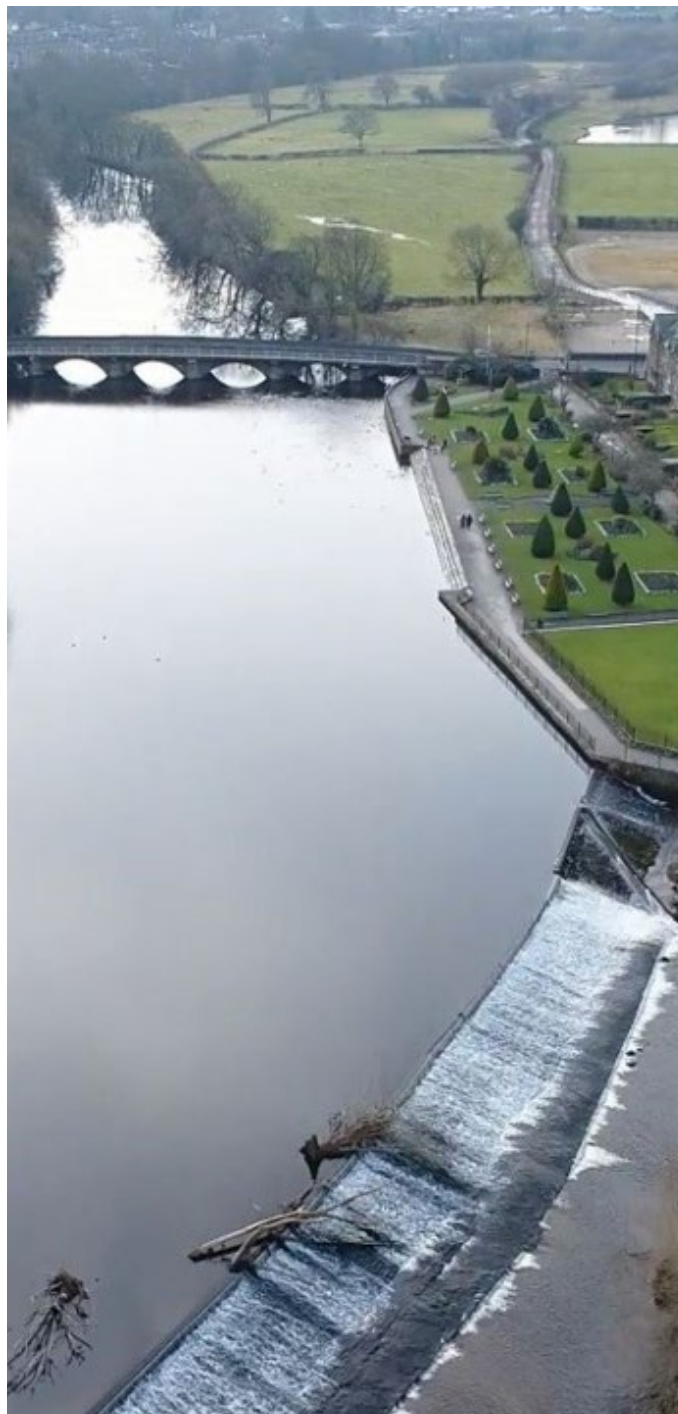
Climate Change Adaptation Plan (CCAP)

Building resilience into our buildings, services and systems is essential to ensure we are equipped to continue providing high level care despite the changing climate. We are committed to embedding adaptation throughout our organisation to ensure the trust is adequately prepared and equipped for the risks and challenges that a changing climate presents.

A formal Climate Change Adaptation Plan (CCAP) has been developed in response to climate change now being acknowledged as a risk by EPRR and formally recorded on the Trust's risk register. We have undertaken a climate change risk assessment (CCRA) which has identified a range of current and potential climate change impacts and the risks these pose to the delivery of the Trust's healthcare services. The risks span across fourteen core categories – heat stress, extreme cold, extreme precipitation, drought, flooding, wildfires, storm and wind events, mass movement, air pollution, indoor environmental quality and health, outdoor airborne allergic pollen, infectious diseases, new vector borne diseases, and disruption to food supply.

Adaptation Action Plan (AAP)

Various adaptation options have been identified to address our climate change risks, categorised into 4 key themes: built environment, operations, clinical, and workforce and communities. The completion of this process involved working collaboratively to align our adaptation strategy with those of our partners in the ICS and other Anchor Institutions.



What do we want to achieve by 2028?

1. Monitor extreme weather events and their impact on the Trust.
2. Educate our colleagues and partners on the risks of climate change to health and the provision of healthcare.
3. Start to prepare for the impacts of climate change on our infrastructure, operations, clinical services and workforce and communities.

How will we achieve it?

- We will consider climate change adaptation in our clinical planning process and capital framework.
- Ensure board approval of and regularly review the Climate Change Adaptation Plan (CCAP) which has been developed.
- The Emergency Preparedness, Planning, and Response (EPPR) team shall work with national and local estates teams to identify, prioritise, and implement local adaptation actions.
- Integrate adaptation into our business continuity plans.
- Provide training to staff on how to respond to extreme weather e.g. keeping patients cool.
- Establish appropriate ongoing monitoring to assess the level of preparedness and resilience across the organisation and our partner organisations.

How will we measure it?

- Number of mitigation plans developed from identified risks.
- Number of training sessions delivered.
- % of facilities assessed for climate resilience.

Governance & Reporting

The Leeds Teaching Hospitals NHS Trust (LTHT) recognises that to meet the challenging targets ahead of us, the commitment to improving sustainability should be the responsibility of everyone at the Trust and will need to become embedded within our organisational culture. We have defined a clear governance structure to ensure accountability for the implementation of this Green Plan (see Figure 10). Governance of the Green Plan aligns with existing systems within the Trust, ensuring transparency and responsibility across all levels.

The Trust's Strategic Sustainability Group (SSG) will continue to act as the senior management group which governs the delivery of the Green Plan. Key actions relating to climate change are identified, considered and managed via the Sustainable Action Plan (SAP) and SSG. The Trust regularly reports on progress against this action plan and towards our net-zero carbon targets to the Board. The Decarbonisation Programme Board (DPB) also reports progress into the Estates Strategy Programme Board (ESPB) who in turn provides an annual update to the Infrastructure Committee, measuring progress against strategic milestones. Separately, monthly Estates and Facilities Finance and Performance (F&P) reports are presented to our Director of Estates and Facilities, providing a strategic overview of the SAP, performance against our carbon targets.

The Lean2Green team, which coordinates the Greener Care Network (GCN) and provides clinical leadership, meets regularly with our Executive Director of Estates and Facilities as the Executive Sponsor for this programme and the Trust's annual commitment on sustainability, to provide updates on clinical sustainability initiatives and colleague engagement. The Travel Steering Group (TSG) also reports into the SSG, and once our Climate Change Adaptation Plan (CCAP) is published, our Climate Change Preparedness Group (CCPG) will also report to the SSG as the primary channel of progress against the Green Plan.

Our governance structure ensures that we maintain continual progress against our objectives and overarching net-zero target. We continue to provide transparent and validated reporting on our impacts, with a standing sustainability section included in our annual report.

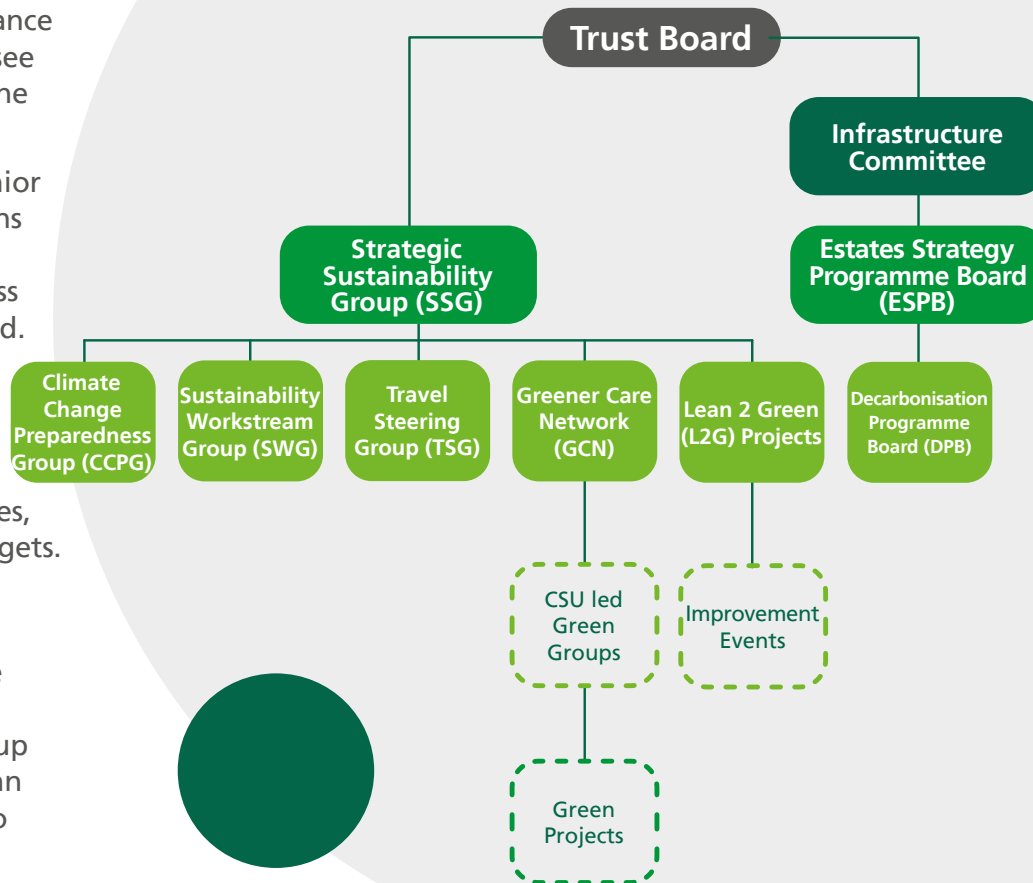


Figure 10: Our Governance Structure for Sustainability

How You Can Help

Staff

As members of the LTHT workforce, colleagues have a crucial role in supporting the Trust to achieve its carbon reduction targets and become more sustainable:

Become a member of the Trust's **Greener Care Network** to network and collaborate with other green-minded individuals and get involved in a sustainability project.

Engage with the leadership of your **CSU green group** to drive change and effective governance for sustainability.

Use the Trust's **carbon footprint calculator** to understand and track the impact of patient pathways.

Register on the [Greener Care Rewards](#) platform and start logging your sustainability activity.

Register for a **Carbon Literacy training** session to learn more about the Trust's Green Plan and how you can help and pledge an action to help the trust to reduce its carbon footprint.

Register your department for a **waste audit** and **waste training** and ensure waste is disposed of in the correct bin.

Use digital systems where available for administrative tasks, prescriptions, and patient records to reduce printing.

Switch off lights and equipment when not in use.

Explore the use of sustainable and recyclable items as an alternative to single-use products when purchasing.

Travel to work by active or public transport and car sharing.

Raise awareness of sustainability in discussions with coworkers, patients, and suppliers.

Use reusable containers for food and drink, ask for a plate if eating in, and only purchase food that you intend on eating to reduce food waste.

Suppliers

By aligning operations, products, and services with sustainability, suppliers can help reduce the carbon footprint of our Trust and contribute to an efficient use of resources:

Ensure your products are sourced from ethical, environmentally responsible, and sustainable producers.

Offer products which are long-lasting, re-usable, low-carbon, and which meet recognised environmental standards (e.g. ISO 14001 certification).

Tell us how you plan to reduce the carbon emissions of your goods and services with a **Carbon Reduction Plan**.

Become familiar with the **NHS Net-Zero Supplier Roadmap** and register on the **Evergreen Framework**.

Minimise the use of single-use packaging and offer reusable, recyclable, or biodegradable alternatives.

Offer green and bulk delivery options and end-of-life programmes.

Meet with our Environment Team to discuss how you can help to support the Trust's Green Plan.

Patients & Visitors

Whilst LTHT's sustainability progress is primarily driven by our policies, the actions of our patients can make a significant difference in reducing the impact of our services:

Ensure waste is disposed of in the correct bin – ask a member of staff if in doubt and follow relevant signage.

Where possible, bring your own reusable items such as water bottles and shopping bags.

Request only the medications you need and dispose of your unused or expired medications correctly – ask pharmacy how to do so if in doubt.

Where possible and feasible, travel to the Trust by active or public transport and car sharing.

Where practicable and offered, opt for virtual consultations and telemedicine for appointments.

Inform us in advance if unable to attend an appointment, for the efficient use of our services.

Live an active and sustainable lifestyle, to stay healthy and reduce the likelihood of needing to use our services.

Raise awareness of sustainability in discussions with our staff, family, friends, and other patients.



Glossary

Air Pollution The presence and introduction into the air of a substance which is harmful to human health.

Carbon Net-Zero A state in which an organisation emits no carbon emissions from its activities. Or a state in which all remaining carbon emissions are offset.

CHP (Combined Heat and Power) A technology that generates both electricity and useful heat from a single fuel source. By capturing and utilising this waste heat, CHP systems offer increased efficiency and reduced energy costs and carbon emissions.

CO₂e (Carbon Dioxide Equivalent) A unit used to express total greenhouse gas emissions. There are multiple GHGs, each with a different impact on climate change. CO₂e equates all GHGs to the impact of carbon dioxide. CO₂e is used to report all GHG emissions.

Greenhouse Gas (GHG) A gas that contributes to the greenhouse effect, leading to climate change (e.g., CO₂). **Global Warming Potential (GWP)** A measurement that enables the comparison of global warming impacts of different greenhouse gases.

kWh (Kilowatt Hours) A unit of measurement for energy usage (e.g., gas and electricity).

Direct Emissions CO₂e Emissions from sources which are owned or controlled by the Trust.

Indirect Emissions CO₂e Emissions from sources which are not owned or controlled by the Trust but are generated due to the Trust's activities (e.g., purchase of electricity, procurement, waste disposal).

Scope 1 Emissions Direct Emissions from owned or controlled sources (e.g., on-site fuel combustion, company vehicles, anaesthetic gases).

Scope 2 Emissions Indirect Emissions from the generation of purchased electricity, steam, heating, and cooling.

Scope 3 Emissions All Other indirect emissions that occur in an organisation's supply chain (e.g., purchased goods, employee commuting, waste disposal).

Public Sector Decarbonisation Scheme (PSDS) Grant to public sector organisations to support the aim to reduce emissions from public sector. The scheme supports the UK's carbon net-zero ambition by encouraging the public sector to transition from fossil fuel heating systems to greener energy.



Abbreviations

AAP – Adaptation Action Plan

AI – Artificial Intelligence

AT – Alternative Treatment

BNG – Biodiversity Net Gain

BtLW – Building the Leeds Way

CL – Carbon Literacy

CLO – Carbon Literate Organisation

CMP – Carbon Management Plan

CCAP – Climate Change Adaptation Plan

CCIO – Chief Clinical Information Officer

CCPG – Climate Change Preparedness Group

CCRA – Climate Change Risk Assessment

CSH – Centre for Sustainable Healthcare

CSU – Clinical Service Unit

DESNZ – Department for Energy Security and Net Zero

DPB – Decarbonisation Programme Board

DPI – Dry Powder Inhaler

EDS – Estates Decarbonisation Strategy

EPRR – Emergency Planning, Resilience and Response

ESPB – Estates Strategy Programme Board

EV – Electric Vehicle

E&F – Estates and Facilities

GCP – Greener Care Plan

GCN – Greener Care Network

GSC – Generating Station Complex

HoTF – Hospitals of the Future

HTI – High Temperature Incineration

ICS – Integrated Care System

ITT – Invitation to Tender

L2G – Lean2Green

LCC – Leeds City Council

LGI – Leeds General Infirmary

LIM – Leeds Improvement Method

LTHW – Low Temperature Hot Water

MDI – Metered Dose Inhaler

ONS – Office of National Statistics

OW – Offensive Waste

QI – Quality Improvement

RERF – Recycling and Energy Recovery Facility

RHS – Royal Horticultural Society

SAP – Sustainable Action Plan

SDMP – Sustainable Development Management Plan

SJUH – St. James University Hospital

SMART – Specific, Measurable, Accountable, Relevant and Timebound

SWG – Sustainability Workstream Group

TCFD – Task Force on Climate Related Financial Disclosures

TSG – Travel Steering Group

UoL – University of Leeds

WHO – World Health Organisation

WYCA – West Yorkshire Combined Authority

HEALTHIER PLANET HEALTHIER PEOPLE

*This Green Plan was developed with the support
of Walker Resource Management Limited (WRM)*

