Healthier Together

Improving health and care in Bristol, North Somerset and South Gloucestershire

Healthier Together Integrated Care System

Bristol North, Somerset, and South Gloucestershire

Green Plan

2022 – 2025

Version 1.0

Approved by Healthier Together Executive Group March 2022

For wider engagement in 22/23

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Foreword

As an Integrated Care System we are committed to meeting the health and care needs of our communities today and into the future. We have a duty to ensure we continue to deliver exceptional health and care in a responsible way that embraces our role as anchor organisations in Bristol, North Somerset, and South Gloucestershire.

We are committed to delivering the ambitious plans set out in this Green Plan, providing high standards of quality health and care whilst addressing the environmental impact this creates. We want to do more than just minimise any negative impact of our activities; this plan shows how, through developing sustainably, we can make a significant positive contribution to the local economy, society and environment.

Climate change has been declared as 'the greatest threat to global health' (Lancet, 2017) which will have serious implications for our health, wellbeing, livelihoods, and the structure of organised society. Failure to act quickly will heighten existing national health and care challenges, place further financial strain on the NHS and care sector, and worsen health inequalities within the UK and internationally.

In recognition of the urgency of the threat that climate and ecological breakdown poses to public health, we are setting out extremely ambitious goals. We wish to be leaders in fast tracking plans to achieve carbon neutrality – improving the health of our population in the process. This strategy commits us to a carbon neutrality target of 2030, improving air quality and biodiversity, reducing our use of single use plastics, and creating a wider change movement amongst local communities and businesses. These targets are challenging but show our commitment to working with partners to deliver our vision.

Shane Devlin

Chief Executive, Healthier Together Integrated Care System

Executive Summary

Climate change is one of 'the greatest threat to global health' (Lancet, 2017) which will have serious implications for our health, wellbeing, livelihoods, and the structure of organised society. As an ICS we have put sustainability at the core of our aims and objectives. This plan sets out the commitments we have made to deliver 3 key outcomes for our population:

Improve the environment: We will improve the overall environmental impact and sustainability of our services, especially the damaging local impacts of air pollution. This will create a cleaner, safer, more ecologically sound environment locally and globally, including restoring biodiversity as much as possible

Net zero carbon: We particularly recognise the pressing urgency to address our carbon footprint and will reduce the impact of our services on the environment by achieving net zero carbon across all emissions scopes by 2030

Generate a BNSSG-wide movement: Our sustainability behaviours, actions and innovations as anchor institutions will support a cultural change amongst local citizens and businesses resulting in wider improvements in air quality, biodiversity, and the quality of the natural environment

We will do this by:

1. **Holding our shared ambition** - building on the success of our organisational level work, we have set out this clear shared ambition that all partners align to
2. **Establish the enabling conditions for change** – putting the green agenda at the heart of our ICS – how we business plan, allocate resources, and develop our governance
3. **Coordinating highest impact projects across partner organisations** – we have set out ambitious pledges, commitments, and deliverables across the highest impact areas
4. **Creating assurance of delivery of actions –** through the clarity of our ambitions, executive leadership, defined outcomes measures and clear accountability.

We want to ensure that we harness the power of our staff, citizens, community and voluntary organisations and local business networks in the delivery of this plan. Over the course of 2022/23 there will be a number of ways that you can input to the development of this plan and support its delivery. To find out more please visit our website www.bnssghealthiertogether.org.uk.

1. Status of this plan

This plan was developed at pace during the Covid-19 pandemic with less organisational and public engagement than we would have liked. As such this submission should be considered our initial plan for engagement with partners and public early in 22/23.

This ICS plan covers three main areas:

i. **Our shared ambition:** Our broad ambitions, linked to our ICS Outcomes Framework and the specific needs of our population
ii. **Our collaborative intent:** Those priorities that will benefit from cross-organisational action. It is likely these will initially be focused on health partners but will be extended to cover the shared benefits of working across health & social care and beyond
iii. **Assurance and delivery:** A framework for assurance, support and accountability of our organisational plans and specific deliverables against priority required over the next 3-years:
    a. Initial focus on University Hospitals Bristol & Weston NHS Foundation Trust, North Bristol NHS Trust, Avon & Wiltshire Mental Health Partnership NHS Trust and Sirona Care & Health CIC
    b. Plans for extending scope to primary care and our shared agenda with local authorities and wider partners

Route to final approval

Wider engagement and assurance of the actions set out in this plan will be undertaken in early 22/23 as set out in the Communications & Engagement section.

It is anticipated that a public version will be approved by the ICS Executive and published in late 2022.

Links to other strategies / core documents

Our ICS Green Plan sets out broad ranging ambitions and actions that will change almost every aspect of how we operate. As such, it is seen as a central pillar of our ICS development, embedded within our core aims and objectives. The implications will crosscut many of our existing and future strategies, including:

- Our ICS Strategy
- ICS Memorandum of Understanding
- Provider Green Plans (UHBW, NBT, AWP, Sirona)
- ICS Population Health Approaches
- ICS Quality Improvement & Oversight Framework
- ICS Financial Framework
- ICS Performance Management & Improvement Framework
- ICS Communications & Engagement Framework
- Bristol & Weston Purchasing Consortium Procurement Strategy
- Integrating NHS Pharmacy and Medicines Optimisation (IPMO) implementation plan 2021-2024

Note: Some of these documents will be redrafted as we formalise as an ICS

2. About Greener NHS Agenda & Climate Change

Climate change has been declared as 'the greatest threat to global health' (Lancet, 2017) which will have serious implications for our health, wellbeing, livelihoods, and the structure of organised society. Failure to act quickly will heighten existing national health challenges, place further financial strain on the NHS, and worsen health inequalities within the UK and internationally.

In delivering services for the public, the NHS and Local Authorities also generate carbon emissions and air pollution that are harmful to health. We have a moral duty to our population to minimise these impacts and to adapt our services to the unavoidable impacts of climate change.

We recognise that meeting our sustainability goals is not something we will focus on once we have met our core aims and objectives; **operating sustainably is at the core of how we will meet our ICS aims and objectives**

In developing our ICS we aim to deliver a truly sustainable health and care system that will bring multiple mutually reinforcing benefits:

- **Improve personal and population health**: improved physical & mental wellbeing of our citizens, improved health outcomes & reduced demand on our services
- **Improve environmental health:** create a cleaner, safer, more ecologically sound environment locally and globally, including restoring the environment and biodiversity as much as possible
- **Make best use of our limited resources:** use our resources at maximum efficiency by getting it right first time to make our services more cost effective and eliminate waste

Examples of mutual benefits

Access to green space: There is a wealth of evidence linking green space with improved health and wellbeing including accelerated patient recovery, improved social cohesion and improved mental health. If every household in England were provided with good access to quality green space, it could save an estimated £2.1 billion in health care costs[i].

Active travel: Across BNSSG, 5% of deaths are attributable to air pollution[ii]. Green transport options, such as improved bicycle infrastructure and facilities can yield a high benefit-cost ratio in the long term for both health and the environment. For example, in the Netherlands where about 27% of all trips are made by bicycle, cycling prevents about 6,500 deaths each year[iii]. Increased physical activity will lead to fewer strokes and heart conditions and improved mental health.

Improve our buildings: Between 2013 and 2018, there were an estimated 160,000 excess winter deaths in the UK. Of these, each year around 9,700 people died due to a cold home – the same as the number of people who die from breast or prostate cancer each year. The fact that UK homes are amongst the least energy efficient in Europe suggests that these deaths are preventable. By improving energy efficiency in homes, we can reduce preventable deaths associated with living in a cold home as well as reducing unnecessary fuel consumption[iv]

Financial efficiency: Sustainable health & care is high-quality, cost-effective care: Procuring for whole life costs; stripping out waste; high-quality services Getting It Right First Time; accounting for whole population benefits of service design, creating a resilient supply chain with security of supply

Green procurement: decarbonise supply chain; reduce whole life costs by adopting the principles of a circular economy; address carbon & particulate impact of transport of goods.

Supporting social value through procurement: Regional collaboration ensuring the collective £1bn purchasing power of local anchor institutions supports social value by creating opportunities for micro, small and medium size businesses, social enterprises and voluntary / community organisations

Social prescribing alternative to certain medications as clinically appropriate: increase physical activity, improving physical health & reducing demand on services; reduce the considerable carbon impact of medicine manufacture; increase social interaction and connection, spreading the benefits; reduce the adverse impact of medicines on the local water supply & associated flora & fauna

3. About our ICS

The Healthier Together Integrated Care System has been established to realise our shared ambitions to improve the health and wellbeing of the people of Bristol, North Somerset, and South Gloucestershire. The Partnership was established in 2016 to work together across the NHS, local government and social care. In 2019 we agreed a five-year plan to deliver significant improvements in the health and wellbeing of our population, to improve the quality of our services and people's experience of care and to make BNSSG the best place to work for our staff.

We were formally designated as an Integrated Care System in December 2020. In 2022 we will develop an Integrated Care Strategy for the population of BNSSG, covering health and social care and addressing the wider determinants of health and wellbeing. This strategy will focus on improving outcomes, reducing inequalities, and addressing the consequences of the pandemic for our local communities. Fundamental to this is our commitment to sustainability.

Members of the Healthier Together Partnership

Clinical Commissioning Group:

- NHS Bristol, North Somerset and South Gloucestershire CCG (BNSSG CCG)

Healthcare Providers:

- Avon & Wiltshire Mental Health Partnership NHS Trust (AWP)
- North Bristol NHS Trust (NBT)
- Sirona care and health (Sirona)
- Southwestern Ambulance Service NHS Foundation Trust (SWASFT)
- University Hospitals Bristol and Weston NHS Foundation Trust (UHBW)

GP Federation:

- One Care (BNSSG) C.I.C. (One Care)

Local Authorities:

- Bristol City Council (BCC)
- North Somerset Council (NSC)
- South Gloucestershire Council (SGC)

Contribution to and commitment to this Green Plan

All Healthier Together Partners have endorsed the vision and aims set out in this plan. However, due to the pandemic and the evolving nature of the ICS the level of engagement in the development of the plan, and the involvement in the delivery of actions varies across partners. This is summarised as follows:

Organisation	Organisational Green Plan (or equivalent) with exec leadership	Commitment to core vision & aims	Involvement in plan development	Delivery in 22/23
NHS Bristol, North Somerset and South Gloucestershire CCG (BNSSG CCG)	No	Yes	Core	Core delivery of plan
Avon & Wiltshire Mental Health Partnership NHS Trust (AWP)	Yes	Yes	Core	Core delivery of plan
North Bristol NHS Trust (NBT)	Yes	Yes	Core	Core delivery of plan
Sirona care and health (Sirona)	Yes	Yes	Core	Core delivery of plan
University Hospitals Bristol and Weston NHS Foundation Trust (UHBW)	Yes	Yes	Core	Core delivery of plan
One Care (BNSSG) C.I.C. (One Care)	No	Yes	High level engagement	In 22/23 primary care will focus on a small number of core deliverables whilst establishing the leadership & structures for future delivery
Commissioning Support Unit	Yes	Yes	High level engagement	Wider partnering opportunities (section 28)
Southwestern Ambulance Service NHS Foundation Trust (SWASFT)	Yes	Yes		Wider partnering opportunities (section 28)
Bristol City Council (BCC)	Yes	Yes	High level engagement	Wider partnering opportunities (section 28)
North Somerset Council (NSC)	Yes	Yes	High level engagement	Wider partnering opportunities (section 28)
South Gloucestershire Council (SGC)	Yes	Yes	High level engagement	Wider partnering opportunities (section 28)

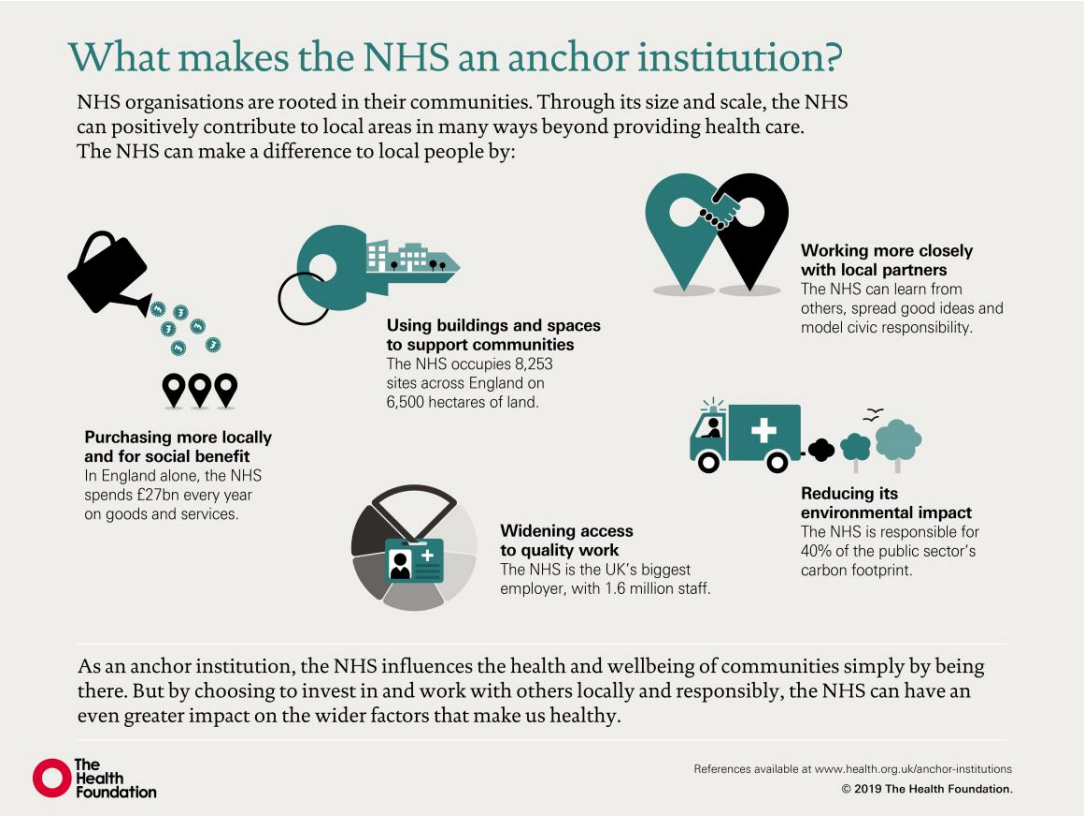
Wider partners

As anchor institutions we recognise our role in leading with our local communities. As such, successfully meeting our sustainability ambitions will require us to work closely with a number of leading local institutions. These include:

- Our landlords & property partners, including NHS Property Services
- Southwest Commissioning Support Unit
- West of England Combined Authority
- Academic partners including the West AHSN, Bristol Health Partners, University of Bristol and University of the West of England
- NHS Blood & Transport
- Independent Sector Treatment Centres and private hospitals
- Voluntary sector bodies
- Citizen leaders
- Key supply chain partners

Our ICS organisations acting as anchor Institutions

The term anchor institutions refers to large, typically non-profit, public sector organisations whose long-term sustainability is tied to the wellbeing of the populations they serve. Anchors get their name because they are unlikely to relocate, given their connection to the local population, and have a significant influence on the health and wellbeing of communities[1].



As an ICS we recognise the power we have as anchor institutions and commit to using this to positively contribute to our local area. This green plan gives us an opportunity to demonstrate what this means in practice, as set out in our vision and outcomes measures.

[1] The NHS as an anchor institution, The Health Foundation, [The NHS as an anchor institution (health.org.uk)]

4. Our Population

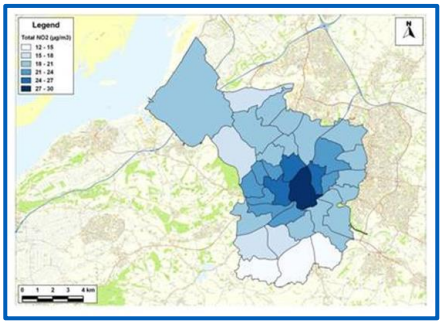
We serve a population of approximately one million people within distinct communities: a vibrant city with huge economic resources but also pockets of deprivation, seaside towns and villages and rural areas. People's life chances and prospects of enjoying good health vary dramatically depending on where they are born and where they live. Our children are disproportionately affected, with nearly 40% of children in Bristol falling within the most deprived quintile. We need to deliver health and wellbeing services that meet the needs of each of these diverse communities.

Specific Sustainability Aspects of Our Population

There are some specific aspects of our demographics and geography that we will look to address through our green plan, including:

Air pollution

Across BNSSG, 5% of deaths are attributable to air pollution, which rises to 8.5% for Bristol residents[v]. Air pollution particularly affects the most vulnerable in society: children and older people, those with heart and lung conditions and those living in the most deprived, inner-city areas. It is recognised as a contributing factor in the onset of heart disease and cancer.



Population-weighted total nitrogen dioxide concentrations, Bristol, 2013.

Our health behaviours – obesity & activity levels

Being overweight or obese increases the risk of death from a number of conditions including cancer, heart disease and stroke and is associated with increased risk of poor physical, mental and social health. Whilst prevalence of obesity in BNSSG is lower than South West and England averages, a large proportion of our population are affected. Around 1 in 5 reception age children in BNSSG are overweight or obese and this rises to almost 1 in 3 by the age of 11[vi].

Activity levels amongst adults in BNSSG are relatively high (61.1% of adults in BNSSG are considered active), particularly when compared with the England population as a whole, but there are substantial levels of inactivity. Approximately 1 in 4 (25%) of the adult population in BNSSG do less than 30 minutes of moderate intensity physical activity per week. In England, on average, 28.7% of the adult population are inactive. Promoting active travel as part of our sustainability ambitions will help to support healthy behaviours[vii].

Risk factor	PAF (%)
Tobacco	19.3
Diet	14.4
High blood pressure	13.0
High BMI	9.6
Alcohol and drug use	9.5
High cholesterol	7.4
Occupational risks	4.9
High blood sugar/diabetes	4.8
Air pollution	4.0
Low physical activity	2.2

Population attributable fraction (PAF) for risk factors for all-cause YLLs rate per 100,000; England 2016 from the Lancet Global Burden of Disease Study.

Access to healthy food:
70% of BNSSG households purchase fresh and affordable food close to home on a weekly basis. This figure drops to 30% for those with serious long-term conditions and 45% in Worle, Weston and Villages. It rises to 75% in North Bristol and Woodspring. Our food and nutrition actions set out in this plan aim to increase awareness of nutritious and environmentally sound food choices[viii].

Healthy life expectancy
Healthy life expectancy (the number of years expected to be lived in self-reported good or very good health) is associated with a strong deprivation gradient within BNSSG

The main contributing factors to disability/poor health	Alignment to green plan ambitions
Musculoskeletal disease	Active travel & green social prescribing
Cardiovascular disease and stroke	Active travel, nutrition, preventative models of care
Respiratory diseases including COPD	Targeting air pollution
Depression and mental health problems	Green social prescribing
Cancers and particularly lung cancer	Targeting air pollution, healthy lifestyle choices
Alcohol and drug misuse	Green social prescribing

Summary
With wider determinants impacting health outcomes by up to 40%[ix], we know that we can only gain real traction in significantly improving the health of our population by working together and particularly capitalise upon the full range of interactions our Local Authorities have with the public.

Making a significant improvement in the health and wellbeing of our population will mean:

- Addressing the major health threats of cardiovascular/cerebrovascular, respiratory, mental health, musculoskeletal diseases and cancer.
- Addressing the gross inequalities in our system by deprivation and between groups, such as those with learning disabilities and serious mental health issues.

As one of our key system objectives, a sustainable approach to health and care delivery, will be part of addressing the wider determinants of health outcomes

5. Our Green Plan Vision

Our sustainability vision is set out as one of our 7 ICS strategic aims.

ICS Strategic Aim 6: We will act as leading institutions to drive sustainable health and care by improving our environment, achieving net zero carbon by 2030; improving the quality of the natural environment; driving efficiency of resource use.

We will focus on delivering 3 key outcomes for our population:

Improve the environment: We will improve the overall environmental impact and sustainability of our services, especially the damaging local impacts of air pollution, creating a cleaner, safer, more ecologically sound environment locally and globally, including restoring the environment and biodiversity as much as possible

Net zero carbon: We particularly recognise the pressing urgency to address our carbon footprint and will reduce the impact of our services on the environment by achieving net zero carbon across all emissions scopes by 2030

Generate a BNSSG-wide movement: Our sustainability behaviours, actions and innovations as anchor institutions will support a cultural change amongst local citizens and businesses resulting in wider improvements in air quality, biodiversity, and the quality of the natural environment

Our pledges:

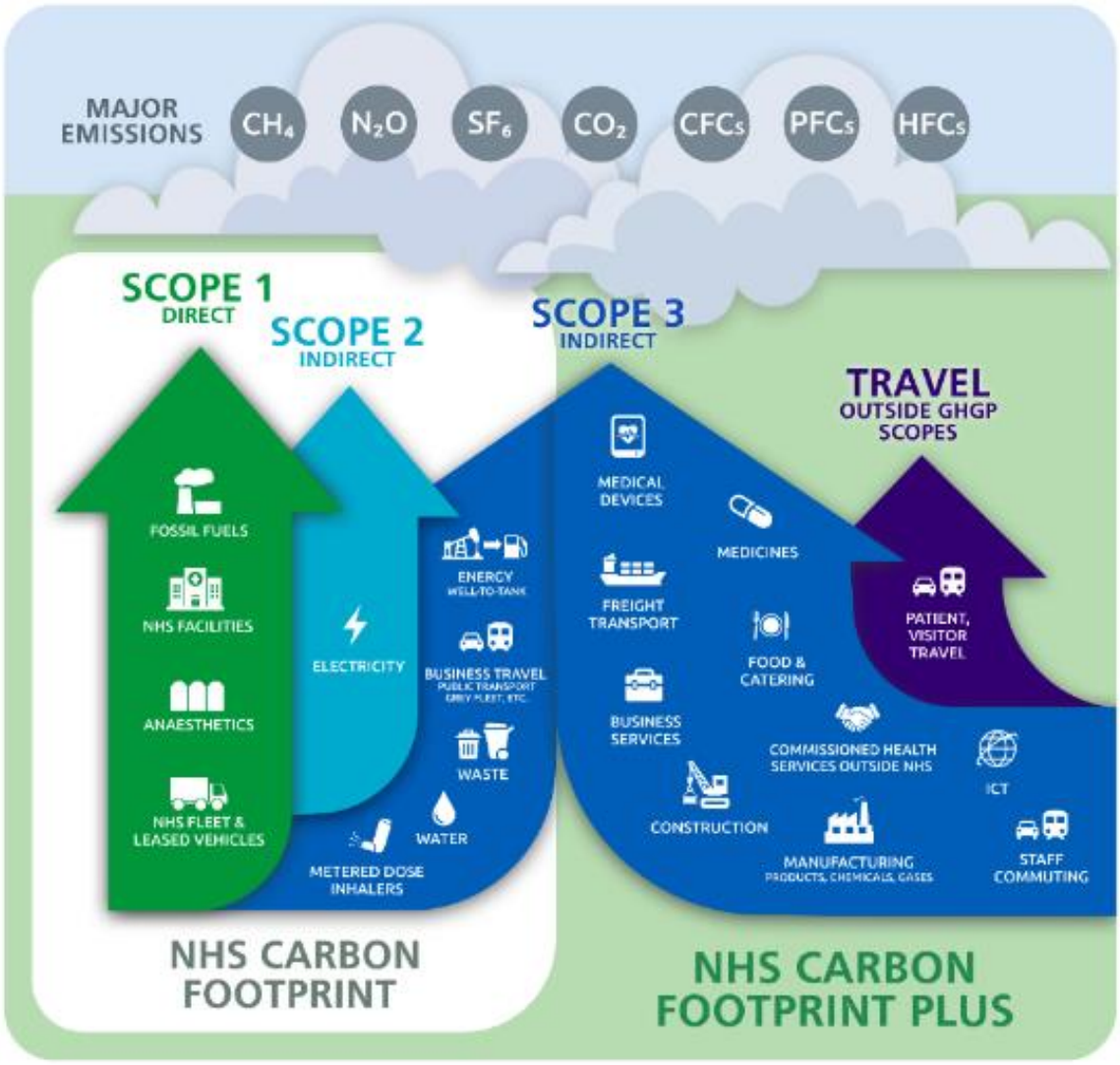
- We will ensure all new capital developments are net zero unless there are significant exceptions. This will be considered a pass/fail decision point in our capital prioritisation matrix
- We will maximise our system building capacity, facilitated by investments in digital infrastructure, before any partner organisation builds new non-clinical buildings
- We will lease or purchase only ultra-low emission vehicles unless a sustainable equivalent is not available in the market
- All new buildings and refurbishments must meet the NHS Net Zero Carbon Building Standard
- We will expect all new models of care to demonstrate a carbon reduction and/or a wider sustainable benefit to support population health
- We will aim for all new procurements or renewals to be with suppliers that demonstrated a clear commitment and plan to achieve net zero carbon
- We will evaluate all new procurements and renewals based on their Green Plan net-zero carbon goals and will monitor suppliers on their delivery against those commitments
- We will actively seek opportunities to create social value through our spending to appoint micro, small and medium size businesses, social enterprises and voluntary / community organisations

6. Our Carbon Footprint – Scope Definitions

The NHS categorises scope 1 & 2, and a specific sub-set of scope 3 emissions as the NHS Carbon Footprint. The remainder of the scope 3 emissions are classed as the NHS Carbon Footprint Plus.

Throughout this plan, and in our ICS commitments, we are referring to the total carbon emissions generated directly and indirectly by our services – i.e., scopes 1, 2 & 3.

Scope	Description	Examples
Scope 1: Direct Emissions	Direct emissions from sources that are owned or controlled by the NHS	• Direct fuel/energy use e.g. natural gas • Fuel used from institution owned vehicles • Anaesthetic Gases
Scope 2: Electricity Indirect Emissions	Emissions from the generation of purchased electricity consumed by the NHS	• Purchased electricity
Scope 3: Other Indirect Emissions	Emissions that are a consequence of the activities of the NHS, but occur from sources not owned or controlled by the NHS	• Construction, water, waste, land-based travel, commuting (both staff and students) • Food and catering • Procurement & supply chain

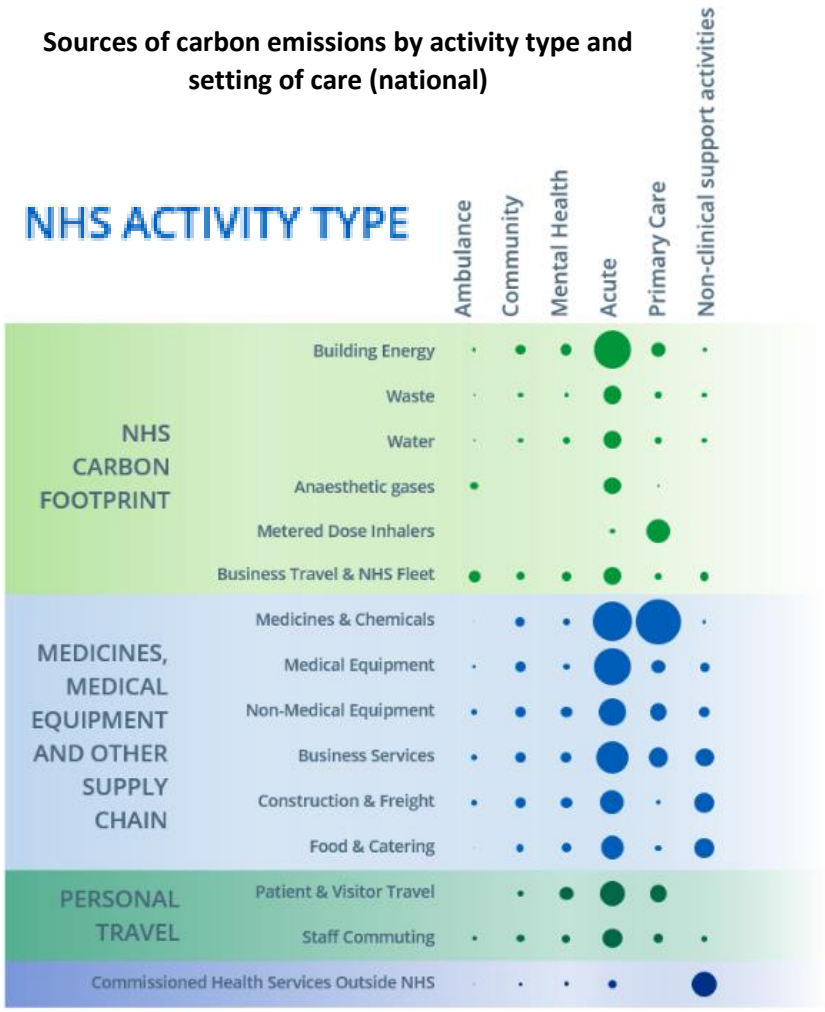


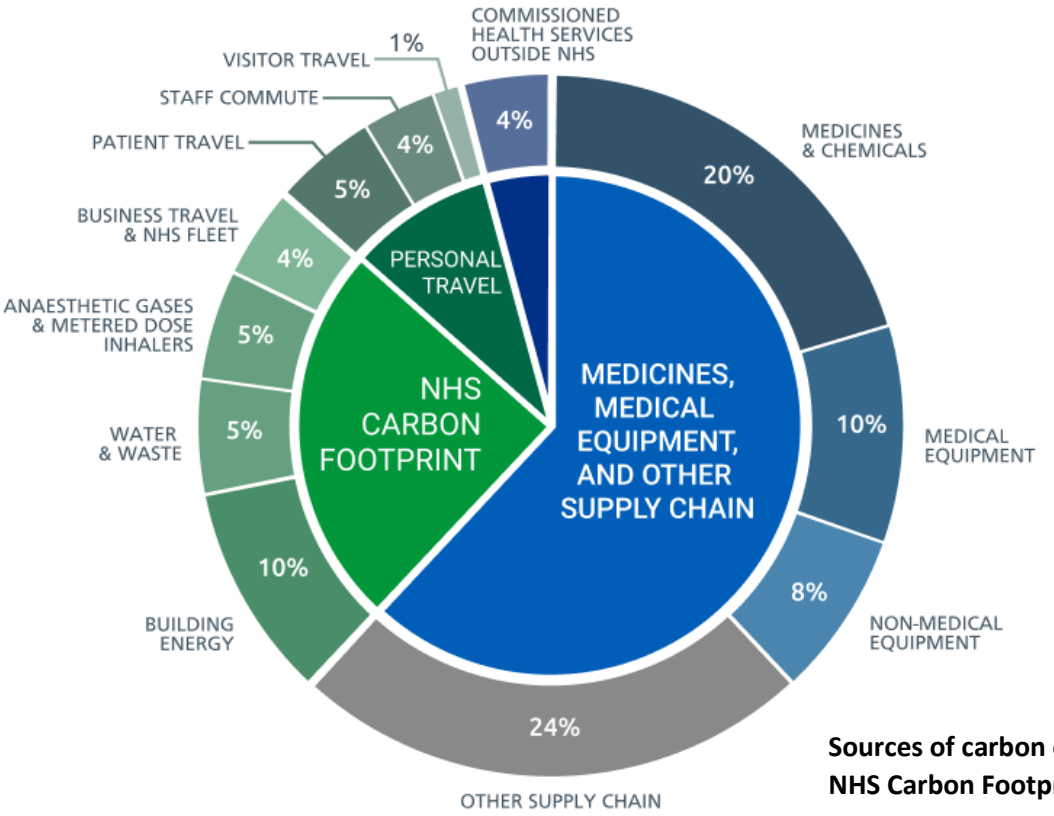
What makes up our carbon footprint (based on national top-down figures):

Most of our carbon footprint is associated with the acute sector, with building energy, waste & water being the largest element of the NHS Carbon Footprint

Medicines & chemicals, NHS purchasing, and other supply chain are the largest element of the NHS Carbon Footprint Plus. We commit to actively influencing our supply chain and associated manufacturers to achieve net zero.

Sources of carbon emissions by activity type and setting of care (national)





Sources of carbon emissions by proportion of NHS Carbon Footprint Plus (national)

7. How we will measure our progress

To assure ourselves and our citizens that we are on track to deliver our headline ambitions we will establish a number of key metrics. For some aspects of our sustainability ambitions there are not currently suitable measures. For these we will work to develop measures and use proxy measures in the meantime.
Our approach to measuring our progress is:

- To have an initial ICS-wide dashboard by end of August 2022
- Work with commercial and academic partners to identify the most appropriate measures
- Ensure wherever possible we measure outcomes (i.e., what will be different for our population), rather than processes
- To review our dashboard at least annual at organisational and ICS board level

Our current headline measures:

Target areas	Proposed measures	Target
Improve the environment: We will improve the overall environmental impact and sustainability of our services, especially the damaging local impacts of air pollution		
Travel & Transport: Reduce particulate, CO_2 & NOX impacts of travel (ultra-low emission vehicles, active travel)	Air quality around our main hospital sites & mean annual background concentration of PM 2.5 and PM 10 particulates	Within legal limits of the 2008 ambient air quality directive by 2025.
	Fraction of mortality attributable to air pollution	Improve across a medium-term rolling average
	Number of journeys to hospital for outpatient care	30% of all non-procedure outpatient attends delivered non-F2F from 22/23
	% Of patients that travel to care contact by sustainable methods	To be defined by travel & transport leads in 22/23
	% Of staff that travel to work by sustainable methods	To be defined by travel & transport leads in 22/23
	% Of new vehicle purchases / contracts that are ULEV (or EURO 6 standard where ULEV not available)	100% by 2023
Waste & water: Reduce waste & water across all estates	Total water consumption of our services (vol)	Reduce compared to previous year
	% Waste to landfill	0% zero waste to landfill from our estates by 2025
	Waste: other recovery weight, alternative treatment weight, landfill weight	Reduce compared to previous year towards zero by 2030
	Recycling weight	Increase year on year

Target areas	Proposed measures	Target
Plastics: Reduce single use plastics	Total volume / number of single use plastic products [not yet measurable]	Moving towards zero, but identify biggest amenable to local changes
	Number of single use products replaced with reusable alternative	Procurement to advise on target - towards zero by 2030
Biodiversity: Protect and enhance biodiversity across our estates	Area (m2) of our sites improved/managed for biodiversity and staff wellbeing	Increase year on year
	New trees planted across our footprint by 2025	1000 trees planted by 2025
	Biodiversity value of our sites	Increase biodiversity value by 10% against biodiversity action plans for sites with green space
Specifically target carbon: We particularly recognise the pressing urgency to address our carbon footprint and will reduce the impact of our services on the environment by achieving net zero carbon across all emissions scopes by 2030		
Total all scopes carbon	Carbon footprint for our activates scope 1, 2 & 3	Net zero by 2030 (trajectory TBD)
	Total financial cost to the system if we were to off-set our carbon emissions (all scopes)	Reduction year on year towards minimal offset by 2030 [£75 per tonne CO2]
Estate: Decarbonise estates	Carbon footprint from estate (exc. energy) - i.e., waste, water, other	Net zero by 2030 (trajectory TBD)
	% New build capital projects achieving NHS Net Zero Carbon Building Standard	100% from 22/23 (unless significant exceptions)
	% Refurbishment capital projects achieving NHS Net Zero Carbon Building Standard	100% from 22/23 (unless significant exceptions)
	Utilisation of our estate: carbon use per care episode to [not yet measurable]	Reduce year on year
	Use of Sustainable Design Guide / net zero building standard for all new buildings/refurbs	100%
Energy: Decarbonise energy	Carbon footprint from all building energy	Net zero by 2030 (trajectory TBD)
	Percentage of imported electricity from truly renewable sources	100% by April 2022
Supply chain: Decarbonise supply chain	Total carbon footprint of supply chain	Net zero by 2030 (trajectory TBD)
	% Of new or renewed contracts with suppliers who have a plan to take their operations to net zero by 2030	100% from 22/23 (except where no viable supplier available)
Medicines: Target the significant carbon impact of medicines and associated supply chain	Total carbon footprint of medicines & chemicals	Net zero by 2030 (trajectory TBD)
	Carbon footprint associated with anaesthetic gases	Net zero by 2030 (trajectory TBD)
	Carbon footprint associated with metered dose inhalers	Net zero by 2030 (trajectory TBD)
	% Of new or renewed contracts with suppliers who have a plan to take their operations to net zero by 2030	100% from 23/24 (except where no viable supplier available)

Target areas	Proposed measures	Target
Care models: Low carbon models of care – do less (preventative & up-stream care), do local (digitally enabled, local care models), do most efficiently (GIRFT, low carbon alternatives etc)	Reduction in patient miles travelled / CO_2 as a result of outpatient transformation	30% reduction on 19/20 levels
	Reduction in patient miles travelled / CO_2 as a result of other sustainable models of care	TBD
	Reduction of carbon associated with new models of care	TBD using Healthy Weston Phase 2 as test
	% Of patients that travel to hospital by sustainable methods	Increase year on year
	Reduction in carbon achieved through green social prescribing [measure to be defined]	TBD
	Utilisation of our estate: carbon use per care episode to [not yet measurable]	Reduce year on year
	% Of large-scale service changes that can demonstrate a positive impact on key environmental measures (e.g. through a Sustainability Impact Assessment)	100% by 23/24
	Generate a BNSSG-wide movement: Our sustainability behaviours, actions and innovations as anchor institutions will support a cultural change amongst local citizens and businesses resulting in wider improvements in air quality, biodiversity, and the quality of the natural environment	
Staff: Training, engagement & personal action	Number of staff reporting increased awareness of C&E emergency and report having made practical changes (in workplace and outside) [Not currently measured]	TBD
	Number of active users on sustainable staff engagement scheme / app	TBC based on year 1 of use
	Number of people who have received training in sustainability / carbon literacy	TBD
	Number of Green Champions – staff who are dedicated to reducing our environmental impact and given the time and resources to do so.	Increase year on year
ICS culture & process: Embed sustainability within all our core decisions	% Of large-scale business cases that can demonstrate a positive impact on the environment	100% by 23/24 (scale and mechanism TBD in 22/23)
	ICS value and financial framework has sustainability as a central component	TBD - e.g., number of business cases pricing in environmental costs and benefits in the value equation
	% Organisations with a staff engagement programme e.g. RCGP endorsed Green Impact for Health awards scheme or Jump	100% by 23/24
Lead change with our citizens: use touch points for raising awareness; behaviour change	Number of citizens who have reported an increased awareness & changed behaviour as a result of contact with an ICS organisation or our messaging	TBD
	Number of people with improved self-reported health due to connecting with nature	TBD by the Green Social Prescribing work
	Percentage of adults walking for travel at least three days per week	
	Percentage of adults cycling for travel at least three days per week	
	% Of service users who report ICS organisations as leading the way in sustainable provision of	TBD – citizen panel or local authority survey

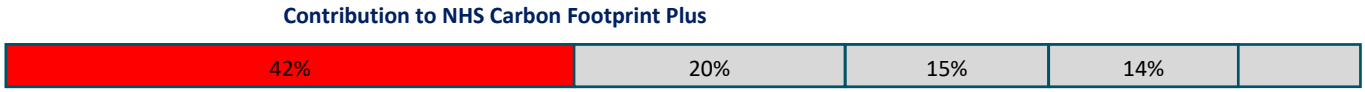
Target areas	Proposed measures	Target
	services	
	Number of citizen communication campaigns / number of citizens reached by campaigns (e.g. front door messaging, appointment letters, transport options)	TBD – to increase year on year, use academically-validated approaches to use health interventions as a chance to create a step change in personal sustainability behaviour
Acting as anchor institutions to Influence local business & economy: Create a step change that directly benefits our citizens	Demonstrable positive impact on local business economy	% of spend with micro, small and medium size businesses, social enterprises and voluntary / community organisations
	Value of external reuse of durable goods by value (e.g. reuse of office furniture)	Increase year on year
	Number of citizens who have benefited from ICS projects such as community heat project	Increase year on year
	Number of citizens we have helped to access key areas of support such as warm homes / sustainability grants	Increase year on year

8. Our ICS ambitions, commitments and actions

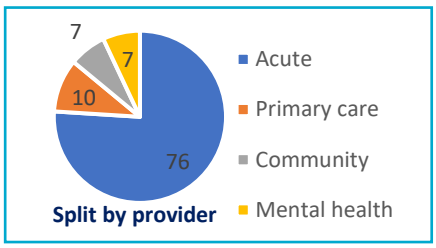
The following pages set out the ambitions, commitments and actions that we have made across key thematic areas.

Explanation of page layout

Contribution to carbon footprint: The coloured bar at the top of the next four pages shows the approximate percentage of all-scope carbon emissions attributable to that area of our operations. We will ensure we target our actions at the highest impact areas. Due to incomplete local data these estimates are based on the national figures[2]. The example shown below is for supply chain & procurement.



Split by provider: The chart on the top right of the next four pages shows the approximate split of the carbon emissions for that area of our operations across provider type. This is also drawn from national data. It is important we know the relative contribution of each organisation as it allows us to focus on the actions within each organisation that will deliver the biggest benefit. The example shown to the right is for supply chain & procurement.

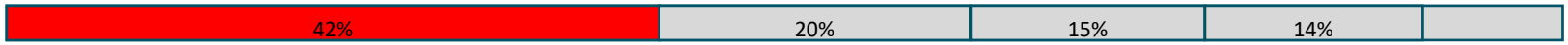


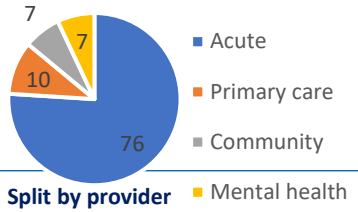
Contribution to our headline metrics: Most actions will contribute to several headline metrics. In the following pages we have highlighted the metrics that will be most significantly impacted by actions in that aspect of our operations.

[2] Delivering a 'Net Zero' National Health Service, delivering-a-net-zero-national-health-service.pdf (england.nhs.uk)delivering-a-net-zero-national-health-service.pdf (england.nhs.uk)

9. Supply chain & procurement

Contribution to NHS Carbon Footprint Plus





Split by provider

Headline ambition for our ICS

We will drive towards a net zero procurement and supply chain by 2030. We will have an ethical approach at the centre of our procurement decisions, recognising that our need to procure to deliver our health service should never be at the detriment of others and we will work to ensure that is the case. We will:

- Driving the supply chain to net zero
- Using our spend as a positive influence in our community
- Promoting a fair, diverse, and inclusive supply chain

Additional opportunities through acting as anchor instructions

We are committed to ensuring that our (combined) annual expenditure of £424M delivers the maximum benefit to society. Our duty under the Social Value Act 2012 is to consider the economic, social and environmental benefits that can be delivered when making procurement decisions. In short, how can we deliver wider public benefits for communities beyond the service being commissioned. Wherever possible, we will also contract with local businesses, voluntary groups, charities and social enterprises.

Key actions for 22/23:

- Implement and embed new procurement strategy & deliver the NBT route map (NBT, UHBW, AWP & Sirona), including the ethical procurement policy
- Contract with a commercial partner to assess the carbon impact of our supply chain
- Establish key delivery metrics to achieve net zero by 2030 (e.g., annual targets / run rate)
- Embed procurement commitments within business planning processes, including amending the TORs of the non-pay group to include both a carbon and monetary assessment
- Actively creating opportunities for micro, small and medium size businesses, social enterprises, and voluntary / community organisations
- Work in partnership with other anchor institutions (local authorities and universities) to establish a region marketplace to promote social value, including: actively engaging with community business for their procurements; making the procurement pipelines of anchor institutions more accessible to community business; creating an opportunity for community business to access anchor institutions and show case their capabilities and innovations; using the skills and experience of the anchor institutions to provide guidance on how to respond to the tenders and procurement requests of the anchor institutions
- Consider system-wide equipment re-use strategy
- Targeted work on single use plastics: share and rapidly adopt learning
- Support for the transition to a circular economy by establishing a list of items most applicable for this.

Key ICS Pledges & Commitments

As a system recognise the positive impact that can be leveraged from a collaborative approach to procurement, to ensure social, responsible, and environmental commitments are at the heart of decision making.

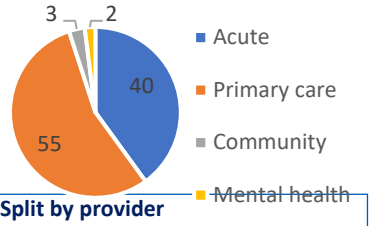
- We will challenge the market to make a significant reduction in carbon for every (re)procurement, including showing how they are on target to meet the 2030 net zero each time we renew a procurement
- Ensure our supply chains and procurement processes are ethical, free from worker abuse and exploitation and provide safe working conditions.
- Influence good practice throughout our supply chains and our partner organisations.
- We will commit to assessing our supply chains ethical practises and compliance in consideration of our contribution towards the SDGs.
- We will review our suppliers for compliance with relevant minimum labour standards and (where applicable) with the Modern Slavery Act 2015.
- We will carry out all our sourcing in an ethical manner, ensuring our treatment of our suppliers remains fair and ethical at all times, and that our procurement processes are transparent and non-discriminatory.
- We will embed a culture of reviewing existing high impact products across all service lines

Contribution to our headline metrics

Headline outcome	Metrics	Target
Improve our environment	Total volume / number of single use plastic products	Moving towards zero, but identify biggest amenable to local changes
	Number of single use products replaced with reusable alternative	Procurement to advise on target - towards zero by 2030
Target carbon	Total carbon footprint of supply chain	Net zero by 2030 (trajectory TBD)
	% Of new or renewed contracts with suppliers who have a plan to take their operations to net zero by 2030	100% from 22/23 (except where no viable supplier available)
Lead change with our citizens	Demonstrable positive impact on local business economy	% Of spend with micro, small and medium size businesses, social enterprises and voluntary / community organisations
	Value of external reuse of durable goods by value (e.g. reuse of office furniture)	Increase year on year

10. Medicines

Contribution to NHS Carbon Footprint Plus



Split by provider

Headline ambition for our ICS

We will reduce the impact of our medicine & medical devices on the environment towards net zero by:

- Reducing overuse of medicines and medicines waste
- Switching to lower impact alternatives wherever possible or green social prescribing initiatives
- Driving changes in the manufacture of medicines through our procurement approach

Key actions for 22/23:

- Embed green plan ambitions within medicines optimisation strategy
- Ensure delivery of anaesthetic gases & metered dose inhaler (MDI) projects
- Appoint a primary care clinical lead to accelerate delivery of the MDI project, other green priorities, and support polypharmacy review programme / switch to social prescribing / recommend digital tools that could enable culture change
- Embed green impact within formulary decision making process and establish a clear decision-making protocol for trade-offs (e.g., carbon v cost v patient experience v clinical benefit). This will also support guideline development.
- Work with Commercial Medicines Unit (CMU), NHSE Commercial and Regional Pharmacy Procurement Specialist to ensure our green procurement commitments are featured
- Promote wider culture change through our regular communications
- Undertake an evaluation of the environmental impact and clinical suitability of personal protective equipment procurement
- Identify pipeline of future lower carbon medicine switches and commit to these through annual business planning rounds
- Consider how carbon impact can be visible at point of care as part of shared decision-making conversations
- Maximise the benefits of our Green Social Prescribing project
- Drive more effective waste management by ensuring contracted services evidence recycling of packaging and driving for teracycle option for plastic blisters
- Recognise environmental challenges relating to medicines and minimise impact where possible

Key ICS Pledges & Commitments

To have an iterative approach to targeting the highest opportunity medicine change each year. Approach to include:

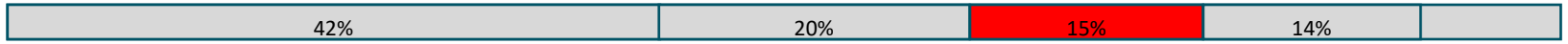
- Aligning our sustainability commitments to the 'delivering best value' strand of our Medicines Optimisation Strategy
- A review of the return and recycling of medicines, medical devices, and equipment to reduce un-necessary waste generation by the NHS, including in general practice
- Reduce medicines waste
- Consider switching highest carbon impact medicines e.g., anaesthetic gasses and inhalers to low carbon alternatives
- Identifying pipeline of future opportunities for greener alternatives
- Considering environmental impacts within structured medication reviews
- Influencing the procurement and supply chain
- Aligning medicine changes to Sustainable Models of Care
- Considering a pass/fail criterion for new medicines approval to demonstrate a commitment towards net zero, unless no viable alternative is available
- Demonstrating where the most environmentally sustainable solution is also the optimal treatment (e.g. correct use of inhalers)

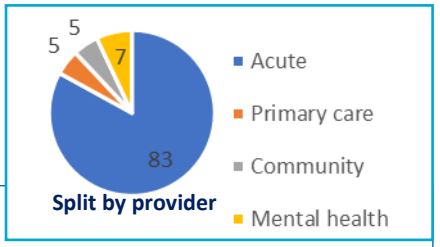
Contribution to our headline metrics

Headline outcome	Metrics	Target
Target carbon	Total carbon footprint of medicines & chemicals	Net zero by 2030 (trajectory TBD)
	Carbon footprint associated with anaesthetic gases	Net zero by 2030 (trajectory TBD)
	Carbon footprint associated with metered dose inhalers	Net zero by 2030 (trajectory TBD)
	& Of new or renewed contracts with suppliers who have a plan to take their operations to net zero by 2030	100% from 23/24 (except where no viable supplier available)

11. Estates & facilities

Contribution to NHS Carbon Footprint Plus





Headline ambition for our ICS

We will be net zero as a health system by 2030. To achieve this, we will:

➢ **Upgrade & renew buildings and infrastructure**

- Develop and implement a sustainable design guide for use by system partners
- Have a strategic system-wide investment programme to decarbonise our estate
- Work with our landlords where we are not property owners, negotiating improvements in building performance at lease renewal and rent reviews. Consider divestment where landlords are unable to meet this

➢ **Optimise the way we use our buildings:**

- Embed energy and water efficient technologies and practices throughout our estate and services
- Deliver year-on-year reductions in consumption of water & energy and production of waste
- Use the benefit of working as a system to make most environmentally sensible use of our joint estate (e.g., sharing buildings, joint back-office functions, and shared working hubs). Look to reduce total estate footprint through new ways of working
- Increase the proportion of our clinical buildings used for delivery of clinical service & increase overall building utilisation, thus reducing carbon output per care episode

➢ **Change our energy source**

- Derive 100% of our energy from renewable sources

Key actions for 22/23:

- Amend financial approval and capital prioritisation processes to reflect our ambitions
- Each organisation will undertake an assessment of how far existing organisation plans take us to net zero, collated into an ICS plan
- Establish view of non-owned estates, the routes & timescales for actions (e.g. lease review) & take a system view of investment vs benefit
- Establish corporate service review and use this to drive new ways of working such as hot-desking & working from home (reduced carbon, reduced estate need)
- Establish a system-wide strategy for clinical & non-clinical waste
- Sharing sustainable design guides
- Supporting system partners with business cases to attract grant funding
- Involvement in district heat network

Key ICS Pledges & Commitments

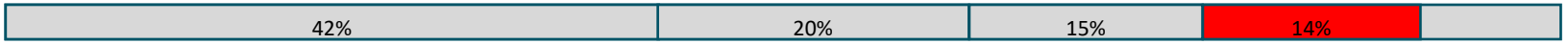
- Each of our tier 1 partners agrees to becoming net zero for estates and facilities by 2030
- We will ensure all new capital developments are net zero unless there are significant exceptions. This will be considered a pass/fail decision point in our capital prioritisation matrix
- We will exhaust our system building capacity, facilitated by investments in digital infrastructure, before any partner organisation builds new non-clinical buildings
- We will lease or purchase only ultra-low emission vehicles unless a sustainable equivalent is not available in the market
- All new buildings and refurbishments must meet the NHS Net Zero Carbon Building Standard
- We will ensure that replacement services & infrastructure will meet net zero carbon requirements (e.g. no new gas boilers)
- We will increase the total amount of green & blue spaces across our total footprint
- We will use our capital allocations & primary care improvement grants and levies to enable developments in infrastructure which prioritise net zero.
- We will positively support investment in decarbonisation. The phasing and prioritisation for this will be considered at system level (i.e. greatest relative impact)
- We will adopt the principles of circular economy to minimise waste and maximise local reuse

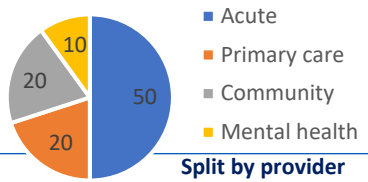
Contribution to our headline metrics

Headline outcome	Metrics	Target
Improve our environment	% Waste to landfill	Zero waste to landfill by 2025
	Total water consumption	Reduce consumption year on year
	% Waste recycled	Increase year on year
	Total volume of single use plastic products	
	Area (m2) of our sites improved/managed for biodiversity and staff wellbeing	
Target carbon	Carbon footprint from estate (exc. energy) - i.e. waste, water, other	Net zero by 2030
	Carbon footprint from all building energy	Net zero by 2030
Lead change with our citizens	% Of service users who see ICS organisations as leading the way in sustainable provision of services	TBC

12. Travel & transport

Contribution to NHS Carbon Footprint Plus





Split by provider

Headline ambition for our ICS

Transport emissions play a role in poor air quality impacting on our population health, contributing to 300 deaths per year in Bristol. Physical activity through active travel can play a key role in improving health and wellbeing. We will drive towards net zero carbon and significant reduction in damaging air pollution from the travel & transport associated with our activities.

Key actions for 22/23:

Headline measures:

- Identify targeted action to address air pollution on our key sites – e.g., standard signage to turn off engines
- Develop a common set of key metrics – e.g., deaths attributable to air pollution, active travel, staff miles, patient journey types, business mileage

Staff & business travel

- Commission system-wide review of fleet vehicles to purchase only ULEVs or Euro 6
- System wide review of travel expenses policy: consider making the expenses rates for using sustainable travel for work options (this will include EV's) higher than the rates for using a private motor car. Promote active travel: All staff to have access to personal travel plans that can be used to identify travel to work options or travel for work options
- Staff loan / salary sacrifice schemes for ULEVs (currently only for B4 up), and active travel options (cycle schemes)
- Ensure that all car parking policies are in line with HTM 07-03 where parking is only provided for those that need it e.g., disabled, night staff, staff that work when unsocial hours when public transport options are limited, and rates discourage the use of the private motor vehicle to get to work
- Promote and facilitate working from home / most accessible office hob.
- Participate in the TravelWest Travel to Work survey to collect baseline staff travel data
- Implement the Clean Air Hospital Framework

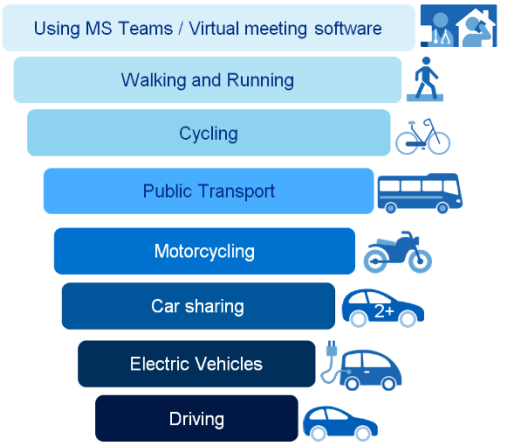
Service user travel

- Work with public transport providers to provide a fit for purpose public transport service for the area
- Consider free public transport tickets for those patients already eligible for free parking
- Review active travel corridors/routes with WECA – all sites should have safe / dedicated low-traffic routes
- System wide events and communications plan to promote active and sustainable travel benefits to drive behaviour change
- Green social prescribing of active travel for rehabilitation

Key ICS Pledges & Commitments

We will act collectively to change travel behaviours & decarbonise our fleet:

- We will lease or purchase only ultra-low emission vehicles unless a sustainable equivalent is not available in the market
- We will ensure new models of care provide care digitally or closer to home wherever possible
- We will develop an ICS approach to lease vehicles and salary sacrifice aligned to our sustainability goals
- We will align our travel expenses policies to support our goals (e.g., mileage expenses for active travel that are comparable to vehicle mileage)
- Ensure that new ways of working, supported by our policies, reduce the need for travel
- Promote active travel (running, walking, cycling etc) for staff and patients, including as part of green social prescribing initiatives.
- Implement a hierarchy of vehicle use: remove travel (work from home), minimise travel with care closer to home, promote active travel, public transport, shared modes, private ultra-low emission vehicles, private fossil fuel as last resort



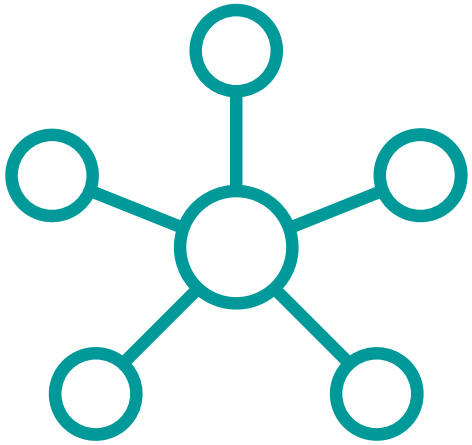
Contribution to our headline metrics

Outcome	Metrics
Improve our environment	Air quality around hospital sites & mean annual background concentration of PM 2.5 & PM 10 particulates
	Fraction of mortality attributable to air pollution
	% Of patients that travel to care by sustainable methods
	% Of staff that travel to work by sustainable methods
	% Of new vehicle purchases / contracts that are ULEV (or EURO 6 standard where ULEV not available)
Carbon	Carbon footprint for our activates scope 1, 2 & 3
Lead change with our citizens	No. of citizens who have reported an increased awareness & changed behaviour as a result of contact with an ICS organisation or our messaging
	% of adults walking for travel at least 3 days per week
	% of adults cycling for travel at least 3 days per week

13. Digital

Headline ambition for our ICS

Our digital vision is to become an exemplar of a digitally advanced ICS. We recognise that this will play a key part in meeting our environmental ambitions. This includes through digitalised clinical systems, smart facilitates management monitoring systems, and facilitating agile working across our footprint.



Digital infrastructure can also contribute to environmental damage through carbon use as well as the use of rare materials. We commit to maximising the positive environmental benefits of our digital enablers, while minimising their impact on the environment.

Key ICS Pledges & Commitments

We will drive towards a net zero digital provision by 2030 by:

- Providing digital capabilities that support clinical models of care that are non-face-to-face or digital by default wherever clinically appropriate
- Achieving a minimum of 30% outpatient care non-face-to-face and increasing our proportion of primary care appointments delivered digitally
- Enable much more effective sharing of clinical information across the ICS, reducing the need for additional patient contacts & travel. We will move information, not people
- Support a community first model of care via an Integrated Delivery Unit
- Enable a personalised & proactive care experience for the service user, thereby reducing the need for more resource-intensive reactive care
- Maximising the use of digital technologies in our facilities management (e.g., smart metering, automation)
- Through our procurement strategies, align to the requirements set out in the government sustainable IT strategy, as well ensuring suppliers entering new or renewed contracts with us have a plan to take their operations to net zero by 2030. This includes our commitments to transparency of supply chain, data storage, data centres and power use /cooling
- Joining up our infrastructure to reduce cost and resource use

Key actions for 22/23:

- Ensure the environmental benefits of existing capabilities are being maximised (Electronic Patient Records, virtual appointments, digital prescribing)
- Work with the CSU to identify the highest impact interventions & pathways for transformation
- Development of fully integrated BNSSG wide community first digital capability that is specifically designed to support our ambition for integrated community first care as the default setting for care.
- Through our digital workforce objective, creating the network infrastructure that will allow seamless working across the BNSSG estate and considering that significant levels of care already happen in the persons home
- Create a BNSSG Digital Infrastructure Alliance joining up key systems that drive cost & resource saving by removing duplication and creating shared services
- Ensure through our contracting and procurement that we are moving to lower carbon impact provision of digital infrastructure and hardware, including the impact of outsourced or subcontracted services
- Embed uptake of digital solutions within services through Digital Changemakers to ensure sustainability and other benefits are realised.

Contribution to our headline metrics

Headline outcome	Metrics	Target
Improve our environment	Number of journeys to hospital for outpatient care	30% of all non-procedure outpatient attends delivered non-F2F from 22/23
Target carbon	Utilisation of our estate: carbon use per care episode to	Reduce year on year
	% Of new or renewed contracts with suppliers who have a plan to take their operations to net zero by 2030	100% from 22/23 (except where no viable supplier available)
	Reduction of carbon associated with new models of care	TBD using Healthy Weston Phase 2 as test
Lead change with our citizens	Demonstrable positive impact on local business economy	TBD – e.g.; increase in % of contracts to local businesses
	Value of external reuse of durable goods by value (e.g. reuse of IT / office furniture)	Increase year on year

14. Sustainable models of care

Headline ambition for our ICS

We will ensure that we are at the leading edge of sustainable models of care. We will embed carbon reduction principles throughout our care delivery recognising that the way we deliver care and the way we operate sustainably are inextricably linked. National estimates are that preventative medicine, reduced health inequalities & lower carbon models of care can contribute to a 15% overall reduction in the NHS Carbon Footprint Plus. The goals of our model of care are to:

Help people stay well and independent in their community

Provide early help and support that is integrated, personalised and wherever possible proactive, avoiding the need for intensive support or hospitalisation

Where hospital is unavoidable and becomes the only way to meet the needs of the person, stays are kept to a minimum and community support is integrated, personalised and pre-emptive

People have a system of support to get them back home as quickly and easily as possible

We help people once home to get back to being as well and independent as possible, including accommodations for any new ways of staying well

Key ICS Pledges & Commitments

By supporting people to stay healthy and well we will reduce overall demands on healthcare services, and thereby their associated environmental impact, by:

- Delivering our prevention agenda
- Reducing health inequalities that lead to inefficient allocation of healthcare resources

We will reduce the carbon impact of the services we deliver by:

- Providing services from places and in ways which minimise the need for unnecessary travel
- Getting it right first time – reducing unwarranted variations in care, delivering the right care, to the right person in the right place.
- Delivering lowest impact, clinically appropriate care
- Ensuring that sustainability and environmental impacts are key considerations in system design principles & integrated care plans
- Ensuring that patients are engaged and well-informed about the carbon impacts (including as part of shared decision making around choice of care pathway)

We will facilitate change at all levels by:

- Ensuring that sustainability principles are central to service design and redesign, not an afterthought
- Enabling a culture where considering the environmental impact of services becomes the norm (education, tools to decide trade-offs, the information to support the right decisions - e.g. GIS - help to visualise trade-offs)
- Explicitly naming environmental costs and benefits as a part of the clinical value agenda

Contribution to our headline metrics

Outcome	Metrics	Target
Improve our environment	Number of journeys to hospital for outpatient care	30% of all non-procedure outpatient attends non-F2F
Target carbon	Utilisation of our estate: carbon use per care episode to	Reduce year on year
Lead change with our citizens	% Of business cases with a sustainable impact assessment (that has influenced the design of the business case)	100% by 23/24

Key actions for 22/23:

- Establish an ICS-wide network of sustainability experts who can support service redesign
- Use Healthy Weston Phase 2 service redesign as a test case for how to make sustainability principles central to large scale service change
- Create a set of standardised tools, such as Sustainability Impact Assessments that support the initiate & delivery of service change
- Use the service redesign gateways to ensure sustainable models of care are part of the service model. Ensure that all service changes & business cases can demonstrate positive environmental impacts through their SIA.
- Establish sustainability agenda into priorities for QI programmes and academic research (e.g. AHSN)
- Continue to deliver the highest impact interventions, including anaesthetic gases & metered dose inhalers as well as digital models of care & telemedicine
- Identify & communicate the benefits of sustainable models of care delivered during COVID-19 to discourage reversion to original state – promote what is already done
- Identifying the next wave of opportunities / highest environmental impact pathways. Share case studies on service models that have reduced carbon impacts
- Launch broader engagement around sustainable models of care including annual displays & roadshow of examples; staff & patient engagement events; discretionary funding & design competitions to accelerate new ideas
- Through shared decision-making conversations, involve service users more fully in treatment choices and options for minimising environmental impacts
- Use Right Care and other tools to reduce unwarranted variation in care and associated resource waste

15. Workforce and system leadership

Headline ambition for our ICS

We will demonstrate our commitment to delivery of our sustainability agenda through a clear approach to leadership and people development at all levels of our organisations.

Key actions for 22/23:

System leadership:

- Establish the executive-led ICS Green Plan Steering Group
- Our Supercharging Coaching approach will be entwining personal and environmental sustainability, including the September Conference which will include an understanding and significant use of nature during the event
- We will develop our "Developing leadership and leaders Principles" to include a focus on holistic sustainability

Wider actions:

- Use our environmental credentials to establish our organisations as employers of choice. ICS job description template should include sustainable vision and staff requirements, and standard interview questions to incorporate sustainability focussed questions.
- Formalise sustainability advocates / link roles in each division & department (e.g., Green Ambassadors).
- Encourage the development of Green Staff Networks / Sustainability Staff Networks across the system.
- Take a proactive approach to engaging underrepresented staff groups with sustainability activities.
- Build awareness with carbon literacy training, starting at Execs. Consider realistic levels of training appropriate to roles. Include:
  - Informal lunch and learn - open to whole ICS
  - Bespoke training - Institute of Environmental Management training - for accredited qualification (e.g. finance, procurement).
  - Consider upskill leads / link role in each function
- Develop as an element of all apprenticeships for future

Staff engagement:

- Expand the UHBW - NBT Greener Together staff engagement to the wider ICS
- Consider how engagement and communications can connect in with One Care/Primary Care e.g. system level newsletter or through Primary Care Networks

Key ICS Pledges & Commitments

We will have clear leadership of our Green Plan delivery including:

- An executive lead in each organisation
- Establishment of an ICS Green Plan Steering Group
- Development and delivery of an ICS Green Plan strategy
- Establish a compelling vision and narrative to embed green agenda into BAU

We will equip our workforce with the skills and capabilities required to meet our ambitions

- Ambition to establish and energise a social movement
- Use of sustainability ambitions and record of delivery to position us as an employer of choice
- Appropriate training and awareness building at all levels
- Use all development opportunities to help people to feel, think and, therefore, behave differently. This includes ensuring all leadership development includes support and challenge for environmentally sustainable mindsets

Contribution to our headline metrics

Headline outcome	Metrics	Target
Improve our environment	Number of journeys to hospital for outpatient care	30% of all non-procedure outpatient attends delivered non-F2F from 22/23
Target carbon	Utilisation of our estate: carbon use per care episode	Reduce year on year
	% Of new or renewed contracts with suppliers who have a plan to take their operations to net zero by 2030	100% from 22/23 (except where no viable supplier available)
	Reduction of carbon associated with new models of care	TBD using Healthy Weston Phase 2 as test
Lead change with our citizens	Demonstrable positive impact on local business economy	TBD – e.g.; increase in % of contracts to local businesses
	Value of external reuse of durable goods by value (e.g. reuse of IT / office furniture)	Increase year on year

16. Food and nutrition

Headline ambition for our ICS

We will make a positive contribution to the environment and our local citizens through the food we provide.

Key actions for 22/23:

- Link with local authorities and other partners to consider a single Food and Drink Strategy including avoidance of food waste. Work already underway with the NHS Healthy Weight Declaration pilot
- Follow the Bristol One City Plan - going for gold process for sustainable food city. Generate a wider health and social change message of a sustainable, nutritional diet.
- Estates' director support to promote importance of nutritional and food, including the role in influencing wider staff and service user behaviours. Trusts supporting going for Gold
- Through joint procurement strategy increase the use local suppliers, Fairtrade, red tractor, MSC food items; encourage more plant-based meals; and increase patient education
- Review vending machines to ensure supplier compliant with CQUINS
- Implement approaches to measure and reduce food waste. Currently measuring patient food waste based on meals not used. Weight of waste is currently not being measured
- Implement plans to change the menu at least twice a year by 2025 to maximise the use of seasonal ingredients.
- Review and adapt menus to offer healthier lower carbon options for patients, staff and visitors.
- Achieving Rainforest Alliance Certification for coffee beans across footprint
- Setting up a weekly food/veg stall for staff and visitors
- Aim to achieve Food for life awards (Bronze and Silver)
- Promote staff engagement in healthy food & the environment e.g. through staff restaurant roof top herb garden and staff allotment – supplies food to staff kitchen.

Key ICS Pledges & Commitments

We will minimise the impact of our food use by:

- Buying Better: procuring local, seasonal, sustainable food wherever possible
- Reducing food waste
- Promoting urban growing and engagement with the natural environment
- Promoting sustainable and healthy food choices for staff and service users
- Supporting community action and food equality.

Contribution to our headline metrics

Headline outcome	Metrics	Target
Improve our environment	% Waste to landfill	Zero waste to landfill by 2025
	% Waste recycled	Increase year on year
	Total volume of single use plastic products	
Target carbon	Total carbon footprint of supply chain	Net zero by 2030 (trajectory TBD)
Lead change with our citizens	% Of service users who see ICS organisations as leading the way in sustainable provision of services	TBC
	Number of citizens who have reported an increased awareness & changed behaviour as a result of contact with an ICS	TBD

17. Adaptation

Headline ambition for our ICS

We will identify our shared climate change risks as a system and implement an action plan to mitigate these risks and adapt our services, activities, and infrastructure to build resilience against climate change impacts.

Key ICS Pledges & Commitments

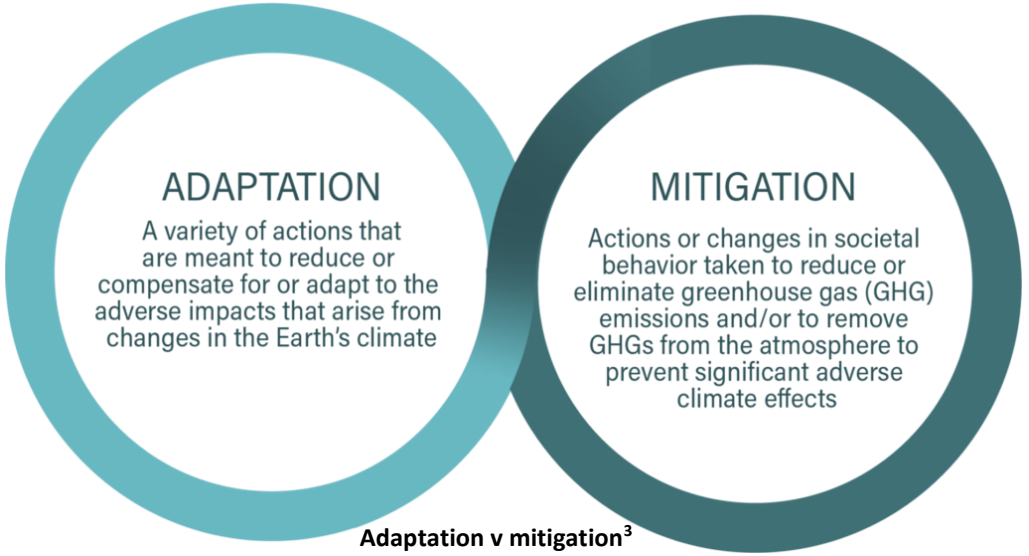
We will ensure all our organisations are prepared to deal with the effects of climate change, particularly extreme weather events, and continue to invest in adaptation and mitigation measures:

- Assess the shared risks and impacts of climate change for the system and adapt services, processes and infrastructure to mitigate the negative effects of past and future climate-altering actions.
- Reduce the impact on public health from climate change.
- Ensure our infrastructure, services, procurement, local communities, and colleagues are prepared for and resilient against the impacts of climate change.

Contribution to our headline metrics

These metrics are specific to the adaptation work and do not currently feature in our headline metrics. We will assess which of these to include within our green plan monitoring.

- Number of overheating incidents in a year (maximum daily temperature exceeds 26 degrees)
- Number of flooding occurrences.
- Business Continuity Plans that contain climate change risks, impacts and adaptation measures.
- Number of patient admissions for asthma / other respiratory diseases.
- Number of supply chain disruptions (items not available or shortages and delays in delivery).



Adaptation v mitigation[3]

Key actions for 22/23:

- Recommend identification of an adaptation lead for each partner and encourage implementation of the ICS adaptation plan
- Understand organisation baselines of how much work the EPRR team are doing around climate adaptation
- Identify key shared risks from the adaptation plan and agree as a system our approach to those risks - which ones we need to collaborate on
- Link the climate adaptation plan to the emergency planning committees and existing network of people through local authorities
- Ultimately, develop an ICS level change and adaptation plan. Consider whether this should be held entirely by the emergency planning groups.
- Forward planning by Estates and Facilities teams to ensure they know how to respond and when adverse weather events are expected to occur. Bristol One City & Partners – Adaptation Strategy.
- Green and blue space joint-funding opportunities with Bristol organisations to mitigate the Urban Heat Island effect and to remove increased volume of air pollutants.
- Working with BCC to utilise the Heat Vulnerability Index tool to identify vulnerable communities and areas.

Climate Change: Vulnerability, Risk, and Adaptation vs Mitigation, [Climate Change: Vulnerability, Risk, and Adaptation vs Mitigation - EA (eaest.com)]

18. Biodiversity

Headline ambition for our ICS

We will fulfil our duty to conserve and enhance biodiversity of our sites and across the region by working closely with our partners. We will promote and utilise our green and blue spaces to support the health and wellbeing of our staff, patients and local communities.

Key actions for 22/23:

- ICS partners to open up and promote their green spaces for use by other partners, particularly those with limited free space.
- Form a network of volunteers that work across ICS partner sites to provide support with conserving and enhancing biodiversity.
- Partner with Health & Wellbeing teams to utilise green spaces, staff allotments and green gyms to improve staff, patient and community health and wellbeing.
- All new building developments and relevant refurbishments will develop comprehensive plans to mitigate adverse impacts on biodiversity, conserve and enhance existing biodiversity, adopt biophilic design and include a robust grounds maintenance regime.
- Undertake ecological surveys across our sites; pollinator surveys, butterfly surveys, newt surveys, bird identification.
- Adopt and implement the guidance detailed in the Healthier Together Green Infrastructure Planning Guide, Green Pockets Planning Guide and Meadow Management Guide.
- We will phase out the use of pesticides across our sites and will participate in No Mow May each year.
- Each partner organisation will register with NHS Forest and will partner with external organisations and groups across the region to designate areas for tree planting.
- Estate masterplans will incorporate green corridors that align with city plans and link site with community parks and green spaces and will take into consideration wildlife highways that intersect site footprint.
- Apply for grants to undertake ICS-wide projects that will conserve and enhance biodiversity and support external organisations bids to develop land for the use of green social prescribing.

Key ICS Pledges & Commitments

We will improve the biodiversity across all of our sites and improve the health and wellbeing of our population by:

- Establishing our sites as an open and accessible network of green spaces and facilities that can be utilised by staff, patients, visitors and volunteers from all ICS partners.
- Prohibiting the use of harmful chemicals and methods in our ground's maintenance regimes.
- Conserve existing and establish new habitats for local wildlife.
- Promote the use of our green spaces and facilities to staff, patients and the community as areas to improve health and wellbeing and to educate on biodiversity conservation.
- Mandating all new developments and relevant refurbishments improve the biodiversity associated with the development area.
- Host green social prescribing programmes and nature wellness activities on our sites.

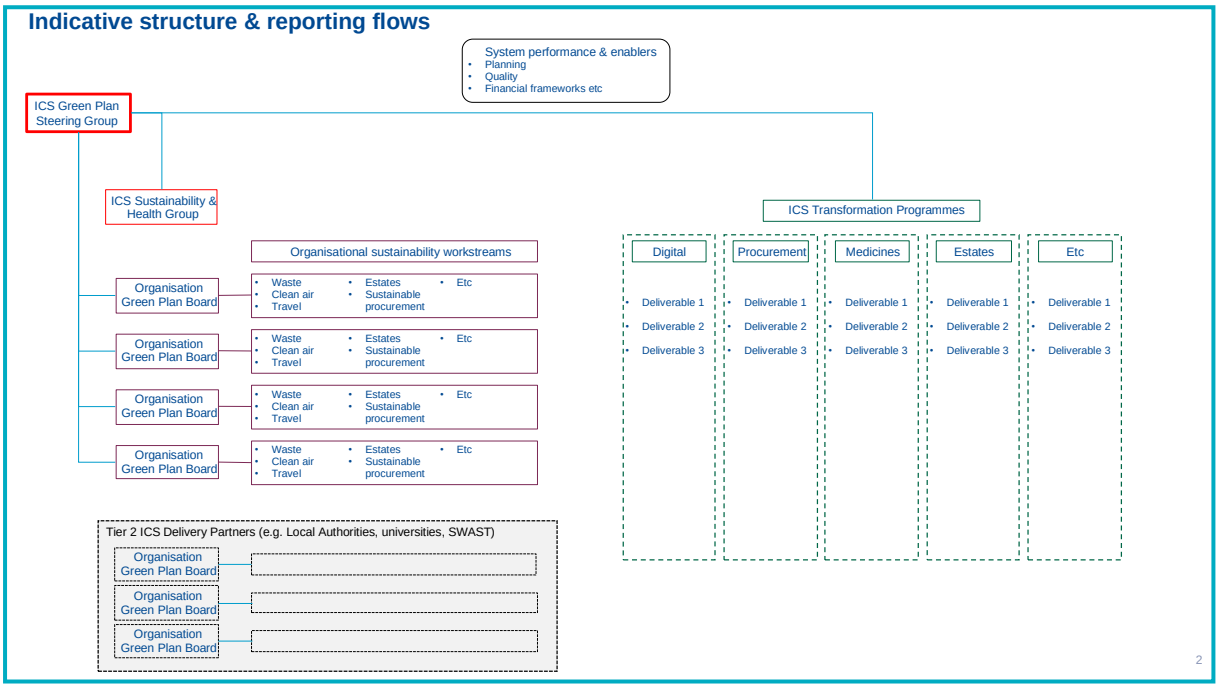
Contribution to our headline metrics

Headline outcome	Metrics	Target
Improve our environment	Area (m^2) of sites improved for biodiversity and health and wellbeing	Increase year on year
	New trees planted across our footprint by 2025	1000 trees planted by 2025
	Biodiversity values of our sites	Increase by 10% by 2025 for sites with green space
Target carbon	Use of Sustainable Design Guide for all new buildings / refurbs	100%
	Reduction in carbon achieved through green social prescribing	TBD
Lead change with our citizens	% of service changes that have a SIA demonstrating positive impact	100% by 2023/24
	Number of citizens who have reported an increased awareness & changed behaviour	TBD
	Number of citizen communication campaigns / number of citizens reached	TBD
	Number of citizens benefited from ICS projects	Increase year on year

19. Governance and delivery plan

Achievement of our ICS Green Plan will require a governance structure and supporting delivery infrastructure. Whilst much of the work of delivering change will be devolved to our core operations and strategic change programmes, the wide-ranging and large-scale nature of the ambition requires a formal governance structure. We are establishing an executive-led ICS Green Plan Steering Group that reports directly into our ICS Executive Board. This will be responsible for:

1. **Holding our shared ambition** - building on the success of our organisational level work, we will hold a singular clear ambition as an ICS that all partners align to
2. **Establish the enabling conditions for change** – putting the green agenda at the heart of our ICS – how we business plan, allocation of resources, development of frameworks and governance
3. **Coordinating collaborative projects across partner organisations**, including advising the Executive Board on priorities and trade-offs - At an ICS level we will put our collective resources and energy behind a small number of impactful changes
4. **Provide assurance of delivery of actions** devolved to other steering groups and organisations - Recognising that the green agenda is everyone's business we will build on the success of organisational plans, putting in place monitoring and support frameworks to maximise the impact across the system, target highest impact interventions, hold collective risks, and hold groups to account for delivery of key actions



Changes to key ICS processes and decision making

Meeting our sustainability objectives will require changes to almost all our prioritisation and decision making. Over the course of 22/23 our ICS Green Plan Steering Group will work to embed our sustainability ambitions within our core governance and decision-making processes.

Some of the key changes we anticipate are:

Capital prioritisation:

- Principle: ensure that any new capital allocations (estates, digital, major medical) are actively driving towards our environmental outcomes
- How: amend our prioritisation matrices and decision-making processes to reflect this. For example, the estates capital prioritisation is now considering our net zero ambition as a pass/fail criterion for business cases.

Revenue allocation:

- Principle: allocation of resources within the ICS should clearly evidence how it meets our 7 system goals, one of which is our environmental commitments set out in this plan
- How:
    - ICS Outcomes Framework, including our green plan outcomes, will increasingly be used to allocate resources across programme areas
    - Transformation & major change: transformation programmes need to demonstrate how they meet our ICS Outcomes; all programmes will need a sustainability impact assessment that demonstrates a positive impact on our environmental outcomes. We will use the development of Healthy Weston Phase 2 business case as a test case for how to incorporate sustainability into large scale change
    - Business planning: we will use annual business planning to drive our collective sustainability ambitions
    - ICS Value Improvement Framework: used to: allocate resources efficiently across our system so that we achieve the overall best possible outcomes; Identify and improve the outcomes and experience that matter to people; Commission and deliver effective services that avoiding overuse of low value interventions (unwanted or not cost-effective) and underuse of high value interventions (deemed cost-effective but not taken up by those who would benefit)

Service Change:

- Principle: we will use key service changes as an opportunity to meet our sustainability ambitions
- How:
    - Identify biggest wins: Our benchmark work will consider how to measure carbon ‘heavy’ opportunities. This will need to link with a system approach for measuring green credentials for Benchmarking analysis i.e., is there a ‘green version’ of model hospital
    - As part of good practice for transformation initiation and gateway controls, we will consider sustainability opportunities
    - Quality improvement: integration of a ‘Sustainability Impact Assessment’ into our Programme Methodology that works alongside current QIA/EIA formats.
    - Annual operational planning: We will embed our sustainability outcomes as one of our key success measures for departmental and organisational planning – e.g., targeting procurement product switches & associated carbon reductions

20. Finance and resourcing

There will need to be significant financial and staff resource investment to deliver against the ambitions of this plan. We also recognise that there will also be considerable financial and non-financial value from operating more sustainably.

At present, we do not have a detailed picture of the likely capital and revenue implications, nor of the source of funds to meet this; these will be developed over the course of 22/23. We will ensure that in assessing the financial implications of this plan we will account for the full financial & non-financial implications of both action and inaction.

Indications of the likely cost implications are:

- Capital investments to decarbonise estates
- Capital & revenue investments to adapt to the unavoidable impacts of climate change
- Potential additional non-pay costs associated with switching to low carbon products
- Pay costs associated with developing the expertise and resource to deliver our plans
- Off-set-set payments for any carbon it is not possible to remove from our operations

Indications of likely benefits from meeting our ambitions:

- Reduced whole life costs of procurement
- Reduced spend on waste
- Reduce heating and power costs through building efficiency
- Reduced healthcare delivery costs due to more efficient models of care
- Social value procurement generating local economic value, reducing inequalities and the associated health burdens
- Reduced mortality and morbidity associated with air pollution and associated costs
- Reduced mortality and morbidity associated with inactivity and associated costs
- Increased value from green capital

Sources of funds will include:

- National funds e.g., Public Sector Decarbonisation Fund
- System capital allocations
- Transformation funding
- Primary care improvement grants
- Procurement savings – savings for reinvestment, CIP savings, cost avoidance savings

How we will assess value

As an ICS we will need to make prioritisation decisions and trade-offs over the coming years, balancing our commitment to the goals of this plan against our responsibilities to deliver safe and effective care. We will seek to make decisions in a clear and transparent way. Our ICS Value Framework provides guidance on how we can frame decision making and allocation of resource.

We define value as:
Meeting the goals of Population Health (including improving the environment); improving physical and mental health outcomes, promoting wellbeing, and reducing health inequalities, for the whole population and not just those who present to services through a focus on achieving the outcomes that matter to people and making best use of our common resources (including our environmental resources).

The outcomes that are important to people (including environmental & social benefits)
The costs to deliver them (including any social & environmental costs)

We will develop additional tools to enable us to make the most effective decisions for our population. These include:

- A refreshed capital prioritisation matrix, aligned to our net-zero ambitions
- A procurement assessment approach aligned to our net-zero and social value ambitions
- A sustainability impact assessment that aligns to the whole system value of care models

Resource investment planned for 2022/23

The first year of our plan will set the foundations for delivery. There are already significant investments in progress within our partner organisations, as detailed in their Green Plan. Proposed additional investment at an ICS, subject to executive sign-off, includes:

Target	Expected benefit
8B Head of Service	Oversee establishment & delivery of programme
0.5 B6 project resource	Coordinate green plan projects across ICS transformation programmes
4 hours pw: primary care clinical lead - green medicines	Metered Dose Inhalers: Accelerate delivery of the project, provide key resources for practices, demonstrate reduction in line with national leaders Prescribing reduction: Support polypharmacy review programme / switch to social prescribing / recommend digital tools that could enable culture change [This one may need to be more targeted to ensure success in year]
4 hours pw: primary care clinical lead - green culture change	Baseline & share good practice: Identify existing good practice and rapidly adopt across BNSSG Establish leadership & comms: Build on existing infrastructure / informal networks to establish a primary care voice into the ICS Green Plan Medium term action plan: Develop an action plan for primary care up to 2030 setting out those actions we can deliver locally, those that will require national pressure (e.g. NHSPS), those that will require additional funding etc. Develop business case for future year funding and plan
B7 Project manager	Deliver system-wide fleet transport strategy and delivery plan
Procure commercial partner to measure carbon impact of supply chain	Ability to baseline existing carbon impact of supply chain Identify and target highest impact product lines Create market visibility and pressure on suppliers
Procure staff engagement platform	Staff engagement - Jump scheme / training / engagement / who would we target. Would need to demonstrate impact and momentum (£20k per org per year for 3-years)
Project accelerator	Ideas generation priming competition - to kick start projects (especially directed to Sirona and primary care)

21. Risks

Risk	Mitigations
Engagement – risk that the plan will fail to become adopted and embedded across the breadth of our activities due to the pace of the development of the plan and lack of wider engagement	• Delivery of communications & engagement strategy • Senior approval by ICS Executive and Partnership Board • Role of ICS Steering Group to oversee alignment
Financial – Risk that we are unable to meet the outcomes of the plan due to financial constraints in terms of capital investment and revenue implications	• Access to national funding such as Public Sector Decarbonisation Funds • Early strategic planning at a system level to understand total financial need & prioritisation of resources to highest impact areas • Recognise the financial savings that are possible through operating more sustainably • Accounting for the contribution to non-financial outcomes (e.g. population health) that can be achieved by operating sustainably
Reputational – Risk that our reputation is impacted if we are unable to meet the outcomes set out in this plan	• Green Plan Steering Group to maintain close focus on key deliverables • Maintain an honest dialogue with staff & citizens about what is achievable and any barriers to delivery that are outside of our control (e.g. supply chain, decarbonisation of national grid)
Elements of delivery beyond our control – Risk that we are unable to deliver against significant elements of the plan due to elements of the plan that are outside of our direct control (e.g. supply chain, national grid decarbonisation)	• Early and robust engagement with supply chains • Use collective pressure through regional and national bodies
Competing priorities – risk that the pressures of the covid-19 pandemic, elective recovery, and establishment of new models of care impact on delivery and relative priority of this plan	• Ensure that the sustainability outcomes are central to our ICS strategic aims • Continue to recognise that operating sustainably is a key part of the solutions to our biggest challenges, not an afterthought • Role of executive leaders to maintain the priority of this programme.

22. Communications & engagement

One of our 3 priority outcomes is to:

Generate a BNSSG-wide movement: Our sustainability behaviours, actions and innovations as anchor institutions will support a cultural change amongst local citizens and businesses resulting in wider improvements in air quality, biodiversity, and the quality of the natural environment

What we already know

Because of the pace at which we have developed this initial plan, and the context of the Covid-19 pandemic, we have done relatively little engagement with either staff or citizens whilst developing this plan. However, there are some things we already know from our existing engagement work:

1. **Staff want us to improve the environment and for us to have a wider positive impact on the community.** This is exemplified in many of our key partners having publicly declaring a climate emergency, as well as in placing our role as anchor institutions central to our organisational strategies
2. **Many of our citizens see improvement of the environment as a top priority.**

How we will engage with this plan:

Over the course of 22/23 we will use this initial plan as a foundation to develop further insights, ensuring that our ambitions are aligned to those of our staff and citizens. Key actions will include:

<u>Staff engagement:</u>

- Engagement with key operational and leadership groups
- Focus groups and roadshows with staff groups
- Festival of engagement –presented in different areas of our organisations to gather comment, questions and ideas.

<u>Citizen engagement</u>

- We will develop a joined-up engagement strategy across all our partners to share our collective ambitions and hear our citizens' priorities and requirements.

How we will use our position as anchor institutions

We will use this plan, and the actions that we undertake as a result, as an opportunity to create the widest possible engagement with the climate and ecological emergency. We aim to generate a culture change across our citizens, leading to further environmental benefits. Key actions will include:

1. Promoting the work we are doing to establish BNSSG as a leading sustainability region
2. Creating opportunities for citizen awareness raising – e.g. with information in hospital atriums, GP surgeries, patient letters
3. Promoting lifestyle changes that benefit both personal and planetary health – e.g. increased use of green spaces, active travel
4. Supporting our citizens to access financial and other support towards more environmentally friendly actions – e.g. warm homes grants, vehicle grants for those living in the emissions zones
5. Providing locally sourced, low-carbon nutrition in our facilities and using this as an opportunity to provide education and information for citizen lifestyle change
6. Working with academic partners to understand how we can most effectively influence behaviour change through our interactions

23. How we are working with key partners

1. Primary Care
2. Academic Partners
3. Local Authorities & public health
4. Other Health and Care Partners

24. Primary Care

Primary Care faces several unique challenges in moving towards sustainable service provision. In the development of this plan there has been relatively low levels of engagement across the breadth of primary care due to the pressures of the pandemic and vaccination programme.

We have however, been able to get primary care agreement to the headline ambitions, to identify some of the key local priorities for primary care, and to set out our plans to make progress in 22/23.

Key challenges for primary care:

- Ageing estate for which there are multiple ownership models. Landlords often not willing or able to engage with sustainability agenda – both in terms of building improvements and allocation of cycle spaces / waste recycling systems
- Funding, contracting & leadership arrangements do not currently promote sustainability agenda

Key opportunities:

- Key institutions in local community with real opportunity to influence citizen behaviours
- Biggest contributor to medicines & chemicals carbon footprint
- Lots of pockets of good practice that can be accelerated through a systems approach

Work already underway:

- Green Impact for Health Toolkit:
- Greener Practice Bristol & Bath Group: produced an online advice page and worked with BNSSG respiratory team to try and improve the carbon footprint of inhaler prescribing across BNSSG.
- Medicines: Successes with reducing overprescribing and medicines waste to make patient care better and safer, support the NHS, and reduce carbon emissions
- Medicines: Successes with making respiratory prescribing recommendations more environmentally friendly
- Medicines: Successes with environmental considerations within treatment pathways
- Reducing testing: Chronic disease order sets, linking with national GIRFT team
- Public health:
- Estates: some progress, but will largely depend on regional & national pressure on landlords
- Reusable kit for IUT and minor opps
- Education & engagement:

- Travel & transport: Travel West funding for cycle storage
- Patient voice:
- Research & partnering with NIHR to find what works in primary care
- Social prescribing

How we will make progress in 22/23

While primary care will contribute to the actions set out across our thematic chapters, there are a number of areas where we will target our efforts:

- Fund GP leads for green prescribing and primary care engagement in the green plan
- Prioritise highest impact actions to generate momentum: for example, reducing overprescribing, medicines waste and metered dose inhalers
- Utilise Investment and Impact Fund in helping to make the NHS more sustainable
- Grow the Greener Practice Group to establish a fully represented primary care sustainability network, linked into our ICS Green Plan Steering Group
- Hold key challenges, such as estates and contractual models, at a system level & engage with NHSE/I for regional or national solutions
- GPC England to negotiate with NHSEI to provide sustainability funding to ensure all NHS GP surgeries are net carbon neutral by 2030

25. Academic Partners

BNSSG has the benefit of leading academic institutions within our geography, including West AHSN, Bristol Health Partners, University of Bristol and University of the West of England. These partners will support in the delivery of our sustainability ambitions in several ways:

i. Assessment of plans – any unintended adverse consequences
ii. Linking inequalities, outcomes and health planning
iii. Service user behaviour change at key life events
iv. NIHR – will do a call around Local Authority health priorities

Support the development & rigour of our plan

We have leaders in climate change and health, including the Cabot Inst for Environment which brings together 600 academics focusing on an inter-disciplinary approach to the environment. These experts can be drawn upon to:

- Assess the ambitions and deliverability of our plans
- Help identify and understand any unintended adverse consequences (e.g., indoor air quality for making buildings super-efficient)
- Looking at mitigation and adaptation as a whole - the things that give mutual wins and minimise harm. Partnering with public health will be important for this
- Thinking as a region how we become net zero - e.g. green space 'offsets'
- Target actions that will help address inequalities by considering who will benefit from interventions such as better air quality. Draw on experts from our academic partners working on climate justice.
- Understand how academic work can inform our priorities - such as cognitive psychology research about behaviour change, climate change and awareness.

26. Local Authorities:

Our local authority partners also have bold sustainability ambitions. This first iteration of our ICS Green Plan has had only relatively high-level engagement with our local authority partners. Through the period of engagement in 22/23 we will further align our actions. The early areas for collaboration include:

i. Procurement and creating a city-region green innovation driver
ii. Community heat and power – city leap
iii. Citizen engagement and messaging
iv. Proactive climate adaptation planning

27. Other Health and Care Partners:

We will increasingly need to work with wider health and care partners to align delivery of our ambitions. These include:

- Southwest Ambulance Service
- Private and independent sector treatment providers
- Care providers
- Community and voluntary organisations

28. Wider Partners

We have a collective responsibility as anchor institutions to work together drive the solutions to the climate & ecological emergency. There are some key elements where we will need to work together

Key: ✓ **– immediate involvement** ✓ **– expected adoption within 2-years** ✓ **– possible future involvement**

	Acute & MH providers	Community	Primary care	Local Authorities	Academic institutions	**What may this look like**
Patient, staff & public engagement	✓	✓	✓	✓	✓	▪ Joined up public messaging between health & LAs (e.g., signposting to energy advice), building on existing successes such as Warm Home Advice for people leaving hospital. ▪ Building on the Bristol One City approach to broad communications with the public / stakeholders, recognising the role of GP practices as hubs of community ▪ Commissioning academic institutions to advise on behaviour change & nudge theory; how key life events, such as having a baby, can be hooks for environmental and health behaviour change. ▪ Internal literacy training - opportunity for developing joint toolkits
Estate strategies	✓	✓	✓	✓	✓	▪ Strategic review of estate decarbonisation potential cross health & LA, which can link to the green capital, community assets and accommodation strategies ▪ Phased disposal of estate that is not viable for net zero ▪ Joined up adaptation plans (e.g. cooling centres), and extend the Bristol mapping projects to wider region. ▪ Challenge estate requirement through new ways of working across entire footprint (shared back office, mobile working, hot desking) ▪ Draw on expertise in UWE & UoB climate action plans and the Bristol advisory group on climate change.
Energy strategy	✓	✓	✓	✓	✓	▪ Review of non-gas energy options across public institutions at regional scale (e.g., strategic heat networks, wind turbines). ▪ City Leap at Bristol city scale. Could include electric vehicles and rooftop renewables. Possibility to extend beyond Bristol. ▪ Connecting to the heat network may be simplest solution for GP practices / health centres following improvement of the building fabric ▪ Consider novel contract forms for energy ▪ Smart technology across shared grids to distribute load across 24/7 variations.
Clinical waste	✓	✓	✓			▪ System-wide strategy for clinical waste. ▪ Resource Futures for the circular economy ▪ SevernNet – Industrial business network to support circular economy
Supply chain &	✓	✓	✓	✓	✓	▪ Implement and embed new procurement strategy in UHBW, NBT, Sirona & AWP. ▪ Align to local authority sustainable procurement strategy– be good to share. Opportunity for joint messaging to market, promoting a

	Acute & MH providers	Community	Primary care	Local Authorities	Academic institutions	What may this look like
procurement						circular economy, aligning to economic policy (WECA). ▪ Provide a clear drive to business that the collective purchasing power of our top local institutions will be directed to social and environmental value. ▪ Targeted projects on single use plastics
Travel & Transport	✓	✓	✓	✓		▪ Commission system-wide review of fleet vehicles. Drawing on experience from local authorities (e.g., waste vehicle depots for North Somerset and gritting lorries converted to use recycled veg oil leading to a 90% drop in carbon emissions. Bristol Waste vehicles are electric & hydrogen, and bus policy moving towards electric ▪ System review of key policies (active travel, lease vehicles, expenses) - draw on best practice nationally to drive change & identify priorities for intervention ▪ System visibility of key metrics - e.g. active travel, staff miles, patient journey types. Joined up messaging and infrastructure investment in active travel (e.g. North Somerset bike lease to WGH staff during pandemic). ▪ Joined up transport needs assessments. BCC are producing an active travel strategy including pilots. Also Travel West, Sustrans. All to link to the positive health impacts ▪ Action for air pollution to be identified. Anti-idling campaigns. ▪ Ambulance conveyance and associated travel, plus patient transport
Adaptation	✓	✓	✓			▪ Stress-testing plans across H&SC providers and consider collateral impacts (e.g. inability to discharge patients into housing stock that cannot cope with extreme heat). Heatmapping project
Natural Capital Assessments	✓	✓	✓	✓		▪ Ensure that all estates are assessed for natural capital value (e.g. as heat sequestration, ecological anchors, contributors to mental health & wellbeing). NS Green Infrastructure Policy – doing a lot of tree planting and rewilding. Link up land etc ▪ Consider broader factors in decision making (e.g. Cornwall's decision making wheel[4]) ▪ BCC ecological strategy – pollution, pesticides, green spaces, procurement. Currently very little carbon sequestration in the city
Public health interventions	✓	✓	✓	✓		▪ Prioritising those activities that have greatest mutual benefit (e.g. addressing vulnerable housing stock that may result in higher frailty / respiratory morbidity). Most social housing in Bristol is still council owned ▪ Need to develop a strategy with private landlords, retirement and care homes, which may require joined up working. ▪ Consider training NHS staff in post-discharge assessment of safe/warm homes. ▪ Scope to drive other public health interventions including – approaches to urban planning, green/blue infrastructure, and obesity/physical activity

[4] Cornwall Council: decision-making wheel (local.gov.uk)

29. Impact of COVID-19

The past two years have been unlike any others. The continuing impacts and pressures of COVID-19 have remained, whilst major strides have been made nationally to develop the sustainability ambition for the NHS. As we've reconfigured health and care services to meet the needs of our communities over the course of the pandemic, we've experienced both sustainability opportunities and challenges.

The COVID-19 pandemic has exposed and exacerbated health inequalities, with disproportionate effects on disadvantaged communities. The effects of climate change will similarly affect and disrupt our communities if action is not taken to reduce our carbon emissions and adapt to an already changing climate.

Demands on both frontline and support services staff have been extraordinary. We have worked flexibly, collaboratively and at pace, all of which will be needed for a modern, sustainable healthcare service; however, the ability of staff to consider and reduce the environmental impact of the services they deliver has been affected.

COVID-19 has shown that important changes can be made quickly in a crisis. Climate change is a crisis which needs to be addressed as a priority and with as much speed as the response to the pandemic. In developing this plan, we have tried to learn from and embed those changes that we want to continue. We also need to mitigate to continue the work to reduce the adverse impacts of changes.

Key negative impacts on our sustainability

- Slowed down some aspects of our sustainability project work
- Additional waste and single use products for PPE
- Recycling schemes, such as PVC mask recycling with Recomed and theatre plastics with Scrapstore, have been temporarily put on hold.
- Reduced our overall efficiency per care episode due to reduced activity levels
- Increased use of private transport
- Externalising our carbon emissions due to working from home – in autumn and winter, emissions from people's homes are likely to be higher than if people were at work.

Key positive impacts on our sustainability

- Massive acceleration of non-face-to-face appointments resulting in less patient travel
- New ways of working, such as home working and virtual meetings have significantly reduced staff travel and made some aspects of work more efficient and more enjoyable for staff
- Decreased gas and electricity consumption across some of our estates
- Reduction in some waste streams (infectious, contaminated) due to reduced theatre activity from COVID disruption
- Improved local air quality in some locations due to annual reduction in NO2, which is likely linked to reduced travel during the pandemic

30. Glossary

Anchor institution: Refers to large, typically non-profit, public-sector organisations whose long-term sustainability is tied to the wellbeing of the populations they serve. Anchors get their name because they are unlikely to relocate, given their connection to the local population, and have a significant influence on the health and wellbeing of communities.

Circular economy: Circular economy is an economic system aimed at eliminating waste and the continual use of resources while identifying opportunities for enhancing social value (e.g. skills and training, employment opportunities for disadvantaged groups and others).

Climate Emergency: A situation in which urgent action is required to reduce or halt climate change and avoid potentially irreversible environmental damage resulting from it

Ecological Emergency: A recognition that nature is declining globally at rates unprecedented in human history - and the rate of species extinctions is accelerating, with grave impacts on people around the world now likely.

Healthier Together Integrated Care System: A statutory partnership of health & care organisations formed to realise our shared ambitions to improve the health and wellbeing of the people of Bristol, North Somerset, and South Gloucestershire.

Net-zero carbon: A person, company or country is carbon neutral if they balance the carbon dioxide they release into the atmosphere through their everyday activities with the amount they absorb or remove from the atmosphere. This is also called net zero carbon emissions or net zero carbon, because overall no carbon dioxide is added to the atmosphere. There are two main ways to achieve net zero: reducing emissions and removing carbon dioxide from the atmosphere, through technologies that actively take in carbon dioxide or by enhancing natural removal methods - by planting trees, for example. These methods can be used in combination.

Value based health and care: Meeting the goals of Population Health; improving physical and mental health outcomes, promoting wellbeing, and reducing health inequalities, for the whole population and not just those who present to services. Delivered through a focus on achieving the outcomes that matter to people and making best use of our common resources.

31. Approval and sign off process

Core plan development team:

- Tricia Down, Associate Director Strategic Estate Development and Sustainable Health, NBT
- Megan Murphey, Environmental Management Systems Co-ordinator, NBT
- Sam Willits, Head of Sustainability, UHBW
- Luke Champion, Energy and Sustainability Manager, AWP
- Kelly Scott, Energy & Sustainability Lead, Sirona Care and Health
- James Dunn, Programme Manager, BNSSG CCG

Executive support:

The following are executive leads for sustainability in their respective organisations. They have endorsed the overarching aims and proposed delivery approach.

- Glyn Howells, SRO and Chief Financial Officer, NBT
- Paula Clarke, Executive Director Strategy & Transformation, UHBW
- Simon Truelove, Chief Financial Officer, AWP
- Clive Bassett, Sirona Care and Health

Approval:

Formal approval: Healthier Together Executive Group 24/03/2022

Appendices

Appendix 1: Case studies

CASE STUDY

GSP – Nordic Walking

Green Care Models

Problem

Low levels of connection with nature amongst populations experiencing inequalities in mental health outcomes.

Solution Overview

Grants to increase the range of nature and health interventions targeting health inequality populations alongside strengthened referral pathways both from the health system but also the community

Contact: Steve Spiers
Green Social Prescribing Manager
BNSSG CCG
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Project Background

The BNSSG Green Social Prescribing Programme Learning (now rebranding as Healthier with Nature has funded a range of projects across BNSSG that both help people connect with nature to improve their health but also work to protect the natural environment.

One of these programmes is a series of Nordic Walking courses taking place in Inner City East Bristol. Nordic Walking is an established intervention that delivers both improved mental and physical health. It builds physical fitness, improves posture and develops supportive peer relationships.

Nordic Walking and the related health benefits have tended to be largely enjoyed by populations who have better health outcomes. The funded project looked to address this by introducing sessions in Easton, Bristol in partnership with two GP surgeries. Sessions are run in partnership between a walking organisation, a local community development worker and two local GP surgeries.

Taster sessions raised awareness and helped recruit walk leaders from the local community and then link workers and GP refer people to a series of 6-week courses.

Process for Improvements

We had clear outcomes in mind.

1. More connection with nature from priority populations (to improve their health outcomes)
2. To embed nature and health interventions in the health system

We then secured some resource for NHS England and other sources to achieve this broad aim but then trusted a range of stakeholders to find the best ways to deliver on the two aims outlined above.

After an engagement process and round of community grants that followed, we are now funding over 40 projects across BNSSG which if they meet their targets will improve the mental health of around 4000 people. Many of these projects also protect and natural environment.

Outcomes

The Nordic Walking Project we are highlighting in this case study will support around 100 people in the Easton area of Bristol to reduce self-reported anxiety and improve self-reported happiness. However, we are also working with partners to measure impact on waiting lists, number of health appointments and possibly prescription of medication.

These outcomes are reported collectively for all the projects and will provide a strong overall data set. This is backed up by individual case studies.

Project Top Tips

Trust communities to find and then deliver their own solutions

Identify and support green champions within both the community and statutory bodies

Create spaces where stakeholders can come together and create partnerships and joint working

Work with existing structures such as PCNs, ICPs, Local authorities or VCSE anchor organisation that already hold local relationships

Celebrate and share good news case studies it keeps partners engaged.

CASE STUDY

Chiller Optimisation

Energy Efficiency

Problem

900kW chiller using large amounts of energy, with no strong correlation with external temperature. Chiller and chiller pumps also suffering from early failures and large maintenance costs.

Solution Overview

Review of BMS control strategy resulted in several initiatives to reduce the time the chiller and associated pumps were running saving energy, cost, carbon and increasing the expected life of the equipment.

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Carbon and Energy Manager
North Bristol NHS Trust
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Project Background

The Learning and Resource Building's chiller was installed in 2010 when the building was built. The chiller is a 900kW Carrier unit supplying a primary circuit at 6°C with a nominal return of 12°C.

The chiller should have been operating 7am-7pm and should not switch on until the ambient temperature exceeded 10°C. We demonstrated that in fact the chiller was running 24/7 with no regard for the ambient temperature.

We also demonstrated that the two sets of secondary pumps were not being switched off when the systems they served did not require chilled water, particularly the pumps serving the AHUs. These pumps were running 8,760 hours per year, despite analysis showing they were only likely to be required 2,000 hours per year.

Further, we noted that the pumps were all running far too fast leading to a vastly reduced difference between the flow and return temperatures, damaging chiller efficiency and wasting pump energy.

Process for Improvements

Working alongside NBT's BMS contractor, our Carbon and Energy Manager assessed the various issues affecting the chiller and using metered energy data put forward a business case for making improvements.

The BMS contractor was able to determine the timeclock and external ambient interlock issues were due to mistakes in the code and they resolved them quickly. They also added new code that switched off the secondary pumps when there was no requirement for them to run.

Changes to pump speed were achieved by adjusting the BMS controls already in place. Future work will involve optimising the temperature set point of the chiller, raising it when the cooling load is low.

Outcomes

Energy metering data demonstrates the electricity cost associated with the chiller and chiller pumps has more than halved since these changes were implemented. In the first year this has saved the trust over £35,000 on an initial outlay of £400 and nearly 70,000kg of CO2. We also expect to have significantly decreased the wear and tear on the chiller and pumps, reducing their annual maintenance costs and increasing their overall life.

Project Top Tips

Confirm the timeclock settings match the requirement of the building.

Confirm the timeclock is working correctly by checking logs of water temperature.

Confirm the ambient interlock is working correctly by comparing the outside temperature to water temperature logs.

Confirm pumps switch off when the equipment they serve (such as AHUs) do not require cooling (or heating).

Assess whether pump speeds are correct by comparing flow and return temperature if they are very similar consider reducing pump speed.

[i] Natural England: An estimate of the economic and health value and cost effectiveness of the expanded WHI scheme 2009
[ii] BNSSG 5-Year Plan
[iii] Dutch Cycling: Quantifying the Health and Related Economic Benefits (nih.gov)
[iv] NICE Guidance NG6: Excess winter deaths and illness and the health risks associated with cold homes
[v] BNSSG 5-Year Plan
[vi] 2017/18; PHOF, PHE NCMP and Child Obesity Profile
[vii] BNSSG 5-Year Plan
[viii] Healthier Together Citizen Panel Survey, conducted 2020
[ix] BNSSG 5-Year Plan