

York and Scarborough Teaching Hospitals NHS Foundation Trust Green Plan 2021-2026



# York and Scarborough Teaching Hospitals Green Plan 2021 – 2026

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# 1. CEO Forward



"York and Scarborough Hospitals NHS Foundation Trust strives to actively encourage, promote and achieve zero carbon emissions in all that it does, through its staff, its services, its premises, its patients and visitors, and its partners in line with NHS targets"

Trust mission statement

I very much welcome and support this Green Plan.

As a large, acute healthcare organisation, we are determined to deliver our contribution to national carbon reduction targets and broader sustainable development principles.

We are committed to incorporating sustainability into all that we do to ensure that our services are fit for the needs of the future without compromising on the services we provide at present.

This Green Plan sets ambitious targets and outlines the reductions in carbon emissions required to achieve our goals.

I am confident that we can face these challenges head on and emerge as a more resilient, sustainable organisation that provides quality services, continuing to put patients at the heart of everything we do.

Simon Morritt

Chief Executive Officer



# 2. Executive Summary

This 2021-2026 Green Plan has been developed to replace the 2017-2020 Sustainable Development Management Plan, taking account of recent NHS guidance and targets. The introduction of numerous targets in the last few months from the NHS Standard Contract, and through a Memorandum of Understanding from NHS England and Improvement, set against a back drop of the October 2020 publication of "Delivering a Net Zero National Health Service", has served to highlight the improvements needed to strengthen the Trust's plan for tackling carbon reduction. Achieving the net zero carbon target which relates to the emissions that we directly control (referred to as our NHS Carbon Footprint) through reducing our energy use, our fleet and business travel, our use of anaesthetic gases and with changes to prescribing inhalers, is to be achieved by 2040 with 80% of this delivered by 2032. For emissions that we can influence but can't directly control, the net zero target is 2045 for our NHS Carbon footprint Plus. The NHS Carbon Footprint Plus includes the embodied carbon emissions from the things we buy such as medicines and medical devices and also the carbon footprint of patient and visitor travel together with the staff commute.

This plan identifies a range of recent achievements in delivering the pathway to net zero as well as achievements against some of the new targets, such as the reduction of the use of the anaesthetic gas desflurane in favour of sevoflurane, (a lower environmental impact gas) and the increased use of technology to allow people to receive consultations at home and also work from home; but it is clear that the speed of change to transition to lower carbon alternatives needs to accelerate.

An analysis of our NHS Carbon Footprint shows that 73% of the footprint is due to our energy use with 55% of the footprint coming from our gas consumption. Fleet and business travel contributes 6% of our carbon emissions, patient and visitor travel accounts for the second largest proportion(17%) of the Carbon Footprint Plus, with medicines at 23% being the highest proportion. In summarising the actions required to achieve carbon and greenhouse gas reduction, there is a strong focus on energy, through better control, improvements to building fabric, installation of renewable and building to net zero standards, and also travel, through improvements of facilities for active travel and electric vehicle charging, but also noting that this is about total reduction to net zero through emerging technology, the way that we deliver services to minimise waste and procurement decisions that capture requirements to reduce the carbon impact and lead to net zero.

Whilst the later sections of the report highlight the importance of communication, tracking progress, risks and finance, it is noted that the real cost of emitting carbon is the long-term impact of the changing climate and irreversible change. We only have a short window of opportunity to stop this happening. Much of the action needed to achieve net zero results in a cost of reducing carbon emissions and this currently has to be borne by the organisation meeting the targets. It is hoped that government addresses this matter through a taxation and /or grant systems to result in financial benefits for delivering carbon savings. Whilst work must continue to deliver the required carbon savings to achieve net zero and help to solve the current climate emergency, the Trust needs to establish the most cost-effective way to achieve this without further delay.



# 3. Introduction

### Why do we need this plan?

As an NHS organisation and a spender of public funds, we must work in a way that has a positive effect on the communities we serve. Our opportunities to make a positive impact extend beyond CO<sub>2</sub> reduction, and we can also help to influence our local community and workforce's health as well as our local environment.

By reducing single-occupancy car journeys, encouraging uptake of active and public travel, and reducing our business mileage, we can contribute to local air pollution reductions and increase our staff's fitness. We can also reduce our environmental impact by reducing the usage of single-use plastics where an alternative is available and ensuring that resources are used sustainably with minimal possible waste.

NHS institutions across the country are committed to the "Delivering a Net Zero NHS Strategy". Published in October 2020, these ambitious targets are outlined later in the document and form the backbone of the Trust's long-term carbon reduction strategy.

In addition to Net Zero NHS carbon reduction targets, we also must ensure that the Trust can meet sustainability-related targets within the NHS Long-Term Plan and Standard Contract. We are also committed to using the Sustainable Development Assessment Tool (SDAT), which contains many work streams which are outlined later in this document. We must take a proactive stance on carbon reduction and take advantage of new technologies and methods of working to reduce our emissions as these become available. Meeting the targets found later in this report will require holistic measures that ensure carbon reduction across the board. By collaborating with local partners and other NHS institutions, we can share best practices and ensure that we are at the vanguard of the process of becoming a Net Zero National Health Service.



**Bridlington Hospital Main Entrance** 



# 4.1 Overview About Us

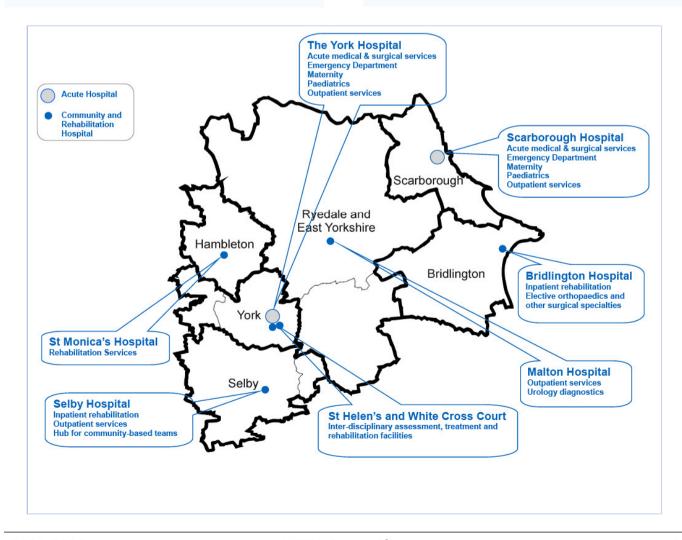
## **Our Hospitals**

- York Hospital
- Scarborough Hospital
- Bridlington Hospital
- Malton Hospital
- The New Selby War Memorial Hospital
- St Monica's Hospital Easingwold
- White Cross Rehabilitation Hospital
- Nelson's Court Rehabilitation Hospital (Previously St Helen's)

## **Our Activity**

The Trust operates a wide range of inpatient, outpatient and community services across the region and provides emergency care through A&E units in York, Scarborough and Selby.

In 2019-20, the Trust had more than 1.2 million patient contacts across our sites, along with over 300,000 visits to patients in the community.





# **4.2 Overview**Achieving Strategic Goals

### **Overview**

The transition to net zero is an exciting process to be a part of, and each NHS Trust will experience its own specific challenges and opportunities in achieving this goal. It is important that both are highlighted and addressed to maximise progress.

### Successes

The Trust has made good progress in reducing carbon emissions from various sources, including implementing  $CO_2$  limits on business vehicle leases, using more environmentally friendly anaesthetic gases in surgery (where appropriate), and incorporating electric vehicles into our fleet. Widening the scope of actions taken allows for increased integration of sustainability into everyday working practices and supports awareness from staff in all roles. More examples of recent successes can be found on page 11.

### **Opportunities**

While the Covid-19 pandemic has unquestionably impacted all sectors, resulting in unprecedented changes to how we live our lives, climate change and the environment remain high on the national agenda.

From an environmental perspective, the pandemic has presented new challenges such as the disposal of high volumes of PPE and decreased public transport utilisation. Still, there have also been areas where the pandemic has sped up positive change and provided inspiration for the post-Covid future. The use of videoconferencing by staff has increased tenfold since the start of the pandemic primarily because of social distancing measures and an increase in home working. We expect that after the pandemic, there will be residual impacts, including a reduction in business mileage due to staff now having a viable, tested alternative to travelling to other sites. The increase in home working enforced by the pandemic, and increasing the availability of video/telephone appointments for patients have reduced unnecessary inconvenience to patients and reduced local congestion, pollution, and carbon emissions.

We must take these and other positive by-products of Covid-19 into account as we make decisions in the future.



# **4.2 Overview**Achieving Strategic Goals

### **Challenges**

With a growing, ageing population and one of the highest rates of obesity in Europe, the outlook is challenging for the Health Service. While the provision of a central NHS strategy to reach net zero is highly welcome, future strategies across all areas of the NHS must be consistent with meeting these commitments if targets are to be achieved.

York and Scarborough Teaching Hospitals provide healthcare for an area of 3,400 square miles - one of the largest of any Trust in the country. This geographical spread results in high levels of business travel between sites, one of the areas we have to address. Combined Heat and Power (CHP) generators, powered by natural gas, provide most of the Trust's electricity. While they used to provide the Trust with an annual carbon saving, the national grid's rapid decarbonisation has resulted in these CHPs being more carbon-intensive than drawing the necessary electricity from the grid. While on-site electricity production from gas benefits the Trust financially, we will not achieve the required carbon savings to meet future targets until we address this.

Historic measures to reduce carbon emissions have often had a financial co-benefit that made them viable, but there will be costs associated with meeting net zero. A Climate Change Committee study determined that a 2050 net zero target is "technically feasible but highly challenging" <sup>1</sup>, requiring complex, costly, and time-consuming interventions. As the NHS Carbon Footprint Plus requires Net Zero emissions by 2045 and includes emissions outside the scope of the Climate Change Act, it is logical to assume that the same will apply to these targets. We must reflect on this reality and adjust our expectations accordingly to reduce emissions at the required rate.



York Hospital Main Entrance: Over 700,000 patients are seen every year at the York site, representing around 60% of our clinical activity.



# **4.3 Overview**Partnership Working

## **Working Together**

The Trust's premises are spread across a large geographical area, spanning three different CCGs and a multitude of local and regional councils, serving a registered population of approximately 800,000 people.

All of our partners are working to reach Net Zero by 2050 as per the Climate Change Act, some such as City of York Council, have gone further and set more ambitious targets, including a 2030 Net Zero target for scope 1 and 2 emissions. It is vital that we link with these partners to share best practices and ideas so that all groups can make progress towards these ambitious targets.

The Trust works with local councils to help achieve our aims, such as encouraging uptake of active and public transport to work and being involved in local schemes to cut air pollution. The Humber Coast and Vale partnership is working towards sustainability goals across the region, and the Trust is keen to be an active partner in this endeavour.

### **Our Partners**

- NHS Vale of York CCG
- · NHS North Yorkshire CCG
- NHS East Riding of Yorkshire CCG
- City of York Council
- North Yorkshire County Council
- Scarborough Borough Council
- East Riding of Yorkshire Council
- York and North Yorkshire Local Enterprise Partnership (LEP)
- Humber, Coast and Vale Partnership













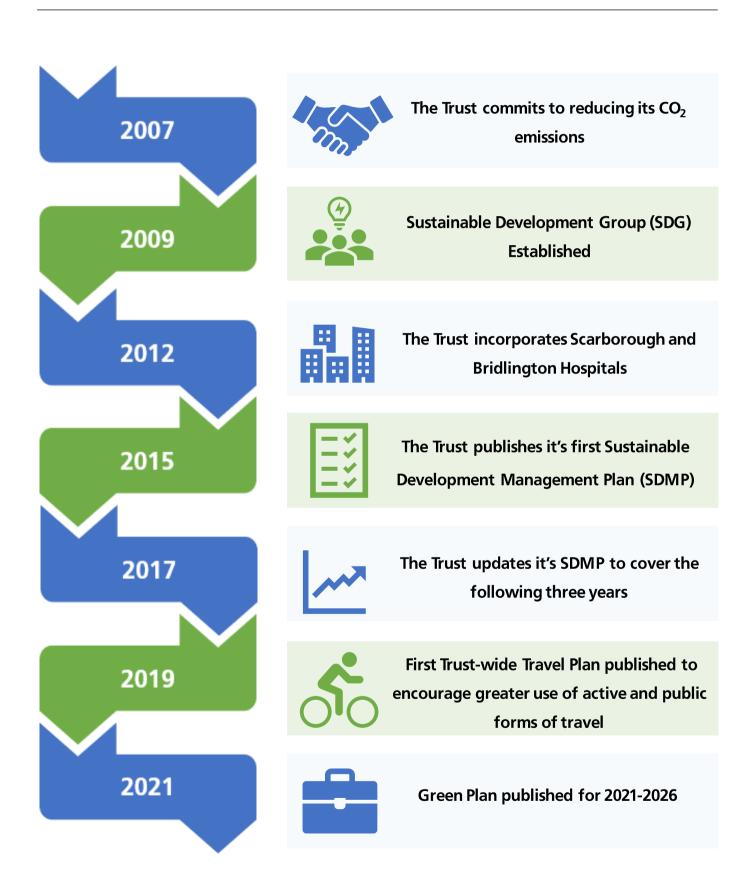








# **4.4 Overview**Sustainability Timeline



# 4.5 Overview

## **Achievements**

In recent years, the Trust has made good progress across a range of areas. Some of our highlights are shown below, aligned to the Sustainable Development Assessment Tool (SDAT) areas of focus outlined in section 7.1.

We believe that the scope of our achievements demonstrates our commitment to carbon reduction and decreasing our environmental impact. We aim to further widen the range of areas that we are addressing during the lifetime of this strategy and look forward to reporting back on further successes in the future.



### **Corporate Approach**

The Trust operates the Sustainable Development group, with an escalation route to the Trust Board.



### **Asset management and Utilities**

Since April 2020, all the electricity we import from the national grid is on a 100% Green Tariff.



#### **Travel and Logistics**

Business leases limit high emission vehicles and encourage Ultra-Low emission vehicles.



#### **Travel and Logistics**

Nine electric vehicles in our transport fleet and electric charge points have been introduced.



#### **Travel and Logistics**

York Hospital Park and Ride established. An E-Scooters trial is in progress at York, and we also operate car share and cycle to work schemes



#### Adaptation

Flood defences installed at Tadcaster Health Centre. Adverse weather plan updated to include data collection opportunities to inform longer term capital planning.



### **Capital Projects**

Sustainable Design Guide introduced reinforcing the need to integrate BREAAM Excellent standards and whole life costs for all new buildings.

# 4.5 Overview

## **Achievements**



### **Green Space and Biodiversity**

Scarborough Hospital car park planted and maintained to increase biodiversity.



### **Green Space and Biodiversity**

£200,000 charitable funding secured for Well-being gardens, with first five to be delivered in 2021/22



#### **Sustainable Care Models**

The proportion of desflurane to sevoflurane (anaesthetic gases) used in surgery reduced from 38% in 2018/19 to 9% in 2019/20



#### **Sustainable Care Models**

Clinical prescription of greener inhalers in local care pathway in conjunction with CCGs



#### **Our People**

The Trust has established a Green Champions network to engage staff in sustainability and carbon reduction



#### Sustainable Use of Resources

Over £6,000 in avoided costs and 3 tonnes of  ${\rm CO_2}$  emissions saved by use of the "Warp It" reuse portal



#### Sustainable Use of Resources

Plastic Straws and stirrers are no longer used in the Trust (Except where clinically appropriate



#### Sustainable Use of Resources

Sustainability is a mandatory consideration in all new business cases and resource use and efficiency is part of all new job descriptions (since 2017)



#### Carbon/Greenhouse Gases

20% Reduction in CO<sub>2</sub> emissions since 2015/16 and a 49% reduction in CO<sub>2</sub> emissions per patient contact since 2007/08



# 4.6 Overview

## **Targets**



Cut our business mileage by 20% (2023/24)



Reduce our fleet air pollution emissions by 20% (2023/24)



Work Towards purchasing vans under 3.5 tonnes that are ULEVs or ZEVs (April 2022)



Ensure that all new staff lease, salary sacrifice and pool cars purchased/leased are ULEVs or ZEVs (April 2022)



Reduce face-to-face outpatient appointments by 1/3 by 2023/24 through use of virtual consultations



Reduce water usage and waste



Phase out use of oil for primary heating (2023/24)



Support move to less carbon intensive inhalers, where clinically appropriate



Reduce avoidable use of single- use plastics



Cease use of single use plastic cutlery, plates and cups on our premises



Reduce use of single-use plastic food and drink containers, cups, covers and lids



Maximise the rate of return for walking aids



Work towards ensuring that all new builds and refurbishments conform to Net Zero Standards



Replace lighting with LED alternatives during routine maintenance



Provide an annual review of adverse weather impacts and adapt premises and service delivery to mitigate risks of climate change



Reduce carbon emissions from use of gas, oil and electricity through better controls and building fabrics and implementation of renewables and heat pump technology

Targets derived from the NHS Standard Contract Service Conditions 2021/20223, NHS Long Term Plan 20194, NHS National Operational Planning and Contracting Guidelines 2021/225 and the Greener NHS MoU requirements April 2021.



# **4.7 Overview**Drivers For Change - General

### Legislative

- Civil Contingencies Act 2004
- Climate Change Act (CCA) 2008
- Public Services (Social Values) Act 2013

## **Mandatory**

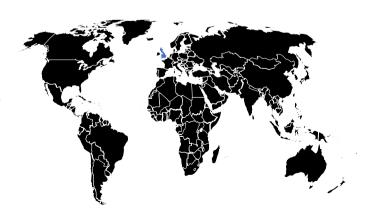
- Standard Form Contract requirements for Sustainable Development 2020
- HM Treasury's Reporting Framework
- Public Health Outcomes Framework

### **UK** guidance

- National Policy and Planning Framework 2012
- Department of Environment, Food and Rural Affairs (DEFRA) The Economics of Climate Resilience 2013
- DEFRA Government Buying Standards for Sustainable Procurement 2016
- The Stern Review; The Economics of Climate Change 2006
- Health Protection Agency (HPA) Health Effects of Climate Change 2012
- The National Adaptation Programme;
   Making the country resilient to the changing Climate 2013
- DEFRA 25 Year Plan 2018
- HM Government Clean Growth Strategy 2017 (Amended 2018)

### International

- International Panel on Climate Change (IPCC) AR5 2013
- United Nations (UN) Sustainable Development Goals (SDG's) 2016
- World Health Organisation (WHO) toward environmentally sustainable health systems in Europe 2016
- WHO Health 2020; European policy for health and wellbeing
- The Global Climate and Health Alliance;
   Mitigation and Co-benefits of Climate
   Change





# **4.8 Overview**Drivers For Change - Healthcare Specific

### **Drivers for Healthcare**

The drivers outlined on the previous page are not specific to healthcare and the NHS. As sustainability has to be considered in a range of settings, there is a wide variety of guidance, requirements, and legislation to be mindful of - this list is not exhaustive.

In addition to more general drivers, there are healthcare-specific requirements that must be incorporated into our plan, particularly the Delivering a Net Zero NHS document released in October 2020, which includes more ambitious carbon reduction targets than legislated for by the Climate Change Act (CCA). The NHS now has a target to be Net Zero by 2045, 5 years earlier than the CCA legislates.

## **Health Specific Requirements**

- Delivering a Net Zero NHS 2020
- NHS Standard Contract 2020/21
- NHS Long Term Plan
- Adaptation Report for the Healthcare System 2015
- 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 Partnership (STP) Plans
- NICE guideline (NG70) 2017
- The Marmot Review; Fair Society, Healthy? Lives 2010





# **5.1 Carbon reduction progress**

# CO<sub>2</sub>e emissions 2007/8 - 2019/20

## **Scopes of emissions**

**Scope 1:** Emissions that come directly from our estate - examples include gas used for heating and power generation, anaesthetic gases used in surgery and the fuel used by our vehicle fleet



**Scope 2:** Our only emissions in this area are from the electricity we import from the grid



**Scope 3**: Downstream emissions such as the carbon embedded in what we buy, our grey fleet business travel and the travel of our patients and visitors



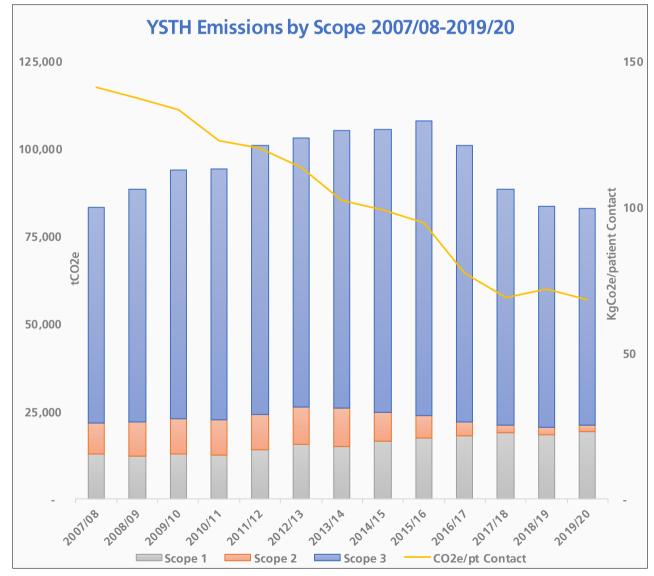


Figure 1:Total Trust CO<sub>2</sub> e emissions 2007/8-2019/20 by scope



# 5.2 Carbon reduction progress NHS and mandatory carbon reporting data issues

### **Baseline**

The targets set by both the Climate Change act and the Delivering a Net Zero NHS strategy are measured against a 1990 emission baseline. As the Trust does not have complete data going back to 1990, a 2007/8 baseline is used, as advised by the NHS Sustainable Development Unit (SDU).

A 2010 SDU report<sup>6</sup> showed that in 2007 NHS England CO<sub>2</sub>e emissions were almost identical to 1990. As the Trust reports in financial years, we have aligned this to our 2007/8 emissions.

We have used this 2007/8 baseline to determine both our interim and final Net Zero NHS Carbon Footprint and Carbon Footprint Plus Targets.

### **Ongoing Data**

We are constantly increasing the scope of both our data recording and reporting. We backdate data wherever possible, but this is not always achievable. Increases in reported emissions as sources of CO<sub>2</sub> are recognised and quantified or as more accurate reporting systems are developed are inevitable. As such, some historical information will not be as accurate as more recent data.

Historical data is subject to change as more information becomes available, and we will report this in the sustainability section of the Trust Annual Report.



### **Procurement**

The Trust uses carbon factors historically provided by the SDU to calculate the  $CO_2$  emissions embedded in what we buy. These carbon factors have not been updated for several years, meaning that changes such as decarbonisation of the grid and reductions in freight emissions are not taken into account for 2008/09 onwards. We apply Retail Price Index (RPI) adjustments to account for inflation. We are exploring options to quantify these emissions with a greater degree of accuracy in the future, which could lead to changes in our reported emissions in this area.

The Greener NHS is expected to provide information and advice to help Trusts reduce their procurement emissions during this strategy's lifetime and the Trust is keen to engage with this work.

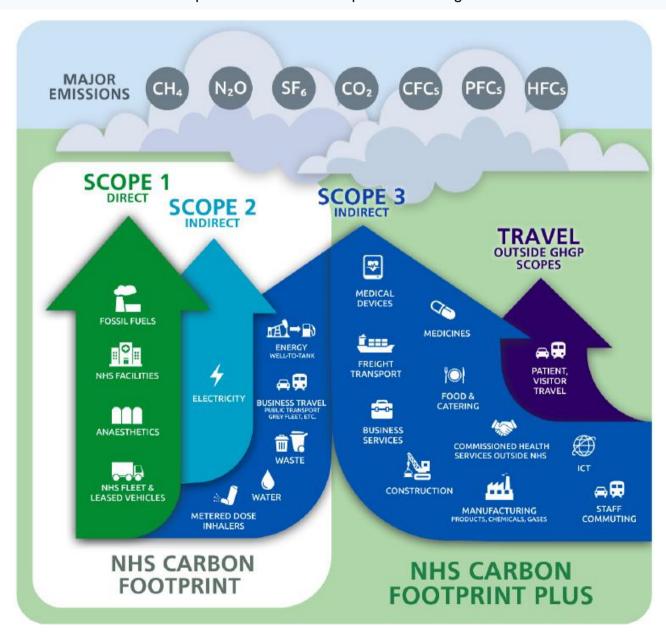


# **6.1 Delivering A Net Zero NHS**

## Historic and forecast data

### **Overview**

In October 2020, the NHS committed to becoming a Net Zero organisation by 2045 in the Delivering a Net Zero National Health Service<sup>2</sup> publication. The Trust has aligned its data to work towards this strategy's targets. There are two targets, one for the "NHS Carbon Footprint," which is for an 80% reduction by 2032 and a 100% reduction by 2040. The other target is the "NHS Carbon Footprint Plus," which has an expanded scope and a target of an 80% reduction by 2039 with net-zero emissions targeted for 2045, all against a 1990 baseline (2007/8 for the Trust). The components of these two targets are shown in the diagram below as presented in the strategy. The next page provides a breakdown of our 2019/20 emissions data into NHS Carbon Footprint and Carbon Footprint Plus categories.





# 6.2 Delivering A Net Zero NHS

# 2019/20 Carbon Footprint/Carbon Footprint Plus

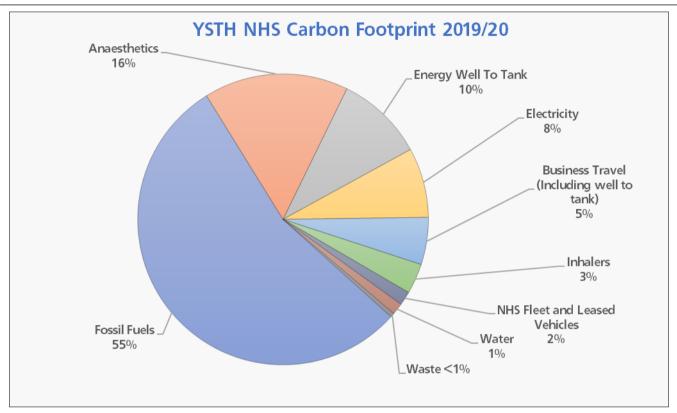


Figure 2: Trust carbon emissions for 2019/20 broken down into NHS Carbon Footprint categories

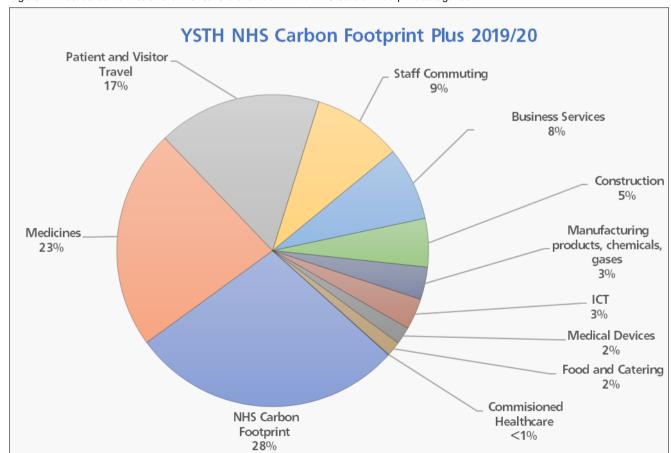


Figure 3: Trust carbon emissions for 2019/20 broken down into NHS Carbon Footprint Plus categories



# **6.3 Delivering A Net Zero NHS**

## Historic and forecast data

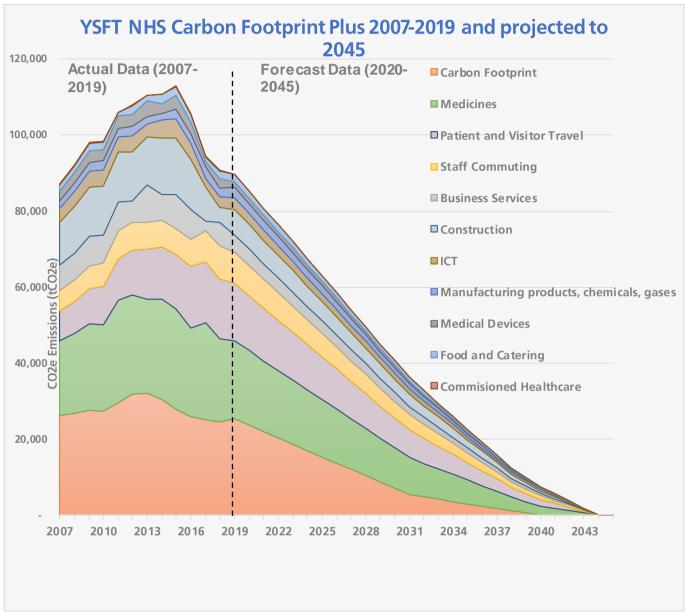


Figure 4: Historic Trust emissions aligned with the "Delivering a Net Zero NHS" Carbon Footprint Plus and projected to 2044/45

### **Carbon Footprint Plus**

The Carbon Footprint Plus includes the full scope of emissions reported by the Trust. An interim target of an 80% reduction has been set for 2039, with a 100% reduction target set for 2045. Freight shipping is included, but this is calculated as part of our procurement emissions and is not displayed separately. Percentage breakdowns of contributions from each area for the Trust are provided in figures 2 and 3 in section 6.2.



# **6.4 Delivering A Net Zero NHS**

# **Carbon Footprint projections**

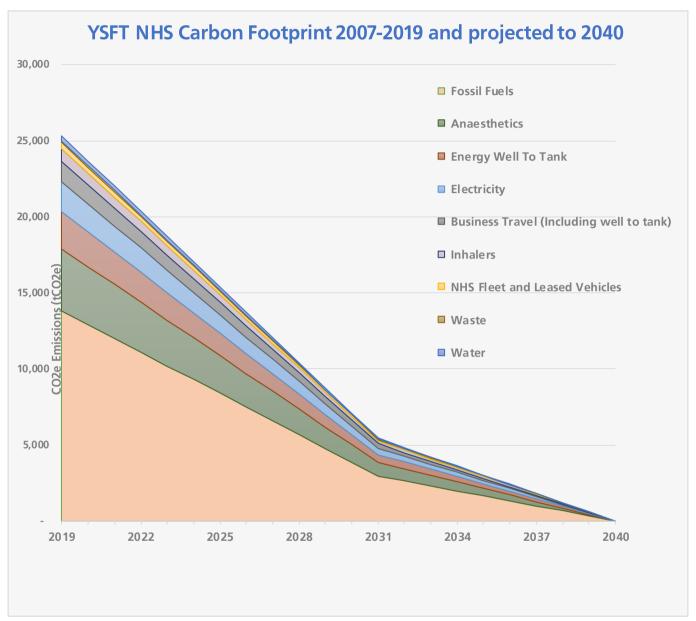


Figure 5: The emission reductions required for the Trust to meet the targets of 80% reduction by 2031/32 and 100% by 2039/40within the scope of the NHS Carbon Footprint.

## **Carbon footprint Overview**

The NHS Carbon Footprint includes all scope 1 and 2 emissions as well as business travel, water and waste which are classified as scope 3. These are areas that we have significant influence over and are largely produced on our estate. We have already made good progress in some of these areas, such as waste and electricity, but a rapid decrease in our use of gas and oil is essential to meeting these targets as they contribute more than 60% of our Carbon Footprint.



# **6.5 Delivering A Net Zero NHS**

# **Carbon Footprint plus projections**

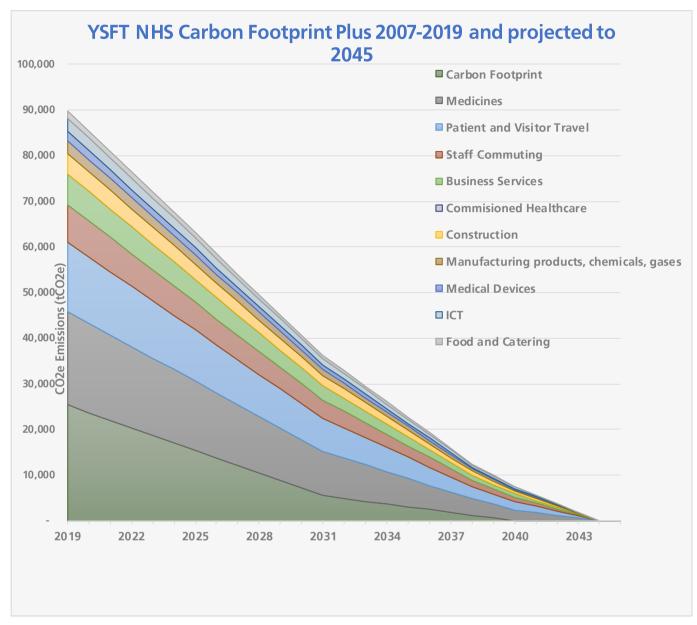


Figure 5: The emission reductions required for the Trust to meet the targets of 80% reduction by 2038/39 and 100% by 2044/45 within the scope of the NHS Carbon Footprint Plus. (Includes the NHS Carbon Footprint from Figure 4)

### **Footprint Plus Overview**

The NHS Carbon Footprint Plus consists of Scope 3 emissions, mainly from what we buy, patient and visitor travel to Trust sites, and our staff commuting. NHS Supply Chain will undertake much of the work in decarbonising supply chains centrally, but we must ensure that we integrate sustainability into procurement frameworks at a local level. Encouraging staff to use active travel and public transport will contribute towards reductions in the emissions produced from staff commuting and this will be supported by greater availability of electric vehicles in future years for both staff and the general public.

# 7. The Sustainable Development Assessment Tool (SDAT)

### Overview

The Sustainable Development Assessment Tool (SDAT) is used to help Trusts reach their sustainable development goals. The tool divides objectives into a group of workstreams, outlined on the next page. Each workstream has a responsible lead who reports back on progress to the sustainability team quarterly.

The SDAT covers measures that can reduce CO<sub>2</sub> emissions and more holistic initiatives such as improving the health of our staff and visitors, increasing access to Green Space, and mitigating the impacts of climate change.

Several NHS Long Term Plan and Standard Contract requirements are also included here within the relevant workstreams to contextualise them and demonstrate how they fit into the "bigger picture." There is inevitably slight overlap, but this is kept to a minimum.

### **United Nations Sustainable Development Goals**

The 2030 Agenda for Sustainability Development Goals, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), shown below which are an urgent call for action by all countries - developed and developing - in a global partnership.





2 ZERO HUNGER









# 7.1 SDAT Areas of focus



### **Corporate Approach**

The top down approach to sustainability within our organisation.



### **Asset Management and Utilities**

The use of utilities such as gas and electricity across our estate.



### **Travel and Logistics**

The travel of our fleet, business users, patients and visitors along with our staff commute.



### Adaptation

The Trust's ability to deal with the impacts of a changing climate and associated extreme weather events.



### **Capital Projects**

The consideration of Net Zero and sustainable development principles in new build and refurbishment projects.



### **Green Space and Biodiversity**

The availability of green spaces for staff and visitors and the wildlife our sites support.



### Sustainable Care Models

The integration of environmental sustainability into care models to improve efficiency and long term sustainability.



### **Our People**

Ensuring staff are engaged with the sustainability agenda and encouraging staff to take ownership within their areas of influence



### Sustainable Use of Resources

Reducing waste and the use of single use plastics.



### Carbon/Greenhouse Gases

The total emission profile of our organisation and targets relating to Greenhouse gas reductions



# 7.2 SDAT 2021 Assessment score

### **SDAT Score 2021**

In addition to reducing our carbon footprint, we have also made good progress against the qualitative SDAT scoring system. The overall score for our latest assessment was 65%, a three percent increase on our 2020 score. This is above average for comparative acute Trusts and is indicative of the measures taken across the Trust, resulting in a 16% increase in our score since 2018.

Areas that have seen the greatest increase are corporate approach, sustainable care models and asset management and utilities, where excellent progress has been made in comparison to our starting position.

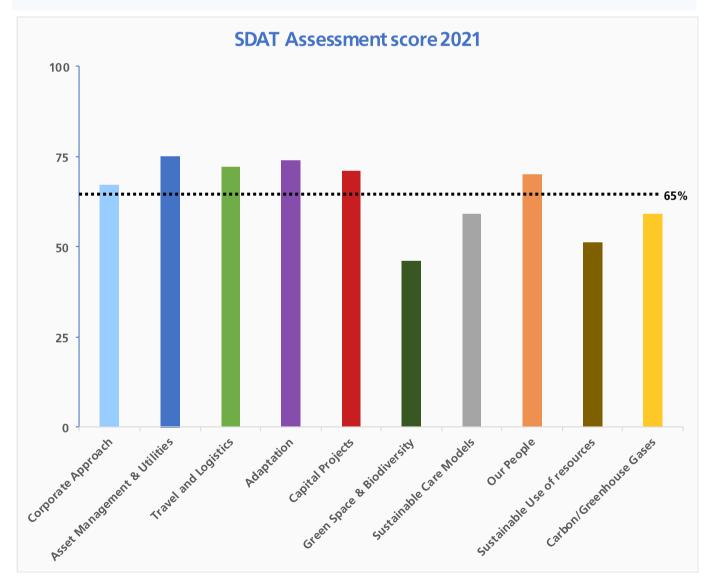


Figure 7: SDAT scores by category,



# 8.1 SDAT Areas of Focus Corporate Approach



**SDAT Score 2021: 67%** 

### **Overview**

"All NHS organisations – including every region and integrated care system – will be required to have a board-level lead, responsible for leading on net zero and the broader greener NHS agenda" Delivering a Net Zero NHS

Corporate support is critical to embedding sustainability into the culture of an organisation. Senior staff must be engaged in and accountable for delivering the targets in our Green Plan, with policies, procedures, and business case processes that reflect this. The Trust has already made progress in this area by establishing the Sustainable Development Group (SDG) and asking senior staff to be "Sustainability Champions" and cascade sustainability-related information to their teams. An Energy Reduction Programme Board has been established to identify areas where energy reduction can be achieved.

The Trust has also has a growing group of Green Champions, currently around 80 staff have signed up, and we hope to involve more staff in the future. We must keep our staff engaged and up to date with our progress and ways they can contribute to making the Trust more sustainable.



Scarborough Hospital is the Trust's second largest site. The Trust has been granted funding to provide a new Emergency Depart ment. This project is in the planning stages and provides the Trust with the opportunity to produce a flagship, BREEAM Excellent department providing ongoing carbon and energy savings.



# 8.1 SDAT Areas of Focus

# **Corporate Approach**



**SDAT Score 2021: 67%** 

### Where do we want to be?

- Sustainability integrated throughout the organisation
- Achieve an SDAT score of 75% or higher by 2025
- Engaged Green Champions network throughout the Trust
- · Senior Support for Sustainability and the Net Zero Strategy



## How will we get there?

- · Increase distribution of relevant sustainability information
- Develop and provide an easily accessible repository of sustainability related information for staff
- · Through strategic use of groups such as the SDG to engage and motivate key staff
- Appointment of a Trust board level Sustainability lead

### How will we measure our progress?

- Sustainability survey to be undertaken every three years
- Review of SDAT scores
- Number of Green Champions across the Trust
- · Inclusion of sustainability in the Trust's organisation values, strategy and processes





# 8.2 SDAT Areas of Focus

# **Asset Management and Utilities**



**SDAT Score 2021: 75%** 

### **Overview**

"A wide range of interventions focused on air conditioning and cooling, building fabric, space heating, ventilation and hot water could all be rolled out throughout the secondary care estate over the next 5 to 10 years, saving some £250 million per year" Delivering A Net Zero NHS

The Trust operates multiple properties across the North Yorkshire Region, with a range of functions, ages and energy efficiency scores. The Trust's aim is to decrease the use of gas, electricity, and water across the estate despite these challenges, with increased energy submetering and monitoring across the Trust playing essential parts in this process.

By developing an understanding of localised energy and water use throughout the Trust, more targeted and measurable initiatives can be devised and accurately quantified.

LED lighting will contribute to reductions in electricity demand as will procurement decisions we make regarding energy-intensive equipment.

We must reduce our gas consumption. While efficiency improvements can be achieved through measures such as purchasing more efficient boilers and installing insulation, gas will ultimately need to be phased out in favour of less carbon intensive energy sources such as on-site renewables, and increased electricity imports from the national grid. This is a challenge faced by many Trusts, and while it is unlikely that the Trust will completely phase out gas within the lifetime of this strategy, progress needs to be made to ensure that we meet Net Zero NHS strategy targets.



St. Monica's hospital is the Trust's smallest community hospital with 12 inpatient beds. A new, energy efficient boiler has recently been installed and is expected to deliver a substantial reduction in gas use at the site over the coming years.



# **8.2 SDAT Areas of Focus**

# **Asset Management and Utilities**



**SDAT Score 2021: 75%** 

### Where do we want to be?

- · Year on year reduction in utilities consumption on a "per patient" basis
- More energy efficient equipment on site.
- To be generating our own on-site, renewable energy
- On target to meet CO<sub>2</sub> reductions required for the Delivering a Net Zero NHS Strategy
- Phase out use of oil for primary heating (2023/24)

## How will we get there?

- Increased metering and monitoring of utilities
- Develop targeted utility reduction plans based on monitoring data
- Include lifecycle costs when purchasing new equipment
- Work to get funding for improving energy control, building fabric and installing renewable technologies at the Trust
- Engagement with staff
- · Facilitating home working where possible

## How will we measure our progress?

- Reviews of the Trust Utility dashboard
- Estates Returns Information Collection (ERIC) Trust Annual Reports
- Sustainable Resource Planning (SRP) Reports
- · Reviews of energy efficiency weighting in new equipment tender documents









# 8.3 SDAT Areas of Focus

# **Travel and Logistics**



**SDAT Score 2021: 72%** 

### **Overview**

"Approximately 3.5% (9.5 billion miles) of all road travel in England relates to patients, visitors, staff and suppliers to the NHS" Delivering a 'Net Zero' National Health Service

Travel to and from Trust sites impacts both our hospitals and the local community as a whole. We have a responsibility to reduce our contribution to local air pollution and CO<sub>2</sub> emissions.

The Trust currently has nine electric vehicles as part of its fleet and plans to gradually add more electric vehicles in line with and above NHS Long Term plan targets. The Trust already has a travel plan and a business travel hierarchy encouraging active and public transport. We have secure cycle storage, a fleet of designated low emission pool cars, and a Hospital Park and Ride service that serves the York site.

As part of the NHS Carbon Footprint Plus, we are required to consider the transport emissions produced due to our day-to-day activities and those of our patients and visitors, along with the commuting undertaken by our staff. Increasing the provision of electric vehicle charging infrastructure is a key objective for the Trust in supporting the transition away from vehicles using fossil fuels.

### York Hospital Park and Ride

The Hospital buses provide a frequent service from a local Park and Ride site to York Hospital. The service has been well received by users and provides a viable alternative to parking on site for staff and visitors. By reducing single-occupancy vehicle journeys, the service has the opportunity to reduce local air pollution and CO<sub>2</sub> emissions and reduce congestion.





# 8.3 SDAT Areas of Focus

# **Travel and Logistics**



**SDAT Score 2021: 72%** 

### Where do we want to be?

- · Fleet air pollution emissions reduced by 20% by 2023/24
- Business mileage reduced by 20% by 2023/24
- Ensure that all new staff lease, salary sacrifice and pool cars purchased/leased are ULEVs or ZEVs (April 2022) and work towards purchasing vans meeting these requirements
- · Year-on-year increase in the proportion of staff commuting via active/public transport
- At least 90% of Trust fleet to use low emissions (Including 25% ultra low) by 2028/29

## How will we get there?

- Increased charging infrastructure across the Trust to support electrification
- All new vehicles to conform to ULEV standards
- · Increased uptake of videoconferencing to reduce site to site business travel
- Increased use of patient video/telephone outpatient appointments (where appropriate)
- Review and reduce business lease and fleet lease CO<sub>2</sub> limit for all new/ replacement vehicles
- Increased provision of cycle storage, shower and lockers supported by incentivisation of bike purchases through staff benefits programs
- Continue to work with partners such as City of York Council to promote sustainable travel

## How will we measure our progress?

- Monitoring of the composition of our fleet and our fuel use/mileage
- · Monitoring of outpatient appointments and use of videoconferencing
- Patient and visitor travel surveys, and staff surveys at least once every three years.







# 8.4 SDAT Areas of Focus

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**Adaptation** 

**SDAT Score 2021: 74%** 

### **Overview**

"A net zero NHS is an essential component of the response to climate change. However, the NHS must also adapt to the impacts of climate change that are already occurring today, and those that cannot be avoided" Delivering a 'Net Zero' National Health Service

As the climate changes and the likelihood of extreme weather events (in particular temperature events and flooding) increases, the Trust has to take action to protect staff and service users from the adverse impacts of Climate Change. Consideration of extreme weather and Trust resilience to it are essential if services are to be maintained.

The Trust already has detailed action plans for various scenarios that could impact service delivery, such as flooding and heatwave events. The mixed age range of our estate results in some areas being more prone to overheating. Work continues to improve temperature monitoring across the Trust to identify these areas and make improvements where possible.

A recent assessment of Tadcaster Health Centre led to the installation of flood defences to protect the site and increase resilience for services provided. Similar actions may need to be taken in the future to protect staff and patients and to ensure business continuity, and we will continue to undertake site assessments to identify areas of opportunity.

In 2021, a new Adverse Weather Plan was agreed to provide for an annual review of data collected for inclusion in an annual report to inform future Capital, Estate, and Maintenance Planning programs of requirements to adapt to the changing climate.



White Cross Court is one of our smaller sites and provides a range of rehabilitation services



# **8.4 SDAT Areas of Focus**

# **Adaptation**



**SDAT Score 2021: 74%** 

### Where do we want to be?

- · Trust premises adapted to mitigate risks associated with climate change
- Be able to demonstrate that our buildings and services are fit for purpose in the context of a changing climate
- Further steps taken to ensure business continuity maintained during extreme weather events such as floods and heatwayes
- Provide an annual review of adverse weather impacts and adapt premises and service delivery to mitigate risks of climate change

## How will we get there?

- Increased temperature monitoring across the Trust to identify areas where overheating may be an issue
- Detailed heatwave plans incorporating monitoring information
- · Work with major suppliers to understand their resilience and contingency strategies
- Ensuring that new buildings are built to BREEAM excellent/Net Zero standards
- · Retrofitting existing buildings where possible
- Risk Assessments based on previous climate impacts/adverse weather monitoring

### How will we measure our progress?

- · Temperature monitoring of key areas
- Number of overheating events relative to overheating days
- All new builds to be certified as BREEAM Excellent/Net Zero with extensions certified as BREEAM Very Good.
- Routine testing of business continuity plans







# 8.5 SDAT Areas of Focus Capital Projects



**SDAT Score 2021: 71%** 

### **Overview**

"Delivering a net zero health service will require work to ensure new hospitals and buildings are net zero compatible, as well as improvements to the existing estate"

Delivering a Net Zero NHS

Set against the complexity of retrofitting a mixed-age estate, capital projects provide a refreshing opportunity to influence building efficiency at the design, build, and commissioning stages. It is therefore essential that sustainability and carbon reduction be factored into capital projects throughout the process.

Ensuring buildings are both designed and built with consideration to energy and water efficiency and integration of renewable technologies can achieve significant long-term financial and carbon savings. The Trust will work towards ensuring all new build and refurbishment projects conforms to net zero standard.



The new endoscopy unit, opened to patients in 2019, this modern unit has increased capacity and incorporates electrical submetering to measure energy use



# **8.5 SDAT Areas of Focus**

# **Capital Projects**



**SDAT Score 2021: 71%** 

### Where do we want to be?

- Projected energy and carbon performance delivered within projects
- All new builds to conform to BREEAM standards
- Work towards ensuring that all new builds and refurbishments conform to Net Zero Standards
- Renewable/low carbon technologies such as solar panels and ground/air heat pumps included in new builds

### How will we get there?

- · Nominating a capital projects BREEAM lead
- Ensuring that the BREEAM process is followed carefully to ensure BREEAM Excellent is achieved
- Soft landings approach to the transition from construction to occupation
- · Electrical submetering in new builds to measure against projected performance
- Sustainability and carbon reduction factored into all projects
- Low carbon heating to be a tender requirement for new builds

## How will we measure our progress?

- Carbon monitoring data from new builds
- BREEAM Assessments
- · Monitoring of renewable energy sources through ERIC data







# **8.6 SDAT Areas of Focus**

# **Green Space and Biodiversity**



**SDAT Score 2021: 46%** 

### **Overview**

"Increasing green space and trees on NHS sites also provides opportunity for improving air quality, supporting mental health and social prescribing. Since 2009, the NHS Forest has planted over 65,000 trees across 180 NHS sites, increasing green space, improving air quality and mental health, and capturing carbon." Delivering a Net Zero NHS

Supporting access to green space has benefits for mental and physical wellbeing and leads to improved health outcomes. The Trust aims to provide accessible Green Space for staff and patients where at all possible.

In the past, where sites have been developed, consideration has been given to making the best use of green space, including Scarborough Hospital car park, which has areas developed to encourage wildlife.

Some of our sites, such as Scarborough, have lots of green spaces, and these are well utilised by staff and patients, particularly in the summer months. Buildings largely occupy the York site, but creative use of spaces such as the formation of courtyard gardens have provided calm areas for staff and patients. There are five more wellbeing gardens planned for 2021/22 following a charitable donation of £200,000 from the York and Scarborough Teaching Hospitals Charity. In addition to the benefit of increased outdoor space, there will also be the opportunity to provide certain rehabilitation services within the wellbeing gardens.



# 8.6 SDAT Areas of Focus

## **Green Space and Biodiversity**



**SDAT Score 2021: 46%** 

## Where do we want to be?

- · Board approved Biodiversity Action Plan published
- More green space available for staff and visitors to enjoy
- Biodiversity considered as part of new builds
- · Local community engaged with green spaces
- · Tree planting to support carbon off-setting

## How will we get there?

- Establish and maintain resources to develop and deliver a biodiversity action plan for the Trust
- Applying for funding to create and improve green spaces, working inter-departmentally to agree best use of space
- Ensure that Ecology/Biodiversity is considered as part of the BREEAM assessment for new builds
- Continue to ensure that volunteers are equipped and supported in their roles

- Biodiversity Action Plan to be published within the lifetime of this strategy
- Monitoring the area of accessible green space to ensure space is being utilised
- BREEAM assessment Ecology/Biodiversity points scored on new builds
- Numbers of volunteers working on green spaces
- · Funding secured for development or improvement of green paces







# 8.7 SDAT Areas of Focus

### **Sustainable Care Models**



**SDAT Score 2021: 59%** 

### **Overview**

"Quality services and systems include sustainability as a fundamental principle. This means minimising environmental impacts, enhancing health and building resilience with individuals and their communities" Sustainable, Resilient, Healthy People and Places PHE

Sustainable Care Models provide the opportunity to increase resilience, performance and sustainability within the Trust. By optimising the location of care, working towards earlier and faster diagnoses, and encouraging the use of virtual appointments (where appropriate), we can positively impact the communities we serve and reduce our environmental impact. T

he Trust has been working on two patient video conferencing trials to reduce unnecessary travel to site by patients. Accelerated by the Covid-19 Pandemic, thousands of patients now have remote appointments every month. Patients can avoid long journeys to hospital, and the avoided vehicular trips reduce local air pollution and congestion. Environmental and carbon impact calculations have been conducted for specific care models, which will continue over the coming years.





# 8.7 SDAT Areas of Focus

### Sustainable Care Models



**SDAT Score 2021: 59%** 

### Where do we want to be?

- In-person Outpatient appointments reduced by 1/3 by 2023/24
- · Increase return of walking aids to the Trust
- Reduced metered dose inhaler use (2% reduction in emissions by March 2022)
- Direct financial and environmental co-benefits of emerging and existing care models quantified

### How will we get there?

- Expanding the rollout of virtual appointments for patients (where appropriate)
- Increase in patient centred care pathways
- Equipment coordinator employed to streamline the process of issuing and delivering equipment.
- Improving links with equipment providers to further enhance accurate data, and actions to enhance increase return rates of walking aids and reduce losses
- Preferential use of dry powder inhalers (DPl's) over metered-dose inhalers (where clinically appropriate)
- · Conducting further environmental and carbon calculations for care models

- Monitoring of outpatient appointments across the Trust
- Monitoring return rates of walking aids and other applicable equipment
- · Monitor prescriptions of MDI's and DPI's
- Sustainability assessments for new and existing care models







# 8.8 SDAT Areas of Focus Our People



**SDAT Score 2021: 70%** 

### **Overview**

Staff wellbeing is essential to an effective, resilient workforce. It is important that as a Trust we provide staff with resources to help take care of their own physical and mental wellbeing, as well as being flexible to the needs of staff where it fits within the service.

NHS Health Checks are offered to all staff over 40 years of age, with advice tailored to the individual. In addition, positive management behaviours training has been introduced, particularly in supporting mental wellbeing and staff with mental ill-health.

Concerning physical activity/sedentary behaviour, the Trust is continuing to widen and improve the offers around physical activity through its Staff Benefits program. Health support has progressed virtually, with health checks, virtual activity sessions and Weight Management, Eating well, and Being Active workshops all moving on-line and being more easily accessible.

There is a staff cycle scheme/salary sacrifice promotion that has good levels of uptake. A cycle mileage rate is also available for those who cycle while at work.

A range of healthy food options are available at Trust eateries, and work has been done to reduce the availability of high sugar foods and beverages while providing healthier alternatives where possible.

The Trust has continued to expand the suite of support for all staff during the last year, a lot of this support has been in response to the added challenges that the global pandemic has brought. Enhanced support both locally and nationally has focussed on maintaining wellness in addition to identifying employee's level of individual risk factors in relation to Covid-19



# 8.8 SDAT Areas of Focus

## **Our People**



**SDAT Score 2021: 70%** 

## Where do we want to be?

- Improved health and wellbeing of our workforce
- Increase in home and flexible working
- Workforce engaged in creating a sustainable environment



### How will we get there?

- · Further increase the provision of healthy eating options in Trust catering outlets and provide nutritional information to customers
- Providing offers on discounted gym membership to staff
- Continuing to offer discounts on cycling equipment to encourage active travel
- · Ensuring that reasonable demands for home and flexible working which fit within the needs of the service are considered
- · Continued engagement with Trust Green Champions

- Staff benefits program availability and uptake
- Establish a baseline and monitor levels of staff who utilise home/flexible working
- Sickness absence rates
- Trust Green Champion numbers





## 8.9 SDAT Areas of Focus

## Sustainable Use of Resources



**SDAT Score 2021: 51%** 

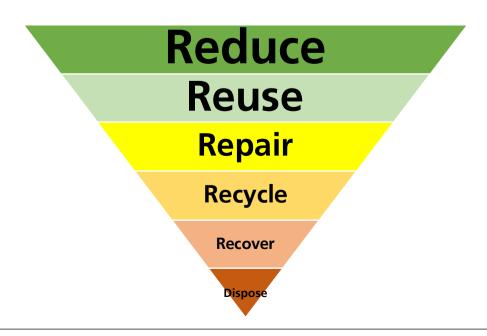
### **Overview**

"Quality services and systems include sustainability as a fundamental principle. This means minimising environmental impacts, enhancing health and building resilience with individuals and their communities" Sustainable, Resilient, Healthy People and Places PHE

Significant amounts of waste are produced as a result of our clinical activities. Minimising waste and where waste is necessary, ensuring that it is disposed of in the correct waste stream are key to reducing our environmental impact. Segregation at the point of source is essential and requires engagement with staff working across different areas for maximum results.

By applying the waste hierarchy, rethinking traditional waste models, and working closely with our staff and supply chain, we can reduce the environmental impact of our waste.

Significant progress has already been made in this area, with emissions from waste falling by more than 80% since 2015/16. Our recycling rate in 2019/20 was 23%, and less than one percent of our waste was sent to landfill. Our incinerated domestic waste contributes to a waste-to-energy plant that powers upwards of 40,000 homes in the region.





# 8.9 SDAT Areas of Focus

## Sustainable Use of Resources



**SDAT Score 2021: 51%** 

#### Where do we want to be?

- Improved waste segregation at point of source and increased recycling rates
- Continued decrease in the use of energy intensive disposal methods such as landfill and incineration without energy recovery.
- · Increased reuse of equipment throughout the Trust
- · Reduced food waste
- Reduction in the avoidable use of single use plastics

### How will we get there?

- · Waste segregation training for staff
- Increased provision of educational information relating to sustainable use of resources
- Maximise use of the Trust Warp-It portal to reduce waste and unnecessary procurement
- · Obtain a baseline of ward food waste levels and implement a plan to reduce this level
- Replacing single use plastics with compostable/more environmentally friendly alternatives as these become available

- · Monitoring of training provided to staff on waste segregation
- ERIC waste stream volumes
- Monitoring of CO<sub>2</sub> and financial savings from the Warp It system
- Food waste baseline and progress reports
- Annual reporting of single use plastic use as per the plastics pledge







# 8.10 SDAT Areas of Focus Carbon/Greenhouse Gases



**SDAT Score 2021: 59%** 

### **Overview**

"Delivering 100% LED lighting could be achieved with an additional non-recurrent investment of £492 million, which would be paid back over a 3.7-year period, providing an estimated net saving of over £3.0 billion during the next three decades (across the NHS)" Delivering a Net Zero National Health Service

The Trust aims for continual reductions in gas and electricity demand in line with the NHS Net Zero Strategy and also monitors this on a per-patient basis. The Trust has purchased a Green Energy Tariff for all grid electricity imports which, while not directly attributable to the Trust as CO<sub>2</sub> savings, will increase the proportion of the grid that is zero carbon.

We must explore opportunities for renewable technology across the estate. There are possibilities for solar panels at multiple sites, and there is potential for more efficient heating methods such as ground and air heat pumps. LED upgrades will deliver energy savings over time as older style bulbs are replaced during routine maintenance.



# **8.10 SDAT Areas of Focus**

## Carbon/Greenhouse Gases



**SDAT Score 2021: 59%** 

### Where do we want to be?

- Reduce greenhouse gas emissions in line with the Net Zero NHS Strategy
- · Year on year reductions in gas and electricity demand
- Reduced carbon intensity per patient contact
- Increased active and zero emission travel
- Lower emissions from use of anaesthetic gases and inhalers

### How will we get there?

- Through the measures outlined in previous sections
- By ensuring that new, emergent technologies are factored into decision making
- · Engaging with staff to save energy
- Working with procurement to ensure that energy use and carbon emissions are appropriately weighted in tender documents
- Building fabric upgrades to reduce heat loss
- Increased submetering to provide greater detail on where energy is being used
- Improving electric vehicles charging facilities and facilities for active travel
- · Promoting more environmental alternatives for anaesthetic gases and inhalers

- Annual reports
- ERIC data
- SRP submissions
- Trust Carbon Dashboard







# 9. Communications and Tracking Progress

### Communications

As an essential part of driving change throughout our organisation, we take a considered approach to sustainability communications. By communicating what we are doing both within and outside the organisation, we can engage staff with key priorities and ensure sustainability is part of the conversation.

We communicate sustainability information regularly through various channels, including our weekly and monthly staff communications and a group of Green and Sustainability Champions.

We aim to provide a resource of accessible sustainability information for staff on our Trust Intranet site, complete with a waste guide and advice on reducing utility consumption/carbon emissions.

## **Tracking progress**

We will be measuring the progress of this strategy using a range of qualitative and quantitative methods including:

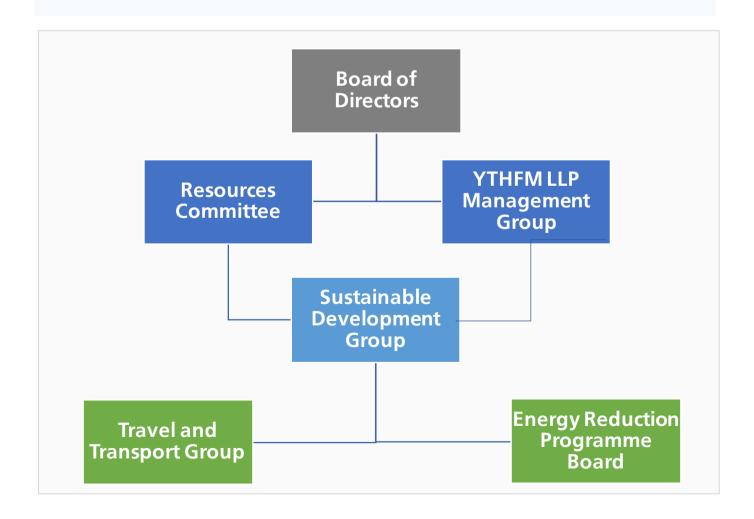
- Our annual SDAT Scores We are aiming for an overall percentage of 75%+ by 2026
- Consumption of Utilities We aim to improve our reporting ability, access to real time data and invest in sub-metering throughout the lifetime of this plan.
- Travel data
- Waste Volumes
- · Anaesthetic gas use
- Organisational carbon footprint as measured and reported annually in line with sector guidance

# 10. Governance

### **Governance**

The Trust has operated a Sustainable Development Group (SDG) since 2009. The group, which meets every quarter, includes key staff from various departments and facilitates interdepartmental work on sustainability projects. The Travel and Transport Group and Energy Reduction Programme Board were established to provide more specific workstreams and feed into the SDG.

The SDG can escalate items to both the Resources Committee and the YTHFM LLP Management group, who in turn can bring items to the attention of the Board of Directors



# 11. Reporting

### Reporting

The reporting of the Trust's sustainability performance is provided through multiple systems at an operational, organisational and national level. As a responsible organisation we adopt an open and transparent approach to the information collected, making it available to all and have a duty to provide information that is accurate and is recorded within the systems below;

### **Monthly**

- Data collection from utilities, waste and transport used to identify levels and trends.
- Reports and monthly figures reviewed at the Energy Reduction Programme Board (ERPB).

### Quarterly

 Quarterly internal reports are produced following the collation of written updates from the sustainability leads including information discussed at the Travel and Transport Group and Energy Reduction Programme Board. These are summarised and presented to the Board Net Zero/ Sustainability Lead and also the Resources Committee who escalate key issues to the Trust Board of Directors.

#### **Annual**

- Annual report presented to the Trust Board of Directors identifying progress against the Green Plan and highlighting the main activities delivered throughout the year.
- ERIC (Estates Return Information Collection)
- Sustainable Development Assessment Tool used to identify sustainable development work, measure progress and enable the Trust to make plans for the future from the previous year's actions.
- Collation of the sustainability section of the Trust Annual Report which includes a summary of Trust's carbon emissions

# 12. Risk

### **Risk**

Risks to the delivery of our Green plan are identified through a series of committees and groups illustrated within our Governance structure. Escalation of risks is conducted through the Sustainability Development Group and placed onto the Risk Register, where depending on the severity of the risk is progressed up to the Resources Committee and Emergency Planning Steering Group (EPSG) and then to the Trust Board.

The register reviewed by the Sustainable Development Group on a quarterly basis include the following key risks:

- **1.** Risks of changing climate increasing costs and impact of adverse weather and climate change which includes heat waves and overheating buildings increasing deaths from air pollution, increasing likelihood of flooding events, disruption to services and communities and longer-term changing disease patterns.
- 2. Specific risk of overheating putting patients and vulnerable groups of visitors and staff.
- **3.** Risk of failure to achieve air quality/transport targets from Delivering a Net Zero NHS and NHS standard contract which requires Trusts to: Cut business mileages and fleet air pollutant emissions by transitioning as quickly as reasonably practicable to the exclusive use Zero and Ultra-Low Emission Vehicles.
- **4.** Risk of failure to reduce the carbon impacts from the use, or atmospheric release, of environmentally damaging fluorinated gases used as anaesthetic agents and as propellants in inhalers, including by appropriately reducing the proportion of desflurane to sevoflurane used in surgery, through clinically appropriate prescribing of lower greenhouse gas emitting inhalers, and the appropriate disposal of inhalers



## 13. Finance

### **Finance**

Sustainable development schemes and activities will provide multiple benefits for the Trust over the coming years. As patient numbers, utilities and transport costs rise there will be a focused approach towards reducing costs and improving services, through changing working practices and identifying beneficial cost reduction schemes.

Financial constraints within the Trust require sustainability improvements to either find external funding, partnership working or go through the Trusts business cases (BC) process, indicating the benefits of the improvement, costs, return on investment and effects on the environment, which is viewed by the BC panel. The Trusts charitable funds are available if the improvement fits in with the criteria for accessing the funds.

The Sustainability team seek to minimise and reduce financial burdens whilst at the same time, seeking to achieve a balance between carbon and cost savings. It is increasingly difficult to achieve financial pay backs of five years or less, and greater levels of investment are now needed to achieve carbon reduction in line with Net Zero NHS targets. The Trust works with local, regional and national organisations to seek technical and financial support.

Utilities are procured through a tendering process to deliver the best value for money, provide energy from renewable sources and capture data that monitors and records information to identify high usage areas. This allows the Trust to identify areas where improvements can be made and alternative options for delivery considered.

Refurbishment to our estate provides an opportunity to invest in equipment and buildings that incorporate whole life cycle materials, heating and ventilation that can cope with the predicted changes in climate change and reduce our carbon impact on the environment.

Recently funding has been secured for submetering and telemetry for the York Hospital site. Further work is planned to develop a capital investment programme to contribute to the achievement of carbon reduction targets.

The predicted global impacts of an increase of greater than two degrees Celsius have been widely modelled and documented. Only a short window of time is available to reduce emissions to a level that can prevent potentially irreversible changes to the climate.

There will likely be grants and government schemes to help support the financial aspect of the transition to net zero, but the organisation meeting the targets will also have to bear some of the costs themselves. The Trust must establish the most cost-effective way to deliver the required works to meet net-zero and contribute to the global effort to solve the climate emergency.



# **Appendix 1: Glossary**

Air Pollution: Levels of pollutants in the air such as Particulate Matter, Nitrogen Dioxide (NO<sub>2</sub>) and Sulphur Dioxide (SO<sub>2</sub>). This is measured on the Air Quality Index, which has a scale of 1-10. Air pollution can negatively impact health outcomes for local communities

BREEAM (Building Research Establishment Environmental Assessment Method): A method of assessing, rating and certifying the environmental, social and economic sustainability of buildings

Carbon Footprint: The total amount of greenhouse gases produced to directly and indirectly support human activities, usually expressed in equivalent tonnes of carbon dioxide (CO<sub>2</sub>e)

Climate change: A long term shift in weather patterns and average temperatures, caused by the emission of Carbon Dioxide and other Greenhouse gases into the atmosphere

Climate change adaptation: Changes made to allow for future weather patterns. Examples include storm drains to help cope with increased flooding and improved quality road surfaces to withstand higher temperatures

CO<sub>2</sub>e – Carbon Dioxide Equivalent: Whilst CO<sub>2</sub> is the most common greenhouse gas, other gases contribute to climate change, often at much higher levels per tonne. One tonne of methane has the global warming potential of 25 tonnes of CO<sub>2</sub>. Whilst one tonne of desflurane (A potent anaesthetic gas) is equivalent to over 2000 tonnes of CO<sub>2</sub>. The CO<sub>2</sub>e figure allows us to factor in the impact of these other gases within our overall carbon footprint

Combined Heat and Power (CHP): The generation of electricity (usually through consumption of natural gas) with the heat utilised as a by-product

Electric Vehicle (EV's): Vehicles driven by an electric motor. EV's have zero tailpipe emissions (CO<sub>2</sub>/air pollutants) and do not contribute to local air pollution

Estates Return Information Collection (ERIC): A central reporting portal where NHS organisations report key information (such as waste and utilities usage)

Greenhouse Gases (GHGs): Gases that reduce the amount of infrared radiation that can escape through the atmosphere, thereby contributing to Global Warming. Examples include CO<sub>2</sub>, Methane and (in the healthcare sector), anaesthetic gases



# **Appendix 1: Glossary**

Hybrid Vehicle: A vehicle that uses conventional fuels, assisted by electric motors

KPI: Key performance indicator

Low Emission Vehicle (LEV): Vehicles that meet current 'Euro Standards'. Euro 3 for motorcycles, mopeds, motorised tricycles and quadricycles; Euro 4 for petrol cars, vans, minibuses and other specialist vehicles; Euro 6 for diesel cars, vans and minibuses and other specialist vehicles; Euro VI for lorries, buses and coaches and other specialist heavy vehicles (Correct as of July 2020)

Net Zero: The point where total CO<sub>2</sub>e emissions minus offset emissions is less than or equal to zero

Patient Contacts: The number of patients that visit the Trust in a given time

Payback Period: The length of time required for the cost of an investment to be recovered

Sustainable Development Assessment Tool (SDAT): The SDU's Sustainable Development Assessment Tool (SDAT) is designed to help Health and Social Care organisations assess progress in sustainable development and identify how local action is contributing to the UN Sustainable Development Goals

Travel Plan: A package of actions put in place by an employer to encourage staff to use alternatives to travelling alone in their cars, both for environmental and health benefits

Ultra-low emission vehicle (ULEV): Vehicles that emit tailpipe emissions of less than 50g CO<sub>2</sub>/km. Electric vehicles (including battery electric, plug-in hybrid electric or hydrogen fuel cell) all meet these criteria

Warp It: A material reuse portal, which assists the Trust in redistributing assets such as furniture

Whole-life Costing: Sometimes called 'life-cycle cost', this approach assesses the absolute cost of a product or service over the course of its lifetime, from its conception through to its end of life, taking into account purchase, maintenance and repair, training, utilities and disposal

Zero emissions vehicle (ZEVs) Fully electric vehicles that produce zero tailpipe emissions



# **Appendix 2: References**

- Committee on Climate Change, Net Zero: The UK's contribution to stopping global warming, 2 May 2019 www.theccc.org.uk/publication/net-zero-the-uks-contribution-tostopping-global-warming/
- 2. Delivering a Net Zero National Health service <a href="https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2020/10/delivering-a-net-zero-national-health-service.pdf">https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2020/10/delivering-a-net-zero-national-health-service.pdf</a>
- 3. NHS Standard Contract Service Conditions 2021/22 <a href="https://www.england.nhs.uk/publication/nhs-standard-contract-service-conditions-full-length/">https://www.england.nhs.uk/publication/nhs-standard-contract-service-conditions-full-length/</a>
- 4. NHS Long Term Plan 2019 <a href="https://www.longtermplan.nhs.uk/publication/nhs-long-term-plan/">https://www.longtermplan.nhs.uk/publication/nhs-long-term-plan/</a>
- 5. NHS Operational and contracting guidance 2021/22 <a href="https://www.england.nhs.uk/wp-content/uploads/2021/03/B0468-nhs-operational-planning-and-contracting-guidance.pdf">https://www.england.nhs.uk/wp-content/uploads/2021/03/B0468-nhs-operational-planning-and-contracting-guidance.pdf</a>
- 6. Sustainable Development Unit NHS Carbon Reduction Strategy Update 2010 Document can no longer be accessed online (the Trust holds a copy on record)