The Shrewsbury and Telford Hospital NHS Trust

Board of Directors' Meeting
9 June 2022

Agenda item	105/22			
Report	ICS Green Plan			
Executive Lead	Director of Finance			
	Link to strategic pillar:		**Link to CQC domain:**	
	Our patients and community	√	Safe	
	Our people		Effective	
	Our service delivery		Caring	√
	Our partners	√	Responsive	
	Our governance	√	Well Led	√
	Report recommendations:		**Link to BAF / risk:**	
	For assurance		BAF 2	
	For decision / approval	√	**Link to risk register:**	
	For review / discussion			
	For noting			
	For information			
	For consent			
Presented to:	ICS CEO group April 2022 Finance and Performance Assurance Committee 31st May 2022			
Dependent upon (if applicable)**:**	National policy requirement for ICS			
Executive summary:	The ICS Green Plan is the successor to the Sustainable Development Management Plan (SDMP) and sets out what the ICS needs to do over the next 5 years to further enhance our sustainability programme and climate change programme. The move to ICS requires integration of all system plans into a system-wide plan. Currently all providers within the system are required to develop their own Green Plan contributing to the overall system plan. The ICS Green plan does not commit SaTH to any additional actions to those identified in the SaTH Green Plan. The appended ICS Green Plan has been agreed at the ICS CEO group in April 2022 as required by NHSE/I. The Board of Directors is requested to **APPROVE** the ICS Green Plan.			
Appendices:	Appendix 1: STW ICS Green Plan			
Lead Executive:				

1.0 Introduction

1.1 The purpose of this paper is to present to the Board of Directors the draft ICS Green Plan for approval as required by NHSE/I. The plan has been agreed at ICS Board and is appended to this cover paper.

2.0 Context

2.1 NHS E/I have required that all systems approve system ICS Green Plans by April 2022. Towards this end the ICS Climate Change Shadow Board has developed a draft Green Plan with system partners who are all represented at the group.

The ICS Green Plan has been co-ordinated with all system partners via the ICS Climate Change Shadow Board. The board has good attendance with representation from all system partners.

The Green Plan and associated action plan reflect the standards adopted by each organisation in addressing climate change. The plan pledges only what has already been commonly agreed by all organisations and identified within their own individual green plans. In addition, it sets aspirational standards identified by each organisation and those identified by NHSE/I guidance 'Delivering Net Zero NHS 2020'.

Sub-groups to the Climate Change Shadow Board have been set up to co-ordinate joint reporting of actions delivered across the ICS in areas such as waste, energy, procurement, travel and energy and therefore provide assurance on delivery of the action plans.

3.0 Link to Pledges

This paper and accompanying draft ICS Green Plan is linked to the system Climate Change Pledge and Tackling Problems of Ill Health.

4.0 Summary

Health and social care services across Shropshire and Telford will need to respond to the challenge of climate change. Climate and carbon issues will need to be embedded into everything we do now and in the future.

Failing to reduce carbon emissions and implement climate change adaptation measures represents a significant financial threat to the revenue costs of health and social care services. The recent increases in the cost of fossil fuels, means that the viability and long-term financial merits of decarbonisation are becoming even more compelling. A review of energy and carbon performance can often help to identify wider efficiency savings. In addition waste and bio-diversity will need to be developed system wide.

Pledge 7 of the ICS plan commits system partners to developing a multi-agency strategy setting out our joint response to the threat of climate change. The ICS has established a 'Climate Change Working Group', chaired by Will Nabih (SaTH), which reports to the Population Health Board. The Working Group has drafted a 'Joint Green Plan' to identify opportunities in the system where we can share learning, optimise efficiencies, and capitalise on collaborative working on this agenda.

The draft joint ‘Green Plan’ outlines the progress made so far, key targets, time frames and collaboration opportunities between system partners for a range of topics. The draft plan outlines collective goals not only at system level.

Individual ICS System partners will need to progressively engage with their staff and service users to explore the need for, and implications of, service changes which may result from the adoption of carbon reduction and other measures and will need to adopt an agile approach keep abreast of national good practice in order to maximise opportunities for equality and social inclusion within the overall policy context of addressing the climate emergency.

The next three years will be fundamental in building collaboration across the system and establishing early investment to maximise benefits later. During 2022 the ICS will identify a Sustainability Lead - a person accountable to the board lead and responsible for providing support to the respective organisations within the ICS, holding those organisations to account and ensuring that their respective action plans are being addressed in the agreed timeframes.

Establishing an accurate baseline is also a priority. To do this, the aim is to determine the carbon footprint for the overall ICS system, focussing initially on direct emissions (by April 1st, 2023), followed by indirect emissions later in 2023. To address goods and services which are commissioned from external organisations and ICS system partners are working closely together and with their procurement teams to identify the carbon impact of specific contracts and will then use this information to discuss these further with the relevant suppliers as part of the procurement process.

Adopting a collaborative approach at both organisational and system levels will ensure that the system can maximise benefits and realise any financial savings. It will also provide consistency in reporting and some resilience in terms of team member movement.

5.0 Conclusion

It is recommended that the ICS Green Plan is approved and adopted. Following on, next steps will be to develop a ‘plan on a page’ summary for implementation. In addition, a costed action plan will be produced setting out how existing commitments made by each organisation would be implemented.

Author:

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ICS Climate Change Shadow Board Chair

Shropshire Telford & Wrekin Integrated Care System

Green Plan

2022-2025

www.stwics.org.uk

Shropshire, Telford & Wrekin
Integrated Care System

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Welcome

Our activities as a species on Earth are having a profound impact on the environment with **irrevocable consequences** -

biodiversity loss and mass extinction, plastics in our food chain, acidification of our seas and climate change that will bring about frequent and often disastrous weather events. We must therefore maintain momentum in minimising our contribution to carbon in the atmosphere, products that persist in nature, and the destruction of other species due to loss of natural habitats. Extreme weather events and infectious diseases are now a very real and tangible part of our lives. Human activities have already set in motion these occurrences and therefore, we must adapt.

The UK typically experiences 10 severe storms per annum, and some of the most severe heatwaves experienced over the last 60 years have been in the last ten years or so (Kendon, et. al, 2021). These incidents will clearly have an impact on our communities' health and wellbeing - be it through heatwaves, flooding, or storms. Moreover, the buildings and infrastructure we use to provide care must do so throughout these events, enabling the business that our clinical and support services colleagues deliver to continue uninterrupted — particularly because of the impact that major incidents have on our service delivery.

We must, then, adapt our services to ensure that we mitigate for emerging risks brought about by climate change and loss in biodiversity.

The Shropshire, Telford and Wrekin Integrated Care System (STW ICS) has thus far reached significant milestones in its journey to realising Net Zero. We must ensure that we speed up our efforts now, in a joined-up approach, to meet targets set out by NHSEI in the document Delivering a Net Zero NHS (2020). We are fortunate enough to be situated in one of the most beautiful areas of the UK, and because of this are reminded daily how precious our world is, and that we must take responsibility for caring for the environment we live and work in.

This document is a representation of our system's organisations, the STW ICS, three-year plans to do just that.

“

It is not the strongest, nor the most intelligent of species that survives, but the one that is most adaptable to change.

Charles Darwin (1808–1882)
naturalist, biologist and geologist, born in Shrewsbury

Introduction

Shropshire, Telford and Wrekin Sustainable Transformation Partnership (STP) became an **Integrated Care System (ICS)** from 1st April 2021.

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

Our ICS footprint covers 1,347sq miles, but is one of the smallest in terms of population, covering around 500,000 people. We have one Clinical Commissioning Group covering the area of Shropshire, Telford & Wrekin. The CCG is responsible for buying NHS services for local people. We have two acute hospitals, sited less than 20 miles apart, with services delivered by one acute trust, Shrewsbury and Telford NHS Trust (SaTH). There is also a specialist orthopaedic hospital, Robert Jones and Agnes Hunt Orthopaedic Hospital NHS Foundation Trust (RJAH), which provides elective orthopaedic surgery, sited in the northwest of the county. Additional providers include a community trust (SCHT), a mental health trust (MPFT) which covers Shropshire and Staffordshire, and the region is served by the West Midlands Ambulance Service University NHS Foundation Trust (WMAS). In summary, our ICS System partnership consists of;

- NHS Shropshire, Telford and Wrekin Clinical Commissioning Group,
- The Shrewsbury and Telford Hospital NHS Trust -SaTH
- The Robert Jones Agnes Hunt Orthopaedic Hospital NHS Foundation Trust -RJAH
- Midlands Partnership NHS Foundation Trust -MPFT
- Shropshire Community Health NHS Trust -SCHT
- Shropshire Council- SC
- Telford and Wrekin Council - TW
- The Primary Care Network including GPs
- West Midlands Ambulance Service - WMAS
- The voluntary sector and other core partners involved in transforming the provision of health and care services across Shropshire, Telford and Wrekin for those we serve.

The ICS has two unitary authorities: Shropshire Council and Telford & Wrekin Council. The area covered by Shropshire Council is 3,197 square kilometres, or 1,234 square miles. This is 91.7% of the ceremonial county of Shropshire, with the remainder being covered by Telford & Wrekin Council. The footprint has a number of towns, but no major cities. Shropshire has an estimated population of around 310,000 and Telford & Wrekin has an estimated population (for the borough) of around 170,000. Of these, around 150,000 live in Telford itself, making it the largest town within the ICS and it is one of the fastest-growing towns in the United Kingdom. In the Shropshire Council area, Shrewsbury is the largest town with a population of 70,600 with the second largest being Oswestry with a population of just 16,600.

Our ICS area is one of a handful that borders Wales and provides some hospital services for people from the Welsh health system who are external to the ICS footprint. Some residents of mid-Wales therefore rely on the services at SaTH and RJAH.

Each organisation within the ICS currently has their own Green Plan, with their own specific Action Plan. This document outlines the achievements already made, our ambition as a system, and how we aim to achieve these ambitions. We see our journey to net zero as a collaboration of the organisations in our system to approach with a broader view of delivering care to our communities.

In October 2020, NHS England published 'Delivering a Net-Zero National Health Service', a report that details the scale of the environmental problems faced by the NHS and the country. This report sets ambitious targets requiring all NHS Organisations to become Net zero by 2040 for the NHS Carbon Footprint and by 2045 for the NHS Carbon Footprint Plus. The document is a milestone for NHS Organisations in that they now have key targets to achieve by the 2030s and 2040s.

Both Telford and Wrekin, and Shropshire Councils have a target to be 100% net zero carbon by 2030

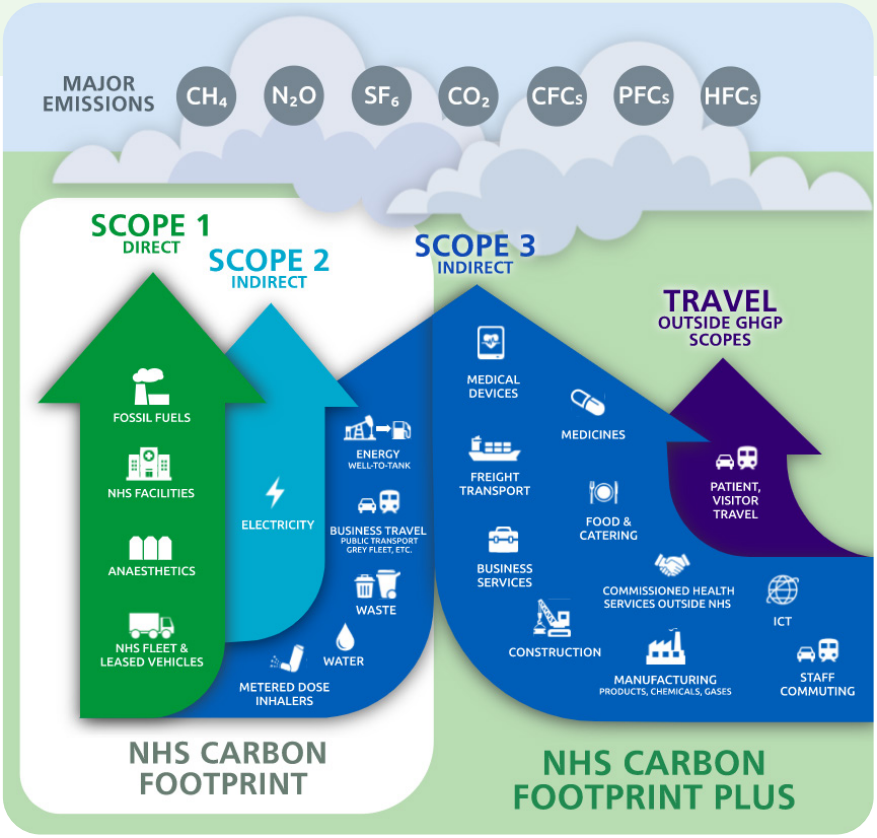
The NHS aims to provide health and high-quality care for all, now and for future generations. This requires a resilient NHS, currently responding to the health emergency that COVID-19 has brought, protecting patients, our staff, and the public. The NHS also needs to respond to the health emergency that climate change brings, which will need to be embedded into everything we do now and in the future.

Clearly, there will be financial investment required across the system. We aim to return on these investments over the lifetime of the output projects, or where this is not possible, for them to be cost-neutral. This may not always be possible so we must be careful in how we initiate projects and consider the benefits they provide in a holistic approach.

The two key net zero targets for the NHS set in the 'Net Zero' (NHSEI, 2020) paper:

1. 100% by 2040 for the NHS Carbon Footprint, with an ambition for an 80% reduction (compared with a 1990 baseline) by 2028 to 2032

2. 100% by 2045 for the NHS Carbon Footprint Plus (see below), with an ambition for an 80% reduction (compared with a 1990 baseline) by 2036 to 2039.



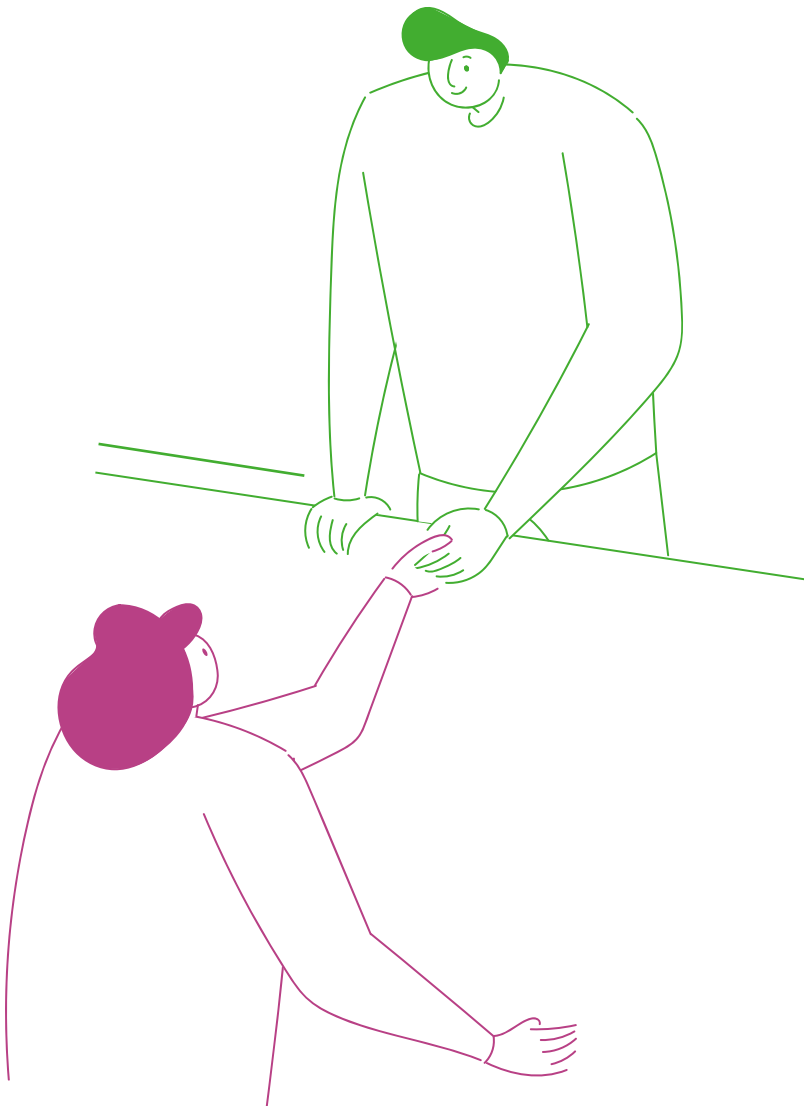
Integrated Care System Vision

We will **work together** with the people of Shropshire, Telford & Wrekin to develop innovative, safe and high-quality services, attracting and retaining the best staff to deliver world class care that meets our current, and future, rural and urban needs.

We will support people — in their own communities — to live healthy and independent lives, helping them to stay well for as long as possible. Creating partnerships to find solutions that work better for the people we serve and those who provide care.

As the world faces up to a climate emergency, we are committed to delivering an internationally recognised system known for its environmentally friendly services that make the best use of our resources. We want this journey to net zero carbon to provide population health benefits to our communities and staff throughout the process and capitalise on financial benefits where possible.

Our journey is towards local sustainability while being sensitive to global sustainability and delivering on net zero. Our approach will be one of collaboration between our member organisations to ensure we achieve our targets comprehensively and systematically together in good time, realising all of the benefits that come with it environmentally and in terms of health and service provision.



Key Milestones — Our progress so far

Our journey to **net zero** has already started at our organisational levels. Our key milestones are:

An overall system reduction in reliance on fossil fuels of circa **1,066,000 kWh** for PV arrays

Achieved by the installation of renewable on site energy

Around £**2.98**m saved from reduction in journeys

Achieved and quantified by MPFT:

- moving outpatients clinics to telephone/video calls, delivering over **80,000** virtual consultations
- adapting agile (hybrid) working for our colleagues
- planning our services better

Diverting around 440 tonnes of waste from landfill each year

Achieved by RJAH in the period April 2020 — March 2021, 100% of RJAH waste was diverted from landfill = saving of 440 tonnes waste, breakdown below:

Area	Weight (tonnes)
Incineration (Clinical) Waste Volume	102.49
Alternative Treatment (Clinical) Waste Volume	76.05
Offensive Waste Volume	119.87
Recycling Waste Volume	53.07
Domestic Waste Volume	78.20
Food Waste Volume	14.39

Achieved by

- segregation of waste
- collaborating with waste partners to adopt practices that make energy from waste

Adapted our sites to accommodate local wildlife

Achieved by

- Installing swift and bat boxes
- Sited beehives on some of our hospital sites
- Encouraged a diverse range of plants and fauna in our green spaces.

Completely eliminated Desflurane from our clinical practices

Achieved by adopting alternative methods such as less environmentally harmful anaesthetic gases and **Total Intravenous Anaesthetics (TIVA)**

Each metric outlined in the document covers more of the achievements we have made in further detail.

The Next Three Years and Beyond

The next three years will be fundamental in **building collaboration** and establishing early investment to maximise benefits later.

There are many early interventions we must address, but establishing our benchmarks is a priority. To do this, we aim to determine the overall system carbon footprint from scopes 1 & 2 emissions by April 1st, 2023, with scope 3 emissions later in 2023. We will also review waste metrics, travel and medicines. This will give us a point of reference in which to measure our progress. Some organisations within the system have already completed a carbon foot-printing assessment, so we intend to complete a joint exercise for those who have not, to capitalise on economies of scale.

Adopting a collaborative approach to both the actions at organisational and system levels will ensure we maximise benefits and realise any financial saving opportunities. It will also provide consistency in reporting and some resilience in terms of team member movement.

Therefore, our key actions are to identify opportunities in the system where we can share learning, optimise efficiencies, and capitalise on collaborative working.

To do this, we will:

1. Establish our system baseline positions
2. Ensure that we have the right people delivering our net zero agenda
3. Consider how we can deliver care in a sustainable, balanced way
4. Harness digital technologies to approach a multifaceted challenge of delivering quality care outcomes, improving the quality of our care and diagnostics, reducing waste, and optimising our building services
5. Encourage our communities to avoid contributing to our carbon output
6. Focus on our supply chain's commitments to achieving net zero
7. Develop decarbonisation plans, continuing our transition to renewable energy, and in the interim making every kilowatt of fossil fuel energy count
8. Adopt practices to avoid creating waste that persists in nature, and recycling those we cannot.
9. Adapting our services to meet the challenges of climate change and extreme weather events
10. Encourage biodiversity at our properties

Our Green Plan structure follows the NHS England Guidance:

LEADERSHIP AND WORKFORCE

SUSTAINABLE MODELS OF CARE

DIGITAL TRANSFORMATION

TRAVEL AND TRANSPORT

ESTATES (Hard Services)

FACILITIES (Soft Services including Waste)

MEDICINES

FOOD & NUTRITION

SUPPLY CHAIN & PROCUREMENT

ADAPTATION

This structure will form the basis of our strategy. Each subheading discusses the progress made so far (and our baselines, where applicable), our key targets, timeframe and how we intend to achieve this. We also feel that it is important to include Biodiversity under its own subheading because a broad and diverse environment locally, nationally and internationally is central to tackling the key issues addressed in this document.

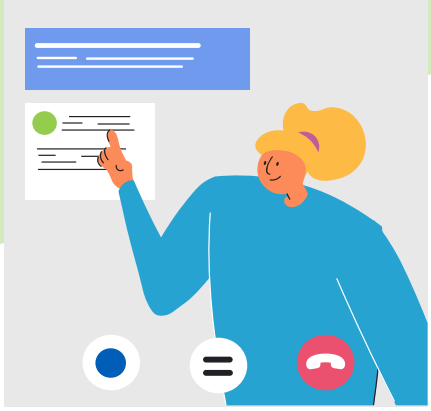
Leadership & Workforce

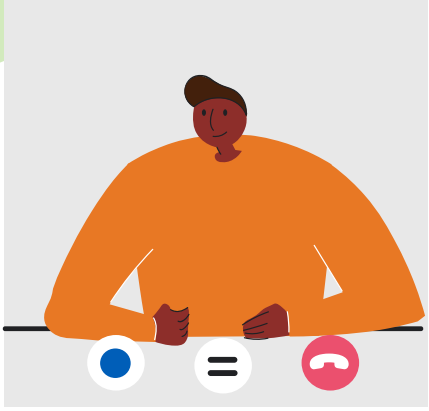
Our people are central to delivering our care services **sustainably.**

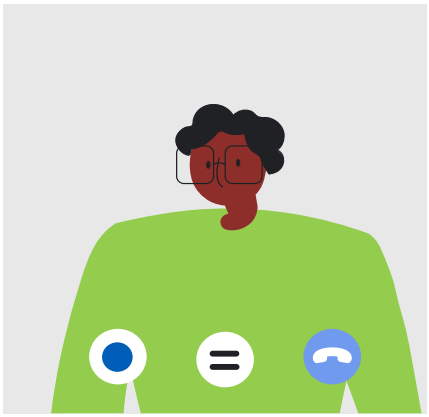
Currently, many of the organisations in our system manage sustainability through various roles such as sustainability managers, energy managers or waste managers (or a combination of these). Whilst we already have excellent examples of collaboration and governance through the ICS Climate Change Working Group, there are opportunities to focus the co-ordination of collaborative working to drive efficiencies between the organisations - both environmentally and financially.

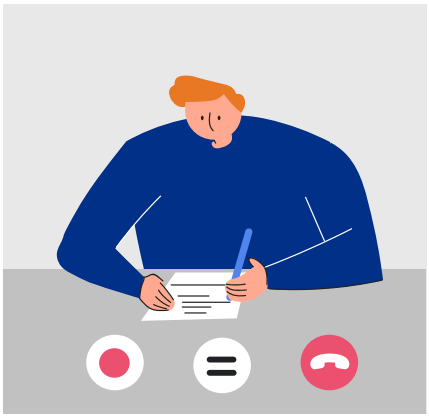
All our staff have a responsibility for contributing to achieving net zero, and can help by:

- Where practical, and meeting the service needs, work from home wherever possible
- Use greener methods of transportation such as 'active travel', and where this is not possible, use public transportation and carpools
- Minimise waste, reuse if safe to do so and use recycling facilities provided
- Holding local sustainability working groups
- Challenge colleagues where socially and sustainably responsible behaviours need improvement
- Increase awareness by discussing with colleagues and teams
- Sensible use of technology to enable remote working and drive efficiencies — for example, embracing the use of electronic devices for delivering services in the community or holding a MS Teams meeting rather than traveling to meet face-to-face.
- Raising sustainability awareness to our colleagues, service users and communities by participating in campaigns, Sustainability Days, Sustainability Competitions, and so on.
- Collaboration with schools and nurseries to promote sustainability as part of their curriculums; providing advice and help with planning activities to teachers, administrators, business managers.









Sensible use of technology to enable remote working and drive efficiencies.

As job descriptions throughout the whole workforce are reviewed and refreshed on a routine basis, we must ensure that sustainability & waste management are highlighted as an essential requirement to the day-to-day responsibilities of each colleague, expecting sustainability as 'business as usual' facet of our work practices.

Our ICS board lead for sustainability is Shropshire Council's Chief Executive.

In 2022 we will look to identify a Sustainability Lead for the ICS — a person accountable to the board lead and responsible for providing support to the respective organisations within the ICS, holding those organisations to account and ensuring that their respective action plans are being addressed in the agreed timeframes.

Some of the organisations in our system already have colleagues in senior leadership positions who have completed carbon literacy training. This training is a formally recognised certificate which we intend to roll out for senior leaders in the whole system using a train-the-trainer model, capitalising on collaboration, to improve our understanding of how we can tackle our emissions by changing behaviours and embedding carbon performance in our service delivery. A by-product of this training would encourage and identify climate and carbon champions in all service areas.

Collaborative Opportunities

1. Individual and System Baseline Carbon Foot-printing (we have a stronger position for negotiation through economies of scale)
2. Introduce a network of Net Zero Carbon Champions (staff, service users and members of the public)
3. Improvement in comms by sharing regular cross-system sustainability-related information, such as benchmarks and how colleagues can change behaviours to have a collective impact on our carbon footprint
4. Share training to provide consistent approaches, and capitalise on economies of scale

We will recognise the fantastic work and milestones achieved by our colleagues throughout the system through nominations at national level sustainability awards and at local levels through internal nominations for individual recognition.

Sustainable Models of Care

Delivering the best care is our business — it's what we do. As a system we have huge opportunity to organise our services in such a way that patient care improves whilst we **make carbon efficiencies.**

We must consider the location of our services to suit — utilising existing buildings, collaborating on projects that improve care across our membership and ensuring we have the right services in the right places.

We are harnessing technologies to reduce the need to invite patients to sites, often through 'virtual' consultations. For example, MPFT has completed over 80,000 of these appointments since March 2020 — demonstrating an estimated £3m saved in travel. There is therefore much opportunity for the system, where it is clinically safe to do so, to adopt this approach.

In 2015, NICE published guidelines on medicines optimisation, advising that the environmental impact of each bed day is 63.7kg of CO2e, 0.6m3 of direct fresh water used (98.6 m3 of indirect freshwater use) and 8.15kg of waste produced. From 1,271 (700 SaTH, 174 RJAH, 24 Ludlow, 25 Bridgnorth, 348 MPFT) bed spaces in the system, this translates to a total of 81tCO2e, 762.6m^3 direct fresh water, 125,321m^3 indirect fresh water and 10,359kg of waste (per day).

We must encourage our patients to live balanced, healthy lifestyles, and geographically we must provide this care that is accessible for all engaging in active travel. The **#TogetherWeMove** movement is a charity-led initiative encouraging active travel, exercise and the benefits that come with this.

There are also opportunities to signpost patients, staff and service users to energy efficiency advice outlets, such as Beat the Cold and Keep Shropshire Warm.

Collaborative Opportunities

Align individual digital technology to offer Care Closer to Home to reduce bed days

Partner to develop and deliver the Shropshire Joint Health and Wellbeing Strategy, specifically: -

- reducing stigma of mental illness
- reduce inequalities that are the cause of ill health
- influence planning decisions regarding fast food takeaways and green spaces
- support people as they are discharged from hospital
- promote the health, wellbeing and social change needed to improve health in Shropshire

Signposting to energy efficiency advise to patients, staff, public, financial help with energy bills, improve their health and wellbeing, etc. directly or via charities (e.g. Beat the Cold, Keep Shropshire Warm **#WeMoveTogether**).

All Shropshire Council commissioned activity will seek to identify opportunities to reduce carbon admissions; including locality-based models of care, reducing the need for paper and moving to digital solutions, incentivise sustainable transport solutions. The same is true for Telford and Wrekin Council; increasing its environmental evaluation criteria weightings to encourage suppliers to use sustainable practices and to reduce carbon emissions in the supply chain. This is an opportunity for the NHS organisations in the system to both support and adopt best practices.

The development of a new Wellbeing Centre in Shrewsbury will provide opportunities to introduce innovative ways of working and delivering health care, including related green initiatives. There are further opportunities to embed carbon reduction into the services that are commissioned from health through the PH grant — the commissioned services are primarily from ShropCom— Drugs and Alcohol (DAT), School Nursing, Health Visiting, health checks commissioned from primary care, and some weight management programmes commissioned from SaTH. Building this integration into our zero-carbon journey will enable us to adapt as we need to and expedite the carbon reductions.

There are further opportunities to embed carbon reduction into the services that are commissioned from health through the PH grant

Digital Transformation

With the advent of SARs-CoV-2 and the subsequent COVID-19 pandemic, our **organisations had to adapt** to continue to provide services whilst protecting patients and staff.

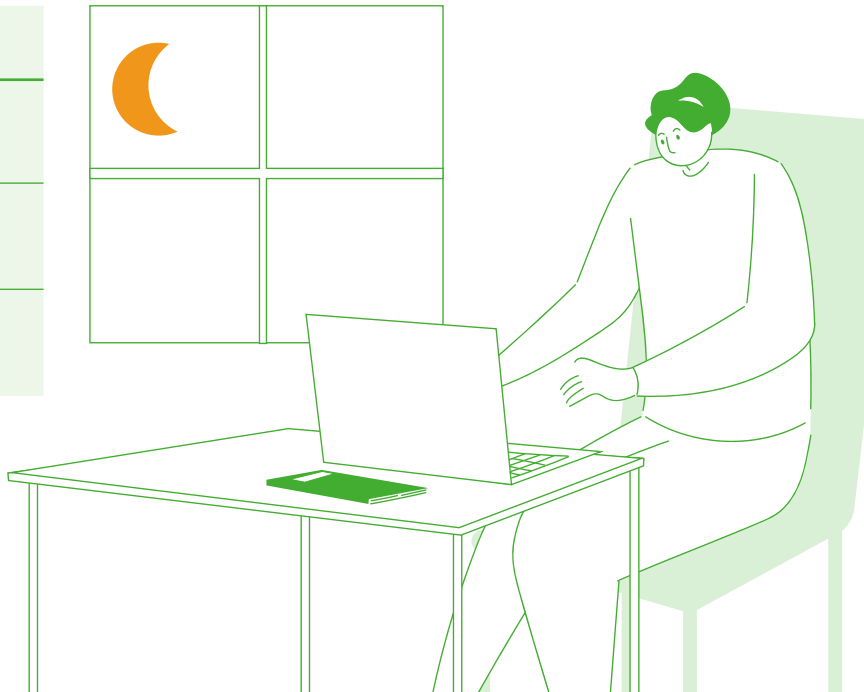
To do so, our IT teams worked around the clock to enable more colleagues to work from home or working remotely to provide services where this did not impact business needs - as discussed in the Sustainable Models of Care chapter, for example, assisting with moving to online consultations.

This inadvertently reduced our carbon footprint significantly, within the space of just a few weeks. There is now real opportunity to further drive down our key carbon emissions through harnessing digital infrastructure, particularly in delivering patient care but also as colleagues return to site.

We are building resilience in the event of major incidents, outbreaks, and enabling colleagues to perform flexibly and efficiently by improving communications — for example, pivoting to VOIP telephones and integrating telephone services with Microsoft Teams. Digital exclusion, the term used for inequalities in access to digital technology, is a barrier to providing care in our communities; particularly with respect to our ambition to provide 25% of outpatient activity and we will aim to review progress with this in mind and exploring options to support our communities to overcome this.

Collaborative Opportunities

- Enable ability for staff to work from other stakeholders locations if closer to home or patients
- Encouraging staff across the system to use Ecosia to contribute to biodiversity around the world.
- Joint booking systems for clinical and non-clinical spaces



Collaboration between council and NHS organisations may also benefit our services; particularly where we share building spaces. whereby staff can work from nearest office space throughout the entire system. A joint space booking system is currently being investigated to cover the entire system both for non-clinical and clinical space. Councils also have a role to play in working with NHS partners in the system to develop and enhance digital solutions to support people to live safe and well at home, to ensure the right care, at the right time in the right place in needed and care is not being overprescribed.

Electronic Patient Records (EPR)

The recent NHS Long Term Plan has an expectation that all services should have met 'a level of core digitalisation by 2024'. The move to EHRs supports this as well as helping with compliance with the General Data Protection Regulation (GDPR) as well as the visibility of patients notes improves care. WMAS and SCHT are already using an electronic system, RJAH are implementing for go live in 12 months, SATH in 18 months.

Work From Home and Agile (Hybrid) Working

The Covid-19 crisis has kickstarted a movement to agile (hybrid) working, and where service delivery is not impacted there are clear benefits to continuing this model:

- Improved wellbeing for staff due to reduced commuting, better work-life balance, local emissions reductions and so on.
- Reduction in carbon from commuting, less local pollution, improved access to parking for site visitors,
- Reduction in utilities usage, such as water, electricity and gas on site

Improving building services monitoring and control

Adopting the latest technologies in Building Management Systems (BMS) will provide significant and often direct carbon emissions at local level. Although frameworks exist for service providers in this industry, there is real opportunity to collaborate on maintenance contracts where similar systems are being employed across multiple sites, and to support transition to improved equipment. Organisations can link and pool expertise through peer meetings to ensure that benefits of BMS systems are being maximised.

Work underway, by Shropshire Council, to help staff with insulations and loan scheme for solar and battery installation in their homes.

There is an opportunity for all organisations to adopt Ecosia

Ecosia

The free-to-use search engine that donates approximately 80% of its profits to fund tree planting projects around the world.

University College London Hospital (UCLH) have recently rolled this out and provided a case study. In the first full month (February 2022) of Ecosia being used trust wide UCLH has funded the planting of 2,238 trees. UCLH employs 11,000 staff, which is a tree planting rate of: 2238/11000 = 0.203 trees funded per staff per week. Although the exact rate of tree planting will vary between organisations, this gives an approximation for potential tree planting impact. If the system adopts this approach, the number of trees planted could reach close to 84,000 per year (34,345 staff x 0.203 x 12 = 83,664)

It is important to note that Ecosia does allow for 'carbon offsetting', so the carbon sequestered from tree's planted cannot be used in any official carbon accounting. Nor does NHSEI encourage tree planting as a route to net zero, rather, this method will be a tool for us to contribute to biodiversity in some of the most environmentally important areas across the globe — South America, Africa, Europe and East Asia.

Journeys, Transport and Active Travel

Business Travel and Staff Commuting are one of the major contributors to Trust Scope 3 emissions. Trusts are tasked with **outlining plans to reduce the carbon emissions** arising from Travel and Transport.

Fig 3: Greenhouse gas emissions by sector, 2019, by proportion (BEIS, 2020)

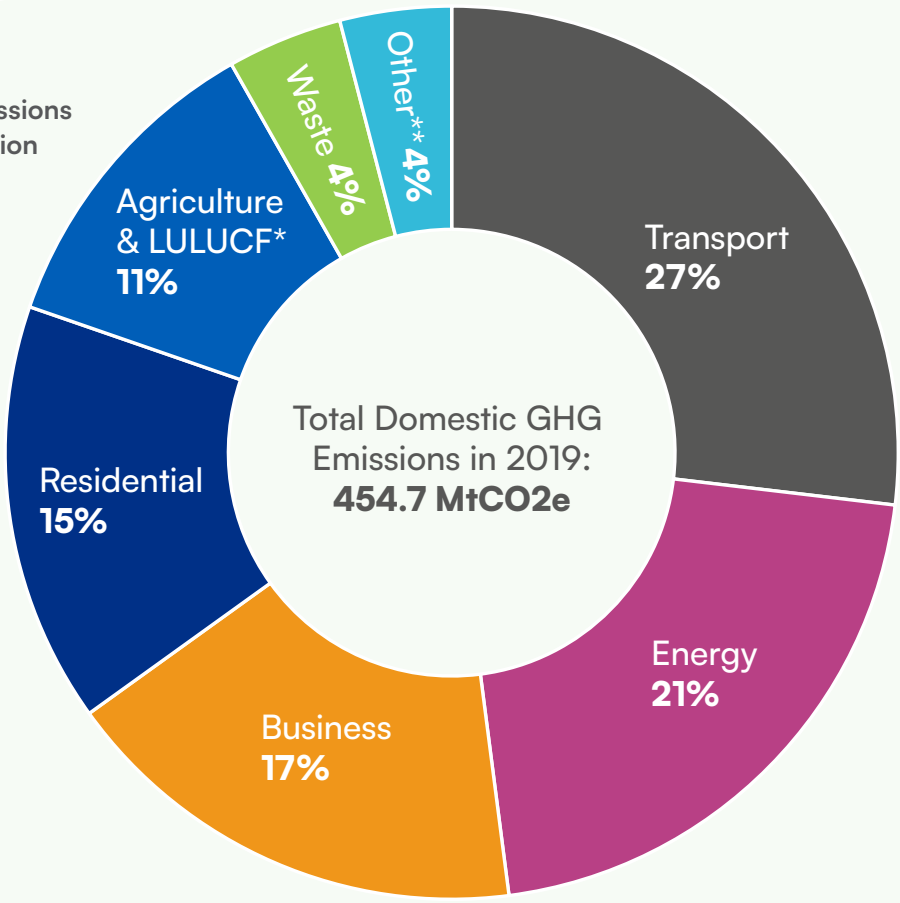
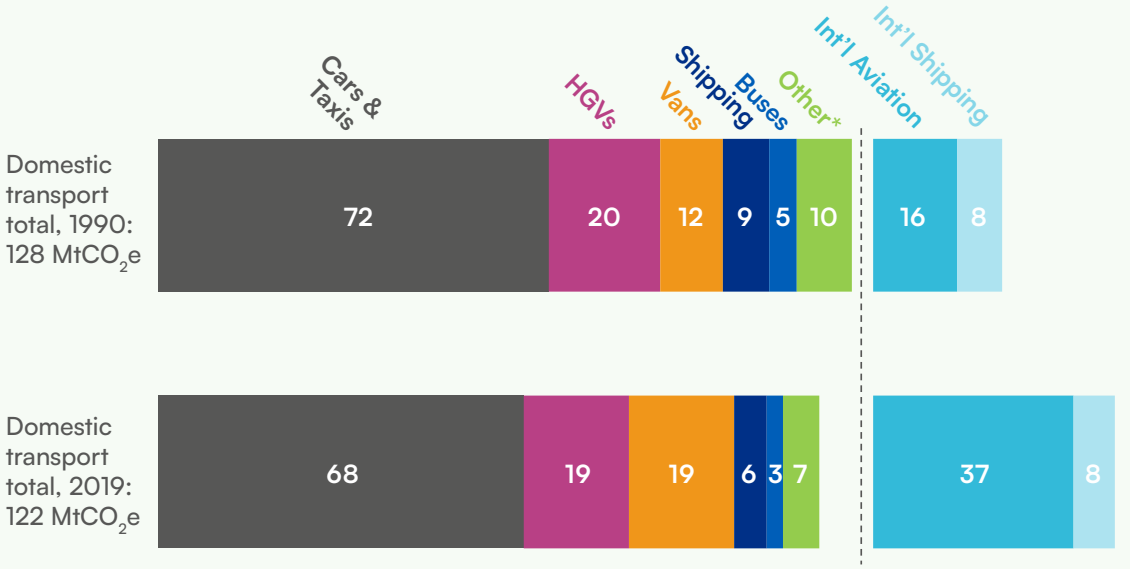


Fig 4: Greenhouse gas emissions by transport mode, 1990 and 2019 (ENVO201)



*Comprises, in 2019: Rail, 1.4%; Domestic Aviation, 1.2%; Motocycles and mopeds, 0.4%; other transport, 1.9%

Source: www.gov.uk/government/statistics/transport-and-environment-statistics-autumn-2021/transport-and-environment-statistics-autumn-2021

The NHSi Greener NHS Fleet Data Collection tool can completed by all non-ambulance NHS provider Trusts and was created to enable reporting on fleet carbon emissions and to understand the vehicle landscape to support planning for the necessary transition to zero emissions vehicles.

This uses vehicle registration numbers (VRNs) to look up emissions data. Understand operated vehicles and how these may be replaced.

Organisations will need to identify a named individual who will complete and submit the return on their behalf. Multiple people can respond for each organisation.

After identifying the responsible individual, they should:

1. Register for OKTA: **https://apps.model.nhs.uk/register**
2. Register for the data collection: **https://forms.office.com/r/PUq5Bre4rz**
3. Start collating the data required
4. Access and submit to the DCF portal: **https://dcfdatacollections.improvement.nhs.uk**

Data collection portal opens: Friday 1st April 2022
Data collection portal closes: Tuesday 24th May 2021

Investing in low emission fleet and reviewing the organisations transport of goods, patient transport, work patterns and location of services are also beneficial. For example, Telford & Wrekin Council are looking to implement an optimum flexible working pattern to reduce the carbon impact of staff travel and enable reduction in required office space as well as developing a Corporate Travel Plan to minimise car travel between offices.

The current process of renewing the Local Transport Plan (LTP4) for Shropshire will provide opportunities to generate co-benefits for both health and carbon performance.

Shropshire Council health and transport colleagues are working together to improve the health impact of the new Shropshire LTP, along with the LCWIP — Local Walking and Cycling Infrastructure Plan and the Bus Strategy. The actions will increase access to public and active travel and help to mitigate any negative health impacts.

Additional effort and investment is required to:

- Reducing barriers to using active travel
- Reduce Business Milage
- Develop and appraise Travel Plans to assess progress and quantify emissions saved
- Replace fleet with low emission (LEV/ULEV/ZLEV) alternatives

Travel plans can make a real contribution towards encouraging and promoting alternatives to the car.

Organisation can utilize the Clean Air Hospital Framework — a free resource available to help clean up their air.

This is a self-assessment tool designed to benchmark and shows areas to improve air quality across sites and in the local community.

The framework is focused on seven key areas:

1. Travel
2. Procurement and supply chain
3. Construction
4. Energy
5. Local air quality
6. Communication and training
7. Hospital outreach and leadership

Increasing 'Active Travel' and use of public transport are some of the interventions which some of the organisations in the ICS have already underway. For example, improvements to availability of shower facilities and increased cycle storage, as well as improving footpaths and lighting and introducing salary sacrifice schemes for cycle purchase or season tickets. Not only improving staff fitness but improving site emissions. SATH have, to date, 38 electronic vehicles on lease (another 19 on order) and 60 bicycle purchases via salary sacrifice.

Car sharing just once a week will help to reduce the amount of traffic on our roads, improve the local environment and our health. Similarly, walking once a week has obvious health benefits and helps to reduce the amount of traffic on our roads.

There are currently two Air Quality Management Areas (AQMAs) in the Shropshire Council area, in Shrewsbury and Bridgnorth, where action is required to address poor air quality. Traffic management measures and new infrastructure, together with support for a move to ULEV transport options are likely to result in a reduction of particles and other more harmful emissions

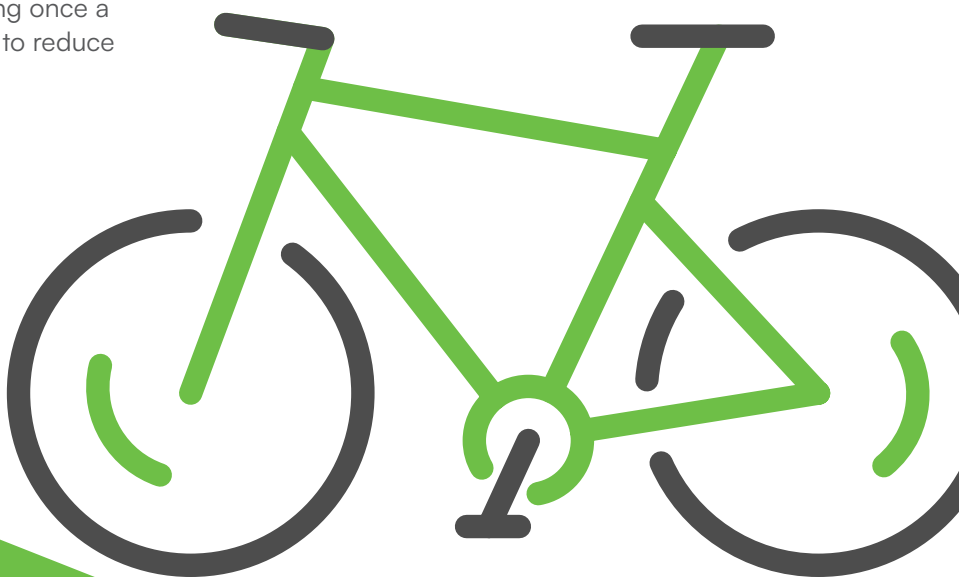
Telford & Wrekin Council are implementing discounts available from Arriva and West Midlands Trains to staff. Arriva also offers discount on monthly season tickets to NHS Staff

Staff commuting contributes to Trust Scope 3 emissions, therefore, any action taken now will begin to reduce our contributions.

Currently SaTH have 60 bikes purchased under salary sacrifice, a bicycle user group and cycle champion promoting the service and benefits amongst staff.

Collaborative Opportunities

Develop a system-wide Green Travel Plan which will in turn influence organisations' Green Travel Plan — focusing active travel, business travel and grey fleet
Manage the combined Non-patient transport service contract (due to start Mar22)
Set up regular meeting between key staff from each stakeholder to share ideas, developments and successes.



Estates (Hard Facilities Management)

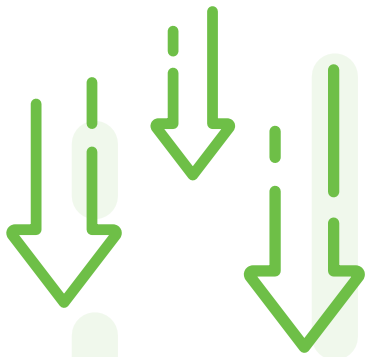
NHS England's guidance, **Estates 'Net Zero' Carbon Delivery Plan**, advises a four-step approach to decarbonising estates.

Taking this holistic approach will enable organisations in our system to make easier, quicker wins in the short term, gradually building to net zero. Our Estate has a significant role in reducing our Scope 1 emissions and organisations within our system have made huge progress with reducing our direct emissions burden by installing photovoltaic (PV) solar panels, replacing lighting for LEDs, replacing boilers and associated equipment with ultra-efficient alternatives, improving installation to buildings and pipework, and for indirect (scope 2) emissions, switched to REGO energy from the national grid (electricity supplied to the grid from renewable energy sources). We have achieved electrical savings of at least 1,066,000 kWh/annum through the installation of PV solar panels, protecting future finances from expected grid cost inflation and price rises from the supply crisis.

Some examples of the efforts so far include:

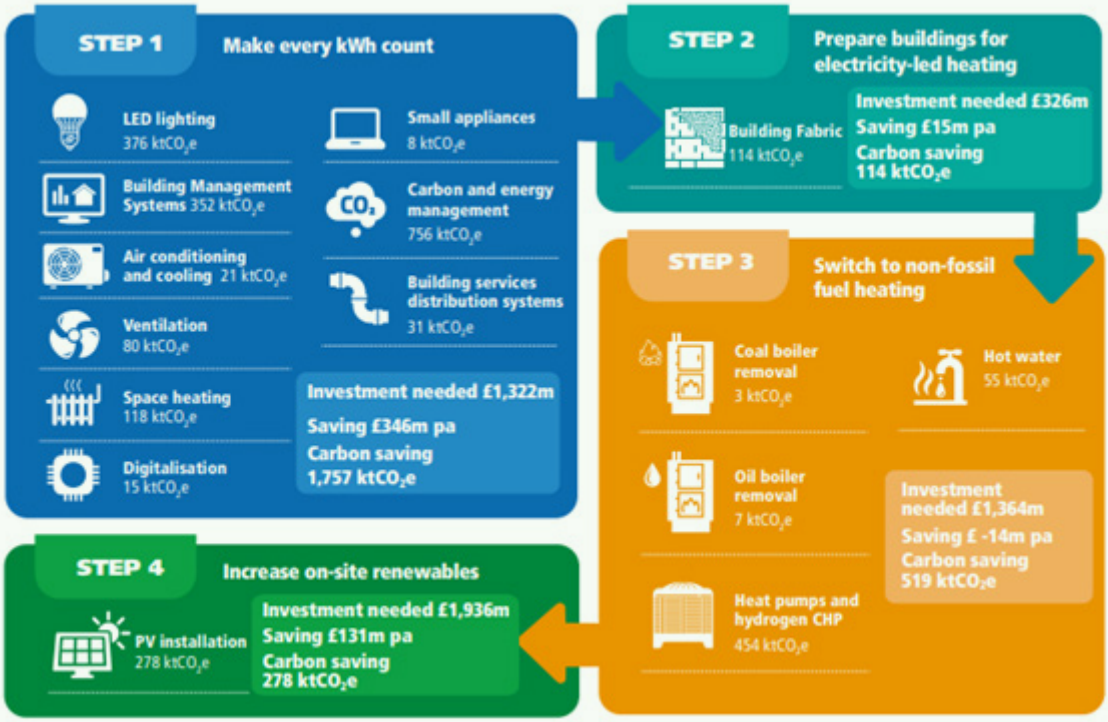
- The installation of photovoltaic (PV) solar panels to many buildings,
- Replacing boilers with ultra-efficient equipment; for example, RJAH have been able to reduce their gas consumption by up to 1.8mWh per year,
- Installing LED lights across multiple sites,
- Improving the insulation, or U-Value, of our buildings so that it takes less energy to reach required temperatures,
- All our organisations will purchase only renewable (REGO) electricity from the national grid by April 2022,
- Replacing antiquated Building Management Systems (BMS) with smarter controls

We're taking responsible measures to not only reduce our carbon emissions, but to realise financial benefits using the philosophy that less kWh used means less money spent - making every kilowatt count. We're also pro-actively accessing public grants and funding available such as the Public Sector Decarbonisation Scheme (PSDS); for example, Shropshire Council are implementing low carbon heating and lighting through this funding on one site to reduce energy use by over 65% and carbon emissions by 15 tonnes per year. Similarly, Telford and Wrekin Council are initiating an air source heat pump and thermal upgrade, saving 115 tonnes CO2e.



Our Estate has a significant role in reducing Scope 1 emissions

The four-step approach to decarbonise the NHS estate by 2040
(Source: Estates 'Net Zero' Carbon Delivery Plan, NHSEI)



Includes indicative numbers to illustrate the scale of the challenge to decarbonise the NHS estate by 2040. These are not actuals.

The above infographic, published in the NHSE 'Estates 'Net Zero' Carbon Delivery Plan, estimates that every £1 million invested across the NHS in the actions listed will deliver a 1.33ktCO2e saving per year. The cumulative capital costs of these investments would be offset by equal revenue savings over only 3.8 years. By generating a proportion of the energy we consume at our sites, we are protecting our finances against inflationary and market price rises of importable utilities. There is opportunity to collaborate on large scale projects between our organisations and a key action is to explore the development of a PV farm on Shropshire Council land near to RJAH.

There are other exciting and potentially ground-breaking opportunities for the system to adopt emerging technologies that could see a reduction of direct and indirect carbon emissions in the near-to-medium-term. We will explore these opportunities and some member organisations may lead case studies with a view to adapting infrastructure at other sites.

The NHS organisations in our system collectively consumed over 116,000,000 kWh

We intend to collaborate between our organisations at a local level; sharing building space, day services are being reviewed with view to offer building-based services to a wider group across all ages. This space utilisation will in some cases reduce the burden on capital budgets and have an impact on carbon output, as well as reducing our consumption of building products which further contribute to climate change.

The NHS organisations in our system collectively consumed over 116,000,000 kWh (NHSEI, 2021) in natural gas in the year 2020-21. These scope 1 emissions are a key challenge that we will aim to reduce over the next three years.

However, we are already mitigating and reducing our reliance on grid energy by utilising Combined Heating and Power (CHP) technology to use fossil fuels in the most ethical way:

- Approximately 13,800,000 kWh electrical generation from CHP across all NHS sites in the system
- Approximately 13,900,000 kWh thermal energy generation from CHP across all NHS sites in the system.
- Approximately 18,600,000 kWh grid energy consumed across all NHS sites in the system in 2020-21, but our organisations are transitioning to on-site generation. Some examples of this are:
  - RJAH generate around 440,000 kWh pa
  - Telford & Wrekin Council produce a combined 498,000 kWh from PV solar arrays across multiple sites
  - MPFT generate around 128,000 kWh pa

Source: NHSE ERIC Data Collection, 2021

Collaborative Opportunities

Share benefits of installation of EV charging points through joint tender exercises
Give early warning to peers on grants, loans and other schemes that may benefit our reduction of scope 1 emissions
Share benefits of adopting emerging technologies and offer unique access to case studies.
Explore feasibility of shared power generation and consumption from PV farms, district heat networks and other renewable technologies.

Facilities (Soft Facilities Management)

In our current economy, we take materials from the Earth, make products from them, and eventually throw them away as waste — the process is linear. In a circular economy, by contrast, **we stop waste being produced in the first place**. The world's economy is only 9% circular. We must be bolder about saving resources.

LINEAR ECONOMY

TAKE MAKE DISPOSE

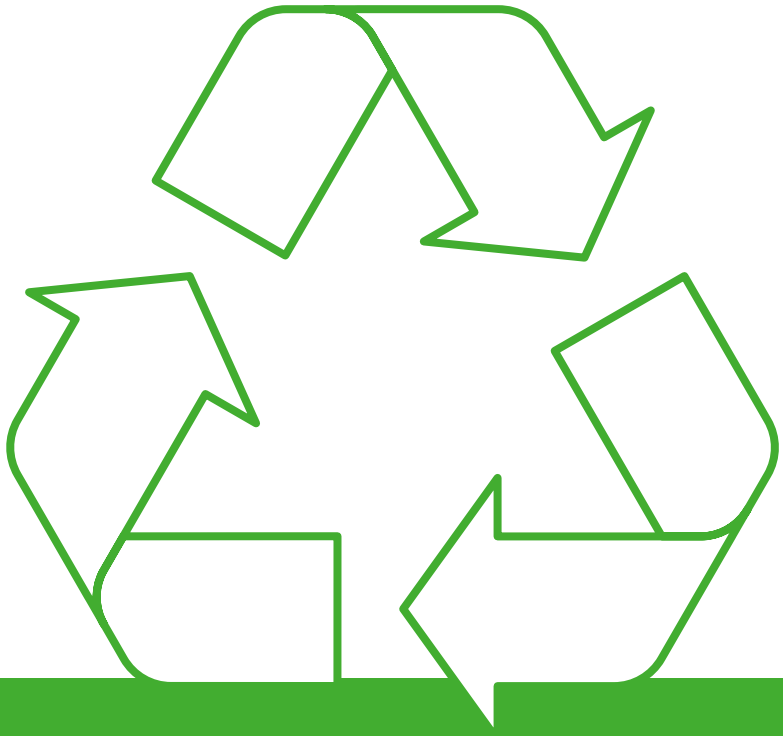
ENERGY FROM FINITE SOURCES

CIRCULAR ECONOMY

ENERGY FROM RENEWABLE SOURCES

As the area the sites depend on to maintain a pleasant, healthy and safe working environment are instrumental in the day-to-day operations it is a key priority that we work to reduce waste as well as air & water pollution to improve local environments.

WMAS have already made some major benefits from changing their cleaning to a single multi use, low packaging product as well as successfully piloting & beginning to roll out Domestic Waste recycling in its office locations. RJAH regularly divert 100% of domestic & clinical waste from landfill.



Waste

The management of healthcare waste is an essential part of ensuring that healthcare activities do not pose a risk or potential risk of infection and are securely managed. UK-wide guidance provides a framework for best practice waste management.

The management of waste in the NHS falls into 3 main categories:

Domestic — generated as a result of the ordinary day-to-day activities

Clinical (including sharps) — waste produced from healthcare that may pose a risk of infection, e.g. swabs, bandages, dressings; or may prove hazardous, for example medicines.

Offensive — non-infectious but may be unpleasant to anyone who encounters it e.g. nappies, feminine hygiene products, used but uncontaminated PPE.

WMAS has undertaken a survey for the implementation of recycling processes for the control and segregation of domestic waste. Following which they plan to introduce recycling at all sites across the Trust to fall in line with the successful introduction of Mixed Recycling at the Erdington Hub.

The initial trial of introducing Mixed Recycling at one of our major Hubs has resulted in the sites waste production being at 50% recycling, which is a 6,000kg saving in CO2e,

MPFT no longer purchase single use plastic stirrers and straws and are looking into alternatives to single use plastics in catering & reduce use of cups, cutlery, gloves & aprons in other areas.

Collaborative Opportunities

Set up quarterly meeting between facilities managers from each stakeholder to share ideas, developments & successes.
Share ways to improve waste management practices & improve specifications for tendering
Develop or update organisations Food & Drink Strategy - starting with aims to improve staff & patient nutrition & hydration as well as ways to reduce carbon
Combined procurement for provision of food & drink & use of local supply chains
Combined procurement of environmentally friendly catering items (e.g. takeaway containers, cups & cutlery)

Upon renewal of MPFT waste contracts requirements will be reviewed to ensure more efficient recycling of waste & are investigating using re-usable sharps and pharmaceutical boxes/bins. As well as displaying “bring your own bottle” notices and the introduction of bespoke MPFT water bottles and reusable bamboo cups.

SATH, RJAH & SCHT utilize the same contracts meaning 98% of domestic waste is incinerated & converted into electricity for homes near the plant in Shrewsbury. Clinical & offensive waste is either safely processed & sent to energy recovery (by a third party) or burnt. SATH also use reusable sharps containers.

Medicines

Medicine optimisation as well as safe & effective use in health & social care can **contribute to Scope 3 emission reductions.**

Progress so far against key national targets:

Anaesthetic Gases

Measures already taken by all the ICS members have successfully eliminated the use of Desflurane.

Inhalers

Carbon emissions from inhalers have been assessed as responsible for approximately 3% of all NHS carbon emissions. The majority of emissions come from the propellant contained in pressurised metered dose inhalers (pMDIs). pMDIs contain propellants known as hydrofluorocarbons (HFCs), powerful greenhouse gases, which are used to deliver the medicine rather than the medicine itself.

Source: NHS England and NHS Improvement. Delivering a 'Net Zero' National Health Service. Published October 2020. & NICE. Inhalers for asthma (patient decision aid). Published 23 May 2019. Last updated 01 Sept 2020.

pMDIs account for 71.6% of all inhaler device types prescribed in England, 68.8% in Wales and 66.6% in Scotland Source - NHSBSA Apr-Jun 21.

The NHS England Long Term Plan published in January 2019, outlined the national targets of reducing the carbon footprint of health and social care in line with the Climate Change Act targets of 51% by 2025.

Many people will be able to achieve the same benefit from DPIs. DPIs have lower average estimated carbon footprints of 20 g CO2e per dose (two puffs) compared O2 to pMDIs which are estimated at 500 g CO2e per dose (two puffs).

The Shropshire, Telford and Wrekin Health Economy Formulary review is) already well underway updating the respiratory section to produce a green inhaler formulary to provide guidance to all prescribers and to support PCNs to deliver the IIF targets in a cost-effective manner. The draft formulary is currently with specialist consultation to ensure there are no clinical gaps before approval and launch.

There are key national targets which the ICS is working towards:

1. The IIF ES-01 has a target for pMDI prescriptions as a percentage of all non-salbutamol inhaler prescriptions issued to patients aged 12 years or over on or after 1 October 2021 (range: 35% to 44%). This aims to reward increased prescribing of DPIs and SMIs where clinically appropriate with a target of 25% of non-salbutamol inhalers prescribed will be pMDIs by 2023/24.
2. The IIF ES-02 indicators has a target for the mean carbon emissions per salbutamol inhaler prescribed on or after 1 October 2021. This aims to reduce the mean propellant carbon intensity of salbutamol inhalers prescribed in England to 11.1 kg per salbutamol inhaler prescribed by 2023/24

Shropshire, Telford and Wrekin Current Performance

Commissioner Benchmarking	Total Items	Carbon footprint per inhaler kgCO2e	Total carbon footprint gCO2e (K = thousands)	Carbon footprint per 1,000 patients gCO2e (K = thousands)
NHS Shropshire, Telford and Wrekin CCG	46,645	25.1	1,651,348K	3,177K

Currently STW CCG prescribes 55.66% on non-salbutamol inhalers as pMDI, ranking 57th/133 CCGs or health boards in England and Wales. Target is 25%

	pMDI (excluding salbutamol)		DPI & SM I (excluding salbutamol)		Grand Total
Commissioner Benchmarking	Total Items	% of Total Items	Total Items	% of total Items	Total Items
NHS Shropshire, Telford and Wrekin CCG	36,619	55.66%	29,177	44.34%	65,796

Source: Medicines Management, Shropshire, Telford and Wrekin CCG

Local Authority transport measures can influence air quality &Shropshire Council are acting to improve air quality through the air quality strategy and through reduction of emissions in the Local Transport Plan 4 **(https://shropshire.gov.uk/roads-and-highways/local-transport-plan-ltp4/)**. This can lead to reduction in the numbers of asthma cases diagnosed and to reduction in the number of asthma attacks.

Other actions in our progress include:

- Monitoring how local prescribing data on the inhaler carbon footprint compares to the national data using the PrescQIPP inhaler carbon footprint data tool and visual data pack to and identify where local improvements can be made to ensure timely progress is being made.
- Optimising prescribing to improve both patient outcomes and reduce carbon impact of inhaler choices by;
  - Reviewing patients regularly; demonstrating, checking and improving inhaler technique.
  - Discussing lower carbon footprint inhalers during reviews or when a change in treatment is clinically necessary.
  - Ensuring newly initiated treatments have a low carbon impact and switching existing therapies to lower carbon impact options where clinically appropriate
  - Reducing SABA overuse and increasing the percentage of patients on the Quality and Outcomes Framework (QOF) Asthma Register who were regularly prescribed an inhaled corticosteroid over the previous 12 months (target for IIF RESP-01 indicator in PCN DES is range 71% to 90%)
- Increase use of leukotriene receptor antagonists where clinically appropriate
- Wherever possible use combination inhalers for patients on dual or triple inhaled therapy.

Support prescribers through education in lowering inhaler carbon footprint, sharing data, reviewing respiratory prescribing guidelines to include lower carbon footprint inhalers, and how to optimise prescribing ensuring lower carbon footprint inhaler options are included in medicines formularies and ensure stock availability with suppliers.

Reduce waste through encouraging patients to; return their used or unwanted inhalers to a pharmacy (for either recycling where available, or environmentally safe disposal); to look after their inhalers and not over-order & increasing the use of re-usable inhalers.

Other opportunities for medicine optimisation include reductions in Polypharmacy (most defined as the use of five or more medications daily by an individual) could decrease the risk of avoidable hospital admissions.

Avoidable medicines-related admissions to hospitals may equate to nearly 2 million bed days in England per year *(Source: Environmental impact report: Medicines optimisation Implementing the NICE guideline on medicines optimisation (NG5)*

We also need to begin to discuss with suppliers to assess and reduce blister pack carbon footprint and recycling opportunities. For example, the Association of the British Pharmaceutical Industry tool can be used to provide a quick approximation of the carbon impacts

www.abpi.org.uk/r-d-manufacturing/abpi-blister-pack-carbon-footprint-tool

Avoidable medicines-related admissions to hospitals may equate to nearly 2 million bed days in England per year

Supply Chain & Procurement

Over 60% of the total NHS Carbon Footprint sits within the supply chain, therefore, **suppliers and procurement will play a pivotal role** in reducing our emissions.

To ensure a better quality of life now and for future generations, we need to look seriously at the way we use the earth's resources, operate our businesses and live our lives. A sustainable approach recognises the broader impacts of our actions and aims to minimise any adverse effects.

Sustainable procurement requires taking environmental and social factors into account in purchasing decisions. For example, looking at what products are made of, where they come from, and who has made them and, therefore, minimising the environmental and social impacts of the purchases we make.

MPFT are looking to increase sustainable procurement principles within their procurement, collaborating with other NHS Trusts and other organisations to improve knowledge and understanding of sustainable procurement and to seek shared opportunities and benefits, consolidate orders to reduce deliveries, improve stock rotation to avoid product expiry.

Collaborative Opportunities

Set up quarterly meeting between procurement team members from each stakeholder to share ideas, developments and successes
Develop ICS Procurement Workplan for projects which would benefit from joint working
Engage and work with local suppliers, where possible within current rules, to reduce delivery miles

In January 2020, a Greener NHS which sets out a path to a 'net zero' NHS and as a result the below targets have been set:

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

80%

We must demonstrate leadership in sustainable procurement and will work with our supply chains to achieve this by addressing specific aspects of sustainable procurement such as:

- Reducing fossil fuel usage to minimise climate change
- Reducing usage of hazardous materials
- Reducing waste
- Ensuring fair pay and working conditions through the supply chain
- Reducing use of transport
- Reducing the use of Single Use Plastics
- Move to working with suppliers to minimise packaging, use reusable containers for deliveries and manufacture using renewable energy

A more sustainable product can be described as:

- Fit for purpose and providing value for money
- Energy and resource efficient
- Reusable and recyclable or durable, easily repairable or upgraded
- Ethically sourced (i.e. Wasn't made in a socially irresponsible way)
- Doesn't deplete natural, non-renewable resources
- The production, distribution, and/or consumption uses as little energy as possible and minimizes/responsibly disposes of waste.

The benefits of moving to an ICS model

The shift to the ICS way of working will provide the foundation for scale procurement across the NHS with significant monetary and non-monetary benefits, achieved through unlocking efficiences and improving operational performance across the system.

Improved resilience	C-19 taught us that working together is essential to mitigate risk. Working together across the ICS and at greater scale (where appropriate) provides greater protection from supply failures, price increases and quality defects
Reduced total cost	The ICS represents a publicised and policy driven way of driving 'at scale' procurement delivery; enabling greater efficiency and effectiveness through the potential to standardise and reduced repetition
Greater value	The ICS enables us to demonstrate social and financial value across organisational boundaries to drive better outcomes for our patients
Better supplier management	Working closer together helps leverage scale and value attained through our supplier base through a single voice for categories
Optimised workforce	The ICS enables us to make best use of our collective resource through reduction in duplicated activities and access morediverse roles across the system
Improved capability	Working together frees up capacity to give us time to develop and leverage specific skills and expertise
Great careers	ICS provides a great platform for career growth with a more diverse set of challenges and opportunities across the commercial life cycle.
Empowered culture	The ICS provides an opportunity to fundamentally change and shape the way we work across the system and into the future

Source: NHSEI Commercial Directorate procurement Target Operating Model "ICS Based Procurement Guidance" January 2021 https://future.nhs.uk/PTOMHub/view?objectId=122643621

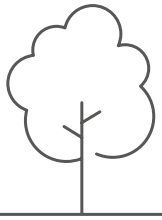
Building Net Zero into NHS procurement

2022

NHSE&I will launch the Sustainable Supplier Framework

April 2022

NHS will adopt PPN 06/20 so that all NHS tenders include a minimum 10% net zero and social value weighting



NHS will adopt PPN 06/21 so that all contracts above £5m will require suppliers* to publish a carbon reduction plan for their direct emissions as a qualifying criteria

April 2023

All suppliers* will be required to publicly report emissions and publish a carbon reduction plan aligned to the NHS' net zero target for their direct emissions, irrespective of contract value

April 2024

All suppliers* will be required to publicly report emissions and publish a carbon reduction plan aligned to the NHS' net zero target for both their direct and indirect emissions (Scope 1, 2 and 3)

April 2027

New requirements will be introduced overseeing the provision of carbon footprinting for individual products supplied to the NHS

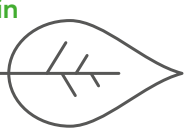
April 2028

All suppliers will be required to demonstrate progress in-line with the NHS' net zero targets, through published progress reports and continued carbon emissions reporting

April 2030

2045

- **Net Zero Supply Chain**
- **Net Zero NHS**



*To account for the specific barriers that Small & Medium Enterprises and Voluntary, Community & Social Enterprises encounter, a two-year grace period on the requirements leading up to the 2030 deadline, by which point we expect all suppliers to have matched or exceeded our ambition for net zero.

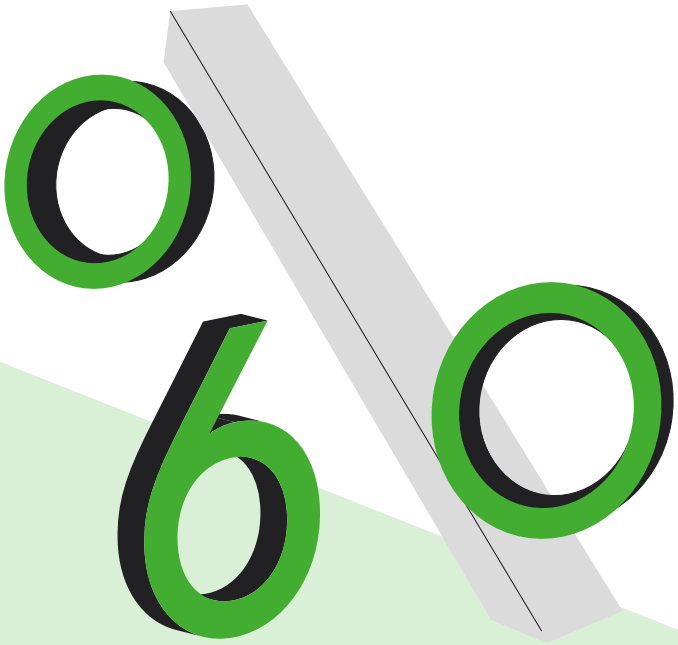
Source: www.england.nhs.uk/wp-content/uploads/2021/09/item4-delivering-net-zero-nhs-updated.pdf page 7

Food & Nutrition

"It is estimated that food and catering services in the NHS accounts for approximately **6% the NHS' Carbon Footprint Plus**" — *Source NHS England Greener NHS website*

Members need to consider ways to reduce the carbon emissions from the food made, processed and served within our organisations. Members currently have various solutions, but it is essential work on reducing overall food waste and ensuring provision of healthier and seasonal menus. Making menus seasonal and adaptable can save money as buying items in season is more cost effective.

Challenging the amount of food waste and reducing the carbon emissions of the food consumed as well as changing to healthier items can have a large impact.



Collaborative Opportunities

Set up quarterly meeting between catering staff and dieticians from each stakeholder to share ideas, developments and successes
Look to award joint contracts to enable utilisation of fresh food sourced locally, where applicable
Share strategies to minimise food waste
ICS members to join the Shropshire Good Food Partnership and Marches good food group

MPFT have a 4 year plan to provide healthier eating for whole hospital community, achieve Soil Association Food for Life Catering MARC - bronze standard, introduce on the day ordering to reduce waste. Food provided in in-patient wards will be purchased and produced in sustainable way. As well as looking to re- instating greenhouse and plots to grow in hospital gardens/health centres, community outside space etc.

Shropshire Good Food Partnership are working across Shropshire taking a food systems approach to improve sustainability, amongst other objectives, in the local food system. Engagement by ICS partners with the local food system is an opportunity to reduce food miles and to engage with producers who are using sustainable forms of food production.

Food production is responsible for one-quarter of the world's greenhouse gas emissions.

UK Agriculture contributed 10 per cent to total greenhouse gas emissions in 2018, including 70% of nitrous oxide emissions, (generated by synthetic fertilizer use), and nearly half of total methane emissions.

Greenhouse gas emissions across the food supply chain:

Land Use Change

Aboveground changes in biomass from deforestation, and belowground changes in soil carbon

Farm

Methane emissions from cows, methane from rice, emissions from fertilisers, manure, and farm machinery

Animal Feed

On-farm emissions from crop production and its processing into feed for livestock

Processing

Emissions from energy use in the process of converting raw agricultural products into final food items.

Transport

Emissions from energy use in the transport of food items in-country and internationally

Retail

Emissions from energy use in refrigeration and other retail processes

Packaging

Emissions from the production of packaging materials, material transport and end-of-life disposal

Source: https://ourworldindata.org/food-choice-vs-eating-local

It is also important to utilize each patient contact to promote healthy and sustainable lives, inc. diet and exercise options.

Biodiversity

Biological diversity, or biodiversity can be described as **“the variety of life on Earth**, it includes all organisms, species, and populations; the genetic variation among these; and their complex assemblages of communities and ecosystems.” (Benn, 2010)

Biodiversity is incredibly important for sustaining life on the planet; the interdependency we have with the species of flora, fauna, animals, birds, insects and micro-organisms is vital in sustaining our existence through absorbing carbon and regulating environmental change such as climate and disease, providing renewable sustenance at all levels of the food chain, and balancing species population.

It is important, then, that the activities we carry out in providing the services we are commissioned to deliver do not negatively impact our local, national and worldwide ecosystems.

What are we doing to sustain biodiversity?

There are great examples of encouraging biodiversity in our Integrated Care System. SaTH are collaborating with local beekeepers to provide hives at the Shrewsbury site, as well as bat boxes and Swift boxes to divert such creatures away from buildings whilst providing space for them to live, in addition to planted trees and improved gardens and courtyards with native plants to attract pollinators. RJAH are planting 100 trees across the site around the Captain Sir Tom Moore Path of Positivity, an area for patients (including those bed-bound) and staff to enjoy the local wildlife.

In 2021, TWC gave away 14,525 free trees to residents and organisations in Telford and Wrekin as part of our Trees4TW project.

Collaborative Opportunities

Share funding models / share information on available grants for investment in surveys introduction of habitats

Work together develop or update organisations ICS Green Space Strategy

What will we do now?

Look to ensure any impact of development is replaced e.g. trees, wild areas or hedges removed are replaced nearby.

As discussed in Digital Transformation, by adopting Ecosia as our default search engine, we are indirectly contributing the planting of trees and in turn promoting biodiverse habitats in areas outside of Shropshire, Telford and Wrekin.

We will ensure that the local habitats of our native species are considered during capital works to ensure that any works we complete have a positive impact on local wildlife.

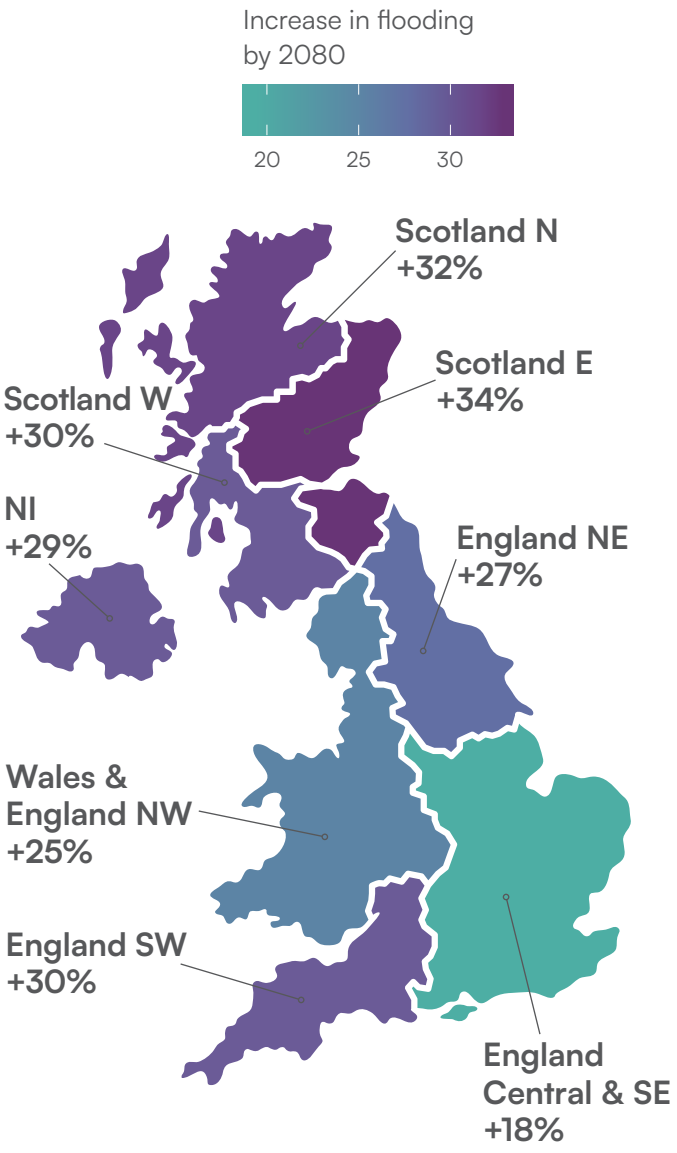
We will adopt methods already employed by some organisations in the system to provide beehives, bat and swift boxes where appropriate and plant trees and plant species in our green spaces.

Adaptation

The care we provide must be **consistent throughout major incidents** such as wildfires, floods, heatwaves, droughts and infectious diseases.

Sustained extremes in weather and climate are likely to become the status quo in the UK, and varied sources and data indicate that:

- Wildfires are likely to increase 14% by 2030, 30% by the end of 2050 and 50% by the end of the century (UNEP, 20
- Flooding will increase by 15-35% by 2080, with Shropshire, Telford and Wrekin likely to experience an increase of around 25% (figure, left) (Visser-Quinn, 2021)
- Heatwave frequency, length and average temperatures are significantly increasing -their average length more than doubling — increasing from 5.3 days in 1961-90 to over 13 days in the decade 2008-2017 (Met Office, 2018)
- Sustained droughts are more common. From September 2010 to March 2012 many parts of England experienced the driest 18 months for over 100 years (Environment Agency, 2017)
- The emergence of SARS-CoV-2 and subsequent Covid-19 crisis in 2020 set a precedent for future outbreaks and how the country will address subsequent variants and other pandemics.



Source: Heriot-Watt University

Although it is unrealistic to expect a service to continue in the event of localised flooding or incidents that incapacitate certain service delivery for some organisations, there may be opportunity to provide contingency, support or mutual aid from the wider system. Preparedness for infectious disease outbreaks is not covered in detail this document, although it is recommended that there be a systematic approach to building resilience to future pandemics and infectious disease outbreaks - for example, the mutual aid between NHS organisations in the system during the Covid-19 pandemic.

How we adapt now to the climate crisis will have significant influence on the investments required later, so it would be prudent to intervene at an early stage. The Department of Health publication for resilience in estate planning (HBN 00-07) offers guidance and all our NHS organisations should adopt this approach when producing Estates Plans. Some of the guidance is transferrable for council estates planning, and other documents such as the CIBSE guidance suite is relevant and applicable.

Collaborative Opportunities

Shared working spaces and agile (hybrid) working to generate carbon and climate resilience benefits
Mutual aid
A co-ordinated Clinical Strategy
A co-ordinated Estates Strategy

Action Plan

The action plan developed below outlines **collective goals** not only at system level, but at organisation level with the support from the ICS.

The target dates and completion of the actions will be monitored by the ICS Climate Change Working Group and assurances/escalations will be provided to ICS Board. Executive leads are to be agreed for each area over the next 12 months.

Leadership & Workforce			
Action	**What resource is needed?**	**How will we measure our progress?**	**Target date**
Explore options for a Sustainability Lead for the ICS	1 WTE to be banded	Once postholder is in role	April 2022
Establish a baseline carbon footprint	Funds for external consultancy to deliver	System-wide carbon footprint figure	March 2023
Make carbon literacy training available for senior leaders, expecting at least one from each organisation to have completed by April 2023	Funds for training provider to deliver training	Once one senior leader from each organisation has completed the training	April 2023
Green Plan to be reviewed and actions measured within 12 months, with a view to amend accordingly	Central co-ordination/Climate Change Working Group to review	Updated version of Green Plan to be published April 2023	April 2023
Develop benchmarks on system performance to demonstrate assurance and/or areas for further development	Central co-ordination/Climate Change Working Group to review	Quarterly benchmark reporting to Climate Change Working Group	October 2022
Ensure that sustainability behaviours are considered when reviewing job descriptions	Communications and engagement with human resources/people services	Job descriptions updated to include sustainability behaviours	April 2023

Sustainable Models of Care

Action	What resource is needed?	How will we measure our progress?	Target Date
Where outpatient attendances are clinically necessary, at least 25% of outpatient activity should be delivered remotely	ICT equipment and training, engagement with clinical teams	All outpatients services delivering ≥25% of activity	April 2023

Digital Transformation

Action	What resource is needed?	How will we measure our progress?	Target Date
Organisations encouraged to adopt Ecosia as their default internet search engine	Engagement with IT departments to add Ecosia as an extension to MS Edge	IT departments to provide collective data (against UCLH data benchmark)	October 2022
Promote the option of agile (hybrid) working where there is no negative impact on service delivery	Engagement with IT departments, it is anticipated that no significant extra equipment be required as those that could work from home did so during the covid-19 crisis and were provided with equipment then	IT departments to provide collective data (against benchmarks during covid-19 crisis)	April 2023

Travel & Transport

Action	What resource is needed?	How will we measure our progress?	Target Date
Organisations will need to identify a named individual who will complete and submit the return NHSEI Greener Fleet Data Collection tool	Time and named individual	Successful and routine return of data to NHSEI	April 2022
ICS to develop a system Green Travel Plan, ensuring a hierarchy of travel starting with active travel	Central co-ordination, climate change working group for peer support	Document to be published April 2023	April 2023
Ensure that, for new (fleet) purchases and (fleet) lease arrangements, the system (and organisations) solely purchases and leases cars that are ultra-low emissions vehicles (ULEVs) or zero emissions vehicles (ZEVs)	It is anticipated that this transition will occur when existing contracts are renewed, so those organisations still in contract by April 2023 will aim to move to ULEVs/ZEVs once those contracts end. Electric Vehicle (EV) charging infrastructure will be required at base sites	All contracts transitioned at their end	April 2023

Estates

Action	What resource is needed?	How will we measure our progress?	Target Date
NHS Organisations to ensure they procure only REGO energy from grid as soon as their existing contracts allow	Small cost pressures to utilities (typically less than £2/mWh additional)	All organisations to confirm at Climate Change Working Group	April 2022
Organisations to commit to invest in on-site renewable energy, insulation, and energy efficient technologies (such as LED lights) as part of their Estates Strategies	Capital commitment during schemes, although there would be an expectation of ROI	Sustainable technologies specified in all organisations' Estates Strategies	April 2025
Where possible, invest in emerging renewable technologies	Capital investment where there is attractive ROI	Successful completion of projects	April 2025
As a minimum, adopt BREEAM as a benchmark for constructing sustainable buildings, with a shared design benchmark to follow on from the work from Shropshire Council	Could be absorbed in capital projects	Successful BREEAM validation on capital projects	April 2023
Develop a heat decarbonisation plan for the system	External consultancy and central co-ordination, climate change working group for peer support	Document to be published October 2023	October 2023
Replace any habitat removed during developments	Could be absorbed in capital projects	External verification	April 2023

Facilities

Action	What resource is needed?	How will we measure our progress?	Target Date
Explore options to appoint a system waste manager	1 WTE to be banded	Once postholder is in role	October 2022
Organisations to assess waste management practices against better-performing peers and adopt where reasonably practicable (i.e. segregation)	System Waste Manager to co-ordinate	Quarterly benchmarking to climate change working group	April 2023
Organisations to aim to divert 100% household waste from landfill	Review contracts and amend when renewing, where applicable	Quarterly benchmarking to climate change working group	April 2023
Organisations to sign up to the single use plastic pledge (catering)	Cost pressure to some catering budgets — opportunities to collaborate on procurement	All organisations to confirm through the climate change working group	April 2023

Facilities (continued)

Action	What resource is needed?	How will we measure our progress?	Target Date
Reduce food waste through smarter working (i.e. patient ordering strategies, management of stock, etc)	Could be pursued through existing catering structures	Quarterly benchmarking to climate change working group	April 2024
Adopt, where clinically safe to do so, environmentally friendly domestic cleaning chemicals	Could be pursued through existing procurement structures	Organisations to report through climate change working group	April 2023

Medicines

Action	What resource is needed?	How will we measure our progress?	Target Date
Organisations to encourage use of low-carbon alternatives to inhalers and similar environmentally harmful medicines (where it is clinically safe to do so)	Continue specialist consultation before launch of green inhaler formulary	All organisations to confirm via the climate change working group	April 2023
Organisations to consult with their clinicians to agree alternatives to environmentally harmful anaesthetic gases such as Sevoflurane, Isoflurane and Nitrous Oxide	Engagement clinicians and Medicines Managements teams	All organisations to confirm via the climate change working group	April 2024

Supply Chain & Procurement

Action	What resource is needed?	How will we measure our progress?	Target Date
Adopt PPN 06/20 so that all NHS tenders include a minimum 10% net zero and social value weighting on contracts >£5m per annum	Add to pre market engagement process	An NHS wide TOMs (Themes, Outcomes and Measures) reporting portal is being developed	April 2022
Procurement staff to complete training on Social Value in tenders	Staff time, although free training available via: **www.govcommercialcollege.co.uk**	Staff appraisals	December 2022
Ensure process/contract for reuse of Walking Aids is in place	Introduction of process and minimal ongoing staff resource to prepare for reissue	Reduction in expenditure	March 2023
Ensure reusable surgical instruments have been investigated and implemented as appropriate	Validating and introducing process by clinicians / H&S	Reduction on expenditure	March 2023
Review procurement procedures to embed awareness of sustainable in procurement processes	Amend with regular reviews	Processes embedded	December 2023

Supply Chain & Procurement (continued)

Action	What resource is needed?	How will we measure our progress?	Target Date
Ensure the whole life cycle impacts of the procurement	Include in pricing exercise and evaluation	Expenditure better managed	December 2023
Begin to communicate NHS Net Zero targets for Scope 3	Carry out via contract management	Awareness improved	March 2024
Promote the value of human rights and equality within our supply chain	Carry out via contract management	Awareness improved	March 2024
All suppliers will be required to publicly report emissions and publish a Carbon Reduction Plan for their direct emissions and social value included in the evaluation and award, irrespective of contract value. *SME and Voluntary Sector have a 2-year grace period to adhere to this	National requirements	Awareness improved	April 2024

Food & Nutrition

Action	What resource is needed?	How will we measure our progress?	Target Date
Organisations to expand plant-based menu options, reduce meat-based menu options and hold 'meat-free' days regularly	Amend menus, there may be a need for new suppliers/ contracts	Use of meat-based items	April 2023
Organisations to employ seasonal menus to enable provision of fresh food sourced locally	Amend menus, may be a need for new suppliers/contracts	Use of more fresh produce	April 2023
Organisations to attain sustainable catering accreditation (i.e. Soil Association Food for Life Catering MARC)	Tie commitment and small cost pressure for validations, in house awareness and inspection	MARC Accreditation	April 2025
Organisations to develop a strategy to minimise food waste	Co-ordination and peer review via climate change working group	Quarterly benchmarking to climate change working group	April 2024

Biodiversity

Action	What resource is needed?	How will we measure our progress?	Target Date
Organisations to consider the impact of capital estates projects on local wildlife and ensure neutral or positive impact by developing green spaces in proximity to the works	Could be absorbed in capital projects	External verification	April 2023
Organisations to 'rewild' green spaces by planting diverse range of trees and plant species	External funding, for example the Queen's Green Canopy	Organisations to report via climate change working group	April 2025
Develop an ICS Green Space Strategy	Central co-ordination / Climate Change Working Group to review	Document to be published September 2023	September 2023

Adaptation

Action	What resource is needed?	How will we measure our progress?	Target Date
Ensure our NHS organisations consider HBN 00-07 when developing Estates' Strategies	Engagement with Estates teams	HBN 00-07 to be specified in Estates strategies	April 2023
Organisations to ensure contingency plans are in place in the event of adverse weather and major incidents to provide business continuity, staff and patient safety and care provision	Engagement with whole organisations to ensure comprehensive and joined-up approach	Organisations to escalate concerns via climate change working group	April 2022

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Acronyms

Acronym	Definition
C02e	CO2e accounts for carbon dioxide and other gases such as methane and nitrous oxide
DPI	Dry Powder Inhaler
EPR	Electronic Patient Records
GHG	Greenhouse Gases
ICB	Integrated Care Board
ICS	Integrated Care System
MPFT	Midlands Partnership NHS Foundation Trust
MS	Microsoft
NICE	National Institute for Clinical Excellence
pMDIs	Pressurised Metered Dose Inhalers
PV	PhotoVoltaic (Solar panels that convert the Sun's energy into useful electrical power)
QIPP	Quality, Innovation, Productivity and Prevention
REGO	Renewable Energy Guarantees of Origin
RJAH	The Robert Jones & Agnes Hunt Orthopaedic Hospital NHS Foundation Trust
ROI	Return on Investment
SATH	The Shrewsbury & Telford Hospital
SC	Shropshire Council
SCHT	Shropshire Community Health NHS Trust
SM	Salmeterol
STW CCG	Shropshire, Telford & Wrekin Clinical Commissioning Group
TW	Telford & Wrekin Council
WMS	West Midlands Ambulance Service

Further Information

If you have a general enquiry about Shropshire, Telford & Wrekin Integrated Care System(ICS), please email **stw.stp@nhs.net**

Visit us online **www.stwics.org.uk**

Our partnership is made up of the following organisations:

NHS Shropshire Clinical Commissioning Group

NHS Telford and Wrekin Clinical Commissioning Group

Shropshire Council

a co-operative council

Telford & Wrekin COUNCIL