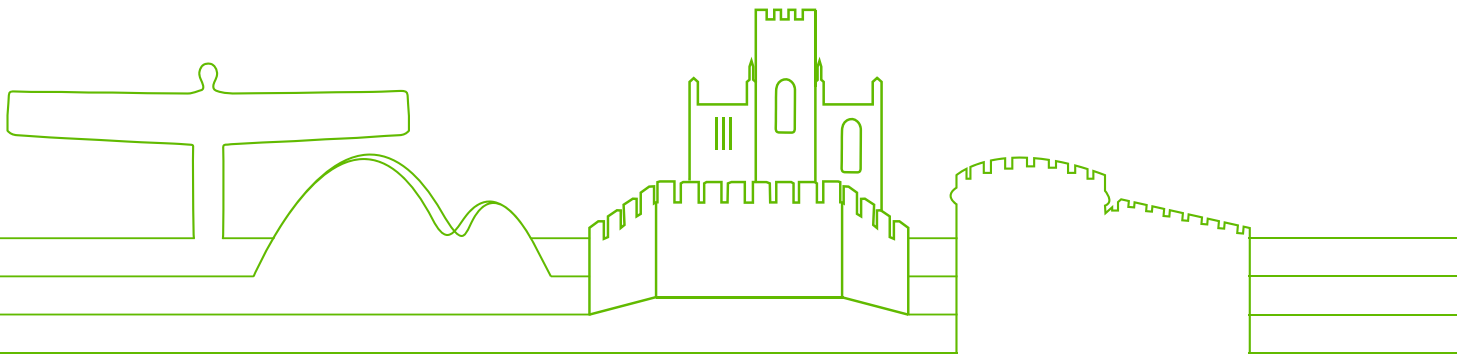




**North East and
North Cumbria**

Introducing our Green Plan 2022-2025

**An ambitious goal to become
England's greenest NHS region**



02

THE CHALLENGE

Across the North East and North Cumbria we are working together to deliver our ambition to be the greenest region in England by 2030.

The climate crisis is one of the biggest health challenges we face, and failing to reduce our impact on the planet will have serious implications for both the physical and mental health of our communities.

As one of the largest organisations in the world, the NHS has a crucial part to play. Through our size and scale we can make a positive contribution to the health of our communities by reducing our environmental impact. The NHS is, in fact, responsible for 40 per cent of the public sector's carbon footprint.

We are massive consumers of energy from heating and lighting our buildings to powering the equipment we use. We buy and use millions of products every day, some of which will have

travelled the globe to get to our hospitals, doctors' surgeries and clinics.

Our ambulances, patient transport, delivery vans and all of our staff travel millions of miles every year. All of these contribute to climate breakdown and air pollution which then negatively impacts on the health of our local communities.

But we are taking action to change this. Across our region, NHS organisations and our partners are already working to reduce our environmental footprint from how we are reducing waste, supporting active travel, using electric vehicles, re-thinking our supply chain and switching to more sustainable products. But there is more we can do to make the crucial changes that are needed.

03

“ Our ambition is to become England's greenest NHS region by 2030 ”



WHY ARE WE DOING THIS?

Put simply, a healthier planet means healthier people. As a region we are focused on preventing ill-health and improving the overall health of our communities.

Being sustainable is not just good for the environment, it's also an important driver of health because we know that things like air pollution can have a detrimental impact on both short and long-term health. It is estimated over one-third of new asthma cases might be avoided by efforts to cut carbon emissions.

We know that keeping people healthy also has a lower impact on the environment too, as they need less treatment and fewer medicines.

Health inequalities are also directly linked to environmental issues, such as poor air quality, lack of access to green spaces and access to nutritious foods.

As a region with some of the starkest health inequalities in the country, it is vital we act to improve the health of all of our communities and look beyond just the healthcare we provide to the wider factors which can keep us well in the first place.



So our plans to be a greener NHS are an integral part of why we are working together in so many areas to ensure happier and healthier lives for our communities, which can also have a positive impact on the environment too.

Improving things like housing, opportunities for more active travel, creating employment opportunities, buying 'local' and tackling loneliness are all vital if we are to support people to thrive in their own communities and need less healthcare.

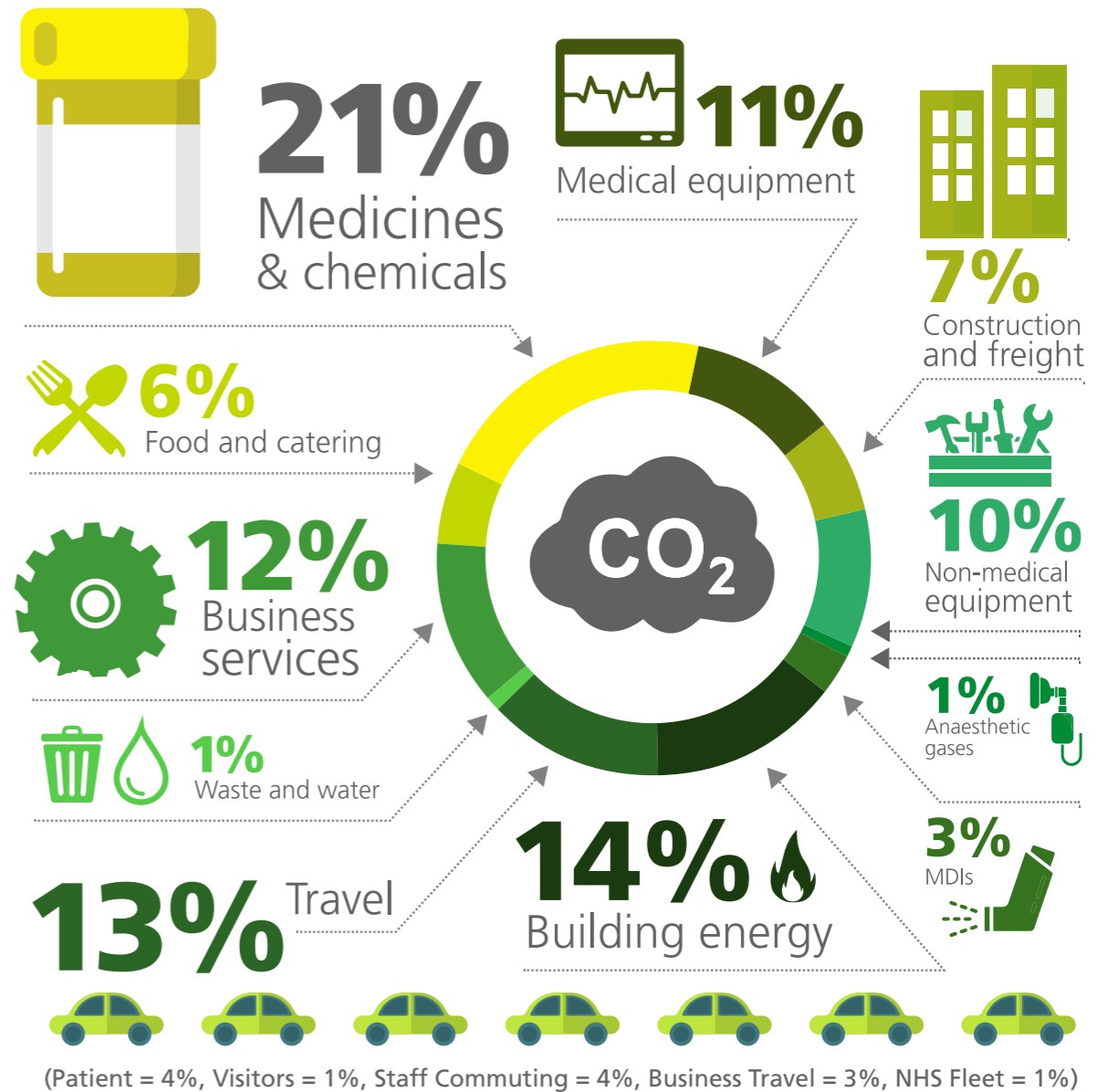
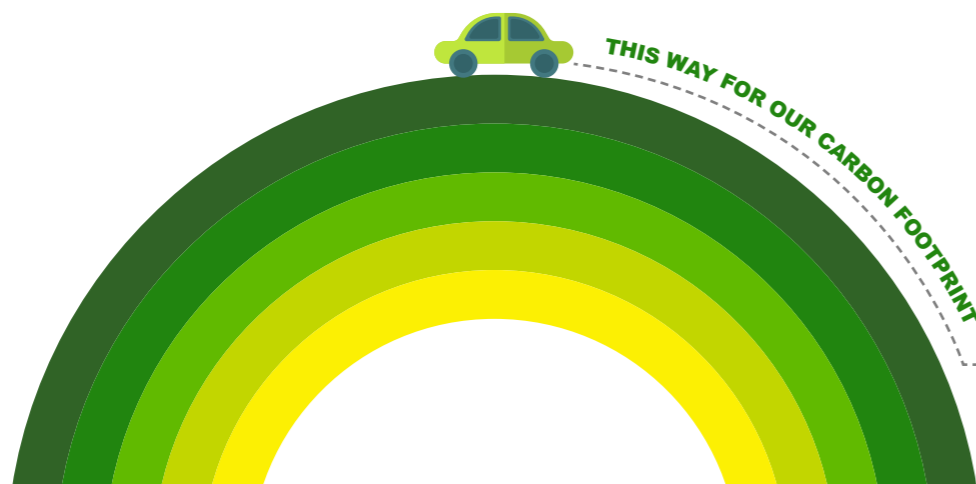
“ Keeping people healthy has a lower impact on the environment as they need less treatment and fewer medicines.”

OUR PLAN...

In the North East and North Cumbria, we have a three year plan which sets out how we will drive forward the changes we want to begin to see – with eight priority areas for action across all aspects of healthcare.

Our plan is dynamic and in future iterations we will continually escalate our targets and actions, building on the lessons learnt in the next three years. But for now our eight priority areas for change are as follows:

People	Sustainable healthcare	Low carbon travel	Energy
Reducing waste	Supply chains and procurement	Greener NHS sites	Clean air



1. OUR PEOPLE

Our staff are key to delivering our green ambitions with many of them already spearheading efforts across the region.

With a workforce of around 170,000 in health and care across the North East and North Cumbria small changes will soon add up to make a big difference.

We'll need staff to make different decisions to business as usual, so we'll work hard to ensure that everyone is aware of our green vision and encourage them to play their part by identifying the things they can do differently in their everyday roles, wider teams and services.

There are many partner organisations who we are working alongside to meet our green ambitions including:

- **NHS bodies (e.g. NHS Property Services, NHS Business Services Authority)**
- **Local authorities**

- **North East England Climate Coalition (NEECCo)**
- **The emerging North East Community Forest**
- **Charities and the voluntary sector**
- **The Local Economic Partnership**
- **Healthcare Ocean**

“Small changes will soon add up to make a big difference.”

SUSTAINABILITY IN ACTION...

County Durham and Darlington NHS Foundation Trust

County Durham and Darlington NHS Foundation Trust took the unprecedented step of making the e-learning for health module 'Building a Net Zero NHS' a required competency for staff. In just a few months, almost 70 per cent of staff undertook the module which improved their understanding of the need to embrace the trust's green plan and urgently drive forward positive change.

Faculty of Sustainable Healthcare

The North East is the first region in the country to have a faculty dedicated to environmental sustainability in healthcare.

The Faculty of Sustainable Healthcare, which is run by Health Education England North East (HEE NE), aims to increase awareness of sustainability, embed good practice and help organisations achieve climate impact reduction targets.

Newcastle upon Tyne Hospitals NHS Foundation Trust

In June 2019, Newcastle became the first healthcare organisation in the world to declare a climate emergency. By joining forces with Newcastle City Council and Newcastle University, they have created a civic partnership resulting in it being the first city in the UK to have all three anchor institutions declare a climate emergency and commit to achieving carbon neutrality by 2040.

2. SUSTAINABLE HEALTHCARE

The climate crisis cannot be tackled without fundamental changes to the way every organisation operates and health services are no exception.

Therefore we'll work to develop low carbon, sustainable models of care that improve health outcomes while cutting our carbon and waste footprint.

We've already identified many areas where we can make a rapid difference including:

Telemedicine

Covid-19 meant the NHS had to deliver many health services remotely and made us realise that it wasn't always necessary to visit a GP or outpatient clinic in person. It was often more convenient for some people too. By 2024, 30 per cent of our outpatient activity will be delivered remotely.

Have you downloaded the NHS app?

Around 200,000 online and repeat prescription appointments, arranged through the NHS App between April-December 2021 would previously have been made by people driving or taking other transport to their local surgery.

With travel accounting for around 17 per cent of the NHS carbon footprint, the journey savings are estimated to have led to a carbon dioxide (CO₂) reduction of 78 tonnes.

Anaesthesia

Several common anaesthetic gases are powerful greenhouse gases therefore we'll work to significantly reduce their use where we can. Our NHS trusts will ban the use of desflurane by 2030 and will reduce use and wastage of other greenhouse gases such as nitrous oxide through regional action.

SUSTAINABILITY IN ACTION...

Northumbria Healthcare NHS Foundation Trust

Northumbria was one of the very first trusts to eliminate desflurane - the most potent and harmful anaesthetic inhalant gas that's 2500 times more warming than CO₂ - with one bottle equivalent to burning 440kg of coal. Other trusts have followed suit including Newcastle upon Tyne Hospitals, County Durham and Darlington and South Tyneside and Sunderland. The gas is also the most expensive, therefore changing has both environmental and financial benefits.



Respiratory care

Inhalers emit powerful greenhouse gases so we will be working hard to reduce the need for them by improving public health through driving air quality improvements and smoking cessation.

Where it is suitable for patients, we will be using more environmentally friendly dry powder inhalers and developing more sustainable ways of disposing of inhalers too.

FACT: Metered dose inhalers have an estimated carbon footprint of 500g CO₂e per dose, compared to 20g in dry powder inhalers. Each dose from a metered dose inhaler equates to about 2.5 miles driven in a car.

Over prescribing

The manufacture, distribution and use of medicines, accounts for 25 per cent of the NHS carbon footprint.

We will be doing all we can to ensure that we are not over-prescribing medicines when there are other alternatives that could be better for patients and at the same time more sustainable.

FACT: A small number of medicines account for a large portion of our emissions. Anaesthetic gases account for 2 per cent of emissions and inhalers account for 3 per cent of emissions. The remaining 20 per cent of emissions are generally found in manufacturing and transport as part of the supply chain.

Social and nature-based prescribing

Social prescribing connects people to community groups and statutory services for practical and emotional support. It's a holistic approach to people's health and wellbeing that also has carbon benefits

by localising support and avoiding unnecessary prescription of medicines. Nature-based prescribing offers patients interventions and activities such as local 'walking for health' schemes, community gardening and food-growing projects.

We'll be reviewing opportunities for both social and nature-based prescribing right across our primary care and hospital services.

FACT: 60 per cent of the carbon footprint in primary care is through prescribed medicines.

Food and nutrition

Every day across our services we provide millions of meals for our patients and our workforce. Together we will be looking at opportunities to ensure we source environmentally sustainable nutritious food across all our NHS organisations and increase spending where we can with local suppliers; as well as reduce any food waste.

With 170,000 of us, our staff are key to delivering our ambitious plans.

Our ambition is to ensure all food waste is segregated and sent for anaerobic digestion by 2030.

FACT: It is estimated that NHS food and catering produces 1,543 tonnes of CO₂e each year - approximately 6 per cent of total emissions.

3. LOW CARBON TRAVEL

Whether it's staff commuting to work, logistics such as delivery of supplies, or patients and visitors traveling to and from our clinics, health centres, hospitals and offices – the NHS generates a lot of road travel.

That's why we are working to ensure that every NHS organisation has a green travel plan in place by the end of 2022 which will identify ways to reduce the amount of road travel. This includes reducing business mileage by at least 20 per cent by 2023/24.

By working with local authorities and others we will support more 'active travel' such as cycling and walking, which will not only reduce our carbon footprint but deliver

many health benefits such as fitness and air quality. This includes achieving the Cycling UK 'cycle friendly' employer accreditation standard.

We'll also ensure that our NHS fleet is made up of ultra-low and zero carbon vehicles. As well as looking at innovative ways to deliver goods such as using low-carbon vehicles for final miles or consolidating freight delivery across the region.



SUSTAINABILITY IN ACTION...

North Cumbria Integrated Care NHS Foundation Trust

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

FACT: About 3.5 per cent (9.5 billion miles) of all road travel in England relates to patients, visitors, staff and suppliers to the NHS, contributing around 14 per cent of the system's total emissions.

4. ENERGY

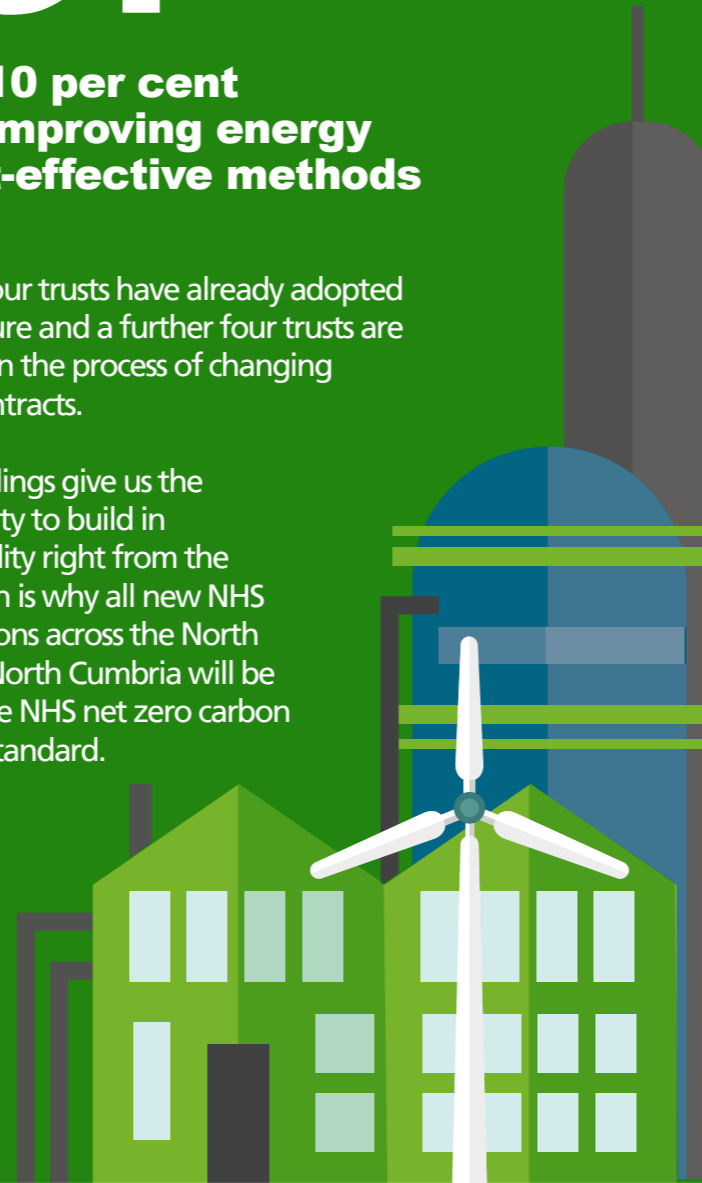
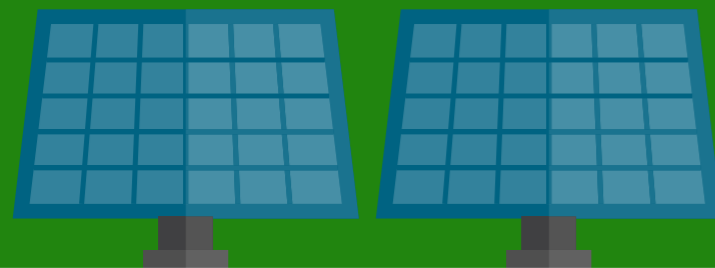
Buildings and estates represent 10 per cent of the NHS carbon footprint and improving energy efficiency is one of the most cost-effective methods of cutting carbon.

Hospitals in particular are large consumers of energy due to their size, amount of equipment and the need to maintain patient comfort levels. This can represent up to 20 per cent of a large acute hospital's carbon footprint.

We'll therefore look to install on-site renewable energy where we can. Where we can't do this, we aim to ensure that all the energy we buy will be from 100 per cent renewable sources. This is in line with the NHS standard contract which requires every trust to purchase 100% renewable energy from April 2021.

Seven of our trusts have already adopted this measure and a further four trusts are currently in the process of changing supply contracts.

New buildings give us the opportunity to build in sustainability right from the start which is why all new NHS constructions across the North East and North Cumbria will be built to the NHS net zero carbon building standard.



SUSTAINABILITY IN ACTION...

Gateshead Health NHS Foundation Trust & Queen Elizabeth Facilities

Gateshead won a Green Apple Environment Award in 2020 for achieving more than 30 per cent reduction in energy emissions through the installation of two bio diesel CHP (combined heat and power) generation units operating at zero carbon. This was alongside other energy saving initiatives including LED lighting and smart switches, installing ventilation heat recovery systems, extension of building management systems and zoning of heating systems.

5. REDUCING WASTE

The NHS consumes large amounts of single use plastics such as personal, protective equipment (PPE) and single use medical devices.

We'll work to reduce waste everywhere we can with a target of zero waste to landfill across the region by 2030. We'll work to source raw materials from recycled sources and feed these back into the recycling loop after they have been used. Clinical and

hazardous waste streams are a particular challenge in the NHS, so we'll aim to reduce the volume of clinical waste by 50 per cent by 2030 and for all remaining non-recyclable clinical waste to be treated through energy recovery by 2030.

FACT: Waste and water together represent 5 per cent of the NHS carbon footprint. As a region we were the first in Europe to adopt reusable sharps boxes which reduce life cycle carbon emissions associated with sharps disposal by 90 per cent.



SUSTAINABILITY IN ACTION...

North Tees and Hartlepool Hospitals NHS Foundation Trust

North Tees and Hartlepool Hospitals NHS Foundation Trust has introduced a new 4 'R' system for dealing with waste: reducing, repairing, re-using or recycling where appropriate. To reduce the volume of waste, the trust has set up a 'swap-shop' to encourage staff to assess equipment or furniture and then correctly identify the process for unwanted items. This has been backed up by a communications campaign to promote the scheme. All work areas have a folder containing instructions to follow when assessing equipment and a set of labels to use to correctly identify the process for unwanted equipment or furniture.

South Tees Hospitals NHS Foundation Trust

An innovative waste management system has been installed in theatres at South Tees Hospitals NHS Foundation Trust to make it safer for staff to dispose of surgical waste fluid. The Stryker Neptune system can filter collected surgical fluid, which allows it to be disposed of via a drain rather than be solidified and put into infectious waste bags. It also eliminates the need for manual handling and the costs and risks associated with an additional infectious waste stream and in turn reduces the trust's carbon footprint.

6. SUPPLY CHAIN & PROCUREMENT

The NHS supply chain* accounts for 62 per cent of our carbon footprint. Our ambition is to make this network carbon free by 2040 – five years earlier than the national target.

We'll achieve this by joining forces across the region when purchasing 'green' products and services, and by letting suppliers know in advance the eco-credentials we'll need to see from their products in order to keep buying them. This sends a signal to the

supply chain to start innovating to meet that need, creating a sustainable supply chain for the NHS and the wider economy.

**The people and organisations who supply the NHS with everything we need.*

SUSTAINABILITY IN ACTION...

Newcastle Upon Tyne Hospitals NHS Foundation Trust

Newcastle Hospitals worked in partnership with SmartCarbon Ltd to develop a 5-step supply chain framework, with an aim of supporting all suppliers, big and small. The trust listened to the views of suppliers, with 98 per cent of respondents supporting the trust's NetZero goal. There is now a requirement for all suppliers to the trust to commit to and publish NetZero targets aligned to the Newcastle Hospitals 2040 vision, by 2030. The project has encouraged suppliers to act and begin to take steps to reduce their carbon footprints.



7. GREENER NHS SITES

Having green spaces and access to nature are known to support patient recovery and have therapeutic benefits.

Nature areas also promote biodiversity, provide sustainable drainage for floodwater, mitigate air pollution and provide shade when it is hot.

Every NHS organisation will be working to ensure that there are plenty of green spaces on their sites and we will work together across the region to learn from each other,

and other organisations, on the best green space and biodiversity measures we can take.

We'll also be exploring 'insetting' (where organisations commission their own projects to offset carbon emissions) with the exciting idea of an NHS forest in the early stages of development.



SUSTAINABILITY IN ACTION...

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

A wildflower planting trial was established at NEAS in October 2021 with sowing of seeds at four ambulance stations. The trust has also committed to integrating green spaces across their estate of 57 properties both to benefit biodiversity as well as staff wellbeing. Tees, Esk and Wear Valley NHS Foundation Trust has established wildflower meadows and four wellbeing gardens.

Cumbria, Northumberland, Tyne & Wear NHS Foundation Trust

Staff and volunteers have planted more than 1,250 trees with the NHS Forest project. The trees have been planted in carefully chosen areas as part of a wider plan for improving the biodiversity of the trust's green spaces, developed with a local ecologist. Not only will this have an environmental benefit, it will also create more opportunities for patients, staff and local communities to connect with nature, which has proven wellbeing benefits. Once mature, the trees have the potential to absorb more than 26 tonnes of carbon from the atmosphere every year.



8. CLEAN AIR




Air pollution is the biggest environmental threat to health in the UK, with between 28,000 and 36,000 deaths a year attributed to long-term exposure.

There is strong evidence that air pollution causes the development of coronary heart disease, stroke, respiratory disease and lung cancer, and exacerbates asthma. Therefore, it is essential that together across the region, we make the air we breathe in our towns, cities and countryside clean.

Our first step is to develop a clean air framework for NHS organisations across our region to support them to take actions to reduce air pollution as part of their own green plans.

FACT: The North East has more attributable deaths to air pollution per 100,000 people than London, despite London having considerably worse pollution.

RE-THINKING HOW WE DESIGN CARE IN THE FUTURE



We are thinking ahead to the future so that we factor in sustainable ways of providing care in our designing processes.

As well as adopting low carbon care options, we also need to adapt to the challenges of the direct impact of climate change; preparing for the health impacts of temperature-related illness, extreme weather events, new infectious diseases, flooding and increased mental health issues.

At the heart of this planning will be our four core principles of sustainable healthcare:

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

WORKFORCE

What are staff already doing and how can you get involved?

As we said earlier, with 170,000 of us, our staff are key to delivering our ambitious plans and for bringing about better health across our communities and improved health and wellbeing for our workforce.

We are the first region to have developed a Faculty of Sustainable Health (see page 9) who will embed sustainable health care into training the people who work for us and helping to raise further awareness.

We also have a North East and North Cumbria ICS sustainability 'people' group which aims to support NHS staff on delivering sustainable healthcare and maximise the opportunities for them to act as environmental champions within their work and their home lives.

A greener primary care

Being greener doesn't just apply to our hospitals. GP surgeries across the country are responsible for 5.75 million tonnes of CO₂e, equivalent to 23 per cent of the total carbon footprint of the NHS. So our practices have a major role to

play in helping the NHS becoming more sustainable too.

Greener Practice Network

A network of GP practices has been established across the region to provide information and shared learning on issues including waste, plastics, single use items, greener energy sources, installing electrical vehicle charge points, solar panels, active travel and pharmaceutical over prescribing. The network will be supporting general practices to develop their own decarbonisation plan helping to reduce their environmental impact. This includes e-learning packages for primary care staff.

If you work in primary care and would like to be involved in the progress towards net zero contact [Greener Practice Network North East](#).

How to get involved

1. Find out what's going on in your own organisation – most organisations have a green plan, green champions, and Facebook groups you can join.
2. See what training is on offer within your organisation or with our Faculty of Sustainable Healthcare (FOSH) and nationally too.
3. If you see practices within your organisation which have an environmental impact – report it via your incident reporting system or directly to an individual involved in sustainability within your own organisation.

Some simple steps we can all take in our lives:

- **Switch short car journeys to walk, cycle or take public transport where you can. 50 per cent of car journeys in the UK are under two miles. Consider electric or hybrid travel if you can.**
- **Reduce energy use – things like turning down your thermostat by one degree can cut your bills by more than £50 a year. Turning off lights, switches and appliances when they're not being used also helps to save energy. A win-win for your bank account and the environment.**
- **Switch to buying products with recyclable packaging or less packaging and be aware of what is in your cosmetic products and sunscreens.**
- **Cut the amount of food you waste.**
- **Eat more seasonally and locally grown food and reduce the amount of meat you eat.**
- **Repair and reuse where you can rather than buy new. This includes clothes - did you know, 11 million items of clothing are binned each week in the UK!**

