Wirral University Teaching Hospital NHS Foundation Trust

Green Plan 2022 - 2025

Contents



Foreword

The Trust vision is "Together we will deliver the best quality and safest care to the communities we serve", an important factor in ensuring that we can deliver the safest care is recognising the responsibility that we have as a health care organisation to reduce our impact on the environment as the link between climate and the NHS ambitions in becoming the world's first net zero national health service.

The Wirral Peninsular is already experiencing the effects of climate change such as higher summer temperatures with longer dry spells and more frequent heat waves, warmer and wetter winters, more storms and floods, and a rise in sea levels. As a coastal peninsular, it's imperative that we work with our system partners to ensure a combined approach not only in reducing our carbon footprint, but also adapting to the changes that are already happening. We are confident that we can work with our partners in the local health and care system to achieve a more sustainable way of working.

As most of us will be aware, reaching net-zero emissions is high on the agenda at present and while the Trust already incorporates sustainability in many aspects of its activities, we also recognise that more can be done, and we are committed to making the necessary changes to contribute to net-zero. This document will set out actions and targets for different areas of focus, these will be monitored annually to ensure we reach our net-zero target by 2040/45.

Matthew Swanborough, Director of Strategy & Partnerships



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

Wirral University Teaching Hospital NHS Foundation Trust (WUTH) is proud to share our Green Plan, which seeks to embed sustainability and low carbon practice in the way we offer vital healthcare services and help the NHS to become the first health service in the world with net zero greenhouse gas (GHG) emissions. The climate crisis is also a health crisis. Rising temperatures and extreme weather will disrupt care and impact the health of our patients and the public, especially the most vulnerable in our society. WUTH 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 WUTH's sustainability agenda and provides the rationale for sustainability at the Trust. Through this Green Plan, WUTH will work with our staff, patients and partners to take powerful sustainable development and climate action as part of our commitment to offer the highest quality care to our communities.

WUTH has previously produced a Carbon Reduction Strategy and Carbon Reduction Implementation Plan, which we reviewed against the NHS Carbon Reduction Strategy for England (NHSCRS). This Green Plan will build on our previous efforts.

The Green Plan will be reviewed annually and updated where necessary to ensure continual improvement.

WUTH NHS Trust in 2020/2021

Number of employees (FTE): 6,300

Key Services: Acute hospital services Footprint of Sites: 116,462m²

Geography: Main sites are Arrowe Park Hospital and Clatterbridge Hospital Specialised Services:

cardiology, dementia services, dermatology, haematology, intensive care, microbiology, minor trauma, oncology, orthopaedics, physiotherapy, rheumatology, surgery, urology, women's and children's services Population that the hospital serves Circa 400,000







The figures above show the consumption data for our key resources during our baseline year (2020/21).

Organisational Vision



...deliver the best quality and safest care to the communities we serve

Our strategic priorities have been derived by reviewing national, regional and local context and can be found in our '2021-2026 Our Strategy' document. They will be incorporated throughout this Green Plan as part of the Sustainability Areas of Focus:



Our values









Green Plan Vision

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

Our Green Plan Vision

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

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

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

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

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



Arrowe Park Hospital. Source: WUTH Library

Our Drivers for Change

Wirral University Teaching Hospital NHS Foundation Trust 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 our Green Plan and shape our Vision.

We will work through this plan to fulfil sustainable development requirements from the NHS (as shown in Figure 1) and other relevant legislation (as listed in Figure 2 on page 12) that are aligned with the relevant United Nations (UN) Sustainable Development Goals (SDGs). This includes obligations to minimise adverse impacts on the environment and secure wider social, economic and environmental benefits for our communities.

We also commit to review and participate in regional partnerships and strategies, such as Healthy Wirral and our ICS, wherever appropriate. Our strategic intention is to provide outstanding care across the Wirral through our hospital sites and units, as per our '2021-26 Our Strategy' document.

WUTH 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



Reception Area. Source: WUTH Library

Environmental Drivers

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

Figure 1 NHS Environmental Drivers

Legislative Drivers

Legislative Drivers	UK guidance; those driven by 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.	The Carter Review 2016
Mitigation and Co-benefits of Climate Change	National Institute for Clinical Excellence (NICE) Physical Activity; walking and cycling 2012
	Health Technical Memoranda (HTM)'s and Health Building Notes (HBN)'s
	Sustainable Transformation Partnerships (STP) Plans

Figure 2 Legislative Drivers with UK Guidance

The UN Sustainable Development

Goals

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

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

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

"The NHS belongs to all of us" *

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

Established on 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



Linking our Green Plan to NHS Net Zero

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

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

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

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

Greenhouse Gas Emissions

Greenhouse gas emissions (GHGs) are conventionally classified into one of three 'scopes', dependent of 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' (tCO_2e).

The emission sources and their 'scope' are shown in the infographic (Figure 3).



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

Data and methodology

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

WUTH's GHG Emissions footprint has been calculated according to and aligned with the GHG Protocol for Corporate Reporting and ISO 14064:1 and incorporates the seven main greenhouse gases as per the Kyoto Protocol. We have used the Department of Environment, Food and Rural Affairs (DEFRA) emission factors used to calculate tCO₂e.

WUTH has included other Scope 3 emission factors for building energy use and vehicle emissions. This includes transmission and distribution losses in the provision of electricity and well-to-tank emission factors associated with all fuels. The reporting of these Scope 3 emissions is voluntary but is recommended standard practice by UK Government.

We have calculated WUTH's carbon footprint from 2018/19 to 2020/21 in terms of building energy and delivery of care, travel, and supply chain, as per the categorisations in the NHS Net Zero report. Primary data has been sourced from utility billing information, prescribing data, waste data and expenses.

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



Hospital cubicles. Source: WUTH Library

Wirral University Teaching Hospital's Net Zero ambitions

WUTH fully commits to reduce our 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 WUTH needs to act now to reduce our emissions from a variety of direct and indirect sources; from our estate to the care that we deliver and beyond, each year from now until we achieve Net Zero. We are using this Green Plan to improve our Net Zero-related data collation, carbon footprint and reporting capacity over time.

This Includes:

Determining weaknesses in our current reporting processes and taking remedial action to ensure robust data is collected Developing processes to measure/record emissions we have not previously tracked, such as emissions related to volatile anaesthetics and our supply chain

Identifying reduction actions for categories we cannot yet easily measure

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,

we have listed a series of actions in each Area of Focus. 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 scope for this Plan).



Clatterbridge Hospital garden space. Source: WUTH Library

Staff and Patient Engagement

In delivering this Green Plan, we have prioritised staff input to ensure that the Plan and actions associated with it are endorsed by our workforce. We held a workshop detailing the data required and gave opportunities for staff engagement. We invited staff to consider the challenges the Trust faced in delivering net zero, what a greener NHS meant to them, and perceived the potential impacts of climate change on the Trust. Going forward, we endeavour to engage our staff and our community with the Green Plan in order to build on our efforts and implement a carbon reduction project. We will also explore any possibilities of securing funding to help with the delivery of net zero.





Supply Chain:

Commissioned Services:

Figure 4 WUTH total carbon footprint breakdown in 2020/21

Built Environment Emissions

Emissions from our built environment are shown in Figure 5, and a more detailed breakdown of emission sources for the financial years 2018/19 to 2020/21 to illustrate trends over this period in Figure 6.

Figure 5 Emissions from our built environment in 2020/21



Our Emissions-reduction trajectory

We have grouped emission sources together and calculated yearly emission reduction targets to 2024/25 (Figure 6).

The reduction trajectory excludes inhaler and volatile anaesthetic data due to an unavailability of data.

Emissions were significantly higher in 2018/19 compared to 2019/20 and 2020/21. This is due to a significant spend on procurement in 2018/19, which emitted 93,267 tCO₂e compared to 40,697 tCO₂e in the baseline year of 2020/21.

We need to reduce our total emissions by 8,246 tCO₂e from our 2020/21 baseline by 2024/25.This roughly equates to **2,062 tCO₂e** per annum. Emissions Reduction Trajectory (tCO₂e)



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

Areas of Focus Contents

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

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

We have given indicative costs and emission reductions. These are very high-level assumptions. A key is given below.

Key:

Indicative Cost to achieve:

- \pounds No or low cost (under £10,000)
- \pounds Moderately expensive (£10,000-£30,000)
- £ Significantly expensive (More than £30,000)

Indicative Emissions reduction:

Low or incremental reduction



Significant reduction

Not applicable



Workforce and System Leadership

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

This is a shared journey, and we ask our colleagues to be a part of it.

Action plans identified by this Green Plan will be reviewed in discussion with Finance and Capital Planning personnel to identify suitable budgets. We will also seek internal and third-party funding to support the roll-out of Green Plan actions.

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

The Trust has previously operated an internal Environmental Action Group, but this has been inactive the past few years. However, there is an external partnership in Wirral of which our Trust is a part of. Cool Wirral is a partnership supported by Wirral Council that promotes and co-ordinates local actions on climate change. There are a wide variety of organisations within this partnership including Merseyside Recycling and Waste Authority, Merseyside Police, Merseyside Fire and Rescue, Community Action Wirral, and

Cheshire and Wirral Partnership NHS Foundation Trust. The group Cool Wirral is a campaign which aims to encourage local action in support of Wirral's Climate Change Strategy. The partnership has quarterly meetings where members can learn the latest updates regarding sustainability across the region.

Our Theatre team has also made efforts to promote sustainability in our operating theatres. As part of this, Procedure Packs have been introduced to reduce waste disposal, as all items required are provided in one single wrapped package.



Staff. Source: WUTH Library



Target 13.2 Integrate climate change measures into policy and planning

Target 13.3 Build knowledge and capacity to meet climate change



System Leadership: Action Plan (1/2)

No	WUTH Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicativ e Cost to achieve	Indicative Emissions reduction	Responsi ble lead/dept	NHS Req.
01	Review and approve the plan at our Board level, monitoring delivery at Board meetings and relevant committees.	Governance & policy	21/22		£	×	Board of Directors	SC 18.2
02	Nominate and empower a Net Zero Lead, Health Inequalities Lead and a Climate Change Adaptation Lead and keep the Co-ordinating Commissioner informed at all times of the persons holding these positions.	Governance & policy	21/22		£	×	Board of Directors	LTP 2.24,17 SC 18.2.2
03	Identify budgets for the delivery of each 'area of focus' and the Green Plan as a whole.	Governance & policy	21/22		£		Board of Directors	LTP 2.24,17
04	Streamline data collection processes and produce a comprehensive monthly data report with relevant Green Plan metrics	Governance & policy	21/22		£		Estates	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	21/22		£	,	Estates	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 actions.	Governance & policy	22/23		£	.	Board of Directors	LTP 2.24,17

System Leadership: Action Plan (2/2)

No	WUTH Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept	NHS Req.
07	Ensure the Green Plan delivery is reflected in our corporate risk register.	Governance & policy	22/23		£		Board of Directors	LTP 2.24,17
08	Review procurement plan at board level to achieve a net zero supply chain. Fulfilling our role as an anchor institution to achieve social value and wider benefits for our communities, particularly,-for our care groups.	Procurement & Supply Chain	22/23		£	,	Board of Directors	LTP 2.24,17
09	Identify and action ways to engage patients and community in Green Plan delivery, including links between health inequality and climate action.	Working with patients, staff & communities	22/23		£	•	HR	LTP 2.24,17
10	Identify internal and third-party funding to enable key Green Plan actions.	Governance & policy	On- going		£		Estates	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		£	*	Board of Directors	LTP 2.24,17
12	Ensure quarterly Greener NHS Data Collection uploads are made.	Core responsibilities	On- going		£	\bigotimes	Estates	NZ 3.1.1, 3.1.2

Figure 7 Green Plan actions for system leadership

Workforce

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

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

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

However, we need to embed our Green Plan within our culture and recognise that our people are the core of the NHS. Building on our experience of leading a person-centred trust, we will empower our colleagues to deliver this Green Plan at all levels of our organisation. To do this, we will further utilise the Greener NHS "One Year On" Communications Toolkit, currently used for general messaging and press releases.



Staff member working in Pharmacy. Source: WUTH Library



Workforce: Action Plan (1/2)

No	WUTH Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Restart the Environmental Action Group and hold regular meetings to discuss and deliver this Green Plan.	Governance & policy	21/22		£	×	People & OD	LTP 4.1, 4.3, 4.39, 4.42 SC 13.1 to 13.10
02	Incorporate the Green Plan into our Induction policies.	Governance & policy	21/22		£		Education Services	NZ 4.2.1
03	Create Green Plan intranet pages for staff access and external webpages for other stakeholders; upload Green Plan content and progress updates accordingly.	Governance & policy	21/22		£	×	Sustainability Manager Infrastructure services	NZ 4.2.1
04	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 our Green Plan.	Working with patients, staff & communities	21/22		£	*	Communicati ons & Engagement	NZ 4.2.1
05	Encourage staff to be active participants in the Greener NHS community and other fora such as the Greener AHP Hub, Centre for Sustainable Healthcare and related workspaces on the FutureNHS platform.	Working with patients, staff & communities	21/22		£	,	Communicati ons & Engagement	NZ 4.2.1
06	Consult, explore and action how clinical and non-clinical staff can best participate in our Green Plan delivery, ensuring this is incorporated into workplans, work-time allocations, performance reviews, and collaborating with other trusts where appropriate.	Governance & policy	21/22		£	*	Sustainability Manager Infrastructure services	NZ 4.2, 4.2.1, 4.2.2, 4.3.3

Workforce: Action Plan (2/2)

No	WUTH Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
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	22/23		£	,	Education Services	NZ 4.2.1
09	Work with our suppliers to ensure that onsite workers are subject to the Real Living Wage, fair working practices and protections against discrimination.	Procurement & People & OD	22/23		£	×	Procurement & People & OD	LTP 4.1, 4.3, 4.39, 4.42

Figure 8 Green Plan actions for workforce

Indicative cost:

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

Indicative emissions reduction: ۰ Low or incremental reduction

- ٠ Moderate reduction
- Significant reduction ٠ \bigotimes
 - Not applicable

Sustainable Models of Care

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

Our Trust delivers inpatient care, outpatient appointments and care in the community. We have two hospital sites and a number of other locations that provide supporting activities for the main sites.

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.

Health inequalities present a growing challenge for the Trust and the NHS as a whole, with the COVID-19 pandemic shining a light on the widening social divides that exist in welfare and healthcare provision across the UK. To combat the increase in healthcare inequality, we are currently following Cheshire and Merseyside Health and Care Partnership guidance, produced by the Institute of Health Equity (IHE), as part of the 'Building Back Fairer In Cheshire And Merseyside' initiative.

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

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



Staff member with equipment. Source: WUTH Library



Sustainable Models of Care: Action Plan

No	WUTH Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Build on current efforts (GIRFT, National Safety Improvement Programme and CMPP) to reduce health inequalities and improve early intervention, linking this work to potential emissions reductions.	Governance & policy	On- going		£	*	Executive Lead or nominated deputy, 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		£	*	Executive Lead or nominated deputy, 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		£		Executive Lead or nominated deputy	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 and further the ambitions outlined in the 'Building Back Fairer In Cheshire And Merseyside' initiative.	Core Responsibilities	21/22		£	×	Executive Lead or nominated deputy	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	22/23		£	×	Estates	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	22/23		£	\bigotimes	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 leads	NZ 4.1.1

Figure 9 Green Plan actions for Sustainable care models

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 <u>NHS App</u> 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. And streamlining and digitising administrative functions reduces paper waste and expedites processes.

WUTH is well-placed to lead the development of digital care as a tool to promote inclusion and increase access to quality care in the Cheshire and Merseyside region and is committed to ensuring that digital services are tailored to meet the needs of our 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 our digital care services.

The '<u>What Good Looks Like</u>' framework designed to guide Trusts towards the successful integration of digital care systems, neatly summarises:

'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 member using computer. Source: WUTH Library

Digital Services

Our digital services complement and link to our in-person services. Since the beginning of the pandemic, we have started recording the number of face-to-face, telephone and video consultations. However, there will always be a need for face-to-face appointments and consultations for some of our patient groups.

We also began using Microsoft Teams during the pandemic, and over the last 2 years, we have deployed over 700 laptops to support our staff. In addition to this, iPads have been deployed to allow patients to speak to loved ones remotely if necessary.

A wide variety of job roles can now be performed from home, from back office support to front-line clinical workers such as radiologists and consultants. However, we must be cautious not to 'outsource' our environmental impacts to our staff.

The Trust has a 5-year digital strategy for 2021 – 2026 which includes a number of key developments. The first is a patient portal where patients can log on and view various information about their own healthcare, including appointments and letters. The portal will also be used to capture pre-op assessments and consent in future.

The second is the digitalisation of our hospitals. In 2021 the Trust was at level 5 in the Electronic Medical Record Adoption Model developed by Healthcare Information and Management Systems (HIMSS). The Trust is striving to attain levels 6 & 7 over the next few years with the implementation of Closed Loop Medicines Administration and Closed Loop Breast Milk.

Technologies to support urgent and emergency care also make up the digital strategy. We are part of NHS111 which directs patients to the most appropriate services and through which appointments can be booked ahead of arrival at the Emergency Department.

Finally, we offer a health information exchange, through which clinical information can be shared with other health and social care providers. The longitudinal Wirral Care Record allows authorised health and social care professionals to have access to shared data to improve decision making. Patients are provided with safer, more consistent care, whether in hospital, at a GP surgery or any place where care may be accessed.



Digital equipment. Source: WUTH Library

Outside of the digital strategy, WUTH has an ambitious vision for staff training. We will be implementing a Learning Management System (LMS) and other supporting technologies to deliver a much more thorough and flexible offering which is modular in its approach.

A number of digital pathways have been implemented by the Trust. From a digital pathology perspective, the Trust plays an active role in the Regional Pathology Network and has embarked on the Digital Pathology Programme. This provides hospitals with more resilience and efficiency through the sharing of resources.

The Trust has a single electronic patient record, called 'Wirral Millennium'. Paper is being eradicated through the 'One Patient Record' project and where this is not possible, notes are being scanned. The Medical Records department is working towards attaining BSI1008 scanning standards. The vast majority of outpatient clinics including paediatrics and maternity services have access to electronic patient records while based in community locations. GPs and other healthcare partners use the IT system to request diagnostics.

The Trust's digital strategy will ensure ICT procurement aligns to the 'Greening Government: ICT and Digital Services Strategy 2020-2025.



Pharmacy. Source: WUTH Library



Digital Transformation: Action Plan

No	WUTH Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Build on our current practice and current online patient guidance, participate in delivery of the Long-Term Plan commitments for digital first primary care and an NHS digital front door, linking this to potential emissions reductions.	Governance & 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 <u>CSH's Carbon</u> <u>Calculator for Avoided Patient Travel</u>	Governance & policy	On- going		£	×	Sustainability manager & Infrastructure services.	SC 28
03	Offer more digital and remote appointments.	Working with patients, staff & communities	21/22		£	*	Care Groups	PG C1
04	Use the <u>What Good Looks Like Framework</u> , the <u>Greening</u> <u>Government: ICT and Digital Services Strategy 2020-25</u> and <u>The Technology Code of Practice</u> as guides to ensure the Trust has robust ICT systems in place to deliver on digital transformation.	Procurement & ICT	22/23		£	,	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, expense claims forms to a digital alternative.	Working with patients, staff & communities	22/23		£	*	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	22/23		£	*	ICT& Business & Value	LTP 1.43, 1.44, 5

Figure 10 Green Plan actions for digital transformation

Travel and Transport

Emissions associated with the Trust's business travel and transport amounted to around 6,266 tCO₂e or 9% of all emissions in 2020/21.

Out of this, 179 tCO₂e was emitted by staff undertaking their work duties using their own vehicles (grey fleet), travelling over 1.1 million kilometres. Business travel attributed to rail and air transport by staff emitted 13 tCO₂e and just over 1 tCO₂e emitted by the small fleet of Trust vehicles.

Using the NHS' Health Outcomes Travel Tool (HOTT), most transport-related emissions (6,073 tCO₂e) can be linked to staff commuting and patient/visitor travel.

Other Lease Vehicles

We operate a salary sacrifice lease car scheme, open to all staff. Emissions released from the fourteen cars (two of which are allelectric, three are plug-in hybrid electric vehicles) provided on this lease scheme are out of scope for this report



Figure 11 Travel Carbon Footprint Infographic. Please note figures within this graphic are estimated and may not reflect true values (based on the NHS HOTT Tool)

Grey Fleet

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

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

We reimburse staff and bank staff for the fuel used in line with their duties through our expenses system. In 2020/21, we reimbursed £231,623 for mileage claims, which equates to roughly 113 tCO₂e and over 411,000 miles. This has fallen significantly since 2019/20, wherein mileage claimed was over 622,000 and we emitted 204 tCO₂e. This can be attributed to the pandemic, although the numbers didn't drop to zero, reflecting our core provision of community care. However, the fall in emissions can be associated with the negation of business-related travel, such as attending physical business meetings.

In reference to sustainable models of care and digital transformation, this significant drop in emissions (and cost) illustrates that these changes in working practice should continue.

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

Using 2020/21 as a baseline, we aim to reduce emissions from our grey fleet by 17 tCO₂e, to 96 tCO₂e in 2024/25, as shown in Figure 12.



Figure 12 Emissions from our Grey Fleet and emissions reduction trajectory to 2024/25

Electric Vehicle Charging Infrastructure

We do not currently have any electric vehicle charge points at our sites, although we will address this need as electric vehicles become more common in the coming years.

Business Travel (public transport)

Before the pandemic in 2019/20, our staff took 655 train journeys, five domestic, two short haul, and two long haul flights emitting a total of 14.6 tCO₂e (as recorded through our expenses system), as shown in Figure 13.

In 2020/21, this had reduced to 5 rail journeys and no flights respectively, with total emissions dropping to 0.02 tCO₂e. This exemplifies how remote working has had a beneficial impact in terms of carbon emissions and air quality.

We also reimburse staff for business travel through our expenses system. However, we cannot discern emissions of these reimbursements, as we do not record the travel mode or distances travelled. Embedding additional criteria in our expenses system is needed to capture these 'missing' emissions.



Image of bus Source: WUTH Library

Commuting, Visitor/Patient travel

Our Trust last collated a travel plan in 2018, which we are in the process of updating. The plan includes patients and visitor surveys which helped to inform our objectives, which included:

- Reduce the level of traffic generated by staff accessing the site by encouraging greater use of sustainable modes.
- Offer an improved choice of travel options to all staff, visitors and patients.
- Improve the health, fitness and well-being of our staff, by encouraging greater use of active travel modes.
- Reduce our environmental impact through encouraging greater use of sustainable modes.
- Be a good neighbour to the local community by reducing our overall transport impacts.

Our Transport Strategy Group (TSG) meets quarterly to support transport planning and surveys.

We operate a cycle to work-scheme (salary sacrifice to purchase a bike at a discounted rate), that is open to all staff, and have several secure bicycle storage areas at each hospital site. Public transport provision to or near our sites remain a vital service to the communities we serve and helps reduce health inequalities. We have a number of bus and train services that serve our hospitals, that the Trust encourages staff and patients to use. WUTH also has inter-site buses available to staff travelling between Arrowe Park and Clatterbridge hospitals.

We have used the NHS' HOTT Tool to estimate the emissions associated with staff commuting and patient and visitor travel. The HOTT Tool uses national and regional datasets to generate figures for transport mode, distances, and emissions from a 2018 baseline and projections into the near future (shown in Figure 13 and 14). Figure 13 does not project into the future, as the COVID-19 pandemic has reduced business travel almost entirely.









Figure 14 Stacked bar chart to show total emissions from patient, visitor and staff travel

Air Quality

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

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, our activity has enormous potential impact both on our communities' air quality and our ambition to reduce emissions. Additionally, our gas-fired boilers contribute to air pollution, and the decarbonisation of heating will address these pollutants in the future.

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



Riding bike to work. Source: Unsplash



Travel and Transport: Action Plan

No	WUTH Green Plan Actions	Trust Area	Target Year	Pro- gress	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	2022/23		£	*	Estates	LTP 2.21, 3.82, 17 SC 18.4.1.3 NZ 3.2, 3.2.2
02	Restart the Environmental Action Group (as per 'Workforce') and manage the delivery of the Green Travel Plan.	Governance & policy	2021/22		£	×	Estates	NZ 3.2, 3.2.2
03	Conduct annual Travel Plan surveys to quantify staff commuting and visitor travel and verify HOTT Tool outputs.	Working with patients, staff & communities	Annual, ongoing		£	×	Estates	NZ 3.2, 3.2.2
04	Review existing staff lease scheme and incorporate additional incentives for the uptake of ULEV and ZEVs.	Governance & policy	2022/23		£	*	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	2022/23		£	.	Estates	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	2022/23		£	\mathbf{x}	Finance	NZ 3.2, 3.2.2
07	Enhance the business travel expense system to capture to the to- and from- destinations for rail, air, bus, taxi journeys	Governance & policy	2022/23		£	×	Finance	NZ 3.2, 3.2.2
08	Improve stores provision and work with our suppliers to consolidate goods orders through better planning wherever possible, reducing transport emissions.	Procurement	2022/23		£	,	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	2022/23		£		HR	NZ 3.2, 3.2.2
10	Install EV charging points at our sites to encourage hybrid and electric vehicle usage.	Working with patients, staff & communities	2022/23		£	*	Estates	NZ 3.2, 3.2.2

Figure 15 Green plan actions for Travel, Logistics and Air Quality

Estates and Facilities

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

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

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

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

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

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

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

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

Estates & Facilities – Energy

- 16,779 tCO₂e emitted from buildings across our estate in 2020/21.
- We will procure 100% renewable electricity by April 2022.
- 73% of our electricity consumption and 64% of our heating emanates from our CHP – emitting over 8,736 tCO₂e.
- We need to reduce energy consumption by over 182,000 kWh per year to achieve the emissions reduction target of **3,376 tCO₂e** in **2024/25**.

Energy and emissions

In 2020/21, we had 2 active sites where we were directly responsible for procuring the energy supply contracts.

Figure 16 shows the total emissions liberated from electricity and gas use from 2018/19 to 2020/21. We need to reduce emissions by 2,528 tCO₂e by 2024/25 from our 2020/21 baseline (this includes the reduction in emissions from procuring renewable electricity).

Both hospitals have significant emissions building energy consumption. However, Arrowe Park Hospital has almost double the emissions at 11,343 tCO₂e compared with Clatterbridge Hospital at 5,424 tCO₂e. This can be attributed to its larger floor area, which is almost double that of Clatterbridge Hospital.

We operate two Combined Heat and Power (CHP) plants at Arrowe Park Hospital and Clatterbridge Hospital. The Arrowe Park unit emitted 5489 tCO₂e, whereas the Clatterbridge unit emitted 3246.64 tCO₂e. These figures are extremely significant, as both sites rely upon the CHP for electricity and thermal energy. The Arrowe Park CHP produced over 12,000,000 kWh of electricity and a similar amount of heat. The Clatterbridge CHP produced 2,600,000 kWh of electricity and a similar amount of heat.



Figure 16 Emissions from our built environment from 2018/19 to 2020/21 and forecast emissions to 2024/25

The Trust will be procuring 100% renewable electricity from April 2022, resulting an 80% reduction in emissions arising from procured electricity. The emission reductions from this all illustrated in Figure 17. However, the electricity produced by our CHP will continue to emit over 2,000 tCO₂e per year.

Despite the negated emissions from renewable electricity procurement, we must still reduce both our electricity and gas consumption at all our sites, at a rate of 182,000 kWh per year!

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

In the future, on-site renewable energy systems, such as solar photovoltaics and integrated large battery storage technologies, will provide additional resilience to power outages, with the potential to reduce our carbon emissions.

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



Figure 17 Emissions from electricity consumption and emission reduction trajectory to 2024/25 (note the difference following the procurement of 100% renewable electricity in April 2021)



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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



Estates and Facilities: Action Plan (1/2)

No	WUTH Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Enhance Planned Preventative Maintenance (PPMs) of our facilities and assets to be proactively energyfocused and to identify opportunities to upgrade equipment/plant.	Core responsibilities	21/22		£	,	Estates	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
02	We will procure 100% of renewable electricity with Renewable Energy Guarantees of Origin (REGO) by April 2022.	Procurement	22		£	*	Estates	SC 18.5
03	Access the NHS Energy Efficiency Fund (NEEF) to upgrade all lighting to LED alternatives.	Core responsibilities	21/22		£	*	Estates	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
04	Follow Estates 'Net Zero' Carbon Delivery Plan guidance on efficiency and decarbonisation protocols for the built environment.	Core responsibilities	21/22 & on- going		£	*	Estates	NZCDP NZ 3.1.1, 3.1.2
05	Optimise energy use by embedding networked Automatic Meter Readers (AMRs) across the Estate with appropriate controls to reduce energy consumption. Monitor and assess risk from overheating events where room temperature exceeds 26 degrees.	Core responsibilities	22/23		£	*	Procurement	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
06	Conduct detailed building energy surveys to identify further energy/thermal efficiency opportunities.	Core responsibilities	22/23		Ç,	*	Estates	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
07	Develop a Decarbonisation of Heat Plan that focuses on the phaseout of existing gas-fired boilers and replacement with low-carbon alternatives, where feasible.	Governance & policy	On- going		£		Executive Lead or nominated deputy	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2

Estates and Facilities: Action Plan (2/2)

No	WUTH Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
08	Explore the possibility of creating District Heat Networks with neighbouring partners.	Working with patients, staff & communities	On- going		£	,	Infrastructure Services	LTP 17 SC 18.4.2.1 NZ 3.1.1, 3.1.2
09	Look to procure 'green gas' through the Green Gas Certification Scheme as and when existing energy contracts are due for renewal.	Procurement	22/23		Ę,	*	Procurement	SC 18.5
10	Incorporate energy conservation into staff training and education programmes and deliver behaviour-based energy saving campaigns.	Working with patients, staff & communities	22/23		СĮ,	*	HR	NZ 3.1.1
11	Develop communication materials for our patients that highlight energy efficiency projects, discuss plans with the local community, including exploring potential community energy projects.	Working with patients, staff & communities	22/23		Ç,	\bigotimes	Estates & HR	NZ 3.1.1
12	Explore how the Trust can implement an ISO 50001 Energy Management System.	Governance & policy	23/24		Ĺ,	*	Estates	NZ 3.1.1

Figure 18 Green plan action table for Energy and Emissions from the built environment

Indicative cost:

- No or low cost £ £ Moderately expensive
- £ Significantly expensive
- Indicative emissions reduction: ٠ Low or incremental reduction

٠

- Moderate reduction
- Significant reduction ٠ \otimes
 - Not applicable

Capital Projects

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

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

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

Cement and concrete production on its own accounts for a huge 8% of all global greenhouse gas emissions from all sources, according to the <u>UK Green Building Council</u>.

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

Estates & Facilities - Capital Projects:

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



Target 9.4 Upgrade all industries and infrastructures for sustainability **Target 13.1** Strengthen resilience and adaptive capacity to climate-related disasters

Target 13.2Integrateclimate change measuresinto policy and planning



Capital Projects: Action Plan

No	WUTH Green Plan Actions	Trust Area	Target Year	Pro- gress	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	LTP 16 SC 18.4.2.1 NZ 3.1.1
02	Explore options to achieve emissions reductions in smaller works and projects in our acute and primary care estate.	Core Responsibilitie s	21/22		£	*	Estates	NZ 3.1.1
03	Ensure capital development accounts for risks identified in climate adaptation plans and addresses these in design/delivery.	Core responsibilities	22/23		£	\mathbf{x}	Estates	SC 18.4.2.3
04	Encourage and measure local subcontractor and supply chain spend as part of our anchor institution approach.	Procurement	21/22		£	*	Procurement	NZ 3.3.1
05	Work with our Procurement team to enable specification of low and zero carbon materials and designs, as well as achieving waste reduction and other opportunities through contractor engagement.	Procurement	22/23		£		Procurement	NZ 3.3.1
06	Continue to ensure our design process is informed by staff, patients and community views for capital projects.	Working with patients, staff & communities	22/23		£	×	Estates, Procurement & HR	LTP 16 SC 18.4.2.1 NZ 3.1.1

Figure 19 Green plan action table for Capital Projects

Water Efficiency

In 2020/21, we used 40,179 litres of water, which cost at total of \pounds 108,156.

There are emission impacts associated with the supply of fresh water and treatment of wastewater, equating to 208 tCO₂e in 2020/21 (see Figure 20).

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

As a water efficiency and leak preventative measure, we will look to install Automatic Meter Readers (AMRs) to our 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.

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

Estates & Facilities – Water:

- We used 40,179m³ of water in 2020/21 enough water to fill 16 Olympic size swimming pools.
- 208 tCO₂e was attributed to the supply of water and wastewater treatment.
- We need to reduce water consumption by 26,114m³ by 2024/25.
- Water efficiency and sustainable drainage will become ever more important in the future.



Water Efficiency: Action Plan

No	WUTH Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Explore and implement water efficiency targets on areas of the highest impact in our estate and delivery of care.	Governance & policy	On- going		£	.	Estates	LTP 17 SC 18.4.3.1 NZ 3.1
02	Develop new water intensity metrics and incorporate these into our greenhouse gas emissions reporting.	Governance & policy	21/22		£	×	Procurement	NZ 3.1
03	Install Automatic Meter Readers on the water network in our largest buildings to determine water use patterns and aid leak detection.	Core Responsibilitie s	22/23		£	,	Estates	NZ 3.1
04	Utilise the most water efficient technologies, such as low flow taps throughout our estate, when replacing equipment and developing new sites	Core responsibilities	22/23		£	,	Estates	NZ 3.1
05	Explore where rainwater harvesting and grey water systems can be installed and utilised.	Procurement	22/23		£	*	Procurement	NZ 3.1
06	Look to consolidate the suppliers across the estate to choose one or two that can provide the service, price, and efficiency we expect.	Procurement	On- going		£	×	Procurement	LTP 17
07	Work with our staff and patients by communicating the importance of water efficiency.	Working with patients, staff & communities	On- going		£	×	HR	NZ 3.1
08	Incorporate water efficiency measures within our climate change adaptation work with the local community.	Working with patients, staff & communities	22/23		£	×	Business Continuity	NZ 3.1

Figure 21 Green plan action table for Water

Waste and Recycling

We collect five main waste types: general, clinical/offensive, confidential paper, dry mixed recycling and electrical and electronic equipment (WEEE) waste. We have collections for other waste streams, such as metal, fluorescent lamps, waste cooking oil and so on, though amounts collected are not reported. We also distinguish between 'recyclable waste', 'glass, tins and aerosols', and 'cardboard'.

Figure 22 shows emissions emanating from our waste streams.

Some of our clinical waste is incinerated (sharps), whilst other types are ultra-high temperature processed (alternative treatment) before being further recycled. Offensive waste is sent directly to deep landfill. General, glass, tin and aerosol, and recyclable waste are compacted together and separated at the recycling centre. General waste then goes through a low temperature process where approximately 30% of the waste is recycled, with the remainder being used as Refuse Derived Fuel (RDF). This is used to power the national grid.

We have separate dry-mixed recycling (DMR) bins at Arrowe Park Hospital, but these haven't yet been introduced at Clatterbridge Hospital. Food waste (kitchen waste such as vegetable peelings) is macerated and discharged into the foul drain.



Figure 22 Emissions associated with our waste streams and emission reduction trajectory to 2024/25

Estates & Facilities - Waste:

- 1647 tonnes of waste were produced, emitting 267 tCO₂e in 2020/21.
- Dedicated recycling bins need to be installed as a priority at Clatterbridge Hospital.
- Food waste bins and collections will ensure food does not decompose in landfill sites, and instead by used for energy and compost generation.

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.

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

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

The waste hierarchy of Reduce, Reuse, Recycle, Recovery (energy from waste) before disposal (landfill) must be embedded to ensure we are maintaining our waste duties of care and circular economic principles. We need to improve our recycling rates. Shoring up our waste handling processes will ultimately reduce greenhouse gas emissions from waste treatment, other negative environmental impacts and landfill disposal costs.



Figure 23 Total waste arisings in tonnes, and weight reduction trajectory to 2024/25



Waste and Recycling: Action Plan

No.	WUTH Green Plan Actions	Trust Area	Target year	Pro- gress	Indicative Cost to Achieve	Indicative Emissions Reduction	Responsible Lead/Dept.	NHS Req.
01	Collate <i>all</i> waste stream data from <i>all</i> sites (including sites we are not responsible for waste collection) and produce monthly reports.	Core Responsibilities	21/22		£	8	Estates	NZ 3.1
02	Ensure that single use items in catering adhere to current legislation and elect to use sustainable alternatives as listed by NHS Supply Chain,	Core Responsibilities	21/22		£	.	Estates	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	22/23		£	•	Estates	LTP 17 SC 18.4.3.1 NZ 3.1
04	Install food waste bins across all remaining sites and start food waste collections.	Core Responsibilities	22/23		£	.	Estates & Catering	NZ 3.1
06	Work with our staff and patients by communicating the importance of waste segregation	Procurement	On- going		£	×	Estates & HR	NZ 3.1
07	Explore whether reusable alternatives to single-use PPE items (aprons, wipes, face masks) are clinically appropriate.	Core Responsibilities	22/23		£	.	Clinical Teams & Procurement	NZ 3.1
08	Explore how the Trust can implement an ISO-14001 Environmental Management System.	Governance & policy	22/23		£	*	Estates & HR	LTP 17 SC 18.4.3.1 NZ 3.1

Figure 24 Green plan action table for Waste

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**

Our Trust wants to protect biodiversity within our estate and region and reduce our 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; forests hold the key to undiscovered medicines and therapies.

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

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



Arrowe Park Hospital Green Space. Source: WUTH Library





Target 11.6 Reduce the environmental impacts of cities, focusing on air quality and waste

3 GOOD HEALTH AND WELL-BEING





Target 13.2 Integrate climate change measures into policy 52 and planning INFRASTRUCTURE Improve our infrastructure and how we use it

Biodiversity and Greenspace: Action Plan

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

Figure 25 Green plan action table for Greenspaces

Medicines - Volatile Anaesthetic Gases and Inhalers

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

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

Volatile anaesthetic gas and inhaler consumption data were unavailable and therefore lie beyond the scope of this Green Plan. In future, the Trust will strengthen our communications with thirdparty pharmacies to account for the emissions of our medicines and improve the reliability of our carbon footprint.



Staff Member in Pharmacy. Source: WUTH Library

Medicines: Volatile anaesthetics and inhalers

We will strengthen our communications with third-party pharmacies to collate our medicines data.

Nitrous oxide

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 across the NHS, as more efficacious anaesthetic and analgesic agents are superseding its use. However, Equanox[™] still plays an important role in maternity.

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

However, this comes at a cost, as methoxyflurane is delivered in non-reusable 3ml inhaler pens, creating additional non-recyclable waste.



Pharmacy Shelf. Source: WUTH 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.

As a Trust, we do not use desflurane and over 80% of the volatile anaesthetic gases used are sevoflurane!

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.

Inhalers

Dry-powder (DPI) and Metered Dose Inhalers (MDI) are prescribed in the NHS. 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.

New <u>Impact and Investment Fund (IIF) indicators</u> 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!



Medicines: Action Plan (1/2)

No	WUTH Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Collate inhaler prescribing data and report quarterly.	Working with patients, staff & communities	21/22		£	×	Clinical Pharmacy Team	LTP 17
02	Collate volatile anaesthetic gas use data and report quarterly.	Working with patients, staff & communities	21/22		£	\bigotimes	Clinical Pharmacy Team	LTP 17
03	Explore the procurement and use of nitrous oxide 'cracking' devices.	Procurement; Working with patients, staff & communities	22/23		£	*	Procurement	LTP 17 SC 18.4.2.2 NZ 3.4.1
04	Switch to methoxyflurane (Penthrox [™]) in preference to nitrous oxide analgesia/anaesthesia where clinically appropriate.	Working with patients, staff & communities	22/23		£	*	Clinical Pharmacy Team	LTP 17 SC 18.4.2.2 NZ 3.4.1
05	Work with our anaesthetists and pharmacy to phase out the use of desflurane completely.	Working with patients, staff & communities	22/23		£	*	Clinical Pharmacy Team	SC 18.6 NZ 3.4.1
06	Set a target of prescribing at least 50% DPIs for all inhaler types.	Working with patients, staff & communities	22/23		£	*	Clinical Pharmacy Team	NZ 3.4.1

Medicines: Action Plan (2/2)

No	ANHSFT Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
07	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	23/24		£		Clinical Pharmacy Team	IIF ES-01 LTP 17
08	Set a goal of reducing the average emissions from salbutamol inhalers to 11.1kg per inhaler, where clinically appropriate.	Working with patients, staff & communities	23/24		£	,	Clinical Pharmacy Team	IIF ES-02 LTP 17
09	Work with our clinicians and Clinical Pharmacy Team to enable uptake of alternative inhalers where appropriate.	Governance & policy	On- going		£	*	Clinical Pharmacy Team	SC 18.6 NZ 3.4.1
10	Write a pathway for daycase spinal use.	Working with patients, staff & communities	22/23		£	*	Clinical Pharmacy Team	NZ 3.4.1
11	Establish a nitrous oxide project to examine our waste rate of nitrous oxide. This will establish the cause of wastage and prevent leaks.	Governance & policy	22/23		£	,	Clinical Pharmacy Team	LTP 17 SC 18.4.2.2 NZ 3.4.1
12	Endeavour to turn off the anaesthetic gas scavenging systems when not in use.	Governance & policy	22/23		£	*	Clinical Pharmacy Team	NZ 3.4.1

Figure 26 Green plan action table for volatile anaesthetics and inhalers

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, climate performance of our equipment and estate, as well as modern slavery in supply chains.

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

Procurement and Climate Action

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



- Emissions from our supply chain were estimated to be 40,697 tCO₂e in 2020/21.
- A new NHS Sustainable Suppler Framework will be launched in January 2022 and will require all suppliers to publish progress reports and continued carbon emissions reporting by 2030.
- An ISO 20400 Sustainable Procurement Strategy would enhance the Trust's environmental and social performance of its supply chain.
- Ensure tenders adopt the new social value procurement note PPN 06/20 and carbon management PPN 06/21 in major contracts 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.



Figure 27 Emissions from our supply chain with reduction trajectory to 2024/25

As a Trust, we procure most items and services through centralised NHS/government frameworks, such as NHS Supply Chain. These centralised frameworks already provide best value through bulk purchasing power and consolidation of orders. We cannot control or influence the sustainability aspects of these routes of procurement and will benefit from the decisions made in how these frameworks operate. However, the Trust also uses NHS Shared BS, Crown Commercial Services (CCS) and Health Trust Europe (HTE) regularly.

The Trust is an active member of the Cheshire Mersey Collaborative Procurement Group and has supported and taken part in all the collaborative procurement exercises undertaken, including agency staffing, general and clinical waste, and radiology consumables.

In addition to collaborative tendering exercises the Group has also pursued some aggregation initiatives- mainly through the Collaborative Theatres Group (now broadened out to include all clinical consumables). The Trust has recently benefitted from an aggregation exercise for Trauma products

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).

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 <u>Policy Procurement Note 06/21</u>).



Medical Supplies. Source: WUTH Library

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

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

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

Stock levels are managed effectively via EDC to achieve optimal stock levels with a stock holding in Materials Managed areas of 14.4 days. This mitigates the risk of stock obsolescence and waste associated with excess stock holding. The Trust uses Model Hospital Metric 5B to calculate stock days in each Materials Managed area.

The directives in PPN06/20 have been adopted and all open tender exercises include Social Value award criteria. Whilst the Social Values Model has not been adopted fully the Trust uses the themes and suggested questions to shape the SV questions in its tender documentation.

The Trust is a member of the Wirral Community Wealth Building Group and is in the process of completing a data gathering exercise (the Group includes NHS and Local Authority partners across Wirral). The Trust is also an active participant in the Cheshire Mersey Sustainable Procurement Group- currently assessing the sustainability credentials of the Group's top 50 suppliers. CMHP Sustainability Road Map attached (caveat the Group is reviewing the objectives as this was agreed at regional level).



Staff member using equipment. Source: WUTH Library



Figure 28 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 our Trust.

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

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

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

Equipment that is beyond repair is disposed of through the appropriate waste channels, and components 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 our control. Though many outpatients will use mobility aids for the long term, many are only used for weeks or months, and we have 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 will negate useful items being scrapped and potentially save the Trust money.

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 improves wider determinants of health

Figure 29 Official NHS Sustainable Procurement Objectives Source: website





Target 8.3 Promote policies to support job creation and growing enterprises

Target 8.7 End modern slavery, trafficking, and child labour

Target 12.7 Promote sustainable public



13 CLIMATE ACTION



Target 13.2 Integrate climate change measures into policy and planning



Procurement: Action Plan (1/2)

No	WUTH Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Review our sustainable procurement approach to find relevant links that enable our Green Plan and work closely with NHS Supply Chain and NHS Improvement to promote their sustainability programmes.	Governance & policy	Ongoing		£	×	Procurement	LTP 6.17, 17
02	Identify wider social, economic and environmental benefits for the local community and population when considering the purchase and specification of products and services, discussed and agreed with the Coordinating Commissioner.	Governance & policy	22/23		£	⊗	Procurement	SC 18.6
03	Adhere to the requirements of the NHS Sustainable Suppler Framework.	Governance & policy	January 2022		£	,	Procurement	SC 18.6
04	Ensure tenders adopt the new social value procurement note PPN 06/20 and carbon management PPN 06/21 in major contracts from April 2022 and 2023 respectively.	Governance & policy	April 2022		£		Procurement	NZ 3.3, 3.3.1
05	Ensure tenders adopt the carbon management PPN 06/21 in major contracts in April 2023.	Governance & policy	April 2023		£	,	Procurement	SC 18.6
06	Ensure the purchase of 100% closed-loop recycled paper.	Core Responsibilitie s	21/22		£	*	Estates	SC 18.6
07	Create a new system for cataloguing and reclaiming mobility aids and other devices from patients.	Governance & policy	22/23		£	*	Physio and Occupational Therapy	NZ 3.3, 3.3.1
08	Engage a key supplier on plans to align their operations and delivery with NHS Net Zero targets over time. Leverage NHS England and NHS Improvement Supplier Engagement Strategy approach for fostering partnerships.	Core responsibilities	22/23		£	×	Estates	NZ 3.3, 3.3.1

Procurement: Action Plan (2/2)

No	WUTH Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
09	Work to identify impactful future supply chain emissions reductions opportunities and links to climate adaptation and other Green Plan commitments in procurement specifications and through contract delivery	Procurement	23/24		£	×	Procurement	NZ 3.3, 3.3.1
10	Work with NHS Supply Chain to address Modern Slavery and domestic and international supply chain environmental, and human rights risks, including those linked to PPE.	Procurement	22/23		£	\mathbf{x}	Procurement	SC 18.6
11	Explore the creation of an ISO 20400 Sustainable Procurement Strategy.	Procurement	22/23		£	*	Procurement	SC 18.6
12	Enable procurement to support Social Value and Anchor Institution NHS aims, e.g., understanding and increasing local, SMEs and social enterprise spend or collaborating with suppliers to promote positive action in equalities or to collaborate on innovation or climate action.	Working with patients, staff & communities	Ongoing		£	×	Procurement	LTP 18
13	Explore the procurement of reusable theatre gowns and reusable theatre hats.	Procurement	Ongoing		£	,	Procurement	NZ 3.3, 3.3.1

Figure 30 Green plan actions for supply chain management and procurement

Indicative cost:

- f No or low cost
- £ Significantly expensive
- Indicative emissions reduction:
- Low or incremental reduction
- Moderate reduction
- Significant reduction
- 8 Not applicable

£ Moderately expensive

65

Food and Nutrition

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

Food production accounts for up to 26% of global greenhouse gas emissions¹. Food and livestock production has a huge impact on biodiversity as well, and according to research collected by <u>Our</u> <u>World in Data</u> "of the 28,000 species evaluated to be threatened with extinction on the IUCN Red List, agriculture and aquaculture is listed as a threat for 24,000 of them".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 our communities and reducing the emissions associated with food transport.

WUTH will work to fulfil Long Term Plan priorities for food provision on our premises, promoting plant-forward diets, higher welfare and more sustainable food options, and supporting regional producers wherever we can. At present, patient meals are sourced by the NHS Supply Chain.

We serve approximately 900,000 meals per year (3 meals per day), and 75,000 meals per calendar month. In previous waste audits, we have ascertained that an average of 7,500 meals are wasted per month, which translates into 10% of all meals ending up as waste.

The Trust is building a new restaurant on site using seasonal food, and menus. We will explore introducing a seasonal approach to patient menus. All of the disposables used in catering are compostable.

We offer a wide choice of meals for inpatients, including vegetarian and vegan options and other dietary requirements. Our menus are paper based and ordering occurs the day before, although we plan to move to 'on the day' electronic ordering.



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

Target 3.4 Reduce mortality from noncommunicable diseases and promote mental health

Target 13.2 Integrate climate changemeasures into policy and planning

Target 14.4 Sustainable Fishing

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



Food and Nutrition: Action Plan

No	WUTH Green Plan Actions	Trust Area	Targe t Year	Pro- gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Review food and catering to explore opportunities to push forward Long Term Plan plans to address obesity, benefit ELTH'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	Phase in more Plant-forward diets and other updated NHS requirements and explore greater seasonal menu changes.	Governance & policy	22/23		£	.	Procurement & Catering Services	LTP 2.18
03	Limit sugary drinks sales at our facilities and fulfil other updated NHS requirements.	Core Responsibilities	22/23		£		Catering Services	SC 19.3
04	Work with NHS Supply Chain to ensure positive impacts from contract management of any updates to Government Buying Standards sustainable food criteria.	Procurement	22/23		£	¢.	Procurement & Catering Services	SC 19.3
05	Work with regional partners to identify opportunities for local and SME food producers for the Wirral.	Procurement	On- going		£	.	Procurement	NZ 3.3.2
06	Ensure all food providers meet or exceed the requirements outlined in <u>Report of the Independent Review of NHS</u> Hospital Food	Core responsibilities	22/23		£	¢ .	Facilities & Procurement	SC 19.3
07	Review internal and NHS strategies for sustainable food procurement, including sustainable fish, elimination of palm oil or limit to RSPC-certified palm oil and Fairtrade items where relevant.	Procurement	22/23		£	.	Procurement	LTP 17
08	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		£	×	ТВС	LTP 2.18 SC 19.1, 19.2 NZ 3.3.2

Figure 31 Table to show green plan actions for food and nutrition

Indicative cost:

- \pounds No or low cost
- f Significantly expensive
- Indicative emissions reduction: Low or incremental reduction
- Significant reduction
- Moderate reduction
- Significant reductNot applicable

£ Moderately expensive

Adaptation

Climate Change Adaptation

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

Greener NHS

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 our local communities.

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

We already engage with other public authorities and partners in tackling extreme weather events, such as heat waves and flooding.

Building on our 2019 Heat Wave policy, WUTH will analyse these risks and develop actions for our care delivery, estate planning

and management, including flood risks across our estate and service area.

Climate change has serious implications for our 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 our healthcare services. Climate change adaptation is critical to achieving this. The impacts of climate change on our health, services, infrastructure and our ability to cope with extreme weather events will place significant additional demands on our 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. Through reducing our impact on the environment to prevent climate change, reducing our organisational running costs, ensuring business continuity and reducing health inequalities, but above all it's about making sure that the NHS, our buildings, our services, our staff and our patients are prepared for what lies ahead.

Wirral University Teaching Hospital NHS Foundation Trust will work with the Wirral SEG to support the Cheshire and Merseyside plan, and across other public sector organisations to develop a climate change adaptation plan.



Climate Change Adaptation: Action Plan

No	WUTH Green Plan Actions	Trust Area	Target Year	Pro- gress	Indicative Cost to achieve	Responsible lead/dept.	NHS Req.
01	Appoint a Climate Change Adaptation lead and follow the recommendations of the third Health and Social Care Sector Climate Change Adaptation Report.	Governance & policy	22/23		£	Board of Directors	LTP 17 SC 18.4.2.3 NZ 1
02	Embed Climate Change as a strategic risk within our corporate risk register and manage appropriately.	Governance & policy	22/23		£	Business Continuity	SC 18.4.2.3 NZ 1
03	Create an ISO14090 Climate Change Adaptation Plan including plans for adapting our premises to mitigate climate change and extreme weather risks, using a recognised methodology, that is routinely reviewed considering the changing climate and scientific advancements.	Core responsibilities	22/23		£	Business Continuity	SC 18.4.2.3 NZ 1
04	Work with NHS Supply Chain to better understand the climate change risks in our supply chain and proactively seek to make our supply chain 'climate-ready'.	Procurement	22/23		£	Procurement	SC 18.4.2.3 NZ 1
05	Embed and adapt existing health-related contingency planning, such as Heat Wave Plans to reflect predicted climate change impacts.	Working with patients, staff & communities	22/23		£	Business Continuity	SC 18.4.2.3 NZ 1
06	Incorporate newly emerging climate-related health care risks into our contingency planning, such as the increasing prevalence of Vector Borne Diseases.	Working with patients, staff & communities	22/23		£	Business Continuity	SC 18.4.2.3 NZ 1

Figure 32 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 our goals and deliver sustainable care. We will look to achieve the 'quick wins' first, though anticipate significant investment in future years, especially in making our buildings 'climate-ready'.

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

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

Contact Details

All of the information contained in this report is, to the best of our knowledge, accurate at the time of publishing.

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This Green Plan was created for Wirral University Teaching Hospital in partnership with Inspired PLC.

