

Report to the NHS Somerset Clinical Commissioning Group on 31 March 2022

Title: Somerset ICS Green Plan 2022-2025	Enclosure G
---	--------------------

Version Number / Status:	1
Executive Lead	Alison Henly, Director of Finance, Performance, Contracting and Digital
Clinical Lead:	Dr Ed Ford, CCG Chair
Author:	Gareth Kane, Consultant, Terra Infirma

Summary and Purpose of Paper

The climate crisis is a health emergency – one of the biggest health challenges faced by humanity. The projected impacts of climate change will have serious implications for both physical and mental health so there is a moral obligation for us to act. In addition, health inequalities are often linked to environmental issues including poor air quality and lack of access to green space. Many of the actions in this plan will deliver better air quality, more access to green space and more nutritious food, which will, in turn, reduce health inequalities.

In response to this challenge, the NHS has set out two top level targets for carbon emissions:

- Net zero carbon emissions by 2040 for emissions under the direct control of the NHS;
- Net zero carbon footprint including the supply chain (known as NHS-plus) by 2045.

NHS England have asked all systems to put a Green Plan in place by 31 March 2022. This 3-year plan sets out targets and actions for the Somerset Integrated Care System (ICS) to meet the climate change and wider sustainability challenges.

Recommendations and next steps

The Green Plan provides a foundation for the system in terms of the key objectives and aspirations that need to be achieved. Partners have helped to devise this plan through a system workshop and the draft has been shared with those partners and the Integrated Care System (ICS) Board. The Integrated Care Board (ICB) will need to take this Plan forward with its partners when it is established on 1 July 2022 but the CCG Governing Body is asked to approve the plan on behalf of the Somerset system.

The action planning will be taken forward through a system working group which will be established comprising of all system partners. The key milestones in achieving the Plan will be monitored through that group. The full Plan will be updated and presented for formal endorsement by the Somerset ICB following its establishment on 1 July 2022.

Impact Assessments – key issues identified

Equality	The delivery of this Green Plan and sustainable services will seek to advance equality of opportunity and reduce the health inequalities that limit life opportunities for the population.
-----------------	--

<p>Quality</p>	<p>The challenge of tackling the climate crisis cannot be met without substantial changes to the way every organisation operates and health services are no exception. Therefore the ICS will need to develop low carbon, sustainable models of care. As with many elements of sustainability, there is a substantial opportunity to improve health outcomes while cutting carbon, for example through green social prescribing.</p>
<p>Safeguarding</p>	<p>Delivery of the objectives of the Green Plan will contribute to providing people with a safer and more sustainable place to live which will have positive affects on their health and well-being.</p>
<p>Privacy</p>	<p>This Plan does not include confidential information.</p>
<p>Engagement</p>	<p>A system workshop was held to collect the views of the system and provided the basis for the Green Plan. Partners will continue to be engaged through the working group and all of the associated workstreams that contribute to the delivery of this Plan.</p> <p>Employee engagement is one of the fundamental challenges of sustainability. Change of any magnitude by definition requires individuals to make different decisions to those made under business as usual.</p> <p>In the general awareness stream, strong connections will be made between sustainability and the health agenda. Participants will be encouraged to identify what they can do in their role to make a difference.</p> <p>For the more focussed engagement, key decision makers will be actively involved in designing the 'new normal'. This approach creates better solutions and secures the buy-in of the decision makers themselves by bringing them into the process.</p>
<p>Financial / Resource</p>	<p>Planning and resourcing of the sustainability agenda needs to be built into annual commissioning plans and ensure that Somerset invests sufficiently to deliver the targets of the Green Plan.</p> <p>The main revenue commitment will be to support the role of Sustainability Manager for the ICS. Once the action plan is developed, we will assess the revenue commitment required to deliver those actions and develop a resourcing strategy.</p> <p>Meeting the vision set out in this plan will require capital investment. We will do this two ways:</p> <ul style="list-style-type: none"> ▪ Integrating sustainability into planned capital projects: we expect many of these measures will be cost neutral or cost negative, but some may require increased investment; ▪ Sustainability projects: we will apply for NHS and Government Grants such as the Public Sector Decarbonisation Scheme (PSDS) to address key issues in the existing estate.

Governance or Legal	<p>The vision set out in this plan will only be delivered if key decision makers are incentivised to make different decisions compared to business as usual. Therefore we will cascade sustainability targets down through the ICS reporting structure to ensure responsibility is properly aligned to authority. In practice this means that appropriate and measurable sustainability objectives will be added to the personal objectives of key decision makers.</p> <p>When the Integrated Care Board (ICB) for Somerset is appointed, a board member will be designated the Lead for Sustainability in the Somerset ICS. The ICB will be the ultimate decision-making body for this plan. Day to day responsibility will lie with the Sustainability Steering Group. In the interim the CCG will take the lead role for the system and begin the implementation process by establishing the Sustainability Steering Group.</p>			
Sustainability	<p>The Somerset ICS Green Plan 2022-2025 includes core work elements around sustainable healthcare, public health and wellbeing, estates and facilities, travel and transport, supply chain and procurement, adaptation and offsetting and digital transformation.</p>			
Risk Description	<p>Risk assessments associated with the delivery of the Green Plan will be built into future planning. At present the hazards of climate change are reflected in the national and regional Community Risk Registers.</p>			
Risk Rating	Consequence	Likelihood	RAG Rating	GBAF Ref
	tba	tba	tba	



Somerset ICS Green Plan 2022-2025

dated 28 March 2022

Author: Gareth Kane, Terra Infirma Ltd

Author's Note:

This Green Plan has been compiled via the following sources and consultations:

- 'How to Produce a Green Plan' – guidance from Greener NHS;
- 'Delivering a Net Zero NHS' – Greener NHS;
- Sustainability requirements from the NHS Standard Contract;
- A stakeholder workshop held 16 February 2022 which set out the vision, principles and priority areas;
- Discussions with Somerset CCG senior staff;
- Discussion at ICS Executives and shadow ICB Board;
- Documents provided by Somerset CCG, Somerset NHS Foundation Trust, Somerset County Council and system partners;
- Comments received from stakeholders on previous drafts of this Plan.

Foreword

Climate change is undoubtedly one of the biggest health challenges of the 21st Century. As the NHS represents 7% of the UK's carbon footprint, we are morally obliged to show leadership in rapidly cutting carbon emissions. But the sustainability agenda is much more than that to us – many of the solutions to climate change also represent an opportunity to improve public health by promoting active lifestyles, improving air quality and embracing the mental health benefits of spending time in natural environments.

In response to these challenges and opportunities, the Somerset Integrated Care System (ICS) recognises the climate emergency and is committed to achieving the national NHS target of net zero by 2040 and contributing to the goal of making Somerset a carbon neutral County by 2030.

In Somerset, we have made some good progress on sustainability. Somerset CCG has led the way on prescribing Easyhaler®, the first certified carbon neutral inhaler. Frome Medical Practice and Primary Care Network (PCN) has received a Nation Award for Sustainability from the Royal College of General Practitioners (RCGP) three years running and is regarded as a forerunner in primary care sustainability. Our two Hospital Trusts have developed a joint green plan setting out how they will meet national NHS targets.

This Green Plan has been developed to build on this work as the Somerset ICS comes to fruition. I look forward to working with all our partners to deliver a truly sustainable and effective healthcare system for Somerset.

Green Plan on a Page

Vision

Somerset ICS believes that an environmentally sustainable society is a healthier society, and we will embrace the synergies between the sustainability and health agendas in everything we do. We recognise the climate emergency and through the delivery of this Green Plan we will meet NHS national targets of net zero carbon emissions by 2040 and make our contribution to the goal of a carbon neutral Somerset by 2030.

Principles

The underpinning principles of this Green Plan are:

- Leadership: as a leading public sector organisation and given the synergies between sustainability and public health, we must be seen to show leadership on these issues;
- Collaboration: we will work together with partners to exploit opportunities for joint working and peer-to-peer learning to accelerate progress;
- Cohesion: we will ensure that all partners are pulling in the same direction and ensure compatibility in technology and infrastructure;
- Integration: sustainability will be embedded into all ICS strategies and the decision-making process;
- Action oriented: we are committed to deliver on this strategy through a joint action plan.

Priority Areas

The priority areas addressed by this plan are:

- Leadership and governance: how this Plan will be delivered;
- Awareness and engagement: it is critical that we engage with our employees to deliver this Green Plan;
- Sustainable healthcare: how our services will evolve to meet the sustainability challenge;
- Public health and wellbeing: how improved public health will mean a smaller carbon footprint;
- Estates and facilities: we will aim for net zero carbon emissions and zero waste from our estates;
- Travel and transport: we will aim for net zero carbon emissions for all aspects of travel relating to NHS;
- Supply chain, procurement and commissioning decisions: how we will drive sustainability down through our supply chain and commissioned services;
- Adaptation and offsetting: we will prepare for locked in climate impacts and offset or inset our residual carbon emissions once we have reduced them as far as possible.
- Decarbonisation through digitisation: a cross-cutting theme of this plan.

1. Introduction

1.1 Background

The climate crisis is a health emergency – one of the biggest health challenges faced by humanity¹. The projected impacts of climate change will have serious implications for both physical and mental health so there is a moral obligation for us to act. In addition, health inequalities are often linked to environmental issues including poor air quality and lack of access to green space. Many of the actions in this plan will deliver better air quality, more access to green space and more nutritious food, which will, in turn, reduce health inequalities.

In response to this challenge, the NHS has set out two top level targets for carbon emissions:

- Net zero carbon emissions by 2040 for emissions under the direct control of the NHS;
- Net zero carbon footprint including the supply chain (known as NHS-plus) by 2045.

This 3-year plan sets out targets and actions for the Somerset Integrated Care System (ICS) to meet the climate change and wider sustainability challenges.

1.2 Somerset ICS Overview

The Somerset Integrated Care System (ICS) covers a population of approximately 560,000 people across most of the County of Somerset. Half of this population lives in rural areas and almost a quarter is over the age of 65. Compared to the English average, Public Health England describes Somerset's health profile as 'varied' with better than average life expectancy and good figures for mortality from cardiovascular diseases and cancer, but worse than average incidences of alcohol related issues and overweight adults².

The scope of this plan covers the following ICS members:

- The Somerset Care Commissioning Group (CCG) function now merging into the ICS;
- The Somerset NHS Foundation Trust;
- Yeovil District Hospitals NHS Foundation Trust;
- Primary Care providers and Primary Care Networks (PCNs) in Somerset;
- Local Authorities: Somerset County Council and its District Councils.

¹ The World Health Organisation rates climate change as the single biggest threat to health <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

² <https://fingertips.phe.org.uk/static-reports/health-profiles/2019/e10000027.html?area-name=somerset>

1.3 Local Government

Somerset County Council and its four District Councils have all declared or recognised a climate emergency. The five bodies have developed a joint climate emergency strategy entitled 'Towards a Climate Resilient Somerset'³ which sets out three goals:

1. To decarbonise Local Authorities, the wider public sector estates and reduce our carbon footprint;
2. To work towards making Somerset a Carbon Neutral County by 2030;
3. To have a Somerset which is prepared for, and resilient to, the impacts of Climate Change.

Meeting these three goals will clearly require the combined efforts of all NHS functions within Somerset.

³ Towards a Climate Resilient Somerset, <https://docs.somerset.gov.uk/wl/?id=8VyMa0AcMI32UyW4VHREq5rTeRZqddPQ>

2. Sustainability Vision

2.1 Our Sustainability Vision

Somerset ICS believes that an environmentally sustainable society is a healthier society, and we will embrace the synergies between the sustainability and health agendas in everything we do. We recognise the climate emergency and through the delivery of this Green Plan we will meet NHS national targets of net zero carbon emissions by 2040 and make our contribution to the goal of a carbon neutral Somerset by 2030.

Target:

T2.1: Somerset ICS will achieve net zero emissions in its 'NHS Footprint' by 2040 and contribute to delivering a carbon neutral Somerset by 2030.⁴

2.2 Meeting our Vision

This is a 3-year Green Plan, but it has been developed to put ICS members on the right trajectory to meet the 2040 NHS Footprint target. The goals set in the County's climate emergency strategy are more ambitious than the current NHS targets, but we believe that the interim NHS target of an 80% cut in carbon emissions by 2030 means that the two targets require very similar (and very challenging) carbon reduction trajectories.

The underpinning principles of the plan are:

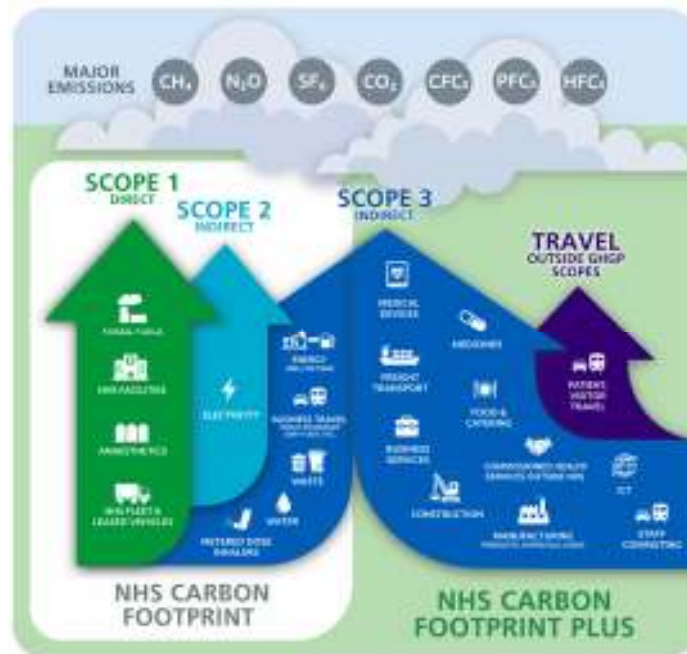
- Leadership: as a leading public sector organisation and given the synergies between sustainability and public health, we must be seen to show leadership on these issues;
- Collaboration: we will work together with partners to grasp opportunities for joint working across silos and peer-to-peer learning to accelerate progress;
- Cohesion: we will ensure that all partners are pulling in the same direction and ensure compatibility in technology and infrastructure;
- Integration: sustainability will be embedded into all ICS strategies and the decision-making process;
- Action oriented: we are committed to deliver on this strategy through a joint action plan which will be appended to this high level plan as Annex B.

We acknowledge that different members of the ICS will have different resources available for sustainability projects. As a guide, the targets in this plan should be regarded as mandatory for organisations with more than 25 employees and advisory for those who do not meet that threshold.

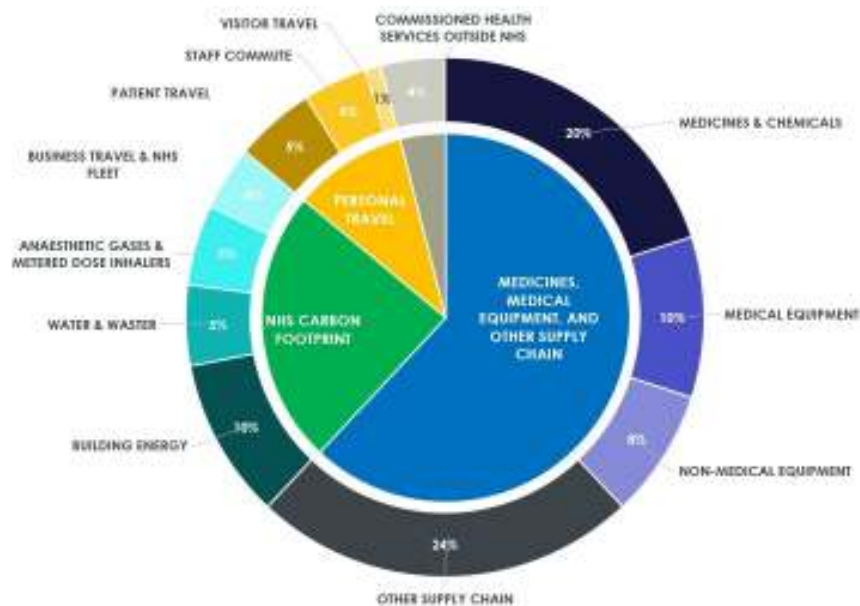
⁴ 'NHS Footprint' covers Scope 1 and 2 emissions along with a small number of Scope 3 emissions as set out in Delivering a Net Zero National Health Service <https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2020/10/delivering-a-net-zero-national-health-service.pdf>

2.3 NHS Carbon Targets

As stated above, the NHS has set two national targets for its carbon footprint: net zero by 2040 for emissions under the direct control of the NHS and net zero by 2045 for the full carbon footprint including the whole supply chain and patient/visitor travel (known as NHS Carbon Footprint plus). The diagram below shows the difference between the two footprints.⁵



The graph below shows the breakdown of the national NHS Carbon Footprint plus. The most significant elements are the overall supply chain (62% of the footprint), travel (14%) and buildings (10%).



⁵ Graphics taken from Delivering a Net Zero National Health Service <https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2020/10/delivering-a-net-zero-national-health-service.pdf>

2.4 Partnerships

While this Green Plan is aimed at NHS members of Somerset ICS, there are many other important partners including:

- Our patients and the public;
- NHS Property Services;
- South West Ambulance Service;
- Charities and the voluntary sector;
- Transport Services;
- NHS South, Central and West Commissioning Support Unit;
- NHS England and Improvement;
- Independent healthcare providers.

These stakeholders will be engaged as and when appropriate during the delivery of this plan.

3. Leadership and Governance

3.1 ICS Leadership

When the Integrated Care Board (ICB) for Somerset is appointed, a board member will be designated the Lead for Sustainability in the Somerset ICS. The ICB will be the ultimate decision-making body for this plan. Day to day responsibility will lie with the Sustainability Steering Group (see below).

3.2 Sustainability Steering Group and Working Groups

An ICS Sustainability Steering Group will be recruited from the ICS membership and key partners to co-ordinate the activity in this plan. Where necessary, the Sustainability Steering Group will co-opt in other specialists to create working groups to develop solutions for particular issues, for example, medicines or procurement. The group will be responsible for developing a detailed implementation plan.

3.3 Resources

3.3.1 Sustainability Manager

The main revenue commitment will be to support the role of Sustainability Manager for the ICS. Once the action plan is developed, we will assess the revenue commitment required to deliver those actions and develop a resourcing strategy.

3.3.2 Capital Investments

Meeting the vision set out in this plan will require capital investment. We will do this two ways:

- Integrating sustainability into planned capital projects: we expect many of these measures will be cost neutral or cost negative, but some may require increased investment;
- Sustainability projects: we will apply for NHS and Government Grants such as the Public Sector Decarbonisation Scheme (PSDS) to address key issues in the existing estate.

3.4 Embedding Sustainability

To deliver the vision set out in this plan, sustainability must be embedded into every ICS strategy and action plan. To facilitate this:

- Every ICS plan or strategy presented to the ICB will be required to address the contribution to our sustainability vision;
- Every report to the ICB will have an impact statement on sustainability;
- Sustainability targets will be embedded into the personal objectives of key decision makers throughout the ICS and, where appropriate, members and partner bodies (see section 4.2).

3.5 Tracking Progress and Reporting

Each ICS member will provide a brief report on the progress they have made each year. This will be supported by quantitative data from the NHS's national data collection and compiled into an ICS progress report by the Sustainability Manager for presentation to the ICB.

The ICB will formally be established on 1 July 2022 and, following receipt of the detailed implementation programme, the Board will review the Plan and the associated timelines.

4. Awareness & Engagement

4.1 Our Approach to Engagement

Employee engagement is one of the fundamental challenges of sustainability. Change of any magnitude by definition requires individuals to make different decisions to those made under business as usual. It follows that without engagement, sustainability simply won't happen, however many standard approaches are simply ineffective (eg awareness posters, lists of top tips); a more emotional connection is required for change to happen.

The ICS will take an 80:20 approach to awareness: everybody needs to know about our sustainability Vision and how that may impact on their day job, but key decision makers need a much deeper understanding to ensure the required step changes happen. This requires two streams of engagement.

In the general awareness stream, strong connections will be made between sustainability and the health agenda. Participants will be encouraged to identify what they can do in their role to make a difference.

For the more focussed engagement, key decision makers will be actively involved in designing the 'new normal'. This approach creates better solutions and secures the buy-in of the decision makers themselves by bringing them into the process.

Target:

T4.1: All ICS members will have an effective employee engagement plan in place by December 2022.

4.2 Integration into Reporting Structure

The vision set out in this plan will only be delivered if key decision makers are incentivised to make different decisions compared to business as usual. Therefore we will cascade sustainability targets down through the ICS reporting structure to ensure responsibility is properly aligned to authority. In practice this means that appropriate and measurable sustainability objectives will be added to the personal objectives of key decision makers.

4.3 Green Champions/Facilitators

A network of Green Champions will be established to embrace the enthusiasm of our employees and to help implement this plan. This network will complement the formal responsibilities as described in section 4.2 and act not only as an engagement technique, but also as a way of identifying and addressing quick wins. An award for the best change delivered by a Green Champion will be made every year.

4.4 Training

We will establish a basic sustainability training course for all employees. The aim will be to develop basic awareness of this Green Plan and our Sustainability Vision, and challenge individuals to identify how that vision will affect their day job. It will be offered to existing colleagues and become part of our induction process for new employees.

4.5 Patient and Public Engagement

We will be unable to deliver our vision without engaging our patients and the wider public. We will develop a plan to identify the key messages we wish to get across and how to communicate them.

5. Sustainable Healthcare

The challenge of tackling the climate crisis cannot be met without substantial changes to the way every organisation operates and health services are no exception. Therefore the ICS will need to develop low carbon, sustainable models of care. As with many elements of sustainability, there is a substantial opportunity to improve health outcomes while cutting carbon, for example through green social prescribing (see below).

5.1 Telemedicine

The Covid-19 crisis has demonstrated that the NHS can deliver many health services remotely. This provides the opportunity to identify which services can be effectively delivered remotely post-pandemic. The NHS has suggested that where outpatient attendances are clinically necessary, at least 25% of outpatient activity should be delivered remotely, resulting in direct and tangible carbon reductions.

Target:

T5.1: 25% of outpatient activity should be delivered remotely.

5.2 Medicines

The NHS has targeted two medicines with a high global warming potential (GWP), anaesthetic gases and metered dose inhalers, which between them represent 5% of the NHS-plus carbon footprint. In addition, the manufacture and supply of all medicines represents 20% of the NHS-plus carbon footprint. Somerset CCG has developed the Somerset Medicines Green Carbon Footprint Strategy which covers a wide range of greener medicine projects.

5.2.1 Tackling Over-prescribing

It has been estimated that 60% of the carbon footprint of primary care is due to prescribed medicines⁶, therefore it is important to minimise over-prescribing. Somerset CCG has already made substantial progress in tackling over-prescribing and the ICS will continue this work.

5.2.2 Anaesthetic Gases

Several common anaesthetic gases are powerful greenhouse gases, for example desflurane, isoflurane, and sevoflurane are 6810, 1800, and 440 times more powerful contributors to climate change respectively than the equivalent amount of carbon dioxide. A study of four Vancouver hospitals found that use of these gases was equivalent to 1,700 personal vehicles driving an average of 22,000 km per year.⁷ Therefore shifting away from desflurane in particular will deliver substantial climate benefits.

Target:

T5.2: Every ICS member to reduce its use of desflurane to less than 10% of its total volatile anaesthetic gas use, by volume.

⁶ <https://www.rcgp.org.uk/policy/rcgp-policy-areas/climate-change-sustainable-development-and-health.aspx>

⁷ Alexander, R., Poznikoff, A. & Malherbe, S. Greenhouse gases: the choice of volatile anaesthetic *does* matter. *Can J Anesth/J Can Anesth* **65**, 221–222 (2018). <https://doi.org/10.1007/s12630-017-1006-x>

5.2.3 Metered Dose Inhalers

The hydrofluorocarbon (HFC) propellants of metered dose inhalers (MDI) are also powerful greenhouse gases. The global warming potential for a single actuation of an MDI is 10-15 higher than an actuation of a dry powder inhaler (DPI).⁸ It has been claimed that an individual inhaler user switching from an MDI to a DPI is equivalent in climate terms to changing to a vegetarian diet.⁹ Somerset CCG has made good progress on this issue, being the leading user of Easyhaler®, the world's first certified carbon neutral inhaler.

Target:

T5.3: Somerset ICS will develop a plan to reduce the climate impacts of respiratory medicine.

5.2.4 Other Medicines

The Somerset Medicines Green Carbon Footprint Strategy sets out a wide range of greener medicine options, including those with reusable and refillable packaging and those requiring fewer in-patient visits. These will be incorporated in our detailed implementation plan.

5.3 Social Prescribing

Social prescribing is a way of taking a holistic approach to people's health and wellbeing. Patients are assigned a link worker to connect people to community groups and statutory services for practical and emotional support.

Green social prescribing links patients to nature-based interventions and activities, such as green gym-style conservation tasks, local walking for health schemes, community gardening and food-growing projects. Seven ICSs across England are currently taking part in trials into the benefits of green social prescribing and Somerset ICS will adopt best practice arising from those pilot schemes.¹⁰

5.4 Future Care Design

The carbon footprint of the NHS is fundamentally determined by the design of its care services. Therefore we will factor sustainability considerations into the design of future services. As well as choosing low carbon care options, future care needs to adapt to the challenges of 'locked-in' climate change impacts, for example:

- The health impacts of excess heat and cold;
- Higher incidences of certain contagious diseases such as Dengue fever;
- Mental health issues, eg eco-anxiety.

Somerset CCG has already commissioned a Joint Strategic Needs Assessment (JSNA) on the Health Impacts of the Climate Emergency¹¹ which assesses these risks and sets out a strategy to address them.

⁸ Panigone S, et al. BMJ Open Res 2020;7:e000571. doi:10.1136/bmjresp-2020-000571

⁹ <https://greeninhaler.org/the-problem-with-inhalers/>

¹⁰ <https://www.england.nhs.uk/personalisedcare/social-prescribing/green-social-prescribing/>

¹¹ Somerset: Our County Joint Strategic Needs Assessment (JSNA) on the Health Impacts of the Climate Emergency 2019/2020

6. Public Health and Wellbeing

The healthier the population, the lower the demands on the health service and the smaller the carbon footprint of that service. The ICS's wider public health targets will contribute to the Sustainability Vision set out in this Plan and we do not intend to duplicate those efforts within the plan. This section focuses on a number of issues where the sustainability programme can help improve public health.

6.1 Food and Nutrition

Food is a key issue for both health and sustainability, with food and drink representing 25% of the average UK citizen's carbon footprint. It is also an opportunity for the NHS to help reduce health inequalities by providing more nutritious food. Therefore it is important for the NHS to provide low carbon, nutritious food to patients, visitors and staff. We will review opportunities to improve the sustainability and nutritional value of the food provided by ICS members, for example by procuring more locally sourced food and shifting to a more plant-based diet.

6.2 Public Health Benefits from this Plan

Many of the measures elsewhere in this Plan will have positive impacts on public health, creating a virtuous cycle of reduced treatment, for example:

- Improved local air quality: plan will contribute to improvements in local air quality which will in turn reduce the incidence of respiratory illness;
- Active lifestyles are healthier lifestyles, so we will do what we can to encourage physical activity amongst staff and patients by improving access for pedestrians and providing facilities for cyclists (see section 8) at our sites, and through social prescribing (section 5.3);
- Mental health: green social prescribing (section 5.3) and biodiversity areas on our sites (section 7.6) will have a positive impact on our patients' mental health.

7. Estates and Facilities

Buildings and estates represent 10% of the NHS's carbon footprint. Hospitals in particular are large consumers of energy due to their size, amount of equipment and the need to maintain patient comfort levels. We will engage with partners including our Hospital Trust, Primary Care providers, NHS Property Services and Somerset County Council to address the carbon footprint of our estates. We will also investigate opportunities for joint procurement/funding bids for upgrading estates across the ICS.

Target:

T7.1: The carbon footprint of the estate will be net zero by 2040 with a minimum 80% reduction in carbon emissions by 2030.¹²

7.1 Energy Efficiency

Improving energy efficiency is one of the most cost-effective methods of cutting carbon and we will seek to improve the energy efficiency of all our estate. While energy efficiency measures are often site-specific, there may be benefits from sharing best practice between ICS members and there may be opportunities for joint procurement and joint funding bids.

7.2 Renewable Energy

The NHS Standard Contract requires every trust to purchase 100% renewable energy from April 2021, with supply contracts changing as soon as possible. These tariffs should be REGO certified to increase confidence that the power being purchased is renewable¹³.

With a large estate, the NHS is well suited to installing on-site renewable energy. This is a more robust method of ensuring that electricity consumed is genuinely renewable (some green tariffs are greener than others) and would free up renewable grid electricity for smaller purchasers. Again this is an area where joint procurement could deliver efficiencies.

Target:

T7.2: All providers to sign up to a REGO-certified renewable energy tariff.

¹² This target covers the 'NHS Footprint' ie Scope 1 and 2 emissions along with a small number of Scope 3 emissions as set out in Delivering a Net Zero National Health Service <https://www.england.nhs.uk/greenernhs/wp-content/uploads/sites/51/2020/10/delivering-a-net-zero-national-health-service.pdf>

¹³ REGO is an Ofgem scheme to increase the transparency of green tariffs <https://www.ofgem.gov.uk/environmental-and-social-schemes/renewables-energy-guarantees-origin-rego>

7.3 New Build

New buildings present the opportunity to build sustainability in by design. Conversely, missing the opportunity to design new build for sustainability risks locking organisations into a high-carbon future for decades to come. Therefore it is essential that all new buildings are net zero by design.

Target:

T7.3: All new builds to be built to net zero carbon and/or achieve BREEAM Outstanding¹⁴

7.4 Waste and the Circular Economy

The very nature of healthcare means that the NHS has to deal with hazardous and clinical waste, and due to infection control the service uses sizeable amounts of single use plastics, for example, personal protective equipment (PPE). It should be noted that waste is usually a product of procurement or operations decisions, for example the choice of purchasing single use plastic cutlery for cafeterias will inevitably lead to plastic waste. Therefore it is important to trace waste arisings back to source.

The idea of a circular economy is one where all resources are recycled (or designed out of the system if it can't be). While waste and water together represent 5% of the NHS's carbon footprint, the carbon benefits of shifting to a circular economy will be most felt in the supply chain by replacing virgin materials with recycled materials. Supply chains for circular economy opportunities can be weak, but may be strengthened by joint procurement exercises and the use of Forward Commitment Procurement (see section 9.3).

We will develop action plans for the reuse of equipment and other resources within the ICS, and to cut single-use plastics at source.

Target:

T7.4: ICS Members will strive to achieve zero waste to landfill for non-clinical waste by 2030.

7.5 Water Quality and Pollution Prevention

We will endeavour to improve local water quality by ensuring good drainage practice and emergency response preparedness across all our sites. Our work on climate adaptation (section 10.1) will protect against the pollution of water courses during flood events.

¹⁴ BREEAM is an environmental assessment methodology developed by the Building Research Establishment <https://www.breeam.com/>

7.6 Nature and Biodiversity

It is well understood that provision of nature areas on hospital sites can aid patient recovery¹⁵ and there are proven therapeutic benefits of 'green space', including positive effects on mental health¹⁶. Nature areas also promote biodiversity and can form part of climate adaptation measures, for example by providing sustainable drainage for floodwater, mitigating air pollution and providing shade during periods of raised temperatures. Therefore we will ensure that every significant site¹⁷ in Somerset will have access to a nature/biodiversity area.

Target:

T7.5: There will be access to a nature/biodiversity area at every significant site in Somerset by 2025.

¹⁵ eg Ulrich, R. S. (1984). View through a window may influence recovery from surgery. *Science*, 224: 420- 421.

¹⁶ Eg Houlden V, Weich S, de Albuquerque JP, Jarvis S, Rees K. The relationship between greenspace and the mental wellbeing of adults: A systematic review. *PLoS One*. 2018 Sep 1;13(9).

¹⁷ The exact definition of 'significant site' will be agreed by ICS members during the implementation of this plan.

8. Travel and Transport

Healthcare is a significant generator of road travel, including staff commuting, logistics and service users/visitors travelling to and from our sites. NHS-related travel has been estimated at 3.5% of all UK road traffic and travel represents 14% of the NHS's carbon footprint.

Target:

T8.1: The carbon emissions from ICS-controlled transport¹⁸ will be net zero by 2040 with a minimum 80% reduction in carbon emissions by 2030.

8.1 Travel Planning

NHS guidance requires every NHS organisation to have a travel plan. We will work together across all our members and partners to develop effective, low carbon travel plans.

Target:

T8.2: Every ICS member to develop a green travel plan by December 2022.

8.2 Active Travel and Public Transport

There is a clear overlap between active travel and the health agenda, both in terms of fitness of the individuals using active travel and the air quality benefits for all. In order to promote active travel and public transport, the transport hierarchy will be used as the basis for travel planning. This is one area where collaboration with Local Authorities and public transport providers can bear fruit by ensuring top quality walking and cycling facilities are available around NHS sites and all sites are accessible by public transport. In addition, sites should have high quality infrastructure for cyclists: secure cycle storage, showers and lockers.

8.3 Low Carbon Vehicles

The NHS Standard Contract requires all systems and trusts to solely purchase and lease cars that are ultra-low emissions vehicles (ULEVs) or zero emissions vehicles (ZEVs). In addition there may be opportunities for other ULEV/LEV fleet vehicles. This is an area where joint procurement (see section 3.7) may realise cost savings and compatibility (eg EV charging points).

Target:

T8.3: For new purchases and lease arrangements, the ICS and members solely purchase and/or lease ULEV or ZEV cars.

8.4 Logistics

Transport arising from the delivery of goods and services will be factored into green procurement plans as well as our green travel plans (see section 8.1). The ICS members and the ICS will also investigate novel logistic opportunities, for example using e-cargobike delivery services in urban areas. This is one area where joint procurement may bring benefits by providing sufficient demand for providers to innovate.

¹⁸ These are the transport types in the 'NHS Footprint' as defined in Delivering a Net Zero NHS.

9. Supply Chain, Procurement and Commissioning Decisions

One of the two key carbon targets for the NHS is to achieve net zero status for its supply chain by 2045. NHS procurement accounts for 62% of its carbon footprint, therefore it is imperative to start driving sustainability requirements down through the supply chain at the earliest opportunity. Given the sheer buying power of the NHS, this effort has the potential to make a significant contribution to delivering a national low carbon economy.

Target:

T9.1: The carbon footprint of the ICS supply chain will be net zero by 2045.

9.1 Sharing Best Practice

We will establish a peer-to-peer learning forum for ICS members to share best practice with the aim of accelerating progress in greening the supply chain. The forum will consist of members of the Sustainability Steering Group and procurement officers and will aim to embed sustainability into their procurement processes.

Target:

T9.2: All members to have embedded sustainability into their procurement processes by 2024.

9.2 Joint Procurement

The ICS can add substantial value to its members by formulating joint procurement exercises for 'green' products and services. The supply chains for such products and services are often immature leading to high cost, low quality and weak security of supply. Ramping up demand through joint procurement will accelerate the maturity of these new supply chains, cutting costs, improving quality and improving availability.

9.3 Forward Commitment Procurement (FCP)

Joint procurement brings enough buying power to implement Forward Commitment Procurement (FCP). Under FCP, ICS members would release joint statements of their requirements for key products and services at a future date, for example "By 2025, we will only be purchasing mattresses which are recyclable." This sends a signal to the supply chain to start innovating to meet that need, creating a Sustainable supply chain for the NHS and the wider economy.

9.4 Commissioning Decisions

We will incorporate key sustainability targets into our commissioning decision making and procurement processes.

10. Adaptation and Offsetting

10.1 Adaptation

Even if the best-case Paris Agreement target of keeping average global temperature rises to 1.5°C above pre-industrial levels is met, significant climate related impacts are to be expected, including rising sea levels, flooding and increased incidents of extreme temperature. Public bodies, including the NHS, are required by Government to have an adaptation plan.

There are potential synergies between climate adaptation measures and providing therapeutical green space on NHS sites, for example planting trees to provide shade or gardens designed to absorb excess stormwater.

Target:

T10.1 All members to have developed an adaptation plan by 2024.

10.2 Carbon Offsetting/Insetting

'Net Zero' by its very name implies an element of sequestration of carbon to account for any residual carbon emissions after all viable decarbonisation actions have been taken. Such sequestration is usually achieved by 'offsetting', ie paying a third party to, say, plant trees to sequester those residual emissions. Offsetting is controversial and can be challenging, for example proving 'additionality' ie that the offsetting project would not have happened otherwise. NHS guidance rightly suggests that consideration of offsetting should be postponed while efforts are put into decarbonisation. There is an alternative to offsetting known as 'insetting' where the organisation commissions its own sequestration project within its own value chain.

The ICS will work with its members and partners to develop an offsetting/insetting strategy, but as a longer term goal.

11. Digital transformation

There are many opportunities to cut carbon via the digital transformation agenda, including:

- Telemedicine;
- Building management systems to reduce energy consumption;;
- Better logistics and route planning;
- 'Gamification' of carbon reduction measures to improve employee engagement;
- Flexible working to reduce commuting emissions;
- Use of virtual meetings to reduce business travel;
- Digitisation of recording keeping and reduction in postage.

Digitisation will be treated as a cross-cutting theme for the other activities set out in this Plan, with opportunities being picked up by the various working groups and other actions.

Annex A: Summary of Headline Targets

Ref	Target	Responsibility	Deadline
2.	Vision		
T2.1	Somerset ICS will achieve net zero emissions in its 'NHS Footprint' by 2040 and strive to help deliver a carbon neutral Somerset by 2030.	ICB	Dec 2030/2040
4.	Engagement		
T4.1	All Trusts to have an employee engagement plan in place.	Sustainability Steering Group	Dec 2022
5.	Sustainable Healthcare		
T5.1	25% of outpatient activity should be delivered remotely.	Sustainability Steering Group	Mar 2022
T5.2	Every ICS member to reduce its use of desflurane to less than 10% of its total volatile anaesthetic gas use, by volume.	Sustainability Steering Group	Mar 2022
T5.3	Somerset ICS will develop a plan to reduce the climate impacts of respiratory medicine.	Sustainability Steering Group	Mar 2022
7.	Estates and Facilities		
T7.1	The carbon footprint of the NHS estate in Somerset will be net zero by 2040 with a minimum 80% reduction in carbon emissions by 2030.	Sustainability Steering Group	Dec 2030/2040
T7.2	All members to sign up to a REGO-certified renewable energy tariff.	Sustainability Steering Group	April 2021
T7.3	All new builds to be built to net zero carbon and/or achieve BREEAM outstanding.	Sustainability Steering Group	Dec 2022
T7.4	ICS Members will strive to achieve zero waste to landfill for non-clinical waste.	Sustainability Steering Group	Dec 2030
T7.5	There will be access to a nature/biodiversity area at every significant site in Somerset by 2025.	Sustainability Steering Group	Dec 2025

Ref	Target	Responsibility	Deadline
8.	Travel and transport		
T8.1	The carbon footprint of NHS-related transport will be net zero by 2040 with a minimum 80% reduction in carbon emissions by 2030.	Sustainability Steering Group	Dec 2030/2040
T8.2	Every ICS member to develop a green travel plan.	Sustainability Steering Group	Dec 2022
T8.3	For new purchases and lease arrangements, the ICS and Trusts solely purchase and lease ULEV or ZEV cars.	Sustainability Steering Group	Dec 2022
9.	Supply Chain		
T9.1	The carbon footprint of the ICS supply chain will be net zero.	Sustainability Steering Group	Dec 2045
T9.2	All members to have embedded sustainability into their procurement processes.	Sustainability Steering Group	Dec 2024
10.	Adaption		
T10.1	All Trusts and the ICS to have a climate adaptation plan.	Sustainability Steering Group	Dec 2022