NHS

Tees, Esk and Wear Valleys

NHS Foundation Trust

Green Plan 2022 - 2025

Contents

Foreword

This Green Journey to Change supports the goals identified in the Trust's overarching strategic framework, Our Journey to Change, and is underpinned by the values included within. The Trust's Journey to Change wants people to lead their best possible lives, with three specific goals:

1. To co-create a great experience for our patients, carers, and families.
2. To co-create a great experience for our colleagues.
3. To be a great partner

The Trust's 3 key values, which are underpinned by behaviours that will help us achieve these goals are:

1. Respect
2. Compassion
3. Responsibility

The aim of the Green Journey to Change is to drive progress to achieve the Trust's three strategic goals. Examples of how great green initiatives will enable this are:

1. To co-create a great experience for our patients, carers, and families: our green processes will help staff, patients and partners to take part in and shape powerful sustainable development and climate action as part of our commitment to offer the highest quality of care to our communities. Achieving the best value possible will support investment to enhance clinical services.

2. To co-create a great experience for our colleagues: our green plan will help to minimise the adverse impacts on the environment for colleagues and help to safeguard and secure wider social, economic and environmental benefits for the community.

   Our wider processes, including salary sacrifice arrangements, will help colleagues to have options to access more affordable green travel arrangements. By implementing hybrid working arrangements, the Trust will be able to offer more flexible working arrangements and new opportunities to improve work-life balance whilst also reducing business and commute mileage.

3. To be a great partner: our green plan will become increasingly collaborative, across organisations and our places and systems, to improve value and achieve shared goals. Increasingly, our commitment to partnership working will lead to procurements that are joint or deliver on our social value commitments, and increased collaboration will support the co-location of teams and services, including in partners' premises (and vice versa), giving new opportunities for collective estate rationalisation and carbon reduction.

The green plan will be reviewed by the Board of Directors and wider Commissioners and revised as necessary to ensure the right level of resource and delivery is reviewed against the respective action plans. To achieve our aims, we will ensure that all investment is reviewed against the appropriate action plan and brings about value for money and tangible benefits.

This green plan will:

1. Deliver value for money and assist in working towards the Net Zero targets.
2. Ensure product investment / service quality for green investment is market leading.
3. Meet the requirements of public spend legislation / best practice / SFIs.

A Sustainable Development Green Plan ('Green Plan') forms a key part of a sustainable healthcare strategy to ensure services remain fit for purpose today and for the future. It helps us to identify waste reduction opportunities, financial savings and address national priorities such as carbon reduction.

We can only achieve this through balancing the three pillars of sustainability (financial, social and environmental). As a consequence of this, the Trust has produced this Green Plan to create a clear and unambiguous plan to deliver a range of core sustainability-related objectives.

By encouraging sustainable development in all its forms, the Trust will continue to take positive steps to mitigate the effects of its activities on the environment and look to build on the strong partnership and coproduction plans that are intrinsic to Our Journey to Change.

The Trust is responding to a new healthcare challenge in the form of the Covid-19 pandemic. This is already having an impact from a sustainability perspective, in terms of additional waste being generated and air quality improvements as fewer people travel.

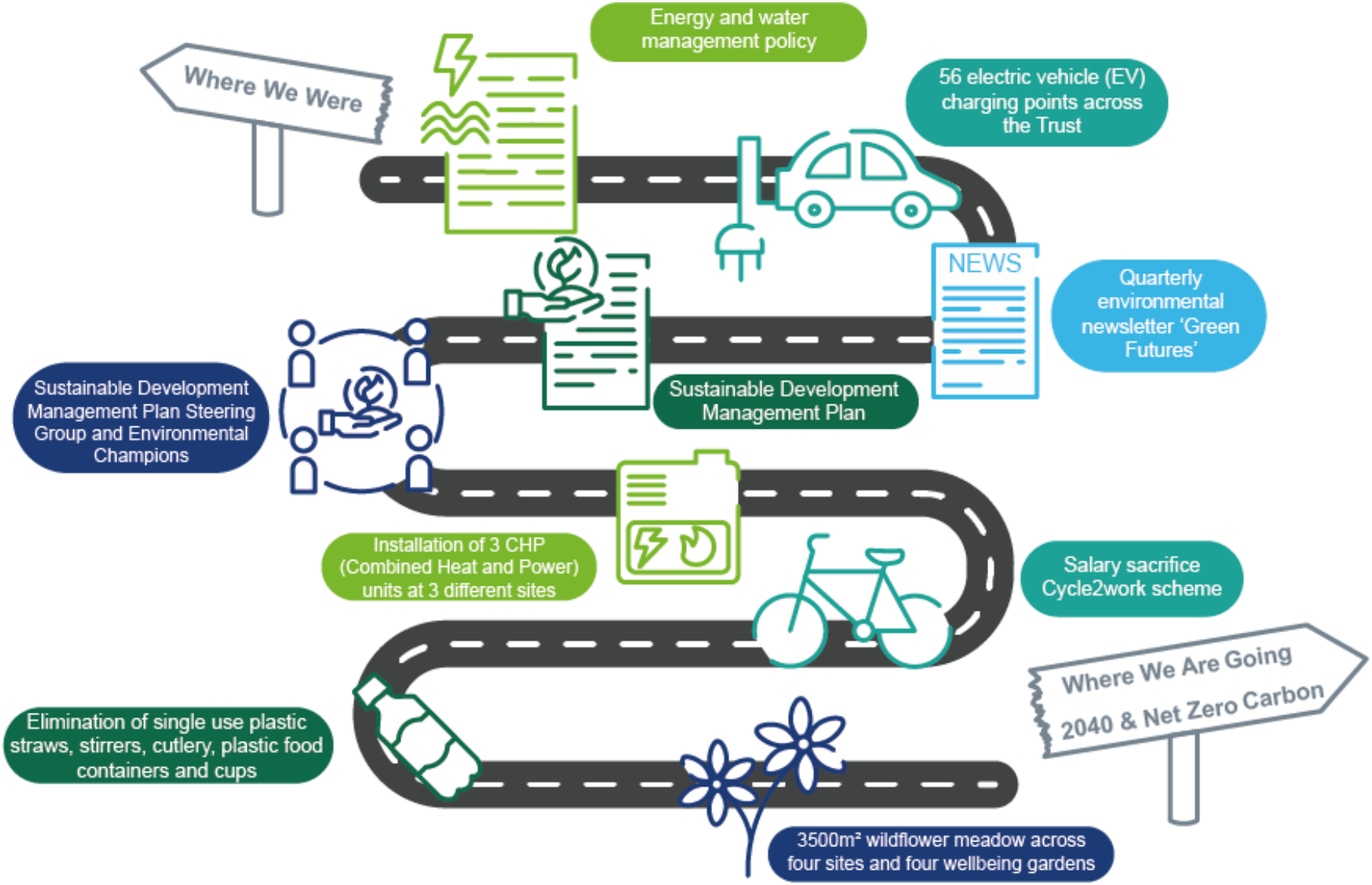
We will continue to monitor these and other impacts such as Smarter Working opportunities as they arise and develop approaches to manage them sustainably.

We need to embed sustainability within our organisation and must work together with our partners across the wide area that TEWV operates in and the NHS to improve sustainability. We will collaborate with our partners to help meet our own internal objectives and also the wider trust wide and national level objectives.

For the Trust to be a truly sustainable organisation, we need all our staff to play their part in delivering this Green Plan and I strongly encourage all of our colleagues to work together to achieve these aims.

Director of Finance Liz Romaniak

Highlights


Where We Were
Energy and water management policy
56 electric vehicle (EV) charging points across the Trust
NEWS
Quarterly environmental newsletter 'Green Futures'
Sustainable Development Management Plan Steering Group and Environmental Champions
Sustainable Development Management Plan
Installation of 3 CHP (Combined Heat and Power) units at 3 different sites
Salary sacrifice Cycle2work scheme
Where We Are Going
2040 & Net Zero Carbon
Elimination of single use plastic straws, stirrers, cutlery, plastic food containers and cups
3500m² wildflower meadow across four sites and four wellbeing gardens

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

Tees Esk and Wear Valleys NHS Foundation Trust (TEWV) 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.

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

TEWV 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 TEWV's sustainability agenda and provides the rationale for sustainability at the Trust. Through this Green Plan, TEWV 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.

Following the publication of our Sustainable Development Management Plan (SDMP), the Trust implemented a Steering Group chaired by the Director of Estates, Capital Development and Facilities Management to oversee our progress on sustainable actions. This group will also oversee the delivery of the Green Plan and report progress to the Trust board and other key stakeholders. The Green Plan will be reviewed annually and updated where necessary to ensure annual improvement.

Tees, Esk and Wear Valleys NHS Trust in 2020/21

Number of employees:
7,645

Footprint of Sites:
139,851m²

Key Services:
Mental health and learning disability

Geography:
Two million people across County Durham, Darlington Teesside, North Yorkshire, and the Vale of York

Our Services:
adult mental health, autism, children and young peoples services, community mental health services, learning disability services, mental health services for older people, secure inpatient facilities and substance misuse services

Number of Sites:
150

Patient Numbers:
56,200

Trust Key Resources and Baseline Data

Building Energy
47.1 GWh

Baseline year for Plan
2020/2021

Waste Arisings
1011 tonnes

Procurement Activity
£95,963,973

Water Supplied
162,027 m³

Business Travel
22,957,592 km

Patient/Visitor/ Communiting Travel
28,196,994 km

Our Journey to Change

Figure 1 TEWV's [Journey to Change](#) Infographic

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 providing 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

Foss Park. Source: TEWV Website

Our Drivers for Change

TEWV 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 2) and other relevant legislation (as listed on the next page in Figure 3) that are aligned with the relevant United Nations (UN) Sustainable Development Goals (SDGs). This includes obligations to minimise adverse impacts on the environment and secure wider social, economic and environmental benefits for our communities.

We also commit to review, leverage and participate in regional partnerships and strategies related to sustainable development wherever appropriate.

Staff in masks. Source: TEWV Website

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

Figure 2 NHS Environmental Drivers

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

Figure 3 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

TEWVT will work to ensure:

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

Linking our Green Plan to NHS Net Zero

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

Two clear and feasible net zero targets for NHS England are outlined in the 'Delivering a 'Net Zero' National Health Service'-report (known as the 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**.

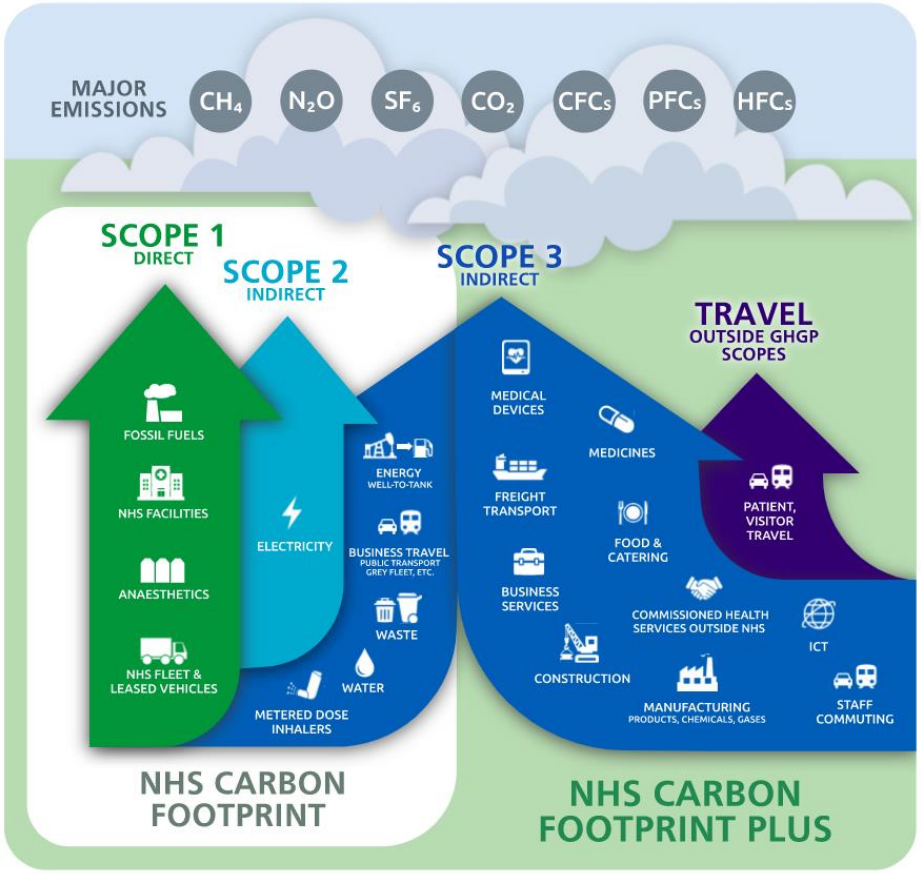
All NHS trusts are to align their Green Plans with NHS England's net zero ambitions. We have calculated those emissions from all the sources listed in the NHS Net Zero Report to be reduced by approximately 4% year-on-year (akin to Science Based Targets) until each of the target dates, respectively.

Greenhouse Gas Emissions

Greenhouse gas emissions 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' (t CO_2e).

The emission sources and their 'scope' are shown in the infographic (Figure 4).

Figure 4 Greenhouse gas emission sources, and their 'scopes'



Data and methodology

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

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

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

We have used the following primary data:

- resource consumption (electricity, gas, water) data from utility bills
- waste arisings from data sets from waste contractors
- number of inhalers from our prescribing data
- fleet vehicle fuel use from fuel reports/receipts
- business miles travelled (by car) from our expenses system
- business travel (by rail, air etc.) from our travel operator system
- published procurement spend

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

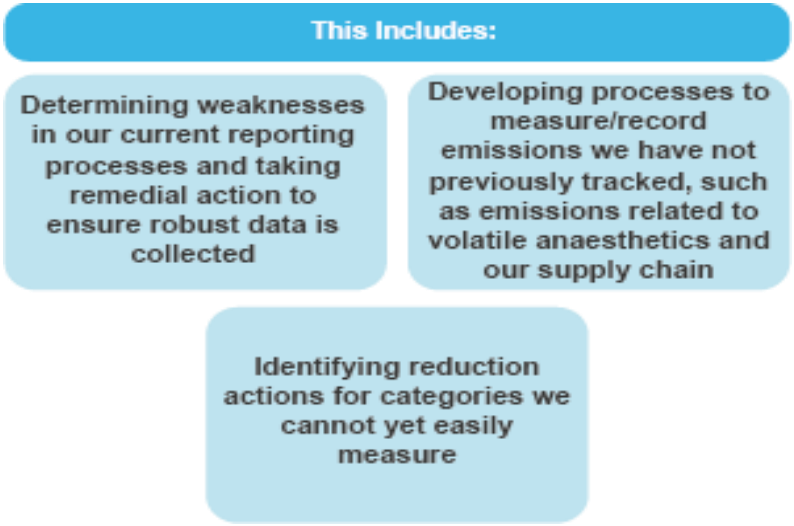
We are using 2020/21 as our baseline year to set targets against as calculations were made before the 2021/22 financial year was complete.

Staff member using microscope. Source: TEWV Website

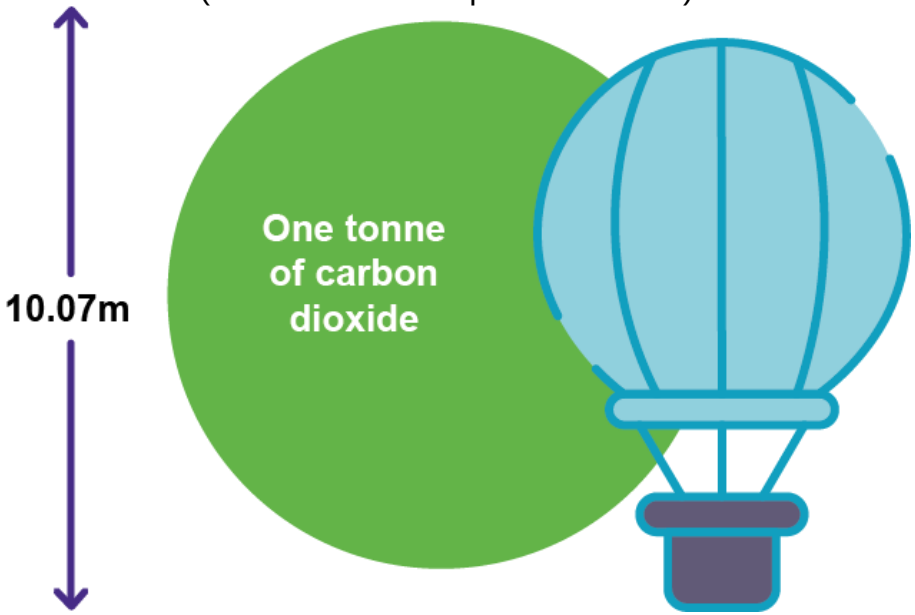
TEWV's Net Zero ambitions

TEWV fully commits to reducing 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 TEWV 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.



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 otherwise accounted for (which is not in scope for this Plan).



What does 1 tonne of carbon dioxide look like?

One tCO_2e can be visualised as a volume of gas the size of a hot air balloon – a sphere about 10 metres in diameter.

The average 3-bedroom semi-detached home in North East England emits around 1 tCO_2e per year from electricity consumption and almost 2 tCO_2e from the use of natural gas for heating and cooking.

Our Current Position

Our Carbon Footprint in 2020/21 was **66,795** tCO_2e.

To meet the NHS Net Zero commitments, we need to avoid around **2,239** tCO_2e from all sources each year until 2040/45.

Akin to the NHS Net Zero report, most of our emissions (83%) came from sources we have little or no control over: 78% from our supply chain, and a further 5% from patient and visitor travel.

The remaining 17.1% arise from sources we can control or strongly influence: 13.4% of our emissions came from the operation of our buildings and 3.5% from transport associated with the delivery of care (including staff commuting).

See Figure 5 for the split of each emission category, as per the NHS Net Zero report categorisation. Data shown relate to emissions in tCO_2e and their relative proportion of our footprint.

Key:

Delivery of Care:

Personal Travel:

Supply Chain:

Commissioned Services:

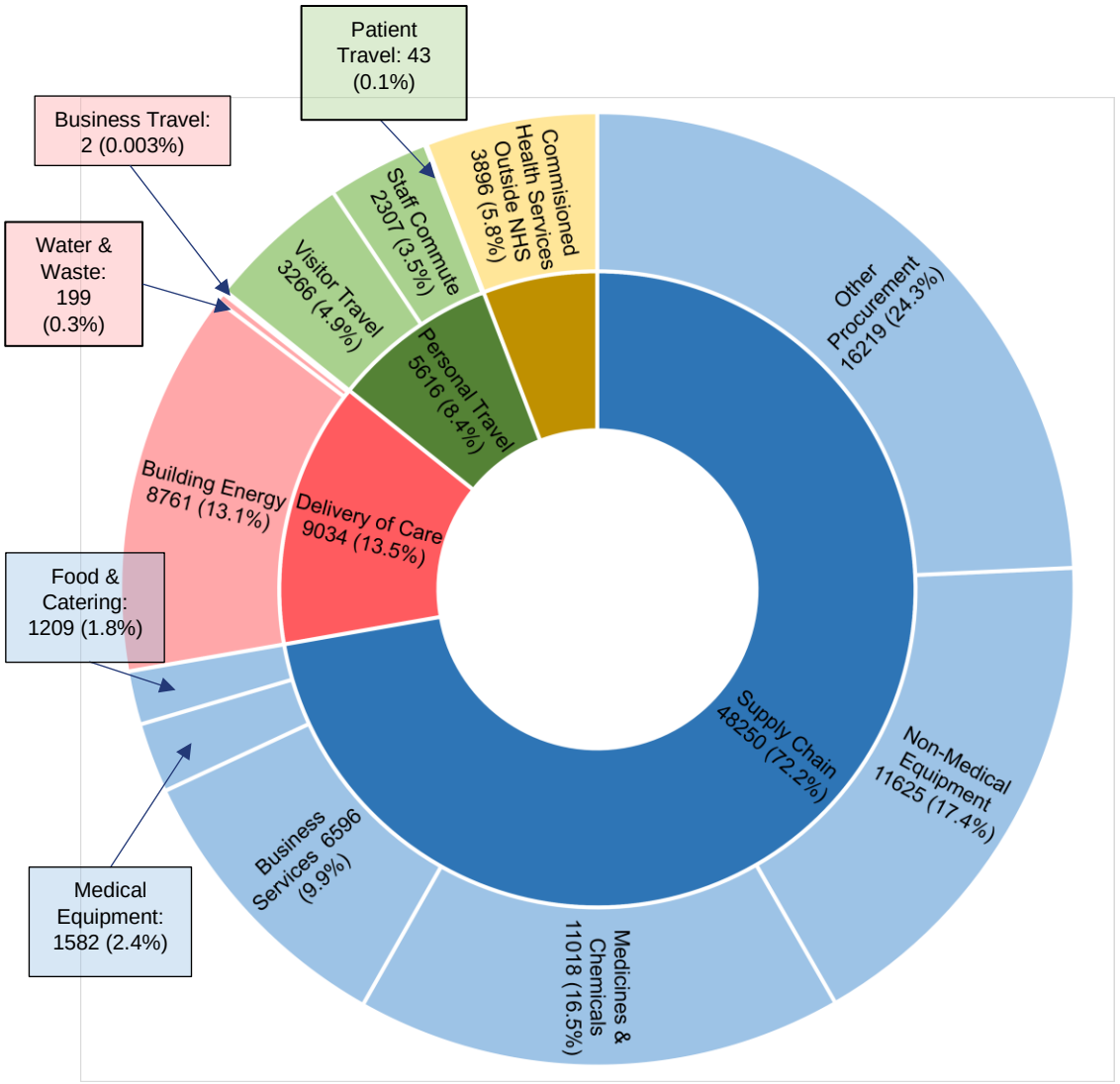
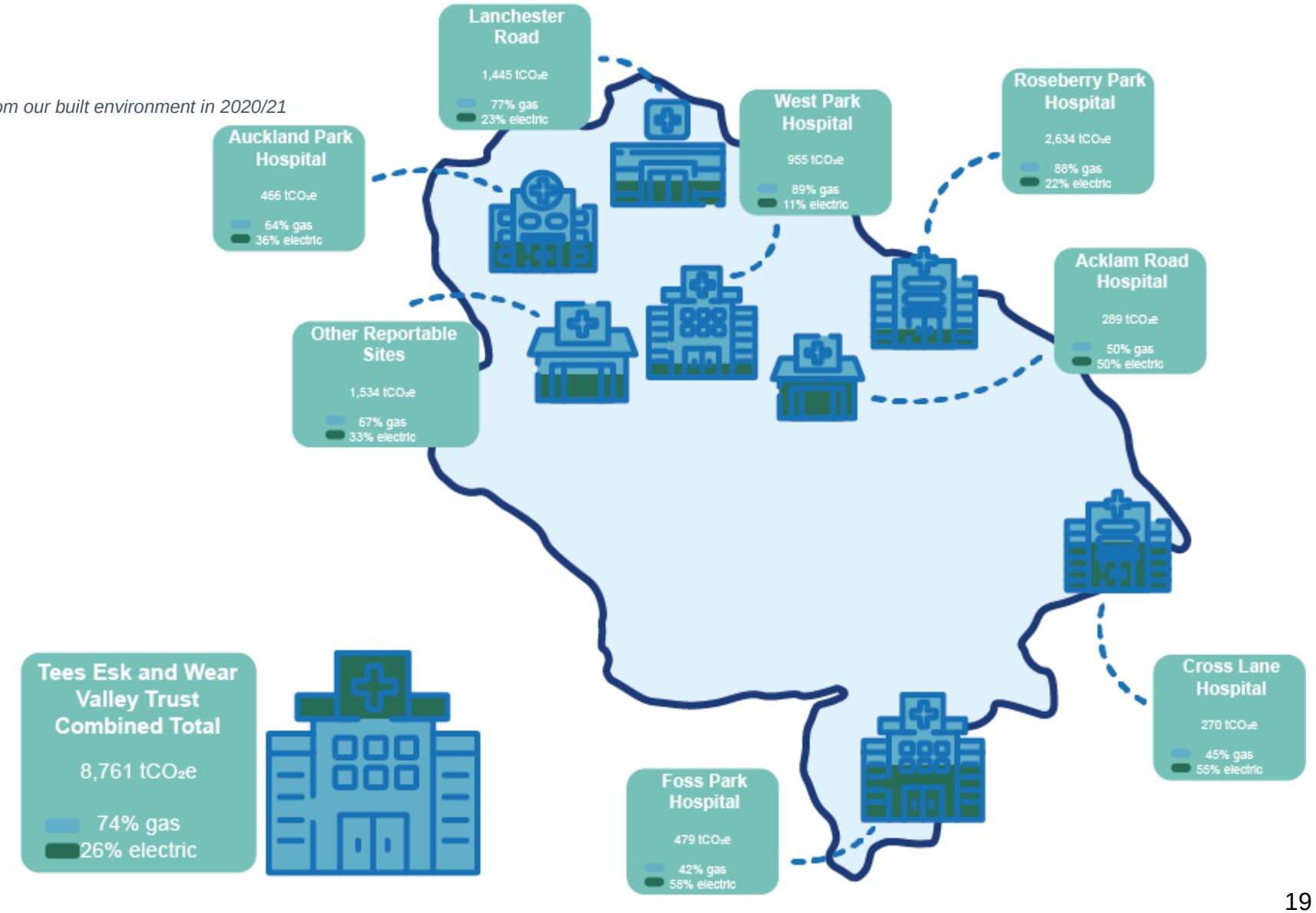


Figure 5 TEWV total carbon footprint breakdown in 2020/21

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

Figure 6 Emissions from our built environment in 2020/21



Our Emissions-reduction trajectory

We have grouped emission sources together and calculated yearly emission reduction targets from 2021/22 to 2024/25 (Figure 7).

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

We need to reduce our total emissions by 8,957 tCO_2e from our 2020/21 baseline (taking into consideration the future procurement of renewable electricity), by 2024/25.This roughly equates to **2,239 tCO_2e** per annum.

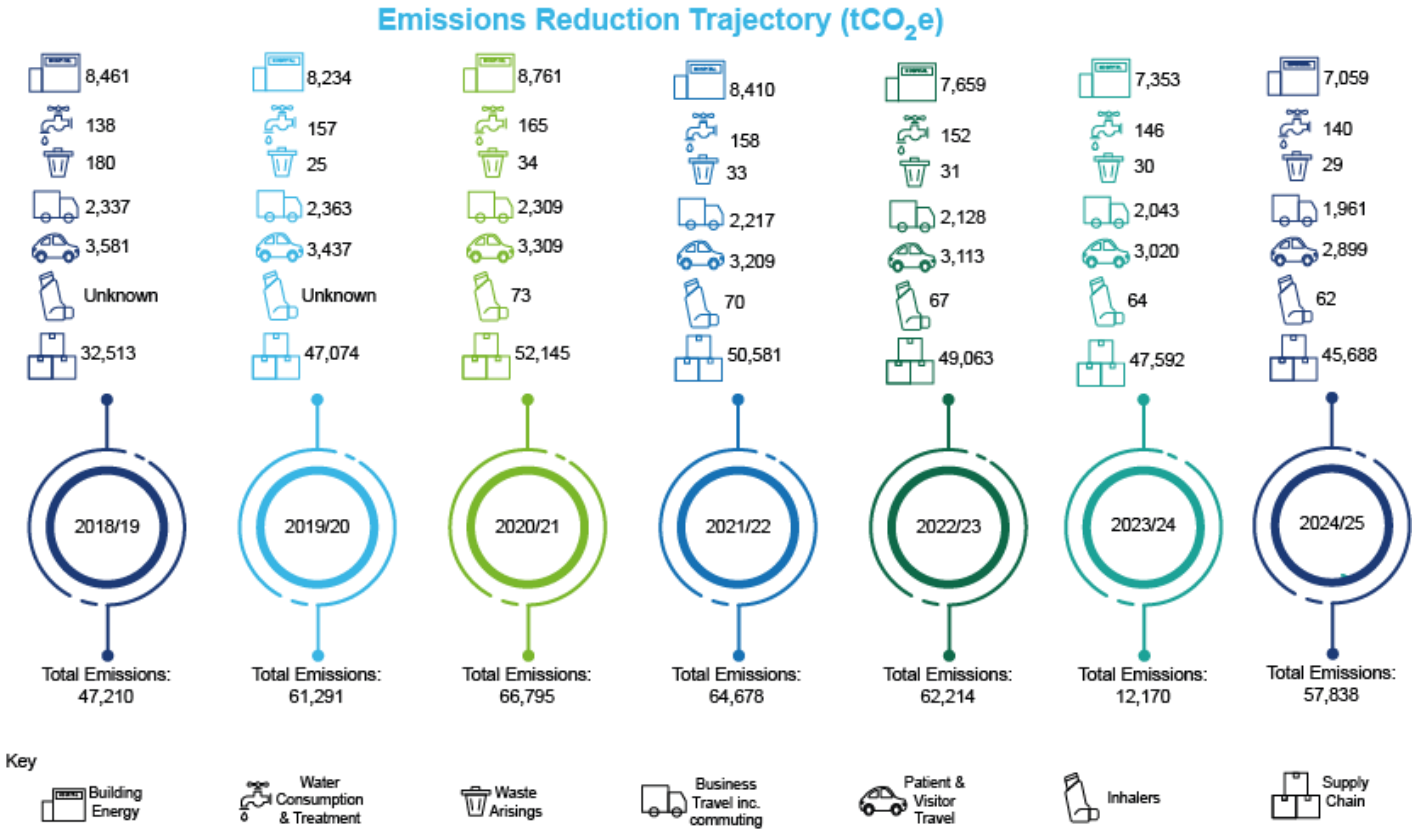


Figure 7 TEWV's Estimated GHG Reduction Target for four years by activity to meet 'Delivering a Net Zero NHS'

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:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative Emissions reduction:

Low or incremental reduction

Moderate reduction

Significant reduction

Not applicable

Workforce and System Leadership

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.

The Trust's Director of Finance Liz Romaniak and non-Executive Director Charlotte Carpenter will oversee the resourcing and delivery of this Green Plan. Action plans identified by this Green Plan will be reviewed through the Trust's annualised Business Planning prioritisation processes to identify suitable revenue and/pr capital budgets. We will also seek internal and third-party funding to support the roll-out of Green Plan actions.

This Green Plan is subject to approval by our Board of Directors and will be reviewed (and revised if necessary) at least annually via the Strategy and Resources Committee on its behalf, to keep us on track with the NHS net zero and TEWV's own targets. These reviews and our progress against the actions in the Green Plan will be submitted to our Coordinating Commissioner.

Sustainable Development Management Plan Steering Group

The group promotes sustainability across the Trust and influences how sustainable actions are implemented. Staff engagement relating to sustainability is also overseen by the group, in addition to the promotion of reducing the Trust's carbon footprint and recruiting and coordinating the activities of Sustainability Champions.

The group has already overseen the circulation of a newsletter and is facilitating the production of a Climate Change Adaptation plan.

Staff with patient. Source: TEWV Website

NHS LTP 2.24, 17

NHS SC 13.9, 13.10, 18.2, 18

NHS NZ 4.2.3

13 CLIMATE ACTION

Target 13.2 Integrate climate change measures into policy and planning

Target 13.3 Build knowledge and capacity to meet climate change

No	TEWV Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept	NHS Req.
01	Review and approve the plan at our Board level, monitoring delivery at Board meetings and relevant committees.	Governance & policy	22/23		£	✕	Strat. & Resources Comm.	**SC** 18.2
02	Nominate and empower a Climate Change Adaptation Lead and keep the Co-ordinating Commissioner informed at all times of the persons holding these positions.	Governance & policy	On-going		£	✕	Strat. & Resources Comm.	**LTP** 2.24,17 **SC** 18.2.2
03	Identify budgets for the delivery of each 'area of focus' and the Green Plan as a whole.	Governance & policy	22/23		£		Strat. & Resources Comm.	**LTP** 2.24,17
04	Streamline data collection processes and produce a comprehensive monthly data report with relevant Green Plan metrics	Governance & policy	22/23		£		Estates	**NZ** 3.1.1, 3.1.2
05	Produce an annual granular carbon account in line with HM Treasury's 'Public sector annual reports: sustainability reporting guidance', with the intention of widening its scope and data quality, when possible, along with an annual review of the progress against the Green Plan actions / emission reduction targets	Core responsibilities	22/23		£		Estates	**SC** 18.3
06	Ensure staff are resourced to undertake Green Plan duties and nominate a lead person or department for each Green Plan area of focus to develop and coordinate action through the existing Sustainable Development Management Plan Group.	Governance & policy	23/24		£		Strat. & Resources Comm.	**LTP** 2.24,17
07	Ensure the Green Plan delivery is reflected in our corporate risk register.	Governance & policy	23/24		£		Strat. & Resources Comm.	**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	23/24		£		Strat. & Resources Comm.	**LTP** 2.24,17
09	Identify and action ways to engage patients and community in Green Plan delivery, including links between health inequality and climate action.	Working with patients, staff & communities	23/24		£		Care Groups	**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		£		Strat. & Resources Comm.	**LTP** 2.24,17
12	Ensure quarterly Greener NHS Data Collection uploads are made	Core responsibilities	On-going		£	✕	Estates	**NZ** 3.1.1, 3.1.2

Figure 8 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 TEWV 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 ways of working 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.

Doctor with patient. Source: Unsplash

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

NHS SC 13.1 through 13.10

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

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

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

No	TEWV Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Incorporate the Green Plan into the Sustainability Steering Group agenda.	Governance & policy	22/23		£	✕	People & Culture	**LTP** 4.1, 4.3, 4.39, 4.42 **SC** 13.1 to 13.10
02	Building on our current practice, review our policies and processes against NHS aims for ensuring: ○ rewarding, flexible and supportive work and ○ positive action on promoting equalities, including through the Workforce Race Equality Standard and new Workforce Disability Equality Standard, and ○ regular reporting against the NHS Model Employer Strategy.	Governance & policy	On-going		£	✕	People & Culture	**LTP** 4.1, 4.3, 4.39, 4.42 **SC** 13.1 to 13.10
03	Incorporate the Green Plan into the Essential Mandatory Training and Induction policies.	Governance & policy	22/23		£		People & Culture	**NZ** 4.2.1
04	Create Green Plan intranet pages for staff access and external webpages for other stakeholders; upload Green Plan content and progress updates accordingly.	Governance & policy	22/23		£	✕	Sustainability Manager Infrastructure services	**NZ** 4.2.1
05	Use the Green NHS 'ONE YEAR ON' Communications Toolkit and/or the 'Healthier Planet, Healthier People' Toolkit to create and share communications about our Green Plan.	Working with patients, staff & communities	22/23		£		Comm & Engagement	**NZ** 4.2.1
06	Encourage staff actively participate in the Greener NHS community and other forums such as the Greener AHP Hub, Centre for Sustainable Healthcare and related workspaces on the FutureNHS platform.	Working with patients, staff & communities	22/23		£		Comm & Engagement	**NZ** 4.2.1
07	Consult, explore and action how clinical and non-clinical staff can best participate in our Green Plan delivery, ensuring this is incorporated into workplans, work-time allocations, performance reviews, and collaborating with other trusts where appropriate.	Governance & policy	22/23		£		Sustainability Manager Infrastructure services	**NZ** 4.2, 4.2.1, 4.2.2, 4.3.3

No	TEWV 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	23/24		£		Sustainability Manager Infrastructure 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	23/24		£	✕	Procurement & People & Culture	**LTP** 4.1, 4.3, 4.39, 4.42

Figure 9 Green Plan actions for workforce

Indicative cost:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative emissions reduction:

Low or incremental reduction

Moderate reduction

Significant reduction

✕ Not applicable

Sustainable Models of Care

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

Our Trust delivers mental health, learning disability and substance misuse services for people living in County Durham, the Tees Valleys, Scarborough, Whitby and Ryedale Harrogate, Hambleton, Richmondshire, York and Selby. We operate in over 150 locations including 64 inpatient wards. Our largest site is St. Luke's Hospital, but it is West Park Hospital that serves as our headquarters.

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.

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.

Therapy. Source: Unsplash

No	TEWV 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		£		Strat. & Resources Comm.& relevant clinical leads	**LTP** 2.26 **SC**13.9.118.4.2.1 **NZ** 4.1.3
02	Use the Embedding Public Health into Clinical Services Programme's toolkit and Sustainability in Quality Improvement (SusQI) Framework to ensure the best possible health outcomes with minimum financial and environmental costs, while adding positive social value at every opportunity.	Governance & policy	On-going		£		Strat. & Resources Comm.& relevant clinical leads	**LTP** 2.26 **SC**13.9.118.4.2.1 **NZ** 4.1.3
03	Continue to collaborate with other trusts and public authorities on the population's health.	Governance & policy	On-going		£		Strat. & Resources Comm.	**LTP** 1.53 **SC** 18.6 **NZ** 4.1.3
04	Appoint a Health Inequalities Lead to coordinate delivery of an updated Health Inequalities Action Plan.	Core Responsibilities	22/23		£	✕	Strat. & Resources Comm.	**LTP** 2.26 **SC** 13.9.2, 13.10 **NZ** 4.1.3
05	Follow Greener NHS guidance or support the development of GHG emissions reduction metrics linked with sustainable care actions, including establishing links between better health outcomes and reduction in emissions from avoided care and travel.	Core responsibilities	23/24		£	✕	Estates	**SC** 18.4.2.1 **NZ** 4.1.1, 4.1.2
06	Work to engage suppliers related to sustainable care in relevant emissions reduction and health equalities activities.	Procurement	23/24		£	✕	Procurement & service providers	**NZ** 4.1.3
07	Explore new ways of delivering care at or closer to home, meaning fewer patient journeys to hospitals.	Working with patients, staff & communities	On-going		£		Clinical leads	**NZ** 4.1.1

Figure 10 Green Plan actions for Sustainable care models

Indicative cost:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative emissions reduction:

Low or incremental reduction

Moderate reduction

Significant reduction

✕ Not applicable

Digital Transformation

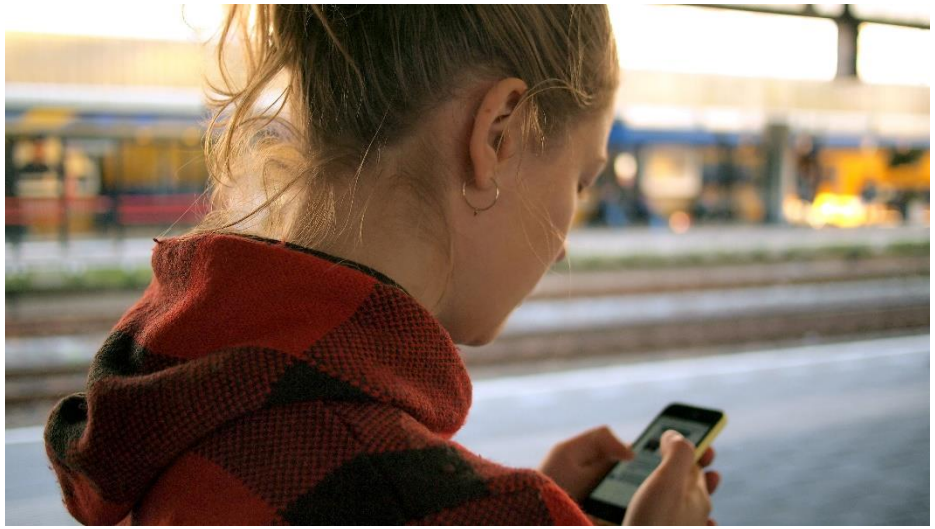
The NHS Long Term Plan commits all NHS bodies to focus on digital transformation by establishing a 'digital front door', enabling digital first care. The NHS App is one example of this, providing patients with a simple and secure way to access NHS services on their smartphone.

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

TEWV is well-placed to lead the development of digital care as a tool to promote inclusion and increase access to quality care across County Durham, Darlington Teesside, North Yorkshire and the Vale of York. We are 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 Trust's Digital and Data Journey to Change establishes a clear vision, priorities and action for the period to 2025.

The 'What Good Looks Like' 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'.



Woman using app. Source: Unsplash

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. Virtual clinical consultations have increasingly become the norm during the pandemic. Where patients do not have a device for video consultations, the Trust has delivered a tablet and disinfected it upon return. However, there will always be a need for face-to-face appointments and consultations for some of our patient groups.

The COVID-19 pandemic has led to a blended working approach, especially for our administrative staff – a mixture of office and home-based working. We have upgraded our IT infrastructure to accommodate this. A data centre with a backup supports this, although cloud storage will be explored in the future. The Trust has provided laptops and smartphones, and internal meetings and related communication utilise Microsoft Teams. Our Digital & Data Journey to Change highlights the importance of supporting hybrid working arrangements (as appropriate) and ongoing arrangements that incorporate a mix of working from home and some Trust site-based working, which will reduce travel compared to pre-pandemic levels.

The Trust's Quality Strategy outlines several measures that we will use to monitor patient experience. Patient satisfaction is gathered from patients or carers using a survey that can be distributed in paper form, digitally using an app, or using an electronic tablet or kiosk on site. Although appointment letters are issued on paper or digitally on an ad hoc basis, appointment reminders are issued using SMS texts. This can also be said for patient records, as we have begun integrating an Electronic Patient Record (EPR) programme which will be completed withing the next 2 years. Our expenses system is fully digital.

A number of digital applications are utilised by the Trust, including Calm Harm which helps patients to manage self-herm, Dementia Stages Ability Model, which promotes understanding of the progression of dementia, Fear Tools, which is an anxiety Aid, and Baby Buddy for pregnancy, birth and baby support.

Patient on video call. Source: Unsplash

No	TEWV 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 CSH's Carbon Calculator for Avoided Patient Travel	Governance & policy	On-going		£	✕	Sustainability manager & Infrastructure services.	**SC** 28
03	Offer more digital and remote appointments: set targets against the baseline recorded in June 2021.	Working with patients, staff & communities	22/23		£		Care Groups	**PG** C1
04	Use the What Good Looks Like Framework, the Greening Government: ICT and Digital Services Strategy 2020-25 and The Technology Code of Practice as guides to ensure the Trust has robust ICT systems in place to deliver on digital transformation.	Procurement & ICT	23/24		£		ICT	**NZ** 4.1.4
05	Build on current practice of engaging staff and care groups in digital care channels, meaning fewer patient journeys.	Working with patients, staff & communities	On-going		£		ICT	**NZ** 4.1.4 **PG** C1
06	Transfer paper-based systems such as prescribing, bed state, observations, ward state, referrals, 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	23/24		£		ICT& Business & Value	**LTP** 1.43, 1.44, 5

Figure 11 Green Plan actions for digital transformation

Indicative cost:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative emissions reduction:

Low or incremental reduction

Moderate reduction

Significant reduction

✕ Not applicable

Travel and Transport

Emissions associated with the Trust's business travel and transport amounted to around 1.9 tCO_2e or 0.01% of all emissions in 2020/21. This low figure has been attributed to a combination of impacts from the national lockdowns and related restrictions, reduced travel/face to face meetings during the pandemic with a key next step of capturing baseline data of staff related business travel. Therefore, this number comprises 195 national rail journeys and 5 domestic flights, resulting in a total of 28,502 km travelled.

For staff commuting and patient/visitor travel, the NHS' Health Outcomes Travel Tool (HOTT) was used. Most transport-related emissions (5,616 tCO_2e) can be linked to these sources.

Figure 12 Travel Carbon Footprint Infographic. Please note figures within this graphic are estimated and may not reflect true values (based on the NHS HOTT Tool)

TEWV Fleet Vehicles

We operate a fleet of 68 vehicles, ranging from cars to small, medium and large vans, some of which are electric vehicles.

We operated four electric vehicles in Estates (used in the transportation of goods) during 2020/21. New electric vehicles will be added as leases on fossil fuel vehicles become due for renewal.

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

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

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

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

We need to undertake a fleet review to see how our vans and large vans are being used, and whether suitable ULEVs and ZEVs are available. Additionally, we must review the choice of company cars on offer and change the specifications to reflect the targets within the NEPTS. We are seeing an increasing number of salary sacrifice orders for fully electric and hybrid vehicles and equally need to consider the impacts on demand for EV charging points.

If we changed all our fleet vehicles to ZEVs, based on 2020/21 data and using 100% renewable electricity, we would likely see a drop in emissions (emissions associated with electric vehicles are due to transmission and distribution losses in the national grid).

Fleet vehicle emissions are a focus action moving forward and will be included in the first plan review.

Fleet of vans. Source: Unsplash

Other Lease Vehicles

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

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

The Trust will support staff hiring lease vehicles to make lower carbon option choices by publishing information on benefits of electric and low carbon vehicles. The Trust will install electric vehicles charging points across its site portfolio and publish locations and procedure for use of these on the staff intranet noticeboard. Electric vehicles have increased in their uptake, providing benefits beyond Trust mileage.

All electric estates vehicle on charge. Source: TEWV Library

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. Mileage and emissions baseline data gathering will be a key next step and will be reported on as a priority as the plan is put into action.

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. This also brings forth the issue of providing additional electric vehicle charge points in the future.

Cars in carpark. Source: Unsplash

Electric Vehicle Charging Infrastructure

The Trust has an extensive EV charging network with 54 charging points across our sites. 40 of these were purchased using government grants. Lanchester Road Hospital has six 7 kW bays, four of which are in the process of being upgraded to 22 kW. Across our sites we have thirty 7 kW bays and twenty-four 22 kW bays.

The infrastructure is being expanded across the Trust at ten additional sites that have been prioritised according to need.

Business Travel (public transport)

Before the pandemic in 2019/20, our staff took 4,417 train journeys, six domestic, two long haul and twenty-seven short haul flights, emitting a total of 61.8 tCO_2e, as shown in Figure 13.

In 2020/21, this had reduced to 195 rail journeys and 5 domestic flights respectively, with total emissions dropping to 1.9 tCO_2e. This exemplifies how ‘extreme’ remote working has had a beneficial impact in terms of carbon emissions and air quality.

EV Charging point at Cross Lane. Source: TEWV Library

Commuting, Visitor/patient travel

A government approved salary sacrifice Cycle2work scheme is in place across the Trust, allowing permanent staff to get a bike and accessories up to the value of £1,000 to encourage cycling to work.

Increasing the number of cycle parking spaces, improving shower/changing facilities, and offering other incentives for active travel will be explored. Public transport provision to or near our sites remains a vital service to the communities we serve and helps to reduce health inequalities.

In lieu of additional travel plan survey data, 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 14).

However, these figures are indicative and need to be bolstered and verified by local travel plan survey data. Hence, the impacts of COVID-19, with less need for commuting, do not fully feature in the results for 2020/21 and the projected 2021/22 data (the sequentially lower emissions are attributed to improvements in vehicle efficiencies and electrification of transport).

Patient transport is facilitated through a few different methods, depending on the needs of the patient. Patients can be transported in pool cars, employee cars (leased or privately owned), or taxis. These miles are outside of the scope of this Green Plan.

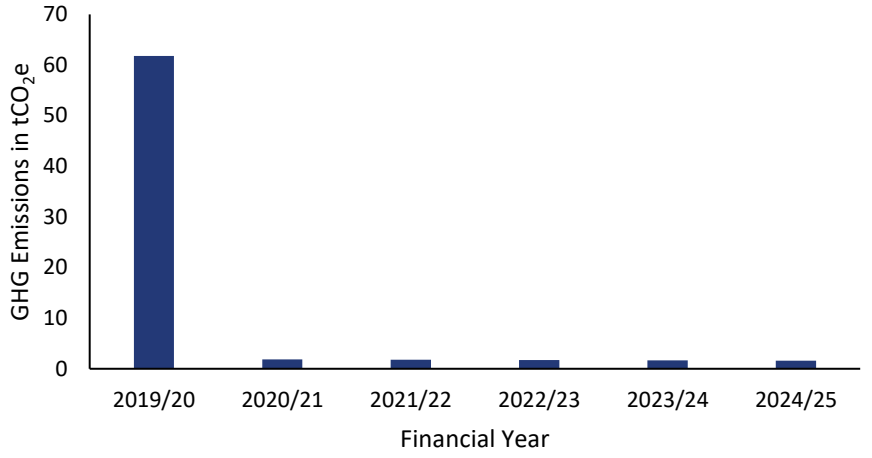


Figure 13 Bar chart to show total emissions from business travel and reduction trajectory to 2024/25

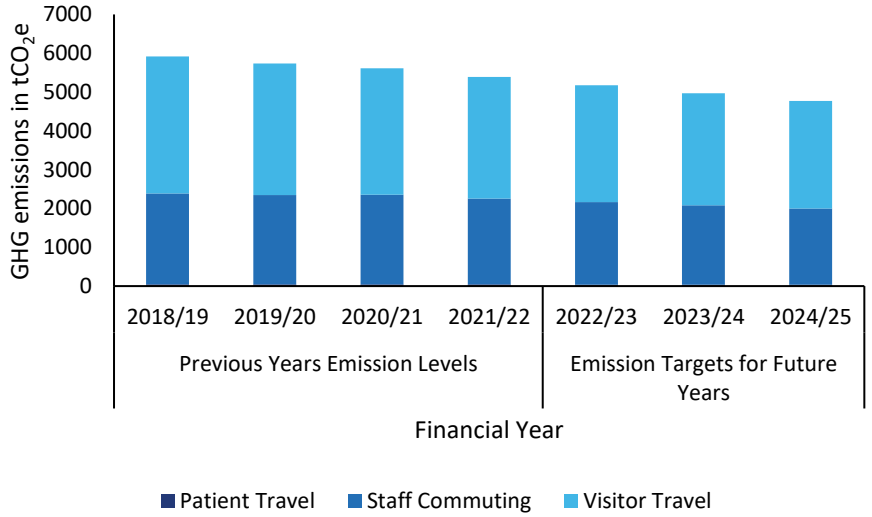


Figure 14 Bar chart to show total emissions from patient, visitor and staff travel and emissions reduction trajectory to 2024/25

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

Cross Lane Wildflower meadow. Source: TEWV Library

No	TEWV 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	23/24		£		Estates	**LTP** 2.21, 3.82, 17 **SC** 18.4.1.3 **NZ** 3.2, 3.2.2
02	Conduct annual Travel Plan surveys to quantify staff commuting and visitor travel and verify HOTT Tool outputs.	Working with patients, staff & communities	Annual, 22/23		£	✕	Estates	**NZ** 3.2, 3.2.2
03	Collate fuel card data for our pool vehicles.	Governance & policy	23/24		£	✕	Hotel Services	**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	23/24		£		Finance	**NZ** 3.2, 3.2.2
05	Undertake a Green Fleet review of our fleet vehicles to ascertain usage and distance travelled, with view to integrating ULEVs and ZEVs	Governance & policy	23/24		£		Finance	**NZ** 3.2, 3.2.2
06	Ensure that any new vehicle purchased or leased are ultra-low emission (ULEV) or zero emission (ZEV) from 2023, in line with the latest NHS non-emergency transport guidance.	Core Responsibilities	23/24		£		Estates	**SC**.18.4.1.1, 18.4.1.4 **NZ** 3.2.1
07	Collate data from the staff mileage reimbursement system to emissions foot printing, monitoring and reduction targets.	Governance & policy	23/24		£	✕	Finance	**NZ** 3.2, 3.2.2
08	Enhance the staff mileage reimbursement system to collate vehicle type/engine size and fuel type data to allow more accurate emissions foot printing, monitoring and reduction targets.	Governance & policy	23/24		£	✕	Finance	**NZ** 3.2, 3.2.2
09	Enhance the business travel expense system to capture to the to- and from- destinations for rail, air, bus, taxi journeys	Governance & policy	24/25		£	✕	Finance	**NZ** 3.2, 3.2.2
10	Improve stores provision and work with our suppliers to consolidate goods orders through better planning wherever possible, reducing transport emissions.	Procurement	23/24		£		Procurement	**NZ** 3.2, 3.2.2
11	Work with staff currently home-working under pandemic conditions to explore voluntary blended working.	Working with patients, staff & communities	22/23		£		HR	**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 several facilities housed in other organisations buildings. This presents challenges to retrofitting resource efficiency measures and heating improvements, and we will work with other Trusts and landlords to improve efficiencies at these sites.

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

- **8,761 tCO_2e** emitted from buildings across our estate in **2020/21.**
- We will procure 100% renewable electricity from April 2022.
- We need to reduce energy consumption by over 5,890,000 kWh per year to achieve the emissions reduction target of **7,071 tCO_2e** in **2024/25.**

Energy and emissions

In 2020/21, we had 65 active sites where we were directly responsible for procuring the energy supply contracts. Buildings under our ownership can be targeted for energy efficiency improvements.

Figure 16 shows the total emissions liberated from electricity and gas use from 2018/19 to 2020/21. We need to reduce emissions by 2,855 tCO_2e by 2024/25 from our 2020/21 baseline (this includes the reduction in emissions from procuring renewable electricity in 2022/23).

Roseberry Park Hospital energy consumption is significant at 2,634 tCO_2e in 2020/21.

Figure 17 shows the energy consumption and emissions from our highest emitting sites as bubble graph. The size of the bubble relates to the combined emissions arising from both gas and electricity use at each site. The 'x' axis represents the amount of gas consumption, and the 'y' axis represents electricity use.

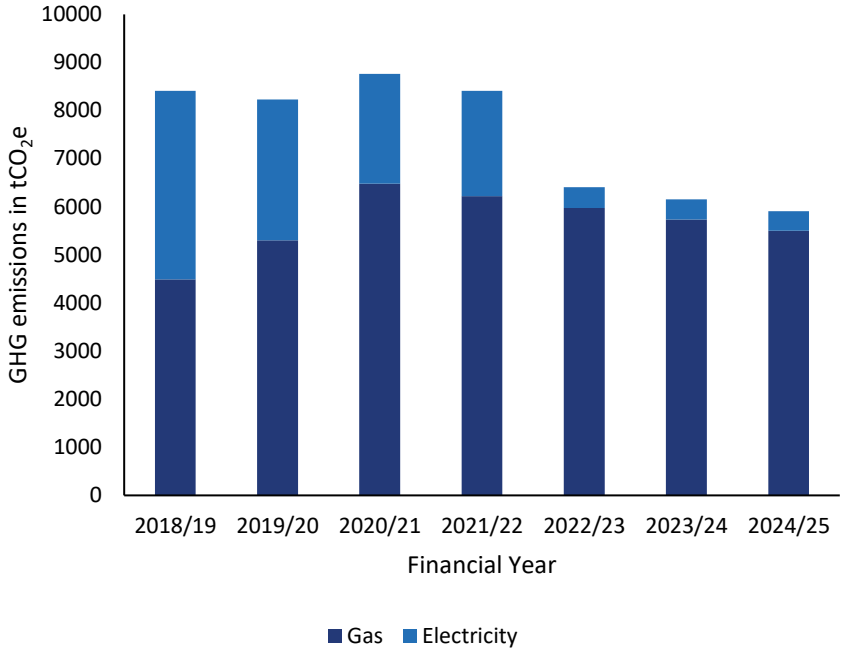


Figure 16 Emissions from our built environment from 2018/19 to 2024/25

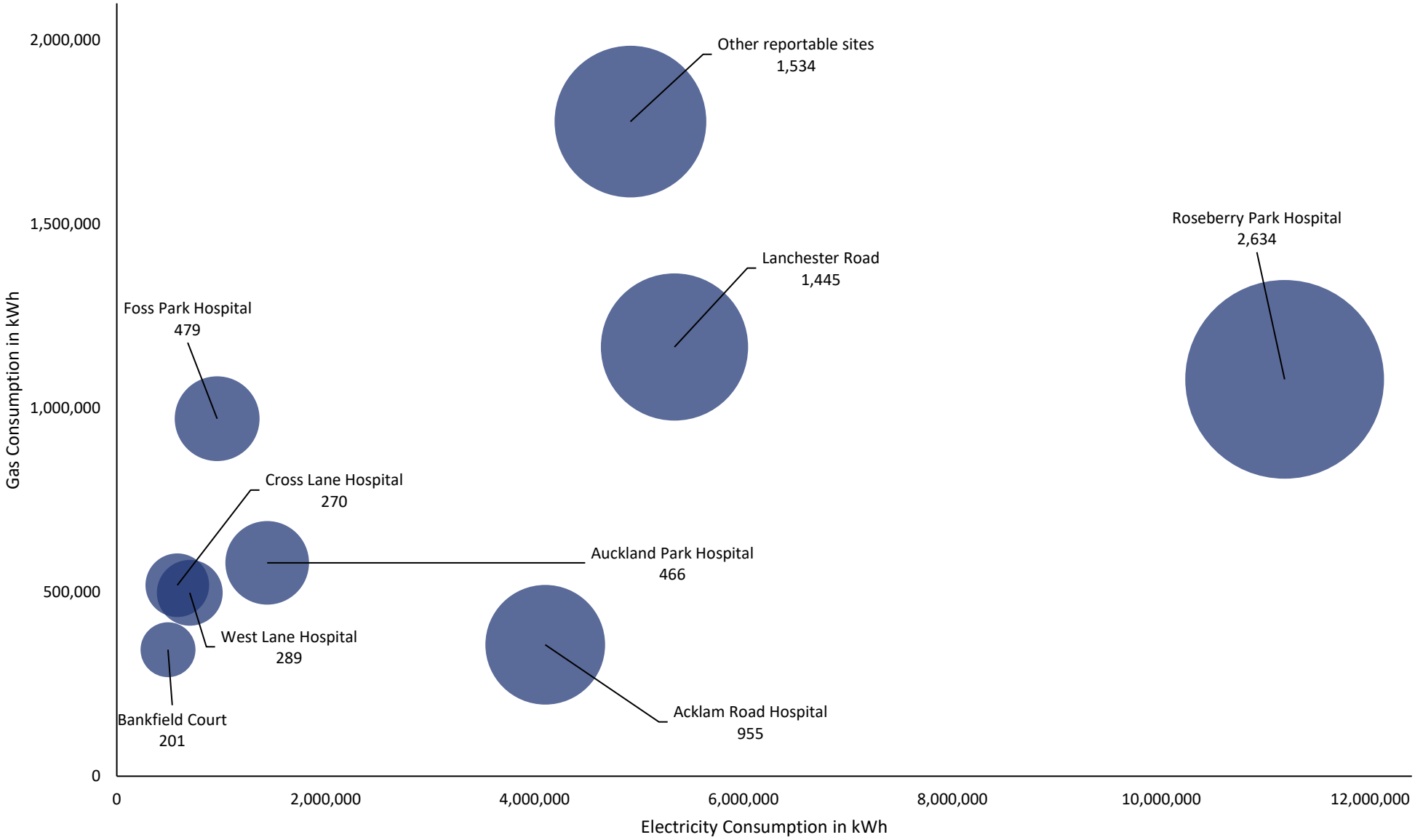


Figure 17 Bubblegraph showing building energy consumption at our top 9 highest emitting sites in 2020/21. The size of the 'bubble' is relative to the GHG emissions

The Trust will procure 100% renewable electricity from April 2022. The emission reductions from this are illustrated in Figure 18.

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 5,890,000 kWh per year!

In our Energy and Water Management Policy, we committed to reduce our volume of energy and water used and utilise advanced technologies in the operations of our buildings to achieve optimum savings.

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

Primary heating systems used within the Trust vary across all sites and include a ground source heat pump at one site and air source heat pumps at several. We also have three Combined Heat and Power (CHP) units across three sites, which are CHPQA certified.

We have a new building management system (BMS) which covers over 40 sites, with enhanced site-based plant room graphics. This system allows for minor adjustments to comfort settings in extreme weather conditions and fault finding in the event of plant failures. Temperature settings are reviewed regularly throughout the year.

The Trust's Hybrid working arrangements inevitably give opportunities for estate rationalisation and associated reductions in energy consumption and emissions.

West Park Hospital Sign. Source: TEWV Website

However, we need to continually improve and upgrade our estate.

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

The decarbonisation of our heating systems will become increasingly important to reach net zero emissions. We already operate air source heat pumps and a ground source heat pump at our sites. However, transitioning the remaining gas-fired boilers, to electrical alternatives remains a significant challenge.

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

Extensive on-site renewable energy systems, such as solar photovoltaics and integrated large battery storage technologies, will help mitigate this, and provide additional resilience to power outages, with the potential to negate using our back-up diesel generators, which consume around 20,000 litres of diesel per annum.

This Green Plan has also been included on the Estates risk register.

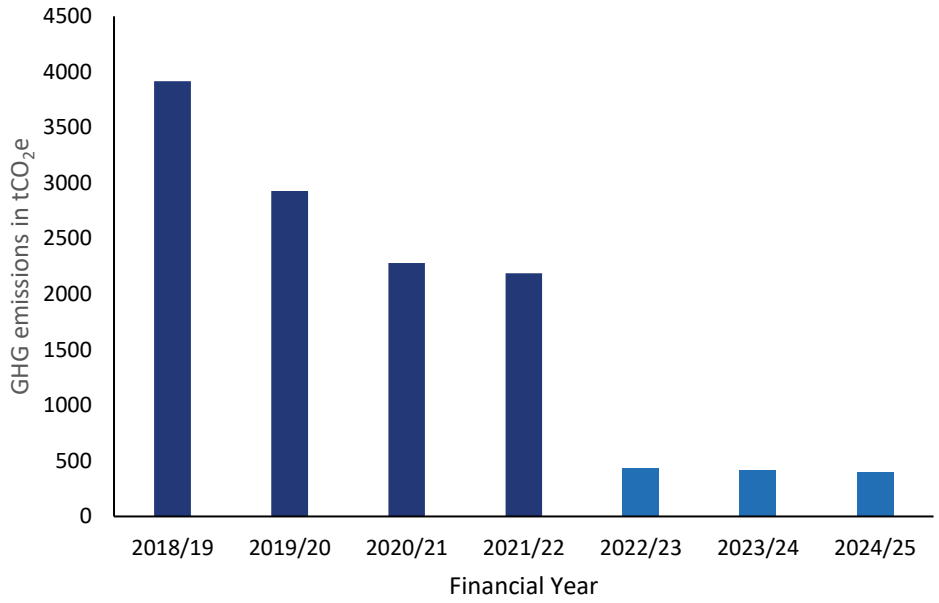


Figure 18 Emissions from electricity consumption and emission reduction trajectory to 2024/25 (note the difference following the procurement of 100% renewable electricity in April 2022)

No	TEWV Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Enhance Planned Preventative Maintenance (PPMs) of our facilities and assets to be proactively energy--focused and to identify opportunities to upgrade equipment/plant.	Core responsibilities	22/23		£		Estates	**LTP** 17 **SC** 18.4.2.1 **NZ** 3.1.1, 3.1.2
02	We currently procure 100% renewable electricity with Renewable Energy Guarantees of Origin (REGO) certificates backed by Npower.	Procurement	22/23		£		Estates	**SC** 18.5
03	Access the NHS Energy Efficiency Fund (NEEF) to upgrade all lighting to LED alternatives.	Core responsibilities	22/23		£		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	22/23 & on-going		£		Estates	**NZCDP** **NZ** 3.1.1, 3.1.2
05	Install solar photovoltaic meters and collate a monthly generation report	Governance & policy	22/23		£		Estates	**NZCDP** **NZ** 3.1.1, 3.1.2
06	Optimise energy use by embedding networked Automatic Meter Readers (AMRs) across the Estate with appropriate controls to reduce energy consumption, and report sub-metered data monthly	Core responsibilities	23/24		£		Estates	**LTP** 17 **SC** 18.4.2.1 **NZ** 3.1.1, 3.1.2
07	Conduct detailed building energy surveys to identify further energy/thermal efficiency opportunities, including the installation of heat recovery systems on Air Handling Units (AHUs)	Core responsibilities	23/24		£		Estates	**LTP** 17 **SC** 18.4.2.1 **NZ** 3.1.1, 3.1.2
08	Collate air and ground source heat pump data as part of the development of a Decarbonisation of Heat Plan that focuses on the phase out of existing gas-fired boilers and replacement with low-carbon alternatives, where feasible.	Governance & policy	On-going		£		Estates	**LTP** 17 **SC** 18.4.2.1 **NZ** 3.1.1, 3.1.2

No	TEWV Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
09	Explore the possibility of creating District Heat Networks with neighbouring partners.	Working with patients, staff & communities	On-going		£		Infrastructure Services	**LTP** 17 **SC** 18.4.2.1 **NZ** 3.1.1, 3.1.2
10	Look to procure 'green gas' through the Green Gas Certification Scheme as and when existing energy contracts are due for renewal.	Procurement	23/24		£		Procurement	**SC** 18.5
11	Incorporate energy conservation into staff training and education programmes and deliver behaviour-based energy saving campaigns.	Working with patients, staff & communities	23/24		£		Sustainability Manager	**NZ** 3.1.1
12	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	23/24		£	✕	Estates & Comms	**NZ** 3.1.1
13	Explore how the Trust can implement an ISO 50001 Energy Management System.	Governance & policy	24/25		£		Estates	**NZ** 3.1.1

Figure 19 Green plan action table for Energy and Emissions from the built environment

Indicative cost:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative emissions reduction:

Low or incremental reduction

Moderate reduction

Significant reduction

✕ Not applicable

Capital Projects

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

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

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

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

Our Trust, furthering a previous commitment to ensure all capital development complies with the Building Research Establishment Environmental Assessment Method's (BREEAM) 'Good' 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 should be considered for new builds and refurbishments. For example, BREEAM rating, the Zero Carbon Hospital Standard, and implementation of on-site renewables.
- Construction supplier alignment to net zero commitments, such as on-site contractor measures on waste reduction and low emission construction plans.
- Low carbon substitutions and product innovation, such as lower embodied carbon construction materials.

NHS LTP 16

NHS SC 18.4.2.1, 18.4.2.3

NHS NZ 3.1.1, 3.3.1

8 DECENT WORK AND ECONOMIC GROWTH

Target 8.5 Full employment and decent work with equal pay

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Target 9.4 Upgrade all industries and infrastructures for sustainability

13 CLIMATE ACTION

Target 13.1 Strengthen resilience and adaptive capacity to climate-related disasters

Target 13.2 Integrate climate change measures into policy and planning

No	TEWV 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 Responsibilities	22/23		£		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	23/24		£	⊗	Estates	**SC** 18.4.2.3
04	Encourage and measure local subcontractor and supply chain spend as part of our anchor institution approach.	Procurement	22/23		£		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	23/24		£		Estates & 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	23/24		£	⊗	Estates, Procurement & Care Group/ Engagement	**LTP** 16 **SC** 18.4.2.1 **NZ** 3.1.1

Figure 20 Green plan action table for Capital Projects

Indicative cost:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative emissions reduction:

Low or incremental reduction

Moderate reduction

Significant reduction

⊗ Not applicable

Water Efficiencies

In 2020/21, we used 162,027m^3 of water, which cost a total of £456,989.

There are emission impacts associated with the supply of fresh water and treatment of wastewater, equating to 165 tCO_2e in 2020/21 (see Figure 21).

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

Water conservation and sustainable drainage shall also be explored. Roof rainwater harvesting already takes place on a few sites for the purposes of irrigating landscaped gardens. Rainwater harvesters collect rainwater for non-potable purposes, such as for flushing toilets. They help reduce water stress and potentially alleviate flooding by attenuating surface water run-off in storm events.

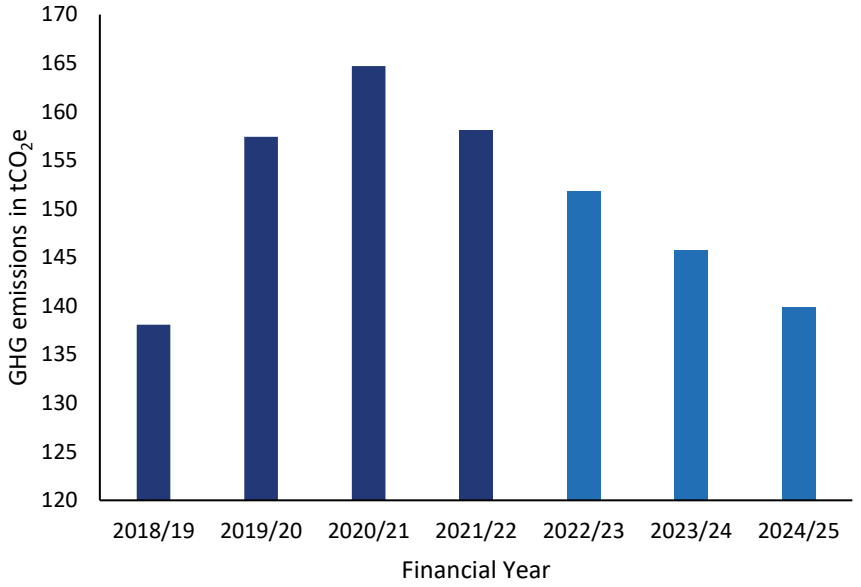


Figure 21 Stacked bar chart to show total water emissions from supply and wastewater treatment, and emissions reduction trajectory to 2024/25

Estates & Facilities: Water

- We used **162,027m^3** of water in 2020/21 – enough water to fill 28 Olympic-size swimming pools.
- **70 tCO_2e** was attributed to the supply of water and wastewater treatment.
- We need to reduce water consumption by **24,410m^3** by 2024/25.
- Water efficiency and sustainable drainage will become ever more important in the future.

No	TEWV 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	22/23		£	⊗	Estates	**NZ** 3.1
03	Collate water Automatic Meter Reader to determine water use patterns and aid leak detection, and report monthly	Core Responsibilities	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	23/24		£		Estates	**NZ** 3.1
05	Install more rainwater harvesting and collate data.	Procurement	On-going		£		Estates	**NZ** 3.1
06	Explore where grey water systems can be installed.	Procurement	23/24		£		Estates	**NZ** 3.1
07	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		£	⊗	Estates	**LTP** 17
08	Work with our staff and patients by communicating the importance of water efficiency.	Working with patients, staff & communities	On-going		£	⊗	Sustainability Manager/ Comms	**NZ** 3.1
09	Incorporate water efficiency measures within our climate change adaptation work with the local community.	Working with patients, staff & communities	23/24		£	⊗	Estates	**NZ** 3.1

Figure 22 Green plan action table for Water

Indicative cost:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative emissions reduction:

Low or incremental reduction

Moderate reduction

Significant reduction

⊗ Not applicable

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, metal waste, IT equipment, batteries and waste cooking oil, though amounts collected are not reported.

Figure 23 shows the total waste arisings (all recorded waste streams), and Figure 24 shows emissions emanating from the waste streams.

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

We have a limited number of dry mixed recycling bins, with the majority of non-clinical and non-hazardous waste being disposed in the general waste bins in the buildings we operate and manage. This general waste and clinical waste are used to create flock that is sent to an 'Energy from Waste' Station (RDF).

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 combined with clinical waste.

We have developed a dedicated strategy for the collection, storage and recycling of WEEE waste, which has been adopted as a 'best practice' case study by the waste contractor.

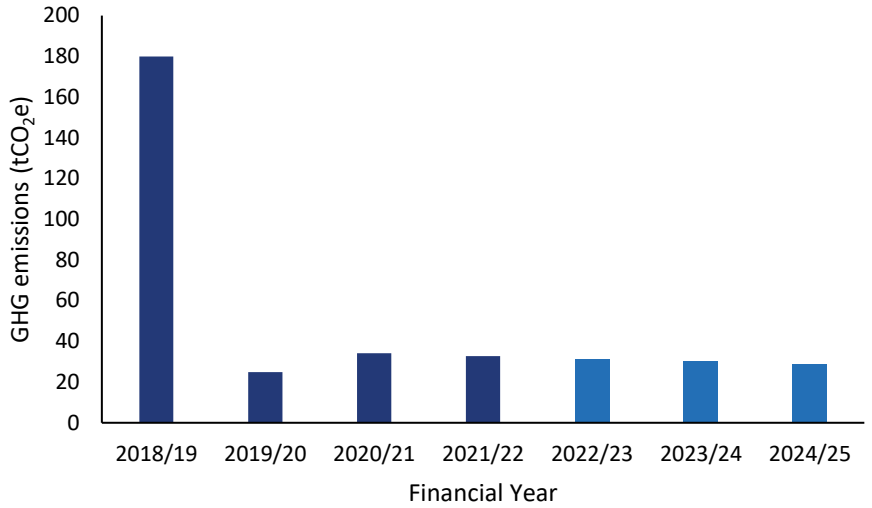


Figure 23 Emissions associated with our waste streams and emission reduction trajectory to 2024/25

Estates & Facilities - Waste:

- **1,011 tonnes** of waste were produced, emitting **34 tCO_2e** in 2020/21.
- **29 tonnes were sent to landfill** in 2020/21, emitting **13 tCO_2e (85%** of all emissions from waste).
- Food waste bins and collections will ensure food does not decompose in landfill sites, and instead is used for energy and compost generation.

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

We are aware of the amount of waste destined for landfill and need to segregate waste to improve our recycling rates. We can tackle this issue in two ways:

1. installing recycling bins with clear signage of what can be recycled will improve recycling rates and help reduce waste processing costs
2. changing the terms of our waste contract to ensure that general waste is sorted at the waste handling centre, with recyclable materials being segregated and non-recyclable waste incinerated (as Refuse Derived Fuel (RDF)) instead of going to landfill.

The COVID-19 pandemic has led to an increase in the usage of single-use plastic items; a necessary infection prevention 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. We have introduced a Trust-wide Tiger Bag Scheme to ensure that waste is effectively disposed of.

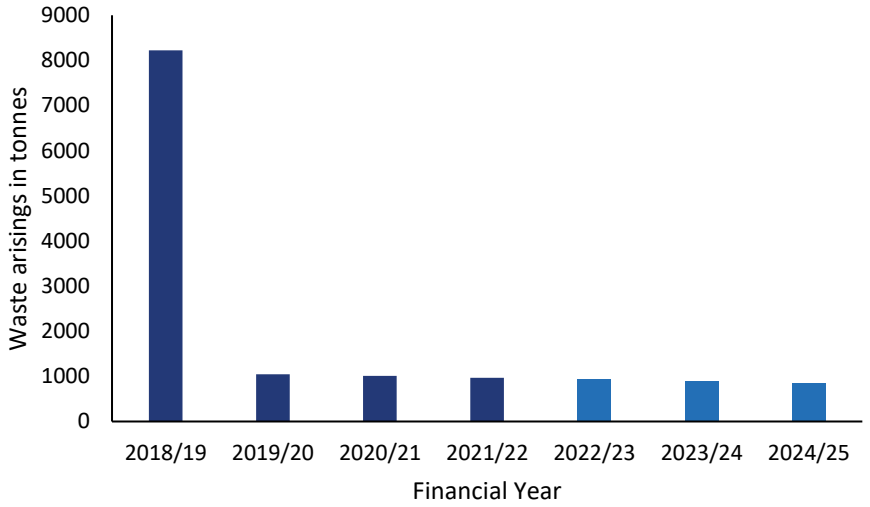


Figure 24 Total waste arisings in tonnes, and weight reduction trajectory to 2024/25.

No.	TEWV Green Plan Actions	Trust Area	Target year	Pro-gress	Indicative Cost to Achieve	Indicative Emissions Reduction	Responsible Lead/Dept.	NHS Req.
01	Collate *all* waste stream data from *all* sites (including sites we are not responsible for waste collection) and produce monthly reports.	Core Responsibilities	22/23		£	✕	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	22/23		£		Estates	**LTP** 17 **SC** 18.4.3.1 **NZ** 3.1
03	Increase the number of Dry Mixed Recycling (DMR) bins across all sites.	Core Responsibilities	23/24		£		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	23/24		£		Estates & Catering	**NZ** 3.1
06	Work with our staff and patients by communicating the importance of waste segregation.	Core Responsibilities	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	23/24		£		Clinical Teams & Procurement	**NZ** 3.1
08	Explore how the Trust can implement an ISO-14001 Environmental Management System.	Governance & policy	23/24		£		Estates & HR	**LTP** 17 **SC** 18.4.3.1 **NZ** 3.1
09	Implement waste segregation training for all staff.	Core Responsibilities	23/24		£	✕	Estates & HR	**NZ** 3.1

Figure 25 Green plan action table for Waste

Indicative cost:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative emissions reduction:

Low or incremental reduction

Moderate reduction

Significant reduction

✕ Not applicable

Biodiversity and Greenspace

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

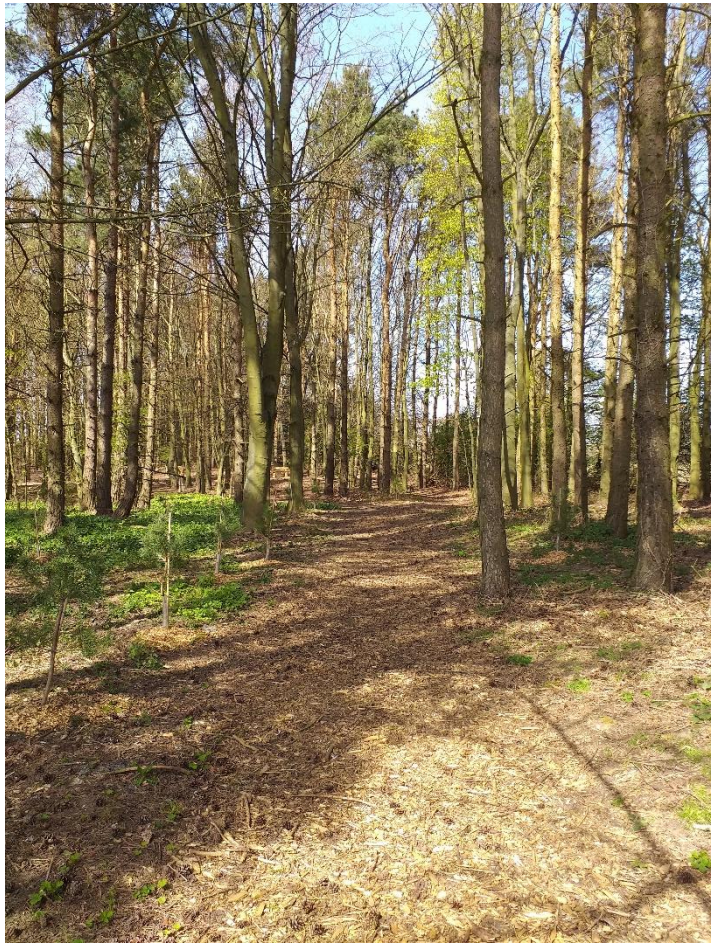
Our Trust wants to protect biodiversity within our estate and region and reduce our negative impact on biodiversity, both locally and globally.

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.

To enhance our greenspace, a project to transform a 3,500m^2 area across four of our sites into wildflower meadows has been implemented. We have also introduced four wellbeing gardens across these four sites.

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.



Lanchester Road Hospital Woodland Walk. Source: TEWV Library

NHS LTP 17

NHS SC 18.4.3, 18.4.3.1 to 18.4.3

NHS NZ 3.1.1, 3.3.2

11 SUSTAINABLE CITIES AND COMMUNITIES

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

3 GOOD HEALTH AND WELL-BEING

Target 3.9 Reduce illnesses and deaths from hazardous chemicals and pollution

13 CLIMATE ACTION

Target 13.2 Integrate climate change measures into policy and planning

No	TEWV 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	23/24		£	✕	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	23/24		£		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	23/24		£		Procurement	**SC** 18.1
04	Continue to engage our staff, patients, and communities in green space initiatives.	Working with patients, staff & communities	22/23		£	✕	Clinical leads & HR	**NZ** 2.2, 3.5

Figure 26 Green plan action table for Greenspaces

Indicative cost:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative emissions reduction:

Low or incremental reduction

Moderate reduction

Significant reduction

✕ Not applicable

Medicines – 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. However, TEWV is a Mental Health, Learning Disability and Autism service provider, and does not use anaesthetic gases.

Additionally, as a Trust, we only continue prescribing inhalers that other care providers have prescribed. This means we have little control over switching inhaler types.

The Long Term Plan commits the NHS to significantly reduce GHG emissions by switching to lower global warming potential (GWP) inhalers.

Inhalers

We do prescribe both Dry-powder (DPI) and Metered Dose Inhalers (MDI). Metered dose inhalers use fluorinated gases as the propellant: in 2020/21, the prescription of 1,572 MDIs contributed to 72 tCO_2e, whereas the 592 prescribed DPIs equated to around 1 tCO_2e.

The NHS Standard Contract stipulates that 30% of all inhalers prescribed across NHS England should be DPIs, potentially saving 374 $ktCO_2e$ per year, according to the NHS Net Zero report. At present, we prescribe 27% DPIs.

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

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

Inhaler. Source: Pexels

In 2020/21, the level of DPI prescriptions was only 3% below the target rate. The Trust will work with other care providers to aim for 30% of all inhalers prescribed being DPIs (from 592 to 657 prescriptions per year), to save an additional 3 tCO_2e (see figures 27 and 28).

At the end of use, inhalers still contain as much as 20% of high-GWP propellant. Greener disposal of these items, where residual fluorinated gases are captured and destroyed, is therefore another key priority. Lastly, overuse of inhalers leads to 250,000 tonnes of equivalent carbon emissions (250 $ktCO_2e$) annually across the UK, according to a new study.

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

Medicines: Volatile anaesthetics and inhalers

- Inhaler prescriptions emitted **2,164tCO_2e** in 2020/21
  - **27% of all inhalers prescribed were DPIs – just below the NHS target of 30%.**

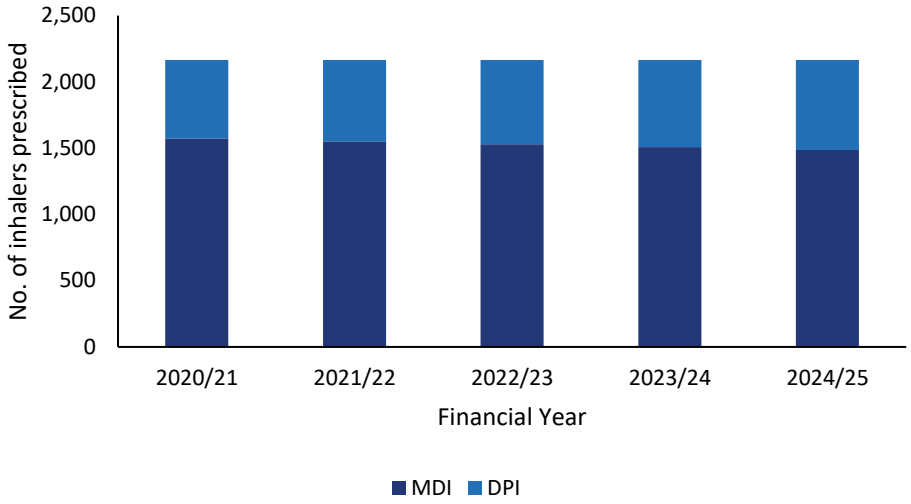


Figure 27 Graph to show the number of inhaler prescriptions by inhaler type (MDI or DPI) with the prescribing number trajectory (30% of all inhalers to be DPIs) until 2024/25

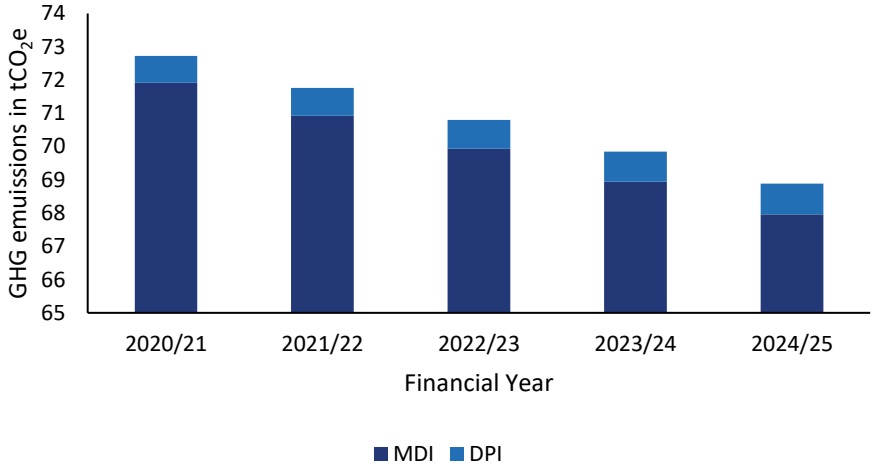


Figure 28 Graph to show emissions and emissions reduction trajectory associated with a 30% total of all inhalers being DPIs until 2024/25

No	TEWV Green Plan Actions	Trust Area	Target Year	Progress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.
01	Work to influence other care providers to prescribe at least 30% DPIs for all inhaler types.	Working with patients, staff & communities	23/24		£		Clinical Pharmacy Team
02	Work to influence other care providers to set a goal to reduce MDIs to 25% of all non-salbutamol inhalers by prescribing DPIs and soft mist inhalers, where clinically appropriate.	Working with patients, staff & communities	24/25		£		Clinical Pharmacy Team
03	Work to influence other care providers to set a goal of reducing the average emissions from salbutamol inhalers to 11.1kg per inhaler, where clinically appropriate.	Working with patients, staff & communities	24/25		£		Clinical Pharmacy Team
04	Work to influence other care providers to enable uptake of alternative inhalers where appropriate.	Governance & policy	Ongoing		£		Clinical Pharmacy Team

Figure 29 Green plan action table for inhalers

Indicative cost:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative emissions reduction:

Low or incremental reduction

Moderate reduction

Significant reduction

Not applicable

Supply chain and procurement

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

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

TEWV is committed to engage with our suppliers to meet the Green Plan and support the sustainable procurement objectives of NHS England wherever practicable. The Trust has partnered with the County Durham Procurement Consortium to ensure that products procured are compliant with legislation and consistent with our efforts to improve our environmental management performance and achieve cost reductions.

Procurement and Climate Action

The supply chain emissions shown in Figure 30 represent a huge portion of our 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 us to identify our carbon hotspots to plan for actions.

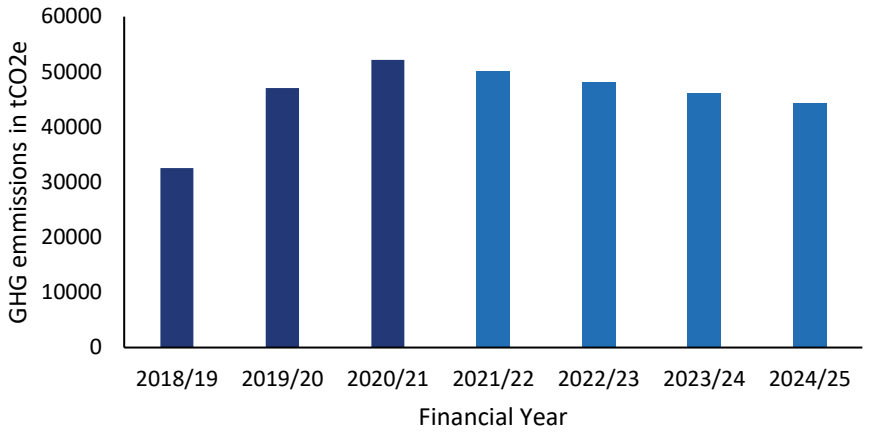


Figure 30 Emissions from our supply chain with reduction trajectory to 2024/25

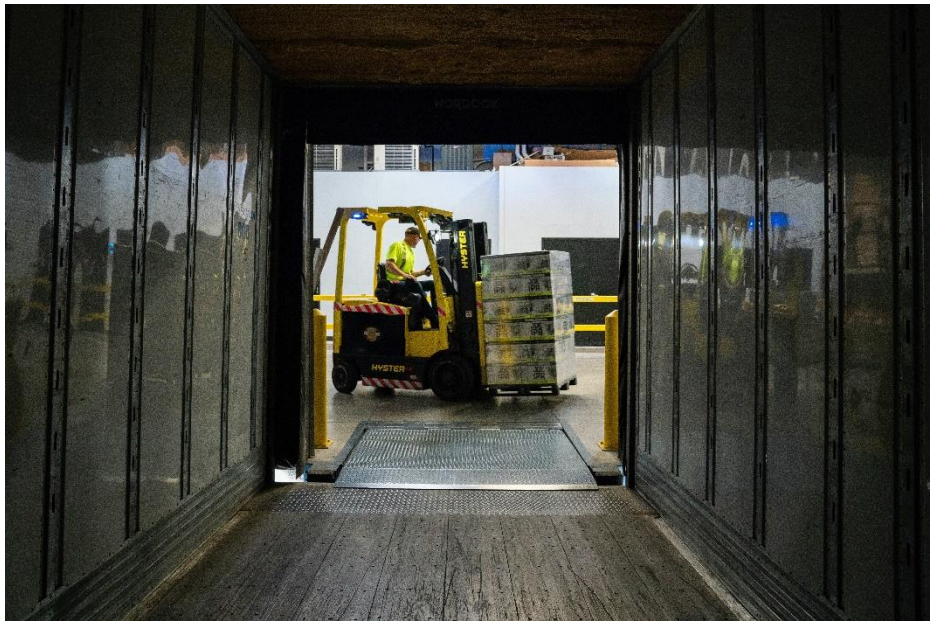
Supply Chain and Procurement

- Emissions from our supply chain were estimated to be **52,145**
- **tCO_2e** 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 environmental and social performance of the Trust's supply chain.
- Ensure tenders adopt the new social value procurement note PPN 06/20 and carbon management PPN 06/21 in major contracts in April 2022 and 2023 respectively
- Reusable items such as face masks and aprons would reduce waste (as per the Waste section)
- Reclaiming mobility aids and other devices from patients will prevent waste and save money

As a Trust, 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.

In addition, the Trust is a signatory of the NHS Single Use Plastics Pledge since 2021.

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).



Forklift with boxes. Source: Unsplash

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

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

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

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

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

Delivery of face masks. Source: Unsplash

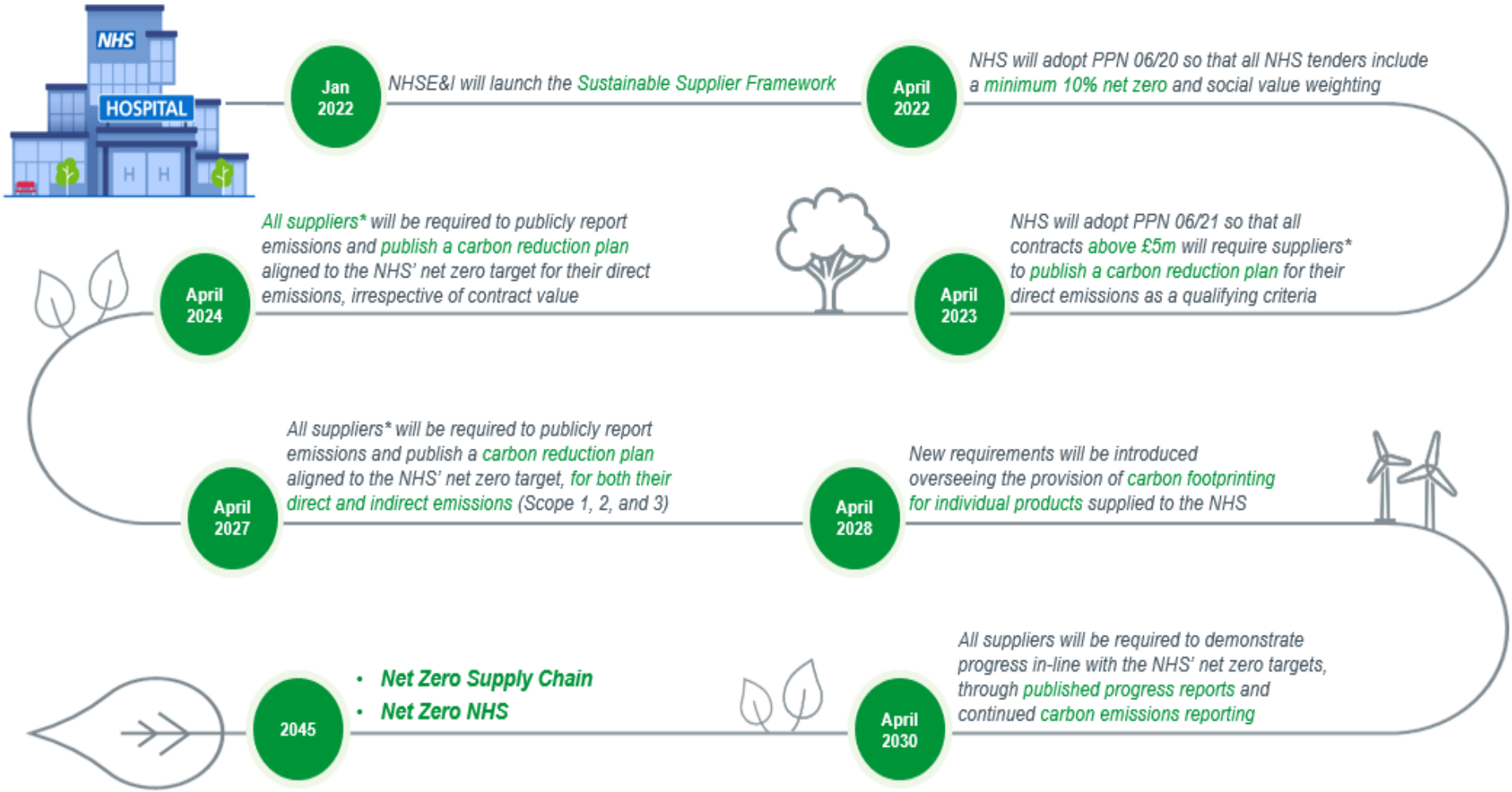


Figure 31 Building net zero into NHS Procurement – shows how NHS England will require all suppliers to provide carbon and social value reporting by 2030

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, bariatric chairs and wheelchairs, 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 aids will negate useful items being scrapped. However, it is cheaper to buy new items than it is to decontaminate and refurbish at present.

Heart rate monitor. Source: Unsplash

Our role as an anchor trust

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

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

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 32 Official NHS Sustainable Procurement Objectives Source: website

NHS road sign. Source: Unsplash

NHS LTP 6.17, 17, 18

NHS SC 18.6

NHS NZ 3.3, 3.3.1

8 DECENT WORK AND ECONOMIC GROWTH

Target 8.3 Promote policies to support job creation and growing enterprises

Target 8.7 End modern slavery, trafficking, and child labour

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Target 12.7 Promote sustainable public procurement practices

13 CLIMATE ACTION

Target 13.2 Integrate climate change measures into policy and planning

No	TEWV 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	Adhere to the requirements of the NHS Sustainable Suppler Framework.	Governance & policy	January 2022		£		Procurement	**SC** 18.6
03	Ensure tenders adopt the new social value procurement note PPN 06/20 and carbon management PPN 06/21 in major contracts from April 2022 and 2023 respectively.	Governance & policy	April 2022		£		Procurement	**NZ** 3.3, 3.3.1
04	Ensure tenders adopt the carbon management PPN 06/21 in major contracts in April 2023.	Governance & policy	April 2023		£		Procurement	**SC** 18.6
05	Ensure the purchase of 100% closed-loop recycled paper.	Core Responsibilities	22/23		£		Procurement	**SC** 18.6
06	Identify wider social, economic and environmental benefits for the local community and population when considering the purchase and specification of products and services, discussed and agreed with the Coordinating Commissioner.	Governance & policy	23/24		£	✕	Procurement	**SC** 18.6
07	Create a new system for cataloguing and reclaiming mobility aids and other devices from patients.	Governance & policy	23/24		£		Physio and Occupational Therapy	**NZ** 3.3, 3.3.1
08	Engage a key supplier on plans to align their operations and delivery with NHS Net Zero targets over time. Leverage NHS England and NHS Improvement Supplier Engagement Strategy approach for fostering partnerships.	Core responsibilities	23/24		£	✕	Estates	**NZ** 3.3, 3.3.1
09	Work with NHS Supply Chain to address Modern Slavery and domestic and international supply chain environmental, and human rights risks, including those linked to PPE.	Procurement	23/24		£	✕	Procurement	**SC** 18.6

No	TEWV Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
10	Explore the creation of an ISO 20400 Sustainable Procurement Strategy.	Procurement	23/24		£		Procurement	**SC** 18.6
11	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
12	Source and collate procurement data to include in future carbon footprint analyses.	Procurement	Ongoing		£	⊗	Procurement	**LTP** 18
13	Work to identify impactful future supply chain emissions reductions opportunities and links to climate adaptation and other Green Plan commitments in procurement specifications and through contract delivery	Procurement	24/25		£	⊗	Procurement	**NZ** 3.3, 3.3.1

Figure 33 Green plan actions for supply chain management and procurement

Indicative cost:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative emissions reduction:

Low or incremental reduction

Moderate reduction

Significant reduction

⊗ Not applicable

Food and nutrition

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

Food production accounts for up to 26% of global greenhouse gas emissions[1]. Food and livestock production has a huge impact on biodiversity as well, and according to research collected by Our World in Data "of the 28,000 species evaluated to be threatened with extinction on the IUCN Red List, agriculture and aquaculture is listed as a threat for 24,000 of them".[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.

TEWV 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.

Prepping vegetables. Source: Unsplash

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

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

We offer a wide choice of meals for inpatients, including vegetarian and vegan options and other dietary requirements. However, implementing a wholly plant forward diet would be difficult for some client groups. We also offer eating disorder support at our sites, so our menu options need to consider clinical factors as well as those relating to sustainability.

After signing the NHS' Single Use Plastics Pledge, we removed all the single-use plastic products from our catalogue. We have also gone beyond these targets in reducing single-use plastic food containers and plastic cups for beverages including covers and lids. Hotel services have also replaced all plastic stirrers, knives, forks and spoons with wooden utensils. The use of single use disposable cups is being discussed by our Single Use Plastics Working Group.

We have four to five different menus that can be utilised, including vegan, halal, and kosher options. The menus are currently paper-based, but the Trust will explore the option of digital menus going forward.

Chef cooking. Source: Unsplash

NHS LTP 2.18, 17

NHS SC 19.1, 19.2,19.3

NHS NZ 3.3.2

2 ZERO HUNGER

Target 2.2 End all forms of malnutrition (including obesity)

3 GOOD HEALTH AND WELL-BEING

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

13 CLIMATE ACTION

Target 13.2 Integrate climate change measures into policy and planning

14 LIFE BELOW WATER

Target 14.4 Sustainable Fishing

No	TEWV Green Plan Actions	Trust Area	Target Year	Pro-gress	Indicative Cost to achieve	Indicative Emissions reduction	Responsible lead/dept.	NHS Req.
01	Review food and catering to explore opportunities to push forward Long Term Plan plans to address obesity, benefit TEWV'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	23/24		£	Moderate	Procurement & Catering Services	**LTP** 2.18
03	Limit sugary drinks sales at our facilities and fulfil other updated NHS requirements.	Core Responsibilities	23/24		£	Low	Catering Services	**SC** 19.3
04	Explore a digital meal system for at least one NHS site to enable accurate meal planning and reduce food waste.	Core responsibilities	22/23		£	Moderate	Estates & Catering Services	**NZ** 3.3.2
05	Work with NHS Supply Chain to ensure positive impacts from contract management and maintain updates to Government Buying Standards sustainable food criteria.	Procurement	23/24		£	Moderate	Procurement & Catering Services	**SC** 19.3
06	Work with regional partners to identify opportunities for local and SME food producers.	Procurement	On-going		£	Moderate	Procurement	**NZ** 3.3.2
07	Ensure all food providers meet or exceed the requirements outlined in Report of the Independent Review of NHS Hospital Food	Core responsibilities	23/24		£	Moderate	Facilities & Procurement	**SC** 19.3
08	Review internal and NHS strategies for sustainable food procurement, including sustainable fish, elimination of palm oil or limit to RSPC-certified palm oil and Fairtrade items where relevant.	Procurement	23/24		£	Moderate	Procurement	**LTP** 17
09	Continue to work with patients and partners on the link between food, health and obesity, as well as the emissions impact.	Working with patients, staff & communities	On-going		£	✕	TBC	**LTP** 2.18 **SC** 19.1, 19.2 **NZ** 3.3.2

Figure 34 Table to show green plan actions for food and nutrition

Indicative cost:

£ No or low cost

£ Moderately expensive

£ Significantly expensive

Indicative emissions reduction:

Low or incremental reduction

Moderate reduction

Significant reduction

✕ Not applicable

Adaptation

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

We already engage with other public authorities and partners in tackling extreme weather events, such as heat waves and flooding. TEWV 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. Reducing our impact on the environment may not only help to mitigate against climate change, but reduce our organisational running costs, ensure business continuity, and reduce health inequalities. Above all, it's about ensuring that the NHS, our buildings, our services, our staff and our patients are prepared for what lies ahead.

Tees Esk and Wear Valleys NHS Foundation Trust will work with partner organisations and other public sector organisations to develop a climate change adaptation plan to mitigate against the consequences of climate change to health and service delivery.

Climate Change Adaptation

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

No	TEWV 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	On-going		£	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	On-going		£	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	23/24		£	Business Continuity	**SC** 18.4.2.3 **NZ** 1
04	Work with NHS Supply Chain to better understand the climate change risks in our supply chain and proactively seek to make our supply chain 'climate-ready'.	Procurement	23/24		£	Procurement	**SC** 18.4.2.3 **NZ** 1
05	Embed and adapt existing health-related contingency planning, such as Heat Wave Plans to reflect predicted climate change impacts.	Working with patients, staff & communities	23/24		£	Business Continuity	**SC** 18.4.2.3 **NZ** 1
06	Incorporate newly emerging climate-related health care risks into our contingency planning, such as the increasing prevalence of Vector Borne Diseases	Working with patients, staff & communities	23/24		£	Business Continuity	**SC** 18.4.2.3 **NZ** 1

Figure 35 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, although significant investment will be required in future years, especially in making our buildings ‘climate-ready’, albeit that we expect to be able to rationalise our estate linked to new ways of working and hybrid working.

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.

Tees, Esk and Wear Valleys
NHS Foundation Trust

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This Green Plan was created for Tees, Esk and Wear Valleys NHS Foundation Trust in partnership with Inspired PLC.

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