

Our Green Plan

– a strategy for a sustainable future



FOREWORD

We are pleased to show our support for this Green Plan.

Stockport NHS Foundation Trust provides hospital care for children and adults across Stockport and the High Peak, as well as community health services across Stockport. We care about our patients and their families, the communities we serve and the environment. We recognise the impact that our clinical activities have on climate change and are committed to the net zero ambitions of the NHS.

Our Green Plan sets out our aims and commitment to improve the environment for our communities and become a sustainable healthcare provider. Through this plan, we will reduce our carbon emissions; reduce landfill waste and improve local air quality. Together, we will work with local partners to create a better environment for our patients and community.



Prof. Tony Warne
Chair



Karen James OBE
Chief Executive

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* Please note all pictures were taken pre-COVID

1. Introduction

About the Trust

Stockport NHS Foundation Trust aims to be a well-led organisation delivering safe, high quality care for local people.

Strategic Vision & Values

Our [Strategic Plan for 2020-2025](#) sets out a clear vision - developed in collaboration with our staff and our patients - to continue to improve the quality and performance of our services, while achieving financial sustainability.

Our Mission:

- Making a difference every day

Our Values:

- We Care
- We Respect
- We Listen

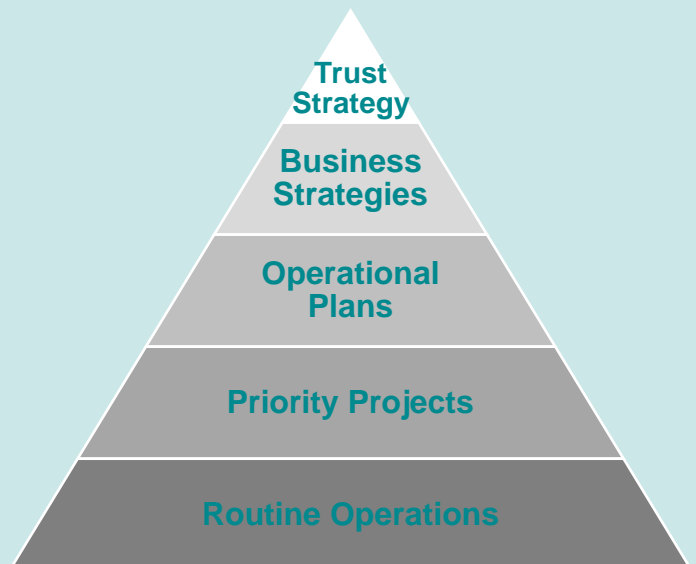
Our Strategic Objectives:

- A great place to work
- Always learning, continually improving
- Helping people live their best lives
- Investing for the future by using our resources well
- Working with others for our patients and communities

Alignment of Plans

Our long-term Trust Strategy will be delivered through a range of medium-term business strategies, which set out the detail of how we will achieve our ambitions across our clinical divisions and enabling functions such as workforce, informatics and estates.

Each year, the Trust develops annual operational plans for our in year priorities, which align to national policy and delivery of our strategic objectives. This hierarchy of plans is set out in the figure below.



This plan sits among our business strategies, detailing our medium-term plans to deliver the Trust's vision.



Our Trust Service Objectives:

- Deliver safe accessible and personalised services for those we care for
- Support the health and wellbeing needs of our communities and staff
- To work with partners to co-design and provide integrated service models within the locality and across acute providers
- Drive service improvement, through high quality research, innovation and transformation
- Develop a diverse, capable and motivated workforce to meet future service and user needs
- Utilise our resources in an efficient and effective manner
- Develop our Estate and IM&T infrastructure that is fit for purpose and meets service and user needs

Purpose of this Strategy

In 2015 the [United Nations Paris Agreement](#) was adopted by 191 countries with the aim of reducing greenhouse gas emissions and keeping the rise in average global temperatures to less than 2°C (3.6 °F) above pre-industrial levels, with an ultimate ambition of 1.5 °C (2.7 °F).

In 2020 the NHS published its strategy [“Delivering a ‘Net Zero’ National Health Service”](#), highlighting that one of most significant challenges to the health care system is the climate emergency.

“Unabated it will disrupt care, and affect patients and the public at every stage of our lives. With poor environmental health contributing to major diseases, including cardiac problems, asthma and cancer, our efforts must be accelerated.”

Sir Simon Stevens, Introduction to the Net Zero NHS strategy

In line with the Trust’s Objective to support the health and wellbeing of our communities and utilise our resources in an efficient and effective manner, this Green Plan sets out the progress and future actions required to reduce our impact on the environment and help address the climate emergency.

It is the Trust’s ambition for the emissions we control directly - our carbon footprint - to reach net zero by 2040, with an initial 80% reduction on our 2012/13 baseline by 2032. For all other emissions that we can influence - our Carbon Footprint Plus - we aim to reach net zero by 2045, with an 80% reduction by 2039.

We will keep these targets under annual review and, where possible, we will move further and faster with our ambitions, subject to available resources. In addition, we will undertake a full review of progress and action plans every three years.











WE CARE about:
Each other
Our patients and their families
The communities we serve
The environment
We support them and deliver on our promises



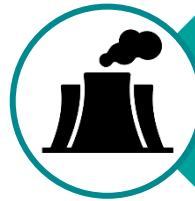
2. Our Green Plan on a Page

The Trust Strategy 2020-2025 sets out 5 strategic objectives including **“Investing for the future by using our resources well”**. Reducing our carbon footprint is therefore key to delivery of the Trust’s Strategic ambitions.

Carbon management is at the heart of this green plan and our focus is on achieving the ambitions set out in the NHS plan “Delivering a net zero National Health Service” by:

-  Developing a low carbon organisation and workforce
-  Reducing our carbon footprint
-  Developing lower carbon care models
-  Reducing local air pollution through sustainable transport
-  Reducing waste and moving to zero landfill
-  Reducing water use and including sustainable drainage solutions for new build
-  Lower carbon procurement and catering, including action to reduce single use plastics
-  Sustainable building design and climate change adaptation

Our Green Plan has the following ambitions:



Reduce greenhouse gas emissions by 80% by 2032



A net zero carbon footprint by 2040



All trust vehicles to be ultra low or zero emission



75% cut in business travel emissions by 2030



Zero waste to landfill



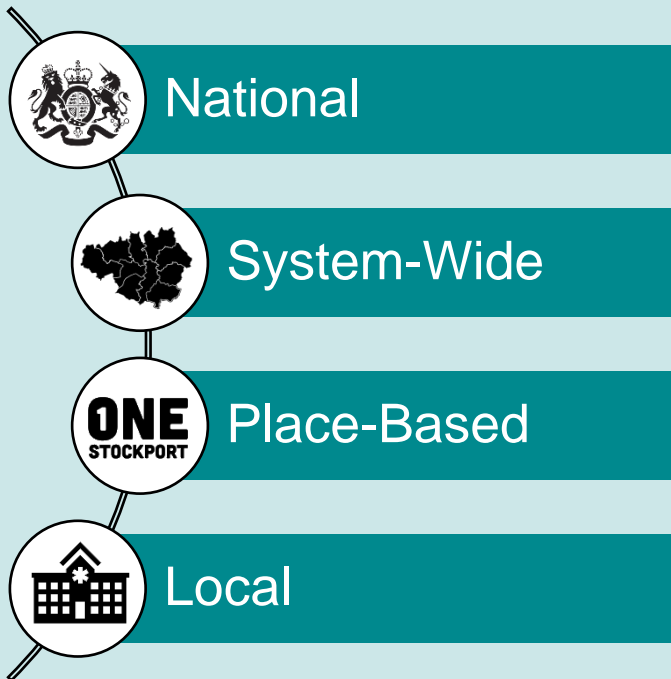
Single use plastics in catering phased out



Purchasing to take account of social value weighting

3. Our Strategic Environment

We recognise that Acute Trusts are part of a wider system of health and care and must work together with partners to deliver for local people.



Collaboration is a central pillar of our Trust Strategy:

- nationally, the Trust is part of the National Health Service and committed to delivering the clinical improvements set out in the NHS Long-Term Plan;
- the Trust is an active member of the Greater Manchester Integrated Care System and devolution project;
- the Trust has been central to the development of Stockport's new Borough Plan – ONE Stockport – and will play a significant role in delivering its new Health and Care Plan;
- and locally, the Trust collaborates with a range of partners in delivery of clinical services.

National Context

In October 2020, the Greener NHS National Programme published its new strategy, *Delivering a 'net zero' National Health Service*, which set out the objective of reducing the emissions the NHS controls directly to net zero by 2040 and the emissions the NHS can influence to net zero by 2045, with an interim target of 80% reduction by 2028-32 and 2036-2039 for each aim respectively.

The 2021/22 NHS Standard Contract set out a requirement for hospital trusts to develop a Green Plan to detail their approaches to reducing their emissions in line with the national trajectories. This plan is designed to ensure the Trust is aligned with those National commitments.

System-Wide Context

The Greater Manchester Integrated Care System has a requirement to produce a consolidated Green Plan covering all health care providers in the area. In turn, the GMICS will be required to ensure each provider has a Green Plan that is aligned with the system wide plan. This Green Plan has been produced taking account of guidance provided from the Greater Manchester Health and Social Care Partnership.

Place-Based Context

The One Stockport plan has an ambition to create a climate friendly and sustainable borough. This plan addresses the Trust's impact on the environment and what we will do to become more climate friendly through significant reductions in global and local emissions.

Local Context

We are the largest provider of healthcare and one of the largest employers in Stockport. This plan addresses how we will help reduce local air pollution by expanding low carbon models of care, investing in low carbon vehicles, encouraging lower carbon options for travel and minimising emissions from our operations.

4. Our Journey

Since 2013, we have reduced our carbon footprint by

26.1%
to under
12,500 tonnes

Our waste output has **reduced by 18%**

Our **electric vans** support service delivery without contributing to air pollution.

By 2040 our carbon footprint will have shrunk by nearly **17,000 tonnes per year**
- equivalent to the emissions of over 1000 households

Over recent years Stockport NHS Foundation Trust has made significant progress on its environmental agenda. The following section sets out our journey to date as a backdrop to our ambitions for the future.

Our building actions

The Trust has achieved carbon savings as a result of reducing building energy through a number of projects, including:

- Investing over £600,000 in LED lighting upgrades in 2019-2021
- Installing cost effective duplex stainless steel plate heat exchangers to improve energy efficiency and minimise waste water pollution
- Reducing mechanical ventilation by improving airflow and natural ventilation through the installation of new windows
- Increasing insulation of roof spaces and exposed pipe work and valves
- Old boiler replacement programme
- Voltage optimisation
- Use of intelligent building management system to support heating control optimisation

Anaesthetic Gases and Inhalers

Medicines account for 25% of emissions within the NHS. A small number of medicines account for a large portion of the emissions, and there is already a significant focus on two such groups – anaesthetic gases and inhalers – where emissions occur at the ‘point of use’. These emissions account for around 12% of our total carbon footprint.

Working with patients, clinicians and industry, from 2015/16 to 2020/21 the overall carbon footprint associated with anaesthetic gases was reduced by 20.7% and the proportion of desflurane to sevoflurane reduced from 49.3% to below 7%.

Nitrous oxides make up over 96% of the carbon footprint associated with anaesthetic gases and there has been a 4% increase over the last two years, with Maternity making the largest contribution.

Inhalers contribute under 0.3% of the Trust carbon footprint but have seen a 27% reduction in carbon emissions. Mainly due to lower volumes issued.



Developing a low carbon workforce

The Trust's Carbon Management Implementation Plan (CMIP) has been in place since 2008, with a focus on energy efficiency, waste management and low emission vehicles.

From 2021, the Trust has participated in the Carbon Reduction Commitment, with external verification of performance and reviews lead by the Estates Department.

Staff have been involved in developing low carbon opportunities for funding supported by external experts, including recent bids for funding under the Public Sector Decarbonisation Fund, which brought together teams from estates, IT and finance.

The Trust has also recently appointed a new Energy and Sustainability Manager and have engaged an expert in carbon management and sustainability in support.

Reducing our carbon footprint

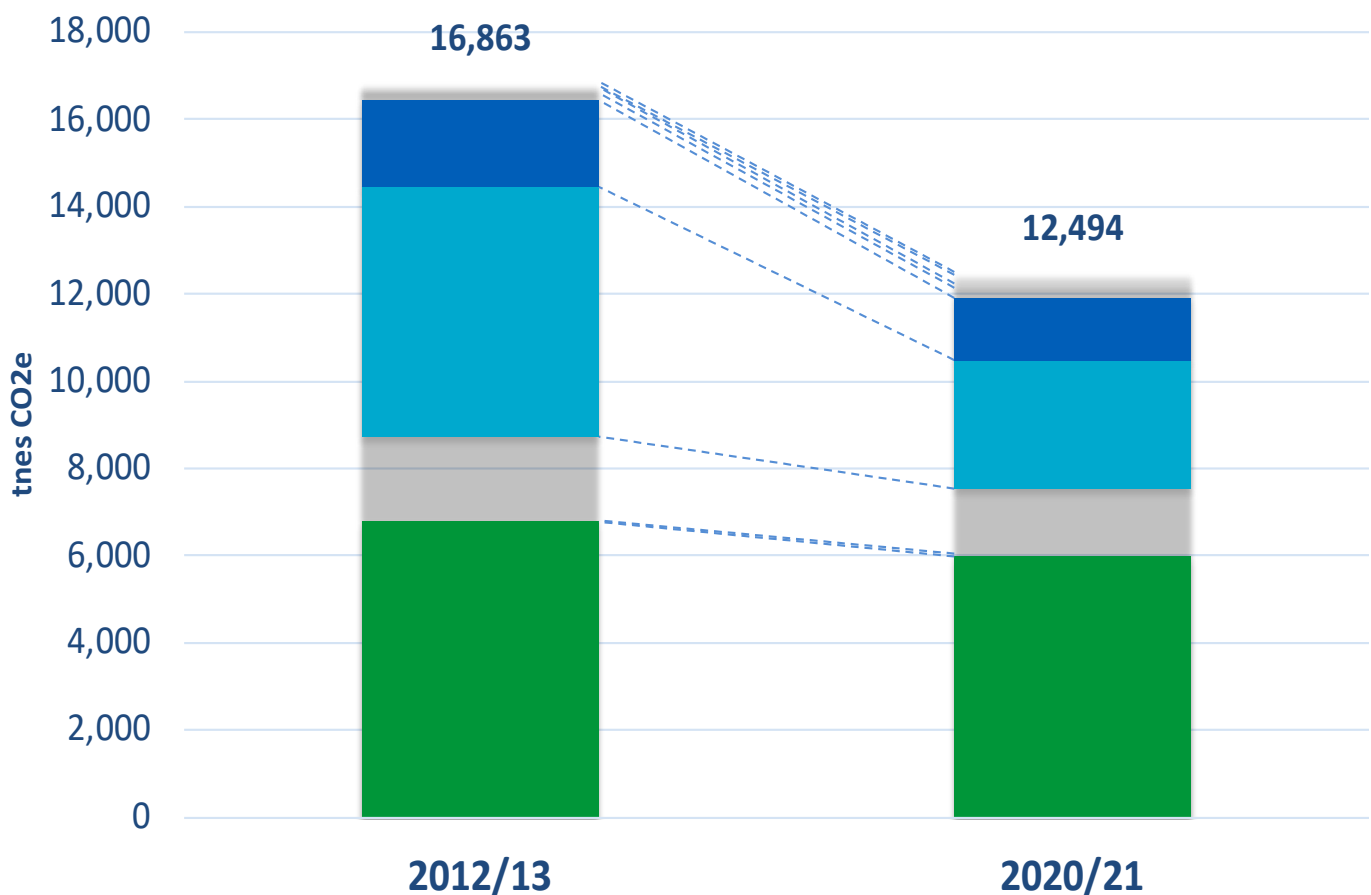
In 2014 our ambition was to echo the NHS target of a 28% reduction in carbon emissions from a 2012/13 baseline.

We have reassessed and independently verified the baseline to include elements in the current NHS Carbon Footprint definition.

Our baseline Carbon Footprint, measured as tonnes of carbon dioxide equivalent (CO₂e), was 16,863 tonnes.

By 2021 it had reduced by 26.1% to under 12,500 tonnes (see figure below).

Stockport NHS FT's Carbon Footprint Reduction 2012/13 – 2020/21



Reducing Local Air Pollution

The Trust has a rolling programme of vehicle replacement to improve the overall efficiency of the fleet and to reduce air pollution.

In 2020/21 the Trust took delivery of two fully electric vehicles and anticipating delivery of another two electric vans. We plan to continue replacing our current vehicles with electric fleet as part of an ongoing replacement program.

We have 4 electric charging points for staff to charge their electric cars at reduced rates and we plan to install more charging points in 2022-23.

A complete smoking ban has been in place on Trust property since 2005 and during 2019/20 we continued to strengthen the effectiveness of this policy with a direct and honest poster campaign supplemented by security officers politely reminding people of our non-smoking policy.



Developing lower carbon models

The NHS Long Term Plan set a number of critical priorities to support digital transformation, seeking to mainstream digitally-enabled care across all areas of the NHS.

The Trust has made significant steps in this area. Wards are digitalised where possible with:

- Electronic Prescribing and Drug Administration
- Electronic system to record patient observations and assessment forms
- Electronic Whiteboard system
- Digital patient meal ordering
- Digital radiological images
- Electronic ordering of laboratory and radiology investigations
- Electronic reviews of laboratory and radiology results

We are also meeting our own internal target of 25% of all consultations to be undertaken virtually, by video or phone.

As a response to COVID a significant number of laptops were rolled out to those that could work from home and as such this has had a direct reduction in emissions from staff travel. This has been complemented by providing access to video conferencing and the provision of unified communications.

Reducing Waste

Our waste actions have concentrated on reducing the amount going to landfill whilst increasing opportunities for recycling and reducing single use plastics.

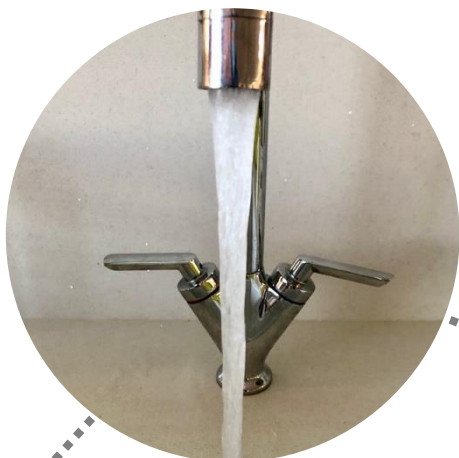
Our total waste tonnage has reduced from 1197 tonnes in 2012/13 to 981 tonnes in 2021, a reduction of 18%. There has also been a reduction of 56% in the amount that goes to Landfill as opposed to recycling/recovery.

Recycling drop-off points and the segregation of cardboard, scrap metals, furniture and electrical waste, together with improvements made to waste compactors, collection bins and holding areas, have contributed to improved recycling performance.

We currently send our food waste off-site to Re-Food which generates biomass energy from the waste.

We have removed single use plastics from the retail outlets and all our take away items are recyclable.

In the patient kitchen we have extensively reduced single use plastics and use crockery where we can instead of plastic cutlery.



Reducing Water Use

The Trust recognizes that the pandemic has contributed to an increase in our water consumption in 2020/21.

However, we will continue to investigate and actively identify any water leaks on-site to reduce our consumption. In addition, the Estates team is looking to minimize water consumption through the use of water efficient technology across the estate such as data loggers and regular recording of sub-meter data.

Reducing consumption will continue to be an area of focus during 2022. However, we are conscious of the need to balance water efficiency initiatives with the need to maintain robust infection control regimes and to guard against the risks of legionella contamination of water systems by regular flushing of water outlets.

Lower Carbon Procurement

The Trust has a Materials Management Team which works closely with the wards and the departments they service to ensure stock levels are correct so there is no overstocking. The Trust is also part of the North West sustainability Group which the Greater Manchester Sustainability Group feeds into.

We are actively working to reduce our use of single use plastics and non-recycled colour paper. The majority of the paper used in the Trust is 100% recycled.

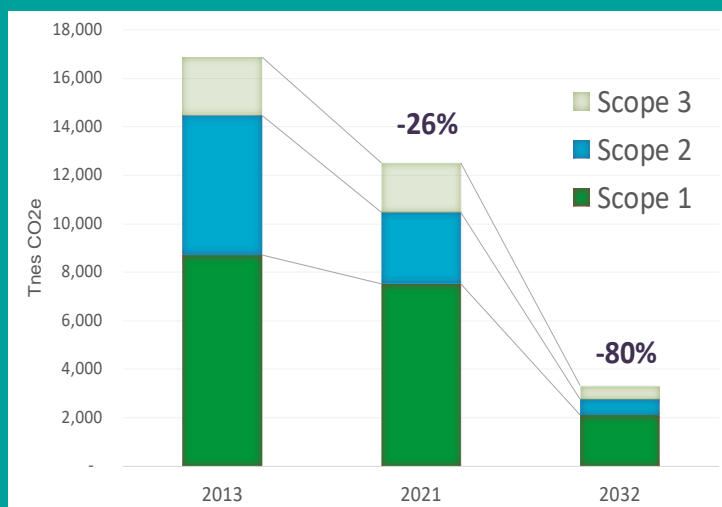
5. Our Ambition

Our ambition is to build on our 26% reduction in our carbon footprint and deliver an 80% reduction by 2032, ultimately achieving net zero by 2040.

As more reliable data becomes available, we will extend our ambitions to include additional emission targets for our purchasing, IT and staff/visitor travel.

Our carbon footprint reduction will be achieved by setting initial targets for building energy use, anaesthetic gases, travel, waste and purchasing.

We will review our ambitions regularly and share our performance. We will also continue to consult with our stakeholders and encourage them to challenge our ambitions and input to the process.



Our initial targets are:

- Building Energy Use:** A 30% reduction carbon related to gas and electricity use by 2025, followed by annual reductions to achieve an 80% reduction by 2032. All new buildings projects to be designed as net zero carbon.
- Vehicles:** Over the next five years the Trust will work towards replacing all its vehicles with ultra-low or zero emission vehicles.
- Travel:** Over the next three years the Trust will review business travel and aim to cut related carbon emissions by 15% per annum with a 75% reduction target by 2030.
- Anaesthetic Gases:** Where clinically possible, anaesthetic gas carbon emissions will aim to be reduced by 50% by 2030. We also aim to eliminate Desflurane use in clinical practise.
- Single Use Plastics:** Over the next three years the Trust will cease the use in non-clinical areas of single-use plastic cutlery, plates and food containers. Over the same time period, the Trust will seek alternatives to single use food and beverage containers in clinical areas and aim to reduce usage.
- Waste Management:** Over the next three to five years the Trust will, in conjunction with its waste management partners, move towards zero waste to landfill and aim to cut its overall waste tonnage by 10% compared to 2020/21 levels.
- Procurement:** The Trust will contract to have 100% green electricity from April 2022. The Trust will revise its purchasing procedures to take account of carbon emissions and social, economic and environmental benefits for the local community.

6. Delivering our Green Plan

The following section sets out the actions we intend to take to deliver our Green Plan.

Developing a low carbon workforce

Trust will launch a staff awareness campaign in early 2022 with the aim of encouraging positive and long lasting sustainable behaviour change among our staff members. In addition, we will build a network of Green Champions who will lead the sustainability agenda in their respective departments.

The Trust will create a Sustainability microsite on the staff intranet which will contain information on sustainable actions our staff can take to reduce waste, conserve water and energy, as well as active travel and well-being.

Reducing our carbon footprint

We will develop a comprehensive carbon monitoring system focused on identifying energy use in different areas of the site to enable better targeting of action. Annual reduction targets will be set in line with our overall ambitions.

The Building Management System (BMS) is currently being upgraded and we are having new controllers installed to allow us to improve monitoring in 2022. We plan to optimise use of the BMS system to improve our control over energy use across the hospital site.

In 2021/22 £60k was invested in LED lighting and this will increase as we install LED in the Endoscopy suite, ward M6 & the CDU schemes.

Subject to business case approval, we are looking over the next three years to invest in the following carbon saving initiatives:

- Approximately £150K into new insulated roofing
- Approximately £250k in replacing steam pipework
- Approximately £150k in window replacements

We will also look at opportunities to decarbonise gas fired heating systems when assets are due for renewal.



Anaesthetic Gases and Inhalers

The Trust's Medical Gases Committee will review further opportunities to reduce the carbon emissions associated with anaesthetic gases and inhalers, with a particular focus on reducing the use of Nitrous Oxides and lower carbon inhalers.

In December 2021, our Anaesthetic department made a decision to eliminate the use of Desflurane. Recommendations will be brought to the Trust Board in 2022 with implementation from 2023/24.

Developing Low Carbon Care Models

We will review the outcomes of virtual consultations and seek to enhance and expand the offerings where appropriate.

We will continue to support staff who wish to work flexibly and will further promote the use of video conferencing to reduce staff journeys.

Clinical noting is still carried out using paper in all inpatient and outpatient settings and will be addressed with the procurement of an EPR solution which is outlined in the Trust Digital Strategy 2021-26.

Reducing Local Air Pollution

Trust will develop a policy on business travel that will promote the following hierarchy:

- Reduce unnecessary business travel by use of IT, coordination of visits, route planning etc.
- Use of walking, cycling and public transport
- Use of low or zero emission vehicles
- Car sharing

The Trust will look to develop and operate an expenses policies for Staff which promote sustainable travel choices.

Through our car lease scheme, staff can lease low emission and electric vehicles only. In future, we will aim to offer car leasing schemes for only electric and ultra-low emission vehicles.

Over the next 2 years, in partnership with the local council and transport providers, the Trust will produce a green travel plan for staff and patient journeys to the hospital.



Reducing Waste

To oversee our targets on reducing waste and removing and reducing single use plastics, a waste resources group will be set up comprising representatives of our estates, catering and procurement departments.

A full waste audit will be conducted to review generation, recycling and disposal routes in order to develop the zero waste to landfill target.

We will continue to identify areas where reduction/elimination of single use plastics can be economically undertaken without compromising patient care, with the aim of elimination for non-clinical need by 2025 and options for substantial reduction in clinical areas in the same timeframe.

Patient communications and incentives will be reviewed by the end of 2022/23 to ensure the return of walking aids is maximised.

Lower Carbon Procurement

The trust will aim to purchase 100% guaranteed green electricity where financially feasible.

By the end of 2022/23 the Trust will review procurement with an aim to identifying the carbon impact and the social, economic and environmental benefits for the local community and population. A purchasing policy will then be produced that favours lower carbon emissions, local sourcing and positive social, economic and environmental benefits for the local community and population.

By the end of 2023/24 the Trust will have identified the emissions that make up the Carbon Footprint plus and develop targets and actions plans to be in line with the ambitions in this green plan.

Sustainable Building Design and Climate Change Adaption

The Trust has announced its intention to bid for capital to develop a new hospital within Stockport to replace the existing provision. If successful, it will be to net zero carbon standards and include climate change adaption provision for extremes of weather.

In the meantime, working with design partners we will require new development on the existing site to be based on the NHS Net-Zero Carbon Hospital Standard. This will include all new designs commissioned from April 2022 and a review of potential for existing designs to move significantly towards the standard.

Building design teams will also be asked to review potential for water recycling, sustainable drainage and improved biodiversity.

In 2022/23 the Trust will commence a review of how green spaces and biodiversity can be significantly improved on the existing site by 2025.



7. Governance & Reporting

The Trust is committed to ensuring delivery of our strategic ambitions and will actively monitor the effectiveness of our plans.

The Trust already reports its sustainability performance in our Annual Report and ERIC (Estates Return Information Collection).

We also report on certain aspects of our carbon reduction performance via Greener NHS Quarterly Data Collection.

Individual departments have been active in developing procedures to ensure sustainability is taken into account across a wide range of activities.

In order to further coordinate and drive forward our agenda, the Trust will have a nominated Board level lead and an executive lead who will provide leadership on the Green Plan and sustainability agenda.

In 2022 we will set up a Green Plan Committee which will include representatives from the Finance, Procurement, Estates and facilities, Pharmacy, Nursing and Medical departments. This committee will meet on regularly basis and will report Green Plan progress to the Board every 6 months.

Through recommendations from the Green Plan Committee the Trust will aim to further embed Sustainability in its strategic objectives and decision making process.



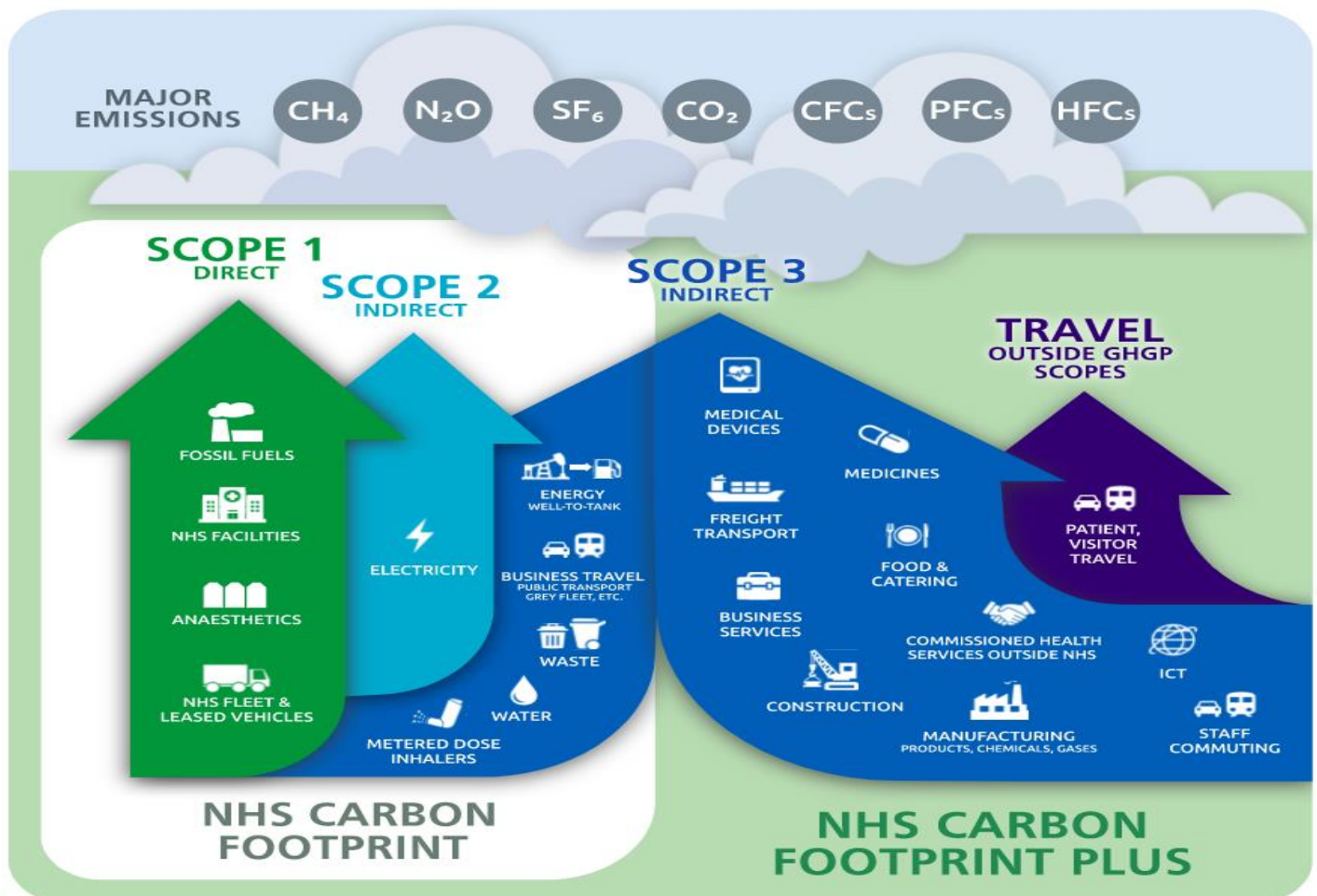
Appendices

A. Definitions

B. Carbon Footprint

Appendix A: Definitions

Term	Definition
Greenhouse gases	key gases that cause atmospheric warming including carbon dioxide, methane, nitrogen oxides, CFCs, HCFCs
Carbon Dioxide (CO ₂)	the greenhouse gas that is present in the highest volume
Equivalent carbon (CO ₂ e)	emissions of any type of gas is converted to the equivalent amount of Carbon dioxide a common unit
Scope	activities that lead to emissions are grouped into different scopes: <ul style="list-style-type: none"> ❖ Scope 1: Direct emissions e.g. from fossil fuels used on site (Natural gas for boilers/catering and Fuel for Trust vehicles) and anaesthetic gases ❖ Scope 2: Indirect emissions from electricity used on site ❖ Scope 3: Indirect emissions from <ul style="list-style-type: none"> a) Upstream/downstream energy distribution, water, waste, business travel, medical inhalers b) Purchasing of medicines, medical devices, food, staff commuting, patient/visitor travel, ICT, construction
NHS Carbon Footprint	Scope 1,2 and 3a from above
NHS Carbon Footprint plus	Scope 1,2, 3a and 3b
Net-Zero	ensuring direct and indirect emissions of greenhouse gases are eliminated or offset by activities to remove a similar amount



Appendix B: Carbon Footprint Calculation

Our Carbon Footprint has been calculated as follows:

Data Sources:

- Scope 1: gas from utility billing
 trust vehicles from fuel consumption records
 anaesthetic gases from pharmacy records and Greener NHS Dashboard
- Scope 2: electricity from utility billing
- Scope 3: water and waste from ERIC records
 business travel from HR expenses records
 inhaler data from pharmacy records

Baseline data is all from 2012/13 apart from the following where the oldest available data have been used:

- Anaesthetics - 2015/16 used as base data
- Business travel – 2014/15 used as base data

Emission Calculations

All figures converted using UK Government GHG Conversion Factors for Company Reporting apart from inhalers which use estimates developed by Prescquip <https://www.prescquip.info> and anaesthetics which use NHS guideline figures. The table below shows the breakdown for the base year and current year (all figures in tonnes of CO₂e)

Scope	Measure	2012/13	2020/21
1	Natural Gas	6,771.5	5,996.4
	Site vehicles	54.0	36.2
	Anaesthetics	1,896.5	1,503.1
2	Electricity	5,751.6	2,938.7
3	Transmission / Distribution	1,984.6	1,446.6
	Water	144.2	210.4
	Waste	142.9	104.8
	Business Travel	34.8	197.1
	Inhalers	83.0	60.8
Total		16,863	12,494



Stockport
NHS Foundation Trust



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or telephone: **0161 483 1010**



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