

Building a Greener OUH

2022-2027



Building a Greener OUH

Welcome

It is clear that climate change poses a major threat, to both the health of the planet and to the health of all of us, with these changes occurring at an accelerating pace.

As one of the largest NHS teaching hospital trusts in the UK, and one of the largest employers in Oxfordshire, we at Oxford University Hospitals NHS Foundation Trust must therefore take seriously our responsibility as an Anchor Institution in our community, reducing the negative environmental impact of our work and taking hold of the role we can play in developing more sustainable healthcare and improved outcomes for our populations.

In 2020, we published 'Our Strategy Framework 2020-2025', which set out a goal to reduce our environmental impact and influence sustainable practices in our local community. Building a Greener OUH takes forward this agenda, setting out the action we will take across key areas – our travel and transport, procurement and supply chains, estates and facilities, medicines, and our approach to digital transformation to reduce our carbon footprint and achieve a Greener OUH.

Across the Trust, teams are already doing great work. Innovative solutions are being developed to improve the experiences of patients, whilst also reducing our environmental impact. We are grateful to the 700 staff, patients and partners who came together to provide detailed ideas and input into this document, challenging us to make impactful changes and highlighting priority areas for improvement.

As well as taking seriously our responsibility to reduce our carbon footprint to limit our negative environmental impact, improving population health is another important driver for this work. In fact, climate change is recognised as having a negative impact on health and, particularly in deprived areas it can exacerbate health inequalities. At OUH, we serve populations within Oxfordshire and beyond from across the demographic and socioeconomic scale.

The NHS is responsible for 40% of public sector emissions and 5% of the UK's carbon emissions totally.



Consistent exposure to air pollution is a known cause of breathing difficulties and other long-term conditions in the lungs and the heart. Research by Kings College London highlighted that in Oxford alone, an extra one adult and one child are hospitalised with asthma on days where air pollution is higher. We know that working to make improvements in local air quality, and working with our partners to ensure local plans are aligned to the same goal, is vital if we are going to contribute positively to the health outcomes of our local population.

We are committed to make the changes set out in this document and are grateful for the huge enthusiasm, passion, and shared commitment we have seen across our staff and community in helping us get there. We also look forward to working with partners across Oxfordshire and beyond to find innovative ways to together reduce our environmental impact and to deliver our services more sustainably for the years to come.



Professor Sir Jonathan Montgomery



Dr Bruno Holthof

Building a Greener OUH

Our Drivers for change

This document outlines our intention to become 'net zero carbon' by 2040. This is in line with local, national and international drivers.

UN Goals

International

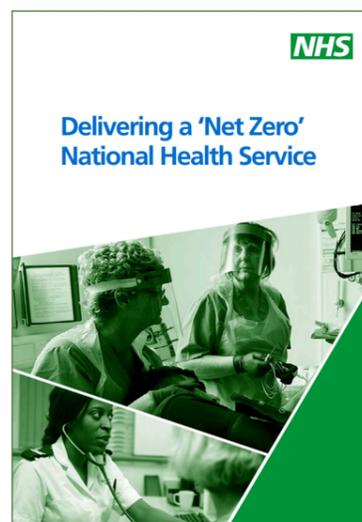
Building a Greener OUH is aligned with many of the United Nations 17 Sustainable Development Goals. These ambitious goals aim to end all forms of poverty, fight inequalities and combat climate change.



For a Greener NHS Commitment

National

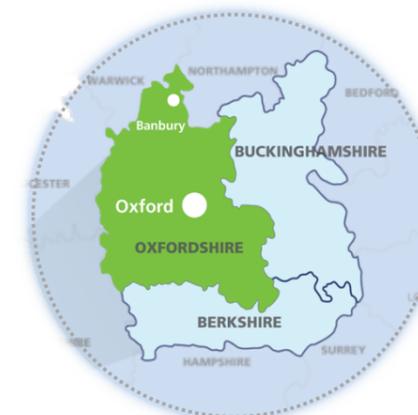
In October 2020, NHS England and NHS Improvement published their 'Delivering a net zero NHS' report, setting their ambition to be the world's first net zero national health service. It sets a target date of 2040 for net zero carbon emissions that the NHS controls directly (NHS Carbon Footprint).



Oxfordshire and Beyond

Regional

As a tertiary centre we serve patients locally across Oxfordshire, regionally across the Thames Valley and South East, as well as national and international specialist services and innovations. We provide a vast range of services across 4 hospital sites and an additional 44 locations in the community.



Oxford

Local

In February 2021, we signed the Zero Carbon Oxford Partnership charter, joining forces with other major organisations and businesses in Oxford to support the aspiration of achieving

net zero carbon emissions as a city by 2040, working together to share best practise, develop funding bids and lobby the UK government for sustainable powers, policy and funding.





Building a Greener OUH Together

Sustainability is a key priority for our staff – 98% of staff surveyed told us that they think it is important that OUH works in a way that supports the environment.

Building a Greener OUH is built on the ideas and inputs of over 700 of our staff, patients and partners who came together in listening events and surveys to share their thoughts.

What we heard:

What you think we're doing **well**:

1. Popular **Cycle 2 Work** salary sacrifice scheme helping staff to buy bicycles
2. **Recycling bins** for some materials including paper and cardboard
3. New **LED lights** as part of the LED lighting project – reducing our carbon footprint and saving energy

What you think we could do **better**:

1. Support staff to travel to work more sustainably with **improvements to active travel facilities** and **public transport**
2. Provision of **more electric vehicle charging points**
3. **Remove paper** from our pathways and processes

Staff felt we could do more to improve resource efficiency, reduce carbon emissions and reduce waste. Across the Trust, the top three priority areas identified for action were:

The top three priority areas:



Reduction in single use items and unnecessary plastic packaging



Recycling and waste disposal



Travelling to work

Some further examples of what we heard, and questions asked by staff:

Building collective responsibility

"Feeling part of the solution is important - hearing about the positive effects environmental initiatives have **encourages me to do more**. Hearing about the negative effects of non-green activities makes me **stop and think**."

Increasing cycling to our sites

"**Safer cycle routes**. Better cycle storage at work. Better staff wash facilities at work. [would encourage me to act in a way that supports the environment]"

Environmentally friendly cleaning

"Can we use more sustainably sourced and **biodegradable cleaning products**?"

Reduce unnecessary packaging

"[we should] go with suppliers who are actively trying to **reduce their packaging**, encourage less waste and promote a green agenda."

'Whole life' impact

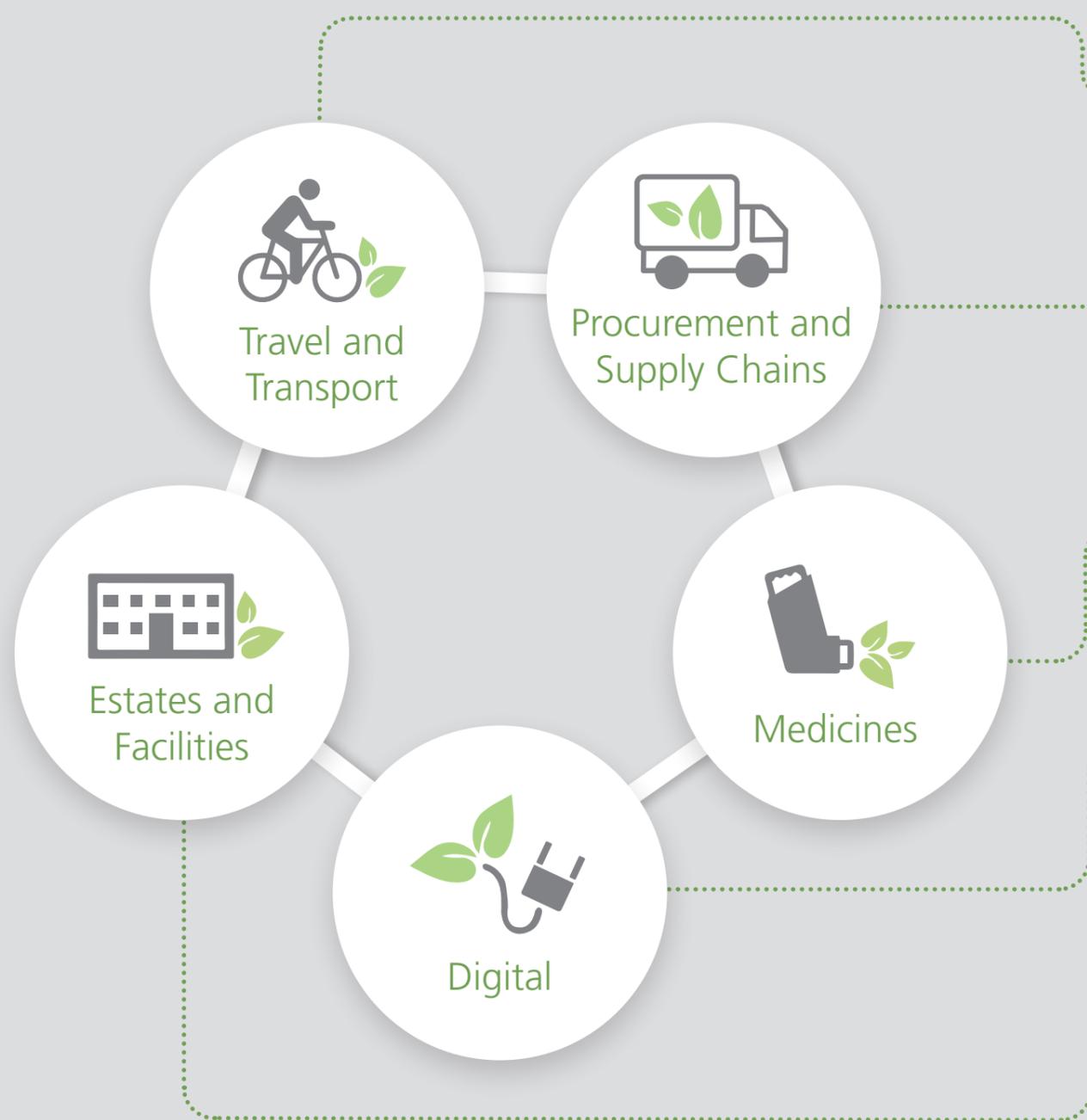
"We need to consider the **lifelong impact** of the products we buy"

More plant-based meal options

"More **vegan and vegetarian options** available at hospital cafés and restaurants would be good."

Our Scope

Priority areas for action:



Our key actions:

- **Travel and Transport**
 - Invest in active travel
 - Support the electrification of the NHS fleet
 - Reduce unnecessary journeys
- **Procurement and Supply Chains**
 - Buying green
 - Focusing on inventory and supply chain management
 - Working to reduce single use plastics
- **Medicines**
 - Anaesthetic gas review
 - Promoting clinically appropriate prescription of low carbon inhalers
 - Taking tablets
- **Digital**
 - Care for our patients closer to, or at home
 - Go truly paperless
 - Low-carbon digital
- **Estates and Facilities**
 - Building sustainably
 - Enhancing wellbeing
 - Greener cleaning and catering



Travel and Transport

Why this matters:

Approximately 3.5% of all road travel in England relates to patients, visitors, staff and supplies to the NHS. Given the number of journeys undertaken on behalf of the Trust, travel and transport is a key area to focus on.

Our key actions:

1

Invest in active travel

Supporting our staff to access active travel options by extending our cycle to work scheme and increasing facilities and storage for cyclists.



2

Support the electrification of the NHS fleet

By investing in ultra-low emission and zero-emission vehicles for owned and leased fleets. More than 75% of cars already leased by staff on our car lease scheme are electric vehicles.

3

Reduce unnecessary journeys

We are helping our staff and our patients to reduce their journeys, embracing virtual technologies for patient care and agile working where we can, caring for patients in their homes and reducing their need to visit our sites.

How will we measure our success?

- ✓ Number of staff using the **cycle to work scheme** or accessing discounted public transport
- ✓ Feedback from our bi-annual **Staff Travel and Transport survey** asking staff for their views
- ✓ **Reduction in cars** coming to our sites by utilising tools such as virtual appointments and remote consultations

What we are already doing:

Last year, we installed our first Electric Vehicle Charging points at the John Radcliffe hospital in Headington, supporting our staff to charge and park their electric vehicles at work. We are working to roll out more electric vehicle charging points across our sites.





Procurement and Supply Chains

Why this matters:

The NHS supply chain accounts for approximately 62% of total carbon emissions in the NHS and is a clear priority area for us at Oxford University Hospitals. This is an opportunity to use our individual, and our collective, purchasing power and decisions to reduce carbon embedded in our supply chains.

Our key actions:

1

Buying green

We will build sustainability into the scoring for award of tenders and choosing which products we purchase. We will engage with our suppliers on sustainability and procure products that minimise packaging use and offer innovative solutions to waste reduction, including take back schemes.

2

Focusing on inventory and supply chain management

As well as reducing unnecessary buying and waste, we will also work with suppliers to consolidate our deliveries and reduce traffic onto our sites.

3

Working to reduce single use plastics

Where possible we will reduce our single use products across our sites with reusable alternatives, and to be transparent where this is not feasible.



How will we measure our success?

- ✓ By implementing a **sustainability scoring mechanism** for the tenders we award and the products we buy
- ✓ A **reduction** in the **number of deliveries** we receive
- ✓ A **reduction** in the number of **single use items purchased** at our hospitals

What we are already doing:

We partnered with local bicycle couriers to deliver chemotherapy and parenteral nutrition from the local depot to our John Radcliffe and Churchill hospitals. In the first ten months of the partnership, over 36,000 products were delivered. The teams are now expanding their sustainable deliveries to the Horton General Hospital with e-motorbikes.





Medicines

Why this matters:

Medicines account for 25% of emissions in the NHS with inhalers and anaesthetic gases contributing significantly, at 3% and 2.5% respectively. For example, one tonne of Desflurane, one of the anaesthetic gases we use every day in the Trust, has the global warming potential of 3,714 tonnes of CO₂. Therefore, medicines present us with a key opportunity to reduce the carbon emissions related to our prescribing and use of medicines and medical products.

Our key actions:

1

Anaesthetic gas review

We commit to mapping our anaesthetic carbon footprint and reducing the proportion of desflurane to sevoflurane used in surgery. We will also review our transportation, use, and explore the disposal of nitrous oxide across the Trust.

2

Promoting clinically appropriate prescription of low carbon inhalers

We will work to significantly reduce the levels of nitrous oxide and fluorinated gases emitted through inhalers, by promoting dry powder inhalers with lower greenhouse gas emissions overall when suitable.



3

Taking tablets

We are expanding on the great work already underway by the paediatric cystic fibrosis team to teach children and young people with long term conditions to take their medicine in a tablet form where possible. Liquid medicines often have shorter expiration dates, are unpalatable to taste, and need refrigeration. There are also a number of sustainability benefits to taking tablets over liquid medications with reduced production, transportation and waste.

How will we measure our success?

- ✓ Instating a **'Green Theatres' project**, outlining our baseline theatre carbon emissions per patient and our improvements against this
- ✓ An **increase** in patients prescribed a **lower carbon inhaler**
- ✓ Feedback from **children** with **long term health conditions** and their families

What we are already doing:

This year we worked with partners in primary care to update the Oxfordshire guidelines for Asthma and Chronic Obstructive Pulmonary Disease to ensure that patients are offered lower carbon inhalers where appropriate.





Digital Transformation

Why this matters:

Transforming how we work and working in a more digital, efficient way supports our net zero ambitions. We will harness existing digital technology and systems to streamline our service delivery and supporting functions while improving the associated use of resources and reducing carbon emissions.

Our key actions:

1

Care for our patients closer to, or at home

We will work with services to continue using technology to reduce unnecessary patient journeys where clinically appropriate, to care for people in their homes using remote monitoring technology and virtual consultations. The average carbon footprint of each kilometre travelled by car to our hospital is 180g of CO₂. With almost 1.3m patient contacts a year, we have a huge opportunity to reduce our Scope 3 emissions.

2

Go truly paperless

We will progress our Digital by Default agenda, removing paper from all Trust processes, digitising medical records and making our patient communications digital where appropriate too.



3

Low-carbon digital

We will be mindful of the true carbon footprint associated with our digital services and develop a blueprint for low carbon digital care in line with NHS England Digital Maturity Framework and the 'Greening Government' ICT and Digital Strategy 2020-2025.

How will we measure our success?

- ✓ Measuring the number of **virtual outpatient appointments** and mapping the resultant travel avoided (and subsequent carbon emissions avoided)
- ✓ A reduction in the **number of pages and documents printed** across the Trust
- ✓ Improved **scoring** against the **NHS England Digital Maturity Self-Assessment**

What we are already doing:

When the pandemic hit, our digital and clinical teams quickly mobilised to safely deliver outpatient care virtually where possible. Between March 2020 and September 2021 more than 280,000 telephone and video consultations took place.



Estates and Facilities

Why this matters:

NHS estate and its supporting facilities comprise 15% of the total NHS carbon emissions profile and is an important area of focus at OUH. We know that the energy used across our four hospital sites alone produces more than 40,000 tonnes of Carbon Dioxide each year.

Our key actions:

1

Building sustainably

We will work towards ensuring that all new estate is built, and our current estate repaired, using lower carbon processes with flexibility built in for changing demands on our services.

2

Enhancing wellbeing

We encourage biodiversity and green space for our people and our patients to enhance their wellbeing. Over 97% of our staff feel there is a benefit to accessing green space on their, and their patients, health and wellbeing.



3

Greener cleaning and catering

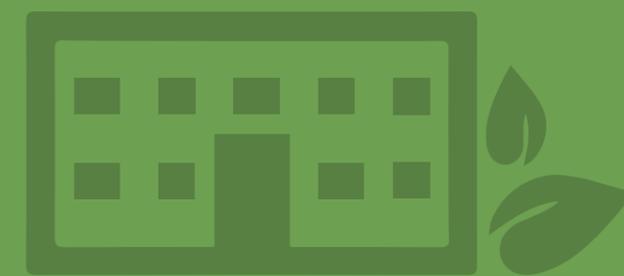
We will switch to chemical-free cleaning products wherever possible and removing all single-use plastics from our contracted catering services. We will also work our catering suppliers to reduce the amount of packaging coming into the hospital in the first instance, as well as committing to sourcing more fresh produce from local businesses.

How will we measure our success?

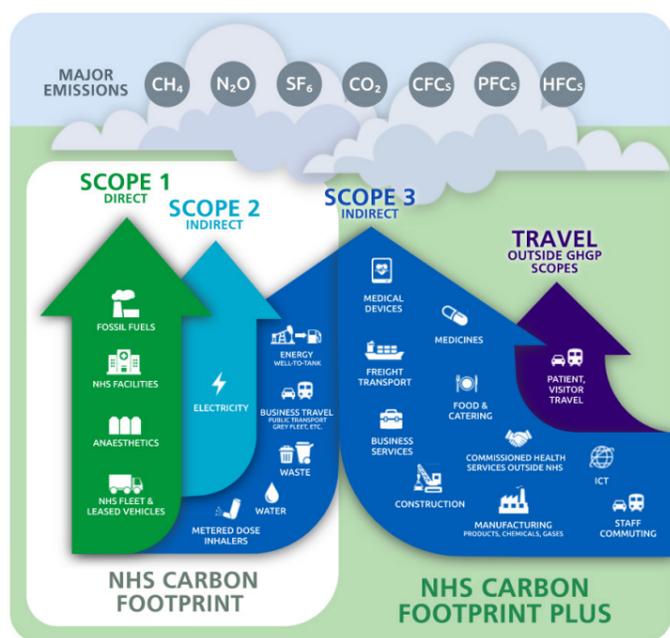
- ✓ By assessing our **new capital projects** against sustainability methodology scores such as BREEAM (Building Research Establishment Environmental Assessment Method)
- ✓ Measuring **staff feedback** and wellbeing via the National Staff Survey
- ✓ Total **waste disposal** from catering department including a **reduction in food waste** and 'miles travelled' by our fresh produce

What we are already doing:

Opening in Spring 2022, the new OUH Swindon Radiotherapy centre will not only provide patients and their families a service closer to home and reduce their travel time (more than 13,000 journeys to Oxford every year), but will also feature 60 solar panels that will help power the building.



Our Carbon Impact



The 'Delivering a Net Zero NHS' report published by NHS England and NHS Improvement sets out a comprehensive NHS Carbon Footprint and NHS Carbon Footprint Plus.

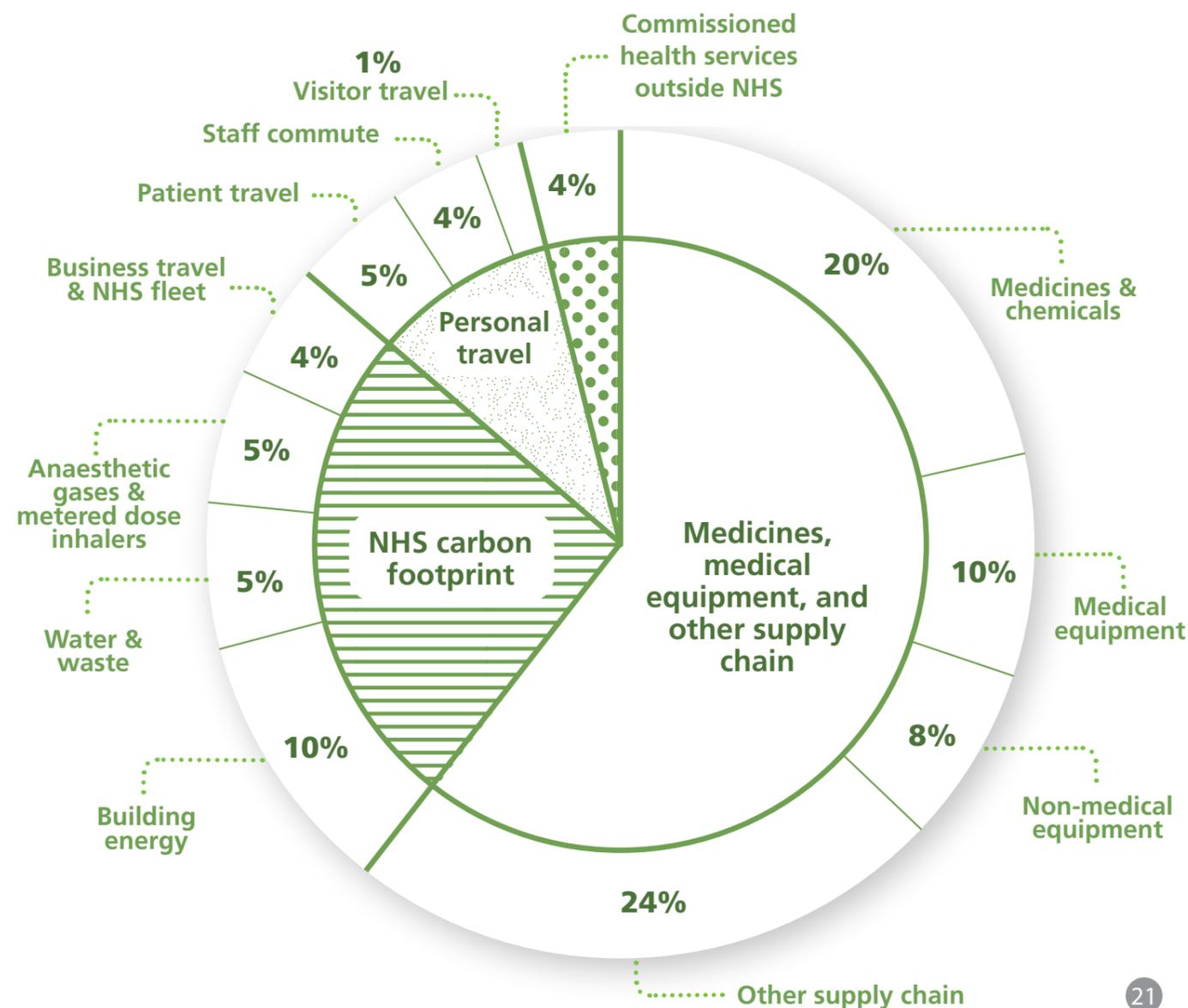
These span across the 3 scopes, direct and indirect, and accounts for both the emissions that the NHS has control over ('NHS Carbon Footprint') as well as the emissions that the NHS has influence over (combined together, both are defined as the 'NHS Carbon Footprint Plus').

Using the NHS England carbon footprint baseline methodology*, our carbon impact at Oxford University Hospitals is approximately:



The Building a Greener OUH framework sets out our intention to reduce our impact on the environment and to deliver sustainable healthcare, with changes affecting both our NHS Carbon Footprint and our NHS Carbon Footprint Plus.

Sources of carbon emissions by proportion of NHS Carbon Footprint Plus:



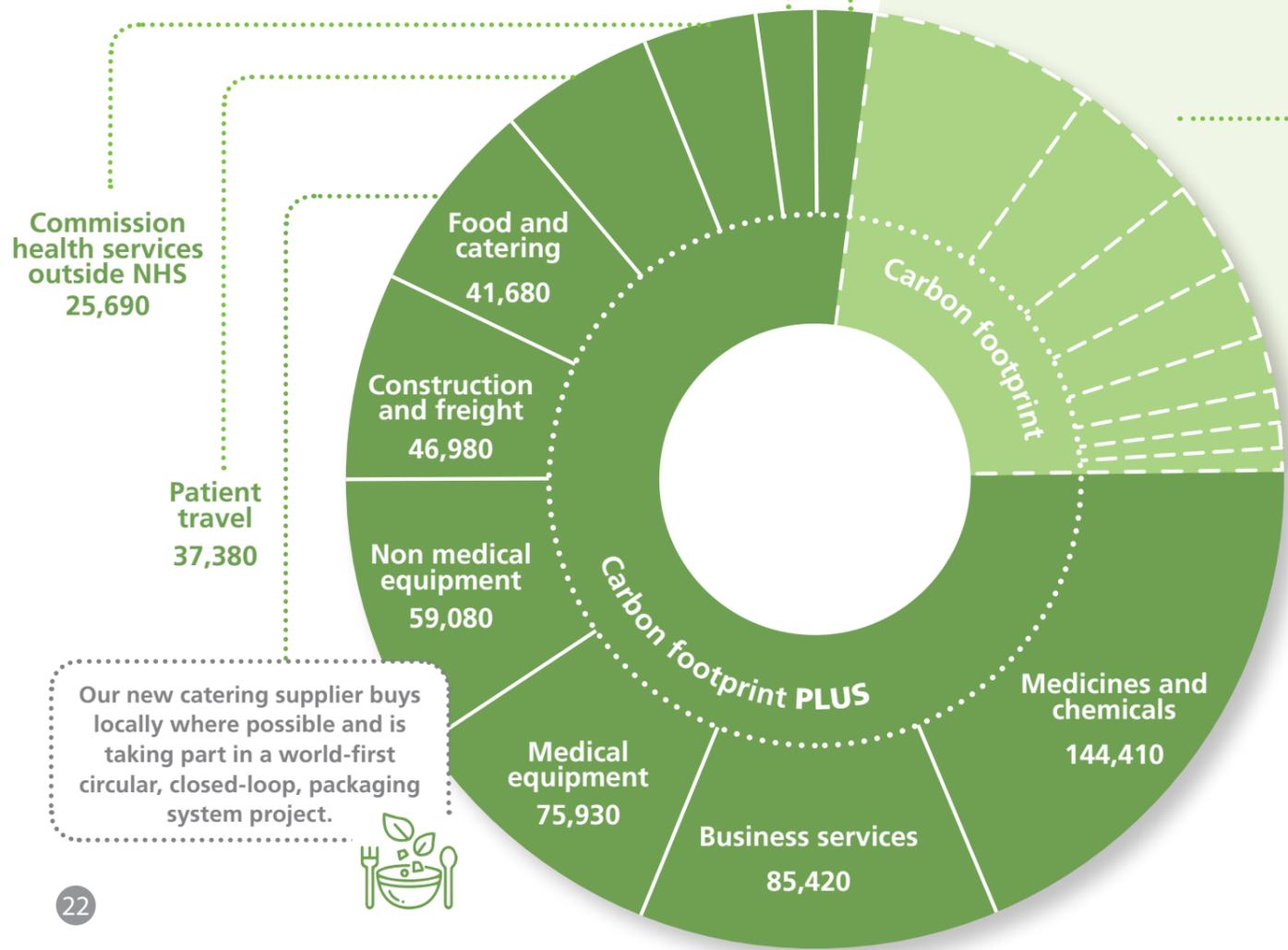
* Based on Tennison, I (2021) 'Healthcare's response to climate change: a carbon footprint assessment of the NHS in England' The Lancet Planetary Health Vol. 5, Issue 2, E84-92, [https://doi.org/10.1016/S2542-5196\(20\)30271-0](https://doi.org/10.1016/S2542-5196(20)30271-0) as turnover as an apportionment of NHS England budget.

Our System Impact

We will work in collaboration with our partners in the Buckinghamshire, Oxfordshire and Berkshire West Integrated Care System (BOB ICS) to share learning, make changes across our communities and develop our ICS Green Plan.

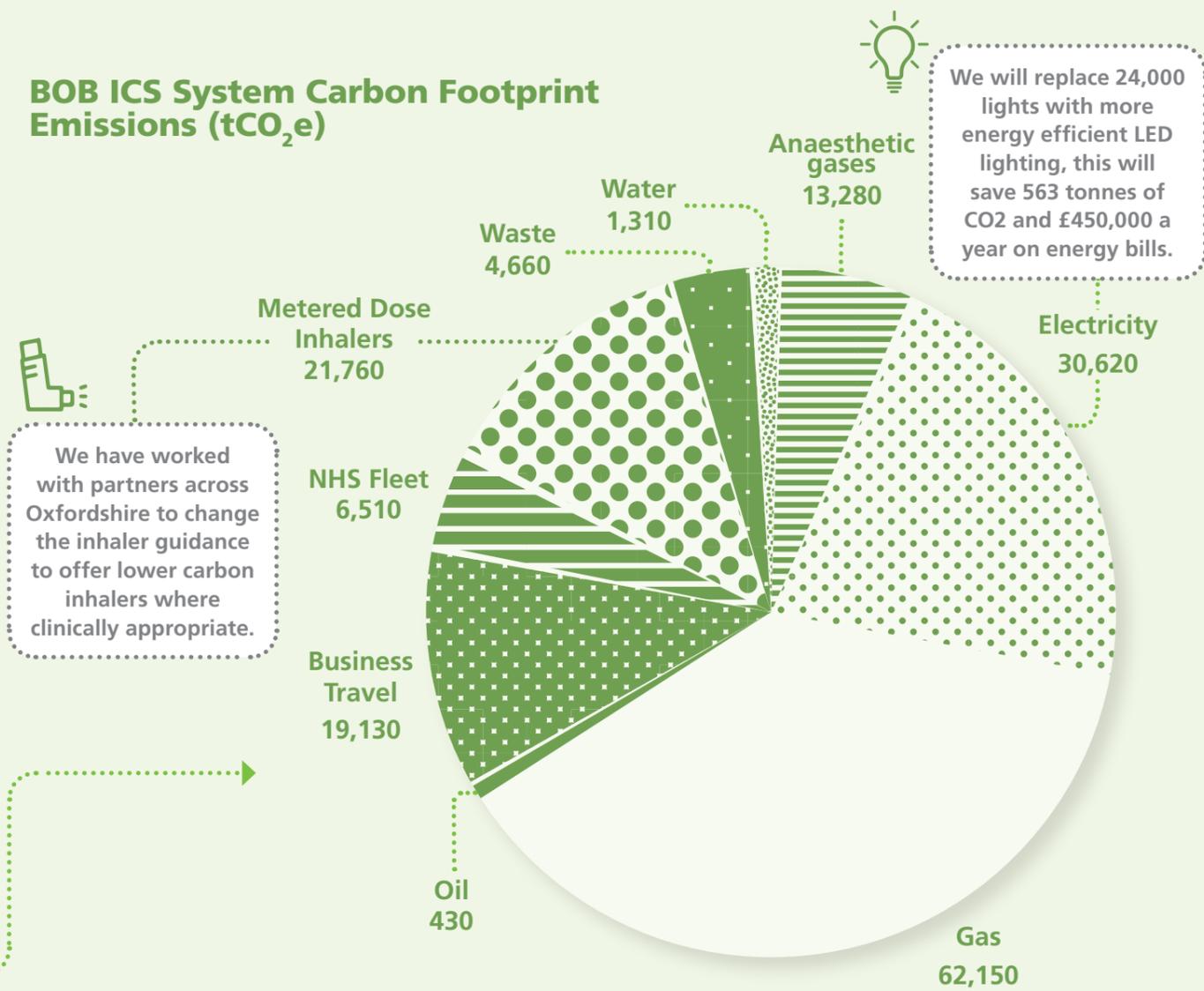
We will extend our Cycle to Work scheme and increase storage and facilities for cyclists.

BOB ICS System Carbon Footprint and Footprint Plus Emissions (tCO₂e)



Our new catering supplier buys locally where possible and is taking part in a world-first circular, closed-loop, packaging system project.

BOB ICS System Carbon Footprint Emissions (tCO₂e)



We have worked with partners across Oxfordshire to change the inhaler guidance to offer lower carbon inhalers where clinically appropriate.

We will replace 24,000 lights with more energy efficient LED lighting, this will save 563 tonnes of CO₂ and £450,000 a year on energy bills.

Spotlight on: National Supply Chain

The NHS uses products from more than 80,000 suppliers, encompassing medical equipment, food, business and office goods. With more than 60% of the NHS carbon footprint based within the NHS supply chain, every supplier will need to support if we are to reach net zero.

- From April 2023:** the NHS will require all suppliers with new contracts above £5 million per annum, to publish a carbon reduction plan for their direct emissions. From April 2024, the NHS will expand this requirement for all new contracts, irrespective of value.
- From April 2027:** all suppliers to publish a carbon reduction plan that takes into account the suppliers' direct and indirect emissions.
- From April 2028:** new requirements will be introduced for the provision of carbon foot-printing for individual products supplied to the NHS.
- From 2030:** suppliers will only be able to qualify for NHS contracts if they can demonstrate their progress towards net zero.

Taking this forward



We can only achieve our ambition of net zero carbon by 2040 by working together with our staff, partners and local community to implement this both across the organisation, and in our wider system.

How will we?:

Implement Sustainability across our Organisation



- ✓ Build sustainability into our **service plans** and **annual business planning process**, empowering teams to **deliver services in a way that reduces our impact on the environment**.
- ✓ Create our '**Roadmap to Net Zero**', an action plan outlining how we will achieve our goals set out in this document, our targets and our milestones.
- ✓ Review our plans for **organisational readiness for extreme weather events**, flooding and heatwaves. These include specific welfare support for staff and patients and all new builds undergo a full ecological survey to reduce our impact on the surroundings.

Work with our System to promote Sustainability



- ✓ Work together with our partners across the **Buckinghamshire, Oxfordshire and Berkshire West Integrated Care System (BOB ICS)** to co-create our system-wide Green Plan.
- ✓ **Collaborate with local organisations including councils and universities** to share best practise, deliver carbon reduction initiatives and set our local sustainability goals.
- ✓ Recognise our role as an **Anchor Institution** in our local community and the positive contributions we can make – from reducing our environmental impact as set out above, to working to **address health inequalities, purchasing more locally** and **supporting local economic growth**.

Thank you

Keep in touch:

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