Staffordshire and Stoke-on-Trent
Integrated Care System

Staffordshire and Stoke-on-Trent Integrated Care System Green Plan:

Strategy towards Net Zero

March 2022

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1. Foreword

Staffordshire and Stoke-on-Trent Integrated Care System (ICS) is serious about committing and delivering against the NHS Green Plan; we are absolutely focused on reducing our carbon footprint and delivering our services sustainably. We recognise that our sustainability journey will change our ways of working, enabling us to continue to make a positive impact environmentally, socially, and financially. In doing so, we will ensure the ICS is fit for the future and that it supports the long-term wellbeing of our staff, local communities, and the wider communities we serve.

Integrated care systems (ICSs) are partnerships between the organisations that meet health and care needs across an area, to coordinate services and to plan in a way that improves population health and reduces inequalities between different groups.

We are focussed on deepening the relationship in many areas between the NHS, local councils, and other important strategic partners such as the voluntary, community and social enterprise sector. They have developed better and more convenient services, invested in keeping people healthy and out of hospital, and have set shared priorities for the future.

As an ICS, with constituent partnership organisations, we deliver a range of health and care services which harness our ability to innovate and leverage the latest research and technology, as well as to drive sustainability and behaviour change across our area. The Green Plan shares the progress we are making towards our vision and how we are anchoring sustainability as a key pillar in everything we do.

We have already started our green journey and are proud to have achieved the following:

- The development of our estates strategy which has seen us rationalise and consolidate our use of buildings
- The uptake in digital tools such as Microsoft Office 365, which has enabled us to adopt highly agile ways of working across all teams and services
- A reduction of single-use plastic cutlery and cups across all our sites
- The raising of awareness of the importance of a net zero carbon future
- An increased availability of recycling bins amongst many of our sites.

These initiatives have not only reduced our carbon footprint but also prompted behaviour changes which are important in moving forward in our delivery of a net zero health service.

We know we have a significant programme of work ahead of us to deliver a net zero carbon future. We are starting from solid foundations and by working collaboratively with all partners, and harnessing the collective endeavours of all our colleagues, we are confident we will achieve our ambitions.

Peter Axon
Interim Chief Executive Officer for the ICS

Chris Bird
Director of Partnerships, Strategy and Digital for North Staffordshire Combined Healthcare NHS Trust and Sustainability Lead for the ICS

2. Introduction

2.a. The Greener NHS National Programme

In October 2020, the Greener NHS National Programme published its new strategy, **Delivering a Net Zero National Health Service**. This report highlighted that if left alone, climate change will disrupt care, with poor environmental health contributing to major diseases including cardiac problems, asthma, and cancer. The report set out trajectories and actions for the entire NHS to reach net zero carbon emissions by 2040 for the emissions it controls directly and by 2045 for those it can influence (such as the supply chain).

To support the coordination of carbon reduction efforts across the NHS and the translation of this national strategy to the local level, the 2021/22 NHS Standard Contract set out the requirement for trusts to develop a Green Plan to detail their approaches to reducing their emissions in line with the national trajectories.

Given the pivotal role that Integrated Care Systems (ICSs) play, this has been expanded to include the expectation that each ICS develops its own Green Plan, based on the strategies of its member organisations.

2.b. Staffordshire and Stoke-on-Trent ICS

The ICS Green Plan will align itself with the NHS Long Term Plan. The latter setting out how health care services will be delivered over the coming years, incorporating issues like ageing, increased use of digital technology and a focus on wellness. As part of the NHS, Staffordshire and Stoke-on-Trent ICS must play its part in reducing the environmental impact and carbon footprint of its operation. This inaugural Green Plan is a high-level, strategic document that should be viewed as a 'living' document. As the ICS develops and work programmes become clearer, the areas of focus of this Green Plan will be developed, and sustainability will be business as usual.

In England, the NHS is estimated to account for 5.4% of the country's greenhouse gas emissions. The health and social care system reduced its carbon footprint by an estimated 62% between 1990 and 2020, however drastic action is now required.

Figures 1 and 2 in the plan illustrate the key areas of focus that the NHS must deliver on to reduce its carbon footprint. The ICS' approach to this is set out in clear chapters in this Green Plan, presenting a targeted approach to meeting the Greener NHS targets of being a net carbon zero healthcare service by 2045.

The Staffordshire and Stoke-on-Trent ICS Green Plan has been written in alignment with NHS England's 'How to produce a Green Plan' guidance. Case studies demonstrating the great projects that are already underway have been included.

Figure 1 :Greenhouse Gas Protocol (GHGP) scopes in the context of the NHS (www.england.nhs.uk/greenernhs/publication/delivering-a-net-zero-national-health-service)
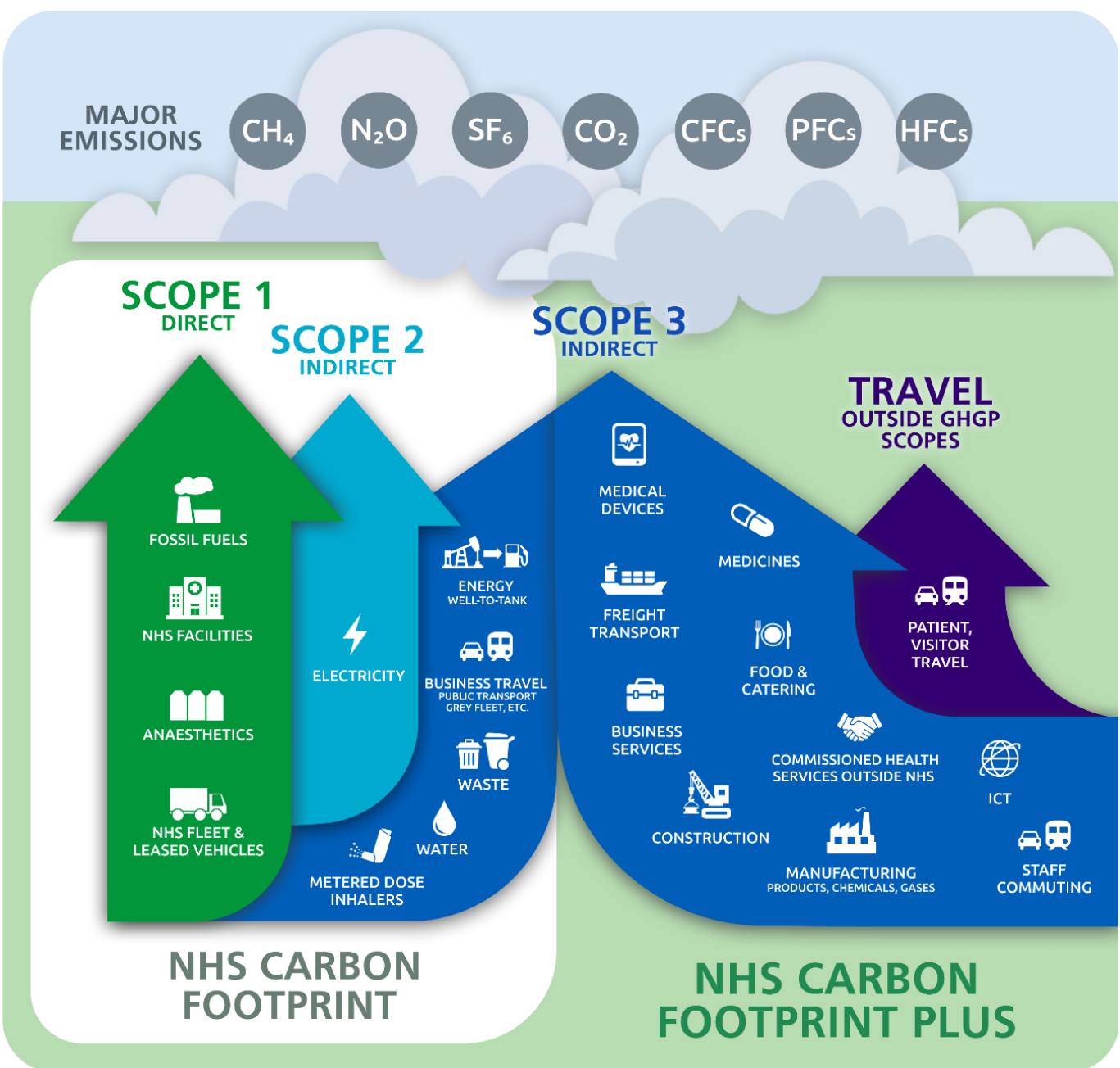
It is important to note that this is very much considered a 'plan for a plan' and as time goes on, we will ensure we align ourselves with wider system priorities in the local areas. This plan will be reviewed on a 12-month basis to ensure that intended actions are being carried out and that it remains relevant. An Integrated Care Partnership (ICP) and an Integrated Care Board are core components of all ICSs.

Subject to legislation the Staffordshire and Stoke-on-Trent Integrated Care Board (ICB) will be a new statutory NHS organisation and will take on responsibilities for leading NHS health and care services in the area from CCGs with effect from 1 July 2022. The Staffordshire and Stoke-on-Trent Integrated Care Partnership (ICP) will work closely with the ICB and will be responsible for the overall strategy on how services are delivered.

Figure 2: Sources of carbon emissions by proportion of NHS Carbon Footprint Plus (includes all three of the scopes in figure 1, as well as the emissions from patient and visitor travel to and from NHS services and medicines used within the home)

- **62%** Medicines, medical equipment, and other supply chain
- **24%** NHS carbon footprint
- **10%** Personal travel
- **4%** Commissioned health services outside NHS
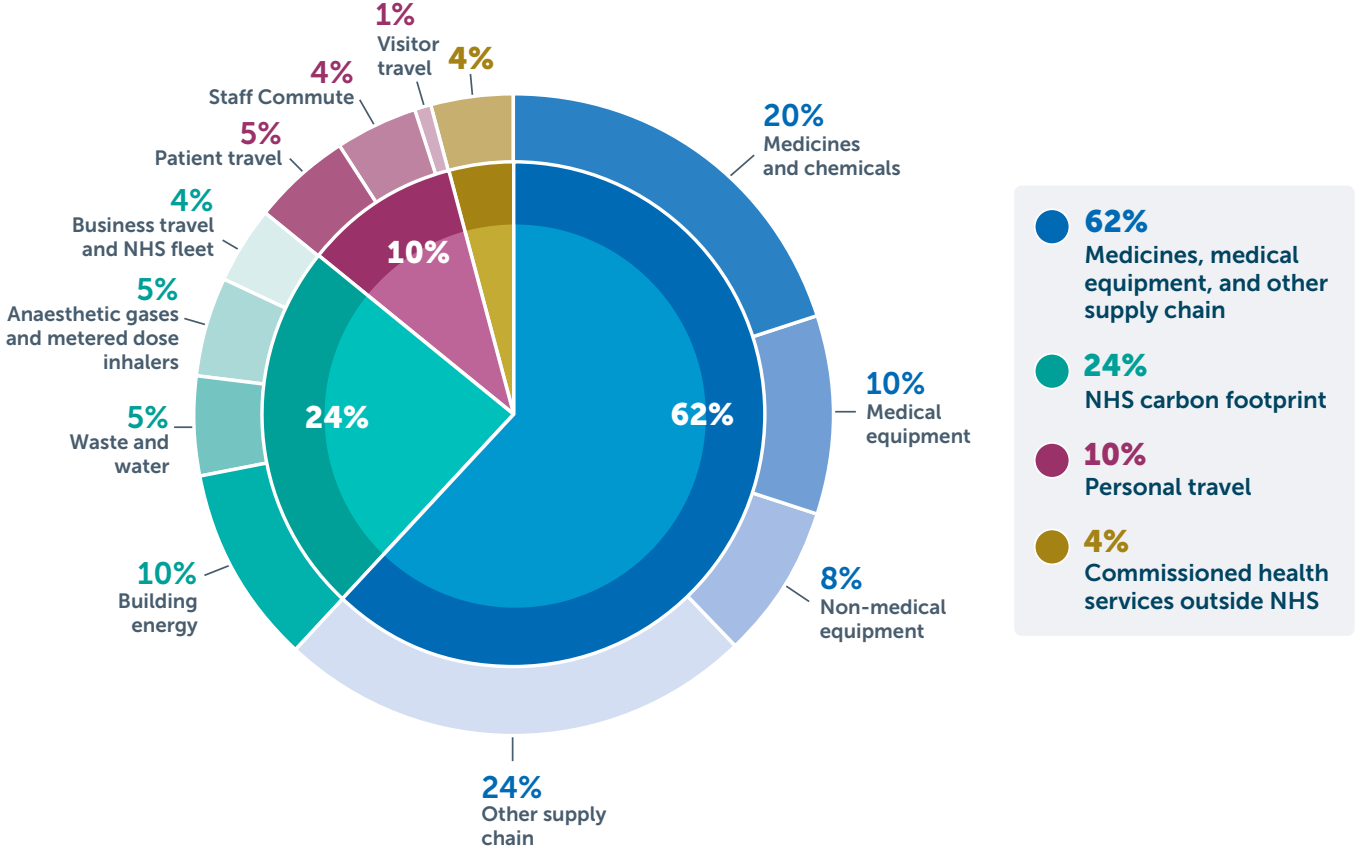
Delivering a plan that meets the needs of the populations across Staffordshire and Stoke-on-Trent requires the partnership of health and care organisations across the ICS geography – NHS trusts and clinical commissioning groups, local authorities, GPs and primary care colleagues, voluntary and independent sector partners, can only provide the type of care that people really need by working together.

The ICS focus will be to work collectively to plan and deliver health and care services to our local population of around 1.1 million people. It means there will be a much greater emphasis on collaborative working to manage resources, performance, and delivery to change the way health and care are delivered for the better.

Our priorities are simple. Residents must come first. We want to deliver person-centred care in a joined-up way that is close to home. We also want to give patients confidence that the changes being made are the right thing to do for them and for health and care staff.

Our four aims are:

1. Improving outcomes in **population health and healthcare**
2. Tackling **inequalities** in outcomes, experience and access
3. Enhancing **productivity** and value for money
4. Helping the NHS to support broader **social and economic development**

Figure 3: ICS geographical map

The following organisations form Staffordshire and Stoke-on-Trent ICS:

NHS organisations*:

- Cannock Chase Clinical Commissioning Group (CCG)
- East Staffordshire CCG
- North Staffordshire CCG
- Stafford and Surrounds CCG
- Stoke-on-Trent CCG
- South-East Staffordshire and Seisdon Peninsula CCG
- Midlands Partnership NHS Foundation Trust (MPFT)
- North Staffordshire Combined Healthcare NHS Trust (NSCHT)
- University Hospitals of Derby and Burton NHS Foundation Trust (UHDB)
- University Hospitals of North Midlands NHS Trust (UHNM)
- NHS England and NHS Improvement (NHSEI)
- Primary care networks (groups of GP practices)

Independent and voluntary bodies:

- Healthwatch Staffordshire
- Healthwatch Stoke-on-Trent
- Support Staffordshire
- Voluntary Action Stoke-on-Trent (VAST)

Local government organisations:

- Staffordshire County Council
- Stoke-on-Trent City Council
- Cannock Chase District Council
- Lichfield District Council
- Stafford Borough Council
- Staffordshire Moorlands District Council
- South Staffordshire District Council
- Tamworth Borough Council
- Newcastle-under-Lyme Borough Council
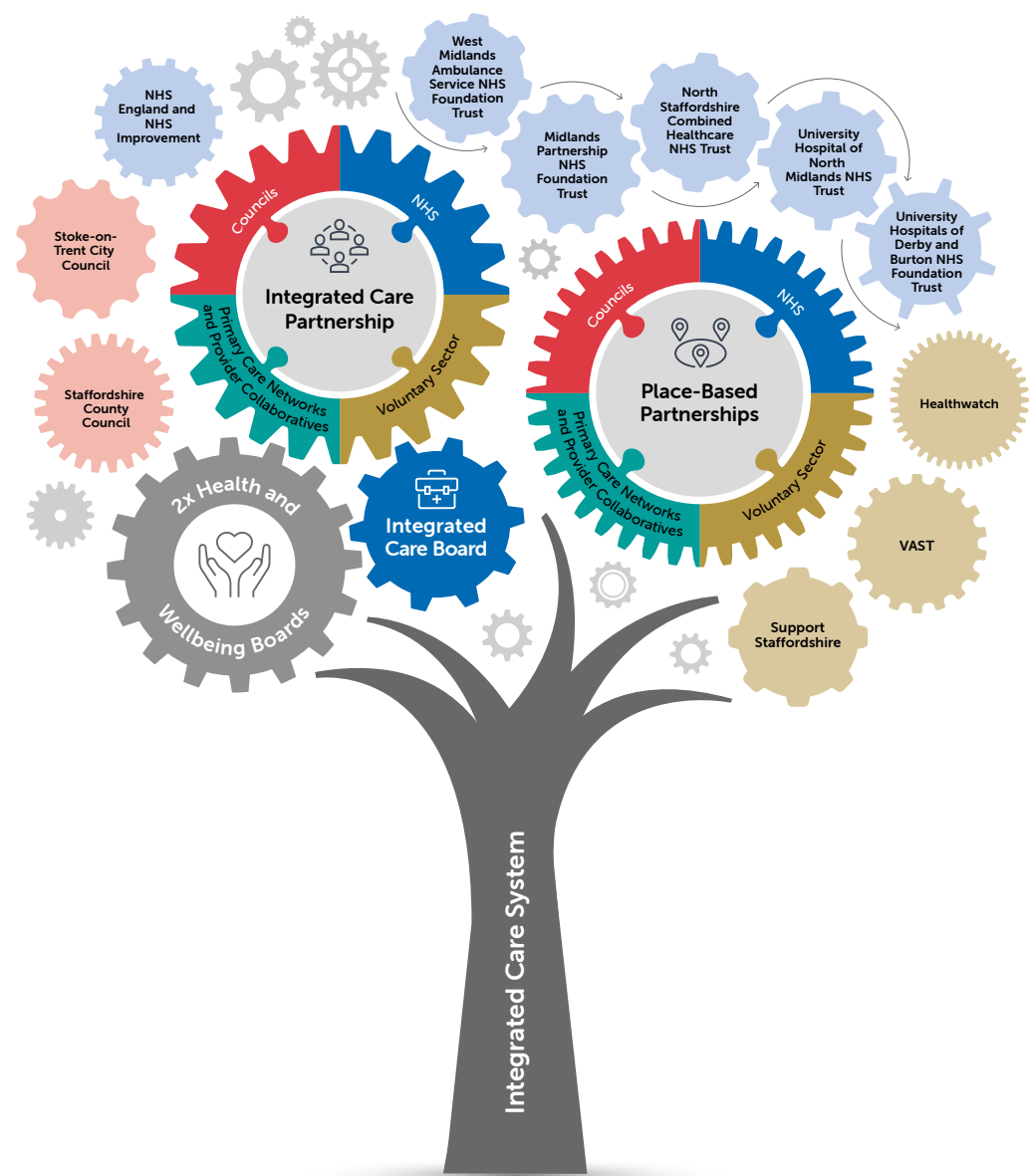- East Staffordshire Borough Council

*Until 1 July 2022, when the ICB will be established and replace the CCGs.

Figure 4: Staffordshire and Stoke-on-Trent ICS organisational tree

2.c. Governance

Staffordshire and Stoke-on-Trent ICS have an existing Greener NHS Programme Group in place that focuses on local priorities. It is expected that as the ICS and ICB development continues, there will be a focused sustainability group that aligns with regional and national priorities, as well as delivering on the locally identified priorities contained within this plan.

This sustainability group will consist of representatives from across the NHS, local government, and voluntary sectors. This group will align with existing groups to ensure sustainability is part of all decision-making processes.

It will also align with the Local Estates Forum and report into the ICS Executive Board, ensuring a joined-up approach and accountability.

In addition, a Staffordshire Sustainability Board has been set up by Staffordshire County Council, which has invited representatives from all Staffordshire Councils and Stoke-on-Trent City Council. This board is chaired by Councillor Simon Tagg (Portfolio holder and County Councillor), with Councillor Jo Porter (Staffordshire Moorlands District Council) acting as Vice Chair. This group is working on a series of initiatives which will be put in place to drive the sustainability agenda forwards.
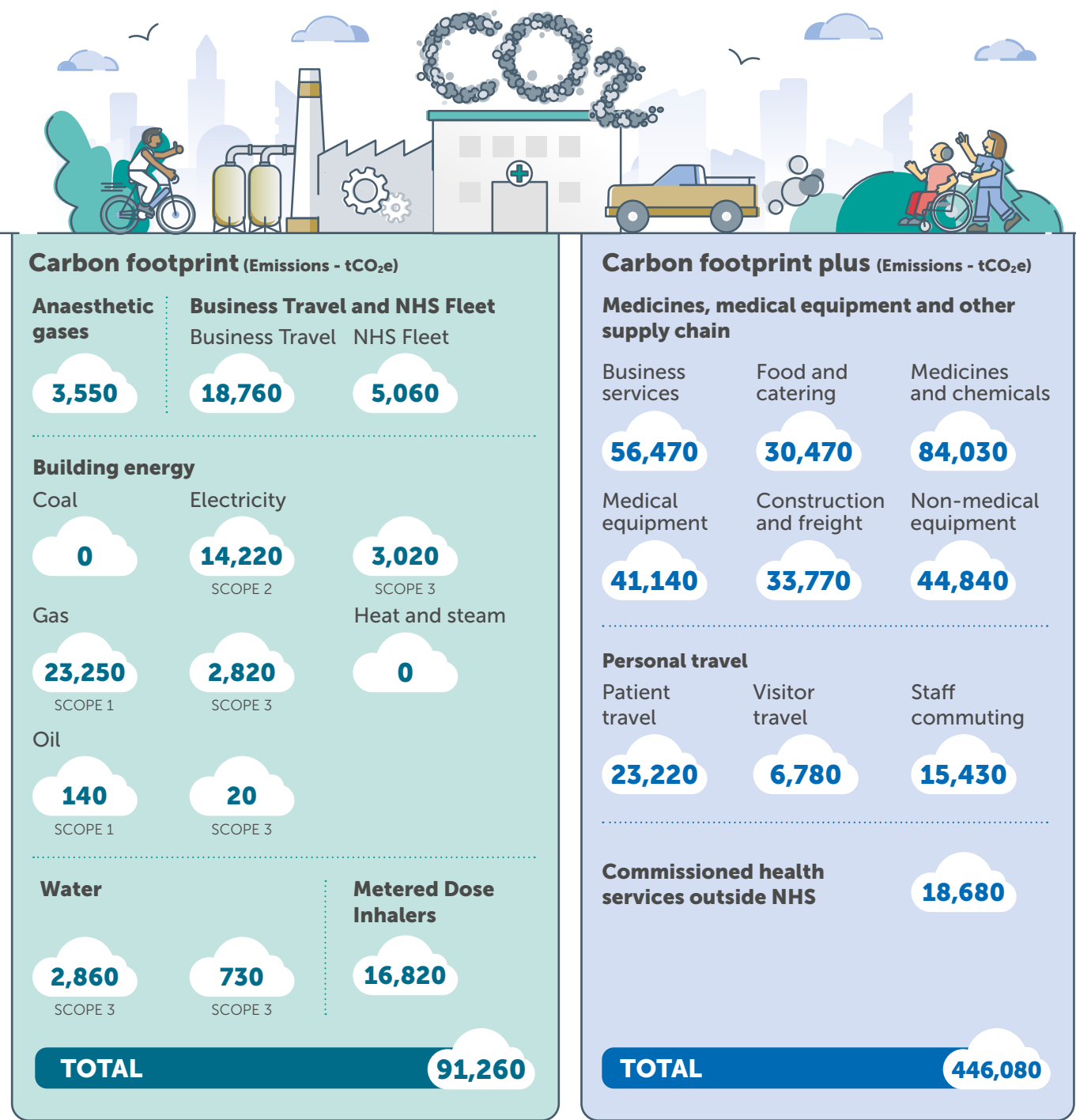
2.d. Funding

This plan sets out a number of initiatives and actions that the ICS are committed to delivering on in order to reach net carbon zero. In order to make these actions a reality, it is recognised that funding will be required and there will be a concerted effort to work collaboratively across partners to identify and secure external funding opportunities as and when these become available to help pump prime and accelerate our transition to a net zero carbon future.

2.e. Staffordshire and Stoke-on-Trent ICS carbon footprint (2019/20)

Figure 5: Carbon footprint and carbon footprint plus (2019/20)

Carbon footprint (Emissions - tCO₂e)

Anaesthetic gases
3,550

Business Travel and NHS Fleet

Business Travel	NHS Fleet
18,760	5,060

Building energy

Coal	Electricity	
0	14,220	3,020
	SCOPE 2	SCOPE 3

Gas		Heat and steam
23,250	2,820	0
SCOPE 1	SCOPE 3	

Oil	
140	20
SCOPE 1	SCOPE 3

Water

		Metered Dose Inhalers
2,860	730	16,820
SCOPE 3	SCOPE 3	

TOTAL 91,260

Carbon footprint plus (Emissions - tCO₂e)

Medicines, medical equipment and other supply chain

Business services	Food and catering	Medicines and chemicals
56,470	30,470	84,030

Medical equipment	Construction and freight	Non-medical equipment
41,140	33,770	44,840

Personal travel

Patient travel	Visitor travel	Staff commuting
23,220	6,780	15,430

Commissioned health services outside NHS 18,680

TOTAL 446,080

3. Our Plan on a Page

Area of focus net zero plan

Our Green Plan has eight main areas of focus, each with their priorities set out within this inaugural ICS Green Plan. A summary of our approach is detailed below.

Our Workforce

Vision: Empowered and motivated staff, creating green leadership within all services.

Areas of Action
- Net Zero Training
- Implement Green Champions across the ICS
- Identify % of ICS employees living in Staffordshire and Stoke-on-Trent

Our Digital

Vision: Collaborative working to align digital transformation to NHSX framework.

Areas of Action
- Benchmarking emissions
- Building resilience
- NHSX Annual Assessment

Our Travel

Vision: Reduced CO_2 emissions from vehicle travel to our sites.

Areas of Action
- Travel plans
- Community of active commuters

Our Food

Vision: Embed high and compliant standards for plastic packaging and food waste.

Areas of Action
- Food Waste Management Plan
- Review suppliers/producer

Our Estate

Vision: Decarbonisation of the estate through a reduction in utility consumption.

Areas of Action
- Make every KWh count
- Replace lighting with LED across the estate
- Support complete removal of coal and gas

Our Care

Vision: Provide quality services and systems that include sustainability as a fundamental principle.

Areas of Action
- Reduce admissions and health inequalities
- Increase social prescribing

Our Procurement

Vision: Joint working to reduce single-use plastics and packaging.

Areas of Action
- Sustainable criteria and minimum 10% weighting within tender process
- Understand ICS efficiencies

Our Medicines

Vision: Provide quality services and systems that include sustainability as a fundamental principle.

Areas of Action
- Reduce admissions and health inequalities
- Increase social prescribing

4. Organisational vision and ICS priorities

4.a. Our green vision

To achieve net zero healthcare within Staffordshire and Stoke-on-Trent ICS, in line with the Greener NHS programme. We want to develop greener health and social care systems which strive to deliver high-quality services and improve the health and wellbeing of the population.

For the NHS to reach net zero carbon emissions by 2040 for the emissions it controls directly, and by 2045 for those it can influence, we aim to achieve the following:

Reduce carbon emissions

Reduce gas, electricity, and water usage, to cut carbon emissions

- Ensure 100% green electricity supply to all sites
- Actively support and promote travel that does not use petrol/diesel-powered vehicles
- All suppliers of goods and services to be aligned to net zero target as well as procurement frameworks.

Decrease pollution

Reduce waste to protect the environment

- Eradicate single-use plastics
- Reduce causes of air pollution across the system and identify best practice
- Procure products with an environmental lens, choosing low carbon or no carbon options where possible.

Improve health and wellbeing

Support on-site health and wellbeing opportunities

- Invest in green site enhancement and green spaces
- Support and encourage active travel
- Create an environment that promotes a highly motivated, engaged workforce.

Increase financial efficiency

Reduce gas, electricity, and water consumption to save money

- Reduce waste to cut costs
- Review all board/committee templates to include a sustainability dimension
- Ensure all future financial decisions have sustainability as a key driver in decision-making.

Boost reputation

Maintain our high reputation as individual organisations of an ICS and other partners by sharing information and promoting action

- Support and encourage green champions by creating a culture that enables compassion and inclusivity to thrive
- Ensure our staff feel informed and empowered to consider sustainability as part of their decision-making
- Ensure we work in collaboration as a system and with other partner organisations.

4.b. Regional greener priorities

As a key element of delivering on the Greener NHS Programme, each region has identified its own priorities. For Staffordshire and Stoke-on-Trent ICS, the Green Plan will cover the following four themes

Medicines

- Reducing the proportion of desflurane used in surgery to less than 5% of overall volatile anaesthetic gases volume in all trusts, in line with the 2022/23 NHS Standard Contract (recognising this is only used in UHNM)
- Implementing approaches to optimise the use of medical gases including reducing nitrous oxide waste and preventing the avoidable atmospheric release of medical gases
- Reducing the carbon impact of inhalers in line with the commitment of a 50% reduction by 2028 and a 6% reduction in 2022/23 on a 2019/20 baseline, by:
  - supporting patient choice of fewer carbon-intensive inhalers, for example, dry powder inhalers, where clinically appropriate, resulting in a 2% reduction of emissions by March 2022
  - working with the national team to ensure schemes for green disposal of inhalers are rolled out across the region.

Estates and facilities

- All electricity purchased by trusts is Renewable Energy Guarantees of Origin[1] (REGO)-certified as soon as is practicable
- Support the reduction of coal and gas in acute premises so it is removed completely
- Support the implementation of net zero hospital building standards which will be published in quarter one 2022/23
- Support the delivery of projects receiving money through the decarbonisation scheme.

Travel and transport

- Ensuring systems solely purchase and lease cars that are ultra-low emissions vehicles (ULEVs) or zero-emission vehicles (ZEVs) and work towards purchasing vans (under 3.5 tonne) that are ULEVs or ZEVs, in line with the NHS Long Term Plan and Net Zero Strategy commitments
- Ensuring that only ULEVs or ZEVs are available to staff through car salary sacrifice schemes
- Identifying a cycle-to-work lead in every trust, as outlined in the People Plan
- Ensuring all systems have:
  - a salary sacrifice cycle-to-work scheme in place for staff
  - facilities to encourage staff and visitors to cycle to work, where possible
- Working with the national Greener NHS team to undertake a review of existing fleet within the region.

Supply chain and procurement

- Supporting implementation of a net zero supplier roadmap
- Minimum of 10% net zero and social value must be within all contracts
- Contracts more than £5 million must include a plan for carbon reduction
- Reduce the reliance on office paper by 50% by 2025
- 100% of all paper purchased to be recycled by 2025
- Walking and refurbishment schemes to be in place by all trusts by end of April 2024.

1. The REGO scheme provides transparency to consumers about the proportion of electricity that suppliers source from renewable generation.

4.c. Greener NHS quarterly returns[2]

In order to measure the progress against the Greener NHS Programme, national targets have been identified that need to be reported on by NHS provider trusts on a quarterly basis. These questions include:

- Does your organisation have a long-term plan for climate adaptation plan in place that is separate from your Business Continuity Plan?
- Does your organisation have an up-to-date, board-approved Green Plan in place which is aligned to the ambitions set out in the 'Delivering a Net Zero NHS' report?
- Does your organisation have a walking aid refurbishment and reuse scheme?
- Does your organisation purchase only recycled paper?
- Does your organisation have a plant-based menu that is readily available and accessible to staff and patients?
- Does your organisation have a board representative who has net zero work within their profile?
- Does your organisation purchase 100% of its energy from renewable sources?

In response to these questions, there are unified positive responses. For example, all three local provider trusts have a board-approved Green Plan in place, a board representative with net zero in their profile, a salary sacrifice cycle-to-work scheme, and they change their meals regularly to enable the use of more seasonal ingredients.

2. Please note, this section will focus only on the three trusts geographically located within the ICS footprint due to the regional reporting processes.

For other areas, there is a degree of challenge in being able to deliver a consistent positive response. For example, issues relating to supply and availability of electric vehicles (EV) and a comprehensive EV charging infrastructure will act to constrain the pace at which change can be delivered. Across the ICS, partners will work collaboratively to seek solutions to these issues.

As the quarterly returns continue and the data gets richer, it is recommended that an overview with regional colleagues is carried out, that will focus on the key areas needing the most support to achieve the targets.

4.d. Our commitment to social value and anchor institutions

While this document refers mainly to environmental elements of sustainability, it is important to also align to the social and economic elements. As the ICS and ICB are being developed and the focus changes from competition to co-operation, reducing health inequalities will be an integral element of all the work carried out. Work is already taking place across Staffordshire and Stoke-on-Trent to deliver on these areas – and this ICS Green Plan will align completely with them.

Social value and anchor institutions are a big part of the way the NHS views the wider remit of sustainability. Social value requires organisations to consider the economic, environmental, and social impacts of both decisions made and activities undertaken. As of 1 April 2022, suppliers will need to be able to explicitly demonstrate the social value of all tenders to the NHS.

Anchor institutions are large organisations based in a local area, that are unlikely to leave and are viewed as an integral part of the local community. The NHS absolutely fulfils this definition, and its ICSs can become anchors using their own local definitions, with a focus on supporting the local community through opportunity, purchase, and employment.

This work aligns with the net zero agenda and the supplier roadmap bringing together the social, environmental, and economic elements of all we do and with the relevant procurement rules.

4.e. Reducing health inequalities

Staffordshire and Stoke-on-Trent ICS aim to reduce health inequalities, help people improve their health and wellbeing, and encourage independence and self-care.

There will be a further development and expansion of a coordinated, evidence-based approach to engaging with communities. Staffordshire and Stoke-on-Trent ICS have been successful in securing £200,000 funding for increasing uptake of preventative services. We are working in partnership with Staffordshire County Council and Stoke-on-Trent City Council to engage with communities, adopting a citizens' and communities' inquiry approach to understand the key factors that impact their health and wellbeing.

The aim is to gain local insights along with a richer and deeper understanding of existing community assets and relationships, which can be used to co-develop and co-produce local solutions and innovations to prevent and reduce existing health inequalities.

To gather local insights and a greater understanding of the needs of the population, the **Community Health Champion Model** will be rolled out. Key components of this model include:

- A roll out of the Champion's Programme
- Development of an engagement platform
- A citizen's enquiry to understand the community perspectives on health and wellbeing
- A community enquiry to understand:
  - The range of health issues concerning them
  - Challenges/issues affecting them
- Strengths existing within communities to support better health and wellbeing
- Establishment of ongoing links to the community
- Establishment of a 'community chest fund'
- Production of a programme of start-up projects to increase uptake of preventative services and promote health within communities
- Support of ongoing development by evaluating and learning from start-up projects
- Increased engagement in preventative health services including:
  - Screening
  - Vaccinations
  - Smoking cessation
  - Healthy eating.

The top line aim is to improve community engagement in key health-related issues for Staffordshire and Stoke-on-Trent. Marginalised and disaffected communities will be encouraged to be active in defining the issues which affect them and included when solutions are devised.

An important part of reducing health inequalities is reducing digital exclusion.

Digital exclusion is when people do not have the access, skills, or confidence to use the internet or fully benefit from technology in everyday life, resulting in their exclusion to health, education, and treatment. Staffordshire and Stoke-on-Trent ICS are committed to reducing this equality wherever possible. A recent report from Good Things Foundation highlights that digital exclusion impacts people's health in three main ways:

Access to healthcare – for example, being locked out of using digital health tools and services

Shaping people's chances of a healthy life – via economy and employment, education and learning, and social participation and community life

Digital exclusion for equalities in a data-driven health system – certain groups will have very low digital and data footprints.

4.f. Voluntary, community, and social enterprise (VCSE) sector

The VCSE sector is an integral part of the ICS, bringing together community and voluntary organisations to share innovative approaches for empowering people to manage their health and to work towards their personal goals, to make decisions about their care, support, and treatment they receive, as well as to engage with and shape health and care support.

The sector is currently implementing a new structured way of working – the Health Communities Alliances, which will deliver support to local communities. Working together, the sector is supporting people so that they can deal with the changes brought about by COVID-19, and vulnerable members of the community can adapt to digital technology without experiencing digital exclusion. These health alliances are also making the most of opportunities to be more effective and efficient and in the case of Support Staffordshire for example, are aiming to become paperless organisations.

Case study – University Hospitals of North Midlands NHS Trust (UHNM)

Keep Warm, Keep Well

The project 'Beat the cold' is a charity based in Stoke-on-Trent that is set up to combat the health and wellbeing effects of fuel poverty faced by vulnerable households. In partnership with UHNM, they sought to assist vulnerable patients who were suffering from conditions exacerbated by the cold following their discharge from hospital, while at the same time reducing cost and the carbon footprint of NHS operations.

'Saving lives with solar' is a community energy project that is the first of its kind for the NHS. As part of the scheme, solar photovoltaic (PV) panels have been installed and commissioned on hospital roofs. The electricity generated by the panels will receive a guaranteed 20-year feed-in tariff (FiT) income from the government, which will accumulate within Southern Staffordshire Community Energy's (SSCE) community fund before being diverted to 'Beat the cold'.

Aims

To facilitate both energy and community resilience by assisting local and vulnerable patients who are suffering from fuel poverty, while increasing the sustainability of UHNM's estates.

Challenges

- Government policy towards renewable energy may change, although it has maintained a commitment to ensure whichever tariff a project is registered for at the start, will remain the same for the duration of the FiT period
- New technology inventions and developments may render existing technologies and equipment obsolete, although such applications require long lead times
- Long-term changes to weather patterns could result in lower levels of production
- Operational costs may rise faster than anticipated during the life of the project.

Results

- More than **1,000** roof-mounted solar PV panels have been installed and commissioned on seven buildings across both hospitals
- The **£335,600** project has been entirely funded by investment from members of the public, who will receive a 4.5% average rate of return
- **£300,000** has been raised for the community fund from the FiT.

4.g. Corporate social responsibility

Staffordshire and Stoke-on-Trent ICS recognise the importance of its corporate responsibility and strives to fully integrate economic, social, and environmental considerations into all levels of its business operations.

Healthcare has a substantial impact on the environment, with an estimated NHS carbon footprint of 20 million tonnes of carbon dioxide equivalent (CO_2e). Staffordshire and Stoke-on-Trent ICS must demonstrate to partner organisations and the population, that healthy people depend on a healthy environment. The rapidly increasing risk of adverse effects on health from climate change is happening now – Staffordshire and Stoke-on-Trent ICS have a responsibility to act and to set an important example to the business community and the public.

4.h. Social prescribing

Social prescribing is a key component of **universal personalised care** but also has close links to sustainability. General practice is often the first point of contact many people have with the NHS. It is estimated that 20% of people visit their GPs for what is primarily a social problem rather than a health problem. And this is where, by taking referrals from GPs and other care professionals, social prescribing link workers can make a difference.

Social prescribing is a way for local agencies to refer people to a link worker. Link workers give people time, focusing on 'what matters to me' and taking a holistic approach to people's health and wellbeing. They connect people to community groups and statutory services for practical and emotional support. Link workers also support existing community groups to be accessible and sustainable, helping people to start new groups and working collaboratively with all local partners.

Social prescribing works for a wide range of people including those:

- with one or more long-term conditions
- who need support with their mental health
- who are lonely or isolated
- who have complex social needs that affect their wellbeing.

When social prescribing works well, people can be easily referred to link workers from a wide range of local agencies including general practice, pharmacies, multidisciplinary teams, hospital discharge teams, allied health professionals, fire service, police, job centres, social care services, and housing associations, as well as voluntary, community and social enterprise (VCSE) organisations. Self-referral is also encouraged.[3]

A standard model of social prescribing has been developed in partnership with stakeholders, which shows the key elements that need to be in place for effective social prescribing. You can access a social prescribing link worker if you are registered with a GP practice, with referrals from a clinician, GP, nurse, healthcare assistant, pharmacist or anyone who works in the medical practice. Once a referral has been received, you will be contacted by a social prescribing link worker and offered an appointment[4]. Support Staffordshire and Brighter Futures are the organisations providing these services across Staffordshire and Stoke-on-Trent.

3. **www.gov.uk/government/news/mental-health-benefits-of-visiting-uk-woodlands-estimated-at-185-million**
4. More information can be found at: **bit.ly/NHSSocialPrescribing**

4.i. The One Planet Standard

The One Planet Standard recognises the organisations that respect planet Earth's natural boundaries and capacities by adjusting the impacts of their activities to a level commensurate with what the planet can provide. At the same time, it can help to combat climate change and reintroduce greater biodiversity and nature into our environment.

As well as this – irrespective of the organisation – these actions are likely to lead to:

- enhanced reputation
- better positioning for tendering
- compliance with legislation
- improved staff motivation
- leaner, more efficient operation
- greater investment-readiness.

The One Planet Standard works by helping organisations to calculate and reduce their ecological footprint. It does this by encouraging an all-encompassing assessment of the influence and effects of all an organisation's activities. Relevant to five different audiences, it is built on 10 interlinked principles underpinned by a set of evidence-based criteria. It is against these criteria an organisation seeking accreditation is assessed.

ONE PLANET
S T A N D A R D

The One Planet Standard embraces the 'five ways of working':

1. **Long-term** – balancing short-term needs with meeting long-term needs

2. **Prevention** – acting to prevent problems occurring or getting worse, using the precautionary principle

3. **Integration** – considering how all an organisation's actions impact upon each other, upon the social and ecological goals, and upon the interests and actions of stakeholders

4. **Collaboration** – with any other person (or different parts of the organisation itself) that could help the organisation meet its objectives, as well as its social and ecological goals

5. **Involvement** – involving a wide range of people in achieving its social and ecological goals, ensuring that those people reflect the diversity of and are from, the area where the organisation operates.

5. Areas of focus

5.a. Workforce and system leadership

Our people

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.

The ICS recognises that the majority of its employees are also residents and is factoring that in as a part of setting the intentions and direction of travel for the constituent ICS organisations' approach to our people.

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.

Figure 6: Image from NHS 'Healthier People, Healthier Planet' campaign

Case study — University Hospitals of North Midlands NHS Trust (UHNM)

UHNM recognised that staff behaviour has a major impact on the sustainability of an organisation. Staff engagement has been facilitated through the 'Switch to a sustainable UHNM' campaign. There are now more than 150 'Switch champions', who are an important network of employee volunteers located throughout the organisation, who are helping to deliver the campaign.

The campaign aims to empower individuals to make lasting and meaningful change through promoting and encouraging a switch to more sustainable behaviours.

The production of efficiency savings will ultimately improve patient care and lead to a more sustainable, health-promoting trust. The Switch champions provide top-down support to current sustainability initiatives and campaigns to ensure that they become embedded in their local work areas. They will also act as a point of contact to departmental employees and provide a valuable source of information, ideas, and opinions, which will create a powerful, bottom-up approach.

Regular communications have been sent out to the Switch champions and to the wider staff body. These are organised into the themes of travel and transport, energy, water, waste, and patient care.

Case study — University Hospitals of Derby and Burton NHS Foundation Trust (UHDB)

UHDB has engaged staff by publicising local, national, and international events.

UHDB	National	Global
• Staff travel survey	• National Marine Week	• World Wetlands Day
• Sustainability Week	• National Clean Air Day	• World Pulses Day
• Cycle to Work Week	• Climate Coalition Show the Love	• Fairtrade Fortnight
• Walk to Work Week	• Recycle Week	• World Wildlife Day
• Public Transport Week	• The Big Pedal	• Global Recycling Day
• Free bicycle maintenance	• National Gardening Week	• International Day of Forests
• Free bicycle security marking	• National Walking Month	• World Water Day
• Environmental champions training	• National Vegetarian Week	• World Meteorological Day
	• National Refill Day	• Earth Hour
	• Organic September	• World Health Day
		• International Mother Earth Day
		• Stop Food Waste Day
		• World Tuna Day
		• Composting Awareness Week
		• World Migratory Bird Day
		• World Bee Day
		• International Day for Biological Diversity
		• World Bicycle Day
		• World Environment Day
		• World Oceans Day
		• Global Wind Day
		• World Meat Free Week
		• Plastic Free July
		• Veganuary
		• World Soil Day
		• World Habitat Day

5.a.i Leadership

The ICS has identified Chris Bird, Director of Partnerships, Strategy and Digital at North Staffordshire Combined Healthcare NHS Trust, as the Senior Responsible Officer for our Net Zero Carbon Programme with responsibility for ensuring the development of this Green Plan as well as leading its implementation.

By identifying a director-level lead, the ICS will ensure that the plan is adopted at the highest level, creating a cascade effect across our organisations and throughout our workforce.

As part of establishing the governance, and as the ICS structures develop, individuals will be identified to lead on each area of focus, ensuring alignment with other governance processes.

5.a.ii Sustainability champions

Case study – North Staffordshire Combined Healthcare NHS Trust (NSCHT)

NSCHT is in the process of establishing a network of 'Sustainability champions' from across the organisation to build a movement of change across all our colleagues. It has also launched this poster to inspire colleagues to positive action by coming forward to be part of the community of champions.

5.a.iii Training

Our ability to deliver on this ambitious Green Plan will depend on all parts of Staffordshire and Stoke-on-Trent ICS pulling together as one team. It will be the actions of our thousands of staff members that will make the plan real. Staffordshire and Stoke-on-Trent ICS will be supporting staff by setting expectations in staff inductions including sustainability in staff contracts and training delivery.

There will be additional support for specific roles such as our Sustainability champions to help further embed sustainability as the business-as-usual approach for everything we do.

In addition, Staffordshire and Stoke-on-Trent ICS will invest in sustainability programs to draw upon learning external to the organisation for inspiration and new ways of working.

Case study – North Staffordshire Combined Healthcare NHS Trust (NSCHT)

There is a commitment to embedding sustainability through the professional development of the workforce by:

- raising awareness of sustainability through team meetings, continual professional development (CPD) opportunities, and ongoing training and induction
- providing regular communications and education through a variety of media channels for staff to provide advice and guidance on a range of environmental topics including access to online training resources
- working with staff and patient groups to develop specific projects that address our Green Plan action plan, for example, cycle-to-work schemes and agile working
- developing a health and wellbeing framework in line with the NHS People Plan expectations for workforce health and wellbeing
- disseminating information on sustainability to all new staff through the Trust's induction programme
- including sustainability within its staff awards programme.

Ideas for training and workforce engagement

- Participate in national sustainability campaigns (Sustainability Day, Climate Change Week, Green Office Week, Energy Saving Week)
- Deliver training to staff via online platforms whenever possible
- Set up a visual green message on computer home screens or lock screens
- Explore and share external expert knowledge for energy and waste reduction
- Encourage staff to provide suggestions and ideas on how sustainability can be improved across all ICS organisations
- Ensure that sustainability is included in staff induction
- Regularly share development and implementation of health and wellbeing initiatives for staff, as well as liaising with regional 'Greener' team on training and communications.

5.b. Sustainable models of care

The NHS Long Term Plan (LTP) 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 an additional factor in care design. Sustainable models of care can deliver better health outcomes.

Other principles that improve quality of care and patient experience can also help to decarbonise care pathways through:

- optimising the location of care
- earlier and quicker detection, diagnosis, and treatment
- embedding best clinical practice
- treating for the long term
- adopting more digital technology
- social prescribing.

What should be done

Carbon-reduction principles should be embedded in the way that all care is delivered, embracing digitally enabled care is crucial to this. There should be a default preference for lower-carbon interventions where clinically equivalent. The aim is a reduction in unwarranted variation in care delivery and outcomes resulting in unnecessary carbon emissions.

Ways it can be done

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 best practice that can be shared.

The ICS will support the adoption and spread of clinical carbon reduction innovations, for example, via running innovation competitions across the site or organisation, involving the local Academic Health Science Network (AHSN).

Approaches will include:

- Connecting with the **Get it Right First-Time team** working within the ICS where possible to reduce unwanted variation and promote learning and sharing of best practice. Earlier and quicker detection, diagnosis and treatment will contribute towards decarbonisation
- Working with our transformation teams to support the redesign of selected care pathways to drive out unnecessary stages and low-value activities
- Recognising the importance of preventing ill health and building preventative medicine into our long-term health strategy
- Working towards optimising the location of care, trying to make it at or closer to home – working across all services to reduce unnecessary patient journeys, always keeping in mind how appropriate it is clinically
- Engaging stakeholders to deliver solutions that reduce the number of hospital visits and consider the impact of different travel options when planning service changes. Setting targets for a reduction in hospital admissions and delayed discharges
- Creating and implementing a strategy for social prescribing to help improve mental health outcomes and reduce health inequalities. Join up with voluntary organisations and charities to help link with the local community
- One of the principal routes to achievement is likely to be through technology. Examples include virtual consultations, virtual wards, and remote monitoring
- Developing a virtual mental health model – mental health patients may be the most open to this approach and prefer remote support
- Reducing readmissions by ensuring the patients' home environments are suitable for recovery
- Introducing recognition in the form of awards for staff members who devise new initiatives and quality improvements in sustainable care.

Ways it can be measured

Measure progress by looking for a decrease in the ratio of face-to-face appointments to overall patient activity

- Aim for at least 25% of outpatient activity to be delivered remotely, resulting in direct and tangible carbon reductions
- Ratio of face-to-face appointments to overall patient activity including NHS 111 calls. Make it real by converting this to actual number of journeys avoided and carbon saved
- Measure the reduction in hospital admissions and delayed discharges
- Use the 'patient view' digital platform to reduce unnecessary car miles travelling to hospital. This also gives patients better access to their health information and reduces the need for physical appointments.

5.c. Digital transformation

There is a major role that digital technologies can play in meeting the NHS net zero targets. The COVID-19 pandemic, whilst undoubtedly an incredibly challenging time for many people, also proved to be the catalyst for NHS organisations to achieve truly remarkable digital transformation at an unprecedented pace and scale. During the pandemic, virtual appointments were introduced – with some estimates reporting the carbon equivalent of taking 40,000 cars off the road for a year. There has also been an accelerated transition to alternate models of care for staff and patient interaction.

Staffordshire and Stoke-on-Trent ICS' Digital and Data Strategy aspires to build on this legacy by focussing on ways to further harness digital technology and systems that streamline service delivery and supporting functions, as well as improving the use of resources and reduce carbon emissions. The programme will be based on **NHSX's What Good Looks Like (WGLL) framework**.

The What Good Looks Like programme draws on local learning. It builds on established good practice to provide clear guidance for health and care leaders to digitise, connect and transform services safely and securely. This will improve outcomes, experience, and safety of our citizens.

Case study – Midlands Partnership NHS Foundation Trust (MPFT)

MPFT has a clear digital strategy with unambiguous ambitions.

Our digital mission is to 'enhance care through digital innovation'.

The digital strategy declares a mission to 'enhance care through digital innovation' with a vision that is made up of three key ambitions that has full alignment with national (NHSX what good looks like) and regional (Integrated Care Systems) ambitions in both health and social care:

- **Digitise care pathways –** we will reduce paper-based operations and improve security and access through digitisation
- **Connect people with reliable and secure IT –** we will put our service users and staff securely into contact with our systems and the information required
- **Inform through the power of data –** we will make use of our data to inform care and decision making.

5.c.i Virtual appointments

The NHS estimates that in the 12 months to August 2021, the benefits of running virtual appointments saved patients more than 277,679 hours in travel time. Staying at home led to a reduction of over 2,500 tonnes of CO_2. Reducing air pollution through patients making fewer car journeys can also directly impact on people's health.

Video and telephone consultations are also popular with many patients. 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.

The COVID-19 pandemic forced many hospital appointments to take place virtually via video calls or telephone.

The easing of restrictions means more appointments have been taking place face-to-face again. However, where appropriate, virtual appointments will continue to be used to benefit patients and staff.

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.

The charts below highlight the recent change from a predominantly face-to-face model of GP consultations and outpatient appointments to a more mixed economy over the period of the COVID-19 pandemic.

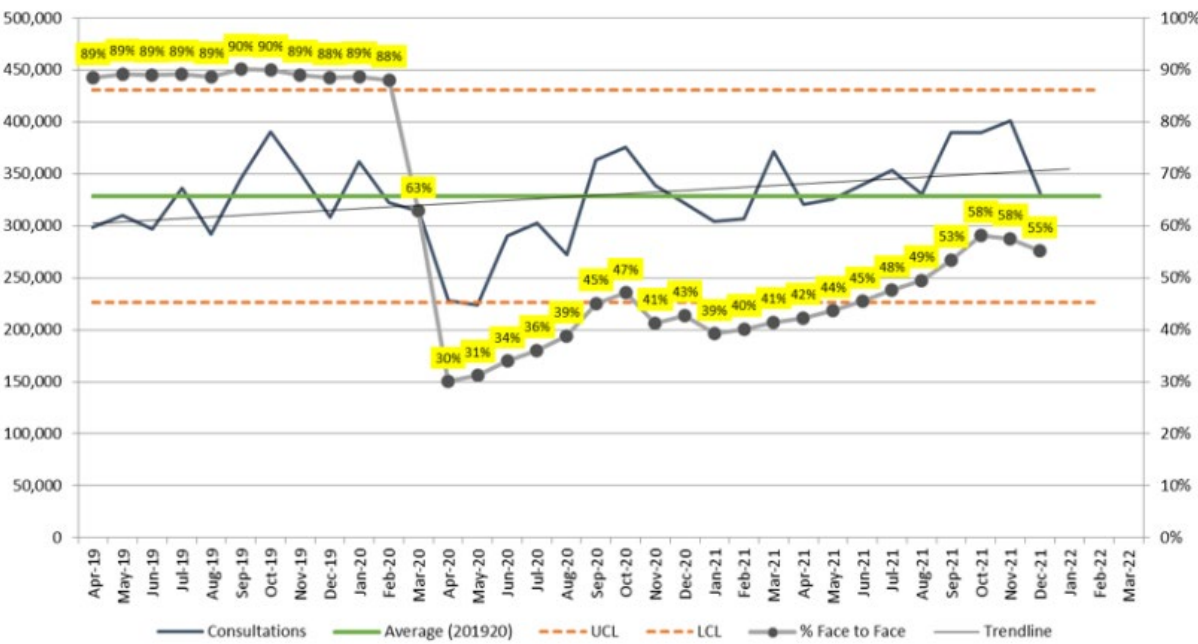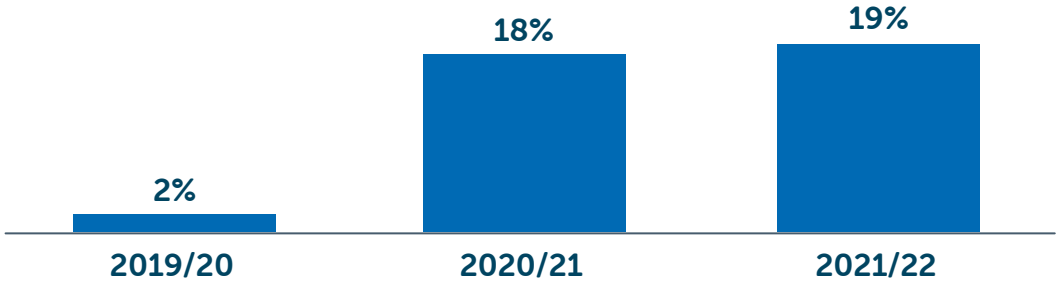**Figure 7: Primary care consultations - ICS level**

Figure 8: Outpatient activity for Staffordshire and Stoke-on-Trent CCGs share of appointments via telephone and telemedicine

2019/20	2020/21	2021/22
2%	18%	19%

Case study — Midlands Partnership NHS Foundation Trust (MPFT)

MPFT has been looking at digital options for a number of years. Some outcomes of projects undertaken in 2019/20 included:

- **E-appointment letters —** reduced paper and reduced did-not-attend environmental costs
- **E-observations on wards —** by eliminating paper, we have saved an estimated 10,212 printouts since April 2021
- **E-consent —** eliminating paper, saved 15,000 avoided printouts in one project alone.

15,000
Avoided eConnect paper forms

1,822
Avoided dental med history paper forms

10,212
Avoided eObs paper forms

22,948
School children seen on school immunisations app

2,500
Visits recorded from tablet users

654
eCommunity users for scheduling

Ways it can be done

- Use digital technology to capture and record information as patients are treated, which ideally, in the future, leads to doctors and nurses being able to spend more time with their patients, leading to safer and quicker care
- Remove paper from processes — go 'digital by default' — digitising medical records under one system. There may be resistance from some, but the aim is to go paperless with as much patient communication as possible
- Explore all alternatives to traditional face-to-face appointments. Virtual, digitally enabled appointments are more efficient, increase productivity and reduce appointments where the patient did not attend ('DNA').

Possible approaches

- Ensuring that the infrastructure, technology, and training for working from home is easily available, then set targets for a share of corporate and administration staff to have home as their default place of work
- Surveying and engaging patients to gain their consent to electronic channels as their default method of communication — less or no paper
- Digitising archived records both from a clinical and corporate perspective, allowing for more efficient use of estate and improving access to documents
- Setting targets — count the number of virtual meetings or telemedicine clinics occurring and aim for a year-on-year increase. Bring it to life by showing the amount of carbon emissions saved — their CO_2 impact
- Truly supporting a working environment that enables flexible working through digital collaboration and online interactions — there is a lot of evidence pointing to an increase in productivity for this model
- Reviewing end-user devices and moving from desktops to more efficient laptops, as well as reducing the volume of printing undertaken
- Collaborating with partners and other stakeholders on opportunities for enhancing current infrastructure and delivery models — looking to share facilities and services to support greater efficiencies
- Engaging with clinical staff and patients to design ways in which they can take more control of their own care through open information sharing and using telehealth and wearable technology.

How it can be measured

- 100% of all paper purchased to be recycled by 2025
- Reduce the reliance on office paper by 50% by 2025
- Monitor the number of the workforce to be home-based
- Monitor the number of meetings held virtually.

5.c.ii Adoption of digital tools

The adoption of digital tools is essential to reducing the carbon footprint and reliance on face-to-face, as well as to increasing virtual wards. One tool that the ICS should consider is Warp It.

Case study — Warp It

'Warp It' is a procurement tool that stops staff from buying items that are already surplus. It is also a waste-reduction tool – finding new owners for items that may have been thrown away. The platform current covers 35% of the NHS in England and 100% of NHS Scotland. Organisations across the ICS could sign up to this.

**Immediate benefits to customers:**

- **Internal marketplace** to encourage peer-to-peer trades across the organisation – stops staff buying items the organisation already has

- **Better management of assets coming out of buildings** – the system finds homes for the assets prior to building clearance dates

- **For customers scrapping assets –** the system helps to reduce the waste cost liability by finding homes for assets being scrapped

- **Reduce procurement costs across budgets**

- Link up with organisations and NHS trusts in the area to **trade between organisations and sectors**

- Link up with local charities/schools to donate surplus in a safe and legal manner

- **Track savings and demonstrate sustainability credentials** to tell the story better and get even more buy-in to the sustainability and circular economy.

Case study — University Hospitals of North Midlands NHS Trust (MPFT)

Total mobile provides users with access to their clinical system in the community, even without an internet connection. A pilot is currently underway with 796 users is in place – 100 community mental health nurses and 696 district nursing staff.
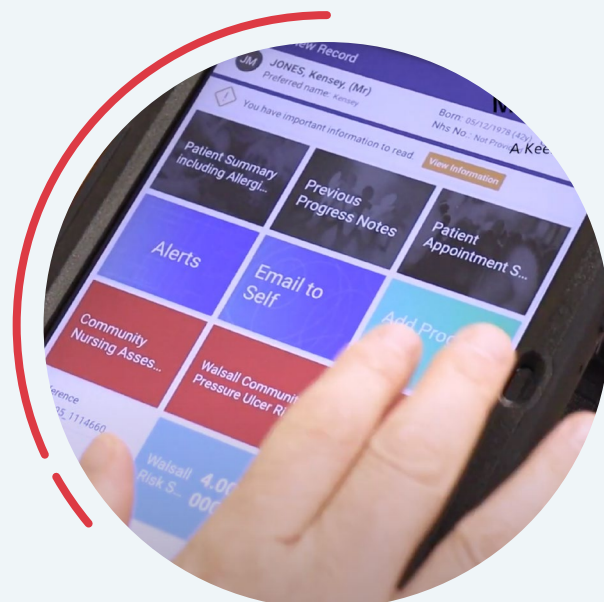
5.d. Travel and transport

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.

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, 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.

What should be done

Environmental and health impacts associated with the movement of goods and people through Staffordshire and Stoke-on-Trent ICS activity will be minimised. Where travel and transport relating to operational activity is necessary, it will be decarbonised. Sustainable and active modes of travel that deliver environmental and health benefits will be extended, incentivised, and promoted.

Ways it can be done

- All new purchases and lease arrangements connected to Staffordshire and Stoke-on-Trent ICS should be for cars that are ultra-low emission vehicles (ULEVs) or zero-emission vehicles (ZEVs)

- Only ULEVs or ZEVs are made available to staff through car sacrifice schemes

- Implement a staff salary sacrifice cycle-to-work scheme

- Identify a cycle-to-work lead in every trust and promote the staff salary sacrifice scheme for it

- Put initiatives in place to reduce unnecessary journeys and enable healthier, more active forms of travel, such as cycling and walking

- Provide details on the organisations' approaches to improving air quality, e.g. participation in the anti-idling Cleaner Air Hospital Framework

- Reduce journeys to and from Staffordshire and Stoke-on-Trent ICS sites. Identify unnecessary journeys. Work across staff and patients to persuade them to embrace virtual technologies.

Possible approaches

- Ensuring all locations have an annual staff travel survey – establishing baselines and monitoring
- Working with the national Greener NHS team to undertake a review of the existing fleet within the region
- Ensuring that locations from which NHS services operate are well served by bus, rail, and other public transport links, have good and accessible pedestrian facilities, are reachable by safe cycle routes and have secure cycle storage
- Monitoring staff engagement in cycle-to-work schemes
- Removing barriers to participation by installing safe cycle storage areas and showers/changing facilities
- Collecting information from finance and other departments to understand current business mileage, promoting what this means in actual CO_2 emissions

- Working with local authorities and other stakeholders to plan for more effective, safer, and realistic travel routes for employee and patient travel. Engage staff, patients, and contractors to promote this initiative
- Infrastructure – increasing the number of EV charging points on site
- Car sharing – rewarding staff for sharing cars when commuting
- Reducing on-site traffic by working with suppliers to consolidate deliveries.

Ways it can be measured

- Establish targets for an increase in EV charging points
- Establish targets for car sharing
- Set targets for reduction in business mileage
- Monitor engagement in cycle-to-work scheme – set targets.

Case study – University Hospitals of Derby and Burton NHS Foundation Trust (UHDB)

UHDB has produced a comprehensive Travel Plan, designed to support staff and patients to travel in a more sustainable way. Built around a staff survey and concluding with a detailed action plan. **See the full report**.

Highlights include advice on how to make sustainable journeys:

Information for patients and visitors

All hospitals are served by reliable public transport links and benefit from easy access for pedestrians.

We have a dedicated service running directly between he RDH and LRCH hospital sites every 12 minutes Monday - Friday. The Royal Derby bus now serves Derby Train Station between 05.28am and 07.17am, as well as limited services in the evening.

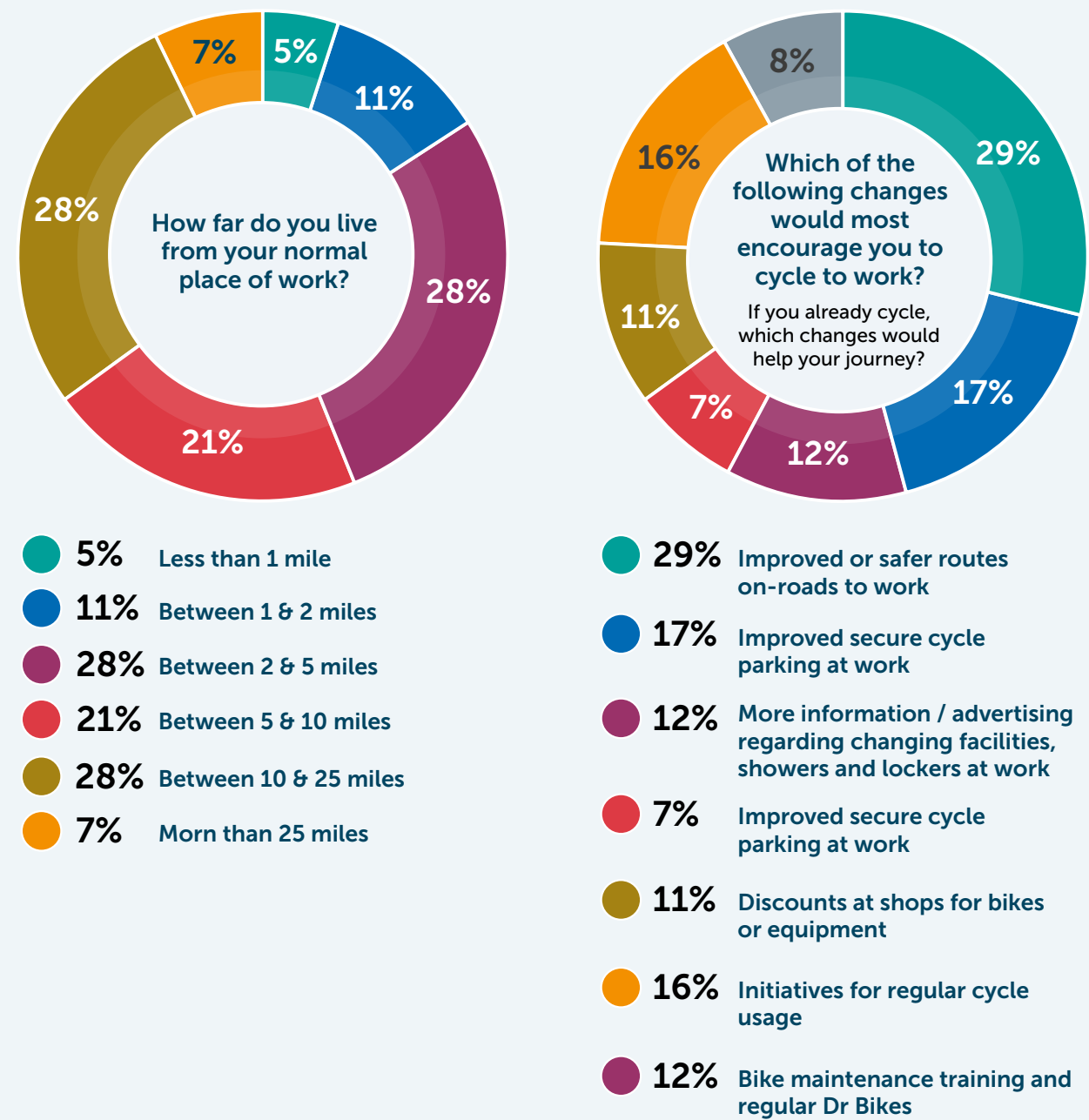### An infographic summarising the patient journey

Derby's Patient Journey
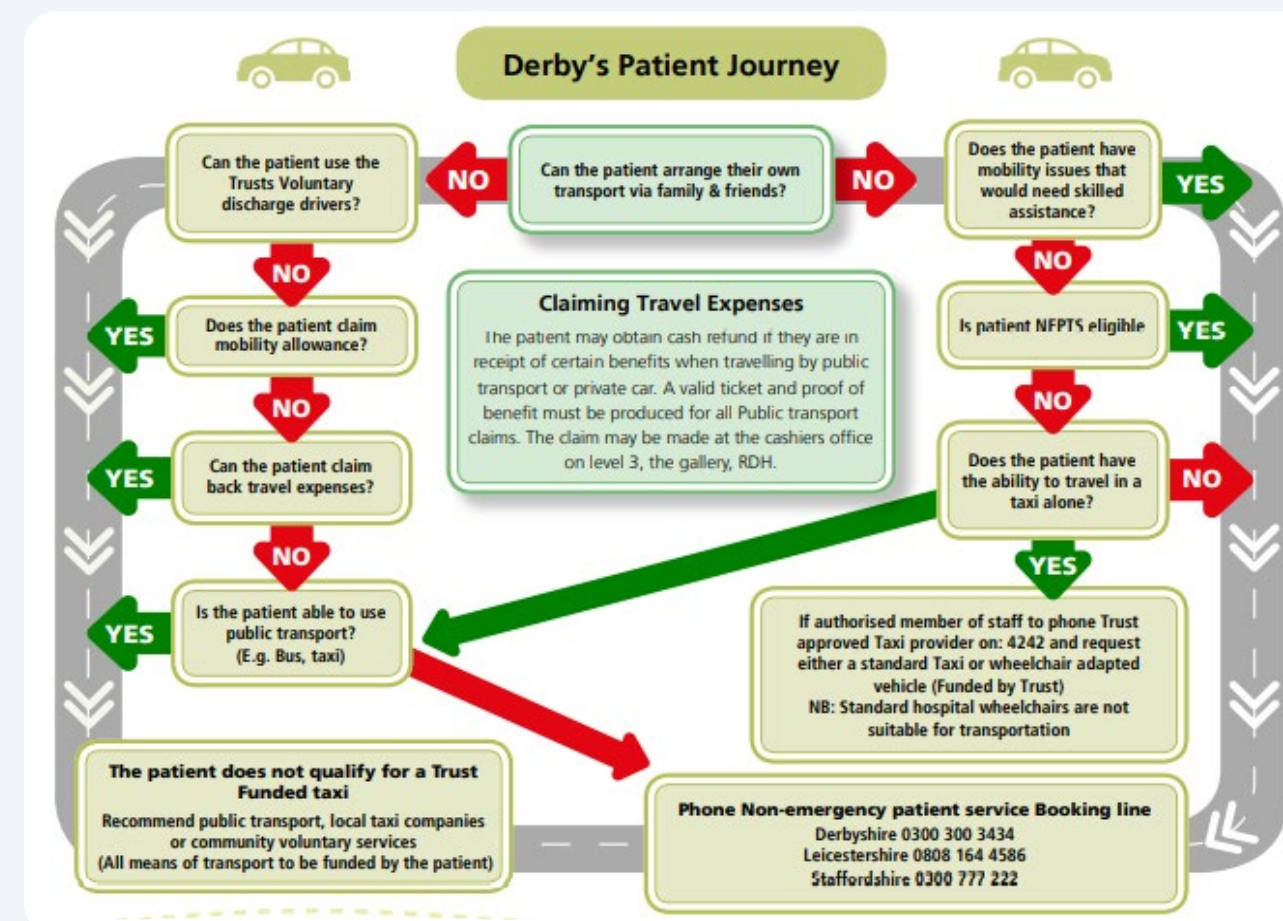
Case study – University Hospitals of Derby and Burton NHS Foundation Trust (UHDB) *continued*

Great analysis of staff survey results:

Graphs showing the travel habits of UHDB staff

How far do you live from your normal place of work?

- 🟢 **5%** Less than 1 mile
- 🔵 **11%** Between 1 & 2 miles
- 🟣 **28%** Between 2 & 5 miles
- 🔴 **21%** Between 5 & 10 miles
- 🟡 **28%** Between 10 & 25 miles
- 🟠 **7%** Morn than 25 miles

Which of the following changes would most encourage you to cycle to work?
If you already cycle, which changes would help your journey?

- 🟢 **29%** Improved or safer routes on-roads to work
- 🔵 **17%** Improved secure cycle parking at work
- 🟣 **12%** More information / advertising regarding changing facilities, showers and lockers at work
- 🔴 **7%** Improved secure cycle parking at work
- 🟡 **11%** Discounts at shops for bikes or equipment
- 🟠 **16%** Initiatives for regular cycle usage
- 🟣 **12%** Bike maintenance training and regular Dr Bikes

Case study – University Hospitals of North Midlands NHS Trust (UHNM)

UHNM is responsible for many patient and visitor trips, along with the associated traffic and congestion in the surrounding area. The trust also has a fleet of vehicles which are used to transport supplies, waste, notes, and samples around the sites and throughout the locality. Focus has been on making active travel more feasible, encouraging bus patronage, and making car-based travel more sustainable.

Examples of initiatives implemented include:

- **Electric fleet –** The UHNM Transport fleet was refreshed in 2016, replacing nine diesel vans with Nissan e-NV200 electric vans. These have been well received by the drivers and are ideal for multiple-drop short journeys. It is estimated that this change has saved around nine tonnes of CO_2 emissions per year, compared to the diesel equivalent. The lease on these vehicles expires in 2020, and it is envisaged that electric vehicles will be the only option considered for replacement

- **Electric Vehicle (EV) charging points –** Four electric vehicle charging points were installed at Royal Stoke University Hospital in 2016. These EV points are accessible to both employees and staff and complement the two EV points already in place at County Hospital. Every month, more than 100 vehicle charges take place at Royal Stoke University Hospital alone

- **Bus ticket discounts –** Working with local bus companies to arrange for discount tickets to be available to staff. Promoting bus travel as a cheap and convenient alternative to commuting by car

- **Cycle to work scheme –** Offering staff a discounted way of purchasing a bicycle to commute to work on. The Trust also offered a 'Dr Bike' service to help staff with maintenance of new or old bicycles

- **Walking routes –** Encouraging staff and visitors to get active by following one of the way-marked routes on each site. It is hoped that this will encourage people who live close to the site to leave the car at home.

This plan summarises the commitments and outlines the journey ahead in helping staff, patients, and visitors to reach our sites and communities safely, sustainably and with the benefit of improved health and reduced cost both in both monetary and in environmental terms.

The ICS will:

- minimise the environmental and health impacts associated with the movement of goods and people through Staffordshire and Stoke-on-Trent ICS activity

- increase use of sustainable and active modes of travel that deliver environmental and health benefits

- decarbonise the travel and transport relating to our operational activity.

5.d.i Lease car scheme

The ICS will develop a Green Travel Plan that facilitates active and sustainable travel options for staff patients and visitors. The ICS Plan will need to meet NHS and national guidance with regards to purchasing, leasing and operating low and ultra-low emission vehicles.

A green fleet review will be required to be undertaken and staff will be incentivised use electric vehicles, with increased access to them.

5.d.ii Cycle-to-work scheme

The ICS will introduce a cycle-to-work scheme for staff, enabling them to purchase a bicycle via a salary sacrifice scheme. An annual staff travel survey will take place, measuring uptake not only of the cycle-to-work programme, but uptake of all staff schemes. The ratio of cycle storage, as well as changing and shower facilities for staff numbers will be allocated accordingly.

The ICS aspires to become a gold-standard, cycle-friendly employer by encouraging uptake on the scheme and reducing the number of individuals travelling to work via higher-polluting transport, such as cars.

As more employees adopt this scheme, we would expect to see a further reduction in carbon emissions across travel and transport.

5.d.iii Agile working

Agile working is about bringing people, processes, connectivity, and technology, as well as time and place together to find the most appropriate and effective way of working to carry out a particular task.

Since the COVID-19 pandemic and the government's advice to work from home where possible, mileage for employees has reduced – for both commuting and attending meetings.

For many, meetings are now routinely held remotely using such technology as Microsoft Teams, Zoom and other video applications. While travel is a core part of business and face-to-face meetings are often the best way to build relationships with customers and colleagues, ever-increasing travel brings with its significant costs to the business, amounting to a high proportion of what can often be quite unproductive time.

The ICS recognises that significant amounts of travel have a negative impact on staff wellbeing, so actively encourages employees to look at ways to minimise travel and adopt a balanced approach to regularly working from home. Many employees across the ICS – including all CCG employees – are now home-based. This trend is expected to continue as the transition to the ICS/ICB continues.

This way of working also aligns with the ICS' target of improving air quality. By reducing total travel (business and commuting), switching to lesser-polluting transport modes, and making use of technology and agile working, we are aiming for an 80% reduction in miles travelled through polluting modes by 2028-32.

There is a targeted approach to agile working across the ICS, with home working the norm and a series of hubs being identified across the patch to enable clinical and non-clinical staff to hold meetings, meet colleagues and support their mental health and wellbeing.

Benefits of agile working

1. **Agile working increases workplace use –** Many organisations are spending money on office space that is under-utilised. The introduction of agile working results in a more cost-effective workplace in terms of office layout and occupational costs and can free-up office space for other purposes

2. **Attract and retain the best talent –** Stimulating, agile working spaces and cultures show employees they are valued. Highly skilled staff will remain loyal, staying longer and performing better

3. **Be greener and smarter –** Designing a new agile office brings the opportunity to create a greener and smarter office environment. This can greatly improve sustainability while reducing cost and a company's carbon footprint

4. **Agile workplaces lead to increased productivity and efficiency –** It is vital to create an efficient and optimal way of working where teams can feel energised and motivated. Productivity and morale are elevated, and a positive corporate identity can be both promoted and reinforced.

Case study – Midlands Partnership NHS Foundation Trust (MPFT)

MPFT has a comprehensive, ambitious plan in place that fully embraces agile working.

Through technology, we aim to ensure that our staff can:

- offer the quality of care they need to
- have the access to retrieve and update the information they require
- stay safe if lone working
- keep our service user information secure, private, and up to date no matter where they are.

We will improve our home IT support offers, ensuring we have well-defined equipment offers, home delivery and remote IT support services in place for those staff now working from home more frequently.

We will also make it easier for our staff to work from any of our Trust premises.

We will reduce reliance on staff travelling to their base, their home, or buildings that they are already familiar with, through improved awareness, we want staff to be able to work from other locations such as a nearby GP practice, library, council building, hospital, care home, or other MPFT service.

5.e. Estates and facilities

Published in November 2021, The NHS **Estates and Facilities Net Zero Carbon Delivery Plan** sets out a clear, sequential four-step investment approach to decarbonising NHS sites:

1. **Making every kilowatt hour (kWh) count –** investing in no-regrets energy saving measures
2. **Preparing buildings for electricity-led heating –** upgrading building fabric
3. **Switching to non-fossil fuel heating –** investing in innovative new energy sources
4. I**ncreasing on-site renewables –** investing in on-site generation.

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.

The ICS-wide Strategic Estates Forum will be carrying out a review of the capital projects required as a part of the refreshed Estates Strategy. Sustainability of the estate will be considered as a part of this process.

5.e.i Primary care

There is a commitment from primary care to work together within and across the PCNs, to achieve as sustainable working practices as possible. As the PCN strategies are being written – in conjunction with community health partnerships – this is an area to be considered including setting out a clear approach for primary care explaining how PCNs will reduce their carbon footprints and widening their social value.

Through the Improvement and Investment Fund, primary care is working towards specific targets:

- To improve prevention and tackling health inequalities
- To support better patient outcomes in the community through proactive primary care
- To support improved patient access to primary care services
- To deliver better outcomes for patients on medication
- To help create a more sustainable NHS.

5.e.ii Building energy use

A key priority for estates going forward must be energy efficiency. Due to price increases, ever-increasing energy bills are having a real impact on NHS finances, meaning money can't be spent on the much-needed services, adding increased pressure to already pressurised services.

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 is to ensure that the power of nature is harnessed, with only green energy and renewable energy sources being used at NHS buildings across Staffordshire and Stoke-on-Trent.

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.

The ICS needs to have joined-up discussions on how to identify alternatives for reducing both energy consumption and bills. An example of this is through applying for funding from the Salix Public Sector Decarbonisation Scheme, which offers cash grants and support to the public sector to support with energy costs. Through tackling this as a system, opportunities for savings through bulk purchasing and sharing of ideas and lessons learned, will be possible.

Case study – The Royal Wolverhampton NHS Trust (RWT)

RWT has a plan to become the first hospital in England to get all its electricity from solar photo-voltaic (PV) panels.

The Trust is currently exploring the funding and delivery of an ambitious project to develop a Solar Farm facility that will be capable of providing free clean green electrical energy to the Trust's New Cross Hospital site. The Trust, in conjunction with the local authority has prepared an appropriate business case and made applications for external funding.

The City of Wolverhampton Council have lodged a Planning Application to fully explore this potential opportunity. If the development moves ahead the Trust will have the first Hospital in England to receive all its electrical supply from Solar Photo-Voltaic (PV) panels via the reuse of an existing inner-city brownfield site. The below images show the proposed location at Bowmans Harbour and the scale of the development.
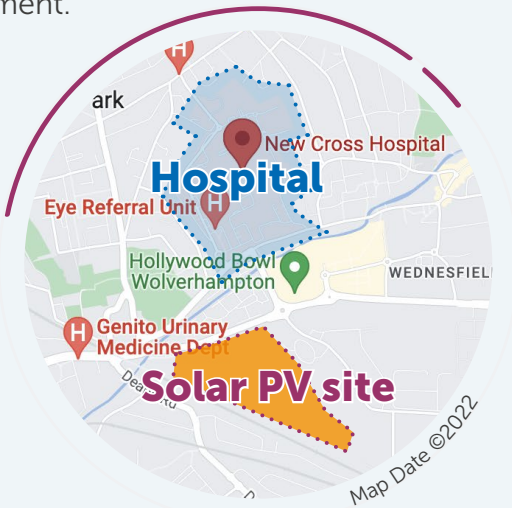
5.e.iii Asset management and utilities

The ICS has numerous opportunities to increase sustainability across the estate. Through improvements to existing operational assets, buildings, critical infrastructure, and equipment which is essential to the smooth running of the hospital, as well as through carefully considering the sustainability credentials of assets and utilities yet to be procured.

Improvements and opportunities can stem from relatively large capital investment, from individuals identifying simple changes which can be implemented across similar departments or indeed, the estate as a whole. The development and implementation of relevant plans and strategies will see sustainable development integrated into all areas and activities within the ICS.

5.e.iv Recycling waste

Of the 590,000 tonnes of waste produced by the NHS in 2016/17, 15% went directly to landfill, while only 23% of waste is recycled. A strong waste strategy will be a crucial in reaching net carbon targets. In addition to this, waste producers have a legal responsibility to segregate and dispose of waste correctly.

What should be done

Staffordshire and Stoke-on-Trent ICS will reduce consumption, measure, and use data better, buy longer-lasting equipment and improve recycling capabilities at all sites.

Ways it can be done

Train staff and promote the right processes and procedures for sustainable waste disposal and recycling.

Possible approaches

- Carrying out regular waste audits
- Working bottom-up, engaging the workforce and mine them for ideas, doing this in line with the NHS plastic pledge. Environmental champions can advocate and drive this activity
- Segregating core recyclable materials. Introducing clear labelling at disposal points to make sure staff and visitors understand the correct way to dispose of waste
- Working across the organisation to drive down use not only of single-use plastics, but all single-use items
- Sourcing consumables that are wholly or substantially made up of recycled materials
- Beginning a campaign promoting a culture of recycling – reduce, reuse, recycle.

Ways it can be measured

- Set targets for the volume of waste going to landfill by 2030
- Set targets for waste that is recycled
- Set targets for the number of workforce-led recycling initiatives
- Remove single-use plastics from clinical and non-clinical operations by 2030.

Case study – Royal Stoke University Hospital (RSUH)

RSUH has invested in heat recovery and replacement of older, inefficient plant.

Heat Recovery Unit

Installation of a Heat Recovery Unit at the Royal Stoke Energy Centre allowed for the capture and reuse of heat that would otherwise be wasted. The flue gases from all five industrial burners, plus the combined heat and power plant, are diverted away from the main chimney and into the Heat Recovery Unit.

A two-stage process brings the flue gas temperatures down from around 200°C to around 40°C. This has a double benefit because not only is energy released by cooling the gases down, but the water content also condenses from gaseous to liquid state. This releases more heat, effectively turning the Energy Centre into one big condensing boiler.

High-grade recovered heat is used to pre-heat the water returning to the hot water boilers that provide heating to all of the clinical buildings at Royal Stoke University Hospital.

Lower-grade heat is used to pre-heat feedwater for the boilers that generate steam for sterilisation of surgical equipment.

Burner replacement

The burners on the industrial sized steam and hot water boilers in the Energy Centre at Royal Stoke University Hospital were replaced with state-of-the-art equipment. The old burners were oversized, so were constantly switching on and off – leading to very poor efficiency and reliability.

The new burners are smaller capacity and are also capable of controlling down to a much lower firing rate. This means that they can keep firing at a low level, maintaining consistent system temperatures, and improving efficiency. They even have sensors that allow them to adjust the mixture of gas and air to ensure optimum efficiency.

Case study — Stoke-on-Trent City Council

Current and projected impacts of activities as of October 2021

A carbon-saving figure from the baseline position for those projects currently deployed LED lights, solar photo-voltaic panels, and initial efficiency measures – achieving a saving of more than 12,000 tonnes (t) a year.

- **Roof-mounted solar PV on social housing –** saving 5,250-6,000t CO_2 emissions annually

- **LED lighting –** saving 362t CO_2 per year

- **Combined heat and power –** saving 1,170t CO_2 per year

- **Tuning up the Civic Centre heating system –** saving 6.2% gas consumption and improving level of comfort in the building

- **Replacement of all streetlights with LED heads and upgrading of columns is 75% complete –** combined savings of up to 5,340t CO_2 per year

- **First complete phases of the district heat network –** 4Km of primary network installed in the Uni Q area with initial capacity to supply up to 12GWh of low-carbon heat to public sector buildings

- **Public sector decarbonisation scheme energy efficiency measures –** all current works forecasted to save up to 1,600t CO_2 per year.

5.e.iv Recycling equipment

Many medical devices such as walking aids are durable products whose useful life greatly exceeds that of a single patient – these can be refurbished and reused repeatedly, reducing waste to landfill, and avoiding carbon associated with new products. Reuse schemes have tended to be limited due to concerns around liabilities, limited resource available to set up a scheme, and the perceived low-cost benefit.

In 2019, 66 NHS trusts in England spent more than £14 million on around 560,000 walking aids. With some 5.7kt CO_2 emissions generated to purchase new aids, there is substantial opportunity to increase return rates further. Device reuse and refurbishment could save the NHS 202kt CO_2 emissions or 1.4% of supply chain emissions. Crutches, frames, and walking sticks are in the top 20 of medical device/equipment categories for carbon footprint – due to the high greenhouse gas intensity of aluminium manufacture.

Case study — Staffordshire County Council

Staffordshire County Council has a 'Waste Savvy Staffordshire' programme in place.

Did you know?

- On average, in the UK, we throw away our own body weight in rubbish every seven weeks

- The average person also uses three times their share of the world's resources

- We all need to think differently about what we buy and try to reduce the amount of waste we produce.

What can we do?

- The best thing we can do for the environment is to reduce the amount of waste we create

- After reducing our waste, the second-best option is to reuse items

- If you can't reduce or reuse, the next best thing to do is to recycle your unwanted items.

Simple things that you can do:

Learn how to reduce your food waste

Get into composting

Find your local Home Waste Recycling Centre

Volunteer to teach more people how to reduce their waste

Join the 'Waste Savvy Staffs' Facebook page for tips on waste and recycling

Understand what happens to your waste

5.e.v Capital projects

The ICS will reduce the environmental impact of building works during the design, refurbishment, construction, operation, and decommissioning stages. Sustainability and efficiency will be embedded through policies and procedures including whole-life costing, smart design, and technology across our newbuild and refurbishment works. Energy and water-efficient technologies and practices will be incorporated throughout our estate and services – year-on-year reductions in consumption will be delivered while protecting and enhancing biodiversity across the estate.

Sustainability impact assessments will need to be a factor in deciding on all capital business cases. Sustainability guidelines will be developed for all capital projects including major refurbishments, driving resource efficiency through the estate's strategy, standard specification, and whole-life costing.

Capital staff will be appropriately trained in terms of sustainable building design. Utilities monitoring systems will be introduced alongside an ongoing programme of energy and water efficiency schemes. New developments and major refurbishments will be net zero carbon. A Biodiversity Action Plan will need to be developed and implemented and supported by a decarbonisation investment programme and funding Plan which will also need to be put in place.

Case study – Outwoods Health Village

In August 2018, East Staffordshire Borough Council granted outline planning permission for healthcare village Outwoods, at Queen's Hospital in Burton.

'Stride', a joint development venture between Healthy Innovation Partners (HIP) and UHDB, submitted the application. Plans for Outwoods include accommodation for a local GP practice, which brings together the King Street and Carlton Street practices to increase the list size by 22,000, as well as supporting community services – a 50-bed step-down facility, a 40-bed care home, a community hub, an 80 extra-care residency and a nursery with 100 places.

Outwoods is also expected to provide 88-room accommodation for doctors and nurses. Using modern construction methods, work began on site in 2020 and is progressing well.

Outwoods Specialist Care Centre, Community Hub and Primary Care Centre

Extra care apartments

5.e.vi Lighting

As many of our partners across the ICS have already discovered, light-emitting diode (LED) lighting is one of the sustainable 'quick wins.' LED lights use less energy than traditional light bulbs and have a longer lifespan, contributing to a positive impact on greenhouse gas emissions and our environment, as well as being significantly cheaper to run. Stoke-on-Trent City Council has identified this and now all streetlights across the city are LED.

Case study – University Hospitals of North Midlands NHS Trust (UHNM)

The benefits of modern light features are being seen by Royal Stoke University Hospital and County Hospital, Stafford.

LED lighting

LED lighting was installed in two phases, at both hospitals.

Not only do the LEDs themselves save energy, some of the fittings also include dimming and motion-sensing technology, so they only provide light when it is needed. The lighting was mostly installed in corridor and circulation areas where it was easier to arrange access for installation.

The LED lamps will last much longer than the fluorescent tubes that they replaced, reducing outages and maintenance costs. They also provide a brighter, whiter light which improves the look and feel of the hospitals.

5.e.vii Air pollution

While wider action on air pollution is for government to lead, the NHS will work to reduce air pollution from all sources. Specifically, it will cut business mileages and fleet air pollutant emissions by 20% by 2023/24.

Almost 30% of preventable deaths in England are due to non-communicable diseases specifically attributed to air pollution. More than 2,000 GP practices and 200 hospitals are in areas affected by toxic air. In 2017, 3.5% (9.5 billion miles) of all road travel in England was related to patients, visitors, staff, and suppliers to the NHS.

At least 90% of the NHS fleet will use low-emission engines (including 25% ultra-low emissions) by 2028, and primary heating from coal and oil fuel in NHS sites will be fully phased out. Redesigned care and greater use of virtual appointments will also reduce the need for patient and staff travel.

Case study –
Staffordshire County Council

Staffordshire County Council has an initiative in place to prevent emissions from idling cars when near schools or on their sites.

Fuming! Council staff told to switch off idling engines outside schools

Council staff and contractors are being urged not to leave their engines idling outside schools following concern about air pollution.

The issue was raised at the latest full Staffordshire County Council meeting after a question was submitted about the progress of the authority's Air Aware project.

What should be done

Environmental impact will be factored in at every stage of all projects, e.g. construction, demolition, upgrades, and refurbishment. Consider the efficient use of all resources including energy, water, and natural materials. Seek best value through effective space utilisation, consolidation, and rationalisation.

Ways it can be done

Use scoring standards (EPC/DEC/BREEAM and others) to assess the sustainability of all new-build and refurbishment. Refit existing buildings to provide better insulation.

Possible approaches

- Monitoring and measuring energy and water usage
- Being visible – installing and informing to engage the workforce; green infrastructure can influence pro-environmental behaviour change, e.g. presence detection and daylight sensors for lighting
- Saving water by installing automatic touch-free taps and low-flush toilets
- Preventing unnecessary energy usage by installing controls on suitable air conditioning (AC) units that will only allow the units to operate when the room is occupied and if doors and windows to the room are closed
- Replacing all lighting with LEDs –using around 69% less energy
- Committing to the complete removal of coal, gas, and oil boilers and to purchasing or generating 100% electricity from renewable energy

- Exploring on-site power generation with renewable technologies – installing solar PV – where there is light there is power
- Considering combined heat and power (CHP) installation
- Introducing further low-carbon solutions such as dimmed windows, shades, awnings, louvres – planting over walls and windows can reduce heat in buildings
- Optimising building usage so that empty estate is not consuming carbon
- Supporting the delivery of projects receiving money through the decarbonisation scheme
- Engaging the workforce – many energy-saving ideas will be found in a bottom-up direction.

Ways it can be measured

- Measure share of REGO-certified power purchased by ICS organisations
- Measure share of coal- and gas-sourced power in acute premises – target complete removal
- Set target for installation of motion-sensor lights touch-free taps and controlled air conditioning units
- Implementation of net zero hospital building standards which will be published in quarter one 2022/23
- Set target for number of workforce-led initiatives
- Set target for 100% installation of LED lighting
- Target 10% water usage reduction.

5.e.viii Green space and biodiversity

The natural environment plays a key role in our wellbeing by improving patient-recovery rates and patient experience, particularly within mental health. As a result, the inclusion of green infrastructure across the estate is a vital resource. Green spaces also provide a habitat for wildlife which contributes to Staffordshire and Stoke-on-Trent's wider biodiversity network. Managing our green spaces effectively can enrich biodiversity, improve air quality, reduce noise, provide shading during times of extreme heat, and reduce local surface water flooding.

Green space should be incorporated into any major new works and refurbishments. Unused areas will be repurposed and replanted to be consistent so that health and wellbeing goals are at the centre of the design.

Staffordshire and Stoke-on-Trent ICS will expand involvement with the **NHS Forest**. This is a scheme that distributes trees to NHS sites to help them increase biodiversity and create more green areas.

Case study — Stoke-on-Trent City Council

The council has committed to planting 11,000 trees, across eight sites around the city. It also has a policy stating that two trees are to be planted to replace any single tree that must be removed due to it being dead, dying, or dangerous.

The council has also committed to naturalising areas of greenways across the city, putting signs up to explain why specific areas have been chosen and which species need protecting.

Case study — University Hospitals of Derby and Burton NHS Foundation Trust (UHDB)

UHDB has a plan in place to provide more green spaces and increase biodiversity.

Incomplete Sustainable Development Assessment Tool (SDAT) Statement — next steps

- Access the impacts of the provision of our services on local biodiversity and develop an action plan to implement mitigating actions
- Develop a board approved green space and biodiversity plan
- Maintain our grounds and green spaces in a way that minimises negative impacts (e.g. low use of pesticides and sustainably manage organic waste)
- Plant more trees on the UHDB sites in line with our targets
- Engage with suppliers of high biotoxicity risk products to identify and manage these risks
- Improve staff wellbeing using a Health Needs Analysis in line with National Institute for Health and Care Excellence (NICE) guidance
- Develop walking maps to be launched in conjunction with the Trust's Walk to Work Week
- Continue to maintain and enhance biodiversity on our estates, through monitoring protected species.

5.f. 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 the identification and encouragement to prescribe medicines which limit damage to the environment.

The Electronic Prescribing and Medicines Administration system (EPMA) is a digital system that will remove the need to have paper drug charts across the ICS. MPFT currently has a four-year programme with an end date of March 2024 and aims to have EPMA in use across all inpatient and community services that prescribe. This is something that should be considered in other trusts in a joined-up approach to increase digitisation and reduce paper.

Hand-written paper prescriptions are currently used across the ICS for inpatient, outpatient, and community services. Alongside the use of paper, the problems currently include legibility of prescriptions, frequent rewrites of inpatient medicine card prescriptions, difficult monitoring of trusts formularies without an electronic log of prescriptions and increased risk of prescription errors.

The EPMA benefits include:
- reduction of medicines errors
- significant positive effect on patient safety
- prescribed medicines information available to both inpatient and outpatient healthcare professionals at all times
- comprehensive medicines reconciliation
- improved workflows through increased productivity and the elimination of paper.

Using these innovative technologies will facilitate changes to processes, people, and practice, which will augment the value to the wider ICS. It will introduce new ways of working across all areas including infrastructure, departments, and wards. This will help adapt and change the current methods of working and cultures, to improve sustainability and streamline working practices.

Implementation of an integrated EPMA and pharmacy system will mean that prescribing and clinical verification of prescriptions is done electronically from any location and dispensing is 100% paperless. Stock is monitored electronically and dispensed, while nurses' administration processes are captured electronically to achieve an end-to-end paperless solution.

5.f.i Electronic Prescribing Service (EPS)

The Electronic Prescribing Service (EPS) is a system that allows community staff to prescribe to a pharmacy of a patient's choice instead of issuing a paper prescription. Last year, 166,000 paper prescriptions were issued by MPFT alone – and of these, 75% were sent through the post. The EPS system removes the need for script paper and postage costs, as well as enhancing prescription security so that there will be no more lost/stolen/misplaced/defaced scripts.

A sustainability quality improvement project is underway and is reviewing the current process of transporting some written scripts by car, in a bid to save clinical time and money, as well as to reduce the carbon footprint.

5.f.ii Anaesthetic gases

Anaesthetic gases have extremely high global warming potential. For example, one litre of desflurane has the equivalent CO_2 emissions of driving a diesel car from Land's End to John O'Groats and back seven times. In addition to this issue, less than 5% of inhalational anaesthetic gases are metabolised by the body. This means that 95% of the administered gas goes into the atmosphere. It is recognised that this desflurane is currently only used in UHNM, so this is an issue specific to them.

Below is the overview of UHNM's current usage and plans to reduce anaesthetic gases.

Nitrous oxide (Entonox) scavenging and destruction

This will require maternity departments to be completely engaged, as the optimum solution is to install a scavenging system throughout labour rooms and have a central destruction unit (CDU). To enable this to happen requires some changes to maternity practices and education for our patients, as the mouthpieces we currently use will need to change to facemasks.

There are alternative mobile units that could be placed in each room, and anaesthesia colleagues would like to introduce to emergency departments and other areas that use Entonox cylinders for analgesia. There is no UK distributor yet, so currently there are no guide prices, but this is something the ICS will investigate further.

Anaesthetic, volatile scavenging and recycling

- This would involve a turnover of canisters adjacent to every anaesthetic machine for capturing the exhaled volatile agents. These would then be sent to get the agent extracted and recycled – a UK company that can cope with all volatile agents is in trial phase

- Upon exploring varying supplier options, Baxter Pharmaceuticals is currently capturing gases but cannot manage isoflurane and is not actually extracting yet.

5.f.iii 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 as a propellant, which administer medicine into 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.

Case study – Stafford and Surrounds Clinical Commissioning Group

Setting targets for reducing use of carbon emissions from MDIs

A service specification has been launched for GP practices, which gives them the option to review asthma and chronic obstructive pulmonary disease (COPD) patients, basing their searches on the number of patients prescribed six or more short-acting beta agonist (SABA) inhalers in a 12-month period.

The idea is that reducing overuse of salbutamol will help reduce carbon emissions as well promote better asthma control. Patients who use triple therapy for COPD as separate inhalers – the idea is that by using one combination inhaler instead of two to three separate inhalers, will improve compliance, reduce cost, and reduce carbon emissions.

MDI prescriptions as a percentage of all non-salbutamol inhaler prescriptions issued to patients aged 12 years or over:

Year	Percentage
2021/22	44% (target was suspended due to COVID-19 pressures)
2022/23	35%
2023/24	25%

November 2021 prescribing data suggests Staffordshire and Stoke-on-Trent is around 58%

Average carbon emissions per salbutamol inhaler prescribed (kg CO_2e)

Year	Percentage
2021/22	22.1kg (target was suspended due to COVID-19 pressures)
2022/23	18kg
2023/24	13.4kg

5.f.iv Wasted medicines

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.

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.

Ways to minimise waste:

- Encouraging patients to feel able to confide in clinicians if they aren't taking their medicines and asking clinicians to prompt patients on this matter
- Regularly reviewing all medications patients are prescribed and check for continued need
- Running a patient campaign to promote minimising medicines waste
- Enabling appropriate disposal – encourage patients to take any unused medications to their local pharmacy so that they can dispose of it safely
- Reviewing all seven-day prescriptions and compliance aid requests.

What should be done

CO_2 emissions that are connected to medicines will be reduced where it is clinically appropriate to do so.

Ways it can be done

Staffordshire and Stoke-on-Trent ICS will reduce CO_2 emissions associated with all medicines. There will be particular emphasis placed on areas of high impact such as pharmaceuticals and anaesthetic gases. Packaging of medicines will be a consideration through the prescription process.

Possible approaches

- Identifying carbon hotspot pharmaceuticals and ensure that action plans identify and mitigate environmental impacts
- Reducing use of and recycle medical devices, e.g. MDIs
- Training and sharing of experience amongst clinical staff around lower-carbon medicines and substitute treatments
- Optimising the use of medical gases – reduce the use of desflurane in surgery, reduce ICS use of nitrous oxide to maternity only and minimise nitrous oxide waste from leaks in the supply infrastructure
- Introducing point-of-use recycling technology for anaesthetic gases
- Ensuring best available technology is used for disposal
- Packaging – fulfilling obligations under the NHS plastics pledge
- Aligning formularies, north and south, to ensure they are focused on a joined-up carbon-neutral approach
- Using the EPMA process which sends the prescription directly to the local pharmacy, reducing the amount of paper used.

How it can be measured

- Set targets to reduce use of MDIs – increase usage of low-carbon inhalers
- Set targets to increase recycling medical devices, e.g. inhalers
- Set targets to reduce medicine wastage
- Monitor use of anaesthetic and other gases by volume and CO_2 impact.

5.g. 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.

Figure 9: The NHS net zero supplier roadmap (www.england.nhs.uk/greenernhs/get-involved/suppliers/)

- **From April 2023 –** The NHS will adopt the **Government's 'Taking Account of Carbon Reduction Plans'** (PPN 06/21), requiring all suppliers with new contracts for goods, services, and/or works with an anticipated contract value above £5 million per annum, to publish a carbon reduction plan for their direct emissions. From April 2024, the NHS will expand this requirement for all new contracts, irrespective of value

- **From April 2027 –** All suppliers with contracts for goods, services, and/or works for any value, will be expected to publish a carbon reduction plan that takes into account the suppliers' direct and indirect emissions

- **From April 2028 –** New requirements will be introduced overseeing the provision of carbon foot-printing for individual products supplied to the NHS. The NHS will work with suppliers and regulators to determine the scope and methodology

- **From April 2030 –** 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 supplier framework.

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. A further framework to support reporting on this map will be published in 2022. The roadmap can be seen below:

Case study – University Hospital North Midlands NHS Trust procurement savings

Clinical product	Sustainable gains at UHNM
Catheter trays	20% of patients admitted to an acute hospital centre will require a urethral catheter, and a urethral catheter is a key source of infection. UHNM introduced an all-in-one catheter tray in 2019 with the aim of reducing catheter related infections. The tray contains 11 different items packaged together so removing the need for individually packaged and sterilised equipment. The waste per patient from a traditional process is 476g, compared to the waste from the catheter tray which is 308g. During the initial pilot at County Hospital – 465 patients received a catheter resulting in: • 83.16g waste saved • 11.2k plastic waste avoided • 24kg was card/paper recycled • Another notable gain is in clinician time taken to gather 11 items from different locations for the procedure. The average time saved is over five minutes per procedure, so for every 1,000 procedures this equates to over 100 clinical hours • This product and process has been successfully rolled out for the wider UHNM.
Reusable tourniquets	The Trust introduced reusable tourniquets into pathology and phlebotomy services in 2019. • 2019-2021 = 745,000 patients • 1 reusable tourniquet = 3,500 patients on average • 213 tourniquets used • 744,787 single-use tourniquets saved from clinical waste.
Walking aids	The Trust is in the process of reviewing recycling options for patient walking aids. While this takes place, we have arranged for collections to be made by medical aid international who will refurbish and repurpose walking aids to the developing world.

Case study – University Hospital North Midlands NHS Trust procurement savings *continued*

Clinical product	Sustainable gains at UHNM
Medical device remanufacturing	UHNM will partner with Vanguard in 2022, a European medical device remanufacturer, to divert used energy devices (used to cut and cauterize tissue) from theatre away from the waste stream. Medical remanufacturing is widely adopted in USA, Canada and Germany, and a practice rapidly expanding in the UK. • In the year to date, UHNM has purchased 1,080 single-use devices • Used devices will be bagged and collected in recycling bins • The bins will be collected by Vanguard for recycling at the cost of the Trust.
Plastic straws	In 2020/21 UHNM used 311,000 plastic straws. These have been substituted for paper straws and plastic is no longer available.
Theatre hats	UHNM is engaged with wider regional sustainability and theatre groups looking at replacing the single use disposable theatres hat with a cloth reusable hat.
Sustainability impact assessment	A sustainable impact assessment has been incorporated into the application process for all clinical products presented to the clinical and theatre product groups.
Tender weighting for sustainability	A 10% sustainable weighting will be added to all tender processes going forward. This has recently been tested in the specialist patient mattress tender which incorporates UHNM, The Royal Wolverhampton and Walsall Healthcare Trusts.

What should be done

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 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.

Ways it can be done

Training will be crucial – staff will develop and use the right processes and procedures for sustainable purchasing and implementing a net zero supplier roadmap across the ICS.

A sustainable culture will be promoted throughout the ICS, with staff encouraged to take an active role across all new initiatives.

Possible approaches
- Fulfilling obligations under the NHS plastics pledge
- Promoting a culture of reuse and refurbishment of items – reduce, reuse, recycle
- Developing and implementing e-learning modules for waste and sustainability

- Including sustainability criteria in procurement, tender evaluations, framework design and selection, and product selection
- Using accreditation programmes to support our procurement strategy, e.g. Soil Association Food Standards and ISO 14001
- Working innovatively with NHS partners and stakeholders/suppliers on sustainable approaches
- Developing robust internal procurement policies and procedures that support the sustainability agenda
- Raising awareness of sustainability through the supply chain, reducing indirect use of resources
- Investigating low-carbon substitutes across clinical and non-clinical categories
- Including place logistics as criteria for supplier selection, e.g. considering proximity and consolidate deliveries to reduce CO_2 in the delivery phase
- Ensuring all contracts over £5 million in value include a carbon-reduction plan.

It will be measured by:
- Tracking the CO_2 impact from waste and supply chain initiatives
- Tracking procurement CO_2 footprint
- Measuring quantity of packaging and single-use plastics reduced or removed from services
- Monitoring number of suppliers engaged in sustainability improvement plans, including achieving net zero
- Owning greener NHS data collections
- Share of recycled paper used.

5.h. 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 – 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.

What should be done

- Staffordshire and Stoke-on-Trent ICS will reduce CO_2 emissions from food made, processed, or served within the organisation by ensuring food is from sustainable sources, providing healthy food choices and reducing unhealthy foods on offer
- Waste associated with food packaging, both from suppliers and the way it is served, will be measured, and reduced.

Ways it can be done

- Committing to and deliver on plastic pledge obligations
- Putting sustainable credentials at the centre of menus and supplier selection
- Effective waste management – ensuring appropriate waste disposal routes are available and a focus on moving waste up the waste hierarchy.

Possible approaches

- Staffordshire and Stoke-on-Trent ICS will no longer purchase single-use plastic cutlery, plates, or single-use cups. The use of 'keep cups' for hot beverages will be promoted
- Roll out grow-your-own food as a form of therapy for mental health and other patients' groups
- Provide and promote interesting and attractive plant-based meals
- Procure food in line with sustainable procurement objectives – low food miles and delivery via ultra-low electric vehicles will be a key scoring factor when selecting suppliers
- 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 performance against food and nutrition policy and the food and drink programme.

How it can be measured

- Auditing food waste
- Measure waste in receptacles across food and beverage areas
- Benchmark against food and nutrition policy, and the food and drink programme.

Case study – Midlands Partnership NHS Foundation Trust (MPFT)

Through its food and drink strategy, MPFT has committed to stop purchasing plastic cutlery for patients and staff. Staff will be provided with their own cutlery that they will reuse in the staff restaurant. This will reduce the amount of single-use plastic being used.

The Trust is also working with the local community to focus on local growing initiatives – using locally-grown produce in the food and providing an opportunity for staff, patients, and locals to plant sunflowers as a part of a community project to help understanding of the cycle of life and reuse, rather than throwing away.

Case study – North Staffordshire Combined Healthcare NHS Trust (NSCHT)

- NSCHT has robust food policy objectives in place to ensure fresh, local food is used – that is traceable through the supply chain and allows for local ingredients to be use – reducing the carbon footprint and supporting local growers.
- To ensure all suppliers are dedicated to taking a dynamic approach to environmental management and sustainability

- Suppliers must demonstrate their commitment and compliance to reduce food miles and use low-/ultra-low emission vehicles
- To ensure our suppliers only use 100% sustainable ingredients and fully traceable suppliers
- To aim to use 99% recyclable packaging – of which 80% will be recyclable cardboard
- To no longer purchase single-use plastic cutlery, plates, or single-use cups.

5.i. Adaptation

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 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.

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.

Ways in which it will be achieved:

- Nominating of an adaptation lead and incorporating adaptation into our sustainability governance structure, corporate risk register and reporting processes
- Creating a climate-change adaptation risk assessment
- Working with key internal and external stakeholders to develop a climate change action plan for both trusts
- Ensuring that our emergency plans for extreme weather also consider support for vulnerable communities during any extreme weather events.

It will be measured by:

- Building Research Establishment Environmental Assessment Method building standard or other sustainable buildings methodology scores
- Monitoring and reporting the progress of our climate change adaptation plan
- The overall risk rating in our climate change risk assessment
- Testing of emergency planning policies.

Case study – University Hospitals of North Midlands NHS Trust (UHNM)

UHNM has understood that adaption has two angles – it has set objectives and puts in place senior managers as leads.

The Trust understands the risks posed from a changing climate and has a Board-approved Adaptation Plan whereby implementation progress is reported within the Annual Report.

The Trust is a part of a system-wide approach, with local planning arrangements for adapting to climate change.

Adaptation for the health and care system is two-fold:

1. Climate change can negatively impact the physical and mental health and wellbeing of the UK population. The NHS needs to be prepared for different volumes and patterns of demand

2. Climate change could impact the operational delivery of the health and care system. The system infrastructure (e.g. buildings, communications) and supply chain (e.g. fuel, care supplies) need to be prepared for and resilient to weather events and other crises.

The Trust recognises that it is an integral part of the local community, as an employer and as a core public service provider. It has an important role to support the community to thrive, be more sustainable, resilient, and healthy in changing times and climates.

As such, in delivering an effective adaptation and resilience strategy, it is essential to adopt a cross-sector approach involving local authorities, third sector, communities and other health and social care providers.

1. Understand the risks of a changing climate and develop appropriate action plans
2. Be part of local planning arrangements for adapting to climate change
3. Develop and apply the UHNM Adaptation Plan.

Lead	Name/role
Operational Leads	UHNM Sustainability Manager
Responsible Lead	Louise Stockdale, Head of Sustainability and Transformation
Responsible Director	Barry Deacon, Deputy Director Estates, Facilities and PFI
Responsible Board Member	Lorraine Whitehead, Director Estates, Facilities and PFI

6. Aspirations

As is clear from this plan, there is a great deal of work already taking place in this area and a great number of examples of best practice. However, there is more that will need to be done.

- Staffordshire and Stoke-on-Trent ICS will target a reduction in on-site patients. Investment in prevention and early diagnosis will be important ways of preventing journeys to and from sites for treatment and consultations. Where a face-to-face consultation is required, sustainable models will be adopted to minimise the impact on the environment

- We will seek involvement from system-wide partners and the people function team to incorporate sustainability into our ICS People Plan. We will seek to engage and develop our workforce in defining and delivering carbon-reduction initiatives and broader sustainability goals

- The fleet and employee lease car programme for Staffordshire and Stoke-on-Trent ICS will be ultra-low emission vehicles (ULEVs) or zero-emission vehicles (ZEVs). This will be enabled by an increase in charging points. Investment will be required to move this forward but this type of vehicle in addition to being more sustainable, has significantly lower running costs

- Initiatives will be in place to encourage more sustainable travel options including active travel planning, the cycle-to-work scheme, and an increased use of public transport. In two years, 20% of journeys will be made via public transport and 50% of all staff will be enrolled on the cycle-to-work scheme

- We will invest in energy-saving measures which will result in cost and carbon savings in the medium and long term. LED lighting and power-and water-saving sensor technology will be rolled out across the ICS. Retrofitting current estate to be better insulated will also reap future cost-saving dividends. By 2025, 100% of lighting across the ICS will be LED. In addition, 100% of power will be REGO-certified and water usage will be reduced by 10%

- We will see a year-on-year reduction in waste going to landfill — the target is zero by 2030. Also, a year-on-year reduction in the use of single-use plastics — to be zero by 2030

- Emissions resulting from medicines can be reduced by investing in anaesthetic gas-recycling technology, sharing knowledge of lower-carbon alternative treatments and more careful consideration of packaging and recycling through the supply chain. A whole-system approach to prescribing medication will be in place — it will be more streamlined and more carbon-friendly. The proportion of desflurane used in surgery is to drop to less than 5% of the overall volatile anaesthetic gases volume

- Procurement of goods and services add significant carbon emissions — but also offer opportunities to generate savings, environmental improvement, and social value. We will consider sustainability criteria across the supply chain to include raw materials, manufacturing, packaging, disposal, and delivery. By 2025, all contracts with a value of £5 million or more will include a carbon-reduction plan. In addition, 100% of suppliers will be compliant with ISO 14001

- Sustainability will be at the centre of the Staffordshire and Stoke-on-Trent ICS' food and nutrition policy, from first-tier suppliers through to waste and recycling. Supplier selection will be increasingly based on green credentials — a zero-waste ethos will be promoted throughout the preparation and serving process and where necessary, a recycle culture will be encouraged. A target of less than 5% food waste by 2025 is in place along with a goal of zero single-use cups, plates and cutlery being used by the end of 2022

- We will have an ICS-wide climate adaptation plan in place to help mitigate climate issues and support the delivery of health and care services throughout changing times.

7. Action plan

Area of focus	Target
Workforce and system leadership	Establish governance. Form a 'green board' with a visible figurehead, taken from key stakeholders across the Staffordshire and Stoke-on-Trent ICS partner group.
	Define the role of, then roll out a 'green champions' programme. The Staffordshire and Stoke-on-Trent ICS Board must drive this initiative.
	Identify the percentage of employees living in Staffordshire and Stoke-on-Trent, and work with area leads to ensure the best travel and digital options are available to support the sustainability case for change.
	Develop a sustainability training programme for all Staffordshire and Stoke-on-Trent ICS staff. This should begin with an induction including how the green agenda is being met and an overview of the Staffordshire and Stoke-on-Trent ICS Green Plan.
Sustainable models of care	Establish a 'where we are now' baseline.
	Measure virtual outpatient appointments. 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 in the way that all care is delivered including digitally enabled care, default preference for lower-carbon interventions where clinically equivalent and reducing unwarranted variation in care delivery and outcomes that result in unnecessary carbon emission.
	Introduce a programme of social prescribing.
	Care for patients at or closer to home – work across all services to reduce unnecessary patient journeys, always keeping in mind how appropriate it is clinically.
	Sign up to the One Planet Standard and become an accredited organisation.

Area of focus	Target
Digital transformation	Establish a 'where we are now' baseline.
	Enable technology and new models of care that facilitate earlier diagnosis and prevention.
	Obtain patients' buy-in for text message and email (electronic channels) communication approvals.
	Set targets for corporate and administration staff to have home as the default place of work.
	Digitise archived records – clinical and corporate.
	Explore ways of increasing virtual consultations and wards, as well as remote patient monitoring.
Travel and transport	Establish a baseline through an annual staff travel survey.
	Working with the national Greener NHS team to undertake a review of the existing fleet within the region.
	Ensure systems solely purchase and lease cars that are ULEVs or ZEVs.
	Work towards purchasing vans (under 3.5 tonnes) that are ULEVs or ZEVs.
	Ensure that only ULEVs or ZEVs are available to staff through car salary sacrifice schemes.
	Identify a cycle-to-work lead in every trust.
	Ensure all systems have a salary sacrifice cycle-to-work scheme in place for staff.
	Where appropriate, all sites to have facilities available that encourage staff and visitors to cycle-to-work.
	Walking schemes to be put in place by all trusts by the end of April 2024.

Area of focus	Target
Estates and facilities	Establish a baseline by measuring and monitoring power and water usage.
	All electricity purchased by trusts is REGO-certified as soon as is practicable.
	Support the reduction of coal and gas in acute premises so it is removed completely.
	Support the implementation of net zero hospital building standards – to be published in quarter one 2022/23.
	Support the delivery of projects receiving money through the decarbonisation scheme.
	Refurbishment schemes to be put in place by all trusts by end April 2024.
	Replace lighting with LEDs.
	Install movement and daylight sensors for lighting and air conditioning.
	Install controls for touch-free taps and low-flush toilets.
Medicines	Reduce the proportion of desflurane used in surgery to less than 10% of overall volatile anaesthetic-gases volume in all trusts in line with the 2021/22 NHS standard contract.
	Implement approaches to optimise the use of medical gases including reducing nitrous oxide waste and preventing the avoidable atmospheric release of medical gases.
	Reduce the carbon impact of inhalers – 50% reduction by 2028 and 6% reduction in 2021/22, when compared to the 2019/20 baseline.
	Use the Electronic Prescribing and Medicines Administration system (EPMA) process.
	Work with suppliers to reduce packaging or make more sustainable. Incorporate the NHS plastics pledge.
	Devise process for selection of lower-carbon alternative treatments.
	Devise programme to encourage the recycling of medical devices.
	Align the north and south formularies to ensure they are focused on a joined-up, carbon-neutral approach.
	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,

Area of focus	Target
Supply chain and procurement	Support implementation of the net zero supplier roadmap.
	Minimum of 10% net zero and social value must be within all contracts.
	Contracts over £5 million must include a carbon-reduction plan.
	100% of all paper purchased to be recycled by 2025.
	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	Set a baseline – measure current food waste.
	Phase out single-use cups, cutlery, and packaging.
	Introduce discount for hot beverages when the customer uses their own 'keep cup'.
	Review and adapt menus to offer healthier lower-carbon options for patients, staff, and visitors.
	All meals meet the current Association of UK Dietitians (BDA) legislation which is reviewed by the dietitians in menu planning.
	Ensure clearly signed, appropriate waste receptacles are installed in all food service areas.
	Procure food in line with our sustainable purchasing objectives.
	Provide and promote interesting and attractive plant-based meals.
	Give a preference to low food miles when sourcing fresh produce.
Adaptation	Install a visible adaption lead from the senior management team.
	Update the risk register to include climate-related risks including floods and heatwaves.
	Complete an estates review, identifying whether changes are required to deal with extreme weather conditions such as floods and heatwaves.

8. Appendix 1

Upper-tier local authorities, district and borough councils in Staffordshire and Stoke-on-Trent

Cannock Chase District Council

Cannock Chase District Council declared a climate emergency in 2019 and set a vision for the district to become carbon neutral by 2030. The council recognises it has an important role to play in encouraging their residents, businesses, and local organisations to achieve zero carbon targets.

The council is also in the process of creating a detailed baseline to assess the district's current position. According to 2016 data from the Department of Business, Energy and Industrial Strategy, the Cannock Chase district had the second lowest carbon emissions (in tonnes) per capita in Staffordshire at 4.1. In 2005, it had been 6.3.

The council has seen great benefit from the significant carbon-reducing event in the district in recent times including the closure of coal-burning Rugeley Power Station in mid-2016. The electrification of Chase Line railway line was another contributor to the reduction in CO_2. Having the Cannock Chase Area of Outstanding Natural Beauty (AONB) in the district with its trees and forests helps absorb CO_2 and potentially harmful gasses from the air, as well as to release oxygen.

Cannock Chase District Council has two exciting projects in place – the **Zero Carbon Rugeley Project** and **Chase Community Solar**.

East Staffordshire Borough Council

In East Staffordshire, the council declared a climate emergency in August 2020 and set an aspiration to make the borough carbon neutral by 2040. Following the declaration, a comprehensive Climate Change Action Plan was developed that contained actions to help local people and businesses contribute to becoming carbon neutral.

The plan covers several themes including:

- energy generation and use
- transport and travel
- resource use
- how green space is used.

The council also carried a motion in July to phase out all single-use plastics wherever possible in its buildings and services over the next 12 months. This includes items such as cutlery, plates, vending machine cups, food packaging and condiment sachets – most of which are not recycled.

Lichfield District Council

In December 2019, Lichfield District Council declared a climate-change emergency and made a commitment to achieve net zero carbon emissions for the district by 2050. An action plan is in place which sets out the first phase of its intended response to deal with organisational emissions.

Initially, five areas of focus have been identified (see table below), although the council recognises that more areas will need to be dealt with if their goals are to be achieved.

Buildings and transport	Biodiversity and environment	Waste	Air quality	Behaviour change, policies, and data
We will: • Reduce building energy usage/ energy emissions • Reduce vehicle emissions • Reduce our overall carbon impact • Increase utilisation of renewable energies.	We will: • Maximise opportunities for carbon capture through our parks and open spaces • Plan for flood prevention/ mitigation • Adapt to climate change • Ensure carbon sequestration.	We will: • Take action to reduce waste generation • Re-use items where possible • Improve local recycling infrastructure.	We will: • Increase sustainable travel • Reduce travel by fossil fuel vehicles.	We will: • Identify policies which can contribute to net zero • Enable understanding of climate change. • Be more efficient in the energy we use.

Newcastle-under-Lyme Borough Council

In April 2019, Newcastle-under-Lyme Borough Council passed a climate emergency motion. A central element of this was the aim of becoming carbon neutral with respect to the council's own estates and activities, and those related to our residents and businesses.

For more information, see the council's detailed **Newcastle Under Lyme Sustainable Environment Policy**. Their strategy is focused on the following areas:

Waste, Recycling and Resource Management

Natural Environment

Built Environment

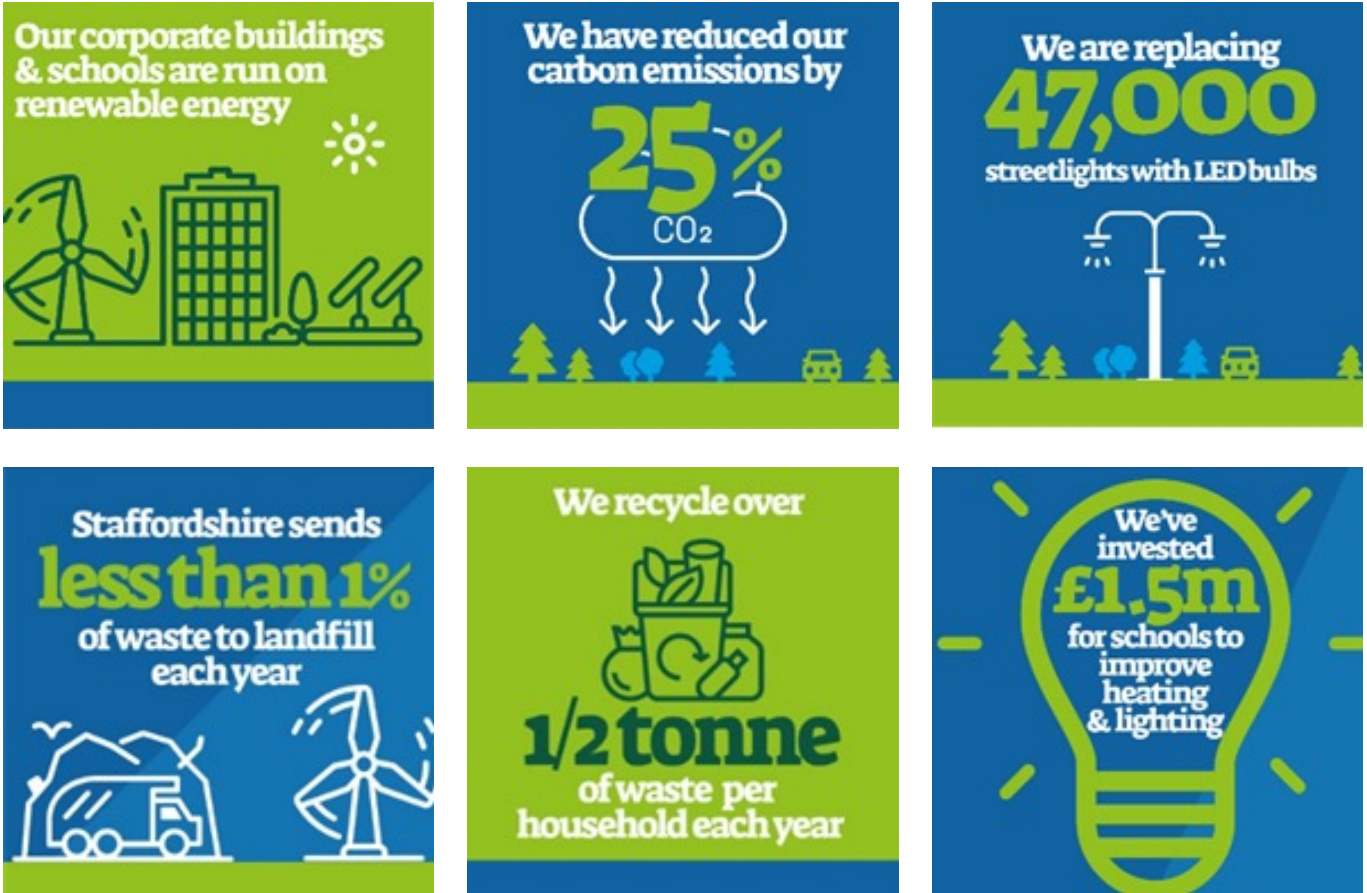Energy Consumption and Renewables

Travel and Transport

Awareness, Engagement and Behaviour Change

South Staffordshire District Council

The council recognises the importance of climate change and its impact on the residents and business of Staffordshire. In July 2019, South Staffordshire District Council declared a climate change emergency and pledged to achieve net zero emissions by 2050 across every aspect of its service provision and estate.

In the first year after declaring the climate emergency, South Staffordshire District Council reduced its carbon emissions by 25%.

Our corporate buildings & schools are run on renewable energy

We have reduced our carbon emissions by 25% CO₂

We are replacing 47,000 streetlights with LED bulbs

Staffordshire sends less than 1% of waste to landfill each year

We recycle over 1/2 tonne of waste per household each year

We've invested £1.5m for schools to improve heating & lighting

Stafford Borough Council

This council declared a climate emergency on 23 July 2019. In 2020, a strategy was introduced to support and enhance the work that was already underway within the council, to tackle climate change and green recovery.

Their vision is 'To create a green, healthy, and resilient Stafford borough where everyone can thrive, by limiting the impacts of climate change and meeting our climate change and green recovery commitments'.

The published priorities are to:

1. Reduce emissions from our own activities

2. Work in partnership with government, elected bodies and elected members, partners, residents, and businesses across the borough, and to take action that contributes to carbon neutrality and sustainable development within communities and across the natural environment

3. Mitigate and adapt to climate change

4. Continue to implement our green recovery objectives

For more information, see the council's **Climate Change and Green Recovery Strategy 2020-40**.

Staffordshire Moorlands District Council

The Council declared a climate emergency on 10 July 2019, making a commitment to:

'Start working with partners across the district and region, towards making the Staffordshire Moorlands area carbon neutral by 2030, considering emissions from both production and consumption'.

The council is committed to:

1. Start working with partners across the district and region towards making Staffordshire Moorlands carbon neutral by 2030, considering emissions from both production and consumption

2. Call on the government to provide guidance, powers, and resources to make carbon neutrality possible by writing to local MPs and all relevant government departments

3. Request that the chair of the community overview and scrutiny panel establishes a sub-committee to undertake detailed research into the effects of climate change in the district, which will include consideration of all relevant data and monitoring information available, to involve evidence from relevant stakeholders with a view to recommending to the council an effective, achievable, and costed plan of action to address climate change within Staffordshire Moorlands

4. Ensure that all council bodies and scrutiny panels consider the impact of climate change and the environment when making decisions and reviewing council policies and strategies

5. Review progress made on an annual basis via scrutiny and full council.

Staffordshire County Council

The Council declared a climate emergency in July 2019, recognising the impact of climate change on residents and businesses across Staffordshire, declaring to achieve net carbon zero across every aspect of its service provision and estate by 2050.

The Council's strategic plan highlights climate change as one of its key principles and has pledged to 'think climate change in all that it does to limit its impact on the environment'. Since declaring a climate emergency, the Council has reduced its carbon emissions by 25%.

Our corporate buildings & schools are run on renewable energy

We have reduced our carbon emissions by **25%** CO2

We are replacing **47,000** streetlights with LED bulbs

Staffordshire sends **less than 1%** of waste to landfill each year

We recycle over **1/2 tonne** of waste per household each year

We've invested **£1.5m** for schools to improve heating & lighting

Stoke-on-Trent City Council

Stoke-on-Trent City Council declared a climate emergency in July 2020, and has committed to being a single-use plastic-free authority by 2023 and to being net carbon zero by 2030.

The Council has established a climate change commission – committing to planting 11,000 trees across the city through the Big Climate Fight back initiative and integrating environmentally friendly initiatives across all that it does.

Tamworth Borough Council

On 19 November 2019, Tamworth Borough Council declared a climate emergency. This resulted in a number of recommendations being made:

1. Make the council's activities net zero carbon by 2050 with an aspiration to achieve 2030 should the council be financially able to do so

2. Ensure that political and chief officer leadership teams embed this work in all areas and take responsibility for reducing where practicable, as rapidly as possible, the carbon emissions resulting from the council's activities

3. The council (including the executive and scrutiny committees), consider the impact of climate change and the environment when adopting and reviewing council policies and strategies

4. Receive a report to the relevant scrutiny committee regarding the level of investment in the fossil fuel industry that any of our investments have

5. Ensure that all reports in preparation for the 2021/22 budget cycle and investment strategy will consider the actions the council will take to address this emergency

6. Ask the council to note there will be a yet-undefined financial impact to any plan to achieve net zero carbon operations.

A climate change strategy has subsequently been published – **Instinctively Green.**