

Staffordshire and Stoke-on-Trent Integrated Care System (ICS)

Green Plan Refresh

2025 - 2028



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Foreword

The NHS was founded to provide high-quality care for all, now and for future generations. Understanding that climate change and human health are intimately linked, in October 2020, it became the first in the world to commit to delivering a net zero national health system.

Two clear and feasible targets are outlined in the Delivering a 'Net Zero' National Health Service report:

- **The NHS Carbon Footprint: for the emissions we control directly, net zero by 2040.**
- **The NHS Carbon Footprint Plus: for the emissions we can influence but do not directly control, net zero by 2045¹.**

On 1 July 2022, the NHS in England became the first health system to embed net zero into legislation, through the Health and Care Act 2022. This places duties on NHS England, as well as all trusts, foundation trusts, and integrated care boards (ICBs) to contribute towards statutory emissions and environmental targets.

The national importance of climate change and sustainability is highlighted within the Lord Darzi report which is an independent investigation of the NHS in England. This report highlights the importance of tackling climate change and reducing waiting lists as mutually reinforcing goals. [Lord Darzi's report on NHS England](#)² said the NHS must stick to its net zero ambitions and that there is no trade-off between climate responsibilities and reducing waiting lists, highlighting that often health and climate are mutually reinforcing goals.

Since the Green Plan implementation in March 2022, Staffordshire and Stoke-on-Trent Integrated Care System (ICS) has demonstrated how the Green Plan has become integrated into the wider ICS. It has

led to collaboration, compromise and cohesion between system partners on reducing our carbon footprint and delivering our services sustainably.

Local achievements to date have seen the phasing out of desflurane (anaesthetic gas used in surgery), reduction in nitrous oxide use, increased prescribing of dry powder inhalers (DPIs) and alternative short acting beta-agonist (SABA) inhalers with lower emissions, leading to an overall reduction in total inhaler emissions. There has been wider rollout of the walking aid reuse scheme across household recycling centres in Staffordshire and Stoke-on-Trent and a growing understanding of the agenda and its benefits system wide via roll out and successful take up of mandatory training on climate change and its impacts upon the integrated care system across all levels. This has led to sustainability being embedded into leadership and decision making across the ICB.

We recognise there is further progress to be made across the system with partners to ensure we align and focus resources to deliver on reducing carbon emissions but also recognising the multiple benefits to the system including efficiency, productivity and reduction in demand to ensure improved health outcomes for patients and optimal delivery of care whilst ensuring the needs for future generations are not threatened by our actions now.

Since implementation of the Green Plan there has been valuable learning, and this refresh of the Green Plan provides us with the opportunity to review and recognise progress to date and build on these achievements. We are focussed on building the relationships between the NHS, Local Authorities (LAs) and other important strategic partners such as the Voluntary, Community and Social Enterprise (VCSE) sector. We have shared priorities to improve population health and reduce inequalities between different groups and continue to work together to develop services that meet

the need of the population whilst minimising the impact on the environment.

There is an ambitious programme of work ahead of us to deliver a net zero carbon future. We have developed solid foundations over the last three years by working collaboratively with all partners, and ultimately share the same goal, we are confident we will achieve our ambitions, realising all the benefits that come with it economically, environmentally and improved health outcomes and service provision.

The importance of recognising climate change and sustainability across the system is supported by key system leaders.



Foreword from senior leaders:

Elizabeth Disney (Chief Transformation Officer)

The environmental changes taking place now, and in the future, present the biggest global threat of the twenty-first century. Climate change is cited as a major factor that directly contributes to cardiovascular disease, asthma, and cancer in NHS England's Delivering a 'Net Zero' National Health Service report. We need to act now to reduce the burden of disease through air pollution. It's essential to decarbonise the NHS through methods such as installing solar panels and heat pumps, upgrading buildings to energy efficiency standards, accelerating the electrification of the NHS fleet, adopting energy efficiency and waste saving measures. All of this action must be delivered in parallel with integrating climate-resilient measures to protect our vital health services from climate threats. As Chief Transformation Officer it is of utmost importance that the green agenda is seen as a priority throughout all portfolios and delivery plans; there is a synergy and requirement for all areas to take ownership and incorporate sustainability measures into delivery plans, creating multiple benefits for Staffordshire and Stoke-on-Trent ICS as well as the wider NHS.

Helen Dempsey (Director of Planning and Green Agenda Senior Responsible Officer (SRO))

System ownership of environmental sustainability and climate change impacts is a responsibility for all portfolio areas, and this is reflected in delivery plans recognising the need to identify and reduce direct emissions under their control and encourage new ways of working through shared best practice, training and wider engagement with system partners. We know we have a significant programme of work ahead of us to deliver a net zero carbon future. Over the last three years we have built solid foundations and by continuing to work collaboratively with all partners, and

harnessing the collective endeavours of all our colleagues, we are confident we will achieve our system ambitions.

David Pearson (Chair of Staffordshire and Stoke-on-Trent ICS)

Since the release of the first Green Plan, we are starting to see the Green Agenda embedded within central NHS planning signalling the implementation of the Green Plan into business as usual. We need to build on this by developing greater system working and encouraging matrix working across the system partnerships making the Green Agenda a collective system responsibility. By demonstrating how it can contribute to system efficiencies and achieving wider sustainability goals will help build further awareness of the importance of this agenda and its impacts on wider determinants of health.

Staffordshire and Stoke-on-Trent ICS recognises that climate change impacts will impact individuals and groups already experiencing social exclusion and health inequality most, the ICS will anticipate and mitigate these impacts through work on key areas of focus such as adaptation and travel & transport. Through creating an accessible, cleaner and more efficient transport network it will provide safer alternative options to car use and promoting active travel is a key driver towards preventing mental and physical health risks including some cancers, heart disease, type 2 diabetes and depression ([Physical activity: applying All Our Health - GOV.UK](#))³



Introduction

About us

As an Integrated Care System, NHS organisations, in partnership with local authorities and other partners, take collective responsibility for managing resources, delivering NHS care, and improving the health of the population they serve.

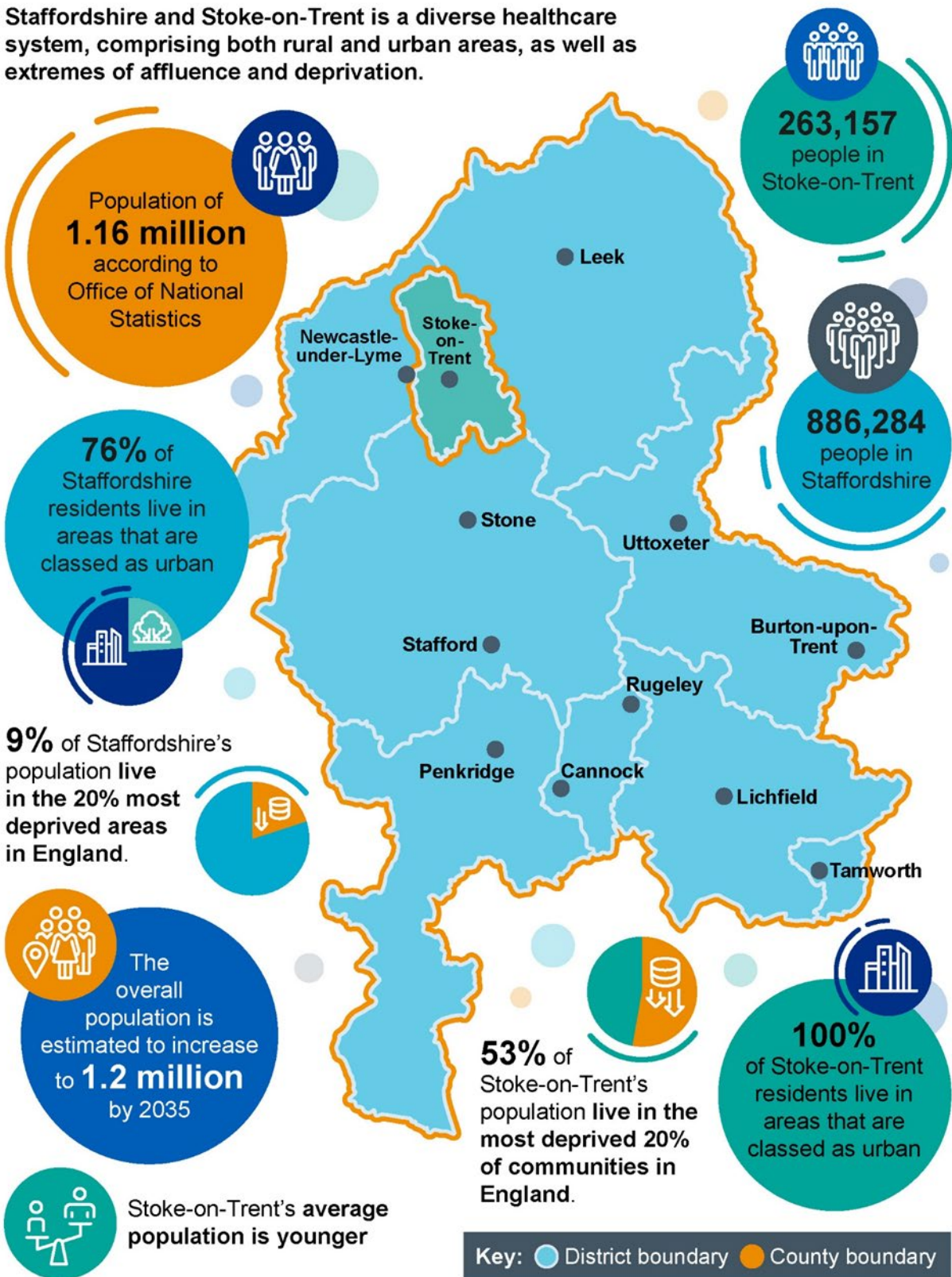
We are responsible for the health and care of 1.16 million people who live in Staffordshire and Stoke-on-Trent, across a geographical area of 1,048 square miles. We are aligned with two upper-tier local authorities, Staffordshire County Council and Stoke-on-Trent City Council.

Integrated Care Boards (ICB) are NHS organisations responsible for planning health services for their local population. There is one ICB in each ICS area. They manage the NHS budget and work with local providers of NHS services, such as hospitals and GP practices, to agree a joint five-year plan which says how the NHS will contribute to the Integrated Care Partnership's (ICP) integrated care strategy. Staffordshire and Stoke-on-Trent ICB employ approximately 451 members of staff.



We serve a very diverse population, with complex health and care needs, comprising both rural and urban areas, extremes of affluence and deprivation, as well as significant health inequalities.

Staffordshire and Stoke-on-Trent is a diverse healthcare system, comprising both rural and urban areas, as well as extremes of affluence and deprivation.



Why do we need a Green Plan?

The environmental changes taking place now, and in the future, present the biggest global threat of the twenty-first century. Climate change is cited as a major factor that directly contributes to cardiovascular disease, asthma, and cancer in NHS England's Delivering a 'Net Zero' National Health Service report. We need to act now to reduce the burden of disease through air pollution such as long-term respiratory conditions, vector-borne diseases such as malaria and other diseases currently only seen in warmer climates. This will ensure existing services are not overwhelmed further by the impact that climate change will have on a local, regional and national scale.

Climate change poses significant risks to both service delivery and healthcare infrastructure. Rising temperatures, extreme weather events, and shifting disease patterns place increasing pressure on health services and the physical infrastructure that supports them. For example, extreme heatwaves can increase patient admissions for heat-related illnesses and increase risk of overheating in health facilities, putting additional pressure on emergency services. Flooding and storms can disrupt the supply to, and operation of healthcare facilities, causing physical damage, leading to temporary closures, or requiring costly

repairs, as well as impact on staff and patients. Consideration of the risks climate change poses and the necessary measures that need to be taken to mitigate this are key to service delivery planning and Emergency Preparedness Resilience Response (EPRR) planning across the entire system.

While there are significant health costs associated with climate change, there are also significant financial costs: heat-related mortality in England alone costs £6.8 billion annually, likely to increase to £14.7 billion per year by the 2050s. These figures reinforce the need for urgent action to sustain our health services now and in the future.













What are we seeking to achieve?

This Green Plan Refresh will work to achieve cohesive system working together to deliver the needs of patients and residents, while recognising and reinforcing the beneficial impacts of greenhouse gas emission reduction and health improvement throughout the system as a green thread. This will link into all portfolios and enable key decision makers to make evidence-based decisions that ensure future generations are not put at risk and contribute to the local, regional and national delivery of net zero targets and the UK Governments Net Zero pledge⁴.



Our progress so far

Highlight of achievements over last 3 years:

| | | | |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  | <p>Phase out of desflurane</p> | <p>Walking aid reuse and recycling of community equipment</p> |  |
|  | <p>Reduction in Nitrous Oxide</p> | <p>Staff travel surveys undertaken annually at Trusts</p> |  |
|  | <p>Reduction in total inhaler emissions (tCO2e) from inhalers supplied</p> <p><i>31.16% reduction in total inhaler emissions 2024/25 versus 2019/20</i></p> | <p>Light Emitting Diode (LED) lights used in all refurbishment schemes</p> |  |
|  | <p>Cycle to work lead and salary sacrifice cycle to work scheme in place for staff at Trusts</p> | <p>Roll out of mandatory training and successful take up</p> |  |
|  | <p>Plant-based meal options included within Trust patient menus</p> | <p>Regular reporting and joined up thinking</p> |  |
|  | <p>Growing understanding of the agenda and its benefits system wide</p> | <p>One Planet Standard – Bronze certification</p> |  |

Please see [Appendix 1](#) for breakdown of key achievements aligned to each area of focus and system partner case studies.

Developing this plan

A system wide partner workshop has been held to set out requirements of the Green Plan refresh and celebrate achievements and progress to date. It identified barriers to progress, opportunities and risks to the wider integrated care system via an interactive session and compiled feedback on the experiences of attendees. Through this engagement exercise and feedback this has been considered and influenced this Green Plan Refresh.

For the refresh of this Green Plan, wider system partners have been engaged and included e.g. Connecting with established sustainability groups such as the Keele University led Climate & Nature Commission where links have been established with the Local Nature Recovery Strategy and Voluntary, Community and Social Enterprise (VCSE), Local Authority Climate and Transport Leads.

ICBs role as a system leader

Working with our system partners

There are significant opportunities to work with wider system partners on joint initiatives. A Joint Strategic Transport Statement between Staffordshire County Council and Stoke-on-Trent City Council⁵ has been agreed looking at EV infrastructure, active travel, improving public transport and looking at sustainable transport plans to address the fact 26% of UK's total emissions come from travel. The ICS intends to link in and develop combined approaches with both councils as part of the Travel and Transport Working Group.

Both upper tier Local Authorities have travel and transport as a key area of focus and priority, presenting opportunity for the ICS Climate and Sustainability agenda to link into.

Staffordshire County Council: Local Transport Plan Update⁶

"In 2024, we're developing a new Local Transport Plan for Staffordshire. This plan will help us to shape the future of transport together, considering all the ways we get around including, walking, cycling, wheeling, public transport, rail, cars, and freight.

This isn't just a plan; it is our shared vision for the future of transport in our area. It will include everything from our vision to the

practical steps we'll take to get there, and how we'll work with others to make it happen".

Stoke-on-Trent City Council: Transport Strategy and Delivery Plan⁷

"Stoke-on-Trent's polycentric (having many centres) and dispersed nature has led to high levels of car usage in the area which results in high levels of carbon emissions and local air quality issues emanating from transport. More sustainable transport measures are needed to address issues from car traffic and encourage modal shift to non-car modes. Impacts from climate change such as flooding will need additional mitigation work on both existing and new infrastructure. However, the development of new infrastructure creates the opportunity to add in flood defences. With a high number of waterways in the area, there is an opportunity to harness the benefits of blue (watercourses, ponds, lakes and storm drainage)/green infrastructure (soft open areas, plants and trees) to enhance not just movement but placemaking."

In addition, Stoke-on-Trent City Council's "Our City, Our Wellbeing" Corporate Strategy 2024-28⁸ includes the Green Agenda as one of its seven key themes with a focus on conserving the environment and living more sustainably.

Travel and transport is one example of system partners working together to

address core components of the ICS Green Plan.

Supporting our partner trusts

The ICB will work alongside partner trusts to deliver their Green Plan objectives and oversee progress through:

- A clear Governance route for oversight of system progress and reporting
- Implementation of 6 monthly system Green Plan delivery and review workshops
- Improved data dashboard and reporting
- Establishing networks of green champions across the system
- Working collaboratively with neighbouring ICS's to share good practice and support regional greener goals e.g. Regional collaboration with other Midland based Integrated Care Systems, working together with NHSE, Nottingham & Nottinghamshire ICB and Coventry & Warwickshire ICB to develop a regional Sustainability Impact Assessment (SIA).
- Linking with wider support mechanism and raising awareness of further funding and training opportunities such as:

- **Midlands Net Zero Hub (MNZH):**
The Midlands Net Zero Hub is funded by the Department for Energy Security and Net Zero as part of the government's clean growth strategy and is hosted by Nottingham City Council. The Midlands is one of five local Net Zero Hubs in England – South East, South West, Midlands, North East and Yorkshire, and North West.
- All local Net Zero Hubs aim to facilitate investment into decarbonisation projects, increasing the number, quality and scale of those being delivered across the regions. We aim to engage with MNZH to support our programme of works with a particular focus on Heat Decarbonisation of NHS estates through connections with Catapult and Public Sector Decarbonisation Scheme (PSDS) to develop an ICS Decarbonisation Strategy and a project pipeline of schemes ready to bid for funding as and when it comes available.

Each provider has their own dedicated Green Plan but the purpose of this strategy is to bring these together, share good practice, embed matrix working and establish joint projects that can be rolled out further

Embedding Green Plan priorities system-wide

The ICS will consider opportunities to reduce emissions and improve population health when planning and commissioning its NHS services.

- The NHS Long Term Plan (LTP) set out a commitment to deliver a new service model for the 21st century. Work to achieve this is already underway, including boosting 'out-of-hospital' care; empowering patients to have more control over their health; digitally enabling primary and outpatient care; and increasing the focus on population health. There are both synergies and opportunities available as part of the NHS LTP priorities and COVID recovery to embed sustainability and carbon reduction within existing and new models of care (MoC).
- When planning and commissioning new services the ICB will ensure this is included as a business-as-usual approach to clinical transformation and service redesign through adopting a sustainability impact assessment (SIA) process which in turn will provide assurances to the ICS Board, satisfying the requirements of the system board assurance framework (SBAF).

The four core purposes of an Integrated Care System (ICS) are listed below:

- improve outcomes in population health and healthcare
- tackle inequalities in outcomes, experience and access
- enhance productivity and value for money
- help the NHS support broader social and economic development

As part of these priorities, the following table in [Appendix 2](#) sets out proposed system approaches associated with the nine areas of focus whereby improved outcomes in population health and tackling inequalities in outcomes are demonstrated via reduced demand (RD), enhanced productivity and value for money are linked to both reducing costs (RC) and increasing productivity (IP) and helping the NHS support social economic development is achieved via social and economic development (SED).



Areas of focus

Our Green Plan has nine main areas of focus, each with their priorities set out within this ICS Green Plan Refresh.

These include:

1. Workforce and leadership,
2. Digital Transformation,
3. Net Zero Clinical Transformation,
4. Medicines,
5. Travel and Transport,
6. Estates and Facilities,
7. Supply Chain and Procurement,
8. Food and Nutrition,
9. Adaptation

Workforce and leadership



The Greener NHS staff campaign – Healthier Planet, Healthier People – has been developed to empower all of us to come together to build a more sustainable NHS with an ambition to become the world’s first net zero health service by 2040.

As part of the Green Plan, Staffordshire and Stoke-on-Trent ICS recognises that the workforce is key to ensuring our organisations are sustainable and every person has a part to play. We will do this by engaging with our staff and partners to define and deliver initiatives and broader sustainability goals.

We will also support the national campaign by helping employees discover how to become greener and how to improve health now and in the future. All staff are encouraged to join in and create a greener, sustainable health service in a way that is meaningful to them.

With more than 1.3 million NHS staff, small actions from all of us will add up to make a big difference.

Leadership

Staffordshire and Stoke-on-Trent ICS has identified Elizabeth Disney (Chief Transformation Officer) as executive lead and Helen Dempsey, Director of Planning, as the Senior Responsible Officer (SRO) for our Net Zero Carbon Programme with responsibility for ensuring the development of this Green Plan Refresh as well as leading its implementation. Each provider has an executive lead for the green agenda and Jon Rouse is Chief Executive Officer (CEO) lead for all things environmental across Stoke-on-Trent and Staffordshire local government.

By identifying leadership at the highest level, the ICS demonstrates its commitment to adopt the green agenda, creating a cascade effect across our organisations and throughout our workforce.

As part of establishing the green governance route, green will be embedded as part of business as usual throughout the ICB, incorporating it into existing governance structures, with the creation of working groups around key areas of focus feeding into the Greener Delivery Group, Strategic

Commissioning and Transformation Committee and ultimately the ICB Board.

In addition, the ICB will ensure green considerations are made throughout ICB decision making processes by implementing a Sustainability Impact Assessment (SIA), an approach already proven and demonstrated through Equality Impact Assessment (EIA) and Quality Impact Assessment (QIA) processes.

Green Champions

The ambition is to have individuals within each organisation that champion and drive forward the green agenda within their respective areas of expertise. There is an opportunity to join up existing green champions across the system to come together and influence how we as a system coordinate our approach to adopting the Green Agenda. As of December 2024, collectively across Staffordshire and Stoke-on-Trent Integrated Care System we have a total of 582 Green Champions.

Leading and championing through these individuals will allow for shared learning, common themes and areas for improvement that can be integrated as a focal point through the Green Champions combined system group.



Executive and Senior Leadership Training

A comprehensive understanding of the impact of climate change and the risk of inaction is imperative for key and influential decision makers. By focusing on training of executives and senior teams, this will ensure the green agenda is recognised and embedded as a key system priority.

We will be working with the NHS Greener Midlands team to trial an NHS-led sustainability training and shadowing opportunity tailored to executives, senior leaders and managers covering:

- How climate change is already impacting our health and health service
- How impacts can be minimised, now and in the future
- This training will allow for executives and senior decision makers to:
- Learn how to apply the Sustainable Quality Improvement framework to their roles
- Use this learning to inform their decision-making

If successful, it's anticipated this will be rolled out to providers across Staffordshire and Stoke-on-Trent ICS.

Carbon Literacy

Carbon literacy means understanding the carbon costs and impacts of everyday activities and being able to factor these into decision making to reduce emissions, both as an individual and collective. As of December 2024, there were 582 carbon literate staff across the ICS, and we aim to set an agreed target for this to increase annually over the next three years.

Mandatory Training

There is an ambition to build on the current success of making the 'Building a Net Zero NHS' course mandatory where a 97% (as of February 2025) completion rate was achieved across Integrated Care Board (ICB).

Whilst system partners have continued to increase the number of staff undertaking both the 30-minute NHS Net Zero training or the full carbon literacy training, there is an aspiration to increase uptake of core Greener NHS training offers by key staff groups (e.g. Leaders, clinicians in high-volume specialities, procurement and finance leads) across the ICS.

This can be achieved through embedding net zero into the complete staff journey, from job description and inductions to objectives and appraisals.

What we will do:

- Sustainable training and shadowing for key decision makers
- Promoting resource sharing and collaboration opportunities across the system and neighbouring ICSs.
- Increase climate change and green agenda awareness through green champions, providing opportunities for development, training and getting involved in system wide sustainability projects

- Ensure area of focus leads are in place to support delivery of key outputs for all areas of focus

Digital Transformation

The NHS has committed to becoming Net Zero by 2040 for the emissions it controls directly, and by 2045 for the emissions it can influence, through the goods and services that it buys from partners and suppliers. With between 10 and 15% of emissions across the healthcare sector coming from technology, digital sustainability is an essential component of reaching these net zero goals. Digital transformation brings many benefits for patients and staff, including sustainability benefits.



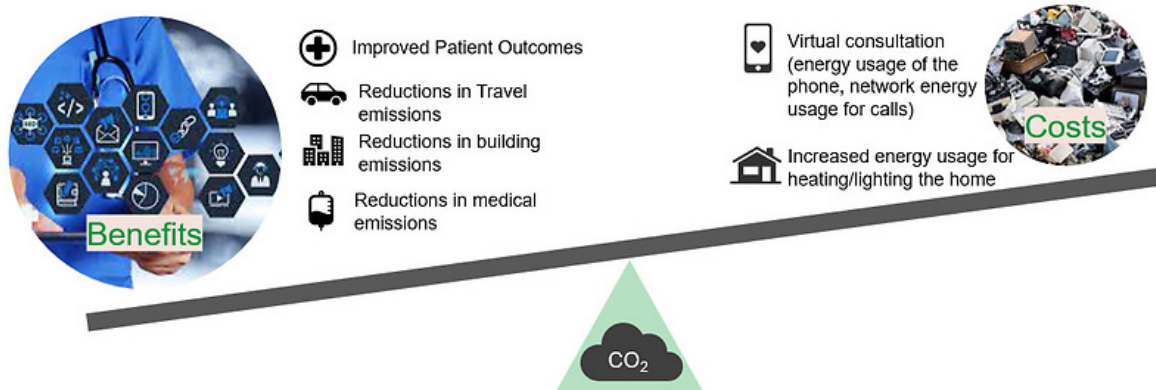
Adoption of digital tools

The adoption of digital tools is essential to reducing the carbon footprint and reliance on face-to-face appointments, transforming care delivery and reviewing care pathways. Moving forward we will put measures in place to promote wider understanding of what digital tools are already available and ready to be adopted, as part of the rollout of the Green Plan Refresh this can be raised at the Digital Design Authority (DDA). They should be able to support identifying what is already available within the system and who the best people are for system partner leads to contact.



Source: [Greener Digital Benefits - Greener Digital - FutureNHS Collaboration Platform](#)¹¹

The evaluation of carbon impacts for digital transformation is unique, whilst there are significant carbon emissions associated with technology itself, there are also carbon emissions that can be avoided through digital transformation and pathway/ service redesign. The above diagram illustrates the 'net gain' approach that should be taken when considering the carbon impact of digital technology. The example demonstrates the carbon reduction impacts of virtual ward.



Source: Greener Digital Benefits - Greener Digital - FutureNHS Collaboration Platform¹²

Virtual Ward

There are other digital technologies and tools that can be utilised and subsequently influence sustainable healthcare. Across Staffordshire and Stoke-on-Trent new ways of working and implementing digital technologies is leading to opportunities for new pathways and options for patients and clinicians, directly impacting on the greenhouse gas emissions associated with delivery.

Electronic Patient Record (EPR)

Our programme aims to onboard all our partners to the same EPR providing patients with care continuity and staff with holistic patient record increasing efficiency by ensuring staff have the right information at the right time to make the best patient care decisions. Our EPR will utilise digital technology to support patients in managing their conditions and where possible using technology to provide care data back to clinicians, driving down travel and making best use of our resources.

Artificial Intelligence (AI) and Robotic Process Automation (RPA)

Artificial Intelligence (AI) is an emerging technology, as a system we aim to use it wisely to improve the patient experience and pathway efficiency. In the future in line with our Digital and Data Strategy and our Federated Data Platform (FDP) programme which allows NHS teams to securely share and use data to improve healthcare planning and patient care AI will support us to make decisions on the needs of our patients helping to reduce waste.

We are currently using some remote monitoring AI technology which supports patients in their home reducing the number of hospital admissions. AI is also being used in administration work to assist in managing meetings and actions.

The system recognises the importance of understanding and capitalising on the emergence of Artificial Intelligence (AI) to help support staff by removing simple, repetitive tasks and allowing more time to be devoted to patient care and treatment.

Electronic Prescribing System (*please refer to Medicines section)

One Health and Care (OH&C)

One Health and Care is a confidential digital shared care record for people living in Staffordshire, Stoke-on-Trent, Shropshire, Telford and Wrekin and The Black Country. Implementation allows for data to be shared across care providers involved in health and social care including across multiple organisations leading to delivery of optimal and safer care.

It will ensure that ICS constituent organisations are connected to an integrated life-long health and care record, sharing data across NHS and local government organisations, and supporting collaboration at system, inter-regional and regional levels.

Benefits

- In addition to the clinical benefits, impacts on service delivery and patient care that are achieved through a streamlined approach to delivery of patient care, reducing duplication, improved clinical understanding and providing wider population health insights there are green benefits:
- Reduced emissions via improved data hygiene and less data storage within data centres
- Enabling full features of existing software to be utilised, enabling join up of system compatibility and saving on emissions from emails, phone calls and letters.

The NHS has committed to becoming a net zero carbon health service by 2045. Digital has a large part to play in this transformation to a net zero health service, but the impact of carbon emissions from digital technologies must be minimised to achieve this. Data centres are a significant source of carbon emissions within the digital sector due to the immense energy required to power and cool the vast amount of equipment needed to support data storage and computing. They are also potentially vulnerable to extreme events such as floods as with other infrastructure, but they also have particularly vulnerability to warmer and peak temperatures, because of the need for mechanical cooling. The NHS needs to carefully consider the placement and management of data centres due to the significant impact these will have on NHS services should they fail due to flooding or overheating, therefore both the emissions and monetary costs of adapting and cooling this essential infrastructure will clearly rise with climate change and this needs to be factored into adaptation planning, the ICS 10-Year Infrastructure Strategy and the organisations risk register.

Virtual appointments

Video and telephone consultations are popular with many patients due to the additional flexibility they provide. Feedback from trusts have shown patients saved time and money by not travelling, were less reliant on others to get to appointments, and that people found the experience less stressful and felt more comfortable in their own home.

Virtual appointments benefit the environment and are part of the NHS commitment both nationally and locally to reduce carbon emissions. However, it is recognised that virtual appointments are not accessible to all patients. There is also work being done to make virtual appointments more accessible for those with sensory impairments to ensure maximum availability. It's recognised that digital poverty can lead to exclusion, and we will work with Local Authorities to confirm where and when full fibre broadband is being rolled out across harder to reach communities within Staffordshire via the Governments Project Gigabit programme.

What we will do

- Work with the digital transformation team to ensure green targets are considered in projects linked to the 12 digital initiatives
- Continue monitoring progress of One Health, One Care and other digital systems and ensure all associated greenhouse gas emission reductions and sustainability benefits are captured and measured
- Explore options for a hybrid approach to carbon monitoring of IT hardware, infrastructure and software

- Review full features of existing software to ensure all paid for and suitable additional options that save energy are active and align this across system partners
- Identify restrictions to virtual appointments and monitoring, once identified work with system partners to address these collaboratively
- Support the procurement of digital technologies ensuring suppliers meet Net zero standards as well as endorsing lower carbon producing replacement of hardware where possible.
- Work with IT to extend the life of hardware where feasible (e.g. hardware is working, supported and cyber secure)
- Explore use of digital tools and systems to support clinical decision making to deliver lower emission care
- Engage with clinical staff and patients to design ways to enable patients to manage their own care through open information sharing and using telehealth and wearable technology where appropriate and safe to do so
- Promote system join up on carbon and resource saving measures such as digitisation of patient letters, hybrid working and electronic prescribing services (EPS) and agree standardised measures across system partners to monitor impacts



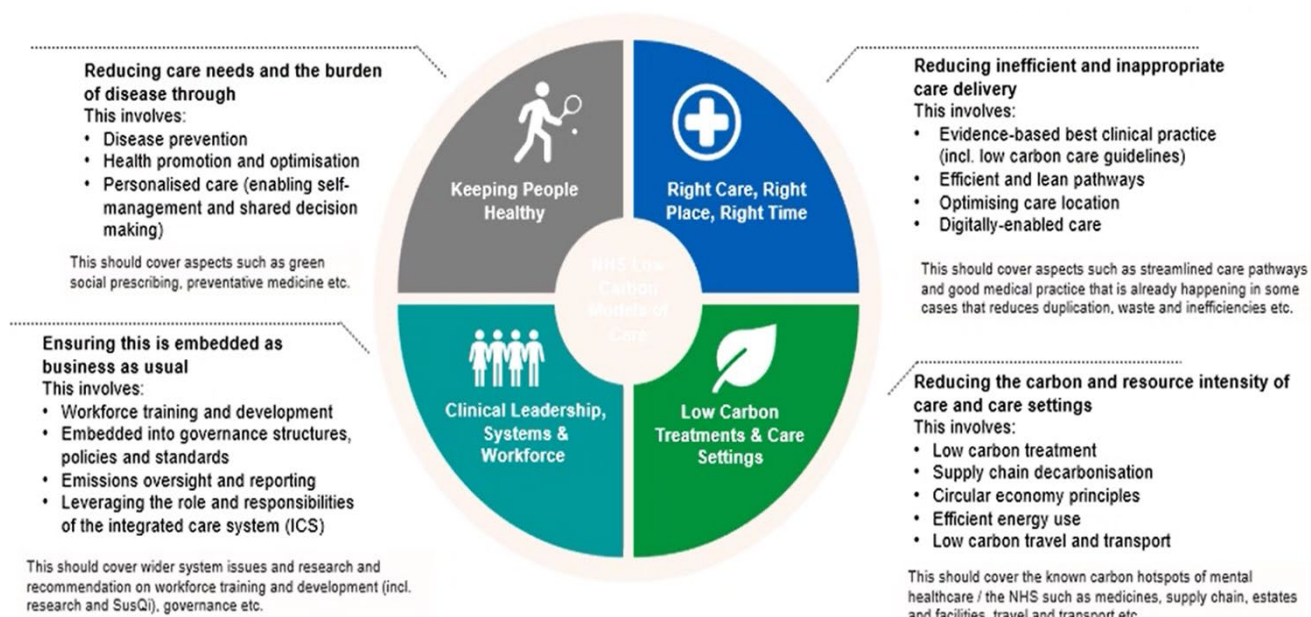
Net Zero Clinical Transformation

Climate change poses significant challenges to health, contributing to respiratory and cardiovascular diseases and increasing demand on NHS services. Early and accurate Diagnostics are vital for reducing emissions by minimising unnecessary treatments, hospital visits, and resource use. Utilising areas such as digital diagnostics, remote monitoring can help decrease patient and staff travel, which currently accounts for 14% of NHS emissions.

Beyond environmental impacts, having Greener Diagnostic practices will improve patient convenience and reduce costs, aligning with the NHS's mission to provide high-quality care for future generations. Clinical service transformation can support demand management, system efficiencies whilst also improving clinical health outcomes and quality of care for patients.

The NHS Long Term Plan (LTP) and Staffordshire and Stoke-on-Trent ICS Joint Forward Plan sets out a commitment to deliver care in new ways for the future. There must be a focus on reducing carbon emissions and environmental impact must be considered as part of care design and clinical service transformation through pathway redesign, digitalisation and supporting cost improvement programmes. Thought needs to be given to ensure clinical pathways reflect the most appropriate care journey for patients whilst also considering the most sustainable delivery models. Implementation of sustainability impact assessments (SIA) across the ICS will support decision makers when redesigning pathways and implementing new policies.

Low Carbon Models of Care



Source: NHSE Greener Diagnostics Virtual Event Presentation (December 2024)¹³

An example of an alternative clinical care delivery model which improves sustainable care delivery is the implementation of virtual wards across ICS's. There is growing connection between clinical care and digital transformation through virtual ward and telemedicine, it's recognised that further work is required to develop this area within Staffordshire and Stoke-on-Trent ICS but there are benefits to be achieved via key measures across multiple portfolios by matrix working and developing new pathways and models of care.

The Centre for Sustainable Healthcare's Principles of Sustainable Clinical Practice¹⁴ should be considered as part of clinical transformation to improve patient outcomes while minimising the environmental, social, and financial costs:

- Prevention - early identification of patients with declining kidney function can reduce the number of people going on to require carbon intensive dialysis
- Patient empowerment and self-care - patients with good inhaler technique need fewer inhalers and achieve better asthma control
- Lean care systems - adherence to prescribing guidelines for flupentixol decanoate by reducing the frequency of doses from two- to six-weekly, saves travel, equipment, money, and time
- Low carbon alternatives - the carbon footprint of one hour of general anaesthetic is equivalent to driving 190 miles (300 km) using inhaled desflurane compared with only 4 miles (6.5 km) using inhaled sevoflurane.

Care delivery model examples include:

- Integrating virtual wards within Urgent and Emergency Care (UEC) pathways, reducing demand on acute hospital services reducing bed days through enabling patients to be reviewed and monitored within their home.
- Clinical pathway redesign to support care closer to home through community service transformation e.g. Movement of clinical services from the acute setting to more appropriate clinical settings such as Primary Care through a neighbourhood health model.

Alternative diagnosis and treatment processes to reduce carbon, costs and improve patient care. It is important to consider the whole pathway when making decisions around diagnostic methods/ products and treatments as actual cost may not be a good indicator to overall impact, as impacts such as patient outcomes, frequency of appointments and better disease control also need to be considered.

- For example, unit cost of a reusable tourniquet is initially higher than a single use tourniquet. However, this can be used up to 10,000 times, leading to a carbon footprint that is almost 5 times lower and savings of almost £200 per tourniquet. In addition, patient acceptability and experience is also improved (Ref: [Reusable tourniquets: their impact on patients, planet and public purse | Nursing Times](#))¹⁵

Carbon savings will mainly come from reduced presentations in Accident and Emergency (A&E), department, primary care, and outpatients – leading to reduced staff and patient mileage. Reduced bed days, fewer pharmaceuticals prescribed, and less-intensive procedures will also make a significant contribution to lowering the ICS' carbon footprint.

Staffordshire and Stoke-on-Trent ICS will work not only with clinicians but across local organisations to consider pathways or clinical specialities that could be decarbonised and learn from best practice that can be shared. Maternity services is an area where new learning and knowledge is being developed and shared as part of the national Green Maternity Challenge, led by the Centre for Sustainable Healthcare.

The ICS will support the adoption and spread of clinical carbon reduction innovations, for example, through areas of focus working groups and Green Plan workshops consisting of key system partners, connecting the NHS organisations, academic organisations, local authorities, VCFSE.

As part of the transformation process, standard metrics should be agreed to measure impacts. In addition to the clinical impacts/ patient outcomes and cost reduction, environmental and social impacts should also be measured.

Greener Primary Care – Transforming delivery

Healthcare delivery has an environmental impact and generates greenhouse gas emissions, with primary care being responsible for approximately 25% of the overall NHS generated carbon dioxide equivalent emissions.

- 40% of the emission footprint is due to non-clinical carbon from the running of the practice including energy use, transport of staff and patients, business services and procurement.
- 60% is due to clinical – pharmaceuticals and chemicals and gases from inhalers.

The main contributors in primary care for non-clinical carbon emissions are dependent on the practice list size, location, building type and services provided.

These may include:

- Energy use – for both gas and electricity
- Travel – for both patients and staff
- Business services – covering accountancy, IT, waste services etc.

- Procurement – covering medical and non-medical equipment and consumables

Other areas such as water, food and drink and recycling are responsible for smaller proportions of emissions but can present an opportunity for reducing emissions within practice carbon reduction plans.

The Royal College of General Practitioners (RCGP) recognises reducing NHS carbon emissions as a key strategic priority which is critical to the future of health⁹. It is recognised that greener healthcare strategies can also lead to a gold standard of care, improved patient experience and outcomes, and healthier and happier lives, in addition to delivering benefits to primary care.

There is opportunity for primary care providers to contribute to system-wide emissions reductions through sharing of best practice and providing peer to peer strategic leadership in addition to implementing key measures and actions at practice level and through overarching structures such as primary care networks and primary care committees.



Benefits to Primary Care¹⁰

- Positive physical and mental health impacts on staff and patients
- Business continuity and resilience allowing us to continue to provide care to our patients
- Financial savings by improving efficiency, reducing waste and changing service delivery models i.e. Community Based/ Neighbourhood Models
- Minimised reputational risk by demonstrating that we recognise the impact healthcare has on the planet
- Safer and fairer communities by recognising and addressing the health impacts of climate change, which exacerbate existing inequalities

Opportunities:

- Royal College General Practice (RCGP) - E-learning completion to improve understanding across GP practices
- Respiratory and asthma – continue inhalers (DPI) promotion – clinical review – better condition management – explore inhaler recycling
- Continue Structured Medication Reviews (SMR) – Polypharmacy – multiple medicines prescribed to one patient – opportunity to review and reduce medicines – Core GP contract – Primary Care Network Directed Enhanced Services (PCNDES) – share staff (Additional Roles & Reimbursement Scheme - ARRS), resources and premises
- Nonclinical waste – improved recycling provisions – reduced single use plastics through procurement – separate food waste containers
- Staff incentives – reusable water bottles – EV and active travel infrastructure
- Wellbeing and adaptation – wellbeing gardens/ outdoor spaces (green estates) – outdoor waiting areas – improved ventilation within GP practices – increase opportunity uptake of planting schemes e.g. NHS Forest
- Carbon literacy and green champions – Signpost to Toolkits – The Royal Pharmaceutical Society [Greener Pharmacy Toolkit](#) is a free to use digital self-assessment tool
- Digital (patient focused – remote appointments/ direct patient control of appointment management and project support tools) – Patient Communication (SMS/ AccuRx)
- Decarbonisation and energy efficiency of primary care estate
- Build on GP Practice and Community Pharmacy links - Patient wellbeing – social prescribers – active travel promotion – nature – exercise – diet (plant based) – improved outcomes for long term condition prevention/ progression (primary and secondary prevention) – health promotion/ public health links (LA) – Waiting Room Television Screens (promotional material – check practice and LA controls over material plus opportunity to publicise asthma (DPI) and medicine reduction/ wastage – Birdie (Air Quality Monitor) within patient waiting rooms
- Expand Patient Ordering Direct (POD) – reduce medicine waste through ordering control measures (Add this to Greener Dashboard)
- Primary Care working group to be launched – thoughts on whether it needs own meetings with practices involved (managers or partners) or needs to be seen on its own as a standalone group

What we will do:

- Review impact of existing services/ measures e.g. Virtual Ward. Convert this to actual number of journeys avoided and calculate carbon saved. Set targets for a reduction in hospital admissions and delayed discharges.
- Embed carbon-reduction principles through SIA adoption, considering options of lowest carbon impact where clinically appropriate.

- Care for patients at or closer to home – work across all services to reduce unnecessary patient journeys, if clinically appropriate to do so.
- Increase use of digital technology when designing clinical pathways and services



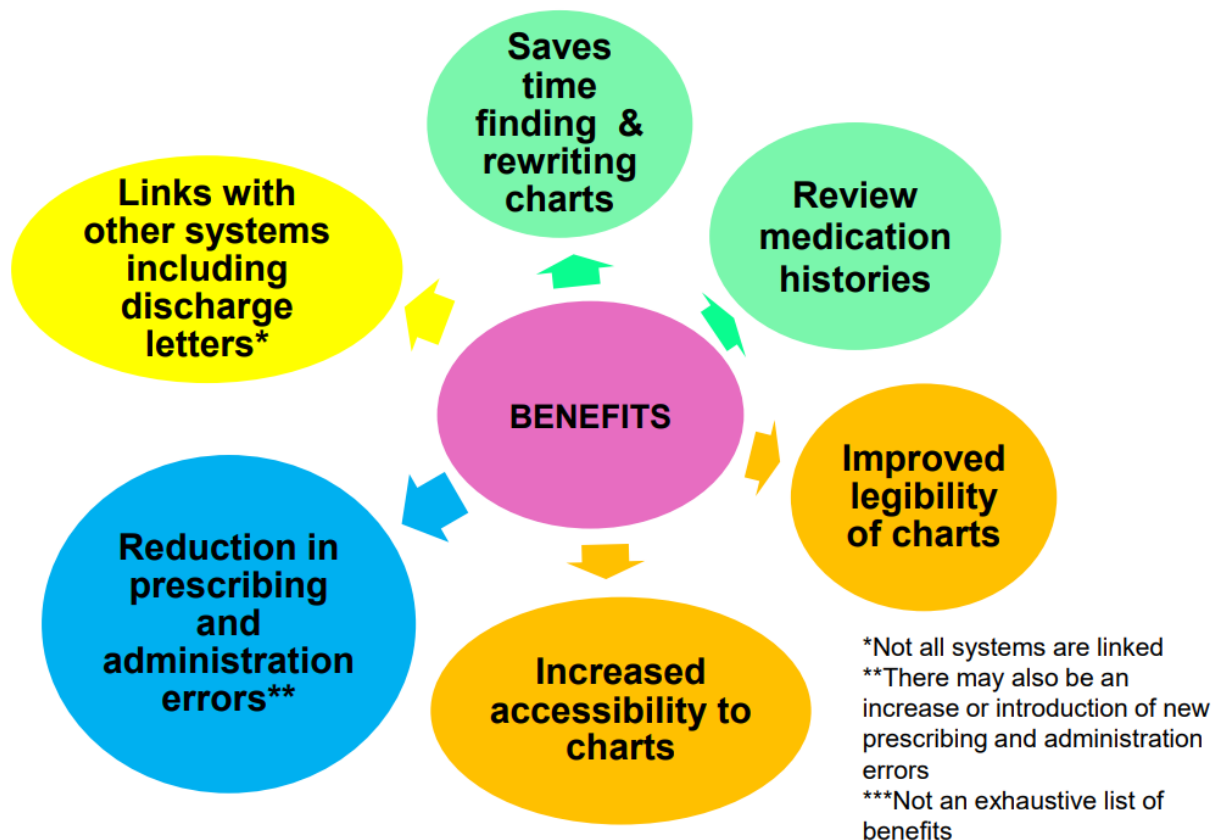
Medicines

Medicines account for about 25% of emissions within the NHS in England. A small number of medicines account for a substantial proportion of these – particularly anaesthetic gases, and nitrous oxide which account for around 2% of NHS emissions, while inhalers account for around 3%.

The NHS Long Term Plan pledges to reduce the negative effect the NHS has on the environment, to help to build a more sustainable NHS. Part of this negative effect can be managed through better use of medicines which also have a reduced impact on the environment. Implementation of systems and processes to support prescribing can further improve the approach to reducing emissions associated with medicine use. Such examples include digitalising the prescription and administration processes; Electronic Prescribing and Medicines Administration system (EPMA) is a digital system removing the need for paper drug charts for inpatient administration. Digitalisation of this process not only reduces risk of error and improves patient safety, but it also improves efficiency of processes relating to medicines in addition to introducing other benefits around formulary compliance and oversight. Through improved efficiency and reduced duplication this is supportive of the green agenda demonstrating cost savings and greenhouse gas emission reductions through reduced waste and reduced use of paper and ink, in addition to increasing productivity.

The national drivers for implementation of EPMA and the benefits have been demonstrated by [National Patient Safety Agency \(NPSA\)¹⁶](#), [National Institute for Health and Care Excellence \(NICE\)¹⁷](#) and there have been National examples of implementation and the benefits: [Using an electronic prescribing and medicines administration system \(EPMA\) in high secure services - Mental health digital playbook - NHS Transformation Directorate¹⁸](#).

Benefits of EPMA systems

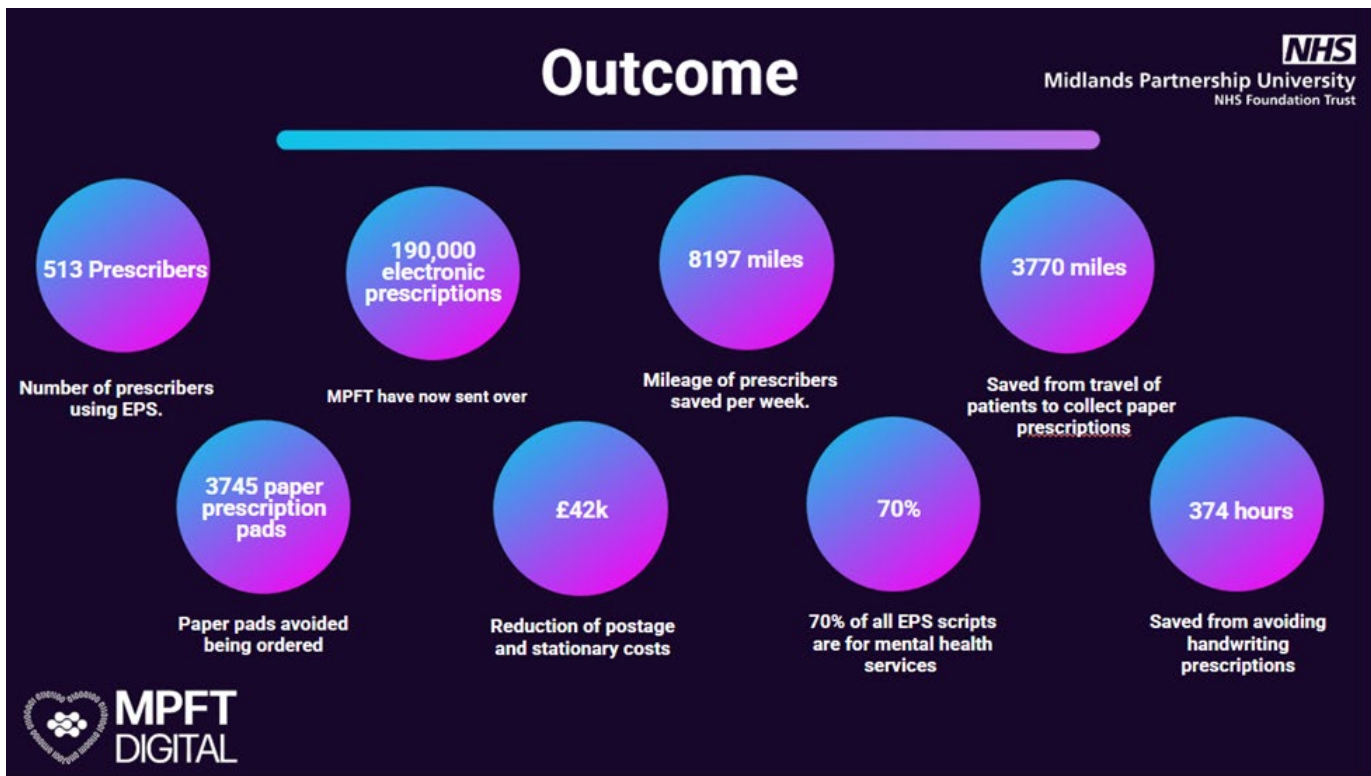


PowerPoint Presentation¹⁹

Nationally there has been an introduction of EPMA across hospital trusts and locally this is in the process of being adopted across Staffordshire and Stoke-on-Trent ICS providers. A local example from MPFT is provided within the case study section.

Electronic Prescription Service (EPS)

The introduction of an Electronic Prescription Service (EPS) has made the prescribing and dispensing process more efficient and convenient for patients and healthcare workers through allowing prescribers to send prescriptions electronically to a dispenser, such as a pharmacy, nominated by the patient. Whilst not mandated, nationally EPS has been widely adopted with over 95% of all prescriptions in England now being produced electronically within primary care. The EPS system removes the need for paper scripts, postage costs, or physical delivery of scripts as well as enhancing prescription security so that there will be no more lost/ stolen/ misplaced/ defaced scripts.



Anaesthetic gases

Anaesthetic gases have extremely high global warming potential. For example, one litre of desflurane has the equivalent CO₂ emissions of driving a diesel car from Land's End to John O'Groats and back seven times. Since April 2024 desflurane use has been decommissioned and restricted for use in exceptional circumstances as outlined within the [NHSE Guidance: Desflurane decommissioning and clinical use](#)²⁰ and published by the Neuro Anaesthesia and Critical Care Society (NACCS).

Nitrous Oxide

Nitrous oxide and nitrous oxide/oxygen mixture, also known as 'gas and air' are used in a variety of settings across the NHS. Recent work has shown that the way these gases are supplied, through medical gas pipeline systems, can cause significant waste. Evidence shows leaks in these supply systems, alongside other issues, cause around 75% – 99% of the gases to be wasted.

Further reductions in nitrous oxide emissions across Staffordshire and Stoke-on-Trent ICS are planned to be achieved through Trust implementation of measures outlined in [Nitrous oxide toolkit: Reducing waste in NHS trusts - UCLPartners](#)²¹ including:

- Roll-out of portable cylinders, enabling the decommissioning of pure Nitrous Oxide manifolds.
- Implementation of alternative gaseous anaesthesia e.g. Pentrox

UHNM Case Study

Reducing emissions from Nitrous Oxide and Entonox is part of the Trust's Green Plan commitments.

Internally progress is monitored at the 6 weekly Nitrous Oxide Waste Review Meeting and reported to the Medical Gas Committee, Estates Divisional Board Meeting and the bi-annual Sustainable Development Steering Group.

The Trust is also committed to the system ambition to reduce anaesthetic gas emissions by 9-14% agreed with the NHSE regional green team.

Progress is monitored through the ICS Greener Delivery Group and reported to the ICS Medicines Steering Group

Success to date:

391 tonnes of CO2e reduction in 2024/25 compared to 2019/20 baseline which equates to a reduction in emissions of 15%.

| Carbon Emissions | Apr - Mar 2019/20 | Apr - Mar 2024/25 | % Reduction | tCO2e Reduction |
|--------------------------|-------------------|-------------------|-------------|-----------------|
| Nitrous Oxide and Oxygen | 1,794 | 1,466 | 18% | 328 |
| Nitrous Oxide | 868 | 805 | 7% | 63 |
| Total | 2,662 | 2,270 | 15% | 391 |

Inhaler prescriptions

The NHS Long Term Plan has set an ambitious target to reduce absolute inhaler emissions by at least 50% by 2028. Certain inhalers contain a potent greenhouse gas known as a propellant, which allow delivery of medicine into the patients' lungs. These types of inhalers are known as metered-dose inhalers (MDIs). While the gas itself is not harmful to inhaler users, the emissions from exhalation and in the disposal of the devices, has a powerful carbon footprint effect.

There are, however, alternatives to MDIs, such as dry powder inhalers (DPIs). These devices can reduce the carbon footprint of inhalers by up to 95%, the equivalent of a journey of 175 miles for an MDI, to a journey of four miles for a DPI. Through review of patients inhalers, the carbon impacts of inhaler devices can be reduced through prescription of an alternative lower carbon inhaler device, review of treatment and improvement in disease control and reduced waste. There is also an opportunity to benefit the green agenda further by promoting appropriate disposal of inhaler devices.

Locally within Staffordshire and Stoke-on-Trent Integrated Care System projects relating to asthma management in adults and children are being implemented within Primary Care such as the SENTINEL project for adults and children's and young persons (CYP) asthma project. These projects will complement and facilitate the delivery of the outcomes described above.

Wasted medicines

This presents a problem not just for the patient's care, but also is a huge area of wastage in the NHS. As part of the medicines optimisation agenda, the RPS looks to tackle unnecessary prescribing, improving medication adherence and promoting proper disposal of unused medications²².

- An estimated £300m of medicines go unused, of which approximately half is recoverable
- It is estimated that waste or unused medicines cost the NHS around £300 million every single year – an estimated £110 million worth of medicine is returned to pharmacies, £90 million worth of unused prescriptions is stored in homes and £50 million worth of medicines disposed of by care homes according to a Department of Health report. There is an estimated £500m opportunity cost from people not taking their medicines as intended.

Causes of medicine waste:

- Over-ordering of medicines
- Continuing requests for repeat medication that are no longer required

- Patients not taking medicines as prescribed
- Poor repeat prescribing system
- Increased workload associated with issuing seven-day prescriptions and use of compliance aids when medicines are dispensed – leads to an increased number of journeys either by the patient to collect the medicines, or the pharmacy delivery driver delivering them
- Many compliance aids are made from single-use plastics or cardboard, meaning that they cannot be recycled.

Measures to be taken to tackle medicines wastage include ensuring appropriate prescribing, improving medicine adherence, prevention of over ordering and safe and appropriate disposal of unused medicines.

Overprescribing can occur when patients are prescribed multiple medicines, sometimes to address side effects caused by other medicines, this can lead to complex polypharmacy (prescribing of multiple medicines). There is opportunity to review a patient's medicine by undertaking a structured medication review (SMR) to ensure they receive the appropriate and necessary treatment, improving the treatment of their condition and clinical outcomes in addition to reducing adverse effects and potential harm. Taking fewer medicines can also improve a patient's compliance to their treatment, with medicines being taken as intended.

Structured medication reviews (SMRs) can be used to review patients identified as having problematic polypharmacy. They provide a comprehensive and clinical review of a patient's medicines and detailed aspects of their health, and are facilitated by shared decision-making conversations with patients around whether medicines are safe, effective and personalised to their needs and current situation.

“SMRs are the best tested intervention for reducing problematic polypharmacy; estimates for the percentage reduction in the number of medicines a patient is taking range between 2.7% ([Baqir et al, 2017](#)) and 9.9% ([Appendix D: Health Economics Analysis of Polypharmacy Reviews](#)). In care homes, SMRs can reduce the number of medicines a person takes by around 19.5% ([Baqir et al, 2017](#)), although this population is not representative of the general population experiencing polypharmacy”. Source: [NHS England » National medicines optimisation opportunities 2024/25²³](#)

Delivery of economic benefits to the wider healthcare system can also be achieved through SMRs, with direct medicines cost savings and potential savings from avoided healthcare resource usage.

The introduction of patient ordering direct (POD) services, use of ordering apps e.g. Patient Access and NHS App can help to support measures for prevention of over ordering medicines. Locally across Staffordshire and Stoke-on-Trent Integrated Care System (SSoT ICS), a pilot is in place to trial the introduction of POD services for prescription ordering. If successful, this may be introduced more widely across SSoT as an option for patients. The introduction of POD to date has led to a reduction in medicines waste with an actual decrease of 1.33% (4,255 items) being seen across GP practices implementing POD. When compared to overall prescribing trends across SSoT ICS (excluding POD GP practices), this is a projected reduction in items prescribed of 5.12%. Based on the reported savings figure for POD to date this equates to an approximate greenhouse gas emissions saving of 11,783kg CO₂e²⁴.

What we will do:

- Continue to use and roll out the EPS to reduce prescriptions' paper usage.
- Expand the use of the EPMA process to reduce paper usage.

- Focus on reducing waste medicine and introduce medicine recycling schemes
- Aspiration to broaden carbon emission traffic lighting system beyond inhalers and apply to all medicines where possible
- Implement respiratory review service in primary care to review inhaler.
- Undertake structured medication reviews to reduce unnecessary treatments and medicine wastage
- Review outcomes from Prescription Ordering Direct (POD) trial and consider wider roll out to reduce medicine waste



Travel and Transport

Approximately 3.5% (9.5 billion miles) of all road travel in England relates to patients, visitors, staff, and suppliers to the NHS. This comprises around 14% of total NHS emissions – action in this area can make an important contribution to overall carbon reduction. Sustainable travel plays a significant part in reducing traffic on the roads, promoting health and wellbeing through exercise, and improving local air quality. Lower emissions equate to fewer admissions.

National strategies such as the Department for Transport: Decarbonising Transport – A Better, Greener Britain²⁵ has referenced the importance for all new developments to be reachable by cycle, foot and public transport, the NHS is no exception.

“The public sector, too, must play its part. Too many recent developments by bodies such as the NHS, including many new hospitals, have been on out-of-town sites which are difficult to reach by public transport. As well as generating car traffic (and difficulties with parking), such sites are inherently less inclusive to patients who cannot drive. Future developments must be more accessible to public transport, walking and cycling.”

Therefore, it is important that the locations from which our health and care services operate are well-served by bus, rail, and other public transport links, that they have good and accessible pedestrian facilities which are inclusive and accessible for people with all levels of abilities, are reachable by safe cycle routes, have secure cycle storage and provide charging points for electric vehicles.

The ICS is working together to deliver a step-change in sustainable travel by growing passenger transport and active travel. All work is achieved in partnership, with a focus on avoiding unnecessary motor vehicle trips, encouraging residents to shift to sustainable transport by improving bus provision, and improving the sustainability of any essential journeys by developing active travel options and a strategy for electric charging points.

Staffordshire County Council and Stoke-on-Trent City Council have agreed a Joint Strategic Transport Statement ([Appendix 1 A Collaborative Vision for Staffordshire and Stoke-on-Trent City Council - Joint Strate.pdf](#))⁵ looking at electric vehicle (EV) infrastructure, active travel, improving public transport and looking at sustainable transport plans to address the fact 26% of UK's total emissions come from travel. The Joint Strategic Transport Statement, developed collaboratively by senior leaders at Stoke-on-Trent City Council and Staffordshire County Council, outlines a

series of shared priorities to modernise and enhance transport infrastructure, benefitting the local population across the Staffordshire and Stoke-on-Trent ICS footprint.

- **Enhancing Public Transport:** A focus on an accessible and integrated public transport system: connecting communities, reducing congestion and emissions, expanding bus services and introducing integrated ticketing systems.
- **Supporting Zero-Emission Infrastructure:** Committed to addressing whole life carbon including user emissions and embodied carbon. Measures to decarbonise bus and taxi fleets while increasing access to residential electric vehicle (EV) charging as well as addressing carbon in the construction and maintenance of highway infrastructure.
- **Improving Road Networks:** Maintenance and enhancement of key road corridors, improved road safety through better design and enforcement, and optimised traffic management that meet economic growth, climate adaptation and carbon reduction targets.
- **Encouraging Active Travel:** Expanding cycle networks, improving pedestrian routes, and ensuring new housing developments support walking, wheeling, and cycling. Both Councils are committed to ensuring walking and cycling is the best choice for shorter journeys, preventing premature deaths from physical inactivity helping to 'Build an NHS fit for the future'.
- **Investing in Digital Modernisation:** Implementing smart traffic management systems and real-time travel information services to enhance users experience and allow for more reliable journey planning and safety.

The ICS intends to link in and develop combined approaches with both Councils as part of the Travel and Transport Working Group and develop an ICS Sustainable Travel Strategy by December 2026.

This will look to address key areas such as:

- Active travel infrastructure
- Air Quality
- Sustainable public transport
- EV charging infrastructure & incentives
- Behaviour Change

A collaborative approach across the Integrated Care System (ICS) is key to addressing key measures and wider determinants of health such as air pollution, exercise and active travel which influence long term conditions and outcomes such as respiratory and cardiovascular diseases.

The ICS Travel and Transport Strategy will address approaches to reduce greenhouse gas emissions and incentivise sustainable methods of travel which in turn, will have environmental and health benefits. In addition, the strategy will capture the current position across Staffordshire and Stoke-on-Trent ICS and identify/ address any key barriers to progressing a sustainable travel and transport agenda (e.g. Key infrastructure improvements, contractual constraints and conditions, procurement).

Possible sustainable travel measures include:

- Cycle and Electric Vehicle Salary Sacrifice Incentives

- Reduced reliance on face-to-face meetings and appointments, reducing the need for travel e.g. Home and hybrid working/ virtual appointments and remote monitoring (links to digital transformation agenda)

Staffordshire County Council are undergoing a number of key developments through the Local Transport Plan update and Bus Service Improvement Plan (BSIP), this combined with the results of their Climate Change Survey 2023 which identified that many respondents are already taking action to reduce use of their cars and take up more forms of active travel which is mutually beneficial to both the green and preventative agenda within the NHS.

Stoke-on-Trent City Council (SoT CC) are also updating their Bus Service Improvement Plan (BSIP) and Local Transport Plan.

What we will do:

- Work with Local Authorities to improve patient and staff choice in sustainable travel options with a key focus on promoting active travel
- Develop sustainable travel strategy and incorporate into trust and system Green Plans.
- Identify local/regional grid capacity and work with local network operators, local authorities and other system partners to plan for increased capacity where necessary and ensure appropriate EV infrastructure is available
- Explore joint funding opportunities with Local Authorities and create a project pipeline
- Offer only zero-emission vehicles through vehicle salary sacrifice schemes from December 2026 onwards



Estates and Facilities

Emissions relating to the estates and facilities services span both the NHS Carbon Footprint and the NHS Carbon Footprint Plus, accounting for more than 60% of the NHS Carbon Footprint (mostly due to emissions from energy use) and a significant proportion of the NHS Carbon Footprint Plus through staff travel, construction, catering plastics and capital spend, as well as food and the wider £9 billion estates and facilities annual supply chain spend. In addition, NHS providers in England produce approximately 156,000 tonnes of clinical waste each year that is either sent to high temperature incineration (HTI) or for alternative treatment (AT), which is equivalent to over 400 loaded jumbo jets of waste. This has a significant environmental impact and is associated with high running costs and carbon emissions ([NHS England » NHS clinical waste strategy](#)).²⁷

Staffordshire and Stoke-on-Trent ICS is developing a 10-year infrastructure strategy to align to the systems clinical vision, supporting the delivery of the NHS Long Term Plan, and ensuring efficient use of resources. This strategy aims to address access and demands of services and meet future needs, ensuring the system can use the estate to support the transformation of services, bringing health and social care together for the community in a more integrated way. It will incorporate requirements from NHS trusts and primary care network estates and support national strategic plans. The strategy will seek to maintain pace on the contribution towards the NHS commitment to achieving net zero emissions by 2040. Successful implementation will allow for improved cost effectiveness, productivity and efficiency, reducing running costs and carbon emissions. For every

£187 spent in the NHS, £1 is spent on building energy. This is the single biggest area that estates and facilities can influence, as it makes up 41% of the NHS carbon footprint. It is an ambition of the ICS to ensure that more renewable energy sources are utilised at NHS buildings across Staffordshire and Stoke-on-Trent ICS.

Building this working partnership will enable collaboration with local system partners to ensure estate decarbonisation planning aligns with local priorities, infrastructure plans (for example, heat networks) and funding opportunities as well as ensuring use of renewable energy by investing in on- or near-site renewable energy generation to meet NHS energy demand is fully mapped out in terms of site suitability and long term infrastructure plans with the national grid to align with the Government's Clean Power 2030: Action Plan: A new era of clean electricity²⁸. The highly anticipated release of The Solar Taskforce – Solar Roadmap scheduled for Spring 2025 will be a key tool for enabling this key national requirement. Renewable technologies including solar panels, wind turbines, ground-source pumps, biomass installations, air source pumps, and solar water heating have already been incorporated within several provider trusts and in general practice across Staffordshire and Stoke-on-Trent Integrated Care System.

District Heat Network (DHN)

UHNM continues to work with Stoke-on-Trent City Council and Scottish Southern Energy to develop the plans for district energy network connections. This includes both heat and electricity from the proposed replacement energy recovery facility at Hanford. A business case is being developed to secure approval to enter into heat and power purchase agreements. The connections are expected to come online in 2030-2031. These will enable the decarbonisation of both heat and power at Royal Stoke.

Local Nature Recovery Strategy (LNRS)

The Staffordshire and Stoke-On-Trent the Local Nature Recovery Strategy (LNRS) is a legal framework for enhancing and restoring the natural environment in our area.

The LNRS is currently being developed by Staffordshire County Council, working closely with Stoke-on-Trent City Council, our district and borough councils in the area, the Peak District National Park Authority and Natural England, alongside other partners.

The main purpose is to identify locations to create or improve habitat that will most likely be of greatest benefit to nature and the wider environment. This is an area that the NHS wishes to contribute to and address the decline in nature within the UK and ensure biodiversity net gain (BNG) and habitat improvement is factored into all estate and facility development plans and continue to build local partnerships for the benefit of a collective cause.

Local Area Energy Plan (LAEP), what's happening locally and how we are getting involved?

In early-2025, National Energy System Operator (NESO)²⁹ became responsible for producing Regional Energy Strategic Plans (RESPs) for England, Scotland and Wales. The plans will help ensure that local areas get the energy infrastructure they need to meet local net zero and growth ambitions. The RESPs will form part of NESO's wider strategic energy planning activities, ensuring a joined-up approach between national, regional and local levels.

The ICS will be joining the local forum with the intention to:

- Learn more about NESO and our RESP role

- Meet the RESP team for your region/nation
- Share the energy issues that are most important for our local area
- Play a key role in ensuring our area gets the electricity and gas distribution infrastructure it needs to grow and decarbonise
- Contribute to the Transitional RESP (or tRESP) project, which is focused on supporting the development of the electricity distribution network operator (DNO) business plans for their next investment period, 2028-33, also known as RIIO-ED3
- Contribute to the methodology for how we'll produce the RESPs, starting in 2026

There is a clear synergy between these approaches and adaptation, ensuring potential risks to service continuity, patient and resident health along with environmental impacts are widely understood across the geography of Staffordshire and Stoke-on-Trent Integrated Care System enabling health care leaders and system partners to improve alignment and collaborate on identifying where infrastructure investment is required and prioritise efforts to reduce the risk of detrimental impacts.

In line with the NHS Net Zero Building Standard³⁰, all new buildings and upgrades to existing facilities need to demonstrate that they are sustainable, resilient and energy efficient. Transitioning away from fossil-fuel energy usage will continue to be a priority that will be addressed as part of the ICS 10-Year Infrastructure Strategy. There are further opportunities to support implementation of decarbonisation strategies and measures through accessing appropriate funding streams such as Public Sector Decarbonisation Scheme (PSDS) and Nationally available schemes such as the Boiler Upgrade Scheme and Great British Energy solar scheme.

Primary Care

There is a commitment from primary care to work together within and across the Primary Care Networks (PCNs), to achieve as sustainable working practices as possible. The ICS 10-Year Infrastructure Strategy will need to consider how Primary Care can support the Green Plan delivery setting out a clear approach on how PCNs will reduce their carbon footprints and widen their social value.

As set out within the Clean Power 2030 Action Plan²⁷ “Local and community power generation can contribute significantly to the prosperity of local places, driving down electricity bills, encouraging people to engage with the green economy, providing energy resilience, and promoting skilled jobs”. This will benefit residents and local businesses such as GP practices through accessing lower cost green energy tariffs.

We are fortunate within Staffordshire to have two well established academic institutions in the form of Keele University and University of Staffordshire, there are clear opportunities to develop pathways in terms of current and future students to be made aware of the opportunities within the NHS that go beyond clinical and are actively combatting climate change and the NHS's contribution to greenhouse gas emissions. The ICS has developed a proposal with Keele University and engaged with the School of Geography, Geology and the Environment to work with Environment and Sustainability students to establish two student led projects, working on Primary Care with one focusing on exploring decarbonisation options for Primary Care estate and the other on adaptation to identify what and where impacts of prolonged extreme weather events will have on Primary Care estate and the wider integrated care system. The outputs will help feed into developing a programme of work for Primary Care and demonstrate the potential for building on workforce resilience and career pathways in sustainability within the NHS for both universities and

promoting the different career paths, as well as undertaking research, feasibility studies and carbon audits of service areas.

It's a legal requirement for NHS Providers to comply with waste legislation and regulations. A strong waste strategy will be a crucial in reaching net zero targets by 2040 and will need to be a key area of focus for the ICS 10-Year Infrastructure Strategy. The Clinical Waste Strategy 2023²⁶ sets out the following deliverables over the next 5 years.

- **2024:** All clinical waste generated by NHS providers is regularly reported with a minimum of 95% accuracy (Area: Data)
- **2026:** 50% reduction in carbon emissions produced from waste management in NHS organisations (leads onto 80% reduction in carbon emissions by 2028) (Area: Sustainability)
- **2026:** All NHS providers achieve clinical waste segregation targets of 20:20:60 HTI (high temperature incineration), AT (alternative treatment), and OW (offensive waste) (Area: Compliance)
- **2030:** The average net cost of clinical waste management reduces by 15% per tonne of waste (Area: Commercial)

New requirements for waste collections came into force on the 31st of March 2025 resulting from the Environment Act 2021³¹. The new requirements aim to improve recycling rates and standardise recycling practices by having a simpler recycling system where we can recycle the same items at home, work or school. There will be new requirements for:

New requirements for collections of dry recyclable materials (except plastic film) from:

- Households: by the end of the financial year in which extended producer responsibility (EPR) for packaging commences – by 31 March 2026
- Businesses and relevant non-domestic premises: by 31 March 2025
- Micro-firms: by 31 March 2027

New requirements for collections of plastic film from:

- Households, businesses, non-domestic premises and micro-firms: by 31 March 2027

New requirements for collections of food waste from:

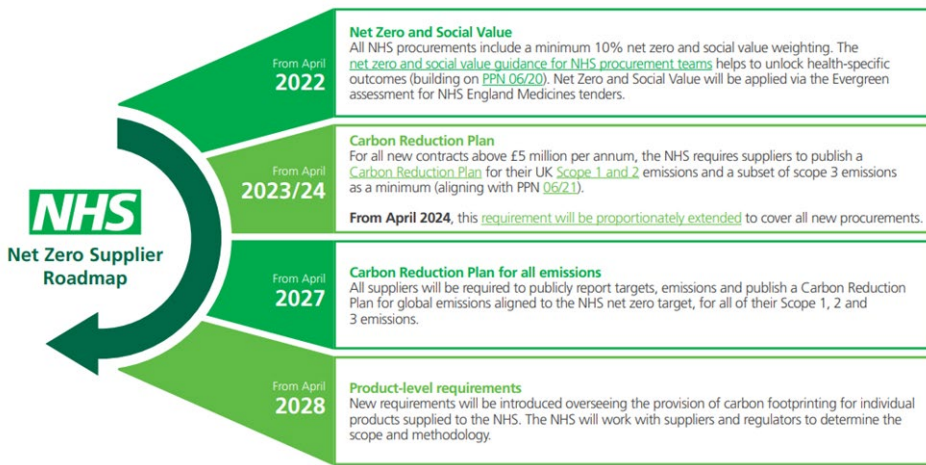
- Households: by 31 March 2026 – unless a transitional arrangement applies
- Businesses and non-domestic premises: by 31 March 2025
- Micro-firms: by 31 March 2027

There is further detail about food waste within the food and nutrition section.

There are further opportunities for waste reduction around medical devices and equipment. Measures can be taken to recycle, reuse and repurpose equipment for example walking aids. The ICB, UHNM, Local Authorities and Voluntary Sector have worked collaboratively to establish a Walking Aid Reuse Scheme across Staffordshire and Stoke-on-Trent Integrated Care System.

What we will do:

- Join the local Regional Energy Strategic Plans (RESPs) forum



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impact on waste streams

- Collaborate with Local Authorities and Voluntary Sector to enhance biodiversity across the system



Supply Chain and Procurement

The NHS uses products such as medical equipment, food, and other business goods from more than 80,000 suppliers. More than 60% of the current carbon footprint can be found in the NHS supply chain, making it important that the NHS supports its suppliers by creating positive change to meet the net zero target that has been set.

In 2021, the NHS public board approved the net zero supplier roadmap, which sets out environmental guidelines and expectations on working with suppliers moving forwards; the roadmap can be seen below:

- Explore opportunities for renewable energy development or shared ownership arrangements with system partners
- Ensure new waste management legislation has been adopted and monitor the

Source: [NHS-Net-Zero-Supplier-Roadmap-2024.pdf](#)³²

In addition to the key milestone listed above there is also the ambition by 2030 that suppliers will only be able to qualify for NHS contracts if they can demonstrate their progress through published progress reports and continued carbon emissions reporting through the Evergreen sustainable supplier assessment.

Staffordshire and Stoke-on-Trent ICS will implement a step-change in education and awareness of sustainability best practices across those involved in procuring goods and services, considering the requirements for net carbon zero and social value.

A sustainable procurement culture will be created, and processes introduced to reinforce this approach. The ambition is to create a consistent approach across all system partners within the ICS to ensure that the greenhouse gas emissions of Staffordshire's public sector supply chains can be measured as consistently as possible and take a combined approach to support the supply chain transition to the requirements of a net zero future.

The procurement process will consider broad criteria for purchasing goods and services by shifting the emphasis of scoring to the following:

- Materials
- Workforce
- Buying locally where possible
- Manufacturing and transport

What we will do

- Work with NHS Supply Chain to develop and encourage staff to use the right processes and procedures for sustainable purchasing
- Support implementation of the net zero supplier roadmap.
- Maintain a minimum of 10% net zero and social value within all contracts and ensure updated policy procurement note (PPN 002): The Social Value Model is embedded by 01st October 2025.
- Contracts over £5 million must include a carbon-reduction plan.
- Commit to a preference for working with partners that have environmental accreditation, e.g. ISO 14001.
- Consider low-carbon substitutes for all clinical and non-clinical products purchased.
- Have a default purchasing position for removing single-use plastic products and packaging.



Food and Nutrition

It is estimated that food and catering services in the NHS account for approximately 6% of the NHS Carbon Footprint Plus. A healthy balanced diet made up of reduced processed foods high in sugar, salt, and fats is also a low-carbon diet.

The Greener NHS programme is working closely with the Hospital Food Review and the new national review of NHS food standards. Collaboration with NHS catering leads, dieticians and suppliers will help provide healthier, locally sourced food to patients, staff, and visitors, while at the same time cutting emissions related to agriculture, transport, storage, and food waste across the supply chain and on our NHS estate.

Regarding food waste, the introduction of the new waste requirements described in the estates and facilities section above, places a further obligation on hospitals (Acute and Community) and other food waste producers (GPs, Care Settings, Hospices - Nursing and Residential Homes) to present all food waste separately for collection. It also makes it illegal to put food waste into drains using macerators or liquidising digesters (which turn food waste into a slurry with enzymes and hot water before flushing into the sewers).

Preventing food waste is key, providers to review their process and understand the causes of food waste unique to them. Measure and explore why food is being wasted, identify level of reductions required and ensure that simple steps are not being overlooked:

- Communication, timing, appropriate cutlery and crockery
- Digital Ordering System
- Portion size and presentation
- Menu design

There's currently no standardised approach to food catering and choice across the NHS, food is an essential tool in aiding recovery and an ambition for the NHS is to work towards building what an optimal menu looks like for our patients, visitors and staff.

Benefits:

- Procurement - local food producers/ low food miles/ high quality/ supporting local business and community (social inclusion)
- Reduction in prescribed medication through improved diets and nutrition
- Increase rates of wellbeing and health leading to reduced costs and demand on health sector

What we will do:

- Staffordshire and Stoke-on-Trent ICS will work with system partners to ensure food is from sustainable sources, is nutritious and low carbon and reduce the range of unhealthy foods on offer
- Effective waste management – ensuring appropriate waste disposal routes are available and a focus on preventing waste.

- Roll out grow-your-own food as a form of therapy for mental health and other patients' groups, potential to link in with the voluntary sector to establish a joint working model
- Provide and promote interesting and attractive low carbon menus
- Deliver on the food and nutrition policy, and the food and drink programme
- Set targets set for reducing food waste
- Appropriate waste receptacles in all areas, incorporating clear signage to segregate different types of waste
- Measure food waste by weight



Adaptation

Climate change threatens the ability of the NHS to deliver its essential services now and in the future. Resilience and adaptation should be built into business continuity and longer-term planning to avoid climate-related service disruptions and support business continuity during adverse weather events. This need to be considered as part of the systems emergency preparedness resilience and response (EPRR). Partnership working between sustainability leads, local authorities, voluntary sector, public health, emergency response teams and estates leads at trust and system level is crucial for ensuring system resilience of sites and service delivery in the event of severe weather events. Climate risks need to be considered by EPRR teams when planning emergency responses in addition climate change impacts should also be considered when making decisions around estates and facilities. Adaptation considerations will need to be incorporated into the ICS 10-Year Infrastructure Strategy.

Climate change can lead to both risks and opportunities, although there are more risks than opportunities. Without measures to adapt to climate change, we would experience additional issues including:

- health risks
- damage to houses and infrastructure
- harm to the natural environment
- disruption to international supply chains

A prominent climate risk is the increased chance of flooding due to more intense rainfall. Without flood management, this can cause millions of pounds worth of damage to peoples' homes and businesses as well as causing essential health services to become cut off. We can prepare for this by using flood defence strategies that prevent damage from flood water, such as building flood defences and using nature to slow down or store flood waters. Actions like this can also benefit local communities, such as through improved access to nature and green spaces for the public.

Ensuring cross-government collaboration and collaboration with the Voluntary, Community and Social Enterprise (VCSE) organisations as well as academia is essential to successfully developing an appropriate plan of action and can be implemented through a more coordinated approach with system partners. The Adverse Weather Health Plan: Protecting health from weather related harm 2025 to 2026³³ provides a high level projection of economic costs of heat related mortality from climate change and socio-economic change in England this decade as amounting to approximately £6.4 billion pounds per year, according to the Monetary Valuation of

Risks and Opportunities in CCRA3 (table 42)³⁴. In addition, the Monetary Valuation of Risks and Opportunities in CCRA3 also identified many early adaptation investments that deliver high value for money. The benefit-cost ratios typically range from 2:1 to 10:1, meaning every £1 invested in adaptation could result in £2 to £10 in net economic benefits, such as:

- Heat alert and heatwave planning – above 10:1
- Weather and climate services including early warning – above 10:1
- Capacity building – around 10:1

As the NHS tackles climate change, there is also a need to adapt to the immediate consequences it brings. As climate change accelerates globally, in England we are seeing direct and immediate outcomes of heatwaves and extreme weather on our patients, the public and the NHS. Adaptation is the process of adjusting our systems and infrastructure to continue to operate effectively while the climate changes. It is critical that the NHS can ensure both continuity of essential services and maintain a safe environment for patients and staff in even the most challenging times.

Many of the changes required to adapt to increasingly severe weather have the potential to impact on carbon emissions positively in the long term, such as increased use of remote monitoring in the community and more efficient cooling systems. However, some changes needed to adapt may impact negatively, such as short-term increases in air conditioning units but recognising suitable alternatives such as ceiling fans and mechanical air ventilation systems when designing and retrofitting NHS estates will help deter from making decisions that will impact negatively in both the short and long-term.

Staffordshire and Stoke-on-Trent ICS will ensure our infrastructure, services, procurement, local communities, and colleagues are prepared for the impacts of climate change, such as heatwaves and flooding. The impacts on climate change will be assessed and adapted to mitigate the negative effects of past and future climate altering actions. The impact on public health from climate change will be reduced as much as possible.

What we will do:

- Consider climate resilience in new building and retrofitting activities
 - Implement nature-based solutions in estate design
 - Adaptation mapping with Keele University
- Work with EPRR teams across the system to develop and embed adaptation plans and climate change risks into business continuity and incidents and emergency response measures
- Update organisational risk registers to include climate-related risks including but not limited to floods, heatwaves and extreme weather conditions.

Governance and accountability

The Group Accounting Manual (GAM) has been implementing a phased approach to integrating the Task Force on Climate-Related Financial Disclosures (TCFD)³⁵ recommended disclosures into the sustainability reporting requirements for NHS bodies. This initiative aligns with HM Treasury's TCFD-aligned disclosure guidance for public sector annual reports. The recommended disclosures will be gradually incorporated into sustainability reporting requirements up to the 2025-26 financial year. Notably, local NHS bodies are not required to report Scope 1, 2, and 3 greenhouse gas emissions under TCFD requirements, as these emissions are calculated at the national level by NHS England.

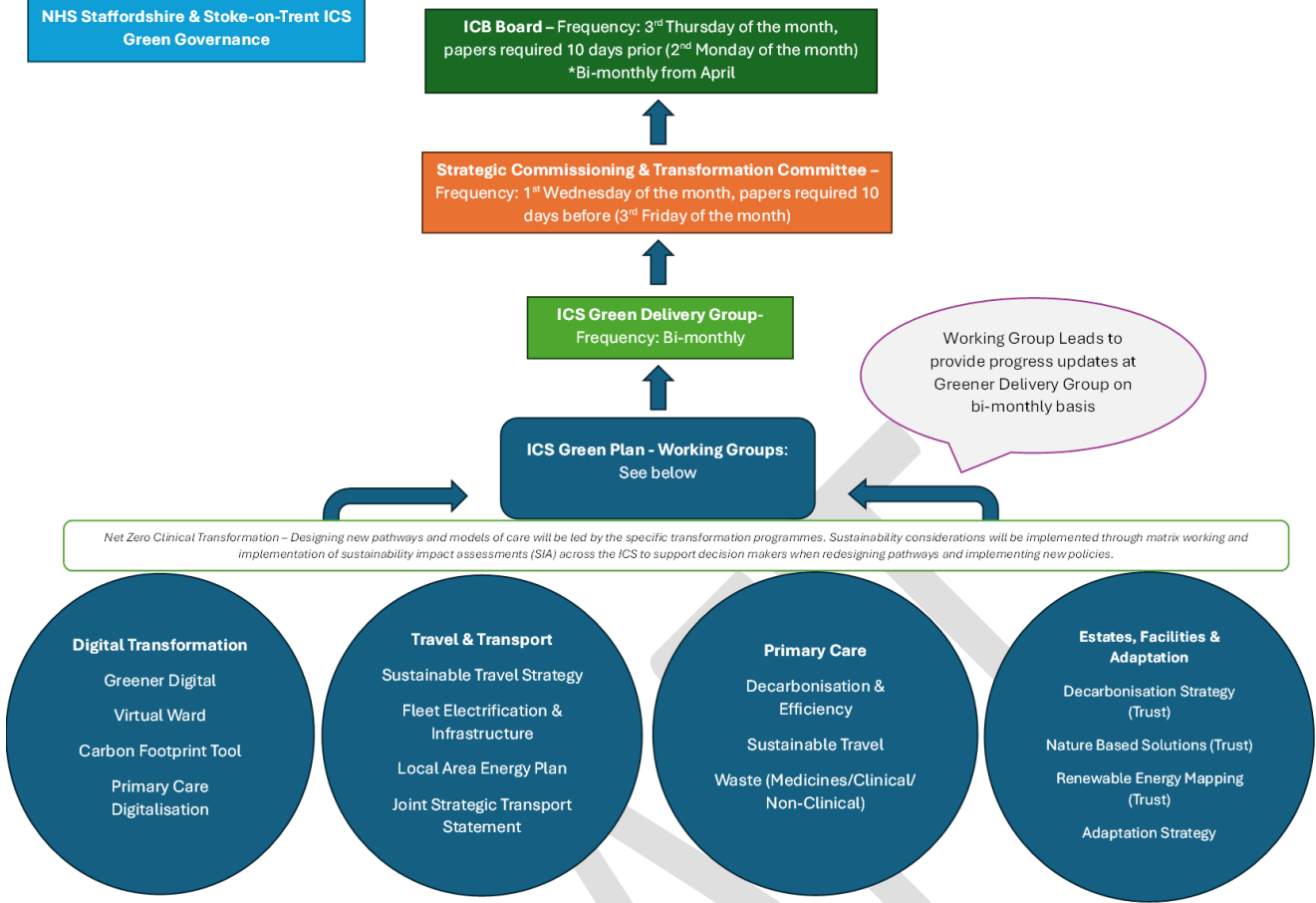
In terms of our governance/ reporting process, we produce quarterly progress reports which provide a high-level overview of progress made on key aspirations within the organisation as well as updated dashboards displaying the latest data against key metrics and key performance indicators (KPIs) such as total inhaler emissions and nitrous oxide emissions. We also include highlight reports from providers and Staffordshire County Council on how they are progressing on key projects, identified risks & mitigations, and priorities for the next quarter.

Our governance route is via Greener Delivery Board, Strategic Commissioning & Transformation Committee and ICB Board. If there is a financial impact to the ICS/ ICB then we would also include Finance and Performance Committee as part of the route towards ICB Board. The NHS Midlands Greener Delivery Board is held every 6 weeks, this is attended by each system SRO (or an appointed deputy) and other regional leads (e.g. Estates, Medicines, Procurement).

The System Board Assurance Framework (SBAF) provides a structure and process which is designed to focus the Integrated Care Board (ICB) on the key strategic risks which might compromise the achievement of its Strategic Ambitions (SA). In identifying those risks, consideration is given to the key controls in place to mitigate the impact of risk and the sources of assurance which the Board can rely upon to determine the effectiveness of those controls. Where gaps in control or assurance are identified, further actions are identified which are aimed at either providing additional assurance or to reduce the likelihood or consequence of the risk, towards the target. The target risk score or 'tolerance' is aligned with our Risk Appetite Statement (appendix 4 of our Risk Management Strategy).

To support progress tracking of identified KPIs for each area of focus and ultimately delivery of this Green Plan, The Staffordshire and Stoke-on-Trent Integrated Care System Green NHS Performance Dashboard will be reviewed and developed further to reflect the additional requirements identified as part of the building on lessons learnt/ feedback from the original Green Plan. Improved visibility of progress will allow for greater awareness and ownership of the green agenda and implementation of this refreshed plan across the system.

ICS Green Governance Structure



SSoT ICS NHS Performance Green Dashboard

| Staffordshire and Stoke-on-Trent ICS - Greener NHS - Performance Dashboard - 2024/25 | | | | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Medicines Measure: Reduce emissions from nitrous oxide and mixed nitrous oxide products Period: Dec 2024 Target: 7% reduction on 2024 ICB: 1,770 MPFT: n/a NSCHT: 30 UHNM: n/a ICS: 1,847 1,877 | | | Travel and transport Measure: Trusts to complete a staff travel survey at least every 24 months, ideally annually Period: Q3 2024 Target: 100% ICB: Yes MPFT: Yes NSCHT: Yes UHNM: Yes ICS: 100% | | | Procurement and supply chain Measure: Proportional to a min. 10% NZ and SV weighting Period: Q3 Target: 100% ICB: 100% MPFT: 100% NSCHT: 86% UHNM: 100% ICS: 97% | | | | |
| Estates and facilities Measure: 100% of electricity from renewable sources Period: Q3 Target: 100% ICB: n/a MPFT: Yes NSCHT: No UHNM: Yes ICS: 67% | | | Food and nutrition Measure: A digital meal ordering system in place Period: Q3 Target: 100% ICB: n/a MPFT: No NSCHT: No UHNM: Yes ICS: 33% | | | Workforce and leadership Measure: Green champions Period: Dec Target: 17 ICB: 141 MPFT: 86 NSCHT: 338 UHNM: 582 ICS: 582 | | | | |
| Digital Measure: Virtual consultations (%) - General Practice Period: Jan Target: 27% ICB: n/a MPFT: n/a NSCHT: n/a UHNM: n/a ICS: 27% | | | Net Zero (NZ) Clinical Transformation Measure: Measure carbon impact of virtual wards Period: Q3 Target: Yes ICB: Yes MPFT: Yes NSCHT: Yes UHNM: No ICS: 75% | | | Adaptation Measure: Long term climate change adaptation plan Period: Q3 Target: Yes ICB: No MPFT: Yes NSCHT: No UHNM: No ICS: 25% | | | | |

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Appendix

Appendix 1 - Our Progress So Far – Additional Content:

Key achievements to date broken down via the nine areas of focus include:

1. Workforce and system leadership

We continue to build awareness of our net zero targets and obligations through education and training of our workforce, as demonstrated by the 'Building a Net Zero NHS' being made mandatory and achieving a 98% completion rate across all employees within the Integrated Care Board (ICB). We have also made connections with Voluntary, Community and Social Enterprise (VCSE) partners who will now be attending bi-monthly Greener Delivery Group meetings to contribute and build on a joined-up approach to delivering the ICS Green Delivery Plan.

Awarded bronze level certification by the One Planet Standard, this serves as additional proof of Staffordshire and Stoke-on-Trent's ICS progress towards delivering the Green Agenda and implementing regional greener priorities and delivering a net zero NHS.

Overview of One Planet Standard: [Home - The One Planet Standard](#)

- Provides a familiar and well-proven framework to increase motivation, effect gradual culture change
- Helps to embed an awareness of environmental sustainability and foster an ethos of continuous improvement
- A recognised toolkit, supporting and is aligning with the Welsh Government's Public Sector Emissions Reporting Toolkit and the values and objectives of the Wellbeing of Future Generations Act.
- Is not an audit; there are no additional Key Performance Impacts (KPIs) or measurements to be met;
- Helps measure your progress and, importantly, gain recognition for what you have achieved.

The System is firmly committed to achieving sustainability and green priorities and has made significant progress in reducing its ecological footprint and in doing so has been certified as meeting the Bronze level of the One Planet Standard.

2. Clinical Transformation (replaced Sustainable Models of Care)

University Hospitals of North Midlands (UHNM) achieved 391 tonnes of CO₂e reduction of Nitrous Oxide in 2024/25 compared to 2019/20 baseline which equates to a reduction in emissions of 15%. The ICB supports work to reduce emissions across patient pathways, spanning primary, secondary and community care and the third sector. We consider net zero principles in all service change, reconfiguration programmes and pathway redesign and aim to achieve this through the implementation and completion of sustainability impact assessments (SIAs).

3. Digital Transformation

Green and Digital teams worked collaboratively with the Remote Care Programme to support the further development of the virtual wards carbon footprint workstream.

One Health and Care our confidential digital shared care record for people living in Staffordshire, Stoke-on-Trent, Shropshire, Telford and Wrekin and The Black Country brings data together from our system health and social care providers. It allows doctors, nurses and other registered health and social care professionals directly involved in patient/client care to view relevant information to provide better and safer care, as well as speeding up the patient journey. This significant piece of digital infrastructure also supports reductions in carbon emissions through a reduction in telephone calls, emails, data transfers and the transfer of physical paper records between health professionals in local authorities, primary and secondary care.

In 2024 we were awarded funding from the “Greener by Design NHS England” programme to review both manual and automated carbon foot printing tool for IT to standardise and improve accuracy of carbon capture data for the NHS. This is a collaboration between the ICB, “Greener by Design” team and the Midlands Lancashire Commissioning Support Unit’s (MLCSU) Subject Matter Experts. We recommended that an NHS-Led Approach over a Commercial Solution due to greater control and flexibility, transparent methodology, reduced ongoing costs, tailored to NHS needs, opportunity for knowledge building and option for selective use of specialist tools where most valuable. We showcased our findings in May to the NHS England Greener by Design team will now take this recommendation forward as part of the programmes next steps.

4. Travel and transport

Cycle to work leads and salary sacrifice cycle to work schemes in place for staff at Trusts. Work continues implementing the actions and recommendations made within the national Net Zero Travel and Transport Strategy, progressing the core deliverables of decarbonising vehicle fleets and encouraging take up of ultra-low emission vehicles (ULEV) and zero emission vehicles (ZEV) across both the NHS estate and staff choices.

5. Estates and facilities

The Keep Warm, Keep Well initiative, a collaboration between NHS University Hospital North Midlands and fuel poverty charity Beat the Cold, is making a positive impact in the community and is now working with system partners to expand the scheme further and incorporate into other Trusts and Primary Care.

6. Medicines

We are continuing our work to reduce nitrous oxide emissions and emissions from inhalers against our 2019/20 baseline. Please see ‘inhaler emissions’ table and information below.

Total emissions (tCO2e) from inhalers supplied

| Year | 2019/20 | 2023/24 | 2024/25 |
|--------------|---------------|---------------|---------------|
| April | 1,886 | 1,430 | 1,489 |
| May | 2,036 | 1,545 | 1,509 |
| June | 1,900 | 1,580 | 1,393 |
| July | 1,974 | 1,464 | 1,508 |
| August | 2,048 | 1,470 | 1,394 |
| September | 1,966 | 1,459 | 1,408 |
| October | 2,102 | 1,530 | 1,484 |
| November | 2,034 | 1,537 | 1,413 |
| December | 2,114 | 1,542 | 1,480 |
| January | 2,119 | 1,563 | 1,460 |
| February | 1,871 | 1,414 | 1,263 |
| March | 2,843 | 1,429 | 1,330 |
| Total | 24,893 | 17,963 | 17,131 |

Source: Greener NHS Dashboard (NHS Organisations): Primary care inhalers - Tableau Server

Overall progress compared to 2023/24 has seen a 5% reduction (year-end target of 6-7%). A 28% reduction from 2019/20 has been achieved. Other works that have taken place over the last 12 months has included greener inhaler formulary choices implemented on net formulary and the circulation of an Medicines and Healthcare products Regulatory Agency (MHRA) alert regarding short acting beta 2 agonists and a need to review these asthma patients to the current guidelines. We are initiating an asthma review project in adults from April as well as a pilot of reviewing uncontrolled paediatric asthma patients, all of which will have positive impacts on carbon emissions on inhaler use.

7. Supply chain and procurement

Successful adoption of a minimum 10% net zero and social value weighting for all new procurements which is monitored and reported monthly to capture all procurements that have taken place across healthcare and non-healthcare services.

8. Food and nutrition

As per the new Green Plan guidance for trusts to measure food waste in line with the Estates Returns Information Collection (ERIC) and set reduction targets, we will be

capturing food waste measurements and reporting through our ICS green dashboard (quarterly).

In addition, through the ICS greener delivery group trusts have outlined opportunities to make menus healthier and reduce carbon emissions by supporting the provision of seasonal menus high in fruits and vegetables and low in heavily processed foods. Trusts within the Staffordshire and Stoke-on-Trent ICS have all implemented plant-based options to patient menus.

9. Adaptation

We have worked with Keele University - Environment and Sustainability students on student led projects focusing on the decarbonisation and adaptation potential of the primary care sector within Staffordshire and Stoke-on-Trent. These reports are focused on the climate resilience and decarbonisation potential of GP Practices within Staffordshire and Stoke-on-Trent ICS.



Green Champions

As of December 2024, collectively across the Staffordshire and Stoke-on-Trent Integrated Care System we had a total of 582 Green Champions. Working together to lead by example in adopting sustainable habits, share ideas for improving sustainability, and help put those ideas into practice and establish as the new business as usual.

System Partners Case Studies

University Hospital North Midlands (UHNM) – Keep Warm, Keep Well

Case Study
Keep Warm, Keep Well (KWKW)
– community energy scheme:
transforming health and the
environment



Supporting households with children diagnosed with asthma

The NHS in England spends £1.3bn each year treating preventable conditions caused by cold and damp homes. It is estimated that 6.5m UK households are in fuel poverty linked to a rise in energy tariffs, poor housing and low incomes.

Stoke-on-Trent has been cited as having amongst the highest levels of fuel poverty in the UK and fuel poverty is regarded as a driver of health and social care demand.

University Hospital North Midlands NHS Trust (UHNM) has delivered a ground-breaking community energy scheme through a partnership with two local organisations; Staffordshire Community Energy Limited (SCE) and 'Beat the Cold' (BTC) (a Staffordshire-based fuel poverty charity).

The 'KWKW' scheme aims to prevent readmissions of vulnerable patients whose health conditions are at risk of being exacerbated by living in a cold and damp home.

This innovative and collaborative approach has been recognised by both the British Medical Journal and Health Service Journal winning awards in both 2020 and 2022.

In 2016, SCE installed 1000 Solar Photovoltaic panels across the UHNM estate. UHNM now buy the electricity generated by the PV panels at a reduced tariff which reduces Trust demand from the grid.

The solar energy Feed-in Tariffs and the payments for the electricity create income for the project. This income facilitates both a return for investors and a surplus which accumulates into a 'community fund'. This fund is used to alleviate fuel poverty in the local community.

UHNM clinicians engage with patients regarding the scheme, gain informed consent and complete a referral to BTC.

A BTC Energy Adviser will contact the patient and arrange a review and, if necessary, a home visit. The Energy Adviser may:

- Identify any benefits entitlement and onward refer to agencies that can support access to these
- Identify ways to reducing energy use whilst maintaining a safe indoor temperature
- Identify any funding that may be available to improve home energy efficiency and provide support in applying for funding

- Help to resolve issues of fuel debt with energy suppliers
- Complete a registration as a priority customer with the National Grid

As a progression of this service, the Trust is now partnering with a GP Practice located in an area identified as being in the 'most deprived decile' of Stoke-on-Trent.

This enables a multi-organisational approach to identifying those patients who would most benefit from proactive support to alleviate fuel poverty.

Patients are sent a text from GP software to inform them they have been identified as being likely to benefit from the 'KWKW' scheme. This includes a link to a leaflet which provides more detail about the scheme, what patients can expect and a 'frequently asked questions' section. The leaflet is also available in hard copy through the GP Practice.

Nationally, this represents a first of kind service with the GP Practice hosting a data-led, targeted patient-centred referral pathway. It exemplifies a truly integrated solution to a local demand driver of poor health outcomes.

The scheme has been successful in securing additional grant funding from the National Energy Action, 'Warm Homes, Healthy Futures' fund. This will enable an expansion of interventions by BTC across the period November 2024 through to January 2026.

University Hospital Derby & Burton (UHDB)

Renal Department

Colleagues within our Renal Department, who recognised the environmental impact associated with the delivery of kidney care, set up a multidisciplinary sustainability working group within their department. Colleagues from across the renal specialty were approached to identify those that had a passion to drive sustainability, and a multi-disciplinary group was formed comprising a patient representative and renal nursing staff from acute kidney injury, in-centre haemodialysis, home therapy, transplant, technicians, nephrologist and clinical lead representation.

The multidisciplinary team presented their aims and potential sustainability initiatives at a departmental meeting to garner support, and agreement was given for the department to proceed with several projects. The multidisciplinary sustainability working group holds quarterly meetings to track progress. Projects undertaken include:

- Changed central dialysate concentrate from 1:34 to 1:44 to reduce volumes being transported
- Ended the use of bedlinen for in-centre haemodialysis chairs

- Reducing the use of hospital blankets in the in-centre haemodialysis unit by giving blankets for all prevalence dialysis patients as a Christmas gift, funded by Derby and Burton Hospitals Charity

- Encouraging increased the uptake of Patient Knows Best to reduce paper letters

The team have also identified a number of projects for implementation over the next year:

- Reducing default dialysate flow rate to reduce water consumption

- Working with Waste Management to ensuring availability of recycling bins

- Reduce use of single-use plastic cups on haemodialysis unit

- Pilot integrated renal care with primary care to reduce chronic kidney disease progression in the region

- Identifying wasted products in pre-prepared consumable packs and seeking to remove unneeded items to prevent waste

The Renal department, and the initiatives they have taken, is a prime example of how departments can make a difference. The changes made have provided financial savings already and, whilst the environment benefits are still to be quantified, the changes made so far have been shown to reduce transport of dialysate concentrate and reduce use (and laundering of). In addition, as a number of the initiatives impact patients (such as removing sheets and blankets) the team have engaged with patients to explain the reasons behind the changes and to foster support - providing the added benefit of engaging with patients about environmental issues. Over the next year UHDB sustainability team will work with the renal multidisciplinary sustainability working group to begin to quantify the environmental savings of their current and planned initiatives

Badgers Wood at Queen's Hospital

Badgers Wood is a 1.2 acre area of lowland mixed deciduous woodland of mixed age profile - now home to over 140 species of flora and fauna. Due to its location in the National Forest area, and potential benefit to the community, Badgers Wood was selected for inclusion in the National Forest Community Woodland scheme - which facilitated the development of a Woodland Management Plan and support with restoration.

The ongoing Badgers Wood project has seen significant progress including removal of 93 tonnes of ash trees affected by ash dieback and restocking with 550 saplings (funded by NHS Forest) of various species - to improve resilience and increase biodiversity.

Whilst the main woodland management work and tree restocking has been completed, the Badgers Wood project continues with plans to install new signage, interpretation boards and benches (subject to funding) - to further encourage people to spend time in the space and improve physical and mental wellbeing. The project featured as a video case study by the National Forest Company - [available here](#).

Wellbeing and community engagement:

Research shows that regular exposure to green environments can significantly reduce stress and improve overall mental and physical health. A number of wellbeing activities have been hosted as part of the Badgers Wood project including bat walks, forest bathing, mindfulness walks, tree planting and willow weaving. Feedback from UHDB colleagues who attended these sessions has been positive.

This community focussed project saw the UHDB sustainability team engage with the Burton Conservation Volunteers, Mind, Natural England, the Royal Forestry Society, Rural Community Council, Derbyshire Wildlife Trust, UHDB Youth Forum and other community groups.

Engagement with UHDB Youth Forum cumulated in a practical session in which young people could explore Badgers Wood and take part in clay mark making activities. Following success of the UHDB Youth Forum engagement session, several forestry-based volunteering taster sessions were held in Badgers Wood, to provide the opportunity for UHDB staff and the local community to spend time in nature, whilst trying new skills such as coppicing, pruning, and step creation (which in turn improved access to the wood).



North Staffordshire Combined Healthcare Trust (NSCHT) – Sustainability Champions

NSCHT is proud to have a network of over 80 'Sustainability champions' from across the organisation to build a movement of change across all our colleagues. The group meet monthly and there is an interactive MS Teams channel on which champions are invited to share ideas / updates which can then be disseminated to teams. Champions are awarded a badge, which identifies them as a champion for their areas.

Become a Sustainability Champion!

We are looking for staff from across the Trust who have an interest, enthusiasm, and passion for our Greener NHS Plan to help support us with our ambition to become Net Zero.

The role includes...



Benefits for you...

- Working with the Sustainability Working Group who are passionate about the environment and contributing to the Green Plan
- Great opportunities for learning, networking, and contributing to your own professional development

Interested? Email the Transformation Management Office on tmo-nscht@combined.nhs.uk and a member of the team will be in touch.



Midlands Partnership Foundation Trust (MPFT) – The Green Wellbeing Project

This project, launched by two registered nurses in response to COVID-19 challenges, focused on improving mental health, wellbeing, and sustainability in care homes. Funded by the Queen's Nursing Institute, this six-week pilot engaged isolated residents in gardening therapy across four Midlands care homes, fostering continuity of care, early health deterioration detection, and community involvement. Outcomes included enhanced mental health, reduced medication reliance, and strengthened staff-resident relationships. This non-pharmacological approach aligned with NHS Green Plan principles, promoting prevention and reduced healthcare waste. Plans for expanded initiatives with local partners

are underway, establishing a model for sustainable, person-centred healthcare.

The infographic is titled "The Green Wellbeing Project – Case Study" and features the NHS Midlands Partnership University logo. It is divided into four main sections: "Background and Specific Aims", "Outcomes highlights/method", "Lessons learnt", "What we did", and "Next Steps".

- Background and Specific Aims:** In response to challenges faced by care homes during the Covid-19 pandemic, two registered nurses initiated the Green Wellbeing Project to redesign care services with a focus on mental health, wellbeing and sustainability. The specific aims were to improve resident engagement and wellbeing through gardening therapy, provide informal healthcare, and educate and support care staff. The project aligned with the NHS Green Plan objectives.
- Outcomes highlights/method:** Pre- and post-evaluation, including wellbeing scores and case reports, was conducted. Relationships between care staff and health workers were strengthened. The case reports demonstrate valuable health interventions for participating residents, such as improving skin care, reducing falls risk, restoring confidence, and increasing engagement. Outcomes included enhanced mental health, early identification of deterioration, reduced reliance on medication, and community involvement.
- Lessons learnt:** The project highlighted the importance of continuity of care from the same healthcare professional for effective and efficient delivery. It led to a review of current services to improve continuity in care homes by implementing a lead clinician. The reflection also emphasized the potential of gardening therapy and a holistic approach to reduce healthcare costs through prevention and early intervention.
- What we did:** The registered nurses secured funding from the Queen's Nursing Institute and implemented a 6-week pilot program in four Midlands care homes. Five to six isolated residents were selected from each home to participate in indoor and outdoor gardening activities. The project provided continuity of care, early identification of deterioration, and a non-pharmaceutical approach. It collaborated with community partners and incorporated learning opportunities for students and staff. The projects improved access to green space to improve mental health.
- Next Steps:** Demonstrated changes introduced against each sustainable healthcare principle: prevention of the need for healthcare, pharmaceuticals; empowering patients to manage their own health; lean service delivery via reduced waste, increased flow, introduced standard work; low-carbon alternatives via gardening therapy.

The infographic concludes with the slogan "HEALTHIER PLANET HEALTHIER PEOPLE".

Staffordshire County Council – Staffordshire Warmer Homes

The Warmer homes scheme is an ongoing programme helping residents in fuel poverty better insulate their homes and install more efficient heating systems so they can heat their homes for less.

In 2023/24, £874,300 was invested between April and September in 81 Staffordshire properties, making their homes more energy efficient and using low carbon technologies. Key measures included loft insulation, cavity wall insulation, air source heat pumps and solar panels.

The council also had access to a further £985,000 to support applications through other funding schemes managed by a third party (ECO4 and GBIS scheme). £4.2 million has been secured for rollout through 2024/25.

[Climate Change Annual Report - 2023-2024 - Staffordshire County Council](#)

Stoke-on-Trent City Council (SoT CC) – District Heat Network (DHN)

The District Heat Network (DHN) in Stoke-on-Trent has been energised from November last year, supplying the Goods Yard as the first connection. Stoke-on-Trent City Council has appointed SSE for the next 5 years to operate and maintain the system.

Stoke-on-Trent City Council cabinet has approved moving ahead with plans to replace the energy-from-waste facility at Hanford post 2030. Over the next 5 years, the Council will

work on such replacement plant ensuring it will provide heat to the DHN to support growth in the scheme.

Voluntary, Community and Social Enterprise (VCSE)

Centric Lab and Support Staffordshire - Rethinking Health

How it was done

Workshops: Organised by Support Staffordshire and The Centric Lab.

Purpose: Explore Community Health Impact Assessments and discuss health in a meaningful way, considering social determinants and climate change impacts.

Methodology

Prompt Questions: Impact of food, housing, employment, transport, green space, and extreme weather on health.

Notes: Extensive notes taken and summary illustrations created by artist Ella Kasperowicz.

Outcomes and Learnings

Attendance: High and consistent due to trusted relationships with Support Staffordshire staff.

Key Insight: Neurodivergent participants preferred closed sessions to avoid being talked over or not understood.

Value: Importance of listening to diverse voices and challenging the status quo.



Artist: Ella Kasperowicz

Source: Support Staffordshire – Rethinking Health

Appendix 2 - Proposed System Approach:

For the nine areas of focus the following system actions are likely to have impacts on service demand, ability to deliver services more effectively, reduced costs for delivering services and positive community impacts. These impacts are highlighted in the table below.

Key: Reducing Demand (RD), Reducing Costs (RC), Increasing Productivity (IP), Social and economic development (SED)

| Area of Focus | System Action | System Outcome |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Workforce and leadership | Workforce - empowering staff, green induction, carbon literacy, mandatory training and enhanced staff wellbeing | IP, SED |
| Clinical Transformation | <p>Example of Keep Warm, Keep Well – Solar Rooftop PV regarding wider system rollout.</p> <p>Efficiency savings can be reinvested into other service areas but could be ring fenced to green efficiency measures or upskilling.</p> | IP, SED |
| | Climate change impacts are often not considered as part of transformational change, for example new service development needs to consider climate impacts as part of its design and day to day running. This can be achieved through introduction of sustainability impact assessments (SIA). | RD, RC, IP, SED |
| | Reduced carbon emissions improve population health and outcomes by preventing long term health conditions from getting worse e.g. respiratory disease by improving air quality. | RD, RC, IP, SED |
| | Financial sustainability can also be achieved through reduced energy costs, reduced spend on medicines and food through reduced waste, reduced spend on admission costs and reduced length of stay in hospitals due to better health outcomes. | RD, RC, IP, SED |

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| Digital Transformation | Remote monitoring and virtual appointments which reduces demand on care settings | RD, RC, IP, SED |
| | Greener Digital project, grant funding awarded of £75k. Help accurately monitor & calculate carbon reduction impacts of digital transformation and cloud-based storage within digital infrastructure such as data centres, hardware and software | RC, IP |
| | Electronic communication with patients, increasing accessibility, reducing letters and postage helping to reduce deforestation and vehicle usage | RC, IP, SED |
| Travel and transport | Electrification of fleet vehicles – reduced running costs, potential savings with flexible tariffs, refuelling whilst waiting for A&E admissions | RD, RC, IP |
| | Active Travel – Sheltered bike storage and access codes, email required to provide details on role, distanced travelled via bike and incentive for travelling this way. | RD, RC, IP, SED |
| | Working with Local Authorities to establish partnership working - park & ride scheme to reduce demands of onsite trust parking, allow for prioritisation to patients receiving long term treatment and those with mobility issues. | RD, RC, IP, SED |
| Estates and facilities | ICS Decarbonisation Strategy – establish funding opportunities for feasibility studies, scenario planning and applying timeline and costs to a programme of works across the ICS estate | RD, RC, IP |
| | Energy efficiency, fabric first approach regarding | RC |

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| | insulation to ensure energy bills do not increase through decarbonising heating system | |
| | Join up with Local Authority regarding Local Plan, health and planning need to be adjoined to help reduce demand and costs upon the health sector. | RD, RC, IP, SED |
| | Upskilling and training of maintenance and operational staff within estates team to prevent outsourcing to expensive and often geographically restricted operation & maintenance contracts with the private sector. | RD, RC, IP, SED |
| | Pursue opportunities to enhance nature, it benefits productivity and wellbeing as well as linking in with Local Authority and Voluntary Sector via the Local Nature Recovery Strategy which may lead to external funding opportunities. | RD, RC, IP, SED |
| Medicines | Waste reduction – better patient compliance with their medicines (education), review medicines to optimise treatment (medication reviews in primary care) and prevention of over ordering through new technology e.g. Patient Access - app based ordering, prescription ordering direct services (POD) | RD, RC, IP, SED |
| | Improved health outcomes and reduce demand on services through better condition control | RD, RC, IP, SED |
| | Direct impacts on carbon emissions e.g. getting patients better controlled and using less medication reduces the cycle of air pollution and emissions from treatment, as well as the | SED |

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| | impacts on reduction in A&E attendances and hospital admissions (cause and effect) | |
| Supply Chain & Procurement | Develop social value criteria and questions to ensure climate change and carbon emissions are covered appropriately to start measuring and monitoring the potential scope 3 emissions being absorbed by the ICB. | RD, RC, IP, SED |
| | Purchasing products and services with favourable carbon emissions, links to clinical transformation and system efficiencies of services (e.g. Two ways of delivering a service but by undertaking a SIA and implementing a service with a lower carbon impact has wider system benefits) | RD, RC, IP, SED |
| | System procurement opportunities to benefit from economies of scale and continuity | RD, RD, IP, SED |
| Food and Nutrition | Electronic/ digital ordering rollout across providers | RD, RC, IP |
| | Healthy vending machines, benefits patients, staff and visitors | RD, RC, IP, SED |
| | Local food mile radius, seasonal eating and increased plant-based meals with a reduction in processed meat – improved diet leads to better health outcomes and prevention of weight and obesity related diseases e.g. type 2 diabetes and cardiovascular disease | RD, RC, IP, SED |
| | Food waste reductions, anaerobic digester feasibility located off site – new legislation considerations e.g. The Environment Act 2021 (18% of meals wasted within hospitals and food & | RD, RC, IP |

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| | catering makes up 6% of total NHS carbon emissions) | |
| Adaptation | Providing a safe environment for patient and staff by implementing remote monitoring in the community, more efficient cooling systems, shading and building design (link to estates) | RD, RC, IP |
| | Electrification of fleet, particularly ambulances reduce emissions produced by idling and improves air quality | RD, RC, IP, SED |
| | Education around risks to the population resulting from climate change e.g. Flooding, prolonged and increased heat leading to heat exhaustion, heat bulb effect, technology failure and medicine storage failure. | RD, RC, SED |
| | Improved ventilation of buildings can reduce disease spread and help with keeping internal temperatures cooler without resorting to air conditioning units | RD, RC |
| | Pro-active emergency planning for shortages of essential resources and power cuts to abate significant strains on service delivery | RD, RC, IP, SED |

Appendix 3 - ICS Green Plan Refresh: Action Plan

| Workforce and Leadership | Action | Measure/ KPI | Delivery Date |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------|
| | Undertake system review of current ICS Green Plan and develop revised ICS Green Plan by end of Q2. | Greener NHS Dashboard and ICB Greener Dashboard | Q1 & Q2 25/26 |
| | Support ICB staff and leaders to embed sustainability into business as usual. Develop rollout plan across portfolios and teams for the implementation of the ICB Sustainability Impact Assessment | Training sessions completed (number), sustainability impact assessments completed (number) | Q3 25/26 |
| | Promote specialist training (carbon literacy) for staff groups who underpin the delivery of Green Plans, such as board members, procurement, finance, estates and facilities staff and clinicians | Percentage completed within identified staff groups | Q3 25/26 |
| | Appoint a designated board-level net zero lead, generally an existing executive director, to oversee Green Plan delivery with clearly identified operational support | Exec lead in place, Sustainability Team in place | Completed |
| | Assess workforce capacity and skill requirements for delivering the Green Plan, considering good practice examples such as hybrid roles, apprenticeships, fellowships and NHS estates sustainability career pathways | WTE in place across system to support green agenda (number) | Throughout 3-year Green Plan implementation |
| | Promote, and consider setting uptake targets for, core training offers set out on the Greener NHS Training Hub | Percentage completed against target | Q1 26/27 |
| Digital Transformation | Action | Measure/ KPI | Delivery Date |
| | Maximise the benefits of digital transformation to | Digital dashboard | - Throughout 3-year Green Plan implementation |

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| | reduce emissions and improve patient care, for example, by reducing the use of paper and providing virtual pathways where clinically appropriate (see also Net zero clinical transformation) | | (key specific actions and timeframes for implementation will be set out within annual portfolio delivery plans). |
| | Supported by the Digital Maturity Assessment, consider opportunities to embed sustainability in digital services, such as by: - using circular and low-carbon approaches to IT hardware management, which may include longer device lifetimes, leasing models, buying refurbished or remanufactured equipment and PC power down configuration - considering low carbon hosting, promoting good data hygiene (such as, deduplication and archiving) and engaging digital suppliers (see also Supply chain and procurement) | Digital dashboard | Throughout 3-year Green Plan implementation (key specific actions and timeframes for implementation will be set out within annual portfolio delivery plans). |
| Clinical Transformation | Action | Measure/ KPI | Delivery Date |
| | Support work to reduce emissions across patient pathways, spanning primary, secondary and community care and the third sector | Number of completed SIAs (% completion for all projects) | Q4 25/26 onwards |
| | Consider net zero principles in all service change, reconfiguration programmes and pathway redesign. Achieved through completion of | Number of completed SIAs (% completion for all projects) | Q4 25/26 onwards |

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| | sustainability impact assessments (SIAs). | | |
| | Measurement of the carbon impact of Virtual Wards through the Greener Toolkit | Virtual ward data dashboard (spend, bed days, travel milage) | Q2 25/26 onwards |
| | Primary Care support plan to be rolled out | Primary Care Dashboard | Q2 25/26 onwards |
| Medicines | Action | Measure/ KPI | Delivery Date |
| | Elimination of desflurane - maintain 0% use across provider sites other than in exceptional circumstances as defined by Neuro Anaesthesia and Critical Care Society guidance | Greener NHS Dashboard and ICB Greener Dashboard | Completed/ Ongoing |
| | Reduce emissions of Nitrous Oxide and Mixed Nitrous Oxide Products use, when compared to 24/25 baseline, implementing actions from the revised nitrous oxide waste reduction toolkit. | Greener NHS Dashboard and ICB Greener Dashboard | Ongoing |
| | Reduce the carbon impact of inhalers (total impacts - SABA & Non-SABA), when compared to 2024/25. | Greener NHS Dashboard and ICB Greener Dashboard | Ongoing |
| | Reduce inhaler waste through encouraging patient recycling of inhaler devices and clinician review of inhaler prescriptions. Achieve through patient directed comms (e.g. Posters) | Medicines Optimisation Prescribing Data | Q2 25/26 |
| | In line with National medicines optimisation opportunities, address overprescribing and oversupply while supporting patients in greatest need, taking a shared decision-making approach and personalising care | Medicines Optimisation Prescribing Data | Ongoing |
| Travel and Transport | Action | Measure/ KPI | Delivery Date |
| | Develop a sustainable travel plan by December 2026, to be incorporated into the | Sustainable Travel Plan in place across ICS | Q3 26/27 |

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| | Green Plan, focusing on active travel, public transport and zero-emission vehicles, supported by a clear understanding of staff commuting (NHS England guidance will be available in 2025) | | |
| | Offer only zero-emission vehicles through vehicle salary sacrifice schemes from December 2026 onwards (for new lease agreements) | Uptake of salary sacrifice (number) | Q3 26/27 |
| | Make arrangements to purchase, or enter into new lease arrangements for, zero-emission vehicles only from December 2027 onwards (excluding ambulances) | Reduction of internal combustion engine vehicles, increase of EV fleet vehicles | Q3 27/28 |
| | Form partnerships with local authorities and local transport authorities to maximise funding and infrastructure opportunities on behalf of the ICS member organisations | Engagement & number of joint projects in place. Alignment of travel & transport strategy to joint strategic transport statement | Ongoing |
| Estates and Facilities | Action | Measure/ KPI | Delivery Date |
| | Improving energy efficiency by installing measures such as LED lighting, insulation and double-glazed windows | ERIC - https://digital.nhs.uk/data-and-information/publications/statistical/estates-returns-information-collection/summary-page-and-dataset-for-eric-2023-24 | Ongoing |
| | Replacing fossil fuel heating systems with lower carbon alternatives, such as heat pumps or connecting to a heat network system | ERIC - https://digital.nhs.uk/data-and-information/publications/statistical/estates-returns-information-collection/summary-page-and-dataset-for-eric-2023-24 | Ongoing |
| | Increasing use of renewable energy by investing in on- or near-site renewable energy generation to meet NHS energy demand | Spend and contract data | Throughout 3-year Green Plan implementation (key specific actions and timeframes for implementation will be set out within annual |

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| | | | portfolio delivery plans). |
| | Work with local partners to ensure estate decarbonisation planning aligns with local priorities, infrastructure plans (for example, heat networks) and funding opportunities | | Throughout 3-year Green Plan implementation (key specific actions and timeframes for implementation will be set out within annual portfolio delivery plans). |
| | Identify opportunities to support primary care estates decarbonisation, such as through the Boiler upgrade scheme | Number/ take up | Throughout 3-year Green Plan implementation (key specific actions and timeframes for implementation will be set out within annual portfolio delivery plans). |
| | Support trusts that have not accessed PSDS funding previously to develop applications (this may include exploring joint bids between trusts or other partners) | Number/ take up | Throughout 3-year Green Plan implementation (key specific actions and timeframes for implementation will be set out within annual portfolio delivery plans). |
| | Ensure the Green Plan aligns with the ICS 10-year infrastructure strategy | | Ongoing |
| Supply Chain and Procurement | Action | Measure/ KPI | Delivery Date |
| | All suppliers will be required to publicly report targets, emissions and publish a Carbon Reduction Plan for global emissions aligned to the NHS net zero target, for all of their Scope 1, 2 and 3 emissions. | TBC | Throughout 3-year Green Plan implementation (key specific actions and timeframes for implementation will be set out within annual portfolio delivery plans). |
| | New requirements will be introduced overseeing the provision of carbon footprinting for individual products supplied to the NHS. | TBC | Throughout 3-year Green Plan implementation (key specific actions and timeframes for implementation |

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| | The NHS will work with suppliers and regulators to determine the scope and methodology. | | will be set out within annual portfolio delivery plans). |
| | 100% PPN06/20 adoption with minimum 10% net zero and social value weighting for all new procurements | All procurements have implemented min 10% weighting for scoring | Ongoing |
| | 100% PPN06/21 adoption with Carbon reduction Plan (CRP) Requirement for all new procurements over £5million | All procurements have carbon reduction plan for tenders over £5 million | Ongoing |
| | Embed sustainability impact assessment considerations within all procurements (products and services) | Number of completed SIAs (% completion of all procurements) | Q4 25/26 onwards |
| | Community equipment refurbishment scheme in place | Reduce spend and physical returns (number returned increase) | Complete |
| Food and Nutrition | Action | Measure/ KPI | Delivery Date |
| | Food waste measurements and reporting | ERIC - Acute Providers, Primary Care - TBC | Ongoing |
| Adaptation | Action | Measure/ KPI | Delivery Date |
| | Embed adaptation provisions within the NHS Core Standards for emergency preparedness, resilience and response (EPRR) and the NHS Standard Contract to support business continuity during adverse weather events | Plan in place which covers climate change related incidents and emergency response measures. | Ongoing |
| | Set out actions to prepare for severe weather events and improve climate resilience of local sites and services, including digital services | Plan in place which covers climate change related incidents and emergency response measures. | Ongoing |
| | In partnership with emergency response colleagues and others, | Plan in place which covers climate change related incidents and emergency response measures. | In partnership with emergency response |

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| | identify interdependencies between services and the necessary mutual aid requirements to prevent service disruptions | | colleagues and others, identify interdependencies between services and the necessary mutual aid requirements to prevent service disruptions |
| | Share findings with resilience partners (for example, local resilience forums and directors of public health) to ensure critical information is integrated into broader emergency planning and climate adaptation planning practices | Plan in place which covers climate change related incidents and emergency response measures across the system. Training delivered to relevant system leads (EPRR plan launched) | Share findings with resilience partners (for example, local resilience forums and directors of public health) to ensure critical information is integrated into broader emergency planning and climate adaptation planning practices |
| | Explore possible opportunities for Local Nature Recovery Strategy joined up approach with LAs | Joint projects in place with providers and Local Authority | Q4 25/26 |