

# OUR GREEN PLAN

Creating a greener LHCH  
2025-2028

LHCH MAIN  
ENTRANCE

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# FOREWORD

**Climate change has been widely recognised as one of the greatest threats to public health of the 21st century.**

As the biggest employer in this country, the NHS has a significant role to play in helping to tackle this crisis. At LHCH we understand both the significant threat that climate change presents to the people in our region and our responsibility to take action.

In 2019 it was estimated that the NHS produced 5.4% of the UK's greenhouse gas emissions. The NHS has therefore set itself the ambitious target of reaching net zero carbon emissions by 2040.

At LHCH we have started the work to make ourselves more environmentally sustainable. We developed our first ever Green Plan in 2022 and in 2025 we collated a comprehensive report on our progress against this original Green Plan. We have achieved a lot – and a summary of our journey so far is included on page 5 – but there is much left to do.

Our refreshed Green Plan for 2025-28 sets out our approach to sustainability over the next three years. Implementing the actions set out in this plan will enable us to make sustainable changes and incremental reductions in our carbon emissions, air pollution and waste over the next three years.

As LHCH comes together with the other acute and specialist hospital providers in Liverpool to form the University Hospitals of Liverpool (UHL) Group, there is clear potential for us to work ever more closely with our NHS partners on sustainability. Coming together as the UHL Group will allow us to make an even bigger strides in reducing our environmental impact over the coming years.

**“The world is reaching the tipping point beyond which climate change may become irreversible. If this happens, we risk denying present and future generations the right to a healthy and sustainable planet – the whole of humanity stands to lose”**

Kofi Annan, Secretary-General of the UN 1997-2006

**“The greatest threat to our planet is the belief that someone else will save it”**

Robert Swan, British adventurer



# THE NATIONAL PICTURE

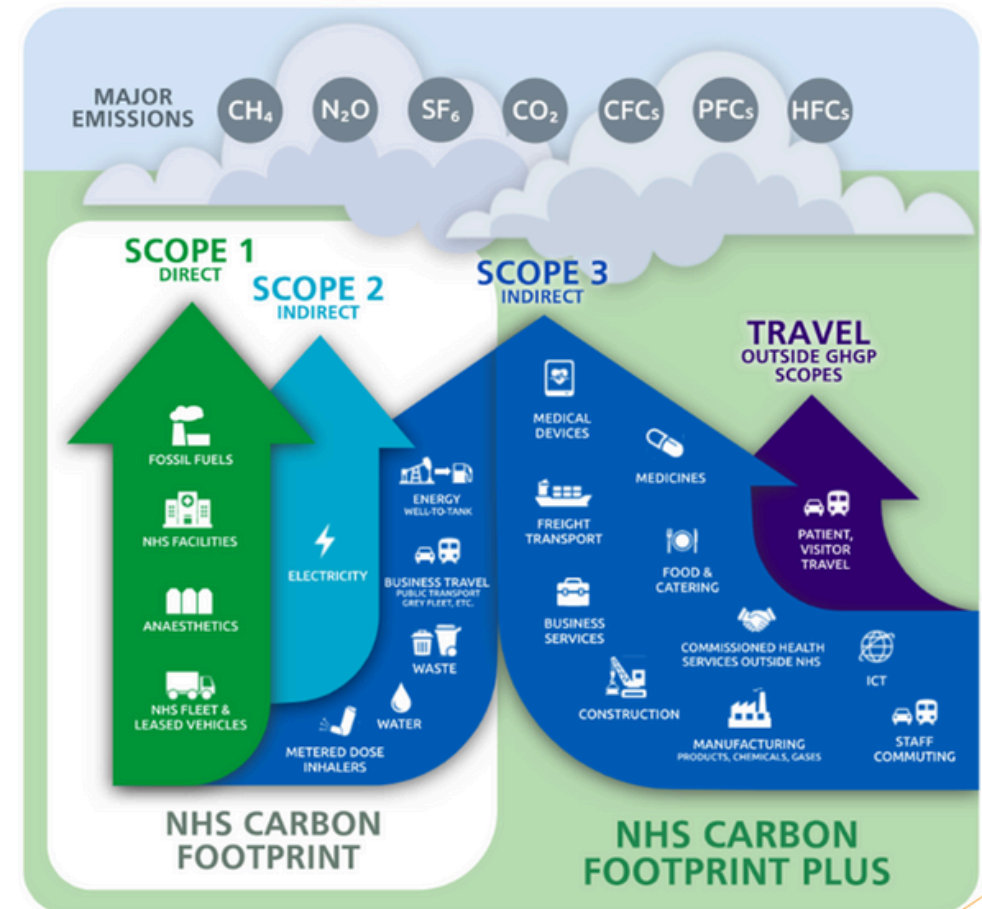
**The NHS currently contributes approximately 5% of the UK's total carbon emissions (around 27 million tonnes of carbon each year).**

This means that we are a big part of the problem, but also means that we can be a big part of the solution.

In 2020, the NHS became the first healthcare organisation in the world to declare its intentions to reach carbon net zero.

The Delivering A Net Zero National Healthcare Service report sets out two targets for the reduction of emissions:

- To reach net zero by 2040 for the emissions we control directly (NHS Carbon Footprint) - with the ambition of reaching an 80% reduction between 2028 to 2032
- To reach net zero by 2045 for the emissions we can influence (NHS Carbon Footprint Plus) - with the ambition of reaching an 80% reduction between 2036 to 2039



*Greenhouse Gas Protocol (GHGP) scopes in the context of the NHS  
(Source: Delivering a 'Net Zero' National Health Service)*



# WHAT WE CAN DO

Our LHCH Green Plan is set out in ten key themes. Here are our ambitions for each of these themes:

## CORPORATE APPROACH

Ensure that sustainability has Board-level support and is embedded as a key consideration and business as usual throughout everything we do at LHCH



## CARE MODELS

Work with our staff and patients to develop and deliver more efficient and sustainable healthcare



## WORKFORCE

Create a culture of sustainability at LHCH and inspire and empower our workforce to play their part in helping us to achieve our net zero ambitions



## TRAVEL & TRANSPORT

Promote low-carbon travel options for our staff and reduce the transport emissions associated with our services



## ENERGY

Manage and upgrade our buildings to minimise the emissions associated with energy use and work towards de-carbonising our estate by replacing our reliance on fossil fuels with more renewable sources of energy



## WASTE & WATER

Generate less waste, reuse and recycle more, ensure that unavoidable waste is managed in the most sustainable way and increase our water efficiency



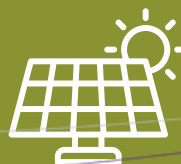
## FOOD, CATERING & NUTRITION

Provide high quality, healthy, nutritious and sustainable food options for our patients, staff and visitors and explore innovative ways to reduce our food waste across LHCH



## GREEN SPACES & BIODIVERSITY

Improve our green spaces in a way that supports biodiversity enhancement, reduces air pollution, captures carbon and enables our local wildlife to thrive



## SUPPLIERS & PARTNERS

Ensure that we work with suppliers and partners who are aligned to our sustainability goals and include a weighting for sustainability and social value in procurement processes



## ADAPTATION

Become 'climate ready' by ensuring that our services and estate are fully adapted to deal with the challenges that climate change brings



# OUR JOURNEY SO FAR

**We have already taken significant steps to help us move toward achieving our net zero ambitions, including:**

- Produced the Trust's first Green Plan in 2022
- Launched our "Gloves Aware" campaign to raise awareness and reduce inappropriate glove use
- Implemented telehealth initiatives incorporating remote monitoring, prehabilitation, and rehabilitation interventions to enhance health outcomes and reduce hospital admissions for patients on waiting lists.
- Transitioning from face masks to nasal cannulas for post-surgery patients in the post-operative critical care unit to improve patient comfort and reduce waste.
- Increased dry powdered inhaler use by 10%
- Switched to reusable gowns in theatres and cath labs
- Removed desflurane vaporisers from its anaesthetic practices, contributing to a significant reduction in carbon emissions
- Dedicated sustainable travel page on the staff intranet, providing information on a range of travel options
- Our sustainability work is introduced to new starters in all corporate induction sessions
- Conducted travel surveys in collaboration with our NHS partners
- Offer a cycle to work scheme and provide active travel facilities
- Staff have access to a Bike User Group, a collaborative initiative with Liverpool University Hospitals
- Installed 10 EV charging stations on site
- Transitioned to using recycled paper across site
- Introduced textile recycling boxes on site, diverting textiles from landfill
- Introduced an electronic menu system to reduce paper use and minimise food waste
- Worked with our catering partners, ISS and Medirest, to adopt more environmentally responsible practices – replacing single-use plastics with wooden and recyclable utensils
- Introduced Steamplicity meals, which use innovative micro steam technology to cook meals fresh on-site and reduce food waste and packaging
- Enhanced our green space by planting 81 trees, along with wildflower patches, bird boxes, and over 200 crocus bulbs
- Implemented the "Sharp Smart" initiative, which ensures more sustainable disposal of sharps waste
- Implemented a take-back programme aimed at reducing single-use medical waste from operating theatres

**Over the pages that follow we will explore each of our ten themes in more detail, outlining what we want to achieve for each, and how we plan to do it...**

# CORPORATE APPROACH



## What we want to do:

- Ensure that sustainability has Board-level support and is embedded as a key consideration and business as usual throughout everything we do at LHCH

## How we will do it

- Embed sustainability and climate emergency action into the culture of LHCH
- Work ever more closely with our partners as we come together as the University Hospitals of Liverpool (UHL) Group to maximise our collective impact on environmental sustainability
- Quantify and report our carbon emissions at regular intervals to demonstrate programme progress
- Empower our colleagues to embed sustainability as a key consideration in their work areas
- Upskill our workforce by encouraging training related to this subject and ensuring that colleagues have capacity to address the climate emergency within their role
- Introduce environmental and sustainability criteria into procurement processes and proposals for service development alongside a focus on cost and availability

- Communicate our Green Plan to patients, visitors and the local community via our external-facing website and relevant channels
- Put the appropriate governance processes in place to support the sustainability agenda
- Include information about sustainability within our advertisement and recruitment process
- Include sustainability as an award category at our annual LHCH staff awards

## How we will measure it:

- Reduction in carbon emissions across all areas of LHCH, captured by regular carbon reporting
- Percentage of staff completing sustainability training

**“It is absurd to question whether we can afford to keep our planet liveable”**

Fiona Harvey, Environmental journalist





# CARE MODELS



## What we want to do:

- Work with our staff and patients to develop and deliver more efficient and sustainable healthcare

## How we will do it:

- Identify a clinical lead for sustainability and develop a clinical working group to target areas of opportunity and enable shared learning and best practice
- Seek to review and optimise the care that we deliver with a focus on developing and providing more low-carbon care pathways
- Incorporate the sustainable use of resources and consumables into our care models and include this as a decision criteria when developing care pathways
- Support quality improvement projects in clinical areas that focus on a measurable reduction in carbon emissions
- Continue to identify an optimal balance between in-person care and telemedicine, making use of remote monitoring where appropriate – such as cardiac remote monitoring
- Implementing a digital solution that aids clinicians to communicate with patients. The aim is to improve patient experience, reduce DNA rates and provide a convenient way for patients to manage their appointments.

- Continue to utilise the most environmentally sustainable options for our anaesthetic gas use
- Calculate the environmental impact of specific care models to identify the most effective ways of minimising our carbon footprint
- Seek the views of patients, staff and local partners to improve services in a way that reduces our environmental impact

## How we will measure it:

- Assess the number of quality improvement projects that incorporate an element of sustainability or carbon reduction
- Report on the quantity of in-person and telemedicine appointments taking place
- Continue to monitor our use of anaesthetic gases and single-use plastics
- Begin to explore the impact of our use of medicines, and their associated emissions

**“Given the global health imperatives, the NHS must stick to its net zero ambitions. There is no trade-off between climate responsibilities and reducing waiting lists.”**

Professor Lord Darzi of Denham

**“Medicines account for 25% of emissions within the NHS.”**

Delivering a Net Zero NHS



# WORKFORCE



## What we want to do:

- Create a culture of sustainability at LHCH and inspire and empower our workforce to play their part in helping us to achieve our net zero ambitions

## How we will do it:

- Encourage, invest in and upskill our workforce to drive and implement staff-generated sustainability initiatives across LHCH
- Keep staff members updated on our sustainability work via our communications channels to ensure that colleagues understand the role that they can play with regards to tackling climate change
- Reintroduce and expand our LHCH Green Champions network and encourage our champions to complete the Greener NHS programme's "Building a Net Zero NHS" course
- Launch of staff-wide behaviour change campaigns (including an energy saving initiative)
- Support our workforce to digitise more of their paper processes (Workforce & OD, Pharmacy, Research and Innovation)

- Recognise and acknowledge staff who champion sustainability initiatives within their work areas, and include sustainability as an award category in our LHCH staff awards
- Explore options for obtaining colleague's views and opinions of the wider sustainability agenda through staff surveys

## How we will measure it:

- Number of LHCH Green Champions
- Number of sustainability projects generated by staff members
- Measuring the carbon impact of behaviour change campaigns

**"No one can do everything, but everyone can do something."**

Max Lucado, Author

**Our workforce are one of the greatest assets that we have at LHCH with regards to bringing about sustainable change. Our ambition is to harness the enthusiasm and support of colleagues from across LHCH to drive the implementation of our sustainable actions and reduce our carbon footprint.**



# TRAVEL & TRANSPORT



## What we want to do:

- Promote low-carbon travel options for our staff and reduce the transport emissions associated with our services

## How we will do it:

- By 2026 all vehicles offered through our NHS salary sacrifice scheme will be ultra-low or zero-emission vehicles
- Ensure that our sole LHCH vehicle is replaced with an ultra-low or zero-emission vehicle by 2028
- Promote our electric vehicle charging infrastructure and explore the introduction of more charging points where possible
- Introduce a structured car-sharing initiative in partnership with other local NHS trusts
- Reduce the emissions associated with our business mileage and grey fleet
- Continue to optimise our medicines delivery service, reducing the number of road miles that this accounts for
- Seek to influence planning and investment in public and active travel to meet the needs of our staff and patients

- Continue to encourage our staff to make a greener commute and continue to conduct staff travel surveys at regular intervals
- Establish a site active travel group and upgrade our shared active travel facilities

## How we will measure it:

- Staff travel survey data
- Business mileage and grey fleet data
- CPL medicines delivery data
- Number of staff participating in green travel initiatives

**“The NHS fleet is the second largest fleet in the country [after Royal Mail], consisting of over 20,000 vehicles travelling over 460,000,000 miles every year. This fleet, combined with the impact of commissioned services and staff travel, directly contributes to the 36,000 deaths that occur every year from air pollution. This burden is borne disproportionately by those with pre-existing health conditions, older people, and children.”**

NHS Net Zero Travel and Transport Strategy



# ENERGY



## What we want to do:

- Manage and upgrade our buildings to minimise the emissions associated with our energy use and work towards decarbonising our estate by replacing our reliance on fossil fuels with more renewable sources of energy

## How we will do it:

- Identify and implement further opportunities for reducing our energy consumption
- Explore opportunities for the installation of on-site renewable energy sources, including solar panels
- Continue to carry out major investments in a way that contributes to the reduction of our environmental impact (upgrading doors, glazing, roofs, insulation, external cladding)
- Ensure that new building works and refurbishments conform to low-carbon standards (including the Net Zero Carbon Hospital Standard)
- Produce a heat decarbonisation plan and conduct regular decarbonisation audits
- Upgrade our estate infrastructure with more sustainable alternatives

- Develop and launch a LHCH-wide printing policy to improve practices, saving up to 75% of the energy associated with our printing
- Launch an in-house energy saving software solution to power down equipment at specific times such as PCs and ventilation plant
- Collaborate with regional partners and anchor institutions to accelerate energy decarbonisation

## How we will measure it:

- Energy consumption and BMS data
- Quantifying the carbon emissions from our energy use (tonnes of co2e)
- Proportion of our energy obtained from renewable sources
- Carbon reduction impacts of energy reduction schemes
- Installation of energy meters and sub meters across site

**“Life with dramatically lower energy consumption is inevitable, and it’s better to plan for it than to be taken by surprise.”**

Rob Hopkins, Environmental activist



# WASTE & WATER



## What we want to do:

- Generate less waste, reuse and recycle more, ensure that unavoidable waste is managed in the most sustainable way and increase our water efficiency

## How we will do it:

- Produce a sustainable waste management plan for LHCH
- Continue to ensure that none of our domestic general waste ends up in landfill
- Introduce food waste and dry mixed recycling segregation and upgrade our waste signage to encourage the correct items to be placed in the correct bins
- Roll out a waste champions initiative
- Continue to make the switch to reusable consumables where appropriate
- Define a formal and consistent process for the sustainable disposal of our electronics and electrical equipment waste
- Introduce inhaler waste bins in pharmacy areas
- Implement an in-house furniture rehoming scheme

- Improve waste reporting across LHCH
- Include water-efficient appliances in building refurbishments

## How we will measure it:

- Waste generation data and reporting (ERIC & carbon reporting tool)
- Water usage data and emissions
- Regular audits of waste streams
- Number of waste champions recruited

**“There is no such thing as ‘away’. When we throw anything away, it must go somewhere.”**

Annie Leonard, Founder of The Story of Stuff

**“As one of the largest producers of waste in the country, it is vital that the NHS disposes its waste in a safe, efficient and sustainable manner, and we are only creating waste when absolutely necessary.”**

NHS Clinical Waste Strategy





# FOOD, CATERING & NUTRITION



## What we want to do:

- Provide high quality, healthy, nutritious and sustainable food options for our patients, staff and visitors and explore innovative ways to reduce our food waste

## How we will do it:

- Identify opportunities for procuring more seasonal and locally sourced food for our patients, staff and visitors
- Review the recently published NHS recipe bank and identify opportunities for making the switch to healthier, lower-carbon meal options (such as plant-based meals)
- Identify and implement opportunities for more sustainable food packaging across our on-site food providers
- Measure, monitor, minimise and segregate our food waste with the support of the food waste reduction roadmap toolkit and food and drink waste hierarchy

- Stopping the use of single-use plastics for all items in the catering environment – including plates, cups, covers and lids
- Move away from the use of disposables by exploring opportunities for making the switch to returnable items such as cutlery, cups and takeaway food containers

## How we will measure it:

- Proportion of our food obtained from local suppliers
- Proportion of low carbon meal options available
- Food waste data
- Volume of single-use plastic items used

**“It is important that all healthcare organisations see the intrinsic value in the view of ‘food as medicine’ and that it remains a standing item on the board agenda.”**

National Standards for healthcare food and drink, 2022



# GREEN SPACES & BIODIVERSITY



## What we want to do:

- Improve our green spaces in a way that supports biodiversity enhancement, reduces air pollution, captures carbon and enables our local wildlife to thrive

## How we will do it:

- Install additional resources to support our local wildlife (bird boxes, bat boxes, bug hotels, owl boxes)
- Plant additional native bulbs, trees and shrubs across our estate
- Continue to engage with external partners including NHS Forest, Mersey Forest and The Queen's Green Canopy
- Create additional no mow zones and wildflower meadows
- Explore opportunities for the introduction of an on-site herbal garden managed by staff volunteers
- Install signage, wayfinding signs and a sustainably-sourced artistic sculpture around the Wirral Glade
- Produce LHCH's first Biodiversity Management Plan

## How we will measure it:

- Regular green space audits
- Repeat of ecological assessments at specified time points
- Monitor usage of on-site resources to support wildlife

**“Surely we have a responsibility to leave for future generations, a planet that is healthy and habitable by all species.”**

Sir David Attenborough, Broadcaster and naturalist



# SUPPLIERS & PARTNERS



## What we want to do:

- Ensure that we work with suppliers and partners who are aligned to our sustainability goals and include a weighting for sustainability and social value in procurement processes

## How we will do it:

- Source sustainable products and materials and partner with environmentally and ethically conscious suppliers
- Work with procurement colleagues to standardise sustainability criteria for suppliers
- Encourage and support suppliers and partners to go beyond minimum requirements and engage with the Evergreen Sustainable Supplier Assessment to support a single conversation between LHCH and our suppliers regarding our sustainability priorities
- Work with suppliers to identify options for reducing plastic items such as packaging
- Monitor new and emerging technologies, innovations and funding opportunities which could support us with our net zero goals

- From April 2027, work with our suppliers to encourage reporting of carbon emissions for all scopes and targets (in line with the Net Zero Supplier Roadmap)
- Continue to maintain links with the sustainability teams of our NHS partners in a bid to align strategies, goals and projects where appropriate

## How we will measure it:

- Spend data for our consumables
- Proportion of suppliers and partners who have completed the Evergreen assessment
- Proportion of suppliers and partners with a compliant carbon reduction plan
- Proportion of suppliers and partners reporting their carbon emissions and targets from April 2027

**“The NHS can reduce emissions from its supply chain in three ways: more efficient use of supplies; low-carbon substitutions and product innovation; and by ensuring our suppliers are decarbonising their own processes.”**

Delivering a Net Zero NHS



# ADAPTATION



## What we want to do:

- Become 'climate ready' by ensuring that our services and estate are fully adapted to deal with the challenges that climate change brings

## How we will do it:

- Develop plans to mitigate the risks of climate change on our estate and services
- Create a contingency plan to ensure our services remain resilient to extreme weather such as heatwaves, storms and flooding
- Work through the Climate Adaptation Framework developed by weADAPT to identify an adaptation maturity rating for LHCH, and work towards improving this rating
- Ensure compliance with the NHS core standards for emergency preparedness, resilience and response to support business continuity during adverse weather events
- Review the UK's Climate Change Committee summary (updated every five years) which outlines climate change risks and opportunities currently facing the UK and continue to monitor the areas of high risk for LHCH

- Factor in the effects of climate change when making infrastructure decisions and designing new facilities (including enhancements like improved green spaces, drainage systems and passive cooling solutions)
- Explore training opportunities for our staff relating to dealing with extreme weather events

## How we will measure it:

- Maturity rating on the Climate Adaptation Framework
- Number of staff who have completed adaptation-related training





# IMPLEMENTING THIS PLAN

**Taken together, our actions will collectively support the delivery of our sustainability objectives and national carbon reduction targets.**

To successfully implement our Green Plan, it will be vital to have a clear governance structure for accountability and reporting in place.

Partnership working will be essential for the delivery of this programme. This includes working with our partners as we come together in the UHL Group in the coming months. We will review our sustainability governance arrangements as we join the Group so that we continue to deliver against this important agenda and that we act as one with our Group partners to maximise our environmental impact.

## Enablers

### Funding and financial mechanisms

The Sustainability Programme Manager will work closely with Estates and Facilities colleagues to identify, apply for, and secure external funding and grants to aid us in our sustainability efforts over the following years (such as Public Sector Decarbonisation Funding, Low Carbon Skills Fund, community funding, and National Energy Efficiency Funding).

### Communications and engagement

We will continue to work closely with our communications colleagues to share updates from the sustainability programme, with information on how our staff can support us even further to achieve our net zero ambitions.

### Research and innovation

We will work closely with our Research & Innovation colleagues to identify and explore opportunities for collaboration in this area.

### Governance and reporting

We recognise the urgent requirement for action on climate change and will monitor our performance against the targets that we have outlined in this Green Plan.

We will work to develop key sustainability metrics to ensure that we can continually monitor and report on our progress to our senior leaders and other stakeholders. These metrics will align to our strategic ambitions and will include:

- The quantity of CO2 savings per project
- Absolute carbon emissions

The information provided by these metrics will provide the basis for regular progress reviews to the Board and to the Greener NHS programme, as well as annual reporting against our strategic objectives and targets.

We will continue to monitor our emissions against these targets and publish our progress on a yearly basis via our Green Plan Annual Report.

# WHAT YOU CAN DO TO HELP

**We need every single staff member at LHCH to play their part in tackling the global climate emergency. Here are ten ways that you can make a difference at work:**

1. Complete the free half-hour “Building a Net Zero NHS” course
2. Commit to making a greener commute at least once a week (public transport, car sharing, active travel)
3. Become a CCC Green Network Champion (and identify and implement sustainability projects within your work area)
4. Switch off your lights, monitors, heating at the end of the day
5. Commit to at least one meat-free lunch per week
6. Put the correct items in the correct bins (and make sure sharps containers are filled to the appropriate level)
7. Spend time enjoying the green spaces around our hospital sites
8. Think before you print and email
9. Avoid unnecessary travel by keeping meetings virtual where possible
10. Have a conversation with a colleague about sustainability and our role in tackling the climate crisis



**Every single decision to act more sustainably matters, and we can't do this without you.**



# OUR NET ZERO ROADMAP

- Develop and launch an LHCH Green Champions Network
- Introduce a formal car-sharing initiative

2025

2026

2027

- Empower our clinicians to make sustainability-related improvements
- Seek the views of patients, staff and local partners

2028

- Begin to investigate innovative opportunities for offsetting unavoidable carbon emissions

2029

2030

- Reduce direct CO2 emissions by 80%

2032

2039

- Achieve 50% of prescribed inhalers to be Dry Powdered Inhalers (DPIs)
- Achieve net zero carbon emissions in our directly controlled scopes

2040

2045

- Establish an LHCH Active Travel User Group
- Launch a staff-wide behavioural change campaign
- All vehicles offered through salary sacrifice will be ultra-low or zero-emission vehicles

- Sole LHCH vehicle is ultra-low or zero-emission vehicle

- Only purchase from suppliers and partners who meet or exceed our net zero ambitions
- Prepare estate for renewable heating solutions

- Reduce indirect CO2 emissions by 80%

- Achieve net zero carbon emissions in our indirectly controlled emission scopes



**“The greatest threat to our planet is the belief that someone else will save it.”**

Robert Swan, British adventurer



**“Anything else you’re interested in is not going to happen if you can’t breathe the air and drink the water. Don’t sit this one out. Do something. You are, by accident of fate, alive at an absolutely critical moment in the history of our planet.”**

Carl Sagan, American Astronomer and scientist





# OUR GREEN PLAN

Creating a greener LHCH  
2025-2028