



Royal Berkshire
NHS Foundation Trust

Our Green Plan 2022 to 2025



Our commitment
to Net Zero carbon



Royal Berkshire
NHS Foundation Trust

Foreword

The NHS has set out an aim to be the world's first Net Zero carbon national health service.

At the Royal Berkshire NHS Foundation Trust, our *Vision 2025* is 'Working together to provide outstanding care for our community'. This includes reducing our resource use so that we can operate more sustainably, reducing our climate change impact for our community and future generations.

As an anchor institution, we have a long history of operating sustainably. Over the last decade we have reduced our scope 1 and 2 carbon emissions by over 30%, through the dedication, hard work of our people and investment in our buildings, infrastructure, and new ways of working.

We are proud to support this NHS aim, and our Green Plan sets out how we will lay the foundations for our journey to Net Zero carbon over the period to 2045.

We have calculated that we need to reduce our carbon emissions by 7% each year to achieve our target. This is a very stretching goal for any organisation, because of current technological limitations and the high levels of investment required. However, we are setting ourselves a stretch target of reducing our emission by up to 7% per annum. We also aim to accelerate our pace of decarbonisation, as our people learn and innovate. We will share best practice, and work with our peers and partner organisations to help us minimise any carbon offsetting that will be required in the future to achieve our Net Zero carbon targets.

Our staff are working tirelessly to ensure that we deliver the best possible care, in the most sustainable way.

Our board of directors, wider leadership team and Net Zero carbon steering group, which I chair, give their commitment and support to work together to resource and support our journey to Net Zero carbon.



Nicky Lloyd
Chief Finance Officer
Net Zero Steering Group Chair

Scope 1 carbon emissions are direct emissions from owned or directly controlled sources, on site.
Scope 2 carbon emissions are indirect emissions from the generation of purchased energy, mostly electricity.

Royal Berkshire NHS Foundation Trust Green Plan

Contents

1. Net Zero Steering Group Declaration	6
2. Executive Summary	8
3. Introduction	16
4. Royal Berkshire NHS Foundation Trust Commitments	18
5. Our Team's Commitment	20
6. Our Aims and Approach	22
7. Net Zero Carbon	26
a) Our Carbon Footprint at Royal Berkshire NHS Foundation Trust	26
b) Green Plan	30
c) Monitoring and Targeting	30
8. Drivers for Change	32
9. RBFT Redevelopment	33
10. Our Areas of Focus	35
a) Medicines, Anaesthetics, and Inhalers	36
b) Travel and Transport	39
c) Digitally Enabled Hybrid Working	42
d) Sustainable Models of Care	43
e) Estates and Facilities	44
f) Food and Nutrition	48
g) Procurement	49
h) Green Space and Biodiversity	50
i) Sustainable Use of Resources	52
11. Benchmarking our Performance	54
12. Adaptation	55
13. Governance	59
14. Glossary	60

The UK Government is committed to take action on climate change as part of its Climate Change Act with a target to have Net Zero in carbon emissions by 2050.

This ambition is supported by NHS England & Improvement NHSEI, which launched 'For a Greener' NHS campaign to be the first Net Zero health service in the world.

1. Net Zero Steering Group Declaration

We the following, agree to the Green Plan, and its implementation at Royal Berkshire NHS Foundation Trust:

Trust Board Members:



Graham Sims
Chair of the Trust



Helen Mackenzie
Non-Executive Director



Eamonn Sullivan
Chief Nursing Officer



Steve McManus
Chief Executive



Bal Bahia
Non-Executive Director



Nicky Lloyd
Chief Finance Officer



Sue Hunt
Non-Executive Director



Priya Hunt
Non-Executive Director



Don Fairley
Chief People Officer



Julian Dixon
Non-Executive Director



Dom Hardy
Chief Operating Officer



John Petitt
Non-Executive Director



Janet Lippett
Chief Medical Officer

Net Zero Steering Group Members:



Nicky Lloyd
Chief Finance Officer



Tracey Middleton
Director of Estates and Facilities



Raghuv Bhasin
Director of System Partnerships



Janet Lippett
Chief Medical Officer



Andrew Statham
Director of Strategy



Karin Leech
Advance Theatre Practitioner



Mike Clements
Director of Finance



Heather Allan
Director of IM&T



Sangeeta Lama
Renal Specialist Nurse



Eamonn Sullivan
Chief Nursing Officer



Alison Foster
Programme Director



Steve Sellwood
Facilities Manager



Dom Hardy
Chief Operating Officer



Clara Purnell
Head of Procurement and Logistics



Guy Kieser
Associate Director of Estates

2. Executive Summary

The Royal Berkshire NHS Foundation Trust recognises the enormous challenge that the issues of climate change, air pollution and waste present and the impact that these issues will have on our patients and future generations. Climate change represents a significant health challenge for the 21st century and this Green Plan details a proactive approach that our Trust will take to continue to do our part to reduce the impact that climate change will have on our communities.

The UK Government is committed to take action on climate change as part of its Climate Change Act with a target to have Net Zero in carbon emissions by 2050. This ambition is supported by NHS England & Improvement NHSEI, which launched 'For a Greener' NHS campaign to be the first Net Zero health service in the world.

Royal Berkshire NHS Foundation Trust (RBFT) recognises that the importance of Sustainability in Healthcare is growing with ever increasing drivers like legislation on compliance on carbon reduction. The Trust has made progress on these drivers and is pleased to share a clear vision in our first Green Plan. We also recognise we have a key role as a key organisation in our community in working with our community in ensuring a healthier more sustainable future for our population.

- We are an active member of Reading CAN (Climate Action Network). Reading is one of just 95 towns or cities worldwide and 10 in the UK to receive a top score on climate action in the Carbon Disclosure Project's 'gold standard' of environmental reporting.

Green Plan Foundations

NHS England and NHS Improvement have advised that seven foundations should be included in this 3-year strategy, which have been our priority to achieve in 2021 / 2022:



Green Plan Foundation	Status
1. Appoint a board member responsible for Net Zero targets and Green Plan	✓ Chief Finance Officer appointed
2. Purchased 100% renewable energy from June 2021	✓ Effective from June 2021
3. Reduce use of desflurane in surgery to less than 10% of its total volatile anaesthetic gas use, by volume	Proposed – November 2021 (Lauren Williams leads)
4. Develop plans for prescribing lower carbon inhalers	Proposed – November 2021 (Amanda Smalley leads)
5. Solely purchase and lease cars that are ultra-low emissions vehicles (ULEVs) or zero emissions vehicles (ZEVs)	Proposed – November 2021 (Dave Jenkins leads)
6. Develop a green travel plan to support active travel & transport	✓ Approved 2019 (Steve Sellwood implemented)
7. At least 25% of outpatient activity should be delivered virtually, resulting in direct and tangible carbon reductions	In progress (Dr David Mossop Leads)
We have also added:	
8. Increase the ability for our staff to work remotely encouraging a hybrid model wherever possible	In progress – to be signed off in January 2022 (Suzanne Emerson Dam leads)

In the period 2022 to 2025, we will lay the foundations to achieve the NHS targets by focusing on the following activity.

1. Reducing scope 1 and 2 emissions (which are the carbon emissions from fossil fuels, Anaesthetics, NHS Facilities and Fleet and the electricity used)
2. Measuring, quantifying, and reducing our scope 3 emissions (which are indirect carbon emissions) and
3. Reviewing our hospital redevelopment plan options to optimise the Net Zero carbon impact of the redevelopment option we pursue as a Trust.

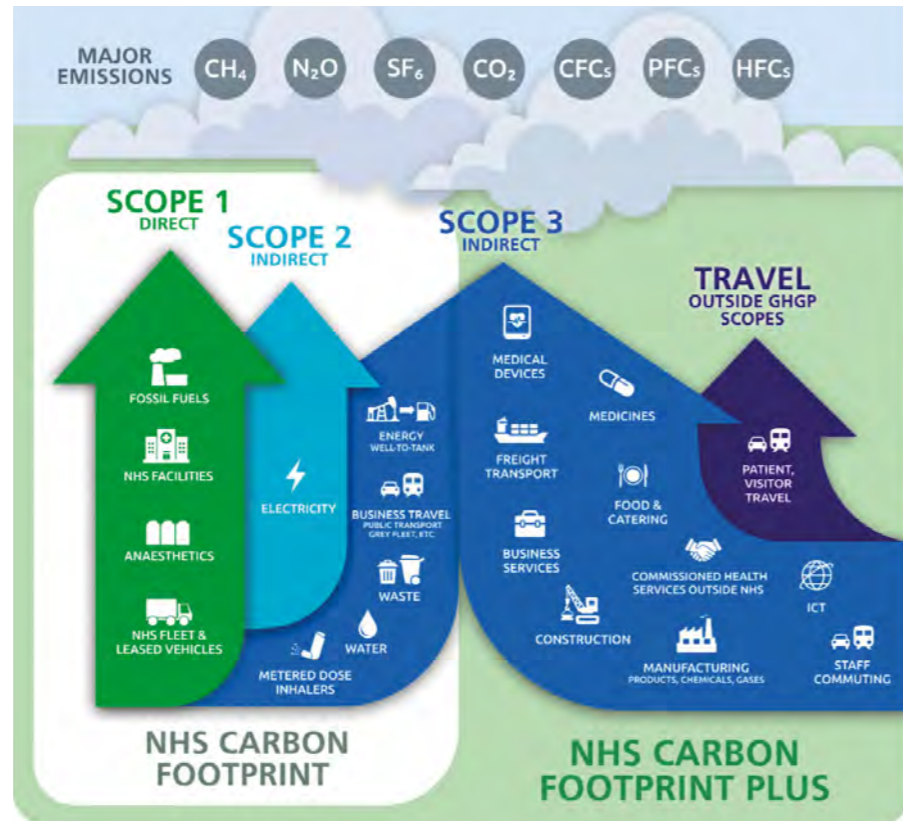
The NHS Carbon Footprint and Carbon Footprint Plus

Scope 1 carbon emissions are direct emissions from owned or directly controlled sources, on site.

Scope 2 carbon emissions are indirect emissions from the generation of purchased energy, mostly electricity.

Scope 3 carbon emissions are all other indirect emissions that occur in producing and transporting goods and services, including the full supply chain, patient, and visitor travel.

We aim to achieve a stretch target of 7% year on year



The NHS carbon footprint detailing scope 1, 2 and 3 emissions

reduction of carbon emissions on Scope 1, 2 and 3 emissions that will achieve a 76% reduction in Scope 1 and 2 by 2040 and an 84% reduction by 2045 from a 2015 baseline. And for scope 3, a 75% reduction by 2040 and an 82% reduction by 2045 against a 2021 baseline. In the period of this Green Plan, as we learn and innovate as an organisation, we aim to achieve a minimum reduction in our combined carbon emissions of 3% year on year. We also aim to accelerate our pace of decarbonisation, as our people learn and innovate, and we share best practice with our peers and partner organisations.

To do this within our Green Plan, we have set out our focus for the next three years for a range

of performance improvement projects including our key priority areas:

1. Medicines
2. Travel and Transport
3. Digitally enabled hybrid working

All proposed measures will be agreed with the Net Zero Steering Group, clinical leads and key stakeholders and progressed in accordance with our existing Trust governance and financial procedures.

Resourcing Net Zero

We are considering how we can create a sustainability team to take responsibility for managing and overseeing environmental and sustainability issues.

Greener NHS Community

Royal Berkshire NHS Foundation Trust is engaged with the Greener NHS Community and represented within the South East Regional Group.

Local Partnerships

We are working in partnership with other major organisations such as local councils and the University of Reading and have also committed to be active members of Reading CAN and Connect Reading to support this work.

Our Commitment

Royal Berkshire NHS Foundation Trust is committed to delivering the NHS Net Zero carbon targets for scope 1 and 2 carbon emissions by 2040, with an 80% reduction by 2028-2032 and scope 3 carbon emissions by 2045 with an 80% reduction by 2036-2039.



Celebrating our successes

Recovery recycling

Over the past 5 years, Theatres and Recovery teams have been recycling half a tonne of pvc oxygen masks and tubing each year thanks to an initiative set up by Dr Lauren Williams, Anaesthetic Consultant.

And since 2019 they've extended their recycling regime to cover as much as possible, including some items that staff were previously unsure what to do with, such as drug boxes and their plastic inserts, and bread and crisp packets.

Lauren has also personally committed to running or cycling to work and using an electric car when she must drive due to being on call. She only buys fruit and veg bought in paper bags or boxes - no plastic and ensures her children's lunches are in paper bags or beeswax wraps rather than clingfilm.



In the period 2022 to 2025, we will lay the foundations to achieve the NHS targets by focusing on the following activity.

1. Reducing scope 1 and 2 emissions by a minimum of 3%, and a stretch target of 7% on our 2020/21 baseline
2. Measuring, quantifying, and reducing our scope 3 emissions by the same amount and
3. Ensuring our hospital redevelopment plan options optimise the Net Zero carbon impact of the redevelopment option we pursue as a Trust.

Energy Saving Projects

Projects have been identified with the Estates and Facilities domain that focus on energy reduction. The recently completed de-steaming project has generated a saving of 800 tonnes of CO₂ per year. Invest to save projects such as LED lighting and Heating Ventilation and Air Conditioning (HVAC) upgrades have quick paybacks of one to five years.

Travel and Transport

We encourage and have sourced parking off site to reduce on site emissions and encourage walking. We support cycling to work with investments such as our cycling village. We are working with Reading Buses

to create routes to encourage public transport use. Our travel and transport working group will develop policy updates to reduce our carbon impact.

Electric Vehicles (EV)

To support our travel and transport plans all newly leased or purchased vehicles and all vehicles offered under the salary sacrifice scheme will be zero emission or ultra-low emission vehicles by April 2022.

We have six EV charging points at Royal Berkshire Hospital and 10% of our existing fleet are electric vehicles. We plan to install more charging points on our sites.

Hybrid Working

We have produced a Hybrid Working Policy where approximately 2,000 staff will be able to work remotely from home. This is approximately a third of our workforce. Initially this was responding to the pandemic and will become the new way of working moving forward.

Sustainable Models of Care

The Trust aims to reduce the carbon impact of providing critical care to patients, in line with the NHS Digital Transformation. Key priorities include:

- Create straightforward digital access to NHS services, and help patients and their carers manage their health.
- Use decision support and artificial intelligence (AI) to help clinicians in applying best practice, eliminate unwarranted variation across the whole pathway of care, and support patients in managing their health and condition.
- Use predictive techniques to support local health systems to plan care for populations.

Anaesthetics

1. Where possible, reduce the use of Desflurane in favour of low carbon alternative Sevoflurane.
2. Reduce use of Desflurane in surgery to less than 10% of its total volatile anaesthetic gas use, by volume.
3. Introduce a piped Nitrous Oxide Waste Reduction Strategy; including a regular auditing system to monitor cylinder turnover per year and review manifold cylinder management ensuring there are routine leak tests performed.
4. Use viable alternatives to Desflurane, Nitrous Oxide and Isoflurane including the use of intravenous alternatives where feasible and appropriate.

Our Champions

The Trust has already made strides towards our sustainability goals, we aim to continue this good work by doing the following:

- **Driving change through Board-level Net Zero group;** We have established a strong steering group of board executives who oversee the Net Zero projects and ensure we meet our targets within the proposed timeframe.
- **Supporting a growing network of Net Zero Carbon Champions;** We have a growing network of Net Zero Champions from a range of departments. We recognise that our people are central to the successful implementation of our key objectives.
- **Regular staff engagement and workshops;** Staff engagement and active participation is key. We will continue to facilitate workshops to gain essential knowledge from staff and incorporate these actions into our long-term plan.
- **Introduction of an annual staff award category – the Sustainability Award;** We will raise awareness of the dedication of staff to the Net Zero objective through the introduction of an annual carbon champion award and inclusion of reducing Net Zero as part of the other awards criteria.
- **Reviewing progress against the plan on an annual basis;** We recognise the development of this plan is only the first step and we must continue to closely monitor progress against our key objectives and sustainability goals. Where we are underachieving, we will review and amend as required.

Food and Nutrition

All meals meet current Association of UK Dietitians (BDA) legislation which is reviewed by the dietitians in menu planning. New software will be able to provide more comprehensive data as it is linked to suppliers' catalogues and national database. The catering team also aspire to the April 2022 "Restriction of Unhealthy Foods Strategy". We plan to provide nutritional data for all items produced in house.

Procurement

We will set and implement criteria for a low carbon procurement process to decarbonise the supply chain.

Sustainability will be included in all tender documents and scored in the evaluation process.

Suppliers of goods and services will be asked to supply their own carbon footprint, environmental policy, green plan, and target to reach Net Zero in their business.

The Trust will, as far as possible, work with local suppliers of goods and services to reduce

delivery miles while securing value for money.

Energy Efficiency will be factored into procurement decisions so that all products and services have a low carbon impact.

All business cases will include a section that addresses sustainability and the impact that the project will have on carbon reduction.

To achieve a sustainable and resilient supply chain, an organisation has to address environmental, social, economic and legal concerns across its entire supply chain. By taking a holistic approach, this reduces waste and environmental footprint, while also improving labour conditions and health and safety — stopping worker exploitation with a focus upon the social value of our supply chain that shall be embedded in all Procurement activity. These principles are embedded into our procurement policies to ensure we are acting sustainability, across the board. These practices are not only good for people and planet but are wholly aligned with the NHS sustainability objectives.

We shall follow guidance and changes set out within the Target Operating Model for Procurement (PTOM). The Trust will commit to regular reviews of all medical and non-medical supplies where we can reuse, recycle or repurpose.

Policies and Processes

We will embed sustainability and Net Zero carbon in everything we do. This means we will include it in our business planning process and business case criteria. We will aim to include in our recruitment and appraisal processes. Our transformation processes will include our aspiration to be lean and green.

Summary

Royal Berkshire NHS Foundation Trust recognises the enormous challenge that the issues of climate change, air pollution and waste present and the impact that these issues will have on our patients and future generations. Climate change represents a significant health challenge for the 21st century and this Green Plan details a proactive approach that our Trust, as an anchor institution, will take to continue to do our part to reduce the impact that climate change will have on our communities.

The NHS has set out an aim to be the world's first Net Zero carbon National Health Service achieving Net Zero for direct controlled emissions by 2040 and Net Zero for the emissions that can be influenced by the NHS by 2045.

In October 2020, the NHS published a new strategy **Delivering a Net Zero National Health Service**.

3. Introduction

The global COVID-19 pandemic has further reinforced the connection between global public health and healthcare systems and populations across the world. The NHS response to the pandemic has demonstrated an impressive capacity to adapt and respond in an emergency. It also highlights the importance of preparedness for future pandemics and the wider health implications of climate change.

The NHS aims to provide health and high-quality care for all, now and for future generations. This requires a resilient NHS, responding to the health emergency that COVID-19 brings, protecting patients, our staff, and the public. The NHS also needs to respond to the health emergency that climate change brings, which will need to be embedded into everything we do now and in the future.



Celebrating our successes

Removing single use plastics in our theatres

Led by Dawn Logie, Advanced Theatre Practitioner, Theatres and Recovery have invested in reusable drug trays. These have replaced the 36,000 single use plastic drug trays that they used to use each year.

In a separate initiative, Karin Leech, Advanced Theatre Practitioner and a team of recycling champions have been encouraging staff to bring in their own travel cups and water bottles as well as to use their own mugs, plates and cutlery in order to replace single use plastic versions. Purely with plastic cups alone (which have now been replaced with an eco-friendly paper version), the team's consumption has gone down from 4,000 to 1,000 disposable cups each month.



More intense storms and floods, more frequent heatwaves, and the spread of infectious disease from climate change threaten to undermine years of health gains. Action on climate change will affect this, and it will also bring direct improvements for public health and health equity. 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 diets.

The Royal Berkshire NHS Foundation Trust have committed to supporting and delivering these targets and this Green Plan sets out how we will lay the foundations for this reduction in our carbon

emissions in the period 2022-2025.

The Royal Berkshire NHS Foundation Trust recognises the enormous challenge that the issues of climate change, air pollution and waste present and the impact that these issues will have on our patients. Climate change represents a significant health challenge for the 21st century and this Green Plan details a proactive approach that our Trust can take to do our part to reduce the impact that climate change will have.

We have a history of operating sustainably. We will continue to embed sustainability within our organisation's ethos and will work together with our partners across the NHS and local system to learn and improve. We will collaborate with our partners and the public to help meet our own

internal objectives and also the wider national level objectives. Our staff have worked tirelessly to ensure that we deliver the best possible care, in the most sustainable way and continue to play their part by supporting us to develop and deliver this Green Plan.

4. Royal Berkshire NHS Foundation Trust Commitments

RBFT present this 12-Point Green Plan as our commitment to Net Zero, in line with the 'For a Greener NHS' campaign and wider sustainability goals. The Trust recognises that action is urgently required if the NHS is to meet its proposed Net Zero trajectory, this plan details our key objectives and methods to align with Delivering a Net Zero Health Service.

The Trust has already made strides towards our sustainability goals. We aim to continue this good work by doing the following:

- **Establishing Board-level sustainability and Net Zero group;** We have already established a strong steering group of board executives who are overseeing the Net Zero projects and ensuring we meet our targets within the proposed timeframe
- **Appointing a network of Net Zero Carbon Champions;** We will continue to grow our network of Net Zero Champions from a range of departments. We recognise the people on the ground are central to the successful implementation of our key objectives
- **Regular staff engagement and workshops;** Staff engagement is key; we will continue to host workshops to gain essential knowledge from staff and incorporate these actions into our long-term plan
- **Introduction of annual Carbon Champion staff award;** We will continue to raise awareness and dedication of staff to the Net Zero objective through the introduction of an annual carbon champion award
- **Reviewing progress against the plan on an annual basis;** We recognise the development of this plan is only the first step and we must continue to closely monitor progress against our key objectives and sustainability goals. Where we are underachieving, we will review and amend as required.

We recognise that a whole community approach is required, we aim to engage with staff, patients, local community, and local organisations to achieve our sustainability goals. Our initial commitments are as follows:

	Date	Area of Focus	Responsible Lead
1	2022 / 2023	Medicines, Anaesthetics and Inhalers	Lauren Williams Consultant Anaesthetist Lead for Obstetric Anaesthesia Amanda Smalley Team leader Department of Respiratory Medicine
2	2021 / Ongoing	Travel & Transport	Gary Barnett Deputy Director of Estates & Facilities
3	2022 / 2023	Digitally Enabled Remote Working	Suzanne Emerson-Dam Deputy Chief People Officer
4	2022 / 2023	Estates and Facilities	Guy Kieser Associate Director of Estates
5	2021 / Ongoing	Food and Nutrition	Daniel Cripps Trust Catering Manager
6	2022 / 2023	Human Resources	Suzanne Emerson-Dam Deputy Chief People Officer
7	2023	Procurement	Clara Purnell Head of Procurement and Logistics
8	2022 / 2023	Green Space & Biodiversity	Alison Foster Programme Director - Building Berkshire Together Hospital Redevelopment
9	2022 / 2023	Sustainable use of Resources	Steve Sellwood Facilities Manager
10	Annual	Benchmarking our Performance	Tracey Middleton Director of Estates and Facilities
11	2023	Adaptation	Alison Foster (Programme Director) for redevelopment and Tracey Middleton (Director of Estates & Facilities) for business as usual
12	Ongoing	Governance	Nicky Lloyd Chief Finance Officer

5. Our Team's Commitment

Our staff work tirelessly to ensure that we deliver the best possible care, in the most sustainable way.

We are proud of the impact our staff have made in helping us reduce our carbon emissions over the last decade and they are key to ensuring the Trust is able to support and deliver the NHS Net Zero carbon target. We are the largest employer in Reading with 6,300 staff, every person can play a part in helping us meet our targets and help to fulfil our obligations to reduce our carbon footprint for the benefit of our community and future generations.

Our Trust values are Compassionate, Aspirational, Resourceful and Excellent (CARE) values that will underpin, support, and accelerate our journey to Net Zero carbon.

Compassionate

All our relationships are based on empathy, respect, integrity, and dignity. In every interaction and communication, we treat colleagues, patients and families with care and understanding.

Aspirational

We strive to continuously improve, to be the very best that we can be – as individuals and as an organisation.

Resourceful

Living within our means. Responding to the challenges of today and tomorrow in effective, efficient, innovative, and optimistic ways.

Excellent

We commit to excellence in everything that we do – placing patient safety and quality at our heart. We learn from mistakes, and we do what we say we are going to do and hold ourselves and others to account for adhering to our values and the behaviours we expect.



Our vision is “working together to provide outstanding care for our community”, improving our sustainability and reducing our climate change impact will help us to do this.

We will listen to, support, engage and work with our staff to implement their ideas to improve our sustainability performance. We will, where possible, help our staff to reduce their emissions, carbon footprint and waste at home and at the Trust.

We will introduce Green Awards which reward and celebrate the work of our staff who deserve recognition for their achievements.

We will also work with our staff to improve our patient, community, and staff wellbeing. To advance this aim we are currently building a **Health and Wellbeing Centre and Garden** which will act as a central hub for staff to easily access health and wellbeing services; it will contain exercise facilities, quiet rooms for relaxation and wellness and rehabilitation services and activities. The health and wellbeing centre will benefit from a beautiful garden area easily accessible from the main building and via its own side entrance.

The garden will be essential in supporting the ongoing emotional wellbeing of staff, as well as providing both the physical and psychological benefits of exercise, socialising and gardening. We hope that our hard-working staff will be better equipped to not only cope with the professional demands placed on them but also have greater life satisfaction and wellbeing.

6. Our Aims and Approach

The RBFT are committed to delivering the NHS Net Zero carbon objectives of Net Zero carbon for scope 1 and 2 carbon emissions by 2040 with an 80% reduction by 2028-2032 and scope 3 carbon emissions by 2045 with an 80% reduction by 2036-2039.

What are we setting out to achieve?

In the period 2022 to 2025, we will lay the foundations to achieve the NHS targets by focusing on the following activity.

1. Reducing scope 1 and 2 emissions,
2. Measuring, quantifying, and reducing our scope 3 emissions, and

3. Reviewing our hospital redevelopment plan options to optimise the Net Zero carbon impact of the redevelopment option we pursue as a Trust.

Our approach is to engage our organisation and stakeholders in understanding, measuring, reducing, and mitigating our resource use and carbon emissions. We will do this in ways that improve our patient experience, care, and reduce our resource use to allow us to deploy our budgets more effectively in pursuit of our organisational and clinical objectives.

To do this within our Green Plan we have set out our initial invest to save and performance

improvement projects for the next two years in our priority areas.

1. **Medicines** - reducing the impact of gas usage and wastage, plus the transition to enhanced inhaler types.
2. **Travel and Transport** - including fleet composition and enhanced travel options/arrangements for staff and patients.
3. **Digitally enabled hybrid working** - building on the progress achieved in 2020, a range of digitally enabled initiatives to support hybrid and flexible working and capitalise on digital models of care.

Celebrating our successes

Becoming Carbon Negative

Dr Zac Etheridge, Clinical Lead for Acute Medicine, says, 'I am aiming for carbon negative not just neutral! In my spare time I'm a Trustee of a charity which aims to improve green spaces in my local area, working to enhance biodiversity, fight climate change and improve people's mental well-being.'



Priority 1

Medicines

Priority 1 is a nationally mandated priority to ensure all regions work towards reducing the environmental impact through the use of Medicines. This is to be achieved by;

- Reducing the use of Desflurane in surgery.
- Optimising and reducing the waste of medical gases.
- Reducing the carbon impact of inhalers.

Priority 2

Travel & Transport

Priority 2 is a nationally mandated priority to ensure all regions reduce travel and transport emissions by;

- Restricting purchase and lease of cars to ULEV and Zero Emissions Vehicles (ZEV) and aiming for vans.
- Implementing a car salary sacrifice scheme for ULEZ and ZEV.
- Appointing a cycle-to-work (C2W) lead in every trust, and ensuring all systems have salary sacrifice C2W schemes and cycle facilities in place.
- Conducting a fleet review with the national greener NHS Team.

Priority 3

Digitally Enabled Remote Working

Priority 3 has been chosen by the SE region to use digitally enabled virtual working to support to minimise carbon emissions by;

- Expanding digital models of care to focus on;
 - Remote care home and long term conditions consultations with primary and secondary care;
 - Providing a virtual mental health offer for patients who may prefer remote support;
 - Supporting the continued use of remote monitoring and virtual wards.
- Developing a flexible approach to virtual and home working aligned with national policy change.

And we have also set out a longer list of areas and projects to be advanced over the full three-year period which include all the areas identified by the NHS that needs to be addressed to decarbonise our healthcare system which include:

- **Care:** Developing a framework to evaluate carbon reductions associated with new models of care and implementation.

- **Medical Supply and Supply Chain:** Working with suppliers to ensure that they are committed to the NHS Net Zero approach before the end of the decade.
- **Transport and Travel:** Working towards developing the world's first zero-emission ambulance by 2022, with a shift towards zero-emission vehicles by 2032 for the rest of the NHS fleet.

- **Innovation:** Utilising new and evolving technologies and implementing as a Net Zero horizon scanning function to identify future pipeline innovations.
- **Hospitals:** By supporting the construction of our new 'Net Zero Hospital' and incorporating higher standards for construction and refurbishment of current buildings.

- **Heating and Lighting:** Investment in LED lighting replacement and other technologies.
- **Adaptation:** By building resilience and adaptation into the heart of our Net Zero agenda.

How will we achieve our objectives and targets?

1. A Net Zero Carbon Steering Group has been formed from key senior management stakeholders and is chaired by a Board and Executive Management Committee member and will manage the journey to Net Zero carbon through the implementation of the Green Plan. The steering group is supported by sustainability award winning members of our staff and colleagues with sustainability training and expertise.
2. The Steering Group meets on a bi-monthly basis to review our performance against the plan and identify any corrective action that may be required.
3. An RBFT Sustainability Champions Network has been established drawn from RBFT staff who play an active role in helping achieve our aims.
4. Net Zero Carbon working groups support the development of the ongoing aspects of the plan and projects. Their membership is drawn from the Sustainability Champions Network nominations by the Steering Group.
5. Net Zero Carbon staff focus groups are regularly delivered to capture ideas, input into the planning and project delivery
6. RBFT is working with our local stakeholders including Reading Borough Council, Wokingham Borough Council, West Berkshire Council, the University of Reading, the Integrated Care System, Academic Health Science Network local business and volunteer networks such as Connect Reading, Reading Voluntary Action, West Berkshire Volunteer Centre, Ethical Reading and Reading Small Business Network to share best practice and resources as required, ensuring we achieve more collectively. RBFT is also a member of the Thames Valley Chamber of Commerce Sustainability group and an active member of Reading CAN Board.
7. The Green Plan workstreams will be supported by an online collaboration site for staff to share information and ideas with each other



Celebrating our successes

Kate Egginton, Associate Director of Nursing for Children and Young People

Reducing my carbon footprint doesn't come as naturally to me as to some of my colleagues, but I'm making improvements.

At home we walk everywhere rather than taking the car and this includes the daily 'school runs' of over a mile each way. My children share a lift to football, and when I do have to drive anywhere, I'm always conscious to 'never idle' i.e. I turn off my car engine while sat in traffic queues. And finally, I've taught my children to turn the taps off when brushing their teeth!



8. The Communications Team will run campaigns to raise Net Zero awareness and engagement with staff, patients, and community stakeholders.
 9. Many of RBFT staff are members of the Greener NHS collaboration site which supports the development of ideas to reduce carbon.
 10. The specific performance improvement projects will be developed in line with the existing Trust budget, standing financial instructions and procedures and delivered as ongoing projects in line with our existing governance processes.
 11. Training programmes will be developed to support and which has a section that enables collaboration between RBFT staff and the wider community.
 12. The Steering Group will report on an ongoing basis to both the Finance and Investment Committee, Executive Management Committee (EMC) and the Trust Board and reconcile the Trust carbon performance and emissions against the carbon reduction targets on an annual basis in a consolidated performance report.
 13. Digital transformation projects such as outpatient transformation which has been established to staff at the various levels of need from awareness raising as part of induction to supporting leaders in complex change to achieve Net Zero. We already have many staff who are using funded study to carry out research in the area of carbon reduction, which we will build on.
- reduce unnecessary on site appointments and increase number of virtual clinics and online bookings for diagnostic and treatment processes. This will deliver system wide benefits like reducing air pollution and reducing pressure on the hospital site. Also initiatives like The Virtual Hospital, synonymous with telemedicine, telehealth and virtual consultations, to support a wide range of patients across a variety of conditions and can be applied within the domain of acute medicine and other specialities where traditional inpatient management could be effectively and safely delivered in a virtual construct. This will also support reduction in travel and impact of wider carbon associated with inpatient admissions.

7. Net Zero Carbon

Net Zero carbon refers to the balance between the amount of greenhouse gas produced by the NHS and the amount removed from the atmosphere. Net Zero is reached when the amount we add is no more than the amount taken away.

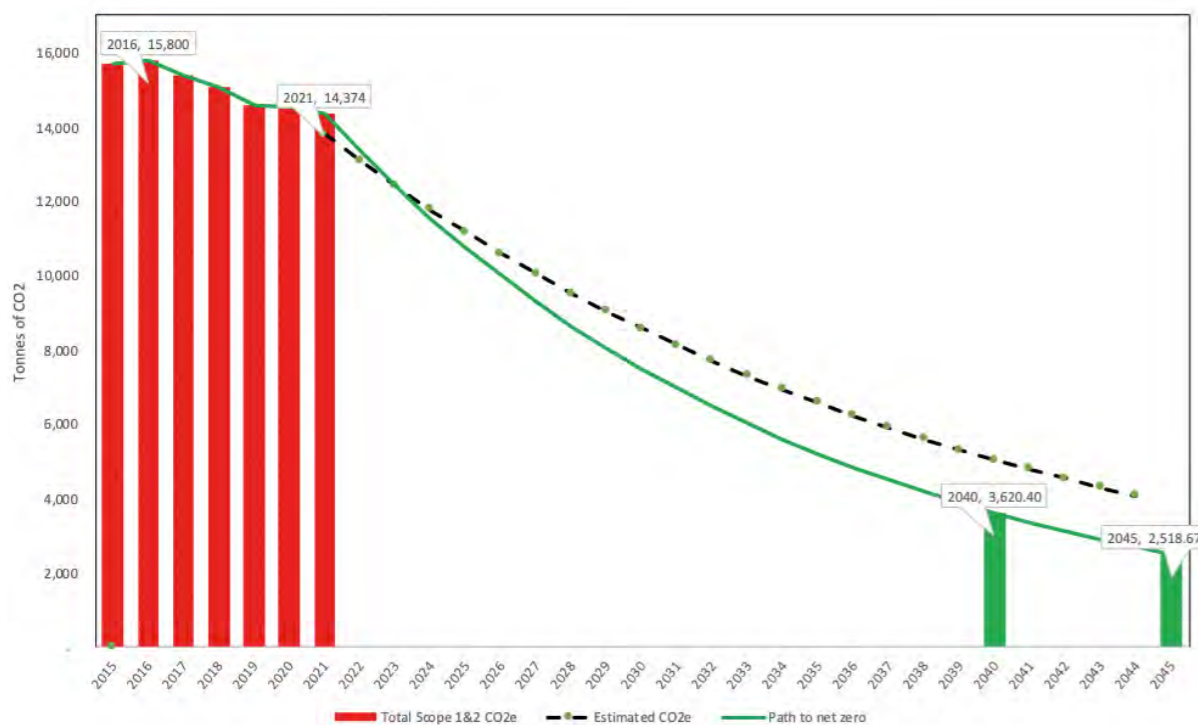
Two ambitious targets have been set within the NHS **Delivering a Net Zero National Health Service** strategy:

1. Net Zero by 2040 for the emissions we control directly scope 1 and 2 (the NHS Carbon Footprint), with an 80% reduction by 2028-2032.
2. Net Zero by 2045 for the broader emissions we can influence scope 3 (the NHS carbon footprint plus), with an 80% reduction by 2036-2039.

a) Our Carbon Footprint at Royal Berkshire NHS Foundation Trust

Scope 1 and 2 emissions have been calculated for Royal Berkshire NHS Foundation Trust from:

- Electricity Consumption
- Gas Consumption
- CHP Usage
- Anaesthetics
- Fleet Travel
- Refrigerant Usage
- Generator Fuel



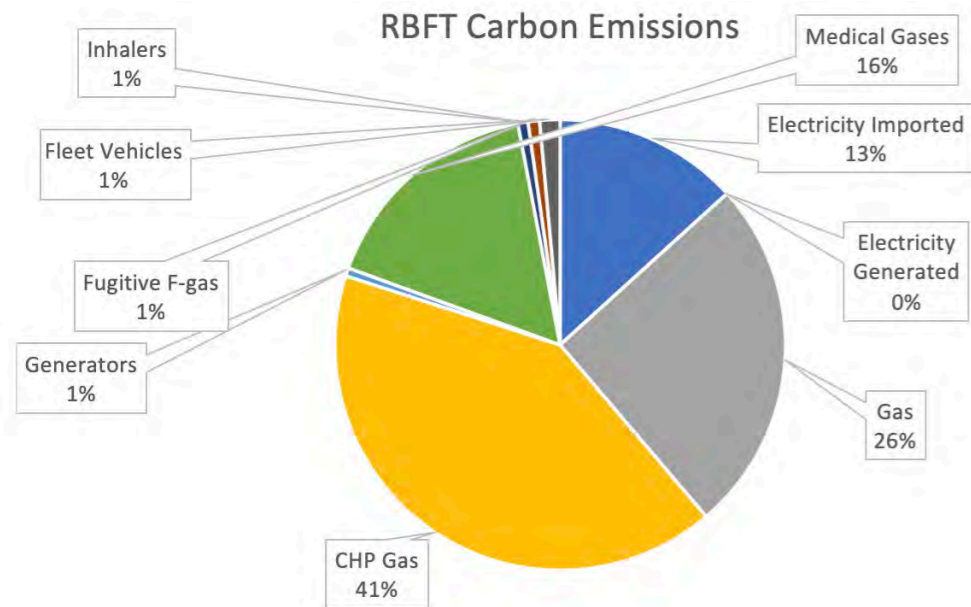
Royal Berkshire Foundation Trust Scope 1 & 2 Carbon Emissions

Scope 1 and 2 emissions have been calculated at 14,374 tonnes CO₂ for the financial year 2020 / 2021 and Scope 3 emissions have been estimated at a further 61,279 tonnes, based on the National NHS carbon emissions, giving Royal Berkshire NHS Foundation Trust a carbon emissions total of 75,653 tonnes for 2020 / 2021.

The carbon emissions have been calculated using data gathered from the 2020 / 2021 ERIC return and Greener NHS Data Collection return for gas, electricity, water, CHP, catering, transport, and waste. Estimates for the remaining emissions have been calculated from guidance notes in **Delivering a Net Zero National Health Service**.

Energy Type	Period From	Period To	Usage	Unit of Measurement	% of Total Energy Use	CO ₂ Emissions Tonnes	% of Emissions
Electricity Imported	01 Apr 2020	31 Mar 2021	8,987,284	kWh	12.19%	1,908	13.28%
Electricity Generated	01 Apr 2020	31 Mar 2021	11,331,736	kWh	15.37%	-	0.00%
Gas	01 Apr 2020	31 Mar 2021	20,017,087	kWh	27.15%	3,666	25.51%
CHP Gas	01 Apr 2020	31 Mar 2021	32,320,924	kWh	43.84%	5,920	41.18%
Generators	01 Apr 2020	31 Mar 2021	325,099	kWh	0.44%	83	0.58%
Medical Gases	01 Apr 2020	31 Mar 2021	2,364	CO ₂	0.003%	2,364	16.45%
Inhalers	01 Apr 2020	31 Mar 2021	104	CO ₂	0.00%	104	0.72%
Fugitive F-gas	01 Apr 2020	31 Mar 2021	59	kg	0.00%	119	0.83%
Fleet Vehicles	01 Apr 2020	31 Mar 2021	732,000	miles	0.99%	209	1.45%
Total			73,716,657		100%	14,374	100%

Royal Berkshire NHS Foundation Trust Scope 1 and 2 emissions 2020 / 2021



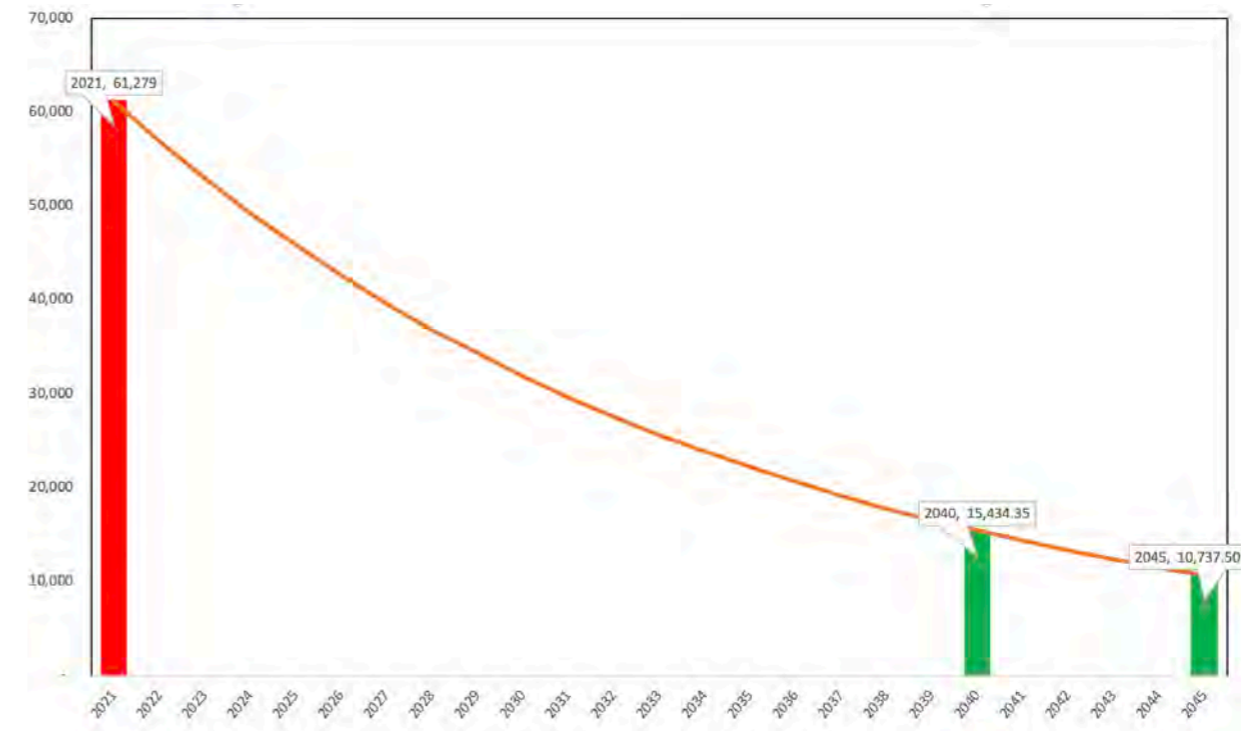
Breakdown of Royal Berkshire NHS Foundation Trust scope 1 and 2 emissions

Medical gases, and inhaler use, have been identified as a key area for reduction because they account for annual emissions of circa 2,500 tonnes. This has been calculated based on conversion factors from The Association of Anaesthetists.

The Trust will focus on minimising energy and resource use and maximising renewable energy generation on site to minimise any future offsetting required to achieve our targets. We have set an initial target to achieve a 77% reduction in Scope 1 and 2 carbon emissions by 2040 and an 84% reduction by 2045 from our 2016 baseline. This equates to an annual stretch target of 7% reduction year on year based on what we believe is currently technically feasible.

Scope 3 emissions have been calculated for RBFT from:

- Waste
- Water
- Transport and Travel
- Supply of Goods and Services
- Catering
- Capital Goods
- Downstream Transportation and Distribution
- Anaesthetics
- Staff Commuting
- Business Travel



Royal Berkshire NHS Foundation Trust Scope 3 route to Net Zero

Scope 3 emissions need to be also addressed. If a similar 7% year on year stretch annual reduction is targeted, it will provide a 75% reduction by 2040 and an 82% reduction by 2045 against our estimated 2021 baseline.

Our scope 3 emissions have been estimated at 61,279 tonnes of CO₂e and apportioned according to the guidance provided in **Delivering a Net Zero National Health Service**.

Scope 3 emissions are not routinely captured by NHS Trusts and will be measured more accurately during the term of this Green Plan making use of Greener NHS Data Collection statistics and other available metrics.

Our annual targets will be updated at the end of this Green Plan period when we will have further details on the quantum and make up of our carbon emissions and what is practically

possible considering our development options and carbon reduction performance.

Our carbon emissions and targets are based on our existing services and estate and will need to be adjusted for any changes to our services or patient volumes because of commissioning or other changes to our organisation.



Celebrating our successes

Nicky Lloyd Net Zero Steering Group Chair

One of the changes I've made includes buying unwrapped, loose fruit and vegetables instead of pre-packaged.

b) Green Plan

A Green Plan is a board approved, live strategy document outlining the Trust's aims, objectives, and delivery plans for sustainable development. This includes the implementation of the NHS Long Term Plan deliverables.

Implementing our Green Plan will help Royal Berkshire NHS Foundation Trust to:

- Deliver on the **NHS Long Term Plan**
- Improve the health of the local community
- Achieve its sustainable and financial goals
- Meet its legislative requirements

In England, the carbon footprint of the NHS was estimated to account for 4-5% of the country's climate emissions and transporting NHS products and services accounts for more than half of our carbon footprint.

However, the NHS has already made considerable progress on climate change, with carbon emissions being reduced by 18% in the decade since 2007. In addition, 85% of NHS provider waste is avoided going directly to landfill and 23% of waste was recycled in 2017. The NHS water footprint was reduced by more than one fifth (21%) between 2010 and 2017.

This Green Plan addresses how our Trust will improve our sustainability and carbon performance over the next three years.

c) Monitoring and Targeting

Monitoring and targeting is essential to ensure that carbon reduction targets are being achieved. It builds on the principle "you can't manage what you don't measure". The 7% year on year reduction of Scope 1, 2 and 3 emissions require careful monitoring to ensure that the Trust is on track to achieve a 75% reduction by 2040 and an 82% reduction by 2045 from a 2015 baseline.

A sustainability team will be recruited and take responsibility for managing and overseeing environmental and sustainability issues. We will allocate three full time equivalent staff to take primary responsibility for the Trust achieving Net Zero. These will be a Senior Net Zero Carbon Manager, an Energy Manager / Sustainability Project Manager and Carbon Assistant. They will monitor and target carbon emissions across all three scopes and will report progress on an annual basis.



Celebrating our successes

Going digital and removing paper

Emailing patient letters

Over the past year, we have used Dr Doctor, our digital patient engagement platform, to send 579,688 patient letters via email. This has saved 579,688 envelopes and a minimum of 1,159,376 sheets of paper, which equates to around 209 trees*.

Digital Consent Forms

Using digital consent forms instead of paper copies in all of our surgical areas is projected to save around 108 trees* per year.

(*according to Conservatree.org)

The Trust is proposing to procure and introduce staff Apps to assist in the organisation's commitment to zero carbon targets by providing a sustainability engagement tool combining a digital platform with innovative communications to record and monitor CO₂ reduction initiatives and their

effects. Trust staff will be encouraged to engage in the reduction of carbon emissions and promote staff wellbeing. It will assist in meeting and monitoring the Trusts sustainability and wellbeing targets.



8. Drivers for Change

Carbon budgets were introduced in the UK under the **2008 Climate Change Act**. Each carbon budget provides a five-year, statutory cap on total greenhouse gas emissions, which should not be exceeded, in order to meet the UK's emission reduction commitments.

In June 2019, parliament passed legislation requiring the government to reduce the UK's net emissions of greenhouse gases by 100% relative to 1990 levels by 2050.

The **Public Services (Social Value Act) 2012** requires all public bodies in England and Wales to consider how the services they commission and procure might improve the economic, social and environmental well-being of the area. The legislation affects a range of organisations including

those in the NHS, public health, local authorities, government departments and housing associations.

The **EU Directive on Public Procurement** sets new rules for public bodies when purchasing goods and services, including clinical services. It includes a number of positive drivers for sustainable development.

Over the last 10 years, the NHS has taken notable steps to reduce its impact on climate change.

The **Long-Term Plan** outlines how the NHS is going to improve care for patients over the next ten years.

The **Sustainable Development Management Plan** demonstrates our objectives on sustainable development and sets out a plan of action.

The **NHS Carbon Reduction Strategy for England** sets an ambition for the NHS to help drive change towards a low carbon society. The strategy shows the scale of reduction in carbon required for the NHS to meet its legal targets set out in the Climate Change Act. It also recommends key actions for the NHS to become a leading sustainable and low carbon organisation.

Greener NHS

The Greener NHS programme works with NHS staff, hospitals, and our partners. It builds on the great work being done by trusts across the country, sharing ideas on how to reduce the impact on public health and the environment, save money and reach Net Zero carbon. Royal Berkshire NHS Foundation Trust are active members of this group.



9. RBFT Redevelopment

The Royal Berkshire NHS Foundation Trust Green Plan sets out our ambition to support the NHS objectives and to work towards the national Net Zero carbon targets in the period 2021 to 2025. The plan sets out the actions to reduce scope 1, 2 and 3 carbon emissions over the period to March 2025.

All new builds will be subject to Part L Building Regulations where a building will not exceed the target CO₂ emission rate to conserve fuel and power. Net Zero will be a major consideration in any refurbishment or new build project.

To support the longer-term route to Net Zero carbon for RBFT, the RBFT redevelopment and subsequent capital projects and estate remodelling will be designed, commissioned, set to work, and operated in accordance with the principles contained within new NHS Net Zero Carbon Healthcare Building Standard which is currently published in Beta Format.

These are broken into two key themes within the new standard:

1. Sustainability and wellbeing

- a. Environmental sustainability ensuring a) that biodiversity is protected and increased and b) climate change adaptability is considered in the design of any new or upgrade to any existing facility
- b. Wellbeing and social responsibility ensuring that a) occupant comfort, health and wellbeing is optimised and b) social value, responsible and ethical procurement is pursued and optimised

2. Net Zero carbon estates performance

- a. Minimising construction emissions and embodied carbon
- b. Optimising renewable energy production and sourcing
- c. Minimise energy and other resource uses
- d. Minimise Soft Facilities Management emissions from waste, food etc.
- e. Reduce staff and patient travel emissions
- f. Minimise use and carbon intensity of anaesthetic gases and inhalers
- g. Minimise the carbon intensity of the procurement of goods and services
- h. Minimise carbon offsetting requirement to achieve Net Zero
- i. Minimise the end-of-life carbon and optimise reuse and upcycling

RBFT will apply the new NHS Net Zero Carbon Healthcare Building Standard methodologies for the minimisation of embodied, construction, operational and end of life carbon, to assess all the options, redevelopment options for their sustainability and wellbeing and Net Zero carbon estates performance. In the medium term these methodologies will be developed and applied to all other capital and minor works projects completed by the Trust. We will work with and learn from our peer organisation and local partners and access available learning and research from organisations such as Greener NHS Southeast, The University of Reading, Health Education England and the Oxford Academic Health Science Network,

In addition, it is proposed that our projects will use the NHS Operational Energy & Carbon Tool and the NHS Whole Life Carbon Compliance Tool to demonstrate compliance to Energy and Carbon Limits at handover as part of the testing and commissioning, soft landing, and post occupancy evaluation activities, when available.

Reporting operational energy and carbon emissions through ERIC and other building management systems will become a requirement during the term of our Green Plan. Our Sustainability team will work towards building measuring and reporting system performances and overall building/departmental performances against energy limits and assumptions in operation in the future to comply with these requirements. This will include demonstrating corrective action plans and investigations are in place for non-compliance.

We will work towards ensuring that our capital projects, equipment investment and general decision making has sustainability and the impact on our carbon emissions embedded in our decision making.

In 2022 we need to reduce our Scope 1 and 2 emissions by 1,006 tonnes which is the 7% target in the Green Plan. This is equal to the energy used in 92 average family homes for a year. But if everyone who currently drives to work 5 days a week reduced this to 4, this would reduce by 1,700 kg CO₂e.

Or if everyone switched off photocopiers overnight this would equate to a saving of 2,300 kg of CO₂e.

10. Our Areas of Focus

During the term of our Green Plan, we will focus on improving our performance in the areas set out below, our detailed action plans will be agreed and updated on an annual basis and our progress monitored, reviewed, and reported by our sustainability team.

	Date	Area of Focus	Action	Status
1	2022-2023	Medicines, Anaesthetics and Inhalers	<ul style="list-style-type: none"> • Reduce the use of Desflurane across the Trust • Introduce piped Nitrous Oxide Waste Reduction Strategy and auditing process • Reduce the administration of MDI inhalers for pMDI alternatives • Introduce Patient Awareness Campaign for correct disposal of used inhalers 	
2	2022-2023	Travel & Transport	<ul style="list-style-type: none"> • Walking Club • Cycle Clubs • Staff travel website • Staff Park & Ride discount initiative • Shuttle bus service • Staff discount for bus 	
3	2022-2023	Digitally Enabled Hybrid Working	<ul style="list-style-type: none"> • Introduction of Hybrid Working policy • Digital Hospital 	
4	2022-2023	Sustainable Models of Care	<ul style="list-style-type: none"> • Increase use of virtual appointments • Align with NHS digital to apply national standard to patient remote care 	
5	2022-2023	Estates and Facilities	<ul style="list-style-type: none"> • Agree business as usual plans 	
6	2022-2023	Food and Nutrition	<ul style="list-style-type: none"> • Introduction of advanced catering software for more transparent data • Work with on-site food retail partners to adopt sustainable catering practices • Reduce single use plastic cups, dishes and cutlery 	
7	2022-2023	Human Resources	<ul style="list-style-type: none"> • Development of the new Health and Wellbeing Centre • Staff awareness campaign • Net Zero Champion Awards 	

	Date	Area of Focus	Action	Staus
8	2023	Procurement	<ul style="list-style-type: none"> • Increase use of local suppliers • Introduction of sustainability scoring in procurement tender process • Evidence-based tender process (carbon impact of suppliers, environmental policy etc) 	
9	2022-2023	Green Space and Biodiversity	<ul style="list-style-type: none"> • Maintain and enhance plants in existing green spaces on site • Development of new health and wellbeing memorial garden in health and wellbeing centre 	
10	2022-2023	Sustainable Use of Resources	<ul style="list-style-type: none"> • Engage in App based reuse schemes • Staff awareness campaign • Reduce the amount of waste produced by using less material in design and manufacture • Work with the local community to recycle and reuse items where possible 	
11	2023-2024	Benchmarking Performance	<ul style="list-style-type: none"> • Engage with model hospital • Development of RBFT progress dashboard 	
12	2022-2025	Adaptation	<ul style="list-style-type: none"> • Create a business-as-usual adaptation plan • Review redevelopment options for changes to the estate to mitigate climate change risk 	
13	2022-2025	Governance	<ul style="list-style-type: none"> • Steering Group of Executive Management Committee • Net Zero Carbon Group 	

a) Medicines, Anaesthetics and Inhalers

Medical gases play an essential role in making surgeries safe and have undisputed benefits in the medical field. Anaesthetic gases, however, contribute approximately 5% of the NHS emissions and reducing the use of carbon intensive anaesthetics is essential to achieve Net Zero carbon.

Prediction of environmental hazards and the potential environmental impact of pharmaceuticals can be

categorised by their impact according to a precautionary principle composed of 3 characteristics: persistence, bioaccumulation, and toxicity. Some gases used in anaesthesia have an additional greenhouse gas effect, this means that once breathed out they continue to have a warming effect on the atmosphere for many years to come. The use of inhalant gas Desflurane is of particular interest due to its extremely high CO₂ content, Desflurane is 2,500 times more warming than Carbon Dioxide. An hour's anaesthetic will have the warming effect of 0.8kg-1.6kg

of CO₂, compared to Desflurane which produces a minimum of 30-60kg CO₂.

Several NHS Trusts have discontinued the use of Desflurane in favour of lower carbon alternative Sevoflurane which produces 97-99% less CO₂ emissions. Royal Berkshire NHS Foundation Trust are still regularly administering Desflurane within theatres. The Trust currently uses 115 litres of Desflurane per year which produces 459 tonnes of CO₂e.

Similarly, the use of Nitrous Oxide (N₂O) has a significant

environmental impact. Using 500ml of nitrous oxide every minute for a procedure lasting an hour, will warm the atmosphere by an equivalent of 16kg CO₂. Nitrous oxide is often used in large volumes and remains in the atmosphere for 110 years and makes up around 78% of the climate change from fluorinated gases used as anaesthesia in surgery. Reducing the use of N₂O would therefore lead to one of the most significant reductions in anaesthesia related CO₂e.

Although primarily used in the Operating Theatres, N₂O can be found throughout the hospital,

in dental, labour and delivery units, as well as emergency departments. Reducing the use of N₂O within the Trust will play a significant role in achieving Net Zero carbon by 2045.

A key problem with the use of Anaesthetic gases is that only 5% of the gas is inhaled, the rest is exhaled, unchanged, and extracted to the atmosphere and wastage from piped manifold systems are also common contributing to the overall damage to the environment.

This is limited and decreased at the Royal Berkshire Hospital by scavenging which collects and

removes vented anaesthetic gases from the Operating Theatres.

A breakdown of the main anaesthetic gases administered by the Trust and their environmental impact are detailed on the following page:



Celebrating our successes

Caroline Bennett, Communications Team

In our household we've reduced our meat consumption and eat organically where we can. The reduction in the use of chemical pest control reduces the harm on insects and the animals that eat them, and increases plant and wildlife diversity. The reduction in the use of chemical fertilisers has the same benefits, and also reduces soil erosion (plants that have to 'dig deep' for their nutrients produce longer roots).

In my spare time, I volunteer at our local organic co-op. The products they sell are not only organic but as local as possible - and in with some goods - without packaging. Customers can bring their own containers to fill up with loose foods such as nuts and cereals, or household products such as laundry liquid or body wash. Shopping here has dramatically reduced the amount of single use plastics we use.

Finally, we cycle or take the train where possible, have our milk delivered in glass bottles and grow a lot of our own fruit and vegetables.

Inhaled anaesthetic agent	100-year global warming potential (per kg, in comparison with CO ₂ where CO ₂ =1)	Atmospheric lifetime (years)
Desflurane	2,540	14
Isoflurane	510	3.2
Sevoflurane	130	1.1
Nitrous Oxide	298	114

As the quantity of Desflurane is removed, the carbon effect is significantly reduced. The carbon intensity of Sevoflurane remains much less significant, despite an increase in usage. The Trust has a key opportunity to reduce the carbon emissions generated by anaesthetic gases by transition away from the use of Desflurane.

In addition, the Trust could see significant cost savings from the reduced use of Desflurane.

Our aims

1. Where possible, reduce the use of Desflurane in favour of low carbon alternative Sevoflurane
2. Reduce use of desflurane in surgery to less than 10% of its total volatile anaesthetic gas use, by volume
3. Review the business case for introducing a piped Nitrous Oxide Waste Reduction Strategy; including a regular auditing system



to monitor cylinder turnover per year and review manifold cylinder management ensuring there are routine leak tests performed

4. Use viable alternatives to Desflurane, Nitrous Oxide and Isoflurane including the use of intravenous alternatives where feasible and appropriate.

Inhalers

A proportion of inhalers administered by the Trust are metered dose inhalers (MDIs) that have a high carbon impact due to their propellant qualities.

The NHS Long Term Plan identifies a shift to lower carbon inhalers as a way of significantly reducing the carbon footprint of health and social care. With this in mind, dry powder inhalers or soft mist inhalers are generally preferred locally, unless there is a specific clinical or dexterity reason that an individual requires a pMDI (pressurised metered dose inhalers) or BAI.

Research indicates inhalers with the active ingredient Salbutamol which can be found in devices such as pressurised meter dose inhalers have a CO₂e per puff of 48.6g. pMDI inhalers with the active ingredient Formoterol or Salmeterol have a CO₂e per puff of 130g, making this the most carbon intensive of the pressurised meter dose inhalers. Alternative DPI inhalers with

active ingredients Terbutaline, Formoterol, Indacaterol or Salmeterol have a CO₂e per puff of 18.75g.

pMDI use in England is responsible for nearly 1 million tonnes of CO₂ equivalent per year.

The NHS Long Term Plan identifies a shift to lower carbon inhalers as a way of significantly reducing the carbon impact of health and social care.

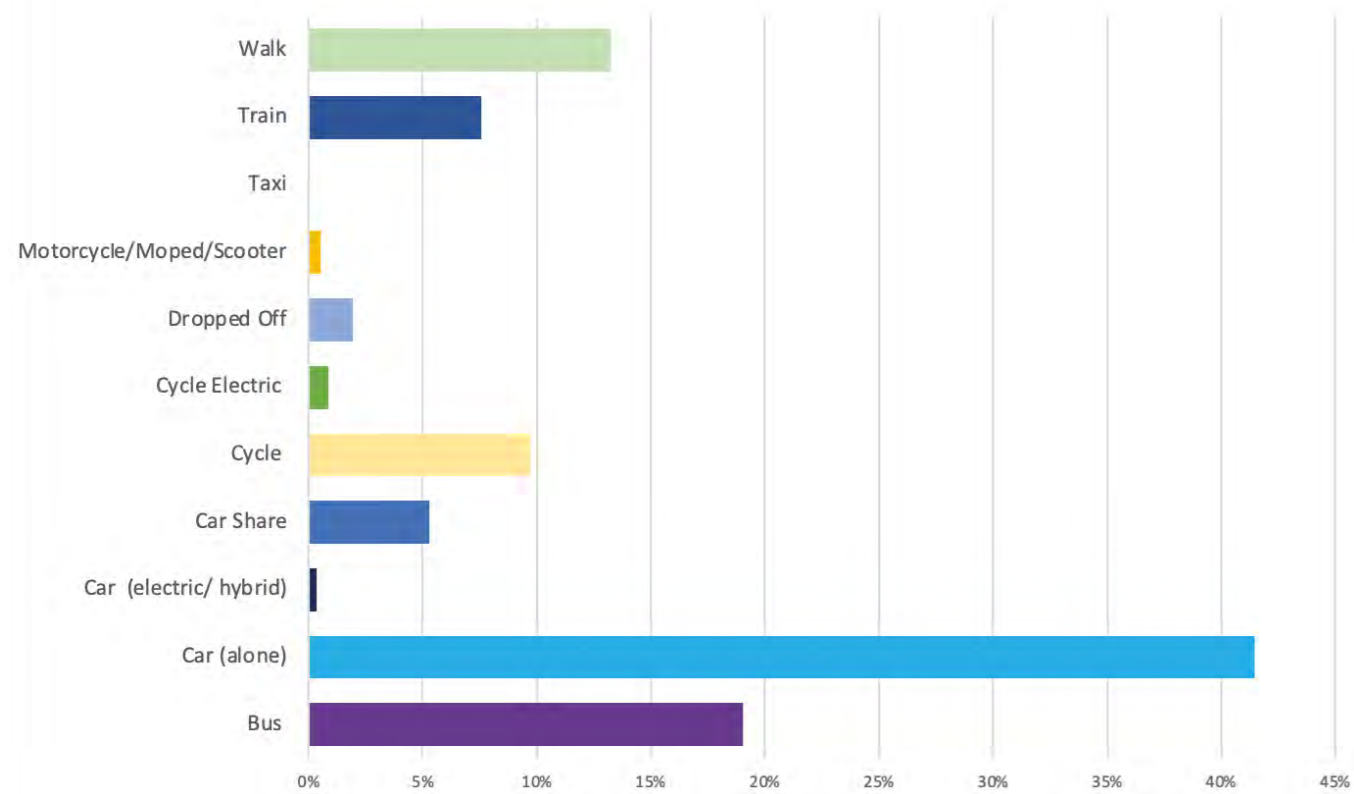
Our aims

1. Where appropriate and safe for administration use DMI inhalers over pMDI
2. Where appropriate and safe for administration select DMI inhalers with the active ingredient Indacaterol as less daily dose is required, contributing to the overall carbon impact
3. Used pMDI inhalers still contain propellants therefore all canisters will be correctly disposed of in an environmentally friendly way
4. Enforce Patient Awareness Campaign into the environmental impact of inhalers to ensure used canisters are returned to pharmacy and do not end up in landfill

b) Travel and Transport

The transport of patients, staff and visitors has a significant impact on local air quality, congestion, and health. We consider our impact on local air quality as our duty of care. Royal Berkshire NHS Foundation Trust already has a well-developed Travel and Transport policy supporting staff, patients, and visitors to use more active and sustainable travel methods, which will reduce the environmental and health impacts of these activities.

A Travel survey was carried out in 2019 which established that 59% of staff travelled to work by a means of transport other than alone in a car with an internal combustion engine. We aim to increase that to 90% by 2040 by engaging and supporting our staff.



Travel Survey Results

The Trust promotes and will continue to support the following:

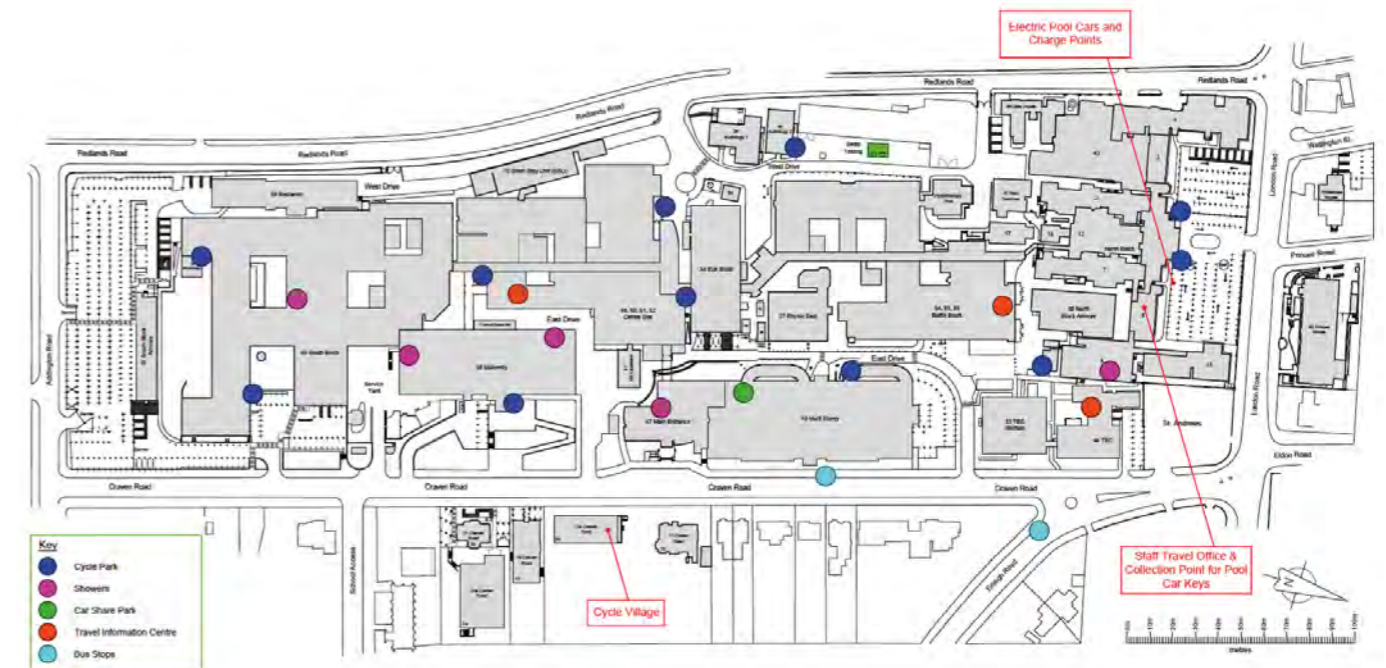
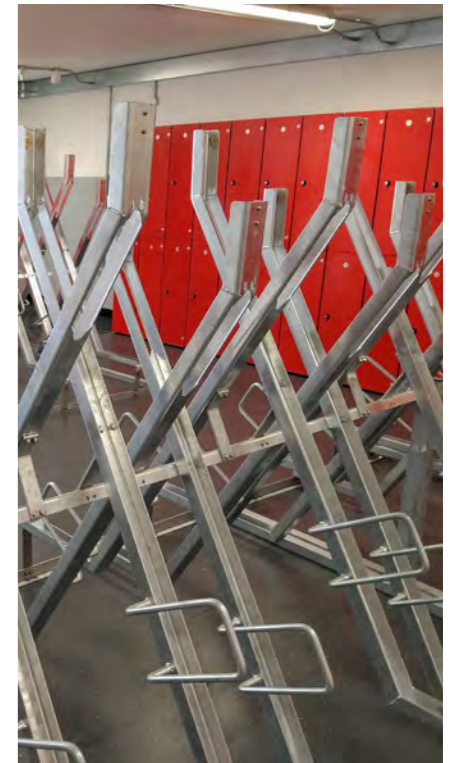
- Walking clubs – those keen to find a walking buddy can do so through the travel portal. Walking clubs are promoted as well as **local walking routes**
- Cycle friendly policies – The Trust operates a cycle to work scheme, allows staff to buy and sell bicycles, scooters, offers free loan cycles and has a cycle buddy scheme
- Car-share scheme is encouraged where staff can travel with each other which will reduce carbon emissions, costs, congestion, and parking issues
- Access to a dedicated staff travel **website** with an individual's travel planner
- Park & Ride – will work towards making discounts available for staff
- Staff shuttle bus service to car parks and railway station on the Royal Berkshire NHS Foundation Trust site
- Bus discounts are passed on to staff and season ticket loans are available

We shall put a policy in place that all newly leased or purchased vehicles will be zero emission or ultra-low emission vehicles by 2022-2023.

The electric vehicles are saving the Trust 30 tonnes of carbon per year. The Trust operates a salary sacrifice scheme for the purchase of vehicles. This will be extended to ultra-low emission and zero emission vehicles by 2022-2023.

There are six electric vehicle charging points at the Royal Berkshire Hospital site with six electric pool cars which are available to book by any member of staff. We aim to install more EV charging posts on our sites between 2022-2025.

The Trust will continue to provide a salary sacrifice purchase scheme for cycles and provide secure storage in the six locations at Royal Berkshire Hospital including the newly opened **cycle village** which accommodates 88 bicycle spaces and 12 e-bike spaces. We shall continue to provide secure parking, showers, and lockers for cyclists.



Travel and Transport Map

c) Digitally Enabled Hybrid Working

Covid19 drastically changed the way the Trust conducts its day-to-day activities. Carbon dioxide emissions from transportation dropped 15% last year as people stayed at home, further highlighting the dramatic effects of unnecessary travel.

Some non-clinical staff switched to working from home, and the average number of remote meetings across the NHS increased from 13,500 to 90,250. Staff reported higher productivity, with less time spent travelling, and the additional benefits of less exposure to air pollution, better attendance in (virtual) meetings, and better work-life balance.

RBFT has developed the digital infrastructure needed to continue delivering a high-quality service on a flexible and sometimes remote basis. The central aim is to reduce the carbon emissions of the Trust by limiting staff travel where possible.

Remote and home working progress and developments achieved during 2020 are to be developed in the Trusts long term plan for sustainable development and in line with the South-East region central green objectives.

We have produced a Hybrid Working Policy where 1,000 corporate and clinical administration staff will be able to work remotely from home. This is not just responding to the pandemic and will become the new way of working moving forward.

Similar technology will also be used in the delivery of telemedicine services which will allow patients to access health services without having to travel.

We have set out our plans to become a digital hospital. We were accepted into NHS England's Global Digital Exemplar 'Fast Follower' programme, which will provide additional funding to support us to deliver on our long-term plans.

Using digital technology to capture and record information as patients are treated, means that in the future, doctors and nurses will be able to spend more time with their patients, leading to safer and quicker care.



Celebrating our successes Waste Watchers

Although in the waste hierarchy it's best to reduce and reuse how much we use, recycling what we have used is the next best approach.

We've been working with Grundon since 2012 to manage our waste and in particular to increase our recycling rates. Through the Waste Watchers initiative we have introduced new waste streams to ensure we recycle as effectively as possible, and in 2019 we won a gold 'Green Apple' award for our environmental best practice.

It has taken more effort, individual determination and research to set up recycling streams, for items that aren't commonly recycled such as I-gel airway devices and PVC oxygen masks. However we are making progress and we aim to continue improving our recycling rates.



d) Sustainable Models of Care

Embedding Net Zero principles across all clinical services is critical, with this section considering carbon reduction opportunities in the way care is delivered. Currently, around 3% of NHS emissions derive from journeys to and from the hospital.

In order to achieve Net Zero carbon, the Trust aims to reduce the carbon impact of providing critical care to patients, in line with the NHS Digital Transformation. Key priorities include

- Create straightforward digital access to NHS service, and help patients and their carers manage their health
- Use decision support and artificial intelligence (AI) to help clinicians in applying best practice, eliminate unwarranted variation across the whole pathway of care, and support patients in managing their health and condition
- Use predictive techniques to support local health systems to plan care for populations.

There is no 'one size fits all' when it comes to patient care, but we aim to build a platform of

competent healthcare tools that can assist both clinicians and their patients in bettering the level of their treatment.

The long-term aim of the Trust is to reduce carbon whilst increasing the quality of patient experience. The purpose of digital models of care is not to replace hospital treatment but to work alongside physical appointments for the benefit of our patients.

Key examples of digital healthcare services which are already successfully being deployed across other Trusts include:

- Asthmatic monitoring
- Mental health services
- Virtual clinics
- Telephone appointments
- Virtual reality for cardiac rehabilitation treatment

Our aims

- Engage with digital platform 'Patient View' to reduce unnecessary car miles travelling to hospital. Not only does this have the benefit of putting health information into the hands of the patient it significantly reduces the need for physical appointments
- Where possible, use local healthcare services accessible to patients
- Increase the number of virtual appointments with clinicians, giving patients more autonomy over their healthcare
- Utilise digital NHS services to provide more transparency of patient's individual healthcare journey
- Work collaboratively with patients to build trust in digital healthcare services and ensure they are receiving the best care possible
- Listen and respond to patient feedback and adapt services to suit their needs for the future

e) Estates and Facilities

The Trust is committed to reducing the environmental impacts from our buildings, infrastructure and equipment essential for the smooth running of the hospital, where feasible and affordable.

The Trust's Capital Programme ensures the delivery of backlog maintenance and major investment projects.

The programme ranges from backlog maintenance projects through to major demolition and construction.

Electricity, gas and water are a substantial cost and environmental impact on the Royal Berkshire NHS Foundation Trust. We need to improve energy and natural resource efficiency of the equipment we use and our buildings to reduce energy and water consumption. Since 2021, we have purchased renewable electricity, and are still focused on reducing our energy use and demand. The Trust will review and agree the levels of capital investment required for targeted backlog maintenance and energy efficiency projects on an annual basis to support our Green Plan commitments.

Approximately 60% of the Royal Berkshire Hospital site's electrical requirement is generated by a gas fired 2MW CHP (Combined Heat and Power) unit. CHP is



an energy efficient technology that generates electricity and captures the heat that would otherwise be wasted to provide useful thermal energy in hot water that can be used for space heating and domestic hot water. The CHP will reach the end of its economic life in 2028, at which point it will be decommissioned, and no longer support our carbon reduction performance.

New initiatives will be required in 2028 to continue our reduction of fossil fuel consumption and reduction of carbon emission. We will review our options during the term of this Green Plan.

The recently completed de-steaming project has generated a saving of 800 tonnes of CO₂ and 17.9 million litres of water per annum.

Increasing staff engagement and awareness will help to embed efficiency and encourage staff to be energy efficient. We have been running sustainability workshops and engaging staff to become Net Zero champions.

We have already invested in a wide range of energy and carbon reduction measures including the installation of CHP, energy efficient cooling, improved

system control and solar film on our south-facing windows which has reduced the demand for cooling and improved patient comfort.

Our aim is to reduce energy, water and resource use across the Trust and during the term of the Green Plan we will:

Celebrating our successes

De-steaming Project

To maintain site resilience, improve boiler efficiencies and heating system efficiency, we de-steamed the entire Royal Berkshire Hospital estate by installing a low temperature hot water (LTHW) solution. This system covered 10 dispersed plant rooms, catering and ventilation systems.

The project included:

- The installation of two 5 MWth and one 1 MWth LTHW hydrogen ready boilers and associated equipment, replacing the old steam boilers.
- 3 km distribution of main LTHW pipework, stripping out 3km of redundant steam and condensate pipework.
- The installation of 44 LTHW heat exchangers, and the removal of 34 worn out steam hot water and LTHW calorifiers.

Savings realised by the project have been calculated as:

- £1,182,996 guaranteed total energy savings per year.
- 2.6 GWh of heat and 1.2GWh of gas per year.
- 800 tonnes of carbon per year.
- 17,900m³ (17.9 million litres) of water per year; saving circa £30,000 per year.



- Monitor utility consumption and plan how to reduce consumption year on year
- Assess space utilisation and make best use of our estate, taking into account changes to working locations and practices following Covid-19
- Work with our communications colleagues to communicate with staff, patients and visitors about how they can reduce utility consumption both at work and home
- Monitor and respond

- quickly to fluctuations in temperature or supply issues
- Work towards securing grant funding to implement a temperature control policy and upgrade our lighting system to LED throughout
- Review the practicalities and funding requirements to introduce heat pumps to replace end of life gas-fired boilers to decarbonise our heating and hot water.

The carbon emissions from the Trust's buildings and

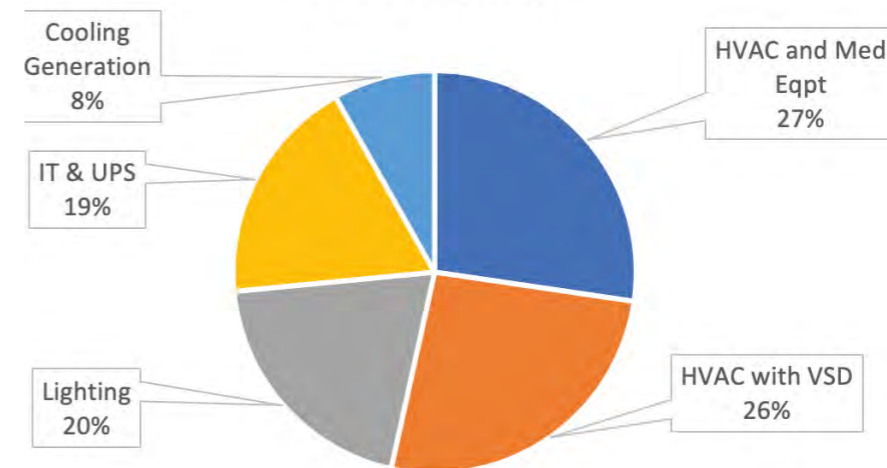
infrastructure amounts to 11,578 tonnes of CO₂ with a large proportion (80%) of this coming from gas. The gas-fuelled CHP generates 11,331,736 kWh of electricity per year and although the carbon produced in this process is less than it would be if sourced from the grid, it still is a fossil fuel with a carbon intensity.

The eventual replacement of the CHP with less carbon intensive solutions for power and heat generation will be considered as

part of our hospital redevelopment programme and options appraisals. We have already made the CHP Hydrogen ready, which may extend their useful life in the event that Green Hydrogen becomes available to us.

The chart illustrates the estimated breakdown of Electricity Consumption across our estate where 61% is accounted for by Heating Ventilation and Air Conditioning (HVAC). We will ensure that these systems are as energy efficient as possible without compromising patient and staff comfort.

Estimated Breakdown of Electricity Consumption



Like most NHS sites, RBFT has a variety of buildings constructed over a period of time that range vastly in their energy efficiency. Single glazing, uninsulated walls and roofs are responsible for high U-values, thermal bridging, and consequent heat loss. We will improve fabric insulation at every opportunity, where possible, across our estate.

Whilst we will first and foremost reduce demand and consumption, we will also consider implementing renewable energy technologies subject to feasibility, capital, and planning constraints.

We have roofs that could accommodate solar panels and car parks that may be able to accommodate solar carports. They could provide shading at the same time as generating green electricity. Reducing reliance on the grid by generating our own power increases the security of supply and reduces carbon emissions.

We will investigate opportunities to create viable invest-to-save projects across the RBFT site. However, these projects need to

be phased to suit the estates' redevelopment and refurbishment programme and focus on the projects and areas with the highest return on investment initially. These projects will be reviewed and phased to suit our redevelopment and capital project priorities.

Where possible, based on funding criteria and return on investment, these projects will be continue to be developed to meet SALIX, Public Sector Decarbonisation Scheme (PSDS), and other grant, and capital funding programme requirements to help secure and extend the Trust's capital programme.

Salix provides Government funding to the public sector to improve energy efficiency, reduce carbon emissions and lower energy bills.

For those projects that would contribute to the decarbonisation of heating, funding may be available through the **Public Sector Decarbonisation Scheme (PSDS)**. This provides grants for public sector bodies to fund heat decarbonisation and energy efficiency measures.

f) Food and Nutrition

In 2020 / 2021 the Royal Berkshire Hospital prepared 593,657 meals for patients and 154,170 meals for staff. This is equivalent to 2,617 tonnes of CO₂e where an average plate of food is responsible for 3.5kg of CO₂e based on NHS reported data.

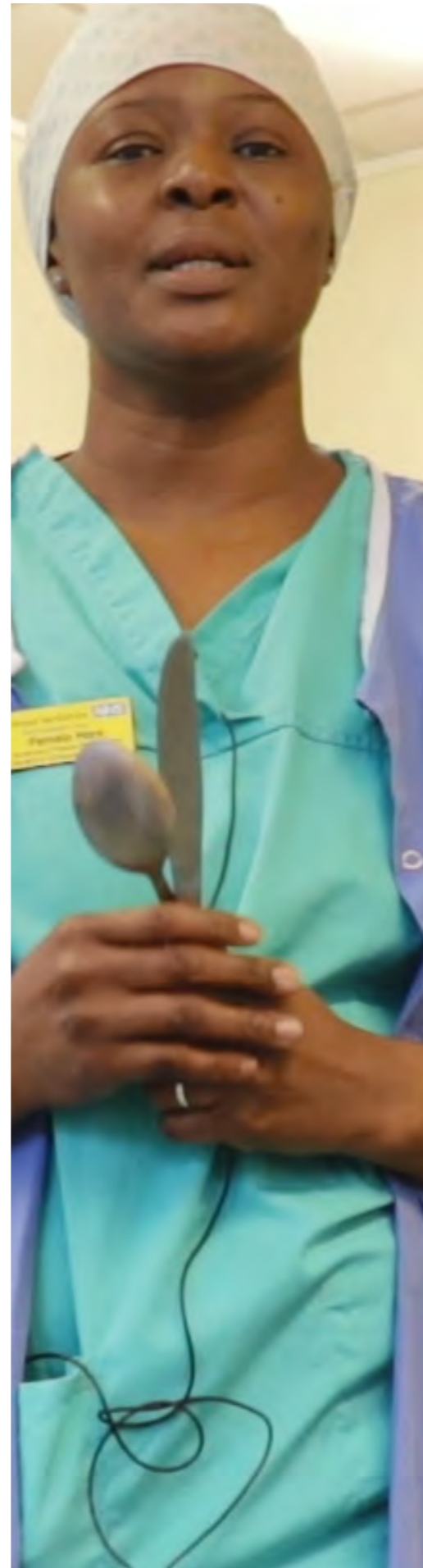
All meals meet current Association of UK Dietitians (BDA) legislation which is reviewed by the dietitians in menu planning. New software, currently being implemented, will able us to provide more comprehensive data as it is linked to supplier's catalogues & national database. Catering also aspires to the April 2022 **Restriction of Unhealthy Foods Strategy**. We plan to provide nutritional data for all items produced in house.

5% of plated food goes to waste (only full plate waste is counted). We are evaluating a standardised waste plan which will provide quantifiable data. Potential waste systems will be evaluated in the consideration of measuring waste in line with NHS recommendations.

All disposable containers are now compostable. We encourage customers to use china when eating in and we give a discount on hot beverages when the customer uses their own 'keep cup'.

All food is sourced sustainably and ethically, wherever possible.

We will work with our on-site food retail partners to encourage them to adopt a sustainable approach to catering, by including specifications in retail strategies when new services are procured.



g) Procurement

The NHS supply chain accounts for approximately 62% of total carbon emissions and is an area that we shall target for reduction.

Many of the healthcare scope 3 emissions are embodied in the global supply chain.

There is limited guidance or standardised methodology on how to calculate the health sector's global supply chain. An important step in addressing this challenge is to identify the greenhouse gases emissions hotspots in the global supply chain, in terms of both products and geography.

We will work closely with our strategic suppliers to support them in reducing their carbon emissions from the products and services they provide to the Trust. We will work with the supply chain to instil sustainability into the procurement process and capture data so that progress

with the changes to procurement can be monitored.

After all, our supplier's scope one and two emissions are our scope 3 emissions.

We will set and implement criteria for a low carbon procurement process to decarbonise the supply chain.

Sustainability will be included in all tender documents and scored in the evaluation process.

Suppliers of goods and services will be asked to supply their own carbon footprint, environmental policy, green plan, and target to reach Net Zero in their business.

The Trust will, as much as possible, work with local suppliers of goods and services.

Energy Efficiency will be factored into procurement decisions so that all products and services have a low carbon impact.

All business cases will include a section that addresses sustainability and the impact

that the project will have on carbon reduction.

The **EU Directive on Public Procurement** sets new rules for public bodies when purchasing goods and services, including clinical services. It includes a number of positive drivers for sustainable development.

To achieve a sustainable supply chain, an organisation has to address environmental, social, economic and legal concerns across its entire supply chain. By taking a holistic approach, this reduces waste and environmental footprint, while also improving labour conditions and health and safety — stopping worker exploitation. These principles are embedded into our procurement policies to ensure we are acting sustainability, across the board. These practices are not only good for people and planet but are wholly aligned with the NHS sustainability objectives.



Celebrating our successes

Eamonn Sullivan, Chief Nurse

I cycle 6 miles to work each way. This not only reduces my emissions from driving to work, but it also reduces my emissions from driving to the gym. Having an active commute of cycling 12 miles each day is not only a great stress reliever, it also saves me time by not having to go to the gym!

h) Green Space and Biodiversity

There have been a number of studies demonstrating the benefits of exposure to green space. The findings show that interventions to increase or improve urban green space can deliver positive health, social and environmental outcomes as well as the additional benefit of purifying the air in an urban environment.

Royal Berkshire Hospital is the largest of the Trusts hospitals situated in central Reading and cares for half a million patients each year. There is limited access to green space on site due to location restrictions of residential housing and surrounding A roads.

Projects to improve our green spaces and biodiversity

Royal Berkshire Hospital houses Englefield Garden, built in 2015. This miniature tranquil space is already utilised in order to increase biodiversity on site, and was achieved by following BREEAM compliance guidelines to increase biodiversity which will:

- a. Provide better quality, cleaner air.
- b. Provide additional biodiversity on site.
- c. Have stress-relieving qualities to improve both patient and staff wellbeing.



In addition, there are proposed plans to build a staff health and wellbeing garden.

The garden will be essential in supporting the ongoing emotional wellbeing of staff, as well as providing both the physical and psychological benefits of exercise, socialising and gardening. Our hard-working staff will

be better equipped to not only cope with the professional demands placed on them but also generally have greater life satisfaction.



Health and Wellbeing Garden

The Royal Berkshire Charity is in the process of campaigning to fund this green space. Increased pressure of the pandemic and a rise of 74% of all helpline calls to the Employee Assistance Programme in the last 12 months have been mental health related, with anxiety and low mood the top two reasons for calling. This additional green space will have environmental and health benefits for staff, patients, and the surrounding community.

Our aims

- Ensure that our estate contributes to local

biodiversity

- Align ecological solutions with current and future local and national government policies on biodiversity protection and enhancement as well as public opinion
- Ensure that an appropriate level of expertise is used to identify risks and opportunities for increasing ecological value in a way that accounts for the nature of the site, the project's construction, and operational viability
- Continue to avoid negative

impact on the wider environment

- Plan construction works to minimise their impacts on natural assets
- Understand, maximise, and demonstrate ecosystem benefits including wellbeing, amenity, and community by adopting appropriate ecological design and management practices
- As part of our redevelopment review, determine the existing ecological value associated with the site, including

surrounding areas, and the risks and opportunities for ecological protection and enhancement as part of this and other projects

- To utilise outdoor space, increase levels of biodiversity through vegetation
- To increase staff and patient wellbeing by increasing the biophilic design and the interaction, or views to green space and nature.

i) Sustainable Use of Resources

The NHS is responsible for producing 600,000 tonnes of waste per annum and irrespective of its disposal method, waste has the potential to pollute land, air, and water. But there are options to reduce waste, and all waste does not have to be disposed of: it can be reviewed for its resource value and potential.

We propose to introduce a benchmarking scheme to identify best practice and waste that could be used as a resource.

The Royal Berkshire NHS Foundation Trust sends zero waste to landfill, as of 2015 with the majority of waste being sent to a waste-to-energy scheme. We also upcycle furniture on site. To further this performance an emphasis will be made to minimise the carbon output of hospital resources, the trust will engage in a waste-less schemes.

These reuse schemes enable hospitals as well as other organisations to loan, rent or claim assets, equipment, or any other common use items. Items can be distributed within the internal network or outside of the organisation and includes items such as:

- Chairs / desks
- Fixtures and fittings
- Office equipment
- Audio / visual equipment
- Bedroom furniture

The central aim of the Trust is to re-use where possible, minimise unnecessary waste and reduce the carbon impact of essential resources. For example, we routinely **recycle** oxygen masks and tubing and have adopted reusable drug trays.

Our aims

- With 60% of NHS carbon emissions coming from the supply chain, RBFT will continue to work with the NHS wide approach of reducing cost and emissions associated with waste via our procurement activities
- Reduce the amount of waste produced by using less material in our projects and supply chain

- Keeping plant and equipment running for longer, using products for longer and using less hazardous materials
- Re-use waste items as and when appropriate, by checking, cleaning, repairing, refurbishing, whole items, or spare parts
- Engage with reuse scheme to reduce the amount of waste sent to incineration
- Where it is unsuitable to reuse resources, work with local suppliers to attain goods to support the local community, subject to viable business cases and standards
- Ensure staff are aware of re-use schemes throughout the hospital to prevent the production of unnecessary waste
- Collaboration between departments to achieve the collective goal
- Collaboration with other local and national organisations to minimise waste



11. Benchmarking our Performance

During the life of the Green Plan, we shall benchmark our performance via the Model Hospital, data gathered from the ERIC return and sharing best practice with academic healthcare partners and other Trusts.

The Model Health System is a data-driven improvement tool that supports health and care

systems to improve patient outcomes and population health. It provides benchmarked insights across the quality of care, productivity, and organisational culture to identify opportunities for improvement.

Our sustainability team will compare our performance to our peers to fully understand where we are doing well and where

there is room for improvement. We will share and collaborate on the exchange of best practice with our peers and partners to continuously improve and advance our sustainability and Net Zero carbon performance and that of our partners.

Celebrating our successes Sustainable Follow Up Care

Earlier this year, the Royal Berkshire NHS Foundation Trust's Pain Department introduced the UK's first app-based pain management programme for their patients. The app was introduced to allow patients to manage their pain during the Covid-19 lockdowns. So as well as helping reduce the spread of Covid, it also reduced patient travel and as a result, indirect carbon emissions.

In addition the Pain Department has begun aligning some of its working principles to those of the Centre for Sustainable Healthcare, specifically:

- Delivering pain management programmes online to reduce patient travel.
- Working with primary care networks to develop group LongCovid and Pain services consultations, thereby giving patients follow up care closer to home.
- Giving patients online resources where possible to minimise use of paper.

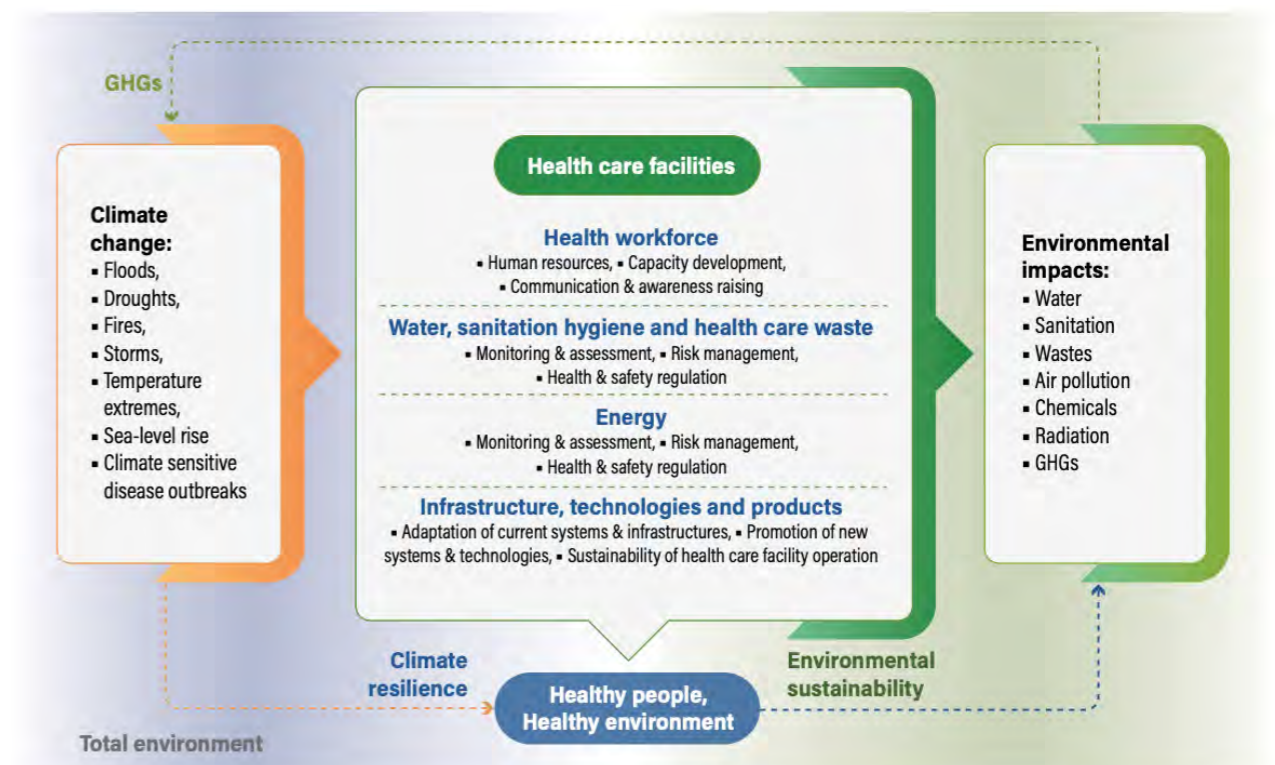


12. Adaptation

Climate Change will adversely affect the NHS and RBFT will take a proactive approach in building a resilient organisational model and the resources required to operate in a changing world in accordance with NHS guidance and policies.

Adapting RBFT's services to be resilient in the context of a changing global climate requires both short term business continuity planning as well as a longer-term strategic focus on resilience.

The climate emergency is a public health emergency as highlighted in the flowchart below which maps the climate change and healthcare linkages



Climate Change Impact on Public Health as detailed in NHS Digital Climate adaptation and resilience reporting



As the NHS tackles climate change there is also a need to adapt to the immediate consequences it brings. As climate change accelerates globally, in England we are seeing direct and immediate consequences of heatwaves and extreme weather on our patients, the public and the NHS.

The Climate Change Committee report **“Progress in adapting to climate change 2021 Report to Parliament”** published in June 2021 sets out in more detail the risk to public health from climate change. The report identifies several key risks for public health relevant to Royal Berkshire NHS Foundation Trust.

- There is increased evidence of overheating in hospitals
- There are forecasts for more flash flooding as a

consequence of warmer and wetter winters

- Poor air quality causes significant harm to health
- The need for a comprehensive long-term adaptation plan to reduce the risk of heat and cold-related mortality and illness.

Greener NHS defines “Adaptation” as the process of adjusting systems and infrastructure to continue to operate effectively while the climate changes. It is critical that the NHS can ensure both continuity of essential services, and a safe environment for patients and staff in even the most challenging times.

The Greener NHS programme is involved in ongoing work taking place across government as part of the UK Government National

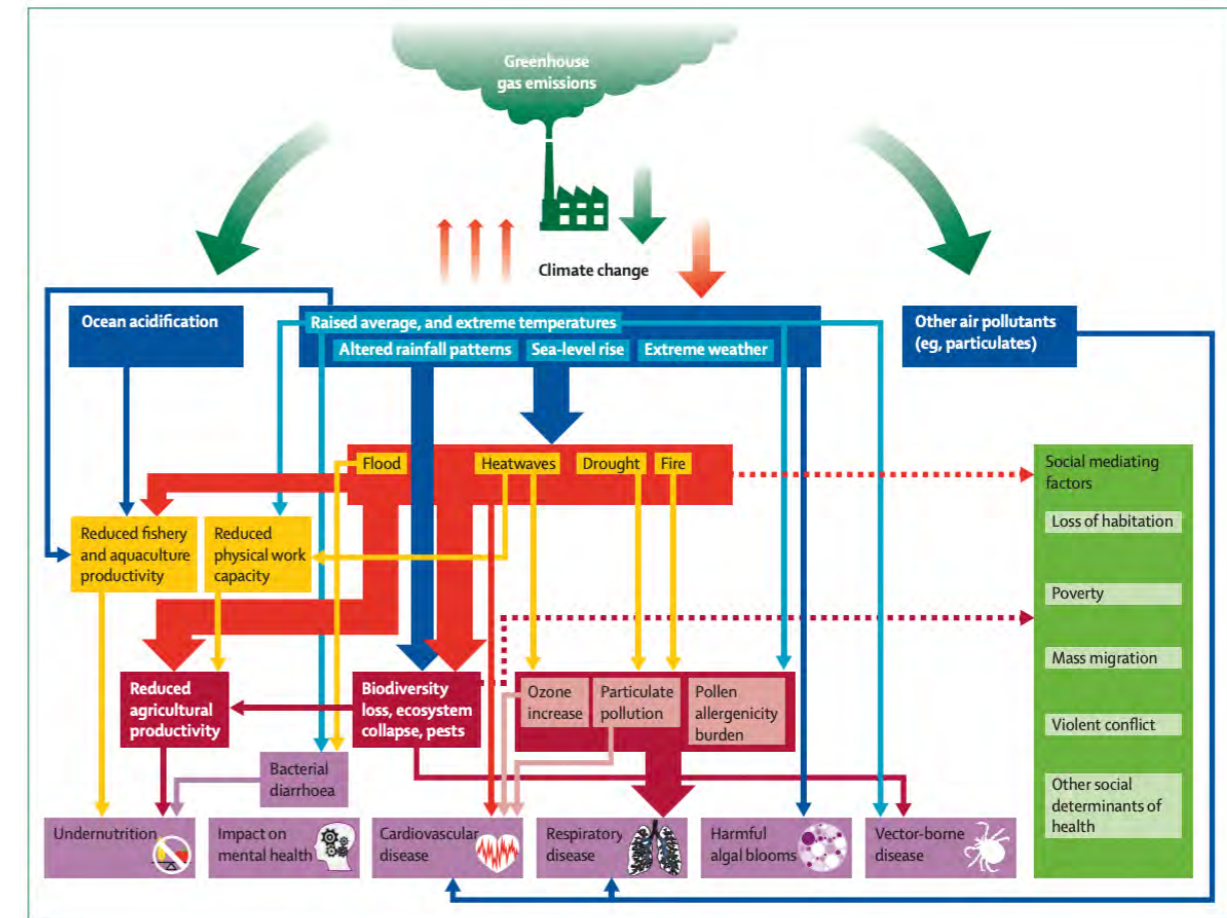
Adaptation Programme (NAP), a response to the national Climate Change Risk Assessment.

Many of the changes required to adapt to increasingly severe weather have the potential to impact on carbon emissions positively in the long term, such as increased use of remote monitoring in the community, and more efficient cooling systems. However, some changes needed to adapt may impact negatively, such as short-term increase in air conditioning units.

The Greener NHS are currently producing the Adaptation Report on behalf of the health and care sector for DEFRA. When this is published the guidance will be used by RBFT to inform our redevelopment options and ensure that the option chosen allows the Trust to future proof

the organisation, the redeveloped and retained hospital estates to help mitigate the future impact of climate change on our patients, staff, communities, and stakeholders.

Until the Greener NHS document is published we will take our guidance from the World Health Organisation publication **WHO guidance for climate resilient and environmentally sustainable health care facilities** to inform our thinking and planning on climate resilience and adaptation.



Health and Climate Change: Policy Responses to Protect Public Health, the Lancet Commission

Our aims

- To create an adaptation plan for our business-as-usual activity in 2022-23, while we advance of redevelopment options
- And to optimise the possibilities for climate change adaptation and risk mitigation in the options we pursue for our redevelopment



13. Governance

The progress and monitoring of our Green Plan and carbon emissions reduction will be overseen by our Net Zero Carbon Steering Group.

The Net Zero Steering Group will report to the Executive Management Committee.

The Net Zero Carbon Steering Group will co-ordinate, monitor, and report our progress against: our Green Plan, Sustainability Policy, and protocol for the Trust in line with the NHS targets.

The Net Zero Carbon Steering Group will be chaired by the Chief Financial Officer who is the Trust Board Sustainability Lead.

The Net Zero Carbon Steering Group will meet every two months and at such other times as may be required.

The Net Zero Carbon Group will report progress to the Executive Management Committee on a bi-annual basis who will in turn update the Board.

The steering group will work with departments, staff, and other groups within the Trust to identify and advance performance improvement projects which will be managed and advanced in accordance with the existing budgeting processes and financial standing instructing.

The Green Plan will be updated in 2025 for the period 2026-2029, or earlier if required due to a change in the internal or external circumstances of our Trust.

14. Glossary

Biodiversity

The variety of all life on Earth.

BREEAM

Building Research Establishment Environmental Assessment Method

A method of assessing, rating and certifying the environmental, social, and economic sustainability of buildings.

Carbon footprint

The total amount of greenhouse gases (sometimes referred to as 'carbon emissions') produced to directly and indirectly support human activities, usually expressed in equivalent tonnes of carbon dioxide (CO₂e).

Scope 1 – direct greenhouse gases – Emissions from sources that are owned or controlled by an organisation.

Scope 2 – indirect greenhouse gases – Emissions from the consumption of purchased electricity, steam, or other sources of energy generated upstream from an organisation.

Scope 3 – other indirect greenhouse gases – Emissions that result from the operations of an organisation but not directly owned or controlled by the organisation.

Carbon neutrality

Achieving Net Zero carbon emissions by balancing emissions with removal, through carbon offsetting, or just by eliminating carbon emissions from the atmosphere altogether.

Carbon offsetting

Schemes that counterbalance the carbon footprint of an organisation by allowing organisations to invest in environmental projects to compensate for the organisation's current or future carbon emissions through e.g., tree planting, rolling out clean energy technologies and agricultural practices that sequester carbon in soils.

Carbon removal

Is a process through which greenhouse gases are removed from the atmosphere through e.g., tree planting to offset emissions. This could slow or even reverse climate change but is not a substitute for cutting greenhouse gas emissions.

CHP Combined Heat and Power

A highly energy efficient process that captures and utilises the heat that is a by-product of the electricity generation process.

Circular economy

An alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value for them whilst in use, then recover and regenerate products and materials at the end of each service life.

Climate change

Describes a change in the average conditions - such as temperature and rainfall - in a region over a long period of time. Global climate change refers to the average long-term changes over the entire Earth including warming temperatures and changes in precipitation, as well as the effects of Earth's warming such as rising sea levels, shrinking mountain glaciers and changes in flower and plant blooming times.

Decarbonise

To reduce the amount of carbon emissions resulting from a process such as generating electricity from renewable energy sources.

Electric vehicle

A vehicle that is driven by an electric motor which draws its current either from storage

batteries or from overhead cables.

Energy efficiency

Cutting down the amount of energy required to perform an action like switching on a light, opening a fridge, or heating water.

F-Gas

Refrigerant Fugitive Gas

ERIC

Estates Return Information Collection

Requirement of NHS Trusts to report annually on the costs of maintaining and servicing their estates and facilities.

Green Plan

A Board-approved document that assists organisations to clarify their objectives on sustainable development and sets out a plan of action.

HVAC

Heating, Ventilation and Air Conditioning.

Landfill

An area of land that is used to dump waste, either directly on the ground or by filling an unwanted hole in the ground.

LED

Is a light-emitting diode; a semiconductor light source that emits light when current flows through it.

Low carbon heat and power

A heating and electricity system whose power needs are not primarily derived from carbon-

intensive energy sources such as fossil fuels but from less carbon-intensive energy sources or renewable energy sources.

Net Zero emissions

Also referred to as 'carbon neutrality,' where carbon emissions need to be removed altogether and any unavoidable emissions need to be counterbalanced through carbon offsetting initiatives.

Renewable energy

Often called 'clean energy,' comes from natural sources or processes that are constantly replenished including carbon neutral sources like sunlight, wind, rain, tides, waves, and geothermal heat.

Sustainability

Means meeting our own needs without compromising the ability of future generations to meet their own needs. It generally refers to the capacity for nature and humanity to coexist and consists of three areas: economic, environmental and social – known as the three pillars of sustainability.

Sustainable healthcare

A health and care system that delivers high quality care and improved public health without exhausting natural resources or causing severe ecological damage.

Travel plan

A set of actions implemented by an employer to encourage staff to use alternatives to travelling

alone by car. This can save time and money as well as reducing environmental impact.

VSD

Variable Speed Drive

An overview of our estimated scope 1, 2 and 3 carbon emissions for 2021/22 and our planned stretch carbon reduction target of 7% to 2025

