

Carbon Reduction Plan

Supplier name: Imperial College Healthcare NHS Trust

Publication date: January 2025

Commitment to achieving Net Zero

Imperial College Healthcare NHS Trust is committed to achieving Net Zero emissions by 2045.

The NHS is responsible for 5 per cent of the UK's carbon emissions and 3.5 per cent of all road travel. At the same time, climate change is recognised as having a negative impact on health, particularly in deprived areas, exacerbating health inequalities. 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.

The Green Plan is our commitment to reduce our impact on the environment and to deliver sustainable healthcare, helping to secure better health, for life for generations to come. We will work with patients, staff, local communities and partners to put our organisation on a path to a cleaner, greener, healthier and more equitable future.

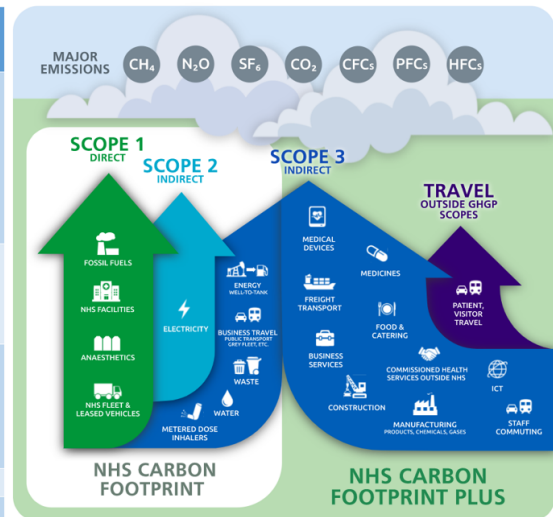
We are focused on acting to deliver against the two headline targets contained in the statutory guidance report Delivering a Net Zero National Health Service. Set against a baseline year of 2019/20 these two nationally set NHS targets are:

- 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.

Baseline Emissions Footprint

Baseline Year: 2019/20
Additional Details relating to the Baseline Emissions calculations.
The Greener NHS has produced a 2019/20 baseline for all NHS organisations – however, this does not provide a breakdown of buildings energy into gas, electricity and oil. This is reproduced below.

	Emissions (tCO ₂ e)	% of NHS carbon footprint plus
NHS carbon footprint	75,970	27.6%
• Building energy	50,434	18.3%
• Waste	1,225	0.4%
• Water	445	0.2%
• Anaesthetic gases	3,934	1.4%
• Inhalers	160	0.1%
• Business travel and fleet	19,772	7.2%
Personal travel	15,036	5.5%
• Staff commuting	8,240	3.0%
• Patient travel	4,461	1.6%
• Visitor travel	2,335	0.8%
Medicines, medical equipment and other supply chain	182,319	66.3%
• Medicines and chemicals	66,267	24.1%
• Medical equipment	39,096	14.2%
• Non-medical equipment	21,684	7.9%
• Other supply chain	55,272	20.1%
Commissioned health services outside NHS	1,559	0.6%
NHS carbon footprint plus	274,884	100.0%



The Trust also produces its own estimate (referred to as ICHT analysis) for our NHS Carbon Footprint annually – which uses emissions factors contained in the Greener NHS Activity-based emissions factors for greenhouse gas modelling in the NHS, Version 1.3, Published June 2024. This is presented below, however, does not include f-gases or fleet and business travel as the Trust does not have the baseline 2019/20 data to include these. However, we will include these from 2024/25 onwards.

Emissions (tCO ₂ e)	2019/20	2020/21	2021/22	2022/23	2023/24	Percent change 2019/20 to 2023/24
Gas	30,094	29,879	31,039	26,832	25,807	-14.2%
Electricity	20,197	16,537	18,619	18,275	17,238	-14.6%
Oil	575	775	682	881	699	21.6%
Waste disposal	869	878	946	907	786	-9.6%
Water and sewerage	467	444	175	218	192	-58.9%
Anaesthetic gases	4,022	3,395	3,426	3,850	1,774	-55.9%
Inhalers	279.9	220.8	265.3	231.5	239.0	-14.6%
TOTAL: NHS Carbon Footprint (tCO₂e)	56,504	52,130	55,152	51,195	46,734	-17.3%

Baseline year emissions: 2019/20

EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	36,307 tCO ₂ e (ICHT analysis and includes gas, oil, water and sewerage, anaesthetic gases, inhalers (propellant only) and excludes f-gases and fleet and business travel. Note, some of these emissions sources that fall under NHS Carbon Footprint are scope 3 emissions)
Scope 2	20,197 tCO ₂ e (ICHT analysis)
Scope 3 (Included Sources)	This is Greener NHS analysis.

	<ul style="list-style-type: none"> • <i>Business travel and fleet</i> 	19,772
	Personal travel	15,036
	<ul style="list-style-type: none"> • <i>Staff commuting</i> • <i>Patient travel</i> • <i>Visitor travel</i> 	8,240 4,461 2,335
	Medicines, medical equipment and other supply chain	182,319
	<ul style="list-style-type: none"> • <i>Medicines and chemicals</i> • <i>Medical equipment</i> • <i>Non-medical equipment</i> • <i>Other supply chain</i> 	66,267 39,096 21,684 55,272
	Commissioned health services outside NHS	1,559
Total Emissions	This is Greener NHS analysis for total emissions, which in 2019/20 is estimated to be 274,884 tCO2e.	
		Emissions (tCO2e)
	<u>NHS carbon footprint</u>	75,970
	<ul style="list-style-type: none"> • <i>Building energy</i> • <i>Waste</i> • <i>Water</i> • <i>Anaesthetic gases</i> • <i>Inhalers</i> • <i>Business travel and fleet</i> 	50,434 1,225 445 3,934 160 19,772
	Personal travel	15,036
	<ul style="list-style-type: none"> • <i>Staff commuting</i> • <i>Patient travel</i> • <i>Visitor travel</i> 	8,240 4,461 2,335
	Medicines, medical equipment and other supply chain	182,319
	<ul style="list-style-type: none"> • <i>Medicines and chemicals</i> • <i>Medical equipment</i> • <i>Non-medical equipment</i> • <i>Other supply chain</i> 	66,267 39,096 21,684 55,272
	Commissioned health services outside NHS	1,559
	NHS carbon footprint plus	274,884

Current Emissions Reporting

Reporting Year: 2023/24

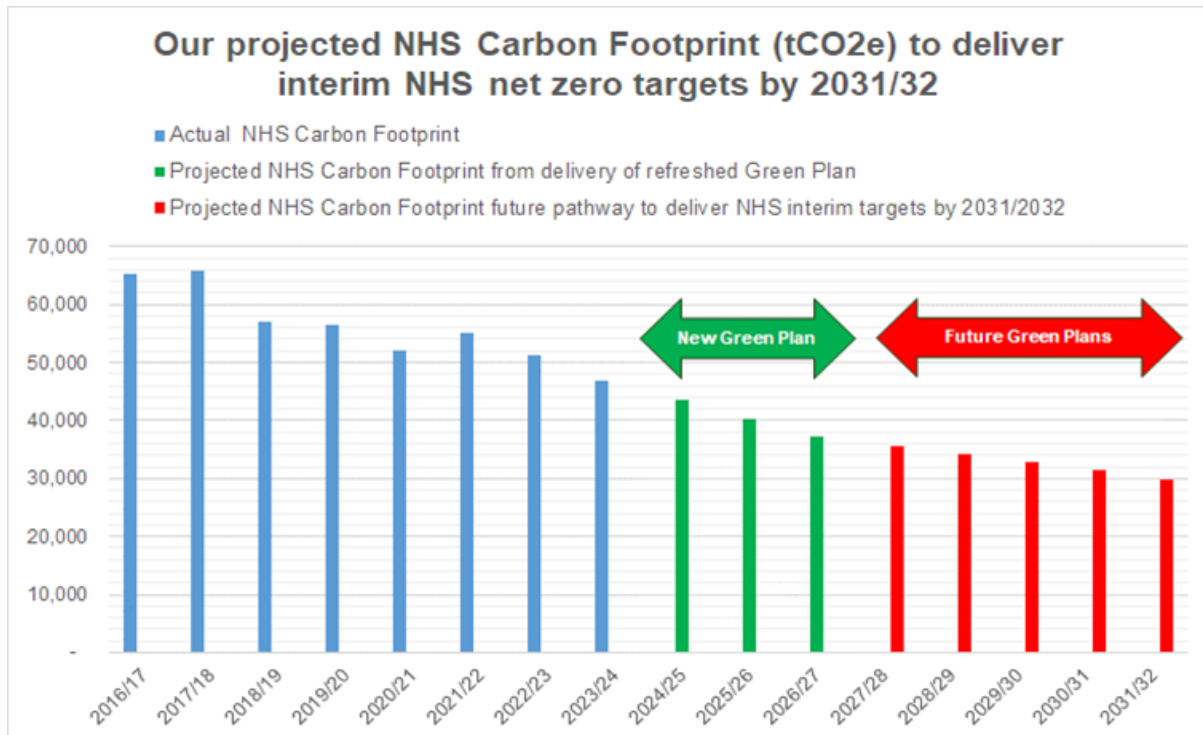
EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	29,496 tCO ₂ e (ICHT analysis and includes WTT, gas, oil, water and sewerage, anaesthetic gases, inhalers (propellant only) and excludes f-gases and fleet and business travel. Note, some of these emissions sources that fall under NHS Carbon Footprint are scope 3 emissions)
Scope 2	17,238 tCO ₂ e (ICHT analysis and includes WTT)
Scope 3 (Included Sources)	The Trust does not have this data. The Trust will be working with others across NWL ICB to produce estimates for scope 3.
Total Emissions	46,734 tCO ₂ e (Note: This is just for the emissions sources outlined above and does not include scope 3 emissions, with the exception of those small number presented under scope 1)

Emissions reduction targets

In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets that are contained in our refreshed Green Plan 2024/25 to 2026/27.

- 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
- Achieve a clinical waste segregation ratio of 20:20:60 by 31 March 2027 (baseline 2022/23)
- Reduce total waste disposal emissions by 50% by 31 March 2027 (baseline 2022/23)
- Reduce our fleet and business travel emissions
- 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
- Increase the proportion of lower carbon / plant-based inpatient meals ordered
- Reduce inpatient food waste
- Increase the number of walking aids returned (baseline 2023/24)
- 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

Delivering our refreshed Green Plan will mean that by 31 March 2027 our NHS carbon footprint will decrease over the three year period of the Plan by 34% on our 2019/20 baseline.



Notes: Our analysis includes tenants on our three major sites. Our NHS Carbon Footprint currently excludes f-gases and fleet and business travel. Oil, water and sewage, and waste includes SMH, WEH, CXH, HH and QCCH. Electricity includes SHM, WEH, CXH, HH, QCCH, Hayes Renal and Chaplin Road (from 23/24). Gas includes SHM, WEH, CXH, HH, QCCH and Hayes Renal. Inhalers is propellant only.

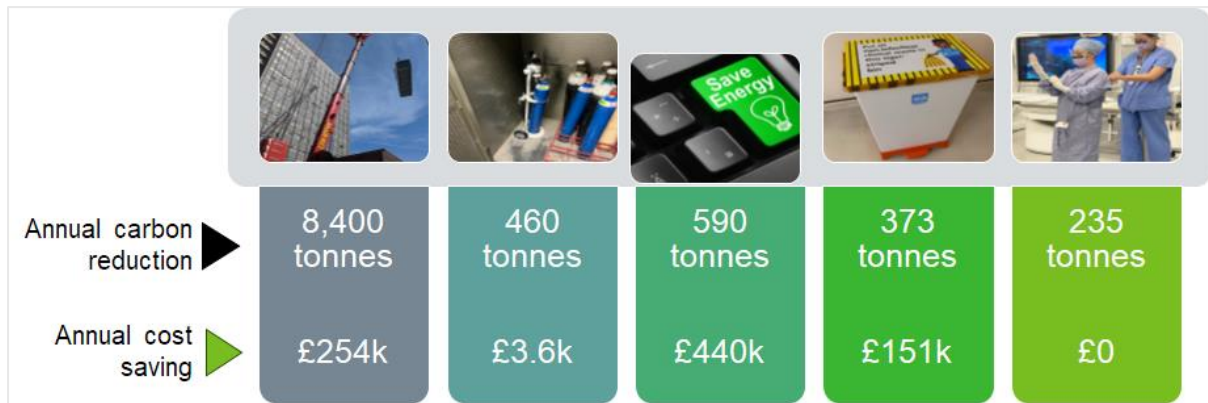
Carbon Reduction Projects

Completed Carbon Reduction Initiatives

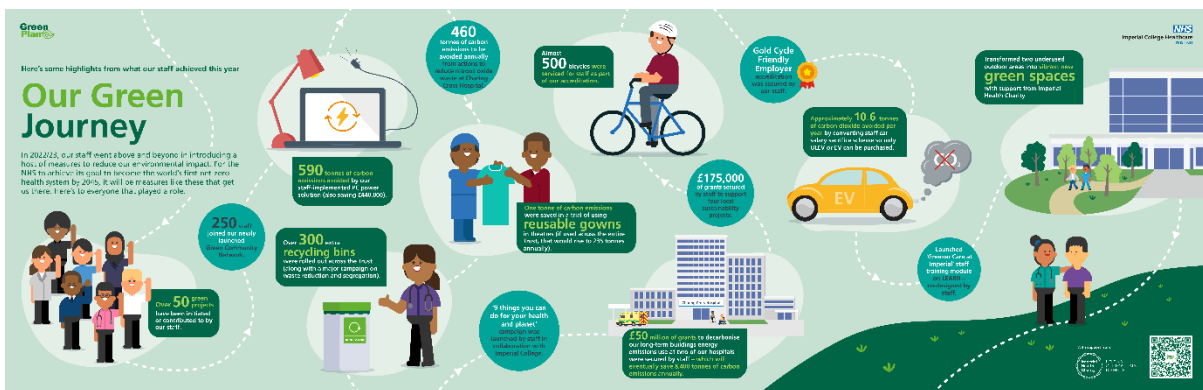
Since launching our first ever Green Plan in May 2021 we have undertaken and completed a wide range of carbon reducing projects – see infographic below. Well over 50 green projects have been initiated in support of our green journey since we launched our Green Plan, and these will have laid the foundations for securing future benefits.

Our efforts between 2021 and 2023 have been publicly recognised in August 2023 when we were shortlisted as finalists for the 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.



The carbon-cost impact of these five projects once scaled up to reach maturity indicates 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 (or put another way, this outcome is the equivalent of avoiding burning 3.5 million kilograms of coal each year)– and also simultaneously will secure annual cost savings of around £850,000, in 2022/23 prices.



In the future we hope to implement further measures such as:

- Implement heat pumps and solar PVC projects at Hammersmith Hospital as part of further PSDS grant funding secured in 2024 to decarbonise our estate
- Further roll out of LED lighting as a standard part of refurbishment
- Decommissioning nitrous oxide manifold at WEH site, before exploring this for SMH
- Produce a Staff Travel Plan
- Explore innovative opportunities to reduce waste volumes and increase reuse i.e. introduce reusable sharps bins
- Recruit at least 75 Green Champions by 31 March 2027
- Implementation of evidence-based good practice with at least two clinical teams to reduce carbon – e.g. imaging and theatres

Note: The Trust can share our Board approved Green Plan, that covers the period 2024/25 to 2026/27, upon request, which contains further details on the we have committed to take on our journey to net zero by 2045. A high-level summary of our Green Plan can be found in the Sustainability Section (page 35) of our Annual Report and Accounts here [annual-report-2023-24.pdf](#). Our Green Plan goals can be found here [Our Green plan | Imperial College Healthcare NHS Trust](#).

Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard¹ and uses the appropriate Government/Greener NHS emission conversion factors for greenhouse gas company reporting².

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard³.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

Signed on behalf of the Supplier:



A handwritten signature in black ink, appearing to read 'Bob Klaber', is written over a faint, light blue rectangular stamp or watermark.

Dr Bob Klaber, Board-level net-zero lead, Consultant paediatrician and Director of strategy, research and innovation

Date: 08.01.2025

¹<https://ghgprotocol.org/corporate-standard>

²<https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

³<https://ghgprotocol.org/standards/scope-3-standard>