



Our Green Plan

2024/25 to 2026/27

Approved: 12th March 2024



Summary version

Table of contents

Executive summary	3
Glossary of terms	6
About us	8
Our mission and strategic goals	8
Our local population	8
Redevelopment and net zero	9
Organisational vision	11
A health emergency	11
Our NHS emissions scopes	12
Our Green Plan vision	12
Building a culture of improvement and innovation	13
The challenges	14
Progress since 2019/20	16
Our carbon footprint	16
Our key 3-year highlights	18
The next 3 years	21
Workforce and system leadership.....	21
Estates and facilities	22
Travel and transport	23
Medicines.....	23
Food and nutrition	23
Sustainable models of care.....	24
Digital transformation.....	24
Supply chain and procurement	25
Adaptation	25
Estimating the impact of this Green Plan on our NHS carbon footprint	25
Governance	28

Executive summary

This refreshed Green Plan for Imperial College Healthcare NHS Trust covers the period 1 April 2024 to 31 March 2027. It builds on our progress and achievements over the last three years to reduce our environmental impact and has been structured to align with both the June 2021 Greener NHS guidance on “How to Produce a Green Plan” and the more recently published Greener NHS Green Plan Support Tool.

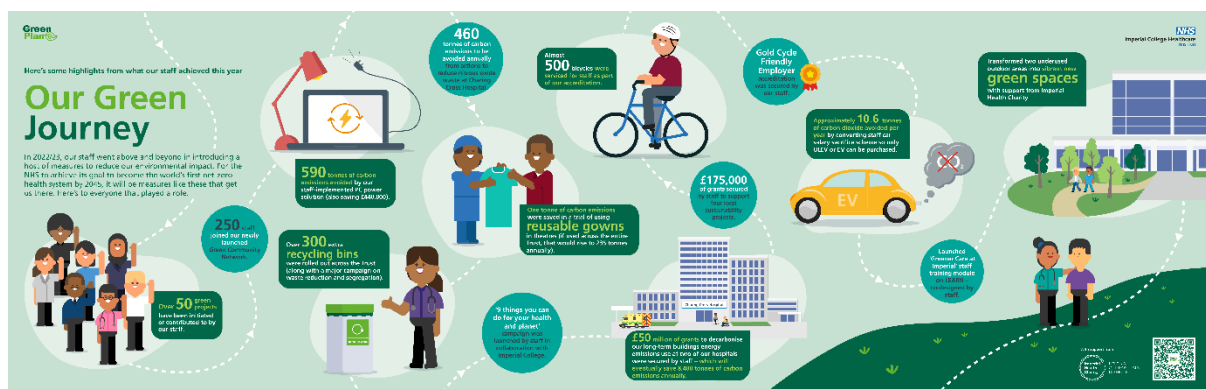
Delivering high-quality health and care places numerous demands on natural resources and the environment. NHS organisations have a significant impact on the environment and are some of the largest contributors to global heating and air pollution.

The climate crisis and air pollution have serious direct and indirect consequences for health. In the UK, climate change is expected to cause more severe and frequent adverse weather events, with heat-related deaths projected to more than triple to 7,000 a year by the 2050s. Global heating and air pollution also disproportionately affect disadvantaged and vulnerable populations and worsens health inequalities.

Our first Green Plan, launched in May 2021, sought to rapidly embed seven foundational cornerstones at our Trust. These were leadership and capacity; data, measurement, and impact; communication, engagement and learning; visible action and improvement; partnerships; and governance. These cornerstones have now all been established.

Well over 50 green projects have been initiated in support of our green journey since we launched our first Green Plan, and these will have laid the foundations for securing future benefits – see figure 1.

Figure 1: Our Green Journey



Source: ICHT

Between 2019/20 and 2022/23 our NHS carbon footprint has fallen by 14 per cent, from 55,724 to 48,139 tCO₂.

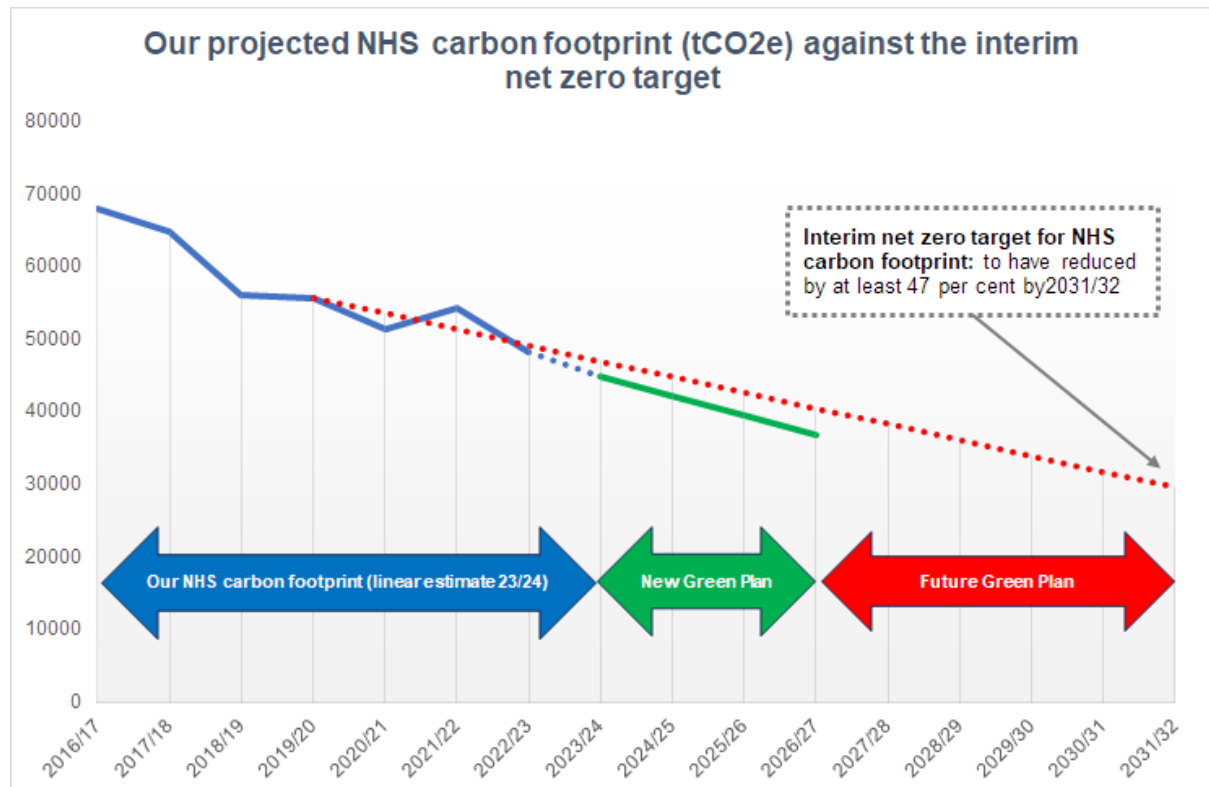
Our refreshed Green Plan contains success measures that describe where we want to get to over the three year period of the Green Plan – see figure 2.

Figure 2: Where we want to get to by 2026/27 – our success measures

<p>Workforce and system leadership</p> <ul style="list-style-type: none"> • Triple our Green Community Network from 250 staff in early 2023 to 750 staff by 31 March 2025 • Recruit at least 75 Green Champions by 31 March 2027 • Have a comprehensive time-series of our NHS carbon footprint from 2019/20
<p>Estates and facilities</p> <ul style="list-style-type: none"> • Reduce our carbon emissions from our combined consumption of gas, oil and electricity by at least a third by 31 March 2027 on our 2019/20 baseline • Reduce our water consumption across the Trust by 20% by 31 March 2027 compared to 2022/23 levels. • Transform at least one outdoor green space each year at our Trust • Increase our coverage of LED lighting at the Trust (baseline 2021/22) • Deliver net zero training and education to estates, facilities and capital projects leadership teams • Achieve a clinical waste segregation ratio of 20:20:60 by 31 March 2027 (baseline 11:65:24 in 2022/23) • Reduce total waste disposal emissions by 50% by 31 March 2027 (baseline 907 tCO₂e in 2022/23) • Achieve a 25% recycling rate by 31 March 2027 (baseline 17% in 2022/23)
<p>Travel and Transport</p> <ul style="list-style-type: none"> • Reduce our fleet and business travel emissions • Increase the uptake of our cycle to work scheme, from a 2022/23 baseline of 119
<p>Medicines</p> <ul style="list-style-type: none"> • Reduce our carbon NHS footprint of medicines that have a high global warming potential (GWP) at the point of use (inhaler propellant, nitrous oxide, Entonox and volatile agents) by at least 40% by 31 March 2027 (or earlier) against our 2019/20 baseline of 3,594 tCO₂e.
<p>Food and nutrition</p> <ul style="list-style-type: none"> • Increase the proportion of lower carbon / plant-based inpatient meals ordered • Reduce inpatient food waste
<p>Sustainable models of care</p> <ul style="list-style-type: none"> • Implementation of evidence-based good practice with at least two clinical teams to reduce carbon • Increase in the adoption of reusable gowns at the Trust • Increase the number of walking aids returned (baseline 2023/24)
<p>Digital transformation</p> <ul style="list-style-type: none"> • Reduce our reliance on paper • Increase the uptake of the Care information Exchange • Deliver at least 25% of all first outpatient appointments and 60% of all follow up appointments virtually • Improve our IT asset disposal • 3% of patients discharged to a PIFU pathway by 2027
<p>Supply chain and procurement</p> <ul style="list-style-type: none"> • Ensure all staff are supported to meaningfully apply a social value weighting (including net zero) of at least 10% to all new procurement and to work collaboratively with partners and suppliers to drive down our NHS carbon footprint plus
<p>Adaption</p> <ul style="list-style-type: none"> • Ensure our organisation is preparing to deal with the impacts of climate change by developing, embedding and monitoring actions from a Climate Change Adaptation Plan

Delivering this refreshed Green Plan will mean that by 31 March 2027 our NHS carbon footprint should have fallen to at least 36,879 tCO₂e – see figure 3. This equates to an estimated 18% reduction over the 3-year period of this refreshed Green Plan or, put another way, a 34% reduction on our 2019/20 baseline. The largest contributor to this projected reduction comes from reducing our electricity, gas and oil emissions, however, around 10% of the absolute reduction will come from reducing emissions associated with medicines that have a high global warming potential at point of use and waste disposal.

Figure 3: Our projected NHS carbon footprint to 31 March 2027



Source: ICHT analysis; Notes: Our NHS carbon footprint currently excludes fleet and business travel and f-gas emissions. The carbon footprint for inhalers is for the propellant only.

Reaching net zero comes with several blockers and barriers. Our greatest blockers to overcome include resourcing, cultural barriers to change, short-termism, and the sheer scale of the challenge.

Finally, redevelopment of our hospitals remains a critical step-change opportunity for us to deliver net zero before 2045. However, until this happens, we will undertake as much of this refreshed Green Plan as we can within the financial envelope that is, or becomes available, and in the short-term will prioritise actions that are proven to be cost and carbon reducing.

Glossary of terms

Air Pollution – the presence and introduction into the air of a substance which is harmful to human health.

Carbon Intensity – a means of calculating the amount of carbon generated for a specific energy source (e.g. electricity).

Carbon Net Zero – a state in which an organisation emits no carbon emissions from its activities. Or a state in which all carbon emissions are offset.

CO₂e (Carbon Dioxide Equivalent) – a unit used to express total greenhouse gas emissions. There are multiple GHGs, each with a different impact on climate change. CO₂e equates all GHGs to the impact of carbon dioxide. CO₂e is used to report all GHG emissions and is measured in kilograms (kgCO₂e) or tonnes (tCO₂e) where 1 tonne = 1,000 kilograms.

Direct Emissions – CO₂e emissions from sources which are owned or controlled by the Trust.

Greener NHS – is the NHS England Team responsible for the Greener NHS programme.

Greenhouse Gas (GHG) – a gas that contributes to the greenhouse effect, leading to climate change (e.g. CO₂).

Global Warming Potential – a measurement that enables the comparison of global warming impacts of different greenhouse gases.

Indirect Emissions – CO₂e emissions from sources which are not owned or controlled by the Trust but are generated due to the Trust's activities (e.g. purchase of electricity, procurement, waste disposal).

kWh (kilowatt hours) – a unit of measurement for energy usage (e.g. gas and electricity).

Net Zero Emissions – refers to achieving a balance between the amount of greenhouse gas emissions produced and the amount removed from the atmosphere.

NHS carbon footprint – is the carbon footprint that NHS organisations have the greatest direct control over, and includes all scope 1, all scope 2 and certain scope 3 greenhouse gas emissions sources.

NHS carbon footprint plus – is the sum of all scopes 1, 2 and 3 sources plus patient and visitor travel greenhouse gas emissions.

Public Sector Decarbonisation Scheme – provides grants for public sector bodies to fund heat decarbonisation and energy efficiency measures.

Scope 1 Emissions – direct emissions from owned or controlled sources (e.g. on-site fuel combustion, company vehicles, anaesthetic gases)

Scope 2 Emissions – indirect emissions from the generation of purchased electricity, steam, heating, and cooling.

Scope 3 Emissions – all other indirect emissions that occur in an organisation's supply chain (e.g. purchased goods, employee commuting, waste disposal)

About us

Imperial College Healthcare NHS Trust provides acute and specialist healthcare to over 1.3 million people a year. Formed in 2007, we are one of the largest NHS trusts in the country, with more than 15,000 staff.

Our five hospitals in central and west London – Charing Cross, Hammersmith, Queen Charlotte's & Chelsea, St Mary's and the Western Eye – have a long track record in research and education, influencing care and treatment nationally and worldwide. We offer private healthcare in dedicated facilities on all our sites, run eight renal satellite units and also host North West London Pathology.

We are a member of the North West London Acute Provider Collaborative, a formal partnership with the other acute NHS trusts in the sector – Chelsea and Westminster Hospital NHS Foundation Trust, The Hillingdon Hospitals NHS Foundation Trust and London North West University Healthcare NHS Trust. We remain independent organisations with a chair in common and a board in common.

Our mission and strategic goals

Our mission is to be a key partner in our local health system and to drive health and healthcare innovation, delivering outstanding care, education and research with local, national and worldwide impact.

We have three overarching strategic goals that, together, will enable us to achieve our vision of 'better health, for life', these are:

- to help create a high-quality integrated care system with the population of north west London
- to develop a sustainable portfolio of outstanding services
- to build learning, improvement and innovation into everything we do.

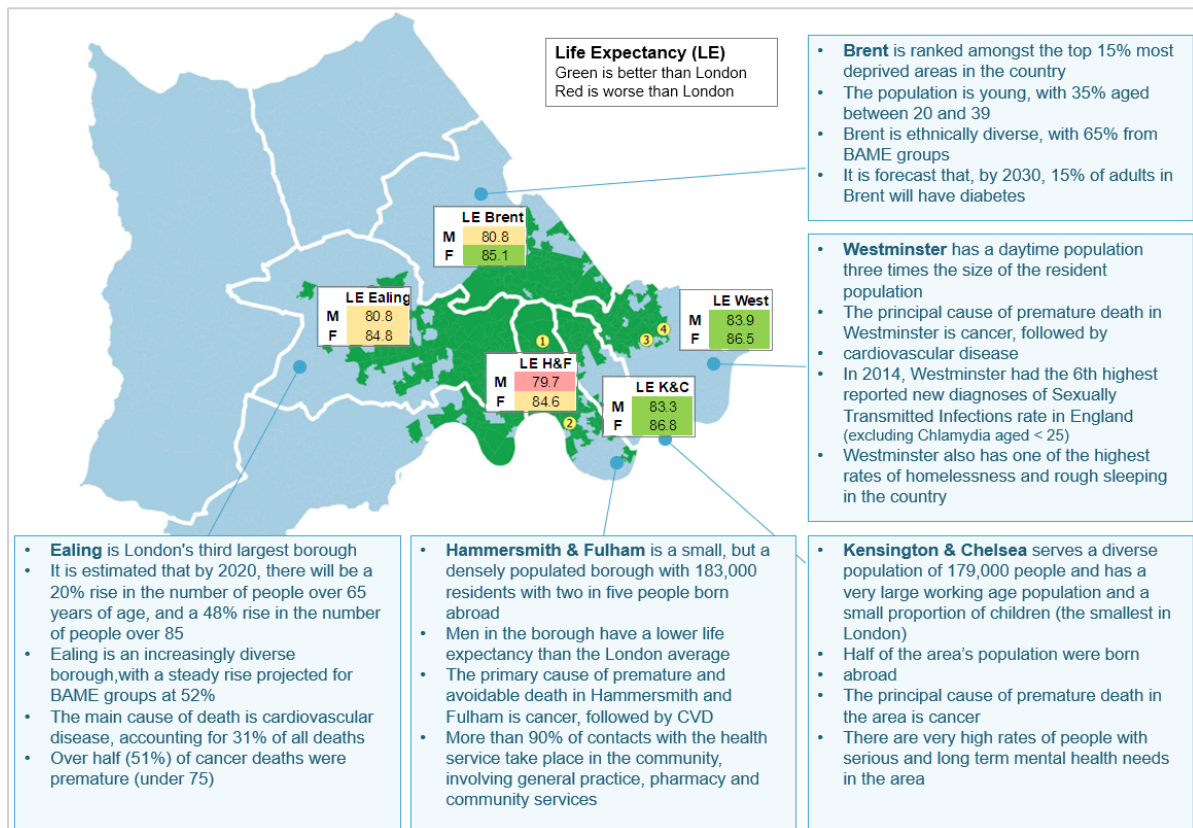
Our local population

North West London (NWL) is home to over 2.5 million people across eight London boroughs. Driven by issues around deprivation, unemployment and structural racism, as well as a number of other factors, many of our local population are suffering at the sharp end of health inequalities. A baby boy born today in the wards in the North of Westminster will have, on average, 18 years less life expectancy than a child born a less than a mile further south around Hyde Park – see figure 4.

The Covid-19 pandemic shone a light on the pre-existing inequalities in our local area. NWL was hit much harder than nationally in the first wave of Covid-19 and

areas with high numbers of deaths from Covid-19 in NWL correlate with areas of ethnic diversity and/or deprivation.

Figure 4: Who are our patients and what are some of the challenges they face?



Source: ICHT analysis (September 2021)

We also have a significant number of Trust employees who are NWL residents. Over 7,000 Trust staff live in one of the eight North West London boroughs. A greater proportion of our lower paid staff live in areas of higher deprivation and are therefore more likely to be impacted by the health inequalities we observe across our local population.

As a healthcare organisation who is determined to deliver high quality services that improve outcomes for our patients, the impact of our work will always remain diluted, and inequitable, unless we significantly increase our focus and efforts in playing our part in improving the health, wealth and well-being of our local communities. There is strong evidence, and learning from elsewhere, that shows us that we need to approach this through a strong focus on place, based around the population who see our hospitals as part of their local community.

Redevelopment and net zero

Our Trust has the highest backlog maintenance liability in the NHS – largely due to the age of our estate. Our latest Estate Strategy 2022 to 2030 highlights that a half of

our annual capital budget is spent on urgent backlog maintenance, and despite investing over £115 million since 2015/16, the cost of bringing buildings services and engineering systems up to an acceptable condition are estimated to be £837 million. However, the backlog costs and the investment/project costs are estimated to be £1.4 billion – this needs to be viewed against an annual turnover of around £1.6 billion

The space and configuration limitations of our old estate also make it more challenging to respond to increasing and changing healthcare demands and opportunities, including decarbonising our estate and adaptation planning in response to climate change.

The Department for Health and Social Care (DHSC) and NHS England (NHSE) have acknowledged this and St Mary's, along with our Charing Cross and Hammersmith sites, have been included in the government's New Hospital Programme. Our plan was to start redevelopment at St. Mary's in 2025 and for the vast majority of the redevelopment delivered by 2030. At Charing Cross and Hammersmith renovations and construction was planned to start in 2026 with phased completion from 2030 onwards.

Our redevelopment plans are key to us achieving net zero by 2045. However, in May 2023, the government announced that the main funding for our redevelopment was to be pushed back beyond the original commitment of 2030. As well as putting at risk the health and healthcare of hundreds of thousands of people supported by these hospitals, this also curbs our ambition to be net zero before 2045 with an estate that is not contributing to climate change and is also fully mitigated for the impacts of climate change. We continue to work closely with the New Hospitals Programme, government and our local councils to find a solution.

Organisational vision

On 1 July 2022, the NHS became the first health system in the world to embed environmental requirements into legislation, through the Health and Care Act 2022. This commits us to reducing our carbon footprint, with a goal to achieve net zero by 2045.

A health emergency

Delivering high-quality health and care places numerous demands on natural resources and the environment. NHS organisations have a significant impact on the environment and are some of the largest contributors to global heating and air pollution. The NHS is responsible for 40% of public sector greenhouse gas emissions and for around 3.5% of all road travel in England.

The climate crisis and air pollution have serious direct and indirect consequences for health. In the UK, climate change is expected to cause more severe and frequent adverse weather events, with heat-related deaths projected to more than triple to 7,000 a year by the 2050s.

Toxic air pollution, caused by the combustion of fossil fuels, is associated with 40,000 premature deaths annually in the UK, and this could potentially be twice as high. And best estimates suggest that over one-third of new asthma cases might be avoided because of efforts to cut carbon emissions. In December 2020, we saw the human face of this when, in a landmark ruling, air pollution was recorded as a cause of death of 9-yr old Ella Adoo-Kissi-Debrah who lived near the South Circular Road in Lewisham.

Global heating and air pollution also disproportionately affect disadvantaged and vulnerable populations and worsens health inequalities. In 2020/21 in North West London, 32% of the life expectancy gap for the most deprived males in our communities can be attributed to circulatory and respiratory causes, with the figure for females slightly lower at 28% (<https://analytics.phe.gov.uk/apps/segment-tool/>).

The NHS feels the strain of these health implications; mitigating climate change not only helps the planet, it also helps strengthen the NHS by protecting health and reducing demand on services.

As one of the largest NHS trusts serving some of the poorest communities in London, we recognise the important role we have to play in helping to reduce emissions and improve sustainability overall.

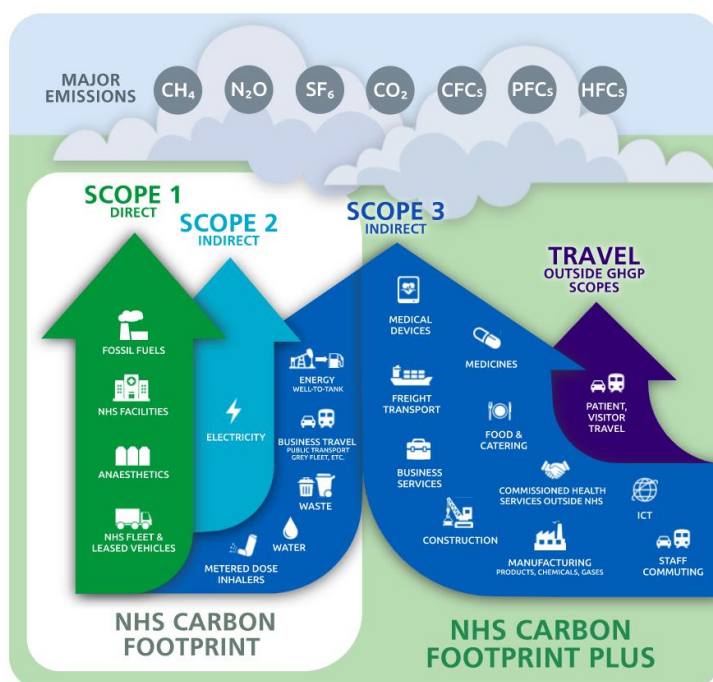
Our NHS emissions scopes

Figure 5 shows the major NHS sources of greenhouse gas emissions that we need to reduce to achieve net zero by 2045. The NHS carbon footprint – which includes scope 1, 2 and certain scope 3 greenhouse gas emissions – is the carbon footprint that NHS organisations have the greatest direct control in reducing.

The other scope 3 emissions plus patient and visitor travel emissions – which includes medicines, medical equipment, other supply chain and staff commuting – are greenhouse gas emission sources that the NHS has limited direct control over but can influence them through, for example, greener procurement, contract management, behaviour change programmes and partnerships with suppliers.

Combining scopes 1, 2 and 3 with patient and visitor travel is called the NHS carbon footprint plus. All greenhouse gas emissions are measured as carbon dioxide equivalent (CO₂e).

Figure 5: Greenhouse Gas Protocol (GHGP) scopes in the context of the NHS



Source: Delivering a net zero NHS

Our Green Plan vision

In May 2021 we launched our first ever Green Plan, underpinned by 12 green goals – see figure 6 – with an ambition to become a net zero carbon exemplar and to achieve net zero before 2045.

Our original Green Plan vision was to reduce our impact on the environment and to deliver sustainable healthcare, helping to secure better health, for life for generations to come, by working with patients, staff, local communities and partners to put our organisation on a path to a cleaner, greener, healthier and more equitable future.

Figure 6: Our Green Plan goals



Source: ICHT

One important aspect of our first Green Plan was to rapidly embed seven foundational cornerstones. These being leadership and capacity; data, measurement, and impact; communication; engagement and learning; visible action and improvement; partnerships; and governance. These cornerstones have now all been established.

Building a culture of improvement and innovation

Our Green Plan provides a platform for our staff, patients, communities and partners to contribute to reducing the impact of climate change and pollution on health and reduce reliance on unsustainable services and medicines.

The “how” for delivering our vision is rooted around people, partnerships and action and embraces continuous ‘green’ learning and innovation as a driving force for change. Key to this has been delivering on our organisation’s third strategic priority to building learning, improvement and innovation into everything we do.

We have been building our culture of learning, continuous improvement and innovation around our Green Plan through co-production, co-design and co-delivery of a programme of engagement and communication. This involves co-production of a short education module; introduction of our Trust Green Plan in our staff induction programmes; co-design of a range of resources to help staff make practical local improvements; publication of staff authored blogs and newsletters; expanded

support to our staff green community network; and hosting of multiple face-to-face and virtual opportunities so that staff have a voice, connect and share.

This means that in our organisation:

- Staff will be empowered and inspired to act: Staff will see committed leadership, collaboration, and co-production. They will experience collective progress and will feel that they have the permission and support to take local ownership for action on a shared green journey.
- Staff will be equipped to act: Staff will see a clear point of contact and opportunities for green education to upskill in sustainability and will feel confident to act knowing that it is everybody's business to act.
- Staff will be recognised that their contributions: Staff will see their own and their colleague's green successes recognised and will feel part of a team with a shared purpose.

Our focus for Green Plan improvements in the short to medium term is the prioritisation of actions based on the highest opportunity for successful delivery and long lasting and meaningful impact. We also recognise our operating context, including delivering large efficiency savings, which means that in the short-term, we will also prioritise actions and improvements that are both cost and carbon saving.

The challenges

Reaching net zero comes with several blockers and barriers. Our greatest blockers to overcome are outlined below.

Funding a net zero NHS

Delivery of this Green Plan requires a significant capital outlay, along with revenue spending for new technologies and innovations that can reduce our NHS carbon footprint plus. The public sector funds that exist to support the transition to net zero are highly competitive, have tight stipulations and are vastly oversubscribed. Capital finance spending caps, requirements for significant efficiency savings, and the maintenance of our aging estate, mean that under current financial arrangements the necessary investment to reach net zero is hard, if not impossible, to make.

There are not the financial instruments currently in place to support the NHS's net zero ambitions. Recognising this we will undertake as much of our Green Plan as we can within the financial envelope that is, or becomes, available, and will work to secure internal and external funding, where available, and in the short-term will prioritise actions that are proven to be cost and carbon reducing.

Finally, redevelopment of our hospitals remains a critical step-change opportunity for us to deliver net zero before 2045, and securing this continues to be a key priority for our Executive team and Board.

Cultural barriers to change

To reach net zero, ways of thinking across our organisation will need to change. Our Green Plan and the consideration of environmental impact of all activities and items used, will need to be a normal part of all staff's thinking.

Our engagement and communications will remain a core component of our Green Plan and we will continue to iterate, adapt and deliver this to ensure all staff have the tools and support to meaningfully act.

A long-term mission versus short-term priorities

Delivering a net zero NHS is an urgent long-term mission, yet it is easy to lose focus amongst short-term competing priorities, especially when the net zero target is two decades away. More so, a lack of ring-fenced dedicated funding to rapidly implement carbon reducing solutions makes delivery of Green Plans, in the context of the current financial challenges facing the NHS, an uphill challenge.

The delivery strategy will need to be flexible and opportunistic in prioritising and commencing as many work streams as possible, and to not treat each 3-year Green Plan as an end point; rather the delivery of these move us towards the ultimate goal to be net zero by 2045. The NHS will require constant and ongoing system and local leadership and stewardship to support iterative prioritisation of what is achievable each year.

Innovation

There is an ongoing race to invent new responsible technologies that we will need to embrace to achieve net zero. We are reliant on these technologies coming to market and being affordable for our Green Plan ambitions to be successful. Our close relationship with Imperial College London also provides the opportunity for collaboration around innovation in sustainability.

Scale of change

Based on a one-off Greener NHS analysis for 2019/20 our baseline NHS carbon footprint plus was 274,888 tCO₂e. To reach the 2045 target we will need to reduce our greenhouse gas emissions by an average of 11,000 tCO₂e per year if we exclude offsetting solutions. This is an immense task.

Progress since 2019/20

Our carbon footprint

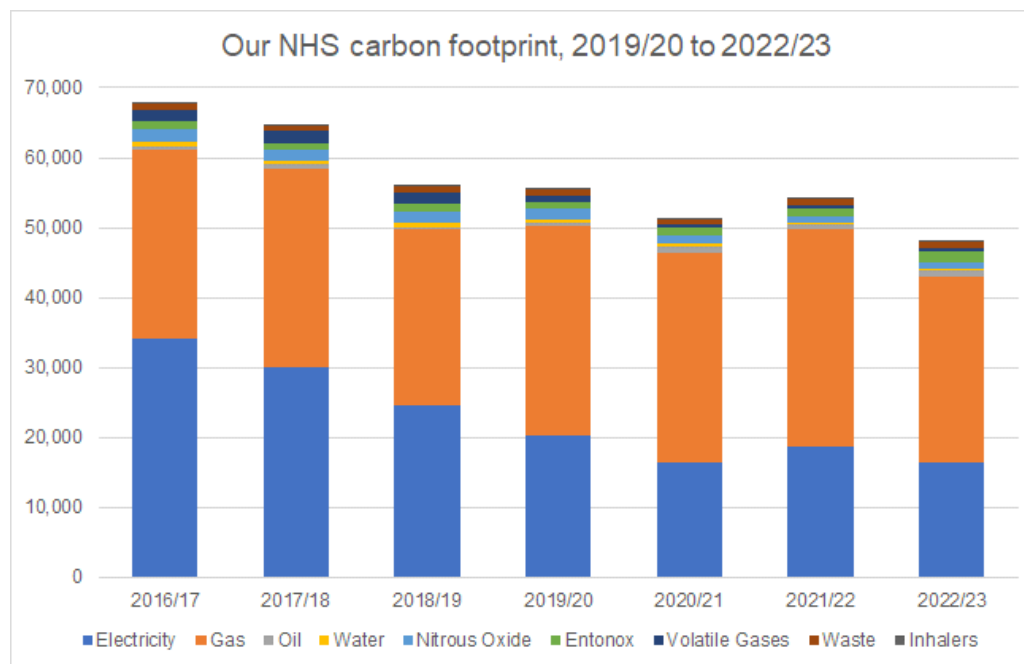
On 1 July 2022, the NHS embedded net zero into legislation, through the Health and Care Act 2022. We are, therefore, focused on acting to deliver against the two headline targets contained in the statutory guidance report Delivering a Net Zero National Health Service. Set against a baseline year of 2019/20 these two nationally set NHS targets are:

- for emissions we control directly (the NHS carbon footprint), to reach net zero emissions by 2040, reducing emissions by at least 47 per cent by 2028-2032; and
- for emissions we can influence (the NHS carbon footprint plus), to reach net zero emissions 2045, reducing emissions by at least 73 per cent by 2036-2038.

We continue to improve our understanding and calculation of our NHS carbon footprint. We have calculated the lion's share of our NHS carbon footprint and plan to complete this picture by including a consistent and reliable calculation for our fleet and business travel emissions and f-gas emissions from 2023/24.

In the three years since 2019/20 our NHS carbon footprint has fallen by 14 per cent, from 55,724 to 48,139 tCO₂e – see figure 7.

Figure 7: Our NHS carbon footprint 2019/20 to 2022/23



Source: ICHT analysis; Notes: Our NHS carbon footprint currently excludes fleet and business travel and f-gas emissions. The carbon footprint for inhalers is for the propellant only.

Over this period we have seen reductions in emissions across most of our NHS carbon footprint emissions sources – see tables 1 and 2 – with the exception of Entonox use, waste disposal and buildings energy oil use. These three emissions sources accounted for 7 per cent of our NHS carbon footprint in 2022/23.

Table 1: Our NHS carbon footprint between 2019/20 and 2022/23 (including tenants)

NHS Carbon Footprint emissions source	2019/20	2020/21	2021/22	2022/23
Gas	30,094	29,977	31,215	26,513
Electricity	20,197	16,537	18,619	16,548
Oil	515	694	597	772
Waste disposal	857	879	946	907
Water and sewage	467	444	175	218
Anaesthetic gas: Volatile agents	1,039	413	451	354
Anaesthetic gas: Nitrous oxide	1,574	1,245	975	1,094
Anaesthetic gas: Entonox	780	1,085	1,150	1,547
Inhalers (propellant only)	201	158	195	186
Total	55,724	51,432	54,322	48,139

Source: ICHT analysis; Notes: Our NHS carbon footprint currently excludes fleet and business travel and f-gas emissions. The carbon footprint for inhalers is for the propellant only.

Table 2: A snapshot of our NHS carbon footprint in 2022/23 (including tenants)

NHS Carbon Footprint emissions source	Emissions in tCO ₂ e by emissions source in 22/23	Emission source as a % of NHS carbon footprint in 22/23	% change between 19/20 and 22/23 in emissions by emissions source
Gas	26,513	55%	-12%
Electricity	16,548	34%	-18%
Oil	772	2%	50%
Waste disposal	907	2%	6%
Water and sewage	218	0%	-53%
Anaesthetic gas: Volatile agents	354	1%	-66%
Anaesthetic gas: Nitrous oxide	1,094	2%	-30%
Anaesthetic gas: Entonox	1,547	3%	98%
Inhalers (propellant only)	186	0%	-8%
Total	48,139	100%	-14%

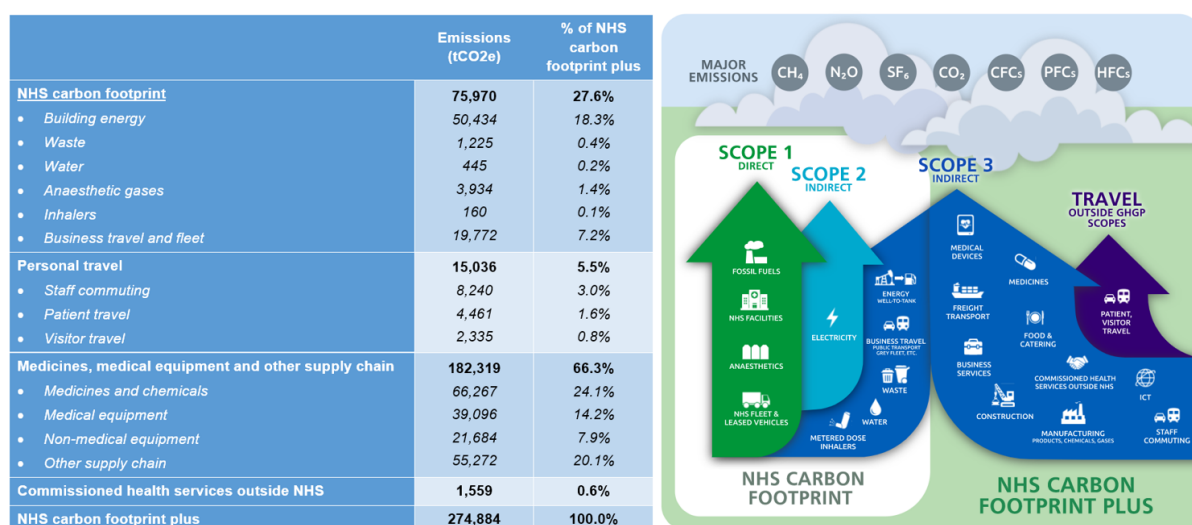
Source: ICHT analysis; Note: Our NHS carbon footprint currently excludes fleet and business travel and f-gas emissions. The carbon footprint for inhalers is for the propellant only.

We continue to improve our NHS carbon footprint calculation, including ensuring that we use the most appropriate emissions factors. Our data in this refreshed Green Plan now uses waste disposal emissions factors which align with the new NHS Clinical Waste Strategy and the NHS Waste Carbon Reduction Tool. These emissions factors are significantly lower for the incineration of clinical waste,

alternative treatment, and offensive and domestic incineration waste streams than we previously used. As such our waste disposal carbon footprint presented here differs from previous reporting and is significantly lower than previously reported.

The analysis presented above is only for our NHS carbon footprint – that is all scope 1 and 2 emissions plus a small number of scope 3 emissions, see figure 8. For 2019/20, the Greener NHS estimates our larger NHS carbon footprint plus (i.e. our directly controlled and indirectly influenceable emissions) at 274,888 tCO₂e. Medicines, medical equipment, other supply chain, personal travel and commissioned health services outside NHS combined was 198,914 tCO₂e, which equates to 72.4% of our NHS carbon footprint plus – see figure 8.

Figure 8: ICHT carbon footprint plus, 2019/20



Source: Greener NHS

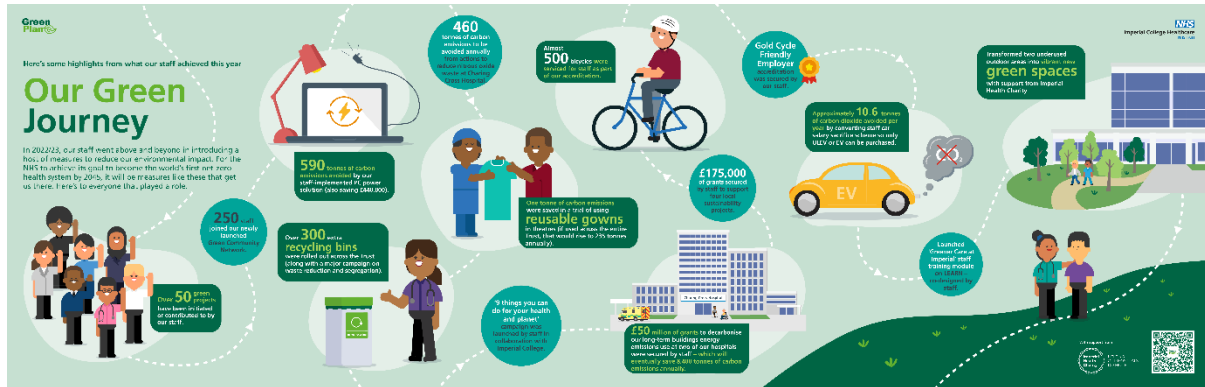
Due to weaknesses in the methodologies currently available to calculate the greenhouse gas emissions over which we have indirect influence, we are yet to measure our progress in this area. We wait for further guidance from Greener NHS (and others) on the best method to estimate emissions outside our direct control, where the method can accurately detect the impact of carbon reduction actions. Our expectation is to have progressed this within the three years covered by this new Green Plan.

Our key 3-year highlights: 2021/22 to 2023/24

Our first Green Plan prioritised actions around foundational cornerstones. These were leadership and capacity; data, measurement, and impact; communication, engagement and learning; visible action and improvement; partnerships; and governance. And, between 2019/20 and 2022/23 our NHS carbon footprint has fallen by 14 per cent, from 55,724 to 48,139 tCO₂e.

Well over 50 green projects have been initiated in support of our green journey since we launched our Green Plan, and these will have laid the foundations for securing future benefits. Figure 9 presents a snapshot of some of our carbon reducing achievements.

Figure 9: Our Green Journey



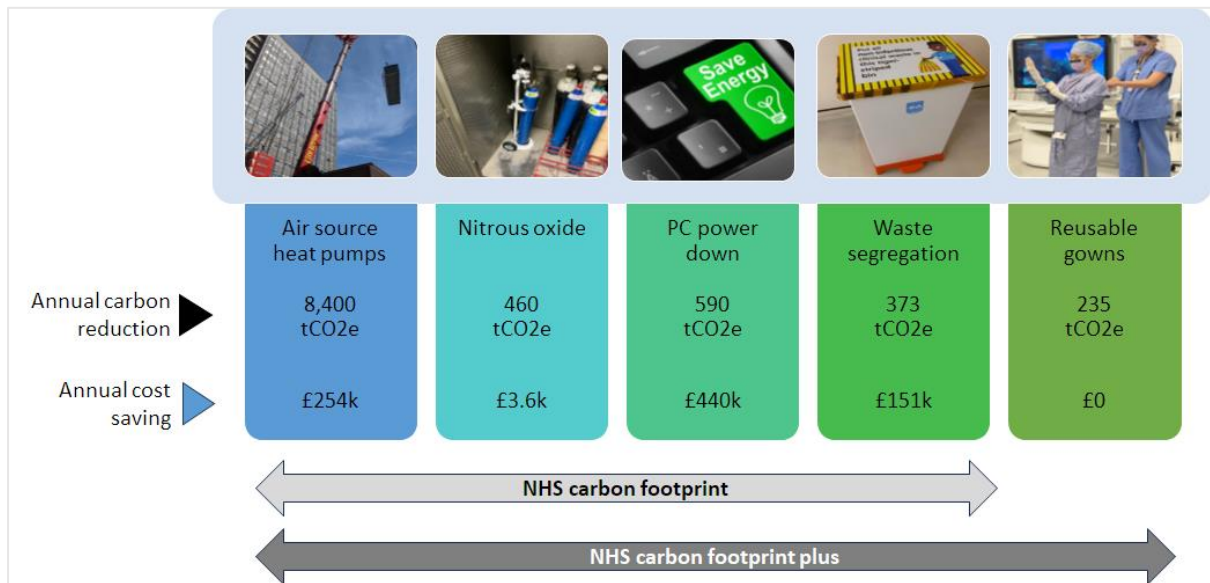
Source: ICHT

Indeed, our efforts over the last three years have been publicly recognised in August 2023 when we were shortlisted as finalists for the prestigious HSJ ‘Towards Net Zero’ Award. Five of our proudest carbon reducing projects implemented in the last three years are:

- installing air source heat pumps at Charing Cross and Hammersmith Hospitals;
- implementing a computer power management solution to turn off idle computers;
- decommissioning the nitrous oxide manifold at Charing Cross Hospital;
- optimising waste segregation; and
- trialling reusable gowns in theatres.

Figure 10 summarises the carbon-cost impact of these five projects once scaled up to reach maturity. This shows that these five projects alone are estimated to reduce our annual greenhouse gas emissions by 9,823 tCO₂e – or around 20% of our NHS carbon footprint in 2022/23 – and also simultaneously will secure annual cost savings of around £850,000, in 2022/23 prices.

Figure 10: Five exemplar cost-carbon savings projects delivered at ICHT between 2021 and 2023



Source: ICHT

We know that success breeds success, and we will build on our successes and our public recognition by the HSJ to further excite, engage, involve and galvanise others at the Trust to act, which in turn will lead to future success in reducing our environmental impact further, and faster.

The next 3 years: 2024/25 to 2026/27

This refreshed Green Plan has been structured according to the June 2021 Greener NHS guidance document “NHS How to Produce a Green Plan” and also aligns with the more recently published Greener NHS Green Plan Support Tool. This section summarises our ambition for the next three years.

In small number of instances we have yet to establish a reliable and consistent baseline to measure our progress, and we will be prioritise establishing these in the first year of this 3-year refreshed Green Plan. It is also important to recognise that some actions will be perpetual (e.g. staff engagement), some will need to be repeated regularly once completed (e.g. waste segregation behaviour change prompts) and some will take more than three years for impactful outcomes to materialise (e.g. securing a multi-provider power purchase agreement).

Workforce and system leadership

Over the next three years ...
Where we want to get to
<ul style="list-style-type: none">• Triple our Green Community Network from 250 staff in early 2023 to 750 staff by 31 March 2025• Recruit at least 75 Green Champions by 31 March 2027• Have a comprehensive time-series of our NHS carbon footprint from 2019/20
Number of supporting work streams: 13
<ul style="list-style-type: none">● Not started: 6● Started: 7● Completed: 0

Estates and facilities

Over the next three years ...
Where we want to get to
<ul style="list-style-type: none">• Reduce our carbon emissions from our combined consumption of gas, oil and electricity by at least a third by 31 March 2027 on our 2019/20 baseline• Reduce our water consumption across the Trust by 20% by 31 March 2027 compared to 2022/23 levels.• Transform at least one outdoor green space each year at our Trust
Number of supporting work streams: 9 <ul style="list-style-type: none">● Not started 4● Started 5● Completed 0

Over the next three years ...
Where we want to get to
<ul style="list-style-type: none">• Increase our coverage of LED lighting at the Trust (baseline 2021/22)• Deliver net zero training and education to estates, facilities and capital projects leadership teams
Number of supporting work streams: 7 <ul style="list-style-type: none">● Not started 4● Started 3● Completed 0

Over the next three years ...
Where we want to get to
<ul style="list-style-type: none">• Achieve a clinical waste segregation ratio of 20:20:60 by 31 March 2027 (baseline 11:65:24 in 2022/23)• Reduce total waste disposal emissions by 50% by 31 March 2027 (baseline 907 tCO₂e in 2022/23)• Achieve a 25% recycling rate by 31 March 2027 (baseline 17% in 2022/23)
Number of supporting work streams: 8 <ul style="list-style-type: none">● Not started 4● Started 3● Completed 1

Travel and transport

Over the next three years ...
Where we want to get to
<ul style="list-style-type: none">• Reduce our fleet and business travel emissions• Increase the uptake of our cycle to work scheme, from a 2022/23 baseline of 119
Number of supporting work streams: 10 <ul style="list-style-type: none">• Not started 6• Started 4• Completed 0

Medicines

Over the next three years ...
Where we want to get to
<ul style="list-style-type: none">• Reduce our carbon NHS footprint of medicines that have a high global warming potential (GWP) at the point of use (inhaler propellant, nitrous oxide, Entonox and volatile agents) by at least 40% by 31 March 2027 (or earlier) against our 2019/20 baseline of 3,594 tCO₂e.
Number of supporting work streams: 8 <ul style="list-style-type: none">• Not started 5• Started 3• Completed 0

Food and nutrition

Over the next three years ...
Where we want to get to
<ul style="list-style-type: none">• Increase the proportion of lower carbon / plant-based inpatient meals ordered• Reduce inpatient food waste
Number of supporting work streams: 10 <ul style="list-style-type: none">• Not started 8• Started 2• Completed 0

Sustainable models of care

Over the next three years ...
Where we want to get to
<ul style="list-style-type: none">• Implementation of evidence-based good practice with at least two clinical teams to reduce carbon• Increase in the adoption of reusable gowns at the Trust• Increase the number of walking aids returned (baseline 2023/24)
Number of supporting work streams: 7
<ul style="list-style-type: none">● Not started 3● Started 4● Completed 0

Digital transformation

Over the next three years ...
Where we want to get to
<ul style="list-style-type: none">• Reduce our reliance on paper• Increase the uptake of the Care information Exchange• Deliver at least 25% of all first outpatient appointments and 60% of all follow up appointments virtually• Improve our IT asset disposal• At least 3% of patients discharged to a PIFU pathway by 2027
Number of supporting work streams: 7
<ul style="list-style-type: none">● Not started 2● Started 5● Completed 0

Supply chain and procurement

Over the next three years ...
Where we want to get to
<ul style="list-style-type: none">• Ensure all staff are supported to meaningfully apply a social value weighting (including net zero) of at least 10% to all new procurement and to work collaboratively with partners and suppliers to drive down our NHS carbon footprint plus
Number of supporting work streams: 7
<ul style="list-style-type: none">● Not started 3● Started 4● Completed 0

Adaptation

Over the next three years ...
Where we want to get to
<ul style="list-style-type: none">• Ensure our organisation is preparing to deal with the impacts of climate change by developing, embedding and monitoring actions from a Climate Change Adaptation Plan
Number of supporting work streams: 10
<ul style="list-style-type: none">● Not started 8● Started 2● Completed 0

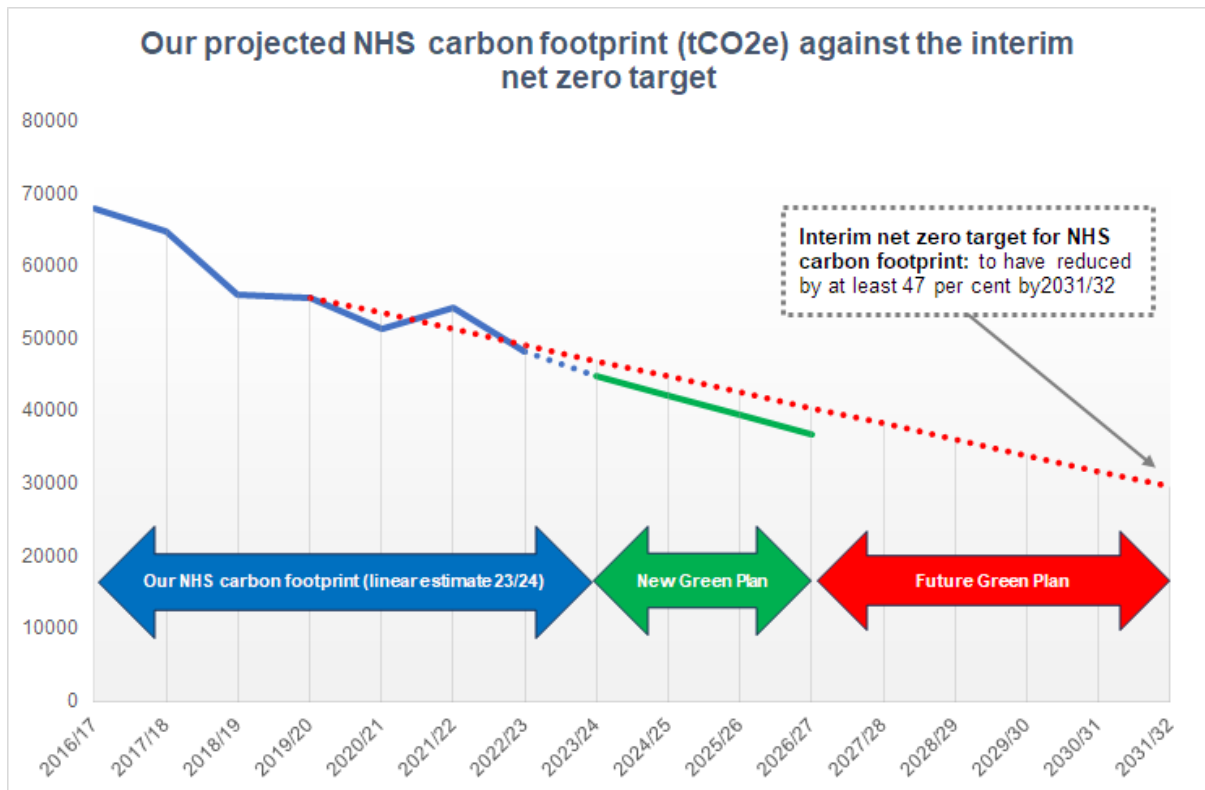
Estimating the impact of this Green Plan on our NHS carbon footprint

It is notoriously challenging to model the impact of this refreshed Green Plan due to the scale and complexity of the programme, and the significant contextual barriers that can make its delivery challenging. We have, however, estimated the impact of delivering this refreshed Green Plan on our NHS carbon footprint, assuming that we deliver on the headline ambitions outlined above.

By the end of 2026/27 we estimate that our NHS carbon footprint will have fallen from 48,139 tCO₂e in 2022/23 to at least 36,879 tCO₂e – see figure 11. This equates to an estimated 23% reduction over the 3-year period of this refreshed Green Plan or, put another way, a 34% reduction on our 2019/20 baseline. The largest contributor to this projected reduction comes from reducing our electricity, gas and oil emissions, however, around 10% of the absolute reduction comes from

reducing emissions associated with medicines that have a high global warming potential at point of use and waste disposal.

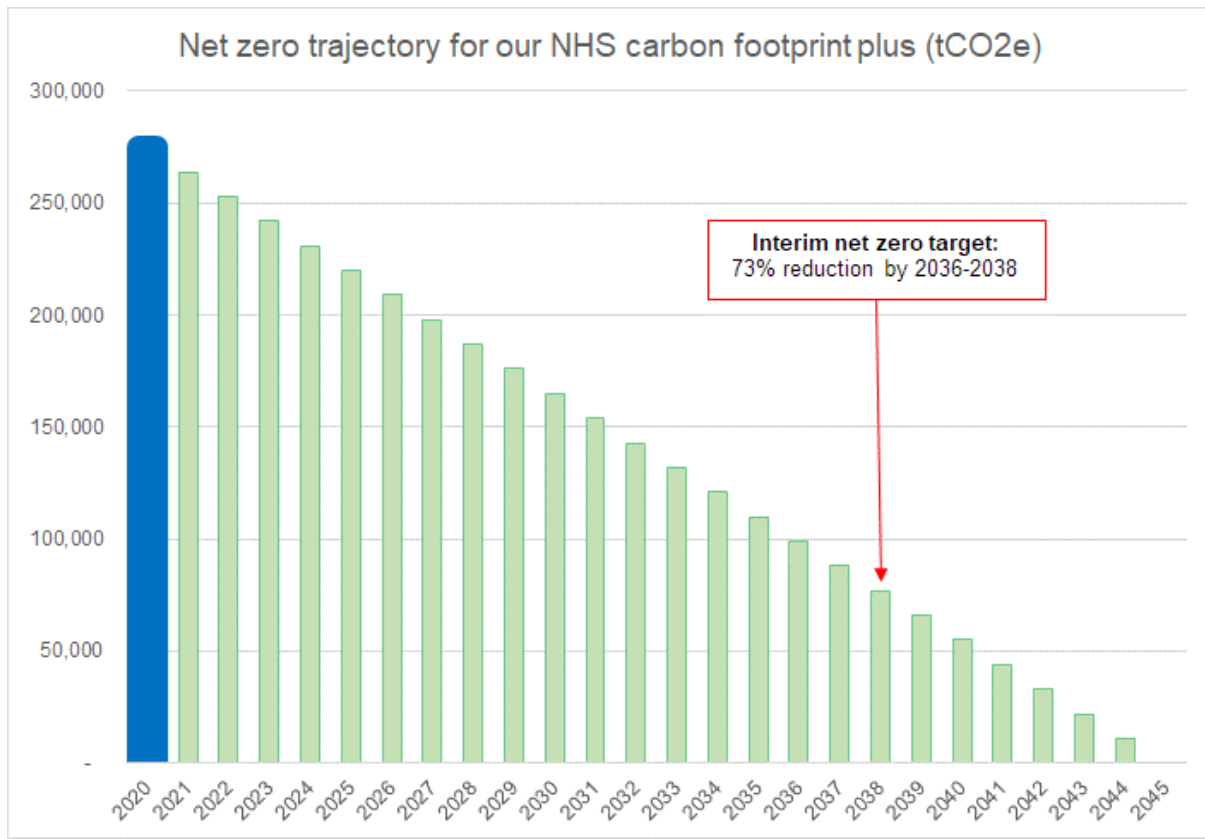
Figure 11: Our projected NHS carbon footprint to 31 March 2027



Source: ICHT analysis; Notes: Our NHS carbon footprint currently excludes fleet and business travel and f-gas emissions. The carbon footprint for inhalers is for the propellant only.

As covered previously this relates only to our NHS carbon footprint and not our NHS carbon footprint plus. We plan to work with others across our geography to explore how best to calculate a consistent timeseries for the NHS carbon footprint plus. However, based on Greener NHS estimates for 2019/20, we will need to reduce our NHS carbon footprint plus by around 11,000 tCO₂e per year until 2045, excluding any residual offsetting required – see figure 12.

Figure 12: Our projected NHS carbon footprint plus between 2019/20 and 2044/45



Source: Greener NHS

Governance

This refreshed Green Plan has been led by our designated executive director and board-level net zero lead, our Director of Strategy, Research and Innovation, and covers the period 2024/25 to 2026/27. It has also had senior, expert input from a broad range of disciplines and functions, including clinicians, estates and facilities, procurement, finance, strategic lay partners and human resources and been supported via our Green Plan operating and advisory structure.

We will ensure that we are flexible and adaptive to opportunities and will continually iterate and update this Green Plan. We will continue to report progress to our Executive Management Board and Trust Board twice a year; we will submit annual progress reports to our Integrated Care Board; and we will submit all NHS mandatory reporting in a timely manner.

In 2023 we had our sustainability reporting independently audited and assessed as providing significant assurance with minor improvement opportunities. All of the recommendations for improvement have been implemented or will be implemented as part of this refreshed Green Plan.

Since launching our first Green Plan in 2021 we have established a Green Plan operating and advisory structure – see figure 13 – and we review and iterate the effectiveness of these structures each year.

Figure 13: Our Green Plan advisory and operational structure



Green Plan: Advisory Group – The purpose of the Advisory Group is to provide ideas, advice and supportive critical challenge to the ongoing development and implementation of our Green Plan.

Green Plan: Estates and Facilities Working Group – The focus of this working group is around how our buildings work, and how it can support carbon reduction, reduction of waste (including physical waste, water and energy), food and nutrition and adaptation planning for climate change

Green Plan: Travel and Transport Working Group – The focus of this working group is around how people, medicines and other kit move, and how it can be reconfigured to reduce carbon and improve air quality e.g. modal shift of movement, car parking and EV etc.

Green Plan: Procurement Working Group – The focus of this working group around how we bring in kit and services, and how tendering, social value, business cases, long term financial planning and engagement with SMEs can reduce carbon and improve sustainability.

Green Plan: Models of Care Working Group – The focus of this working group around how we work, and how we can work in smart and innovative ways e.g. clinically-led changes that reduces carbon in clinical pathways, including key NHS priorities such as anaesthetic gases and inhalers, reducing single use plastics and digital transformation.