NHS
North East and North Cumbria

North East & North Cumbria Integrated Care System

Green Plan 2022-2025

CONTENTS

1. INTRODUCTION

1.1 Background

The climate crisis is a health emergency – one of the biggest health challenges faced by humanity. The emerging and projected impacts of the climate crisis have serious implications for both physical and mental health. Failing to tackle the climate crisis will lead to extreme weather, changing patterns of infectious diseases, mass migration and significant mental health consequences (eg 'eco-anxiety') and, as one of the largest organisations in the world, the NHS has to play its part in reducing carbon emissions.

In addition, health inequalities are often linked to environmental issues such as poor air quality and lack of access to green space. Many of the actions in this plan will deliver better air quality, better access to green space and more nutritious food, which will in turn reduce health inequalities. Therefore, the plan will deliver positive impacts beyond the climate crisis.

The NHS has set out top level targets for carbon emissions as follows:

- **For the emissions we control directly (the NHS Carbon Footprint), we will reach net zero by 2040, with an ambition to reach an 80% reduction by 2028 to 2032.**
- **For the emissions we can influence (our NHS Carbon Footprint Plus), we will reach net zero by 2045, with an ambition to reach an 80% reduction by 2036 to 2039.**[1]

The North East and North Cumbria Integrated Care System (NENC ICS) has already established a Sustainability Group and several subgroups to address sustainability issues. This three-year plan sets out targets and actions for the NHS members of the ICS to meet the sustainability challenge through an agreed programme of activity and by exploiting synergies between the member organisations.

1.2 NENC ICS overview

The North East and North Cumbria Integrated Care System (NENC ICS) covers a population of 2.9 million people across northern England. The area is characterised by relatively poorer public health, lower life expectancy and stark health inequalities compared to the rest of England.[2]

The organisations covered by this plan are:

- **North Cumbria Integrated Care NHS Foundation Trust**
- **County Durham and Darlington NHS Foundation Trust**
- **Gateshead Health NHS Foundation Trust**
- **South Tees Hospitals NHS Foundation Trust**
- **North Tees and Hartlepool NHS Foundation Trust**
- **Northumbria Healthcare NHS Foundation Trust**
- **The Newcastle Upon Tyne Hospitals NHS Foundation Trust**
- **South Tyneside and Sunderland NHS Foundation Trust**
- **Cumbria, Northumberland Tyne and Wear NHS Foundation Trust**
- **Tees, Esk and Wear Valleys NHS Foundation Trust**
- **North East Ambulance Service NHS Foundation Trust**
- **North West Ambulance Service (aligned with North West regional area)**
- **Newcastle Gateshead CCG**
- **County Durham CCG**
- **North Tyneside CCG**
- **Northumberland CCG**
- **South Tyneside CCG**
- **Sunderland CCG**
- **Tees Valley CCG**
- **North Cumbria CCG**

Note that, at the time of writing, the Care Commissioning Groups (CCGs) are being merged into the ICS. This green plan has been developed to exploit synergies throughout the ICS membership, but an additional 'internal' green plan will be required to manage sustainability within primary care.

To showcase the great work that is happening across the region sustainability case studies have been included throughout this document, they clearly show that collaborating across the region will facilitate system wide positive change.

1.3 Local government

The ICS works in partnership with local government to deliver its aims. At the time of writing, the following local authorities within the North East and North Cumbria have declared a 'climate emergency': Newcastle, Gateshead, Northumberland, Sunderland, Durham, Darlington, North Tyneside, South Tyneside, Middlesbrough, Redcar & Cleveland along with the North of Tyne (NoT) Combined Authority and the North East Combined Authority (NECA). In declaring a climate emergency, these authorities have committed to a target of net zero carbon emissions, usually by a deadline of 2030 for their jurisdictions.

Given the scale of NHS operations and the size of the NHS carbon footprint, these commitments will not be achieved unless NHS Trusts and other NHS services align their targets to those of the local authorities.

1.4 Benchmarking

A benchmarking exercise was carried out in March/April 2021 to establish a baseline for sustainability activity across the ICS membership.[3] Two summary graphs are included in Annex A which clearly illustrate the main conclusions of the benchmarking study:

- **Trusts have been making good progress on the core elements of addressing sustainability, however more focus is required on travel planning, procurement, medicines, adaptation and staff engagement.**
- **Care Commissioning Groups were at a much earlier stage in the process, consisting of ad-hoc series of initiatives.**

2. SUSTAINABILITY VISION

2.1 Our 2030 vision

By 2030, we will be England's greenest region.

We will achieve the maximum health and wellbeing dividend for our population by being sustainable in all aspects of our work.

While environmental sustainability is the main thrust of this green plan, our vision acknowledges the interdependence between the environment and public health. A healthier environment (and associated behaviour such as active travel) means healthier people who have a lower impact on the environment by requiring less treatment and/or fewer medicines. Our vision is underpinned by the four sustainable healthcare principles as set out by the Centre for Sustainable Healthcare:[4]

- **Prevention: improving public health by tackling underlying causes of disease**
- **Patient empowerment and self-care: educating the public and giving patients a greater role in their own health**
- **Lean systems: being more efficient in healthcare delivery**
- **Low carbon alternatives: e.g. low carbon medicines**

2.2 Meeting our vision

This is a three-year plan, but it has been developed to put ICS members on the right trajectory to meet this 2030 vision. To meet this 2030 vision and align our ambition with the majority of local authorities in the region, the ICS and its members will have to cut their carbon footprint at a faster rate than the NHS national targets of 2040/2045. Therefore, the ICS will declare a climate emergency, adopting an aspirational target of net zero for its NHS footprint by 2030 and its NHS-plus footprint emissions by 2040. As ICS members currently have a variety of net zero goals ranging from 2030 to 2040, the ICS will support its members to move further faster and thus exceed their targets.

TARGET

T0.1: NENC ICS will strive to achieve net zero for its NHS footprint by 2030 and its NHS-plus footprint emissions by 2040 and members move further, faster on carbon reductions.

ACTION A0.1: The ICS will declare a climate emergency.

Section 3 contains the action plan to deliver the vision; Section 4 lays out the governance structures and processes.

2.3 NENC ICS carbon footprint

Figure 1 shows the 'NHS-plus' carbon footprint for the NENC ICS as per October 2021. It is notable that the 'NHS footprint' is only a quarter of the 'NHS-plus' footprint which includes more of the supply chain.

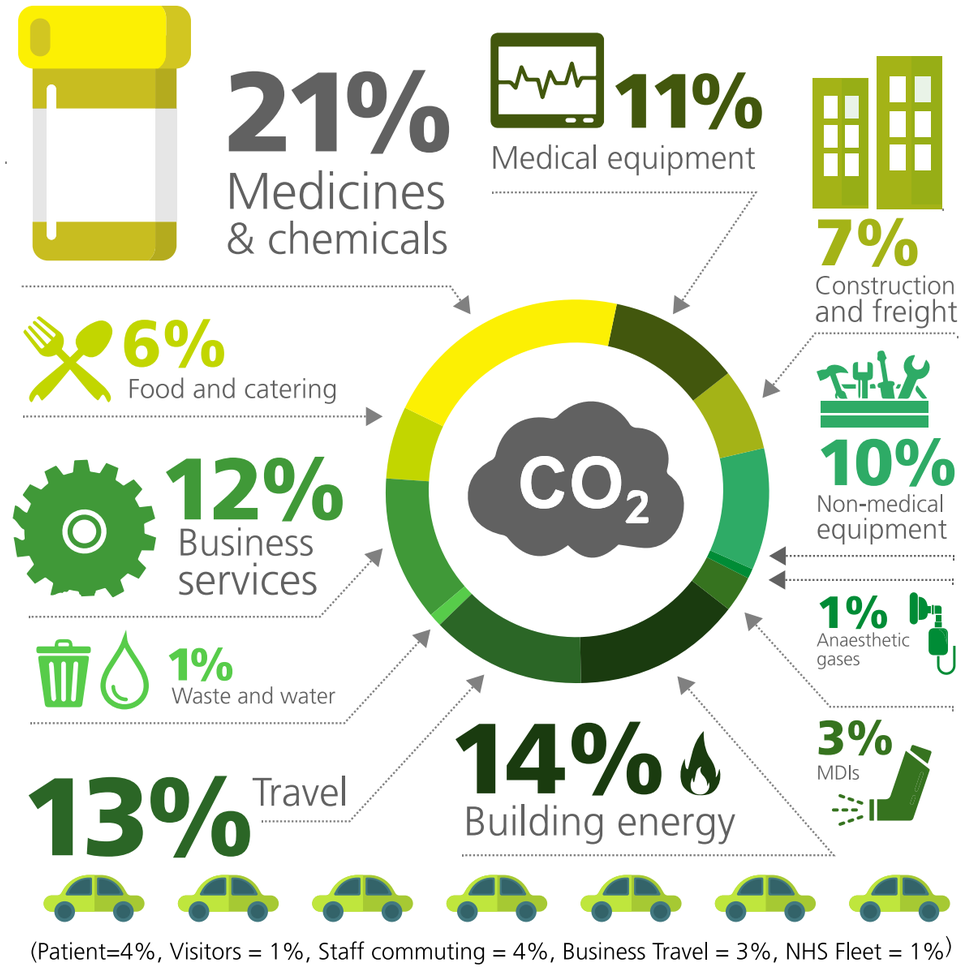

Figure 1 - 'NHS' plus carbon footprint - Oct 2021[5]

3. PRIORITY AREAS

3.1 People

3.1.1 Context

The ICS Sustainability Leads Group has a highly proactive 'People' subgroup. However, the benchmarking survey found that only two NHS trusts out of 12, and none of the CCGs, had an employee engagement plan in place, so there is substantial work still to do in this area.

The benchmarking survey showed strong compliance (11/12 responses) amongst the trusts on having a designated board member with responsibility for sustainability. The benchmarking survey showed that most trusts had a designated sustainability lead, but that none of the CCGs had a dedicated resource. A resource is required for the ICS internal work and to co-ordinate activity across ICS member trusts. This is described in section 4.

3.1.2 Awareness and 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 (e.g. 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 the NHS's sustainability targets and how that may impact on their day job, but key decision makers need a much deeper understanding of what they need to do to ensure the required step changes happen. As such, it is essential that local and regional leaders are fully bought into the process.

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.

Throughout the engagement, language, imagery and approach will be tailored to each audience.

TARGETS

T1.1: All ICS members will have an effective employee engagement plan in place by June 2022.

T1.2: All employees to have a basic awareness of sustainability by 2025.

ACTIONS

A1.1: Commission a 'train the trainer' workshop for employee engagement in the health sector for ICS sustainability leads.

A1.2: Commission an e-learning platform for training all staff in the basics (including awareness of regional and national resources).

A1.3: Map 'who needs to know what' and develop engagement plans for all trusts and the ICS, including those in leadership positions.

A1.4: Trial the use of Schwartz rounds in engaging employees in sustainability.

A1.5: Develop a staff platform to promote innovation and share best practice.

CASE STUDY

County Durham and Darlington NHS Foundation Trust

County Durham and Darlington took the unprecedented step of making the e-learning for health module 'Building a Net Zero NHS' a required competency for staff. In just a few months, almost 70% of staff undertook the module thereby increasing the internal understanding of why we need to embrace the green plan and urgently drive positive change.

3.1.3 Partnerships

While this sustainability strategy covers NHS members of the NENC ICS, there are many other partners and potential partners including:

- **Other NHS bodies (e.g. NHS Property Services, NHS Business Services Authority)**
- **Local authorities**
- **The North of England Climate Coalition (NEECCo)**
- **The emerging North East Community Forest**
- **Charities and the voluntary sector**
- **The Local Economic Partnership**

3.2 Sustainable Healthcare

3.2.1 Context

The challenge of tackling the climate crisis cannot be met without fundamental 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).

The ICS Sustainability Group has established two subgroups on sustainable healthcare, one for anaesthesia and one for respiratory care. As these two topics are highly specialised, we will establish a Sustainable Healthcare Overview group to identify wider sustainable healthcare issues and opportunities (green social prescribing, telemedicine etc) and establish working groups with specialist knowledge to develop these.

ACTION

A2.1: Establish a Sustainable Healthcare Overview Group to identify priority healthcare areas for carbon reduction and establish further working groups of specialists to address those priorities.

3.2.2 Sustainable anaesthesia

Several common anaesthetic gases are powerful greenhouse gases, for example desflurane, isoflurane, sevoflurane and nitrous oxide are 6810, 1800, 440 and 330 times more powerful contributors to the climate crisis 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.[6] Therefore shifting away from desflurane in particular will deliver substantial climate benefits. Capturing fugitive nitrous oxides in maternity services can also protect midwives' health.

TARGET

T2.1: Every applicable Trust to ban the use of desflurane in surgery by 2030.

ACTIONS

A2.2: Trusts will develop a plan to reduce or eliminate the use of desflurane and other volatile anaesthetic gases with a high global warming potential.

A2.3: Disseminate best practice via our regional network of environmental champions within anaesthesia across the North East and North Cumbria.

A2.4: Establish monitoring system to measure progress against a baseline.

A2.5: Share best practice with, amongst others, the National Environmental Champions Network of Anaesthetists through submission of work to Association of Anaesthetists conferences Green Star Awards.

CASE STUDY

Northumbria Healthcare NHS Foundation Trust

Northumbria Healthcare were one of the very first Trusts to eliminate desflurane use. It is known to be the most potent and harmful anaesthetic inhalant gas; 2500 x more warming that CO2 which one bottle equivalent to burning 440kg of coal. Engaging with clinicians and highlighting the potential harm in terms of both air quality and global warming paved the way for its elimination at the Trust, and subsequently other Trust followed in their footsteps.

The Freeman Hospital, County Durham and Darlington as well as South Tyneside and Sunderland have now eliminated desflurane. The gas is also the most expensive, therefore changing to cheaper and less polluting anaesthetic gases has both environmental and financial benefits.

3.2.3 Sustainable respiratory health

The HFC propellants of metered dose inhalers (MDI) are also powerful greenhouse gases, representing 3% of the NENC ICS carbon footprint-plus. The ICS will take a whole-systems collaborative approach to reducing the need for inhalers by improving public health e.g. through air quality improvements and smoking cessation.

The global warming potential for a single actuation of an MDI is 10-15 times higher than an actuation of a dry powder inhaler (DPI).[7] 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.[8] Therefore the ICS will also seek to shift from MDIs to DPIs and develop more sustainable disposal routes for inhalers.

ACTIONS

A2.6: Continue to promote preventative healthcare actions (e.g. smoking cessation).

A2.7: Develop a plan to optimise inhaler use, support choice of inhalers with a lower carbon footprint eg dry powder inhalers (DPI) and promote greener inhaler disposal.

A2.8: Carry out patient led reviews covering prevention, self-management, inhaler technique, and having local patients/groups to guide, inform, design personalised reviews.

3.2.4 Telemedicine

The Covid-19 crisis has forced the NHS into delivering many health services remotely. This provides the opportunity to identify which services can be effectively delivered remotely and can be continued in this way.

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, but NENC ICS has set a higher target.

TARGET

T2.2: 30% of outpatient activity will be delivered remotely by Dec 2024.

ACTION

A2.9: Review remote healthcare opportunities across primary and secondary care post-Covid-19.

3.2.5 Over-prescribing

Over-prescribing is the use of a medicine where there is a better non-medicine alternative, or the use is inappropriate for that patients' circumstances and wishes.

It occurs in several ways:

- **There is a more effective alternative**
- **The medicine is not appropriate for the individual**
- **The patient's condition changes, but the prescription is not reviewed**
- **The patient no longer needs or benefits from the medicine but continues to be prescribed it**

The extent of overprescribing is a result of weaknesses in the healthcare system and culture, not the skills or dedication of individual healthcare professionals.

Waste medicines are a significant burden and need to be disposed of carefully, to avoid harm to patients and the public, and to minimise harm to the environment. The manufacture and distribution of medicines, and the use of some medicines, has a significant carbon footprint, accounting for 25% of the NHS carbon footprint, therefore the waste of medicines must be minimised to meet net zero.

ACTION

A2.10: Overprescribing to become a key priority of ICS medicines planning and oversight - to make patient care better and safer, support the NHS, and reduce carbon emissions.

3.2.6 Nature-based 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. As well as benefits for the user, this approach may have carbon benefits by localising support and avoiding unnecessary prescribing of medicines. Note that 60% of the carbon footprint of primary care is prescribed medicines.[9]

Nature-based prescribing is a subset of social prescribing which 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 nature-based prescribing and NENC ICS will adopt best practice arising from those pilot schemes.

ACTIONS

A2.11: Review opportunities for social prescribing and nature-based prescribing within the ICS across primary care and long-term in-patient services.

A2.12: Adopt lessons learnt from the green social prescribing test projects.

3.2.7 Future care design

The carbon footprint of the NHS is fundamentally determined by the clinical needs of its users and how those needs are addressed. Therefore carbon considerations must be factored in during the design process for future care. As well as adopting low carbon care options, future care will need to adapt to the challenges of 'locked-in' climate change impacts, for example:

- **Preparing for the health impacts of excess heat and cold**
- **Impact of severe weather on care delivery**
- **Preparing for the health impacts of flooding**
- **Mental health issues, e.g. eco-anxiety**

Future care services will be designed to embed the four principles of sustainable healthcare:

- **Prevention: improving public health by tackling underlying causes of disease**
- **Patient empowerment and self-care: educating the public and giving patients a greater role in their own health**
- **Lean systems: being more efficient in healthcare delivery**
- **Low carbon alternatives: eg low carbon medicines**

ACTIONS

A2.13: Introduce carbon mitigation measures into the care design process.

A2.14: Ensure climate-related physical and mental health issues are embedded into clinical services forward planning.

3.2.8 Food and nutrition

Nutrition is a key issue for both health and sustainability, with food and drink representing 25% of the average UK citizen's carbon footprint.[10] It is also an opportunity for the NHS to help reduce health inequalities by providing more nutritious food and increase spending with local suppliers. Therefore it is important for the NHS to provide environmentally sustainable, nutritious food to patients, visitors and staff.

ACTION

A2.15: Investigate opportunities for environmentally sustainable, nutritious food across the ICS members.

3.3 Travel and transport

Healthcare is a large generator of road travel, including staff commuting, logistics and service users/visitors travelling to and from services. This has been estimated to contribute 3.5% of all UK road traffic and travel represents 14% of the NHS's carbon footprint. The ICS Sustainability Group already has a transport subgroup which will lead on this section of the plan.

3.3.1 Travel planning

This is an area where the ICS organisations did not fare very well in the benchmarking survey. Only five Trusts had a travel plan in place, with a further six Trusts and three CCGs having one under development. Therefore developing and implementing travel plans is a priority.

TARGETS

T3.1: Every Trust and the ICS to develop a green travel plan by Dec 2022.

T3.2: ICS members will reduce business mileage by at least 20% by 2023/24 from an identified baseline.

ACTIONS

A3.1: Introduce a business mileage hierarchy into pool car/business mileage policy and reduce the incentives to travel for work purposes.

A3.2: Identify opportunities to exploit synergies across the ICS members eg procurement, logistics planning, lift share systems, driver training etc.

A3.3: Develop a green travel plan for primary care services.

3.3.2 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, running 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, lockers etc.

ACTIONS

A3.4: Liaise with local authorities and other anchor institutions to optimise public transport and active travel options.

A3.5: Commit to achieving the Cycling UK cycle friendly employer accreditation standard.

CASE STUDY

Cumbria, Northumberland and Tyne & Wear (CNTW) NHS Foundation Trust

An online community on Microsoft Teams has been set up by CNTW. The technology provides a way for staff interested in the NHS sustainability to contribute and discuss ideas. A series of fortnightly lunchtime 'climate health conversations' are held by video call have proved very popular, with one of the outputs being a staff led cycling forum. Innovative ways to improve cycling rates across the trust are shared e.g. staff new to commuting by bicycle can buddy up with someone to explore new routes to the workplace.

3.3.3 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).

TARGETS

T3.3: 90% of NHS fleet should be low emission, including 25% ULEV (<50gCO2/km) before 2023/24.

T3.4: For new purchases and lease arrangements, the ICS and Trusts solely purchase and lease ULEV or ZEV cars by 2025.

ACTIONS

A3.6: Explore opportunities for joint procurement/leasing of ULEVs and ZEVs.

A3.7: Determine an ICS-wide approach to EV charging points to maximise compatibility across sites.

CASE STUDY

North Cumbria Integrated Care Trust

North Cumbria Integrated Care Trust are working to identify where ultra-low and zero carbon vehicles can be utilised in their fleet. They have already installed EV charging points at one of their main sites and have now commenced the programme of work to identify the locations of further charge points Trust wide.

3.3.4 Logistics

Transport arising from the delivery of goods and services will be factored into green procurement plans. The ICS members and the ICS primary care function will also investigate novel logistic opportunities for example the NUTH Trust's use of e-cargobike delivery services. Freight consolidation, where supplies are unloaded at logistics centres and transported by low emission vehicles over the final miles, is another opportunity to work together to reduce the impact of deliveries. This is one area where joint procurement may bring benefits by providing sufficient demand for providers to innovate.

ACTION

A3.8: Explore opportunities for developing novel sustainable logistics services, including through collaboration with other ICS members and other local partners e.g. freight consolidation.

3.4 Energy

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.

The ICS Sustainability Group already appointed an energy subgroup to lead on this issue and agreed to strive to achieve energy emissions of net zero by 2030. This will be achieved by pursuing all options for energy efficiency and adopting renewable energy across existing sites.

TARGET

T4.1: All ICS members to strive to achieve net zero status for energy emissions by 2030.

ACTION

A4.1 Investigate innovative funding sources for building decarbonisation.

3.4.1 Energy efficiency

Improving energy efficiency is one of the most cost-effective methods of cutting carbon. While energy efficiency measures are often site-specific, there will be benefits from sharing best practice between Trusts and primary care estates and could be opportunities for joint procurement and joint funding bids.

ACTIONS

A4.2: Share best practice on energy efficiency including the use of building management systems and theatre systems.

A4.3: Investigate energy efficiency opportunities across the primary care facilities.

A4.4: Engage with NHS Green Lease Programme for property services estates.

3.4.2 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. The benchmarking survey showed that seven of the ICS Trusts had adopted this measure with four Trusts and one CCG working on it. These tariffs should be REGO certified to increase confidence that the power being purchased is renewable.[11]

A power purchase agreement (PPA) is a long-term agreement between a renewable developer and a consumer for the purchase of energy. There may be scope for a joint PPA across the ICS to deliver better value for money for renewable energy in the medium term.

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

T4.2: All Trusts to sign up to a REGO-certified renewable energy tariff. Note this target is already overdue.

ACTIONS

A4.5: All ICS members to switch to renewable energy tariffs.

A4.6: Feasibility study into a joint PPA for renewable energy.

A4.7: Feasibility study into the joint procurement of onsite/ICS installed renewable energy systems.

CASE STUDY

Gateshead Health NHS Foundation Trust & QE Facilities

Gateshead won a Green Apple Environment Award in 2020 for achieving over 30% reduction in energy emissions through the installation of two bio-diesel CHP's generating heat and power at zero carbon. This was alongside other energy saving initiatives introduced as part of Salix funding of almost £1m including LED lighting and smart switches, installing ventilation heat recovery systems, extension of BMS and zoning of heating systems to allow better time and temperature control and steam decentralisation.

3.4.3 New build/capital projects

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. There may also be opportunities to collaborate on new build projects to bring economies of scale to the procurement of green technology (see Section 3.5).

TARGET

T4.3: All new builds to be built to the NHS Net Zero Carbon Building Standard and achieve BREEAM outstanding from Dec 2022.

ACTIONS

A4.8: Explore synergies in new build specification and procurement (including joint procurement).

A4.9: Ensure carbon reduction is a key priority in all capital investment decisions.

3.5 Waste and the circular economy

The healthcare sector consumes sizeable amounts of single use plastics, for example PPE and single use medical devices, and due to the nature of healthcare, has to deal with hazardous and clinical waste. 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 benchmarking survey showed that fewer than half of Trusts and none of the CCGs had a waste target, although a higher number had carried out a waste audit. The ICS Sustainability Group already has a waste subgroup to lead on this area and has set an overall target for 2030. This target needs to be cascaded through member organisations.

TARGET

T5.1 Achieve zero waste to landfill across the ICS by 2030.

3.5.1 Non-clinical waste

The priority will be to develop circular economy solutions where raw materials originate from recycled sources and are consequently fed back into the loop after they have been used (emulating natural cycles such as the carbon cycle). 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 3.6.3).

Where circular economy solutions are not available, the waste hierarchy will be followed ie promoting minimisation, reuse and recycling of waste. Where these options are not available, energy recovery will be prioritised over landfill.

TARGET

T5.2: All food waste segregated and sent for anaerobic digestion by 2030.

ACTIONS

A5.1: All members to set waste targets.

A5.2: Investigate circular economy opportunities arising out of joint procurement and forward commitment procurement eg for PPE.

A5.3: Adopt a furniture/equipment reuse scheme across the ICS area.

A5.4: Identify on/offsite opportunities for anaerobic digestion of food waste to produce green gas.

A5.5: Share best practice via the waste subgroup.

CASE STUDY

North Tees and Hartlepool NHS Foundation Trust

North Tees & Hartlepool have introduced a new 4 'R' system for dealing with waste and recycling by implementing a clear process for the disposal of equipment and furniture, repairing, re-using or recycling where appropriate. To reduce the volume of waste arising at the Trust the Waste Manager set up a 'swap-shop' in the waste and recycling yard to encourage staff to assess equipment or furniture before it leaves the Trust. All work areas throughout the Trust have a folder containing instructions to follow when assessing equipment and a set of labels to use to correctly identify the process for unwanted equipment or furniture, and this has been backed up by a communications and marketing campaign to gain internal buy-in for the scheme.

3.5.2 Clinical waste

Clinical and hazardous waste streams are a particular challenge in the healthcare sector. The ICS Sustainability Group has already set targets for clinical waste.

TARGETS

T5.3: Reduce volume of clinical waste by 50% by 2030.

T5.4: All remaining non-recyclable clinical waste to be treated through energy recovery by 2030.

ACTIONS

A5.6: Explore opportunities for reducing clinical waste.

A5.7: All North East and North Cumbria hospitals to implement a reusable sharps container system across their sites where possible.

CASE STUDY

South Tees Hospitals NHS Foundation Trust

An innovative waste management system has been installed in theatres at South Tees Hospitals to make it safer for staff to dispose surgical waste fluid. The Stryker Neptune can filter collected surgical fluid, which allows it to be disposed of via a drain rather than be solidified and put into infectious waste bags. Once full, these bags which would inherently be cumbersome and heavy would need to be lifted and carried by a member of staff. The Stryker Neptune system eliminates the need for manual handling and the costs and risks associated with an additional infectious waste steam and in turn reduces the Trust's carbon footprint.

3.6 Supply chain and procurement

The NHS supply chain accounts for 62% of its carbon footprint. One of the two key carbon targets for the NHS is to achieve net zero status of its supply chain by 2045. The aspirational target in this plan is for ICS members to bring this target forward to 2040.

The benchmarking exercise flagged up procurement as an area requiring improvement, with only four Trusts having a green procurement plan, and a further two Trusts and one CCG working on such a plan. This is a key area for ICS members to address.

3.6.1 Embedding best practice

The ICS currently deals with supply chain sustainability via its general procurement group. The option of a specific sustainable procurement working group will be kept open as the strategy progresses.

TARGETS

T6.1: All Trusts to have embedded procurement into their green plans, or embedded sustainability into their procurement processes, by 2024, giving environmental and social issues greater or equal weighting than financial criteria.

T6.2: By 2024, all ICS members to mandate that suppliers have a carbon reduction plan for their direct emissions.

ACTIONS

A6.1: Ensure green procurement is embedded in all organisations' procurement function including carbon monitoring, auditing, human rights (e.g. modern slavery) and training.

A6.2: The ICS to develop a supply chain sustainability plan for primary care.

A6.3: Develop a priority list for procured items by impact/volume and develop criteria for these.

A6.4: Identify barriers to sustainable procurement (eg budgetary measures) and develop best practice for removing them.

A6.5: Engage with NHS Supply Chain to ensure the most sustainable options are available.

CASE STUDY

The Newcastle upon Tyne Hospitals NHS Foundation Trust

A sustainable procurement working group led by the Director of Procurement and Supplies was set up at Newcastle Hospitals to allow engagement with the Trust's suppliers. The aim was to begin to tackle the emissions associated with the supply chain, which represent over 60% of the overall carbon footprint. The Trust worked in partnership with SmartCarbon Ltd to develop a 5-step supply chain framework, with an aim of supporting all suppliers big and small. The Trust listened to supplier views, with 98% of respondents supporting the Trust's NetZero goal. Webinars were held to raise awareness, inform and engage suppliers on carbon foot printing before inviting all suppliers to report their performance via the SmartCarbon platform. There is now a requirement for all suppliers to the Trust to commit to and publish NetZero target aligned to the Newcastle Hospitals 2040 vision, by 2030. The project has encouraged suppliers to act and begin to take steps to reduce their carbon footprints.

3.6.2 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.

3.6.3 Forward commitment procurement (FCP)

Joint procurement brings enough buying power to implement 'forward commitment procurement' or 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.

A number of potential opportunities for joint procurement and FCP have been identified in other areas of focus; it is likely that the working group will identify more.

ACTION

A6.6: Investigate joint procurement opportunities including the use of forward commitment procurement.

3.7 Greener estates and adaptation

3.7.1 Greener space and biodiversity

It is well understood that provision of nature areas on hospital sites can aid patient recovery[12] and there are proven therapeutic benefits of 'green space', including positive effects on mental health[13] (nature-based prescribing is covered in 3.2.6 of this plan). Nature areas also promote biodiversity, provide sustainable drainage for floodwater, mitigate air pollution and provide shade during periods of raised temperatures.

The benchmarking survey showed that only five Trusts and one CCGs had integrated 'green space' measures into their sustainability programme. ICS members will work together to learn from each other and other organisations on implementing effective green space/biodiversity measures.

TARGET

T7.1: Provision of facilities for spending time in nature across all ICS members.

ACTION

A7.1: Develop and communicate best practice guidance for implementing nature/ biodiversity areas at ICS healthcare sites.

CASE STUDY

North East Ambulance Service (NEAS) and Tees, Esk & Wear Valley NHS Foundation Trusts

A wildflower planting trial was established at the NEAS in October 2021. Sowing of seeds began at four ambulance stations with an aim of providing a partial bloom in spring 2022, with a full bloom a year later. The Trust as part of their green plan have committed to integrating green spaces across the estate of 57 properties both to benefit biodiversity as well as staff wellbeing. Tees, Esk & Wear Valley have already established 3500m2 of wildflower meadows and four wellbeing gardens for the enjoyment of their staff.

3.7.2 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. All public bodies are required to have an adaptation plan, but the benchmarking survey suggested that only a third of Trusts and no CCGs had a plan in place.

Adaptation to climate impacts also includes ensuring the medical services provided evolve to meet emerging needs, including the health impacts of extreme weather, eco-anxiety etc. These are addressed in section 3.2.7.

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

T7.2 All Trusts and the ICS to have developed an adaptation plan by Dec 2022.

ACTIONS

A7.2: Establish an adaptation subgroup to ensure all Trusts and other organisations have adequate climate change adaptation plans.

A7.3: Liaise with Local Resilience Forums (LRFs) to ensure NHS adaptation plans are compatible with local plans in each area.

A7.4: Share best practice on implementing onsite adaptation measures.

3.7.3 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', e.g. paying a third party to, say, plant trees to sequester those residual emissions. Effective offsetting can be challenging, in particular proving 'additionality' i.e. that the offsetting project would not have happened otherwise. Several accreditations have been established to made additionality more robust. NHS guidance suggests that consideration of offsetting should be postponed while efforts are put into decarbonisation, although given the 20-30 year time lag for sequestration to take place, planning should start immediately.

However, there is an alternative to offsetting known as 'insetting' where the organisation commissions its own sequestration project within its own value chain. The idea of a NENC ICS Forest has been mooted and this would require planning to start earlier than for offsetting (which is purely a transactional process), or alternatively, this offsetting could form part of the development of a wider North East Community Forest (NECF). There may also be opportunities for links with nature-based prescribing (Section 3.2.6).

ACTION

A7.5: Investigate the opportunities for insetting and offsetting including an ICS forest and/or the North East Community Forest initiative.

3.8 Clean air

The benchmarking survey showed that none of the members had a clean air strategy in place. Given the health implications of air pollution, it is essential that the NHS shows leadership on this issue. Local authorities have prime responsibility for clean air action, so this will require partnership working.

The ICS has secured funding to develop a clean air hospitals plan in collaboration with the global action plan.[14] This framework will cut across all aspects of hospital activity and has clear synergies with the rest of this strategy, particularly the net zero ambition.

ACTIONS

A8.1: Implement the outcomes of the GAP clean air hospital project.

A8.2: Engage with and support clean air initiatives with the local authorities within the NENC region.

4. GOVERNANCE

4.1 Governance structure

4.1.1 ICS leadership

Dame Jackie Daniel, Chief Executive of the Newcastle Upon Tyne Hospitals NHS Foundation Trust is the lead CEO for Sustainability on the NENC ICS. The ICS Management Board will be the ultimate decision-making body for this plan (see Figure 2).

4.1.2 Resources and working groups

A sustainability manager will be required for the ICS itself. The ICS Sustainability Manager will be known as the Senior Net Zero Programme Manager (NENC) and will facilitate the actions of the current group of sustainability leads across the ICS membership (and beyond) to co-ordinate much of the activity in this plan, and lead on a green plan for primary care.

ACTION

A0.2: Appoint a Senior Net Zero Programme Manager (NENC) to co-ordinate ICS member collaboration and internal ICS/primary care actions.

The ICS Sustainability Group already has subgroups established to support work in most of the priority areas set out in Section 3. This strategy recommends the creation of two further subgroups:

1. **Sustainable Healthcare Overview Group: to identify carbon reduction opportunities in the delivery of healthcare and establish specialised working groups to explore these issues.**
2. **Adaptation subgroup: to oversee the development of adaptation plans.**

These will be augmented on an as and when basis if the implementation of this Strategy requires. Note that, at present, clinicians are contributing to the ICS sustainability effort on a purely voluntary basis. To ensure the continued contribution of this vital effort, the ICS will investigate potential funding mechanisms to cover the time clinicians spend on sustainability.

ACTION

A0.3: Pursue funding mechanisms to cover clinicians' time spent on the Sustainability programme.

4.1.3 Structure

The ICS Senior Net Zero Programme Manager will facilitate the actions of the current group of sustainability leads across the ICS membership (and beyond) to co-ordinate much of the activity in this plan. Figure 2 sets out the governance structure for ICS sustainability.

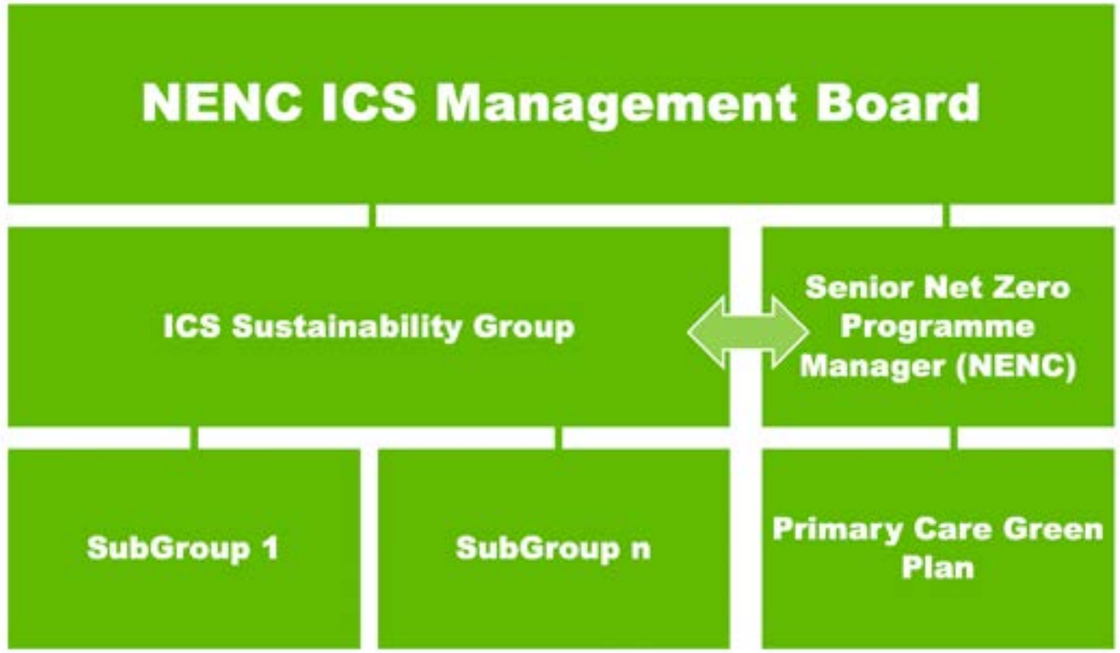

Figure 2: Governance and delivery structure

4.1.4 ICS Internal sustainability programme

Once the CCGs are merged into the ICS, the ICS will require a primary care green plan to cover all primary care functions, including GP practices, community pharmacies and dentists (as part of the supply chain). This will be facilitated by the Senior Net Zero Programme Manager (NENC), with support from the ICS Sustainability Group.

ACTIONS

A0.4: Establish the structures to co-ordinate sustainability across the primary care function.

A0.5: Develop a primary care green plan.

4.1.5 Peer review of green plans

The Sustainability Leads Group will perform a peer-review of each other's green plans each time those plans are updated. Lessons learnt from this process will be fed back to the Trust/ICS and as appropriate into the working groups. The following process will be followed:

- **In turn, each Trust will send the Sustainability Leads Group a copy of their green plan.**
- **The Trust will give a quick overview of their green plan at the next sustainability leads meeting.**
- **Other sustainability leads will ask questions.**
- **The sustainability leads will send their comments to the Senior Net Zero Programme Manager for collation and distribution.**

ACTION

A0.6: Begin the peer review of ICS members' green plans.

4.2 Progress and reporting

4.2.1 Tracking progress

Each ICS member will provide a brief written report on the progress they have made each year against their own green plan and the requirements of this ICS green plan. This will be augmented by the NHS's national data collection which is expected to provide quantitative data on the ICS members. Report templates will be developed to ensure that the collection of data is synergistic with other NHS data collection processes (eg PAM, ERIC).

ACTIONS

A0.7: ICS to develop reporting template.

A0.8: ICS members to provide annual progress reports.

4.2.2 Annual report

From the annual reports in 4.2.1 and data provided by the NHS national data collection, the Senior Net Zero Programme Manager will collate and publish an annual report of progress summarising progress against this green plan.

ACTION

A0.9 : Produce annual ICS sustainability report.

4.3 Future ambitions

This is a three-year plan aimed at working towards a 2030 vision of being England's greenest region. We acknowledge that much of the content of this plan is designed to get the basics right and create a solid foundation for higher future ambition. Future iterations of this plan will continually ratchet up our targets and actions, building on the lessons learnt in the next three years.

In order to galvanise our commitment to this longer-term ambition, the NENC ICS will declare a climate and environmental emergency[15] (see Section 2.2), adopting an aspirational target of net zero carbon by 2030, acknowledging some ICS members have different targets.

ACTION

A0.10: Draft the next iteration of this plan (ie 2026-2029) with even more ambitious targets.

ANNEXES

ANNEX A

Summary of NENC ICS sustainability benchmarking

Figure 3 shows the number of 'yes' and 'in progress' responses to each multiple-choice question and it gives a good overview of the strengths and weaknesses of the NENC ICS members.

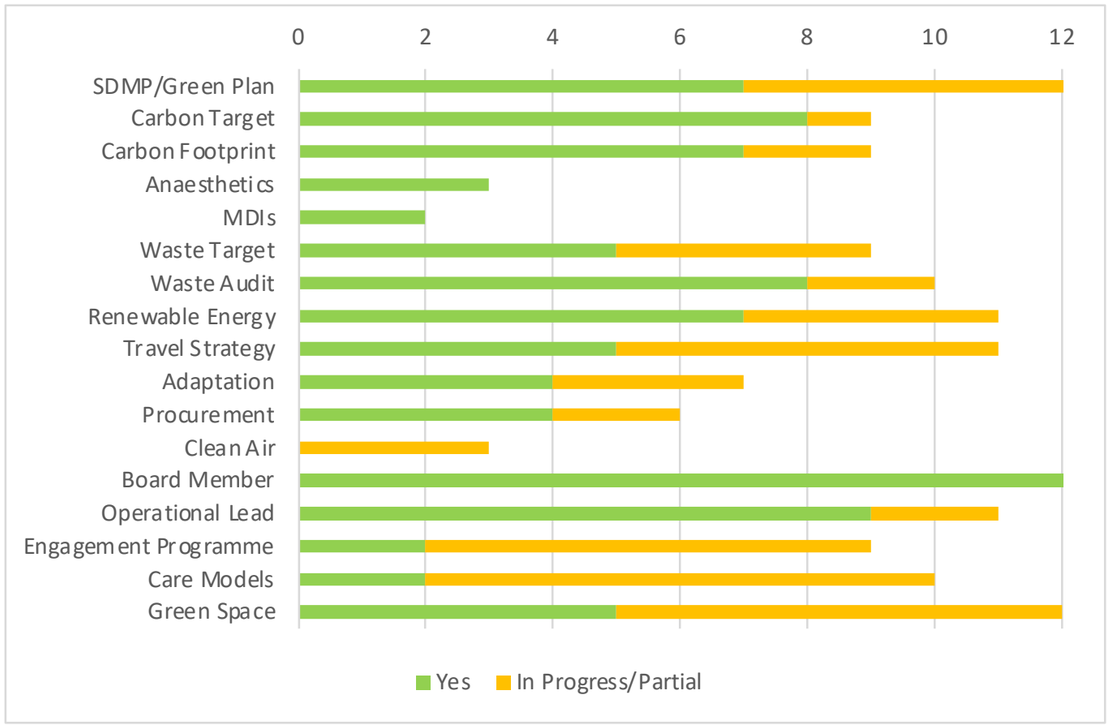

Figure 3: Summary of Trusts' responses

In summary, the Trusts perform strongly on:

- **Developing green plans/SDMPs**
- **Adopting renewable energy**
- **Appointing a board member**
- **Providing an operational lead (although those with a part-time resource may want to consider whether this is sufficient moving forwards)**

However, the Trusts performed weakly on:

- **Inclusion of anaesthetic gases and MDIs in carbon targets/plans**
- **Clean air policies**
- **Procurement**
- **Adaptation**
- **Staff engagement programmes**

Figure 4 shows the 'yes' and 'in progress' results from the CCGs. It is clear that sustainability activity is ad-hoc at best with only five 'Yes' responses across all the questions (out of a possible 122).

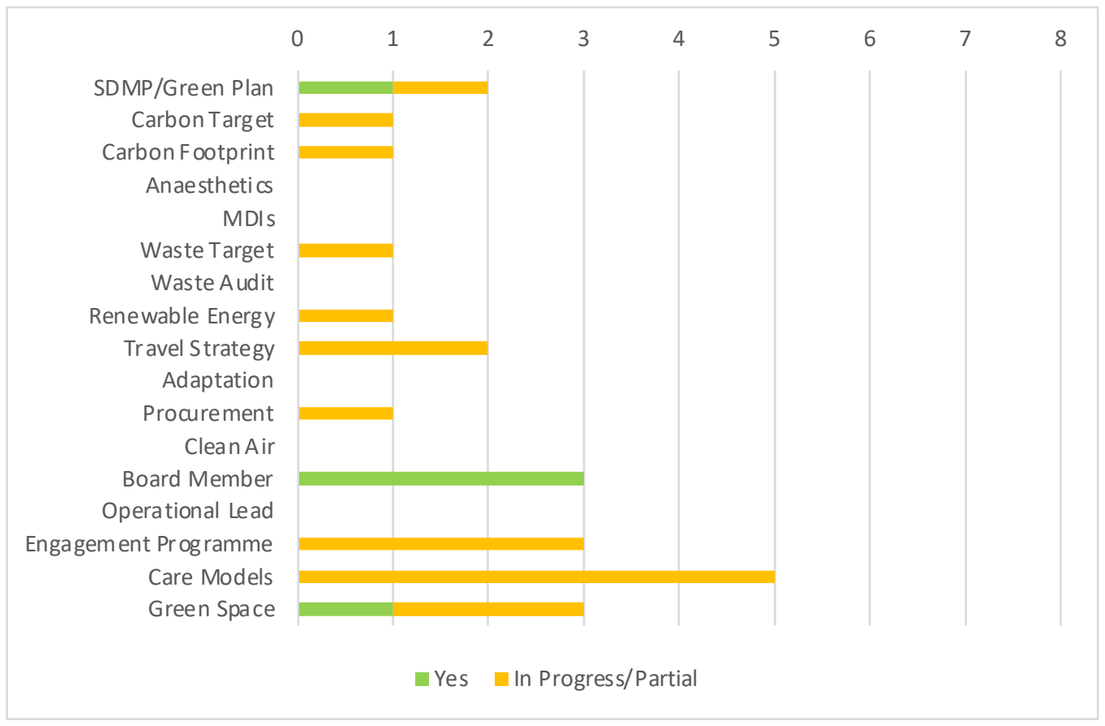

Figure 4: Summary of CCGs' responses

ANNEX B
Summary of targets

Ref	Target	Responsibility	Deadline	Notes
0.	**Governance**			
T0.1	NENC ICS will strive to achieve net zero for its NHS footprint by 2030 and its NHS-plus footprint emissions by 2040 and aid members to move further, faster on carbon reductions.	Sustainability Leads	Dec 2030/2040	
1.	**People**			
T1.1	All Trusts to have an employee engagement plan in place.	Sustainability Leads	June 2022	Supported by People Subgroup
T1.2	All employees to have a basic awareness of sustainability .	Sustainability Leads	Dec 2025	
2.	**Models of care**			
T2.1	Every applicable Trust to reduce its [ban the] use of desflurane in surgery by 2030.	Sustainability Leads	Dec 2024	Supported by Anaesthetics Subgroup
T2.2	30% of outpatient activity should be delivered remotely.	Sustainability Leads	Dec 2024	Supported by Sustainable Healthcare Subgroup
3.	**Travel and transport**			
T3.1	Every Trust and the ICS to develop a green travel plan.	Sustainability Leads	Dec 2022	Supported by Transport Subgroup
T3.2	ICS members will reduce business mileage by at least 20%.	Sustainability Leads	FY 2023/24	Supported by Transport Subgroup
T3.3	90% of NHS fleet should be low emission, including 25% ULEV (<50gCO_2/km) before 2023/24.	Sustainability Leads	FY 2023/24	Supported by Transport Subgroup
T3.2	For new purchases and lease arrangements, the ICS and Trusts rusts solely purchase and lease ULEV or ZEV cars.	Sustainability Leads	Dec 2025	Supported by Transport Subgroup
4	**Energy**			
T4.1	All ICS members to strive to achieve net zero status for energy emissions by 2030.	Sustainability Leads	2030	Supported by Energy Subgroup
T4.2	All Trusts to sign up to a REGO-certified renewable energy tariff.	Sustainability Leads	April 2021	Supported by Energy Subgroup
T4.3	All new builds to be built to the NHS Net Zero Carbon Building Standard and achieve BREEAM outstanding.	Sustainability Leads	Dec 2022	Supported by Energy Subgroup

Ref	Target	Responsibility	Deadline	Notes
T5.1	Achieve zero waste to landfill across the ICS by 2030.	Sustainability Leads	2030	Supported by Waste Subgroup
T5.2	All food waste segregated and sent for anaerobic digestion by 2030.	Sustainability Leads	2030	Supported by Waste Subgroup
T5.3	Reduce volume of clinical waste by 50% by 2030.	Sustainability Leads	2030	Supported by Waste Subgroup
T5.4	All remaining non-recyclable clinical waste to be treated through energy recovery by 2030.	Sustainability Leads	2030	Supported by Waste Subgroup
6.	**Supply chain**			
T6.1	All trusts to have embedded Procurement into their Green Plans, or embedded sustainability into their procurement processes, by 2024, giving environmental and social issues greater or equal weighting than financial criteria.	Sustainability Leads	Dec 2023	To be supported by ICS Procurement Group
T6.2	Sll ICS members to mandate that suppliers have a carbon reduction plan for their direct emissions.	Sustainability Leads	Dec 2024	To be supported by ICS Procurement Group
7.	**Greener estates and adaption**			
T7.1	Provision of facilities for spending time in nature across all ICS members.	Sustainability Leads	2030	
T7.2	All Trusts and the ICS to have a climate adaptation plan.	Sustainability Leads	Dec 2022	Supported by Adaptation Subgroup

ANNEX C
Action plan

Ref	Action	Responsibility	Deadline	Notes
0.	**Governance**			
A0.1	The ICS will declare a climate emergency.	ICS Sustainability Leads	Jun 2022	
A0.2	Appoint a Sustainability Manager (Senior Net Zero Programme Manager NENC) for the ICS.	NUTH	Dec 2021	
A0.3	Pursue funding mechanisms to cover clinicians' time spent on the sustainability programme.	ICS Senior Net Zero Programme Manager (NENC)	Jun 2022	
A0.4	Establish the structures to co-ordinate sustainability across the primary care function.	ICS Senior Net Zero Programme Manager (NENC)	Jun 2022	
A0.5	Develop a primary care green plan.	ICS Senior Net Zero Programme Manager (NENC)	Dec 2022	
A0.6	Begin the peer review of green plans.	ICS Senior Net Zero Programme Manager (NENC)	Mar 2022	
A0.7	Develop reporting template.	ICS Senior Net Zero Programme Manager (NENC)	Mar 2022	
A0.8	ICS members to provide annual progress reports.	ICS Senior Net Zero Programme Manager (NENC)	Annually	
A0.9	Produce annual ICS Sustainability report.	ICS Senior Net Zero Programme Manager (NENC)	Annually	
A0.10	Draft the next iteration of this plan (ie 2026-2029) with even more ambitious targets.	ICS Senior Net Zero Programme Manager (NENC)	Dec 2025	
1.	**People**			
A1.1	Commission a 'train the trainer' workshop for employee engagement in the health sector for ICS Sustainability Leads.	ICS Senior Net Zero Programme Manager (NENC)	Dec 2021	In collaboration with the People Working Group
A1.2	Commission an e-learning platform for training all staff in the basics (including awareness of regional and national resources).	ICS Senior Net Zero Programme Manager (NENC)	Jun 2022	In collaboration with the People Working Group
A1.3	Map 'who needs to know what' and develop engagement plans for all Trusts and the ICS.	ICS Senior Net Zero Programme Manager (NENC)	Jun 2022	In collaboration with the People Working Group
A1.4	Trial the use of Schwartz rounds in engaging employees in sustainability.	Sustainability Leads	Dec 2022	In collaboration with the People Working Group
A1.5	Develop a staff platform to promote innovation and share best practice.	Sustainability Leads	Dec 2022	In collaboration with the People Working Group
2.	**Sustainable healthcare**			
A2.1	Establish a Sustainable Healthcare Overview Group.	ICS Sustainability Lead	Mar 2022	
A2.2	Trusts will develop a plan to eliminate the use of desflurane and other volatile anaesthetic gases with a high global warming potential.	Anaesthetics Subgroup	Jun 2022	
A2.3	Disseminate best practice via our regional network of environmental champions within anaesthesia across the North East and Cumbria (NEASH).	Anaesthetics Subgroup	Continuous	
A2.4	Establish monitoring system to measure progress against a baseline.	Anaesthetics Subgroup	Mar 2022	
A2.5	Share best practice with, amongst others, the national Environmental Champions Network of Anaesthetists through submission of work to Association of Anaesthetists conferences Green Star Awards.	Anaesthetics Subgroup	Continuous	

Ref	Action	Responsibility	Deadline	Notes
A2.6	Continue to promote preventative healthcare actions (eg smoking cessation)	Respiratory Subgroup	Continuous	
A2.7	Develop a plan to optimise inhaler use, support choice of inhalers with a lower carbon footprint eg dry powder inhalers (DPI) and promote greener inhaler disposal	Respiratory Subgroup	Jun 2022	
A2.8	Carry out patient led reviews covering prevention, self-management, inhaler technique, and having local patients/ groups to guide, inform, design personalised reviews	Respiratory Subgroup	Dec 2022	
A2.9	Review remote healthcare opportunities across primary and secondary care post-Covid19	Sustainable Healthcare Overview group	Jun 2022	
A2.10	Overprescribing to become a key priority of ICS medicines planning and oversight - to make patient care better and safer, support the NHS, and reduce carbon emissions	Sustainable Healthcare Overview group	Jun 2022	
A2.11	Review opportunities for social prescribing and nature-based prescribing within the ICS across primary care and long-term in-patient services	Sustainable Healthcare Overview group	Dec 2023	
A2.12	Adopt lessons learnt from the green social prescribing test projects	Sustainable Healthcare Overview group	Dec 2023	
A2.13	Introduce carbon mitigation measures into the care design process	Sustainable Healthcare Overview group	Dec 2021	
A2.14	Ensure climate-related physical and mental health issues are embedded into clinical services forward planning	Sustainable Healthcare Overview group	Dec 2022	
A2.15	Investigate opportunities for low carbon, nutritious food across the ICS members	ICS Sustainability Leads	Dec 2022	
3.	**Travel and transport**			
A3.1	Introduce a business mileage hierarchy into pool car/business mileage policy and reduce the incentives to travel for work purposes	Sustainability Leads	Jun 2022	Supported by the Transport Subgroup
A3.2	Identify opportunities to exploit synergies across the ICS members eg procurement, logistics planning, lift share systems etc	Transport Subgroup	Continuous	

Ref	Action	Responsibility	Deadline	Notes
A3.3	Develop a green travel plan for primary care services	ICS Senior Net Zero Programme Manager (NENC)	Dec 2022	Supported by the Transport Subgroup
A3.4	Liaise with local authorities and other anchor institutions to optimise public transport and active travel options	Sustainability Leads	Continuous	Supported by the Transport Subgroup
A3.5	Commit to achieving the Cycling UK cycle friendly employer accreditation standard	Sustainability Leads	Jun 2022	Supported by the Transport Subgroup
A3.6	Explore opportunities for joint procurement/leasing of ULEVs and ZEVs	Transport Subgroup	Dec 2022	
A3.7	Determine an ICS-wide approach to EV charging points to maximise compatibility across sites	Transport Subgroup	Dec 2022	
A3.8	Explore opportunities for novel Sustainable logistics services	Transport Subgroup	Dec 2022	
4.	**Energy**			
A4.1	Investigate innovative funding sources for building decarbonisation	Energy Subgroup	Continuous	
A4.2	Share best practice on energy efficiency including the use of building management systems and theatre systems	Energy Subgroup	Continuous	
A4.3	Investigate energy efficiency opportunities across the primary care facilities	ICS Senior Net Zero Programme Manager (NENC)	Continuous	
A4.4	Engage with NHS Green Lease Programme for Property Services estates	ICS Senior Net Zero Programme Manager (NENC)	Jun 2022	
A4.5	All ICS members to switch to renewable energy tariffs	Sustainability Leads	April 2021	
A4.6	Feasibility study into a joint PPA for renewable energy	Energy Subgroup	Dec 2023	
A4.7	Feasibility study into the joint procurement of onsite/ICS installed renewable energy systems	Energy Subgroup	Dec 2023	
A4.8	Explore synergies in new build specification and procurement (including joint procurement)	Energy Subgroup	Dec 2022	
A4.9	Ensure carbon reduction is a key priority in all capital investment decisions	Sustainability Leads	Dec 2022	

Ref	Action	Responsibility	Deadline	Notes
5.	**Waste and the Circular Economy**			
A5.1	All members to set waste targets	Sustainability Leads	Jun 2022	
A5.2	Investigate circular economy opportunities arising out of joint procurement and Forward Commitment Procurement eg for PPE	Waste Subgroup	Dec 2022	
A5.3	Adopt a furniture/equipment reuse scheme across the ICS area	Waste Subgroup	Continuous	
A5.4	Identify on/offsite opportunities for anaerobic digestion of food waste to produce green gas	Waste Subgroup	Jun 2022	
A5.5	Share best practice via the waste subgroup	Waste Subgroup	Continuous	
A5.6	Explore opportunities for reducing clinical waste	Waste Subgroup	Continuous	
A5.7	All North East & North Cumbria (NENC) hospitals have implemented a reusable sharps container system across their sites	Sustainability Leads	Dec 2022	Supported by the Waste Subgroup
6.	**Supply chain**			
A6.1	Ensure Green Procurement is embedded in all organisations' procurement function including carbon monitoring, auditing, human rights (eg modern slavery) and training	Sustainability Leads	Jun 2023	
A6.2	ICS to develop supply chain sustainability plan for primary care	ICS Sustainability Leads	Jun 2023	
A6.3	Develop a priority list for procured items by impact/volume and develop criteria for these	Sustainability Leads	Dec 2022	
A6.4	Identify barriers to sustainable procurement (eg budgetary measures) and develop best practice for removing them	Sustainability Leads	Dec 2023	
A6.5	Engage with NHS Supply Chain to ensure the most Sustainable options are available	Sustainability Leads	Continuous	
A6.6	Identify opportunities for joint procurement and forward commitment procurement	Sustainability Leads	Continuous	
7.	**Greener estates and adaption**			
A7.1	Develop and communicate best practice guidance for implementing nature/biodiversity areas at ICS healthcare sites	Estates Sub Group	Dec 2022	
A7.2	Establish an adaptation subgroup to ensure all Trusts and other organisations have adequate climate change adaptation plans	ICS Senior Net Zero Programme Manager (NENC)	Dec 2021	
A7.3	Liaise with Local Resilience Forums (LRFs) to ensure NHS adaptation plans are compatible with local plans in each area	Adaptation Sub Group	Continuous	Liaise with Estates Working Group
A7.4	Share best practice on implementing onsite adaptation measures	Adaptation Sub Group	Continuous	
A7.5	Investigate the opportunities for insetting and offsetting	Sustainability Leads	Dec 2024	
8.	**Clean air**			
A8.1	Implement the outcomes of the Clean Air Hospital project	Sustainability Leads	Dec 2024	
A8.2	Engage with and support clean air initiatives with the Local Authorities within the NENC region	Sustainability Leads	Continuous	

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Produced by NENC ICS Sustainability Group with the support of Gareth Kane, Terra Infirma Ltd.

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