



# ZERO

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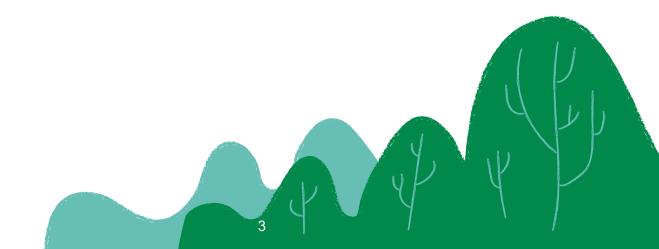
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#### **FOREWORD**

Sustainability in healthcare is changing, and we have a significant part to play. Climate change is the greatest threat to human health in the 21st century, impacting everything from the types and numbers of cases we see to how and where we provide patient care. As healthcare providers, we have a responsibility to take action and lead by example in delivering care sustainably.

We must not lose sight of the imminent health emergency that climate change could bring, with more intense storms and floods, more frequent heat waves, and the wider spread of infectious diseases. Only the strongest and most determined response will impact on this, bringing with it direct improvements for public health and health equity.

As one of the UK's largest organisations, the NHS has a huge impact on our overall carbon footprint, producing 5.4% of the country's total carbon emissions. That's the equivalent the greenhouse gas emissions of 11 coal-fired power stations.

Our goal is to be recognised as the leading NHS organisation in the country in our journey to achieving both net zero emissions and fostering climate resilience. We will focus on delivering future models of healthcare that are more sustainable and have a lower impact on the world around us. We will work towards rapid decarbonisation of our services and ways of working, foster greater resilience and adaptation in our buildings and service models and enable an inclusive transition that reduces inequalities and leaves no one and nowhere behind.

Sustainability in healthcare is changing, and we have a significant part to play.

Collaboration is essential to delivering these goals and supporting sustainable and inclusive growth in the Humber. Partnership working with academic institutions and research organisations will allow us to access research funding to support further understanding of the impacts of climate change and actions we can take to reduce our effects on the environment. Partnerships with local industry and leaders in the renewable energy sector will ensure we continue to be at the forefront of NHS organisations in our carbon reduction and delivery of net zero.

Closer to home, the Humber is one of the coastal regions around the world officially listed at high risk due to rising sea levels and increasing flood threat.

The XDI Gross Domestic Climate Risk Report, published in 2024, lists Lincolnshire as one of the two UK regions at highest risk from climate change and with 90% of Hull standing below the high-tide line, the devastating floods of 2007 are a sign of things to come, should we choose to do nothing.

From every perspective, the case is compelling. We cannot retreat from climate change, and doing all we can to reduce it will need to be embedded into everything we do.



Amanda Stanford, Acting Chief Executive

#### NHS HUMBER HEALTH PARTNERSHIP OVERVIEW

Our Group is one of the largest in the NHS, with a budget of around £1.6 billion employing more than 19,000 staff. Our vision is: United by Compassion, Driving for Excellence.

Made up of two Trusts - Hull University
Teaching Hospitals NHS Trust (HUTH)
and Northern Lincolnshire and Goole NHS
Foundation Trust (NLAG) – we're committed to
delivering world-class services for the (up to)
1.5 million people we serve.

Our five main hospital sites are Castle Hill Hospital, Diana, Princess of Wales Hospital, Goole and District Hospital, Hull Royal Infirmary, and Scunthorpe General Hospital. We deliver a wide range of community services across North and North East Lincolnshire, including district nursing, physiotherapy, occupational therapy, psychology, podiatry, specialist dental services and and support patients in their own homes through our virtual wards.

We see well over a million patients every year with just over 350,000 attendances at our emergency departments, more than 150,000 hospital admissions and around 1.3 million outpatient appointments. We deliver over 8,000 babies each year and our community services provide vital healthcare to patients in their own homes.

As Teaching Hospitals working with the Hull York Medical School, we are a UK leader in research and innovation.

We've also been recognised for our work in supporting veterans, newly qualified nurses and our international recruitment programme.





#### **OUR GROUP STRATEGY**

#### **FIVE YEAR VISION**

IN FIVE YEARS, WE WILL BE ONE OF THE LEADING HOSPITAL GROUPS IN THE UK, DELIVERING SAFE, SUSTAINABLE AND INCLUSIVE HEALTHCARE SERVICES.

#### WE WILL ACHIEVE THIS BY FOCUSING ON OUR

**PATIENTS** 

**PEOPLE** 

**POPULATION** 

WE WILL STRIVE TO BE PIONEERS, PARTNERS AND GUARDIANS OF THE PUBLIC PURSE AND THE PLANET

Our Group Strategy sets out a number of areas that support the goals within this green plan. Specific items are shown below but our work to deliver sustainable healthcare and move to net zero is embedded in everything we do.

Our work to build a virtual hospital will not only improve the level and access to care we offer our patients but also reduce our emissions and financial costs.

We will play a part in local areas working with partner organisations, academic and industrial to advocate for our region. Supporting investment and the opportunity for the Yorkshire and Humber area to be seen as a global leader in net zero.

We will leverage our industry partnerships and expertise in carbon reduction and sustainability to ensure we are leading research and helping to define the future of sustainable healthcare.

We will forge new partnerships with industry – both local and further afield – to deliver our ambitious net zero targets and play our role in driving economic regeneration on and around the Humber estuary.

#### THE NATIONAL PICTURE

#### The NHS guidance sets out two targets for the reduction of emissions:

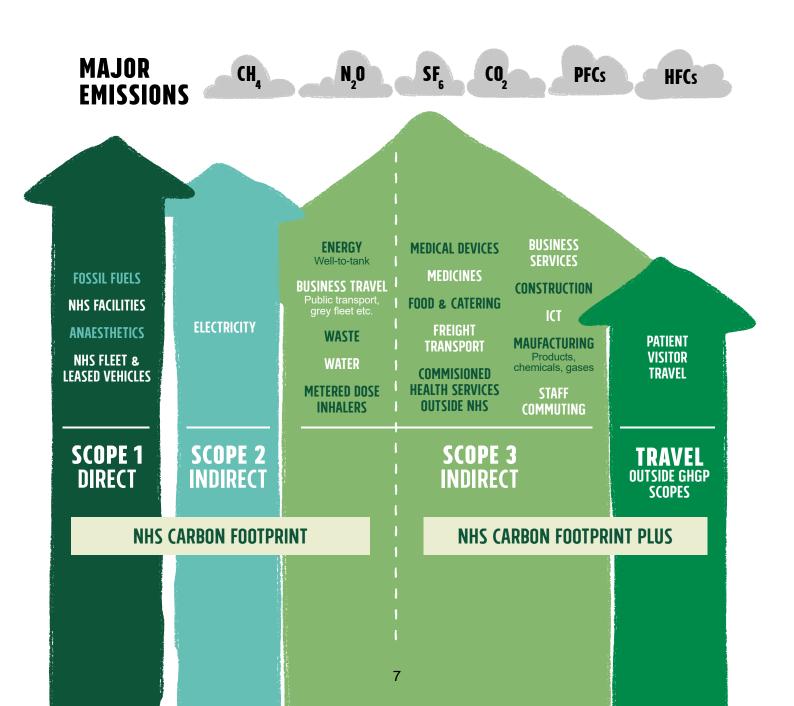
For the emissions we control directly (NHS Carbon Footprint), it's net zero by 2040, with an ambition to reach an **80% reduction between 2028 to 2032.** 

For the emissions we can influence (NHS Carbon Footprint Plus), it's net zero by 2045, with an ambition to reach an **80% reduction between 2036 to 2039.** 

Prioritising interventions that support world leading patient care and population health, and reduce inequalities.

Supporting NHS organisations to plan and make considered investments while increasing efficiencies and delivering value for taxpayers.

Ensuring every NHS organisation supports the ambition to reach net zero carbon emissions.



#### **OUR CARBON EMISSIONS MOUNTAIN**

The NHS has a target to achieve **80%** reduction by 2032.

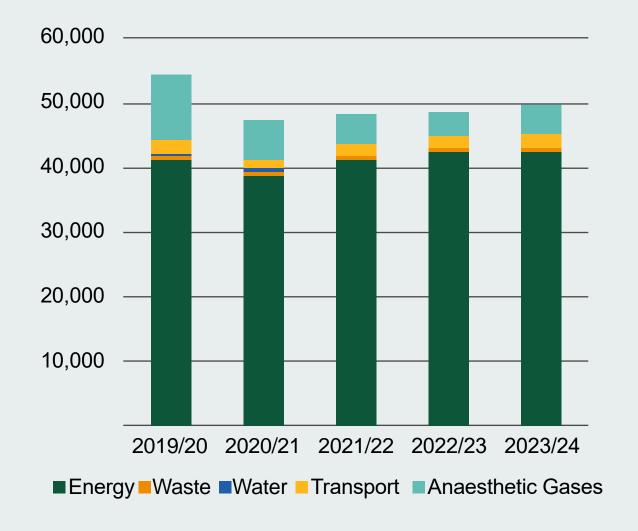


Net Zero is the balance between the amount of carbon emissions produced and the amount removed from the atmosphere. We reach net zero when what we add is no more than what we take away.

As a trust we will seek to rapidly reduce our carbon emissions as much as possible. Where Net Zero cannot be achieved, we will offset this using carbon sequestration through rewilding or carbon capture on our own sites together with off site sources.

### HUMBER HEALTH PARTNERSHIP EMISSIONS OVERVIEW

ENERGY CONSUMPTION	2019/20	2020/21	2021/22	2022/23	2023/24
Energy	41,248.23	38,984.87	41,388.53	42,681.33	42,745.75
Waste	648.14	553.61	485.81	478.90	455.52
Water	563.76	508.46	183.04	176.89	161.11
Transport	2,119.35	1,283.08	1,818.46	1,865.50	1,897.86
Anaesthetic Gases	9,877.65	5,808.52	4,236.50	3,295.30	4,338.67
TOTAL	54,457.12	47,138.54	48,112.34	48,497.92	49,598.91



<sup>\*</sup>Significant work has been completed to reduce energy emissions. The increases seen are due to new builds and expansion of combined heat and power plants

#### **MAJOR ACHIEVEMENTS**



#### **PV SOLAR POWER**

As a group we have almost 6 MW of solar PV installed with more on the way.



#### **LEDs**

100% of lights in the Group will be eco-friendly LEDs by the end of 2025.



#### NITROUS OXIDE REDUCTION REMOVAL OF DESFLURANE

56% reduction in emissions since 2019/20.



#### REMOVAL OF COAL BOILER

Coal fired boilers removed from Goole combined with other measures reduced emissions by 60%.

**£68M** OF EXTERNAL FUNDING FOR NET ZERO SECURED SINCE 2020

#### **ASSURANCE AND GOVERNANCE**

#### **HOW WE DO IT**

Build on the work already done as individual trusts and come together to make further improvements as a group.

Group sustainability committee established with membership from all group directorates and functions.

Evaluate sustainability impact of projects and policies

Ensure sustainability is included within business cases, services changes and board reports.

Collaborative working with partner organisations

#### HOW WE'LL MEASURE IT

Record the good work, progress, and examples already in place

Revise and review against net zero targets annually



#### **WORKFORCE, NETWORKS AND LEADERSHIP**

#### **HOW WE DO IT**

Net Zero Champions to offer direction and impetus from the start

Net Zero training for all staff

Additional Net Zero training for leaders and sustainability ambassadors

Regular Net Zero news and updates circulated to all staff

Encourage innovation and ideas which contribute to Net Zero goals

#### HOW WE'LL MEASURE IT

Training provision

Staff performance development review Evaluation tools for Net Zero

#### HOW WE'VE DONE SO FAR...

Supported local University and schools

Shared best practice with SME's via Oh Yes Net zero

Supported National guidance documents





Sustainability delivers additional benefits of supporting economic growth, local jobs while improving patient care and supporting healthy communities.

#### DIGITAL TRANSFORMATION

#### **HOW WE DO IT**

Further encourage tele and video conferencing facilities

Reduce our use of paper and move to digital first processes

Purchase equipment with low power consumption

Host data in energy efficient data centres

Recycle ICT equipment

Establish a baseline for the ICT carbon footprint according to the guidelines set out in the published materials by the UK Government's Sustainable Technology Advice & Reporting (STAR)

Deploy powerdown software for equipment

#### HOW WE'LL MEASURE IT

Percentage of outpatient care delivered remotely

Percentage reduction in the use of paper

Revise and review against net zero targets

## HOW WE'VE DONE SO FAR...

Implemented paperless systems for purchase requisitions and orders

NLAG awarded £5M as part of the digital Aspirant Programme to support ward boards and clinical monitoring systems



#### **NET ZERO CLINICAL TRANSFORMATION**

#### HOW WE DO IT

Reduce emissions while improving quality of care

Consider Net Zero principles in all clinical pathways and services

Commission services with focus on more efficient whole-life care

Offer more virtual appointments, reducing the need to travel

#### HOW WE'LL MEASURE IT

Measure and report the use of medicines, gases and their emissions

The number of follow-up appointments

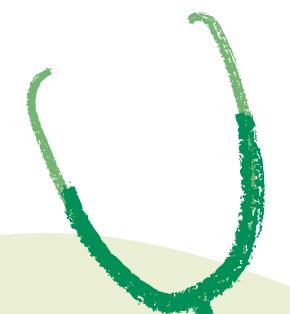
Review changes to clinical pathways in establishing cabin reduction and sustainability improvements

## HOW WE'VE DONE SO FAR...

Increased the number of virtual consultations

Created virtual wards

Switched from Entonox to Penthrox in Gynaecology



"Reaching our country's ambitions under the Paris climate change agreement could see over 5,700 lives saved every year from improved air quality, 38,000 lives saved every year from a more physically active population and over 100,000 lives saved every year from healthier diet,"

#### **DELIVERING A NET ZERO NHS**

#### **MEDICINES**

#### HOW WE DO IT

Remove piped nitrous from all sites

Reduce medicine wastage

Monitor and manage Entonox usage

Support high quality, low carbon, respiratory care

Provide patients information in line with clinical guidelines

Reduce emissions from inhaler use

#### HOW WE'LL MEASURE IT

Greener NHS dashboard

Annual Trust emissions report

Medical gas committee

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

#### **GRO HARLEM BRUNDTLAND**

## HOW WE'VE DONE SO FAR...

Removal of Desflurane

Reduced emissions of nitrous oxide/volatiles across the group by 56% saving over £370k

Removal of piped nitrous oxide systems

Supported and informed NHS guidance on nitrous oxide

Inhaler recycling scheme

Anaesthetic gas capture equipment trialled



#### TRAVEL AND TRANSPORT

#### HOW WE DO IT

Assist patients, visitors, and staff to travel in more sustainable ways

Reduce the amount of business travel. Limit and offset business flights.

Only ZEV vehicles available through salary sacrifice scheme

Expand EV charging infrastructure

Work with suppliers to increase the efficiency of deliveries to minimise carbon emissions

Support the use of cycles and e-bikes with secure lockers, changing and shower facilities

#### HOW WE'LL MEASURE IT

Work with suppliers to report and reduce milage and emissions

The percentage of our fleet made up of ULEV and ZEVs

Percentage of salary sacrifice vehicles made up of ZEVs

## HOW WE'VE DONE SO FAR...

Staff park-and-ride options

Secure covered cycle storage and changing facilities on Castle hill and Hull Royal

Secure cycle storage on all NLAG sites

Reduced of inter site travel with adoption teams calls

Installed EV chargers



#### **ESTATES AND FACILITIES**

#### **HOW WE DO IT**

Build sustainability into all new facilities, with improved green spaces, drainage systems and passive cooling solutions

Set energy/ utility benchmarks

Increase on-site renewable energy generation

Reduce energy demand within our buildings

Follow NHS net zero building standard

Improve climate resilience of our sites and services

## HOW WE'VE DONE SO FAR...

Humber health has secured over £68.4M from external sources that support net zero work.

Coal fired boilers removed from Goole combined with other measures reduce to emissions by 60%

Almost 6MW of solar PV installed saving £4.7M in 3 years

Replaced glazing

Increased insulation

#### HOW WE'LL MEASURE IT

Assess sustainability impact and carbon cost of completed schemes

Monitor utility usage

Report carbon emissions performance

Monitor air quality on our sites



#### **SUPPLY CHAIN AND PROCUREMENT**

#### HOW WE DO IT

Work with sustainable, ethical, and local suppliers to meet our Net Zero targets

Remove single use plastics and products wherever possible

Reuse equipment, such as walking aids

All suppliers must publish a carbon reduction plan



#### HOW WE'LL MEASURE IT

Report on procurement emissions

Develop new foot-printing of supply chains and procurement

## HOW WE'VE DONE SO FAR...

Trialling reusable tourniquets

Director of procurement as our nominated lead for sustainable supply chain and procurement

Removal of single used plastics in catering

Completed a high-level footprint of group procurement emissions

By using a reusable cup, you can significantly reduce your carbon emissions. For example, switching from disposable to reusable cups could save 52,000 tonnes of CO2e annually in the UK.



#### **FOOD AND NUTRITION**

#### HOW WE DO IT

Implement seasonal menus, high in locally sourced fruits and vegetables

Reduce food waste to less than 5%

Review the adoption of a digital meal ordering system

Use sustainable sources, such as SOIL

Introduce low carbon meals

#### HOW WE'LL MEASURE IT

Record any food waste

Record number/ percentage of low carbon meals

**ERIC** returns

## HOW WE'VE DONE SO FAR...

Fresh food all sourced locally (NLAG)

Have seasonal menus

Food waste digester



#### **CLIMATE CHANGE ADAPTATION**

#### **HOW WE DO IT**

Set out actions to prepare for severe weather events

Improve climate resilience of local sites and services – including digital services

Implement the NHS Climate Adaptation Framework

Work with LRF partners to develop to ensure co-ordinated emergency and climate change adaptation planning

#### HOW WE'LL MEASURE IT

Number of overheating cases reported

Number of flood occurrences triggering a risk assessment

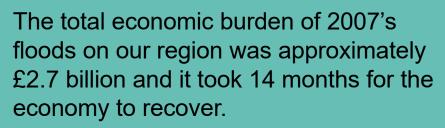
New builds and refurbishments with adaptation measures included

## HOW WE'VE DONE SO FAR...

Day surgery building elevated

Hull CDC built with climate change adaptation measures.

Scunthorpe CDC built with climate change adaptation measures.



Flood footprint of the 2007 floods in the UK: The case of the Yorkshire and Humber Region





#### **GREENSPACE AND BIODIVERSITY**

#### HOW WE DO IT

Work with NHS and Humber Forest to increase tree planting

Ensure there is a net biodiversity gain in any new developments

Make our sites available for green prescribing

#### HOW WE'LL MEASURE IT

Number of trees planted

Measure and record biodiversity gain

Record use of our sites for green prescribing

## HOW WE'VE DONE SO FAR...

Over 1,000 trees planted on CHH

Creation of green spaces NLAG

Woodland walk at CHH

Staff orchard planted at CHH

Raised bed and gardening group at HRI

Designated areas for biodiversity

Air quality sampling at sites



#### **FINANCE**

#### HOW WE DO IT

Support Net Zero projects through the creation of a self-generated fund

Include sustainability in business case submissions

Additional resource within sustainability to support Quality Improvement work and secure external funding

#### HOW WE'LL MEASURE IT

Review of number of business cases including consideration of environmental impact

Funding pot created



"Sustainability is a political choice, not a technical one. It's not a question of whether we can be sustainable, but whether we choose to be"

#### **GARY LAWRENCE**

## WASTE AND WATER HOW WE DO IT

Zero waste to landfill

Purchases fewer consumables

Recycle more

Ensure the provision of water efficient appliances within new buildings and refurbishments

Install water metering to help leak detection



#### HOW WE'LL MEASURE IT

Monitor usage

Auditing of waste streams

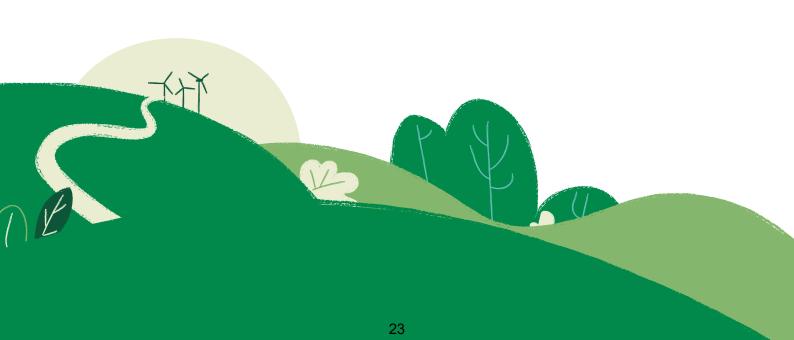
Report on the amount of waste recycled

## HOW WE'VE DONE SO FAR...

Zero waste to landfill

Increased recycling by over 300%

Improved compliance with waste segregation



#### **DELIVERY PLAN**

Area of Focus	Number	Description	
	1.1	Establish a group level net zero committee that reports to board/cabinet together with directorate sub committees.	
	1.2	Develop a sustainability impact assessment to evaluate impact of projects or policies and embedded into his existing evaluation tools.	
4.4	1.3	Establish sustainability into the governance of trust processes and committees	
1. Assurance and Governance	1.4	Ensure sustainability is included within business cases, service changes and board reports	
	1.5	Group sustainability committee established with senior directorate leads	
	1.6	Review green plan annually	
	1.7	Sustainability in all JD's	
	1.8	Implement a carbon management platform for reporting	
	2.1	Assess workforce capacity and skill requirements to deliver net zero goals	
	2.2	Collaborative working with partner organisations	
2. Workforce,	2.3	Engage with research and innovation activities	
Networks and Leadership	2.4	Mandatory net zero training for all staff	
Leadership	2.5	Net zero champions network with regular news, meetings and training	
	2.6	Carbon Literacy training for leaders and sustainability ambassadors	
	2.7	Mandatory waste management training	
3. Digital transformation	3.1	Maximise the benefits of digital transformation to reduce emissions and improve patient care.	
	3.2	Supported by the Digital Maturity Assessment, find opportunities to embed sustainability in digital services	
	3.3	Establish a baseline for the ICT carbon footprint according to the guidelines set out in the published materials by the UK Government's Sustainable Technology Advice & Reporting (STAR)	
	3.4	Look to specify low power equipment	
	3.5	Deploy powerdown software for equipment	
	3.6	Prioritise the hosting of data in energy-efficient low carbon local or cloud-based data centres	
	3.7	Scanning patient records	
	3.8	Doctor Doctor	
	3.9	Printing for meetings will be eradicated or by exception	

Area of Focus	Number	Description		
–	4.1	Identify a clinical lead for net zero clinical transformation		
	4.2	Select an area to reduce emissions while improving quality of care, include sustainable quality improvement training		
	4.3	Consider that zero principles in all service change reconfiguration and pathway redesigns		
4. Net Zero Clinical	4.4	Utilise the sustainable care pathways guidance		
Transformation	4.5	Introduce more virtual consultations		
	4.6	Commission services with focus on more efficient whole life care		
	4.7	Develop a clinical working group to educate inform and target areas of opportunity		
	4.8	Green surgery awards (?)		
	5.1	Continue removal of piped nitrous at remaining sites		
	5.2	Monitor and manage Entonox usage		
	5.3	Support high quality lower carbon respiratory care		
5. Medicines	5.4	Give patients information in line with clinical guidelines		
	5.5	Reduce medicines wastage		
	5.6	Safe prescribing, de-prescribing		
	6.1	Change salary sacrifice scheme to ZEV's only		
	6.2	Develop a net travel and transport strategy and roadmap		
6. Travel and transport	6.3	Stop business travel reimbursement for UK domestic flights		
	6.4	All new fleet to be ZEV were available		
	6.5	Promote active travel		
	6.6	Develop a plan for EV charging infrastructure		
	6.7	Work with suppliers to increase the efficiency of deliveries and to minimise carbon		
	6.8	Assist patients visitors and staff to travel in more sustainable ways		
	6.9	Increase the number of online patient appointments		
	6.10	Review group logistics requirements		

Area of Focus	Number	Description		
	7.1	Continue to source external funding		
	7.2	Update heat decarbonisation plans for each site		
	7.3	Develop plans to increase on-site renewable energy generation		
	7.4	Building management system optimisation software/digital twin		
7. Estates and	7.5	Reduce energy demand within buildings		
facilities	7.6	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		
	7.7	Follow NHS net zero building standard (and implement NHS net zero derogation schedule) move to action		
	7.8	Energy Benchmarks		
	8.1	Ensure that supplier roadmap requirements are embedded		
	8.2	Encourage supplies to use Evergreen sustainable supply assessment		
	8.3	Single used products together with clinical teams		
8. Supply chain and	8.4	Training for all financing procurement teams		
procurement	8.5	Walking aid reuse scheme		
	8.6	Work with sustainable ethical and local suppliers to meet our net zero targets		
	8.7	Paper less and digitally optimised environment		
9. Food and nutrition	9.1	Record food waste in line with ERIC		
	9.2	Have seasonal menus high in fruits and vegetables		
	9.3	Review the adoption of a digital meal ordering system		
	9.4	Incorporate the NHS E Low carbon menu bank		
	9.5	Look to participate in NHS Chef of the year		
	9.6	Consider on site food waste processing		
	9.7	Develop business case for traditional cooked patient meal service		

Area of Focus	Number	Description	
10. Climate change adaptation	10.1	Comply with the adaptation provisions withing the NHS cores standards foe EPRR	
	10.2	Set out actions to prepare for severe weather events and improve climate resilience of local sites and services, including digital services	
	10.3	Implement the "Climate Adaptation Framework" as a comprehensive method to cultivate climate resilience.	
	10.4	Work with resilience partners to ensure co-ordinated emergency planning and climate change adaptation planning	
11. Green space and biodiversity	11.1	Ensure biodiversity net gain for any new developments	
	11.2	Support local partners in making our sites available for green social prescribing	
	11.3	Work with NHS and Humber forest to increase tree planting were possible	
12. Finance	12.1	Create a ring fenced fund to support net zero projects	
	12.2	Increase sustainability resource to support sustainable QI work and secure external funding	
	12.3	Include sustainability in business cases	
	12.4	Funding allocation for smaller schemes managed by the sustainability committee.	
	12.5	Savings from net zero projects to have a percentage re-invested into net zero fund	
13. Waste and water	13.1	Continue to increase levels of recycling	
	13.2	Explore alternatives to traditional waste disposal	
	13.3	Reduce the volume of consumables purchased	
	13.4	Install water metering to help leak detection	



## NET ZERO

#### THE MISSION

We want to engage our workforce and change the culture to inspire our people to deliver sustainable healthcare, reducing, reusing and recycling, wherever possible.

We want to work with staff and patients on pathways that deliver efficient and sustainable whole life care.

We want to minimise energy use, emissions and unnecessary journeys, and replace fossil fuels with zero carbon sources.

We want to create sustainable spaces for patients, staff, and visitors.