NHS
Cambridge University Hospitals
NHS Foundation Trust

Together
Safe
Kind
Excellent

Our Action 50 Green Plan Phase 1 2022-2024

Executive Overview

To find out more, visit: www.cuh.nhs.uk

Contents

Improving cycle & pedestrian access

Recycling exhausted batteries

Installing heat pump technology

Rolling out dry-mixed recycling

Compressing polystyrene to recycle

Repairing staff bicycles on site

Foreword

Roland Sinker
Chief Executive

The science is clear: we are living in the midst of a human-made climate emergency.

If the carbon emissions arising from what and how we consume are not halved within the next ten years, then today's rapidly unfolding environmental crisis can be expected to become globally catastrophic for health, wellbeing and prosperity within a generation. Governments, organisations, and communities are stepping up to the challenge of 'net-zero'. In the UK, the NHS is providing real and practical leadership – clearly setting out what the country's largest employer will be doing to meet the targets and how this will directly contribute to resolving the emergency.

Every NHS Trust has therefore been asked to draw up a new 'Green Plan' that will put them onto a rapid decarbonisation trajectory in line with these targets.

For Cambridge University Hospitals NHS Foundation Trust (CUH), it is important that this is clearly interlinked with the organisation's strategy and goals for partnership working. **Our vision is to demonstrate, through action, our leadership locally, regionally and nationally in the delivery of sustainable healthcare across the community.**

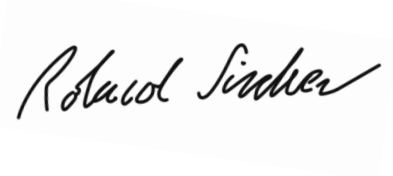
This is not new territory for CUH, we have been working to make our services more environmentally sustainable for many years. We know that working on the margins of business-as-usual is not sufficient if we are to play our role as a genuinely responsible consumer in avoiding climate chaos.

We have also learned that we cannot do this alone. The actions we take will have to be connected to those of our suppliers, contractors, campus colleagues, and public, academic, commercial and third sector partners. We know that the relationships already forged with other healthcare system partners, industry, local councils, and universities will need to be further strengthened and developed to allow us to deliver fully against our Green Plan.

High-carbon and high-waste has been woven into all our day-to-day lives over a very long period of time. Changing the fabric requires, not only, concerted commitment within the Trust, but also collaboration and cooperation across supply chains and the wider community we serve.

We have to work out how to reframe all our decisions so that they take full account of their environmental impacts both today and tomorrow, and both here and elsewhere.

Our **Action 50 Green Plan** has been specifically designed to do just this. And to achieve these actions, and our exceptionally challenging targets, we need the help and support of each and every member of the CUH family.



Introduction

Carin Charlton

Net Zero Lead (Director of Capital, Estates & Facilities Management)

As the owner and operator of one of the largest acute teaching hospital campuses in the country, CUH will need to play a significant part in delivering against the NHS Net-Zero commitment. This new Phase 1 **Action 50 Green Plan** lays out how we will deliver the first phase of a ten-year programme. It has five guiding principles:

1. provide all staff with a practical understanding of their environmental impacts and how to reduce them.
2. always work out whether Trust policy or process changes will increase or reduce its carbon footprint.
3. take sufficient deliberate actions to meet our carbon emission targets by design.
4. recognise that ill-health prevention for all is the best way to lower a hospital's carbon emissions.
5. use our long-term embedded position in the community to extend the influence of our environmental actions.

These principles will build on the Trust's learning and achievement from a strong track record of infrastructure and behavioural-based carbon reduction and environmental sustainability work.

However, we must also recognise that the approach taken to date is falling significantly short of meeting the level and rate of decarbonisation now required. Carbon emissions are so deeply embedded within the processes of what and how we consume, that resistance to anything but marginal change is built into business-as-usual.

From the results of a recent survey, there is real interest amongst staff for us all to work together to do more. The majority view is that the Trust has an obligation to take urgent action with regard to environmental sustainability, and that there is a strong enthusiasm for learning and support to help us reach our targets.

We must therefore reframe our consumption with an approach aligned to the needs of accelerated decarbonisation. The approach needs to put the objective of net-zero at the heart of our decisions – from building design to service delivery. And, this must be done without compromising patient care, hospital capacity and flow, budget control, and staff wellbeing.

Our five guiding principles will help in transitioning **from** – today's fossil-fuelled conveyor belt of take-make-use-throwaway consumption (often referred to as the 'linear economy'),
to – tomorrow's renewably fuelled self-sustaining take once then make-use-reuse-repair-recycle mode of consumption (often referred to as the 'circular economy').

This Phase 1 of our Green Plan (Action 50) aims to deliver:

- comprehensive engagement across the organisation;
- a 10% demonstrable reduction in carbon emissions by design by the end of 2024;
- the springboard to cut emissions by 50% by 2032.

As a provider of acute healthcare, CUH will always be an intense consumer. However, to do this responsibly in the 2020s means we must provide a new frame for our consumption choices – one that actively secures our role, and supports our patients and partners roles, in urgently diffusing the climate crisis we are all a part of.

Our transition into a circular economy way of working will not undermine the quality of the Trust's safe, kind and excellent healthcare. Rather, it responsibly redefines what productivity means in a restorative and resilient manner through a reframing approach to what and how we consume across three distinct elements:

1. Life Cycle Assessment: putting the spotlight on the carbon emissions from everything that CUH consumes from 'cradle-to-grave' – whether this be materials, miles, medicines, machines, metered energy or one of the multitude of items that CUH purchases, uses and then disposes of.
2. Devolving responsibility: with the variety in the services that CUH provides, it is rare for one-size-fits-all solutions to work well in practice.
3. Connecting budgets: the transition to net-zero/zero-waste will require investment in new future-proofed ways of working and alternative infrastructure.

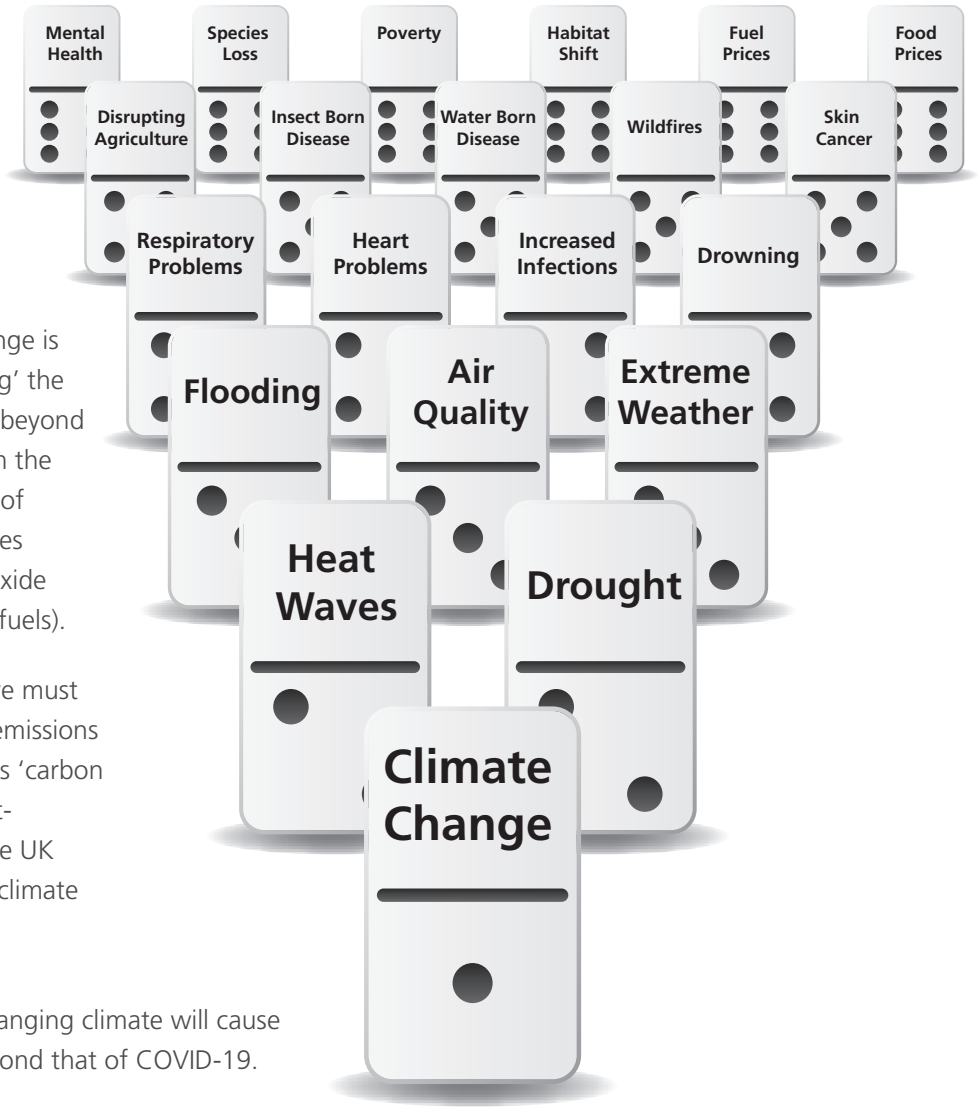
This approach has evolved through our environmental sustainability work to date and has been positively raised and discussed in both patient and staff focus groups. Reframing our approach in this way establishes a clear set of strategic commitments to guide all decision making. Decisions that will progressively shift the Trust onto a net-zero/zero-waste trajectory.

CUH will always put its patients first and, as a consequence, it will always be an intense consumer. However, to do this responsibly in the 2020s means we must provide a new frame for our consumption choices – one that actively secures our role, and supports our patients and partners roles, in urgently diffusing the climate crisis we are all a part of.

"It comes down to a simple premise – we must move from high-carbon/high-waste to net-zero/zero-waste."

Why we need a Green Plan

The NHS, and therefore CUH, has a priority stake in reducing the significant impacts of human-made climate change on both our physical and mental health (e.g., heatstroke, disease, flooding, fire, malnutrition, anxiety, and stress) and the infrastructure needed to provide healthcare (e.g., hospitals, clinics, surgeries, and ambulances). As a significant contributor to these impacts the priority is even greater.



Human-made climate change is primarily caused by 'forcing' the natural greenhouse effect beyond its current balance through the release of huge quantities of additional greenhouse gases (predominantly carbon dioxide from the burning of fossil fuels).

The urgency with which we must halt the increase in these emissions (referred to in shorthand as 'carbon reduction' on route to 'net-zero carbon') has led to the UK Government declaring a "climate emergency".

The domino-effect of a changing climate will cause disruption and loss far beyond that of COVID-19.

So far, our department, which has many like-minded and enthusiastic team-members, has been working to reduce our volatile anaesthetic gas use, promote better waste management and recycling, and to positively engage our NHS colleagues in helping this cause. We also have plans to reduce our energy usage and reduce our single use plastics.

The health of our patients, be they young or old, is inexorably linked to the environment we live in, and I am grateful to work in a department, and a Trust that has significant plans.

Louisa Swain Senior Clinical Fellow – Anaesthetics

Carbon emissions are deeply embedded in everything we consume – from goods, materials, equipment and medicines to energy, water and business miles. Some of these can be responded to directly (e.g. improving energy and waste management efficiencies and removing unnecessary losses) and others only indirectly (e.g. the supply of lower-carbon grid energy and more readily reusable medical devices). These all require CUH working closely with suppliers and contractors.

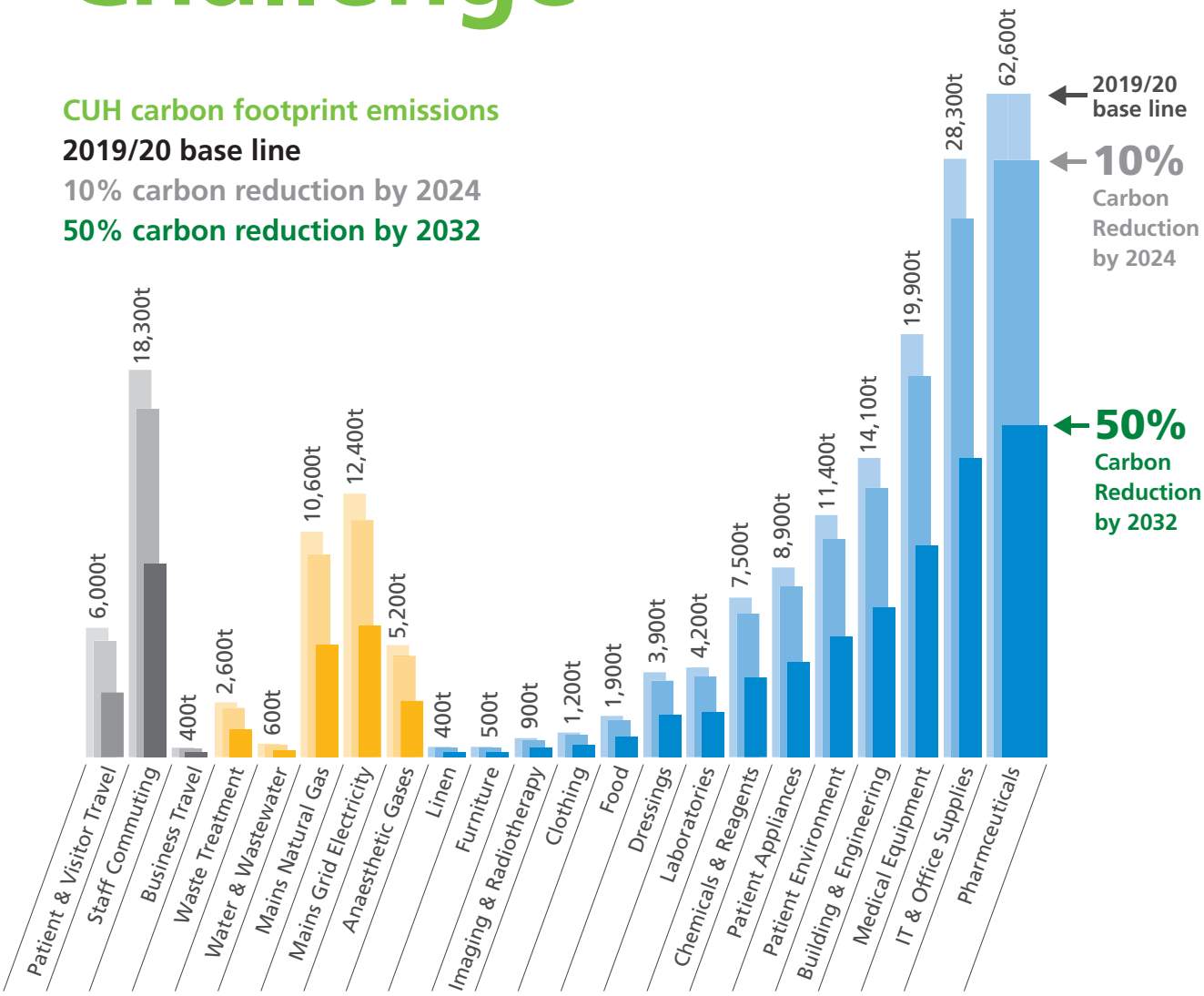
The significant number of moving parts within our supply, use, and disposal chains mean that our Green Plan cannot just work on changing some individual choices – it needs to reframe the decisions about what and how we consume as a whole system. CUH cannot do this on its own. Our Green Plan provides the vehicle for connecting across our local, regional and national partners to reduce both direct and indirect carbon emissions.

Our Objectives 2022-24

Our Action 50 Green Plan (Phase 1: 2022-24) lays out what will be completed in the first opening period of a ten-year programme. Phase 1 has three core objectives, to:

- **enact** a rapid 10% reduction in carbon emissions by design by the end of 2024 (from a 2019/20 baseline);
- **establish** a deeper set of medium-term actions that will provide the springboard to achieving the delivery of a 50% cut in emissions by 2032 (and provide a firm foundation for longer-term decarbonisation to net-zero by 2045);
- **embed** a comprehensive climate emergency engagement structure across the organisation.

The Scale of the Challenge



Every organisation has a role depending on its position in the sub-systems of production, consumption and disposal that provide for our health, wellbeing and prosperity.

For CUH, this role is as a large and intense consumer. The most obvious (direct) emissions are from the fossil fuels used for heating, powering and from anaesthetic gases (shown in orange), alongside travelling to and from our premises (shown in grey). The less obvious (indirect) ones are 'embedded' through the production and supply of **all** the goods, materials and services we purchase (shown in blue).

The diagram above shows that these embedded emissions are the most significant - making up around 75% of our carbon footprint. For CUH therefore, not 'wasting' this carbon so it has to be embedded **all over again** is of great importance – reuse, repair, and high-value recycling are essential parts of CUH being a responsible consumer in the 2020s.

'Net-zero' carbon is inextricably linked to 'zero-waste'.

Our Progress so far

Our sustainability progress to date has been productive – we have cut significant amounts of carbon and reduced operational budgets whilst contributing to CUH being an even better place to work.

4 in 10
People drive to the campus

2,700 tCO_2e
reduction from energy projects since 2010.

36%
Reduction in in direct emissions since 2014

2,000+
cycle parking spaces - over **25%** of staff now regularly cycle to work

LOW Emissions
car club for staff

Catering waste
disposed of via bio-digestion

10,000
Light Fittings upgraded to LED and ALL streetlights

60
buses an hour at hospital's bus station and stops around the site

15%
Heating recovered from on-site waste incineration

24 recycling streams
Approximately 30% of all CUH waste is divereted into one of our recycling or reuse streams

Central Boiler upgrades

33 teams
Actively participating in **Think Green Impact** Behaviour Change programme

100 kWp+
Solar PV panels

In the context of our total consumption however, we have only made our business-as-usual marginally more environmentally sustainable, efficient and cost-effective. The major areas of achievement to date have been seen across: energy and water; travel and transport; waste management, staff engagement and partnership working.

Some examples of our progress are illustrated overleaf.

Physical infrastructure: Energy

Lowering our environmental impact through sustainable building upgrades and management, including:

- Automated control
- Plant upgrades
- Solarised plant - internal batteries
- Metering
- Boiler & incineration efficiencies
- Insulation
- High efficiency (LED) lighting
- Building Management System
- Solar panels

High efficiency pumps and motors


Photovoltaic solar panels on the roof


Plant controlled to save energy


LED lighting: better light lower energy

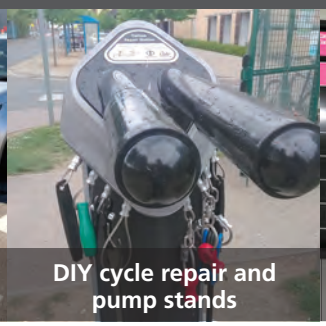
Physical infrastructure: Travel and transport

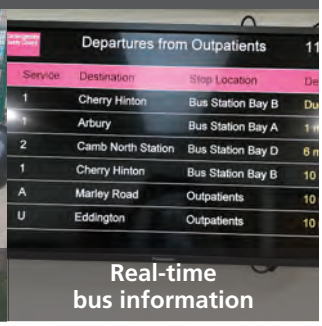
Lowering our environmental impact through supporting sustainable travel and transport, including:

- Cycle Parking
- Cycle Repair Hub
- DIY Cycle Repairs
- Site access
- Changing facilities
- Business Car Club
- Cycle-Share
- Bus routes
- Bus services


Increased cycle parking capacity


Lower emission pool cars


DIY cycle repair and pump stands

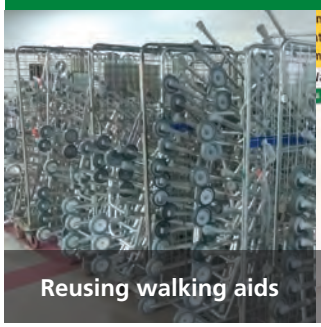


Real-time bus information

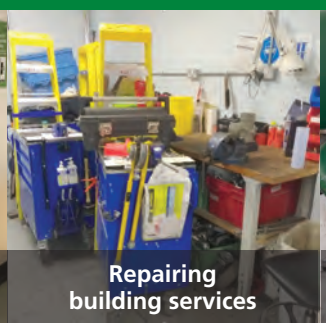
Physical infrastructure: Waste Management

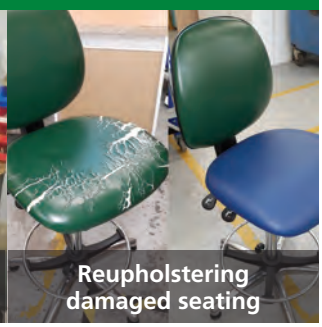
Lowering the environmental impact through sustainable waste management, including:

- Dry-mixed recycling
- Walking aids
- Abandoned cycles
- Polystyrene
- Domestic glass
- Maintenance and repairs
- Clinical glass
- Food waste - biodigestion
- Batteries
- and many more..


Reusing walking aids


Recycling domestic glass


Repairing building services


Reupholstering damaged seating

Engagement: Voluntary collaboration

Increasing engagement and rewarding those who make an Impact, including:

- Rosie Hospital, Level 1, Breast Unit
- Theatres
- Cambridge Health at Work
- CRN Nurses, Coton House
- Frank Lee Centre
- C3 Ward
- A&E
- J2 Ward
- Contact Centre
- and many more..

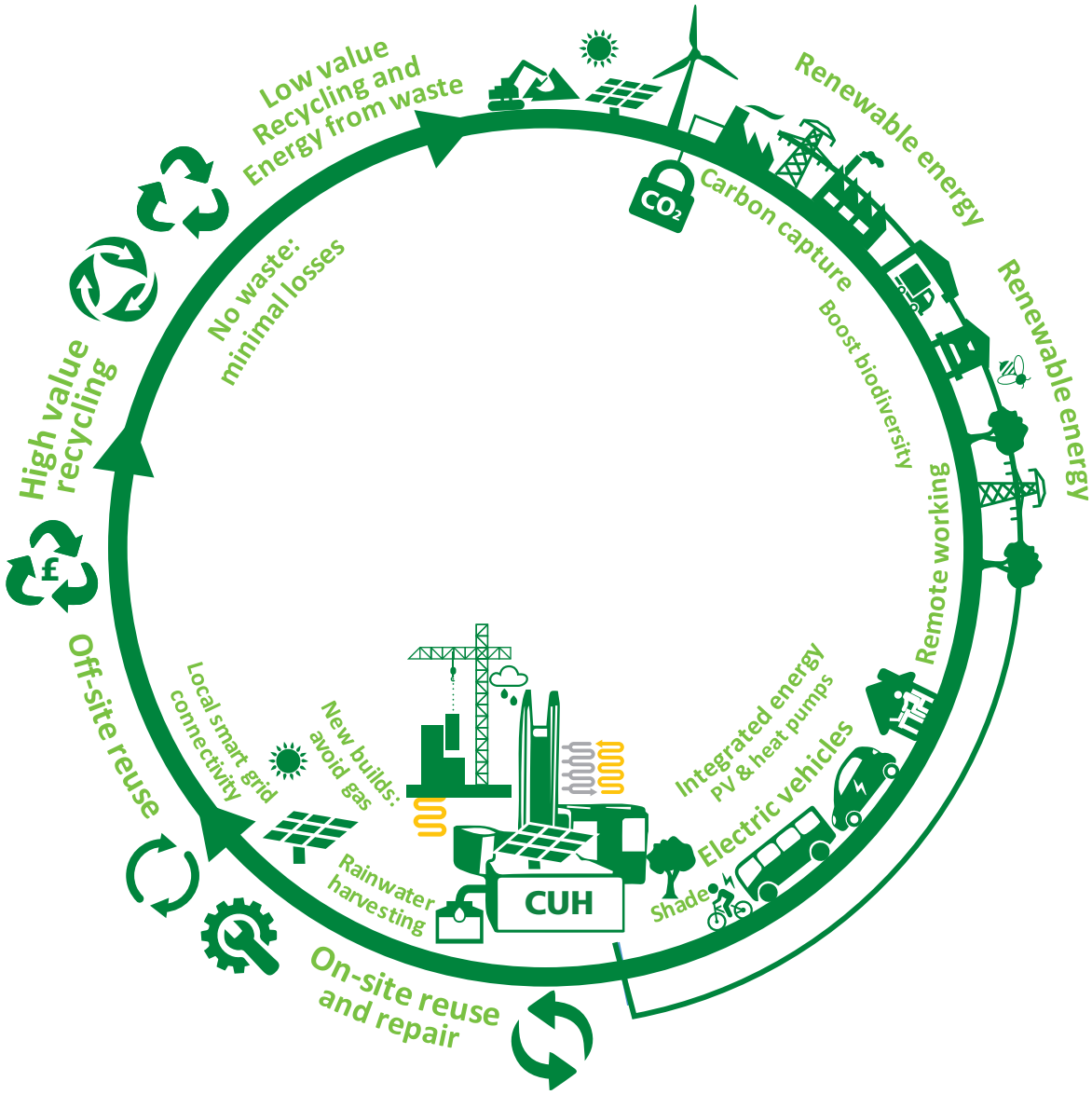
These projects and their benefits have been delivered against relatively short-term efficiency savings and ad hoc voluntary support. This has produced valuable incremental progress, but it has been achieved whilst the demand for CUH's services and use of electrically powered technology and single-use items has grown significantly. Taken together, we can only acknowledge that we have been "running to stand still". An overall marginal improvement in the efficiency of fossil-fuels within a predominantly take-make-use-throwaway approach to how we consume will not diffuse our climate emergency in time.

Our Green Plan steps away from experiencing consumption in the form of a high-carbon/high-waste conveyor-belt to one that is grounded in a vision of total sustainability as a matter of course. Taking CUH's learning and experience into a fully reframed net-zero/zero-waste response to what and how we consume.

Our Vision for Change

The sustainable alternative to high-carbon/high-waste consumption is a constantly revolving system of renewal where fossil fuels are rapidly replaced and everything that is thrown-away is fed directly back into the supply chain by design.

This net-zero/zero-waste system is known as a 'circular economy'. CUH's essential consumer role is illustrated in the diagram below.



> *The Occupational Therapy department has created an enthusiastic working party aiming to reduce waste and to contribute to the Trust's Zero Waste Plan. As a group, we proactively identified ways that we can reduce waste and we will continue to identify many more. We are challenging every member of the occupational therapy department to make a sustainable waste reduction pledge on our up and coming 'Waste Challenging Wednesday'. This is an important issue for us all and we can all make a difference, no matter how big or small. We are excited to see what differences we can make to tackle climate change.*

Louise Bonner Occupational Therapy Deputy Manager

For CUH to become a responsible consumer in this transformation there are some key strategic steps to put in place:

- Drive down the intensity of our energy use (e.g. fewer kilowatt hours per square metre or miles travelled per patient contact) through building design, active travel measures, amended processes and adjusted behaviour. We will also install or directly account for new renewable energy in the process of decarbonising all our building services and travel energy requirements.
- Create value and reduce carbon by directly linking our purchases with repair, reuse and sustainable disposal by design so that as little as possible is wasted or lost.
- Secure staff engagement for the process and provide community leadership across our CUH family and local community. We will work with our local, regional and national partners to share this vision. A renewably powered circular economy can only become a reality where care is integrated, commercial partners are innovative, local authorities are facilitators, and the wider community acknowledges and experiences the benefits.

Incinerator heat recovery helps warm the hospital

Food waste biodigesters

Directly connecting our solar panels to large building services plant for maximum efficiency

Our Approach

Three-quarters of our carbon emissions are already embedded in the goods, materials and equipment we purchase and consume.

Directly pressuring suppliers to calculate and cut these emissions is not presently something the majority of our commercial partners can effectively respond to. It is also very hard for an organisation with as many moving parts, and complex purchasing requirements as our own, to manage and verify supply chain carbon footprint data.

Our vision of rapidly developing our role as a responsible consumer within a circular economy provides us with a much more achievable and locally productive way forward. One that can act as both a foundation and ongoing boost to the higher level processes of supply chain decarbonisation coming forward in the centrally driven "*Roadmap for NHS suppliers to reach net zero by 2045*".

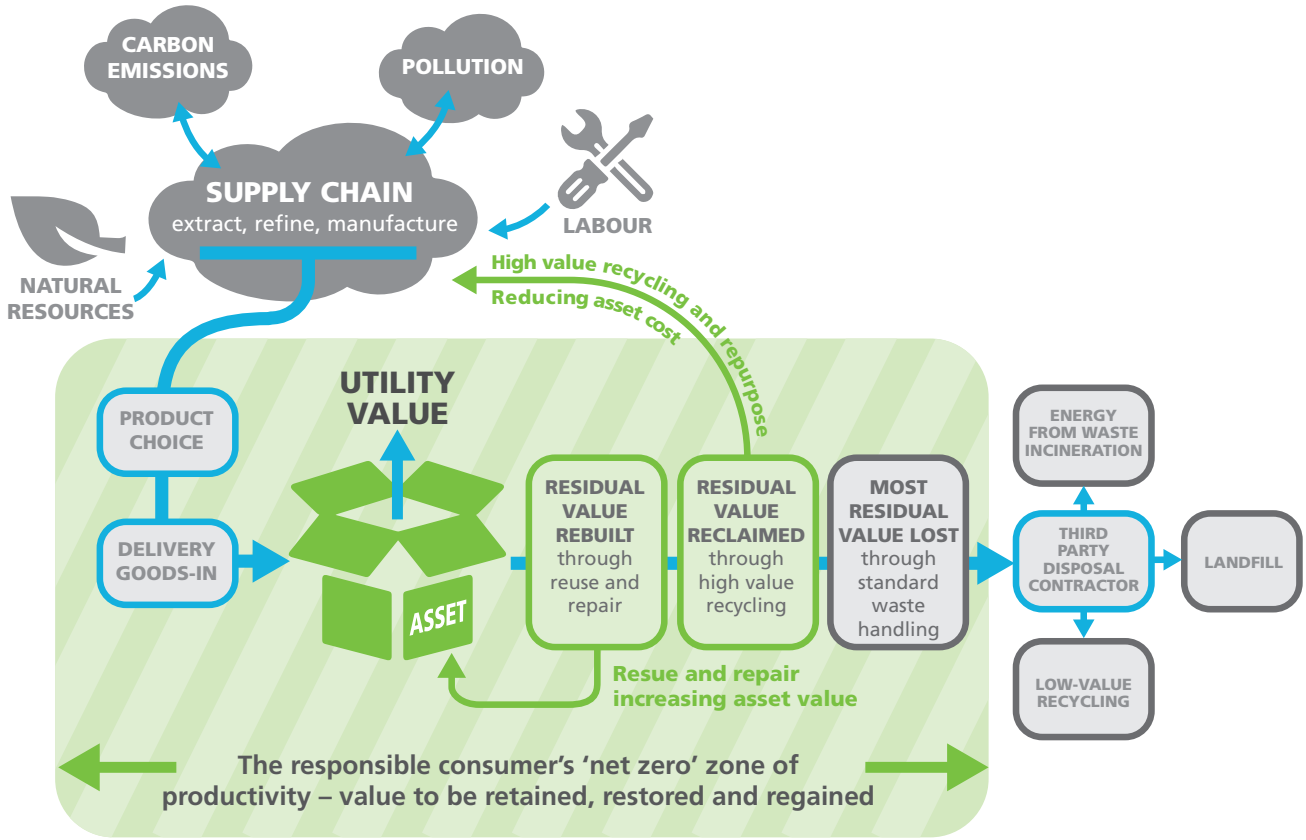
Our approach begins with considering everything we consume as an asset with a real carbon footprint and a real post-consumption value (from energy to equipment, from medical devices to travel miles, from food to pharmaceuticals, and from cardboard to copier paper). Our daily decisions determine how much carbon, monetary and material value is expended in the first place (reducing as much as possible) or retained post-consumption (re-using, repairing and recycling as much as possible).

Everything CUH purchases does, of course, have an immediate utility value in terms of healthcare delivery. In a circular economy, however, the productivity does not stop there:

- ✔ the value can be sustained through reuse and repair on-site;
- ✔ some of the purchase cost can be recouped through high-value recycling;
- ✔ by working with suppliers, products can be designed for ready reuse, repair and high-value recycling;
- ✔ by working with disposal contractors, exhausted products can be more readily segregated, collected and fed back into the supply chain to secure maximum value, zero-waste and minimum carbon emissions; and
- ✔ by working with our NHS, community and academic partners to share and expand net-zero/zero-waste knowledge and experience.

"Respiratory patients are amongst the most heavily impacted by air pollution and the climate crisis. I hope that by intensifying our sustainability efforts – ranging from decreasing the carbon cost of our prescribed inhalers to reducing the number of plastic aprons we throw away – we can be the environmental leaders the NHS needs."

Anthony Martinelli Respiratory Specialist Registrar



The crucial and productive role of the responsible consumer in the transition to a net-zero/zero-waste circular economy

This approach, of taking a more joined-up responsibility for what and how we consume, fits well with the more conventional direct decarbonisation of energy associated with building services, transport, and anaesthetic gases.

Both deliberately cut significant carbon, pollution and natural resource loss from our utility and material supply chains in a clearly defined transition to net-zero/zero-waste.

Converting this into reality requires some reframing of how we make decisions. There are three important determining factors to bring into play:

1. Locate and quantify all the associated carbon emissions using a life cycle assessment in order to work out the level and extent of CUH's options as a carbon-conscious and environmentally responsible consumer. Behind everything we consume there is a 'shadow' of embedded environmental cost (and real value)
2. Devolve the responsibility to the local management closest to the point of consumption – where the 'what' and 'how' of consumption will be best understood. The carbon consciousness needs to be developed here so that this form of carbon reducing subsidiarity can really work.
3. Unlock current spending constraints on carbon reduction measures by highlighting the cost of trying to deal with runaway climate change. We need to reach into the future and borrow from this incalculably immense sum of money.

> ***"The current climate crisis is going to affect us all, including our patients, probably in ways we haven't really appreciated yet. We all have an important role to play in trying to prevent it getting worse, no matter how small we feel our efforts are, it all counts. I believe that with everyone working together, CUH can make a difference!"***
>
> **Dr. Stephen Farrell** Consultant Paediatric Surgeon

Making every kilowatt count with integrated power electronics and battery storage

Recycling cardboard

Recycling cooking oil

High efficiency LED street lighting

Electric cycle and scooter share scheme

New bus routes onto campus

Recycling paper

Our experience also tells us that decisions reframed in this way must take account of the following three aspects of change if they are to be successful:

- Physical infrastructure
- Organisational policy and process
- Behavioural response

By adopting this approach, CUH becomes a carbon-conscious responsible consumer.

Each of the actions in our **Action 50 Green Plan** work within or develop this reframing of decision-making. They will engrain the three principles of change behind CUH's role as a responsible net-zero/zero-waste consumer and deliver very real benefits to organisational resilience and productivity (through value retained, restored and regained).

To deliver our Green Plan we will work with all our staff to help them choose between high-carbon/high-waste and net-zero/zero-waste options.

Some of these reframed day-in-the-life choices will be familiar and others less so – but all matter. As the following examples demonstrate.

> ***"The one thing we need more than hope is action. Once we start to act, hope is everywhere."***
>
> G. Thunberg, December 2018, TEDxStockholm

Day-in-the-life decisions at CUH: choosing between high-carbon/ high-waste or net-zero/zero-waste

Business-as-usual decisions and choices that perpetuate high-carbon/high-waste consumption – worsening the climate emergency, dangerous pollution and the loss of vital resources.		Decisions and choices are reframed so that life cycle analysis counts, current and future costs are connected, and responsibility is devolved to those closest to the point of consumption.
Staff continue to use their own cars (esp. where not very low emissions).	When choosing how to travel on business.	Use of on-line meetings where possible. Switch to using Trust's very low emission pool cars.
Net-zero/zero-waste not included or given sufficient weight in specification.	When drafting a tender specification document.	Specifications include material net-zero/zero-waste parameters that are prioritised in scoring.
Weak coverage of operational inputs (utilities and supply chain) and outputs (waste).	When thinking about what should be included in a new process.	Carbon, waste and travel footprint of the full process calculated and minimised by design.
Use of nearest bin or waste collection point that seems appropriate.	When deciding how to dispose of an unwanted item.	Care taken to fully understand waste segregation and then to ensure the correct stream is used.
Selection based on availability from supplier (and marketing promotions).	When picking out what to eat from the shop or café.	Fresh, local, seasonal, organic, plant-based option preferred or home-brought.
Decision almost entirely based on only utility and up-front cost.	When specifying a piece of equipment to carry out a particular job.	Full life cycle carbon and waste implications given real material weight in choice.
All used/open items put into nearest general purpose bin (typically offensive)	When setting-up or clearing-away after a clinical procedure.	Clean and non-hazardous paper, card and plastic packaging separated out and put in a green bin.
Lowest initial cost; carbon & waste not costed; future value discounted.	When establishing and managing a project budget.	All operational and lifetime costs (plus carbon and waste) included; discount rates reversed.
Limited focus on importance of active travel, recycling, and energy saving.	When introducing a new starter to their job role.	Focus on responsibilities to help deliver CUH, team and personal net-zero/zero-waste targets.
Pre-leave checks and hand-overs do not cover energy, waste and travel.	When routinely packing up to go home at the end of a shift.	Routine checks covering power-off, all waste carefully sorted, and sustainable travel where possible.

Our Action 50 strategic themes

We have created a plan that details 50 distinct actions.

From our experience to date, and from our staff and stakeholder consultations, we have identified three **strategic themes**. Within each theme are three **activity areas** that form the basis of our Action 50 planning.

Because we are talking about a systemic change across CUH's physical infrastructure, organisational processes and behavioural responses, it is important to remember that these three themes (and associated activity areas) will always overlap, to a lesser or greater extent, with each other – everything is connected.

The strategic themes and activity areas provide the framework for planning all the actions over the next three years. It is important to remember that as we move through our Green Plan phases, the interconnections and shared actions will mean we get more and more value and progress from each area of activity: the whole progressively becoming much greater than the sum of its parts.

The following pages provide an overview of the actions under each theme and activity area. The complete prioritised listing (and individual delivery summaries) for all 50 actions can be found in Part 4 of the accompanying full Executive Plan document.

Strategic Theme No.1: Reducing Emissions

Activity areas

Building Services
Making every unit of energy count in the running and development of our buildings (with renewable generation wherever possible).

Travel and Transport
Evaluating every mile that has to be travelled to and from our premises, patients and partners so as to minimise carbon emissions.

Clinical Practice
Ensuring every procedure and prescription we provide is carbon-conscious and pressing for practical low-emission alternatives.

Strategic Theme No.2: Saving Resources

Activity areas

Reuse – Repair – Recycle
Retaining and regaining as much post-consumption value from everything we purchase through carefully connected reuse, repair and recycling.

Purchased Items
Steering our supply chain to stand behind our net-zero/zero-waste objectives via responsible sourcing, design, packaging and distribution.

Avoided Emissions
Establishing alternative practices that assist the supply chain transition to a circular economy delivery model.

Strategic Theme No3: Working Together

Activity areas

Engagement
Providing the direction and guidance needed to embed net-zero/zero-waste decision-making in everything delivered by us and our partners.

Leadership & Accountability
Being accountable for the targets we set and widening our role in meeting them across the communities with which we work.

Locked-in & offset emissions
Long-term holding of emissions in tree-planting and materials, plus working in our community on ill-health prevention.

Our Action 50

As well as delivering our immediate objectives of organisational engagement and a 10% carbon reduction by 2024, the actions below are all essential to ensuring early momentum in achieving our medium-term 50% carbon reduction milestone by 2032 and then continuing to net-zero by 2045.

Reducing emissions: progressively cutting the carbon emissions that we have direct control over.

In our buildings services we will:

- Reduce energy use intensity through maintenance upgrade programmes.
- Install photovoltaic solar panels wherever we can.
- Review the set-points of all our building services to ensure they are not on unnecessarily.
- Follow the NHS net-zero standard for our new builds and major refurbishments.

In our transport and travel we will:

- Electrify our CUH vehicle fleet and support staff purchase of electric vehicles.
- Amend our expenses policy in favour of low-carbon travel.
- Upgrade our cycle parking capacity.
- Support public transport and active travel routes to and from our premises.
- Provide telemedicine services and remote access technology to reduce travel to site.

In our clinical practice we will:

- Reduce our nitrous oxide emissions by 50%.
- Reduce our desflurane use to less than 5% of volatile gases used in surgery.
- Prescribe lower carbon inhalers where possible and collect used items.

"Theatres are one of the most resource intense areas of a hospital and I have been working to improve the sustainability and environmental impacts of surgery. Specifically, driving change from disposable theatre gowns and drapes towards reusable alternatives that create 750% less waste, 250-330% less carbon and 200-300% less water waste throughout their life cycle.

Other changes we hope to implement include increasing the number of single use surgical instruments that are reprocessed for reuse rather than discarded."

Dr Henry Dunne CT1 Plastics

Saving resources: creating value and cutting carbon in how we purchase, use and throwaway.

To increase reuse-repair-recycle options we will:

- Specify goods to be reusable, repairable and recyclable wherever possible.
- Expand on-site reuse, repair and recycling facilities.
- Continue to develop waste bin infrastructure to extend recycling rates.
- Set an expectation that suppliers match our net-zero/zero-waste objectives.

To lower the carbon footprint of our purchased items we will:

- Reduce our consumption of single-use plastics (esp. PPE and in catering).
- Reduce paper consumption and maximise recycled content.
- Secure electricity supplies from very low-carbon sources.

In avoiding emissions within our supply chains we will:

- Set an expectation that suppliers match our net-zero/zero-waste objectives.
- Seek to exercise the Extended Producer Responsibility regulations.
- Work with carbon and waste reducing modern methods of construction.

Working together: responding to responsibility across our CUH family and local community.

In our engagement with staff and stakeholders we will:

- Provide extensive carbon literacy training and support
- Incorporate net-zero/zero-waste content in all relevant policies and procedures.
- Include net-zero/zero-waste engagement in new starter, new manager and appraisal processes.
- Roll-out net-zero/zero-waste tools for small teams alongside development of a more formal Think Green Champions Network.

In how we provide leadership and accountability we will:

- Deliver a 'say' and 'do' approach with management accountability.
- Become a net-zero/zero-waste anchor institution and ICS leader.
- Support ill-health prevention in the local community we serve.
- Bring together collective capabilities across the campus, local council, universities and research centres.

In how we provide leadership and accountability we will:

- Bring forward the longer term storage of carbon in materials and tree cover.
- Support ill-health prevention in the local community we serve.

"Working for the NHS is not only about looking after our patients but also about being a leader in our community. In spite of international legislation climate change continues at pace and it is only by not compromising on our Green plans at all levels, as individuals, organisations and nations, that we may be able to change this.

As a Divisional Director I want to be able to make the plan real for staff, and this will start with small but tangible targets such as promoting "Meat Free Monday" or looking at our local recycling. We will be working closely with the central team to see what real changes we can make."

Miss Kanwalraj Moar Divisional Director, Women's and Children's Service

Governance and Reporting

The Green Plan is high on CUH's agenda with progress being reported through the CUH Board of Directors and Management Executive. The specific details of progress against responsibility will be managed by a new Environmental Stewardship Committee and delivered through a suite of Green Plan Working Groups across the six core areas of coverage.

Each of the actions has been allocated appropriate director-level accountability with the responsibility to complete actions founded in the most relevant areas of expertise and delivery. From here, wider contributions will be devolved across the organisation as required.

Reporting

Each Green Plan Working Group will be assigned the actions relevant to their area of expertise. This arrangement will provide for the oversight and reporting of all 50 actions. The working groups will actively assist and support the accountable and responsible people assigned to each of the actions within their remit.

The Working Groups will report against individual action targets and progress together with any issues arising that are limiting headway. Reporting and escalation will be to the Environmental Stewardship Committee which will establish and maintain a 'balanced scorecard' focused on the realisation of all Action 50 outcomes across the Plan's three strategic themes and associated areas of activity.

The balanced scorecard will be used to report on overall Green Plan progress to the Trust's Management Executive and through the Board's annual reporting mechanism (with interim updates or escalation as requested).

Next Steps

Each of the actions will be developed into a project plan by the allocated, accountable and responsible directors and managers. The projects will be designed to cover and integrate the three core delivery dimensions of physical infrastructure, organisational process and behavioural response.

Re-framing conventional decision-making (to include life cycle assessment, connecting future and current spending, and devolving responsibility) will also introduce new contributors from within the Trust, the Biomedical Campus, local public, business, academic and community sectors, wider NHS systems (e.g., the Cambridge and Peterborough Integrated Care System), and supply and disposal chains (many with global dimensions).

Execution Plan

April-Sept 2022:	All actions developed into project delivery plans and implementation initiated – supported by the six Action 50 Green Plan Working Groups.
Oct 2022:	Environmental Stewardship Committee (ESC) reviews all 50 project delivery plans and reports status to Management Executive.
Oct 2022-Mar 2023:	First formal delivery round for all actions.
April 2023	First round carbon savings and other returns assessed and calculated through the Working Groups and reported through the ESC to Management Executive.
May 23	Year 1 Board Report – incorporated into Trust's Annual Report.
April 2023-Sep 2024:	Iterative 6 month review and reporting process for all actions: Apr 2023 – Sept 2023; Oct 2023 – Mar 2024 (plus Board and Annual Report); April 2024 – Sept 2024 (including full Action 50 review and preparation of Green Plan Phase 2: 2025-27).

How to contribute:

There is already a strong informal network of green champions across the Trust. We expect this to grow and strengthen considerably as our Action 50 is developed and delivered.

All staff are encouraged to assist in anyway they can with any of the actions – all contributions are invaluable in meeting the climate emergency challenge.

So please do not hesitate to join colleagues who you know are already working on actions or start up something new in an area that looks like it is not getting enough attention.

Action 50 is a plan that needs the support of the whole CUH family!

Almost all the actions can be supported by small local teams signing up to and completing the increasingly rewarding levels of the CUH **Think Green Impact** (TGI) programme. This fully supported online resource will guide teams through everything they need to do to help us achieve our Green Plan targets and beyond.

We encourage everyone to bring their ambition and innovation to TGI.

Glossary

"Green" language can be unclear or ambiguous, the terms used around climate change, carbon and environmental sustainability can create uncertainty. To help with consistency in reading this Green Plan, some of the less familiar and potentially confusing terms are defined as follows:

Carbon: used by the NHS (especially in the context of 'net-zero carbon') as a short-hand for all manmade greenhouse gas emissions: 80% of which are carbon dioxide and the other gases are converted to a carbon dioxide equivalent (CO_2e). The majority of emissions come from burning **fossil fuels** (gas, petrol, diesel-oil and coal), then agriculture and land-use change followed by industrial processes.

Carbon footprint: the sum of all the carbon emissions that an organisation or a specific process is responsible for emitting (may include negative emissions where carbon emissions are removed). For the NHS it is split into two: the first part covers those emissions that it is most directly able to control (sometimes loosely referred to as the system's **Scope 1 and 2 emissions**) and is called the NHS Carbon Footprint (currently approximately 6 million tonnes per year) and the second where the control is more a matter of exercising influence (loosely referred to as **Scope 3 emissions** where the majority are embedded in everything purchased) and is called the NHS Carbon Footprint Plus (currently approximately 25 million tonnes per year).

Circular economy: living and working in ways that help fix our climate emergency by supplying and consuming all our goods, materials, and equipment so that they retain as much of their value as possible after use. Making waste and pollution a thing of the past and, once the whole system is powered by renewable energy, then carbon emissions are eradicated as well. A circular economy is therefore **net-zero/zero-waste** by default.

Climate change: for the purposes of our Green Plan, this refers to human-made climate change caused by increasing the concentration of greenhouse gases in the atmosphere. An increase in average global temperatures of over **1.5°C (above 1850 pre-industrial levels)** will have major impacts on natural systems, health, wellbeing and prosperity; above 2.0°C and there is a high risk of the impacts being catastrophic. The current rate of global emissions will push global warming to 1.5°C in less than ten years from now.

Green: shorthand for **environmental sustainability** which in turn applies to anything or any situation in which carbon emissions, pollution and the loss of natural resources have been fully accounted for and corrected so that any negative impacts are negligible, or will be reversed in time for the next generation to experience no risk to health, wellbeing and ecological value.

Linear economy: the opposite of a circular economy – this is how the majority of goods, materials and equipment are consumed today: in a take-make-use-throwaway manner. There is some recycling (mostly very low value), repair and reuse but overall waste is very high and the system is predominantly powered by fossil fuels. A linear economy is therefore **high-carbon/high-waste** by default. Our Green Plan seeks to map out a route and deliberately move away from linear consumption and towards the circular.

Net-zero: a target for carbon reduction in which there is no net increase in the concentration of carbon emissions in the atmosphere as a consequence of human activity (from what we consume and how we consume it). For the UK the target date has been legally set at 2050. For the NHS it is set at 2040 for emissions it can directly control (with a 47% interim reduction by 2032 from a 2019 baseline) and by 2045 for all of its emissions (with a 73% reduction by 2039 from a 2019 baseline): i.e., the NHS Carbon Footprint Plus is balanced out between positive and negative emissions so that the sum is zero.

NHS
Cambridge
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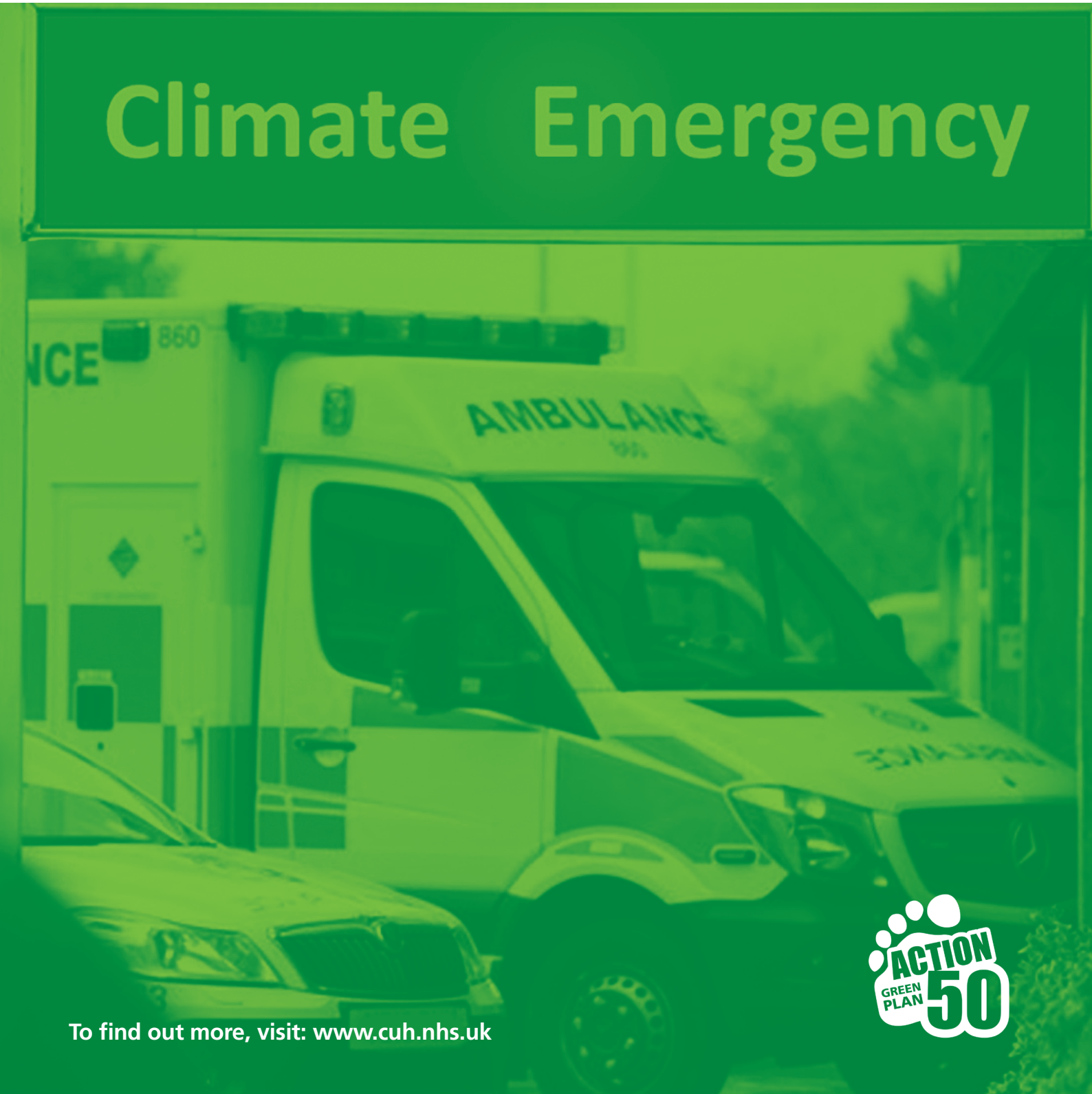
Together
Safe
Kind
Excellent

Climate Emergency



ACTION GREEN PLAN 50

To find out more, visit: www.cuh.nhs.uk