



Northampton
General Hospital
NHS Trust

Green Plan 2022-2025



Dedicated to
excellence

Summary

This Green Plan sets out the intentions of Northampton General Hospital NHS Trust (NGH) to reduce its environmental impact in line with the Greener NHS Strategy, annual standard contract requirements, and the NHS Long Term Plan. A second plan will be produced to cover in more detail the requirements to decarbonise the direct emissions from NGH to reach net zero by 2040. This Green Plan covers the period up until March 2025. It has been approved by a multidisciplinary Sustainable Development Committee and the Trust Board, and it will be incorporated in the local ICS Green Plan. With the creation of the University Hospitals of Northamptonshire Group, therefore a joint Sustainability Strategy will be produced in the next 18 months.

Northampton General Hospital has the following broad aspirations within its Green Plan:

- Reduce our scope 1 and 2 carbon emissions in line with the Net Zero 2040 target
- Improve our resource efficiency
- Reduce air pollution from trust operations
- Embed wider social value aspirations within our operations
- Ensure our staff are more informed about the environmental impact of healthcare and that our premises and care patterns are prepared to deal with a changing climate
- Adapt our models of care to low carbon pathways and utilise new innovations and digital solutions

We have included a number of targets and KPIs within the sections of the plan. Due to the impact of Covid-19 on the operations of the hospital for the full year of 2020/21 all targets will be against a benchmark of 2019/20 data unless otherwise stated.

This Green Plan forms our underlying Sustainability Strategy, but includes a number of actions that we aim to achieve over the next three years. Some of these actions will be embedded as business as usual and therefore have no completion date. These are labelled as ongoing within the action plan tables.

Actions and progress will be included on a dashboard to be developed on the Trust's intranet pages visible to all staff.

Sustainability is also included in the Group's Dedicated to Excellence Strategy; the targets from that strategy are incorporated into this Green Plan.

Background

This Green Plan sets out the intentions of Northampton General Hospital NHS Trust (NGH) In 2015, The Lancet reported that Climate Change was the biggest threat and the biggest opportunity for human health of the 21st Century – threatening to undo 50 years of positive public health achievements.

The recent IPCC report published in August 2021 stated the following are now likely scenarios:

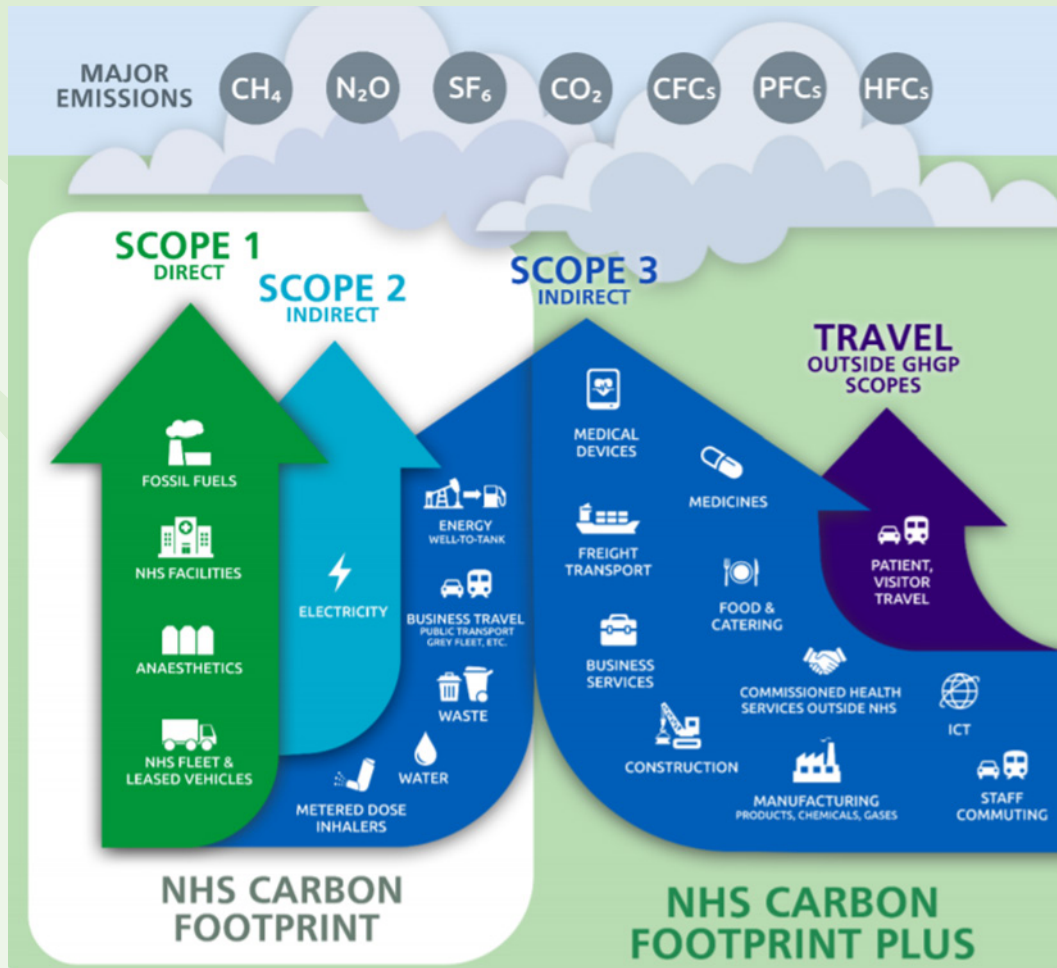
- We will pass a 1.5°C increase in temperature between 2030 and 2035
- We will reach a 2°C increase between the early 2040s and early 2050s

In June 2021, the UK Government published its latest risk report with the following noted with respect to healthcare:

- Chances of a hot summer have increased to 1 in 4 and will be 1 in 2 by 2050
- Heat related deaths are expected to increase from 2,500 per year to 7,000 by 2050
- 90% of hospital wards are at risk of overheating
- 10% of hospitals are at significant flood risk
- New diseases are expected, for example 10% of sheep and deer ticks are carriers of Lyme disease
- There will be heat related productivity losses
- Climate change overseas will have a cascading impact
- There are risks to supply chains, particularly food, but also IT and medicines
- There are risks to the electricity supply, particularly with the increasing move to electrical heating

The NHS has been actively working to reduce its carbon footprint and reduce its overall negative impact since 2009. However, the NHS is responsible for over 5% of UK carbon emissions, uses more single use plastic than any other sector, creating 133,000 tonnes of plastic waste. In addition, 5% of travel in England is related to the NHS, which adds over 7,000 tonnes of NOx and 330 tonnes of PM2.5 pollution.

In October 2020 the NHS declared that by 2040 it will be carbon net zero for all of its Scope 1 and 2 emissions as detailed below with everything else, its carbon footprint plus, being net zero by 2045.



Within the NHS Long Term Plan and the Standard Contract 21/22 there are a number of sustainability measures:

- Moving to lower carbon inhalers
- Cutting business mileage by 20% by 23/24
- Ensuring 90% of the fleet uses low emissions engines by 2028
- Reducing single use plastics
- Develop and operate an expenses policy or staff that promotes sustainable travel choices
- Reduce the use of desflurane to less than 10% by volume
- Adapt the premises and manner in which services are delivered to mitigate risks associated with climate change and severe weather
- Reduce water and waste usage
- Sign up to the plastics pledge
- Create a provision to maximise the rate of return of walking aids.
- Give due regard to the potential to secure wider social, economic and environmental benefits for the local community and population in its purchase and specification of products and services

Locally, the two unitary authorities have declared a climate emergency and that they would aim for net zero for scope 1 and 2 by 2030. The University of Northampton have recently also declared they will be carbon zero for Scope 1 and 2.



Northampton General Hospital

Northampton General Hospital NHS Trust (NGH) is an acute hospital with around 790 beds and a 24-hour Emergency Department (A&E). In addition to the full range of district general hospital care, NGH also provides some specialist services including cancer and stroke services for the county. It has inpatient, day case, diagnostic, maternity and outpatient facilities with a dedicated children's ward and outpatients. In 2019/20 teams at NGH cared for approximately 135,000 emergency patients and 140,000 patients were referred to us for treatment.

Together with our neighbour, Kettering General Hospital, we will continue to serve our growing population of around 900,000 people across Northamptonshire. This population is varied with a range of needs from our services: There are large and growing numbers of people aged over 70, as well as high numbers of people aged under 20 and new-borns. Around 70% of our population live in urban areas, whilst 30% live in more rural areas. Our county is diverse, with countryside and urban areas, different age groups between local communities, and differing levels of affluence. There are growing levels of ethnic diversity, particularly in more urban areas of the count.

We have been working to reduce our carbon emissions since 2010. Since the last strategy, issued in 2015, Northampton General Hospital has:

- Maintained static carbon emissions from buildings at approximately 30% lower than 2010 levels, despite additional activity and increased occupied floor space.
- Utilised over £1.3million of interest free loans for energy efficiency improvements
- Mostly removed the use of desflurane as an anaesthetic agent, removing approximately 600 tonnes of CO₂e. • Been awarded Highly Commended in the 2020 HSJ Awards for Environmental Sustainability in 2020
- Maintained Investors in the Environment Accreditation for seven years

- Reduced emissions from volatile anaesthetic gases by 75% compared to 2018/19 levels.
- Removed over 1.5 million pieces of single use plastic from our catering department
- Introduced reusable PPE in theatres
- Added solar panels to the new ITU building
- Issued a new Travel Plan
- Improved outdoor spaces available to patients and staff
- Carried out a number of awareness days, including the 12 month long Small Action Big Impact campaign with our waste management company
- Issued its first Climate Change adaptation policy
- Benchmarked its progress against the Sustainable Development Assessment Tool
- Improved help for staff with mental wellbeing challenges
- Introduced remote consultations and remote working during Covid which will become part of its mainstream activities
- Joined the National Performance Advisory Group Sustainability and Waste forums
- Joined the Healthcare Plastics Recycling Committee – an international group made up of producers and healthcare waste managers
- Increased the number of cycle storage facilities, including a number for visitors in a prominent position by the new entrance
- Created parking spaces for eScooters



1. Carbon net zero 2040

Scope 1 and 2 carbon emissions come from a variety of areas; building energy use, business travel, anaesthetic gases, metered dose inhalers, water and waste. A separate carbon management plan will be produced for the reduction of carbon emissions from buildings, and the reduction from staff travel is covered in other sections of this strategy.

Our Aims

- Reduce absolute carbon emissions from buildings by 5% each year
- Reduce carbon emissions from nitrous and anaesthetic gases by 25%
- Reduce carbon emissions from metered dose inhalers by 25%

Action	Timescale
Create a Net Zero Strategy for our buildings to cover new and major refurbishments	2022/23
Include a sustainability review at the design stage of all new buildings, refurbishments and changes to models of care	Ongoing
Replicate the Nitrous Oxide reduction project carried out in NHS Scotland	2021/22
Calculate the carbon footprint of prescribed inhalers	2021
Provide environmental information to clinicians prescribing inhalers	2022
Provide environmental information to midwives regarding the environmental impact of Entonox	2021
Introduce electric vehicles for our leased fleet	Ongoing
Create a plan to move to 100% LED lighting across the estate	2022/23
Create a long term plan to increase insulation in roof spaces	2021
Create a plan to install solar panels and battery storage	2022
Include whole life costing in procurement decisions	2023
Implement the NHS Net Zero Building Guidance when published	Ongoing
Monitor energy use from major users weekly	Ongoing
Achieve a BREEAM score of excellent for new builds and major refurbishments	Ongoing

How will we measure it:

- Board approved and costed net zero strategy for the next 5 years
- Annual reporting of carbon emissions from buildings
- Annual reporting of anaesthetic gases and nitrous compounds from Pharmacy orders
- Annual usage of asthma inhalers



2. Improving Resource Efficiency

The majority of carbon emissions from healthcare are from the supply chain, which also has a direct impact on financial resources. During Covid the use of single use items, particularly PPE, has dramatically increased. However, it has also resulted in innovation in the supply chain and a realisation of the risk inherent in the global supply chain. The NHS has a target to be net zero for all of its purchased items by 2045.

Our Aims

- Reduce water consumption by 5%
- Reduce single use plastic used for catering by 50%
- Reduce food waste by 50%
- Increase recycling by 25%
- Increase reuse across the trust
- Remove single use PPE where possible
- Reduce clinical single use plastics

Action	Timescale
Install water efficient sanitary ware	2022
Add water meters to areas of high use	2023
Replace plastic vending cups with paper	2022
Introduce electronic meal ordering for patient meals	2023
Review single use and reusable theatre sets to remove unnecessary items	2022
Introduce reusable options for takeaway food	2022
Determine the reasons for wasted food and create a reduction action plan.	2022
Promote WarpIt and integrate it with the Procurement process to create a culture of reuse and refurbishment	Ongoing
Target high use plastic items for reduction	2022/23
Create a better measure of Scope 3 emissions	2022
Increase segregation of recyclable items at source	Ongoing
Review the appropriate use of PPE, reduce where appropriate and investigate the options for expanding the use of reusable PPE	2022
Work with organisations innovating new sustainable waste disposal alternatives.	Ongoing

Use our purchasing power wisely, by working with suppliers to procure products that minimise packaging use and offer innovative solutions to waste reduction, including take back schemes.

Ongoing

How will we measure it:

- Meter readings of water
- Ordering information from catering
- Plastics audit and reporting of medical consumables
- Measurements of food waste from catering team and contractor
- Procurement data
- Waste Management invoices
- Carbon value and hotspots from procurement information



3. Reducing Air Pollution

Over 40,000 people die each year in the UK from air pollution related illness and the World Health Organisation calculate that approximately 90% of people around the world live in areas where air quality does not meet their minimum requirements for good health. In urban areas the majority of the outdoor emissions are from exhaust emissions. Poor indoor air quality is caused by poor ventilation, lack of heating and the use of volatile chemicals. Air pollution leads to hospital admissions related to respiratory, stroke and cardiovascular illnesses.

Our Aims

- Reduce emissions from business travel by 25%
- Improve air quality around the site
- Improve the greenspaces around the site for patients, staff and wildlife

Action	Timescale
Install a minimum of 50 EV charging points for staff and visitors	2024
Introduce a Business Travel Policy to make use of pool and rental cars and encourage low carbon travel	2022
Move to ULEV and ZEV for lease cars and salary sacrifice	Ongoing
Encourage the use of remote working to have up to 15% of staff work-ing remotely	Ongoing
Improve changing and storage facilities for those undertaking active travel	2023
Implement the Hospital Clean Air Framework	2023
Increase the quantity and quality of green spaces on site	Ongoing
Work with suppliers to reduce the number of fossil fuel deliveries to site	Ongoing
Measure the impact of patient travel to site	2023
Improve indoor air quality monitoring for VOCs, NOx, dust and CO2	Ongoing

How will we measure it:

- Number of EV charging points installed
- Data from IT for remote working and consultations
- Staff travel survey
- Patient travel survey
- Action plan from the Clean Air Hospital Framework



4. Increasing Social Value and Improving Health

The Social Value Act of 2012 and updated Procurement Policy Note 06/20 require that social value is included as a minimum 10% weighting in all contracts awarded above the (previous) OJEU threshold. The Social Value Act is designed to ensure that better value for money is obtained during the commissioning and procurement process, encourages innovative solutions and promotes healthier, safer and more resilient communities.

Action	Timescale
Create a joint social value procurement strategy with KGH	2021
Measure the social impact of NGH	2022
Incorporate and, where appropriate exceed, the NHS mandated 10% social value weighting required for new contracts	2022
Run a workshop to help local SMEs access procurement tenders	2022
Promote and increase the options for plant based diets in the hospital	Ongoing
Play an active role in promoting and delivering the West Northampton-shire Unitary Authority Sustainable Food Place Foals	Ongoing
Ensure the Catering Department is accredited to Food for Life Standard	2022
Maintain Investors in the Environment Accreditation	Ongoing
Play an active role as an Anchor Institution, creating opportunities for local communities such as work experience and access to employment, thus contributing to the local economy and improving local population health.	Ongoing

How will we measure it:

- Data from finance – Number of SMEs and local spend
- Sustainable Food Place Reporting
- Food for Life and Investors in the Environment Accreditation
- Number of vegetarian and vegan meals sold
- Social Impact Score



5. Educating, Communicating and Adapting

As a trusted organisation, it is important that every member of staff has enough information about the impact of climate change on healthcare and the impact of healthcare on climate change to make informed decisions. This means we have to improve the education of our staff, and communicate our ambitions and actions to staff and our local community. As the impacts of climate change increase, we will also need to ensure that our estate and our staff are ready to cope with the expected changes.

Action	Timescale
Introduce Carbon Literacy Training for staff	2022
Hold climate adaptation and risk workshops with senior leaders	2022
Re-start a multifunctional Sustainability Committee	2021
Establish an Environmental Shared Decision Making Council	2021
Ensure Sustainability is included in all job descriptions	2022
Create 1 new wildlife areas around the site each year	2021
Increase the number of trees on site by a minimum of 5 each year	Ongoing
Create intranet pages relating to sustainability	2021
Create Green Groups in individual departments	2022
Ensure sustainability is included on the agenda of all major departmental, directorate and trust meetings	Ongoing
Create a dashboard so staff and the local community are aware of our green progress	2022
Embed Sustainability in Education Programs	2022
Develop a Sustainability Communications Plan	2022
Introduce sustainability into the mandatory elearning for new starters	2022
Create a network of active Sustainability Champions across the Trust	Ongoing

How will we measure it:

- Minutes from board and committee meetings
- Staff survey regarding green space
- Analytics for internet usage of training packages
- Output from GreenTeam competition



6. Changing models of care and digital solutions

Within the trajectories for net zero, there is a need for clinical leadership to move to different ways of working, from reducing waste to utilising the estate efficiently. There is also a recognition that digital innovation will be one of the ways that we can both empower patients and reduce carbon emissions. This means that we have to review the available options for reducing the activity on site or using lower carbon alternatives.

Action	Timescale
Include a sustainability impact assessment in all new business cases	Ongoing
Add sustainability into Quality Improvement Training	2022
Carry out 50% of consultations by phone or video	2023
Adopt and implement best practice from case studies across the NHS and Centre for Sustainable Healthcare	Ongoing
Ensure that NGH acts as a test bed for sustainable care solutions from AHSNs	Ongoing
Ensure that sustainability is considered where appropriate in Evidence based practice research.	Ongoing
Expand Electronic Patient Records to reduce paper usage	Ongoing
Run a Green Team competition across the ICS	2022
Develop a Sustainable Anaesthesia Strategy	2022
Promote the use of myPre-Op for virtual assessments	2021/22
Create a plan to reduce medication wastage of high environmental impact medicines	2023
Create a ten year University Hospitals of Northamptonshire Sustainable Healthcare Strategy	2023

How will we measure it:

- Reduction in paper consumption
- Number of remote consultations
- Number of staff working remotely
- Case studies of new innovations and best practice adopted



Financial Investment

In order to achieve the NHS ambition of carbon zero it must be recognised that there will be a significant amount of investment. However, some of this will be mitigated by reduced utility and waste costs. However, should there be a cost of carbon imposed at £20 for offsetting emissions; those from scope 1 and 2 would cost the Trust in excess of £250,000 per year.

Implementing and Monitoring

The areas of work will be detailed in a separate action plan. This will be agreed with the owners of the action and progress will be reviewed and published at least annually. The carbon emissions data from the Trust is reported via the ERIC (Estates Return Information Collection) Portal where the Trust is benchmarked against other similar NHS Trusts and will be submitted to the Greener NHS data platform when it is made available.

Data is also externally audited by Investors in the Environment during the accreditation process.

The data is submitted as part of the annual Trust Report, and, also, through the Global Green and Healthy Hospitals Hippocrates data platform.

Any risks relating to climate change are reported via the Facilities Governance Group to the Trust corporate governance meetings, and an annual report is presented to the Trust's Finance Committee.

In addition, progress on all action plans relating to this strategy will be reported through the Trust's Sustainable Development Committee on a quarterly basis.



Safe sleeping for your baby at all times

- The safest place for a baby to sleep for the first six months is on their back, in a separate cot or Moses basket, in the same room as you
- Never fall asleep with a baby on a sofa or armchair. This is one of the most high-risk situations for a baby
- Refer to the Red Book for diagrams on placing baby safely in their cot or Moses basket
- For further support please speak to your health visitor or midwife



Northamptonshire
NHS

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**Northampton
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