NHS

The Newcastle upon Tyne Hospitals
NHS Foundation Trust

Shine

Sustainable Healthcare in Newcastle

Empowering Action

Sustainable Healthcare in Newcastle (Shine)

Annual Report 2023-24

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1. Foreword

It is a pleasure to share our annual Shine Report. On 1 July 2022 the NHS became the first health system to embed 'net zero' into legislation through the Health and Care Act 2022[1]. The 'Delivering a Net Zero NHS' Report is statutory guidance[2] and our Annual Report sets out our progress towards this national objective, and our own target to reach net zero for our NHS carbon footprint 10 years ahead of the national ambition.

I want to be honest about the challenge the climate emergency presents to us. Providing great patient care within the means of our planet and supporting our patients whilst acknowledging the impact we have for future generations, is the biggest challenge we all face. We can only make progress if we work together.

To achieve this ambitious aim, leaders are required to understand these issues, empower and encourage their teams, and embed the principles of environmentally sustainable care into all of our services. In this report, we seek to empower staff and highlight the excellent work done to date, whilst acknowledging the challenging context we find ourselves in. All of our progress is thanks to our dedicated staff, and I extend my sincere gratitude to everyone working to ensure our patients receive the best care in an environmentally sustainable way.

I am grateful to the Green Champion network for their ongoing enthusiasm and commitment to support us in providing sustainable and future proofed services that acknowledge the importance of prevention. I am pleased to say that I have recently become a Green Champion myself and look forward to playing a personal role in this work.

I acknowledge the huge challenge we face, and that decarbonising our estate remains a priority so that we can reach our goal of Net Zero for the emissions we control by 2030. We are currently not on course to achieve this target as we are still reliant on fossil fuels to heat and power our hospitals. We know that changing this will require additional external funding and we report on our Public Sector Decarbonisation Scheme (PSDS) funding received for Regent Point in this report.

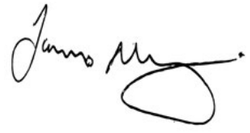
In respect of our NHS Carbon Footprint Plus (the emissions we can influence) we continue to work with our suppliers so that we can continue to work towards a net zero carbon supply chain by 2040.

We are not alone in seeking to make positive change. There is a great deal of work being developed nationally, within the Greener NHS programme, and with our partners across the North East and in the city and you can read more about these exciting partnerships in the report. We are also acutely focussed on cleaning up the air that we breathe around our hospitals – a way to create improvements for staff and patients, minimise health inequalities and reduce our carbon footprint.

I want to be honest about the challenge the climate emergency presents to us. Providing great patient care within the means of our planet and supporting our patients whilst acknowledging the impact we have for future generations, is the biggest challenge we all face. We can only make progress if we work together.

I hope you enjoy reading this report and that you continue to share our commitment to continue to work towards zero carbon care, clean air and zero waste.

Keep going.



Sir Jim Mackey
Chief Executive, Newcastle Hospitals

I am pleased to say that I have recently become a Green Champion myself and look forward to playing a personal role in this work.

Staff at our Day Treatment Centre, Freeman – read about their theatre sustainability work on page 27

[1] Health and Care Act 2022 (legislation.gov.uk)
[2] Greener NHS » Delivering a 'Net Zero' National Health Service (england.nhs.uk)

2. Introduction

In 2019 the Trust declared a climate emergency, acknowledging the urgency of the situation, and committing to taking the action necessary to reduce our impact on global heating. This resulted in the creation of our Climate Emergency Strategy, creating a vision for change to educate, engage and empower our staff, patients and stakeholders.

In last year's report, as Executive Lead for Climate Emergency, and Chair of the Executive Oversight Group (EOG) for Climate Emergency, I communicated our vision for how we think the Trust could reach Net Zero by 2030 and provided updates about the work being done on our "red flags". The challenges remain and so this year we want to empower our staff to take more action and create quick wins, by providing examples of where staff have made sustainable improvements to our services. We have also highlighted in this report where we have been able to make it stick, for example in reducing our emissions from anaesthetic gases, which are potent greenhouse gases. We acknowledge more needs to be done to build on the change we have seen so far and ensure that we continue to move forwards.

Our Green Champion network have communicated to our new Chief Executive, Sir Jim Mackey, their ambitions for the Trust and Jim has offered his support. We acknowledge that sustainability is part of Well-Led for the CQC and so leadership is key. We recognise the challenges we have had in embedding this strategy in the Trust. Given the prominence of our 2030 Net Zero ambition, we were selected by our internal audit team to review our published carbon performance data and progress against this target. The Sustainability Team were enthusiastic about this opportunity and found the exercise to be incredibly useful with key areas for improvement identified, including improvements to processes for reporting sustainability performance to the Trust Board, which we have embraced.

Breathing clean air should be a given, so we are continuing to work on improving the air quality both inside and outside the hospital

Our vision is that sustainability is embedded from ward to board and staff feel empowered to act. The Shine 10-step framework for embedding sustainability in departments or directorates is being followed by a number of teams, including the Integrated Laboratory Medicine Directorate, Procurement, Newcastle Nutrition and Clinical Research . These early adopters will help us refine the framework to roll it out more widely across the Trust. We are working on embedding sustainability in the ward accreditation framework, in clinical board governance structures and in the business case process.

We all want to see a reduction in the things that we waste. In addition to the directorate working groups on the Shine 10-step framework, the Theatres Sustainability Working Group is piloting projects with the potential to be rolled out across the trust, which reduce our reliance on single use items and increases reuse (moving up the waste hierarchy). Work is also ongoing with our Wasted Medicines Project, featured in last years' Shine Report 2022-23, to ensure the best practice from the wards involved is shared and replicated.

Our Procurement Team – read about their work to embed sustainable procurement on page 28

Our Green Champion network have communicated to our new Chief Executive, Sir Jim Mackey, their ambitions for the Trust and Jim has offered his support. We acknowledge that sustainability is part of Well-Led for the CQC and so leadership is key. We recognise the challenges we have had in embedding this strategy in the Trust

Breathing clean air should be a given, so we are continuing to work on improving the air quality both inside and outside the hospital, with collaboration between the Travel and Transport Team, the Sustainability Team, the Non-Smoking Team and the Public Health Team. The staff Hopper service is now an electric bus service[4], with zero tail pipe emissions. We are working on monitoring our air quality and Babatunde Okeowo our research PhD student has developed a prioritised action plan to clean up the air in and around our hospitals.

We are able to report a small decrease in our NHS Carbon Footprint, for the emissions within our control, but this is not sufficient to bring us within our carbon budget, and as we progress closer to 2030 the challenges are increasing to meet our Net Zero targets. This is in part because we are reliant on difficult to access external funding in order to de-carbonise our estate. We received PSDS funding for decarbonising Regent Point to install LED lighting, solar photovoltaic (PV) panels and heat pumps. We were not, however, successful in obtaining subsequent funding for our main hospitals (the biggest source of our controllable emissions), but we will be ready at each step of the way to ensure we make those applications for available funds, so that we can implement the capital projects required to decarbonise our estate.

In terms of the emissions we can influence, known as our NHS Carbon Footprint Plus, our supply chain and procurement of goods and services make up a significant proportion of those emissions. We have launched our 5-step Net Zero Carbon Supplier framework to help suppliers to decarbonise in line with our targets. This was launched at an event on 12 July 2023 and has been embedded in all future tenders. This is an example of the great joint work done by the Procurement Team and the Sustainability Team.

This report will show how we are progressing to make change to embed sustainability at Newcastle Hospitals. As ever we seek to empower staff to take action, to sustain the change and make it stick.

Victoria McFarlane Reid
Executive Director Lead
for Sustainability

[4] 97.8% of total mileage is electric.

Empowering Action

Declaring a climate emergency in 2019

A vision to be a global leader in sustainable healthcare

Published our Climate Emergency Strategy in 2020

Corporate Induction

Training & resources

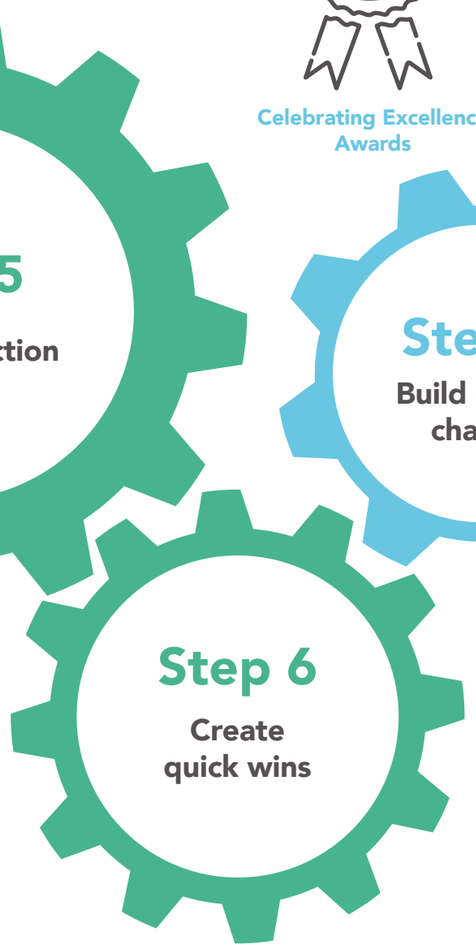
Shine10-step framework for embedding sustainability

Reduction in emissions from anaesthetic gases

Shine rewards app

Reduction in clinical waste volumes

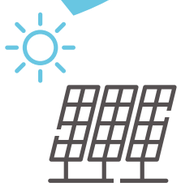
Celebrating Excellence Awards



Network of 500+ Green Champions

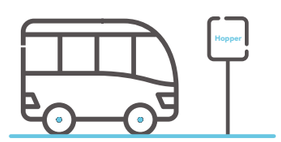
Letter from Green Champions to Sir Jim

Climate Emergency Action Fund



Decarbonisation of Regent Point

Clean Air Hospital Framework



Electric Hopper

5-step Net zero carbon supplier framework

(Inspired by Kotter's 8 Steps for Leading Change: Leading Change by John P Kotter)

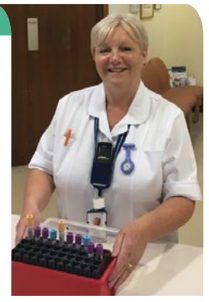
Empowering Action

1	Newcastle Hospitals was the first healthcare organisation in the world to declare a climate emergency in 2019.
2	There is a network of over 500 Green Champions across the Trust working in different departments and directorates forming a powerful coalition of staff members committed to sustainable healthcare.
3	Newcastle Hospitals Climate Emergency Strategy 2020-25 created Our Vision: to be a global leader in sustainable healthcare delivery through collaboration and innovation, helping our patients and communities to thrive within the means of our planet.
4	We continually work to ensure the vision is communicated to all of our staff, and this has been supported with the introduction of sustainability training for all staff when they join Newcastle Hospitals at corporate induction.
5	Shine 10-step framework for embedding sustainability empowers staff to take action in their departments and directorates. Our 500 + Green Champions have written a letter to our new CEO to ensure sustainability remains a priority and Sir Jim has confirmed his support.
6	We have allocated £150,000 of Climate Emergency Action Funding to support staff led sustainability projects.
7	Teams are working on embedding sustainability across the Trust, including via the Clean Air Hospital Framework and our 5-step Net Zero Carbon Supplier Framework.
8	We have made it stick, despite the challenges, in reducing our emissions from anaesthetic gases, running the hopper as an electric bus service, reducing our clinical waste, offering a rewards platform to staff, training all staff at induction and decarbonising Regent Point.

Climate Emergency Action Fund

£150,000 allocated to staff-led sustainability projects over the last three years (£50,000 per year)

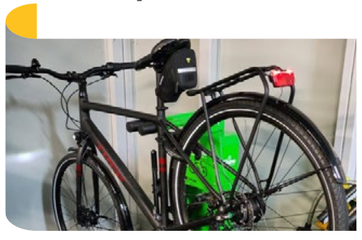
22 **Number of projects supported**



1 million
single use plastic bags eliminated each year by using reusable transport boxes

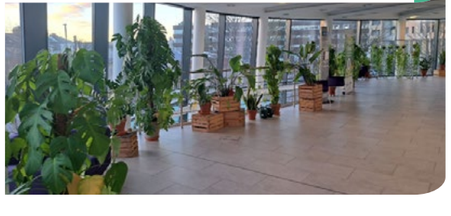
Bike repair stations

installed in staff cycle compounds at our hospital sites



Green the Grey

Enhancing biodiversity in and around our hospitals



Reusable theatre hats

Funding trials to reduce the carbon in our care pathways and saving money

3. Performance

Please see our Shine Annual Report 2022-23 for a detailed breakdown of our three long-term goals and our vision to reach Net Zero.

We are mirroring the Greener NHS definitions of 'carbon footprint' and 'carbon footprint plus' which were published in their Delivering a Net Zero NHS Strategy. The sources of carbon included under those definitions are shown in the diagram. In addition, we have also continued to calculate and present our carbon performance in line with the global best practice framework of the Greenhouse Gas Protocol.

Category	Sub-category	Total tCO_2e			% change from previous year	% change from baseline year
		2019-20	2022-23	2023-24		
Newcastle Hospitals carbon footprint	**Scope 1**					
	Building energy – fossil fuels	54,858	52,742	51,170	-3	-7
	Refrigerant gases	477	246	246	0	-48
	Anaesthetic gases	4,336	2,381	1,704	-28	-61
	Trust fleet	112	113	110	-2	-2
	Scope 2					
	Building energy - purchased electricity	4,933	4,943	5,187	5	5
	Scope 3					
	Water	441	204	207	1	-53
	Waste	558	518	496	-4	-11
	Inhalers	1,399	1,341	1,319	-2	-6
	Business Travel	1,278	1,015	1,020	0	-20
Newcastle Hospitals Carbon Footprint Total		**68,393**	**63,502**	**61,459**	**-3**	**-10**
Medicines, medical equipment and other supply chain	Medicines and chemicals	67,952	73,272	132,625	81	95
	Other supply chain	39,094	42,158	51,184	21	31
	Medical equipment	42,415	40,577	106,048	161	150
	Patient Transport Service	1,870	1,968	1,770	-10	-5
	Procurement total	**151,332**	**157,975**	**291,628**	**85**	**93**
Personal travel	Staff commute	14,863	11,601	11,994	3	-19
	Patient and visitor travel	22,257	22,056	22,240	1	0
Newcastle Hospitals Carbon Footprint Plus Total		**256,844**	**255,135**	**387,321**	**52**	**51**
Patient numbers		1,788,469	1,819,965	1,836,116	1	3
Carbon intensity (tCO_2e per patient contact)		**0.144**	**0.140**	**0.211**	50	47

Table 1: Breakdown of Total Newcastle Hospitals Carbon Footprint

3.1 Carbon Footprint

This year we are encouraged to report a small decrease in our Newcastle Hospitals carbon footprint. There has been a 3% reduction in the carbon footprint as compared to last year, and 10% as compared to the baseline year (2019/20).

This is mainly due to reductions in energy consumption, and changes to anaesthetic gas use, including banning the use of desflurane in almost all cases, the introduction of technology to capture and destroy Entonox and decommissioning piped nitrous oxide at the Freeman Hospital.

We are continually trying to improve our calculation process so in some areas, the calculation methods have altered or the data source is improved. Our baseline year has changed as emission factors have changed and we have accessed more data and improved our methodology. We have put a new line in for PTS, which was previously included within patient and visitor travel. Please see the end note for more detail.

NEWCASTLE HOSPITALS CARBON FOOTPRINT

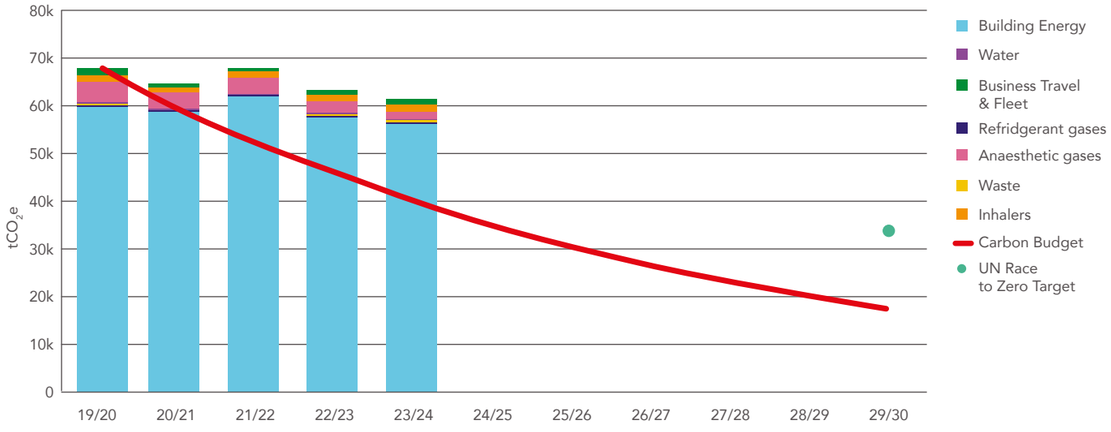


Figure 1: Newcastle Hospitals Carbon Footprint

This graph shows our progress in reducing our carbon footprint against our carbon budget (the red line). Like a financial budget we will have to account for overspend in later years.

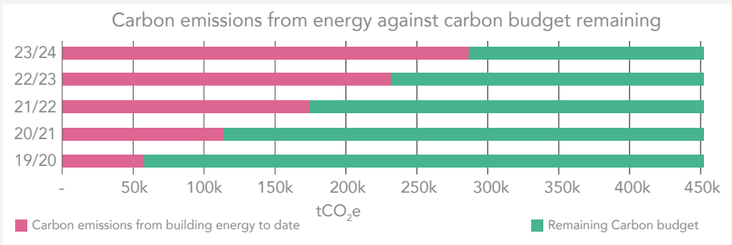
HOW MUCH OF OUR CARBON BUDGET HAVE WE USED?

The Tyndall Centre for Climate Change Research uses the principles of science and equity that are aligned with the commitments in the United Nations Paris Agreement to set budgets at national and sub-national levels, providing local authorities with recommendations that translate the 'well below 2°C and pursuing 1.5°C' global temperature target.

We took that method and applied it at our organisational level for Newcastle Hospitals to calculate our own carbon budget – giving us the absolute total amount of carbon dioxide we can emit – 450,000 tCO_2e.

As has been reported previously, we have not achieved a sufficient reduction for the last four years. This means the level of action required to stay within the carbon budget is now even greater, otherwise we are at risk of exceeding our total budget.

We have already emitted 286,983 tCO_2e out of our total carbon budget for building energy. If we continue at the current rate we will exceed the budget in under 3 years.



NEWCASTLE HOSPITALS CARBON FOOTPRINT PLUS

In relation to our carbon footprint plus we have reported a significant increase in emissions as we have continued to improve the calculation methodology, in line with the Greenhouse Gas Protocol Hybrid Approach. In previous years we estimated our emissions based on how much money we spent, with a small amount of data coming from our suppliers directly. This year thanks to our engagement work with suppliers through the 5-step Net Zero Carbon Supplier Framework we have received a much higher proportion of direct data from suppliers. The proportion of emissions from supplier data is highlighted, and we will continue to work to increase this, and in turn work with our suppliers to reduce their emissions.

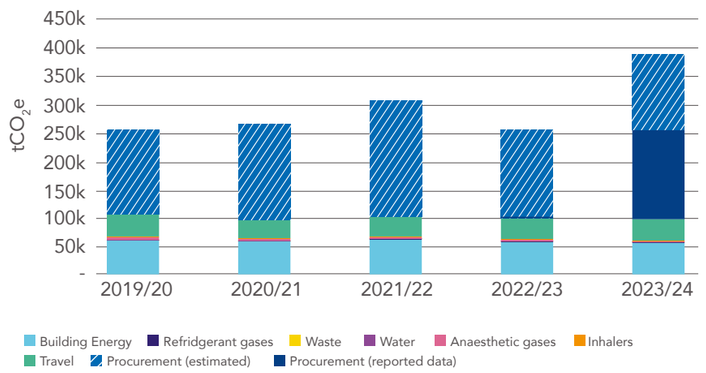
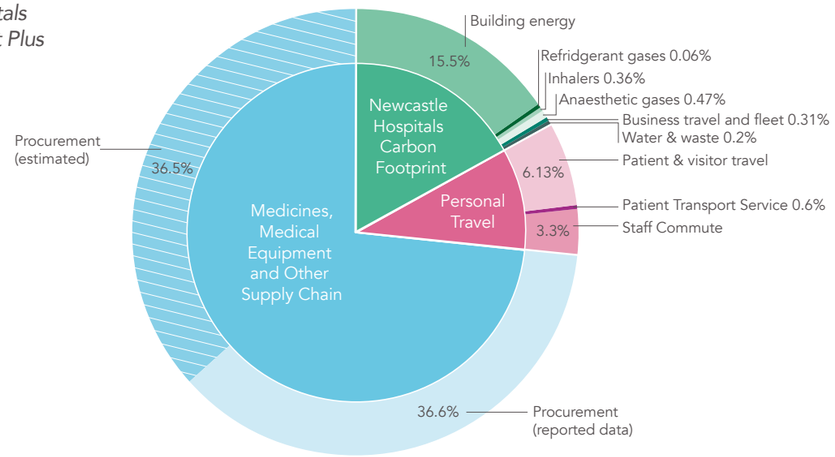
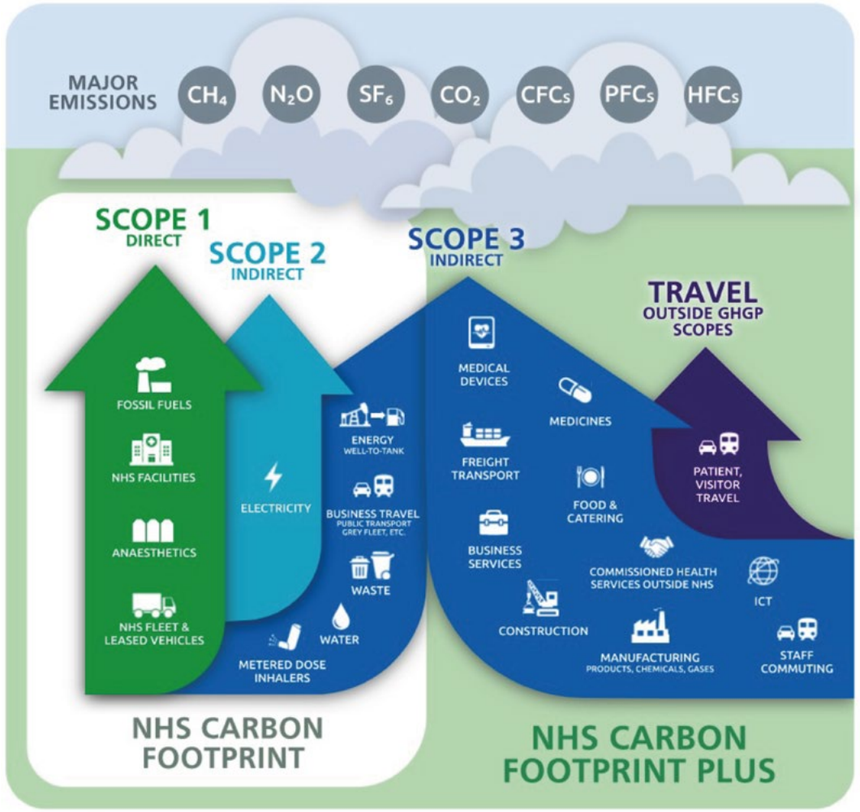


Figure 2: Newcastle Hospitals Carbon Footprint Plus

We aim by next year to be in a position to state the baseline impact of our footprint plus by using a greater proportion of reported data than estimated data. Please see the procurement section for more information.

Figure 3: Newcastle Hospitals Carbon Footprint Plus Pie Chart





3.2 Staff Sustainability Survey

STAFF SUSTAINABILITY SURVEY

Every year we ask our staff a number of questions in our annual staff sustainability survey. Of the 447 members of staff that completed the survey 98% said that it is important for the Trust to work in a more sustainable way.

How important do you think it is for the Trust to work in a more sustainable way?

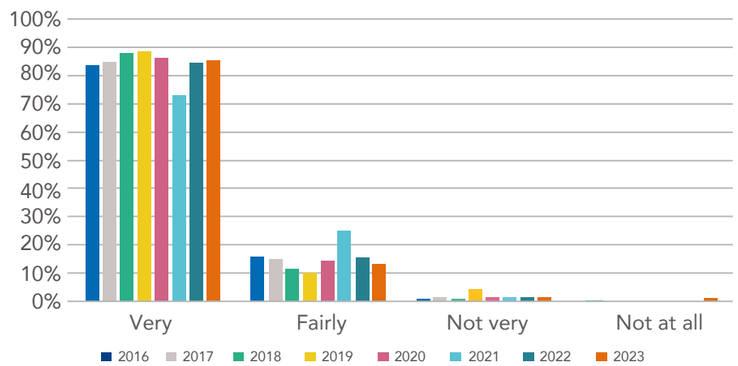


Figure 4: Staff survey – how important do you think it is for the Trust to work in a more sustainable way?

This year we had our highest rate of awareness for the sustainability work undertaken by the Trust. 85% of staff were aware, which is an increase from 78% the year before.

Are you aware of the sustainability work of the Trust?

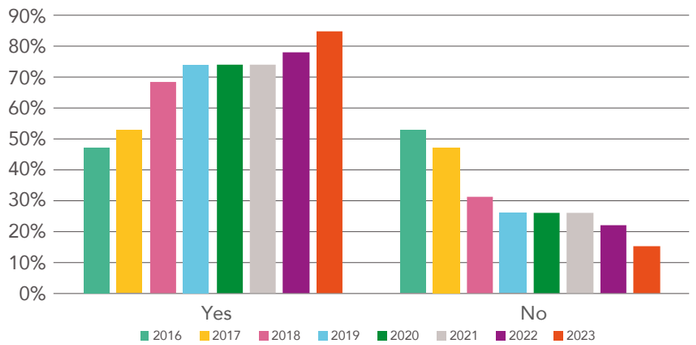


Figure 5: Staff survey – are you aware of the sustainability work of the Trust?

98% said that it is important for the Trust to work in a more sustainable way.

This year we also asked:

In the current Trust Strategy, there are five overall priorities - 5 'P's - for the organisation to focus on Patients, People, Partnerships, Pioneers, and Performance. As the strategy is due to be refreshed and reviewed, do you think it is important for Planet to be included as an additional priority for the Trust?

Should there be a 6th "P" for Planet in the Trust Strategy?

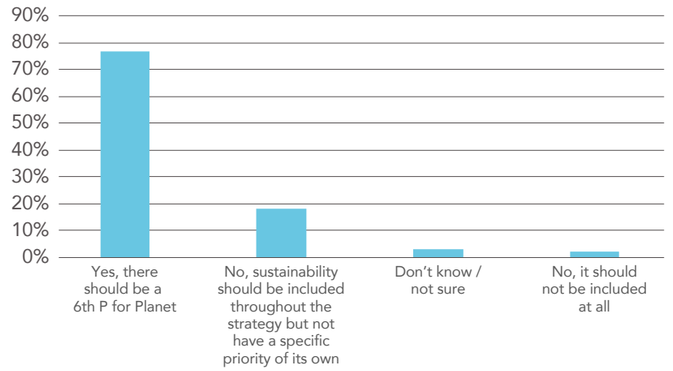


Figure 6: Staff survey – should there be a 6th "P" for Planet in the Trust Strategy?

We had lower response rates this year to our staff survey, with 447 members of staff completing the survey. We acknowledge the pressure that staff are under working in the NHS and the difficulty there is in communicating about the survey to staff, and then staff having the time to complete it! We will work to engage more staff in the survey process going forward. Trends can nonetheless be seen that sustainability is increasing as a priority for staff, but acting in a more sustainable way is becoming increasingly difficult. Our Green Champion network included the 6th P for planet as an ask to Sir Jim Mackey who confirmed his agreement to sustainability being part of business as usual and to consider the 6th P for Planet as part of the upcoming Trust Strategy review in 24/25.

How easy does the Trust make it for you to act in a more sustainable way when doing your job?

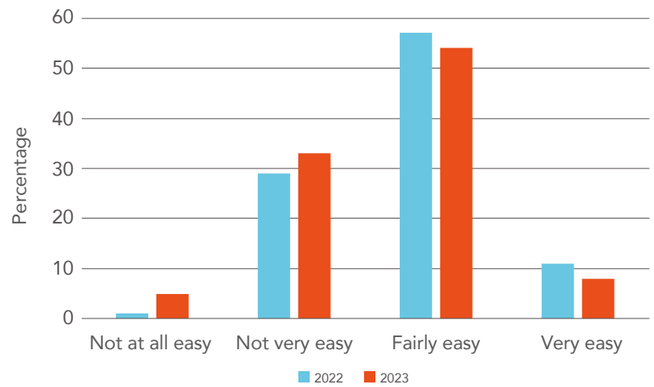


Figure 7: How easy does the Trust make it for you to act in a more sustainable way when doing your job?

3.3 Red Flag Register

As a result of the findings in our 'Red Flag' Shine Report (2021-22) a red flag register was compiled, which identified several key themes we believe must be addressed in order for us to progress towards Net Zero and most importantly remain within our carbon budget.

It is acknowledged the space that we are working in is extremely challenging, with limited resources. The CQC findings will have had an impact on staff across the Trust. The reason that we are driving this change is ultimately for the benefit of our patients, staff and local community so we remain focused on the red flags as the key to unlocking transformational change. Our ability to deliver services and care for our patients will be under threat if we do not take this action.

1. DEDICATED RESOURCE TO DRIVE URGENT CHANGE

Challenges and achievements

Appointments made to our Net Zero Estates and Energy Teams but vacant posts remain. There is a skills gap and so recruitment has proved a challenge.

We were unsuccessful in our bids for Low Carbon Skills Fund (LCSF) (Phase 4) and PSDS (Phase 3c) funding this year. This means we have progressed another year without securing the only source of funding available to decarbonise our hospital estate.

Focus for 2024-25

Prioritise a detailed estates decarbonisation pathway and applying for funding to deliver these schemes (with a particular focus on applications for LCSF 5 and PSDS 4 funding this financial year).

Suppliers at our annual Sustainable Suppliers event

2. SUSTAINABILITY CONSIDERATIONS IN ALL DECISION MAKING

Challenges and achievements

The Trust was rated "requires improvement" by the CQC. Nevertheless, Sir Jim Mackey has listened to our Green Champions request for action and has confirmed his agreement to make sustainability business as usual. We are challenged by a lack of specific resource for this.

The Procurement Team have done great work in working with suppliers to embed sustainability. This is now a requirement in all tenders.

Focus for 2024-25

Embed sustainability from ward to board through implementing the Shine 10-step framework in all clinical boards.

Embed sustainability into the Ward Accreditation Scheme and the business case template.

Solar panels being installed on Regent Point

3. SIGNIFICANTLY INCREASE INVESTMENT IN ESTATE DECARBONISATION

Achievements and challenges

Decarbonising Regent Point with the installation of LED lighting, solar panels and heat pumps. This was a £1m+ scheme, with 50% funding from a PSDS 3b government grant.

There is no internal funding available for estate decarbonisation. We are reliant on external funding which is a competitive process.

Focus for 2024-25

Work with Capital Team colleagues to ensure the limited capital allocation for critical estates backlog and refurbishment work supports our decarbonisation goals.

Our ability to deliver services and care for our patients will be under threat if we do not take this action

4. LEADERSHIP TO SIGNAL THAT ACTION ON THE CLIMATE EMERGENCY IS A TRUST PRIORITY

Achievements and challenges

James Dixon, Associate Director for Sustainability, delivered an educational workshop supported by IEMA (Institute for Environmental Management and Assessment) resources to the Trust Board on the climate emergency, the strategy, performance and what more needed to be done.

Focus for 2024-25

Ensure that sustainability is prominent in the Trust strategy refresh.

5. ACTION TO ELIMINATE WASTE AND WASTEFULNESS OF RESOURCES – MOVING TOWARDS ZERO WASTE

Achievements and challenges

Waste consigned at the disposal level of the waste hierarchy represents 1.8% of total waste.

Focus for 2024-25

Support for staff-led MDT waste reduction projects via working groups.

4. Key Action Areas

This section explores the progress made in each of our Shine action areas which feed into our three Climate Emergency Strategy goals, and the plans for next year and beyond.

We have mapped action across these areas within our existing eight Shine themes.

Energy
Minimise energy use and replace fossil fuels with zero carbon energy sources

Water
Minimise water use

Waste
Dispose of less, reuse and recycle more

Buildings & Land
Provide healthy, sustainable and biodiverse spaces

Journeys
Embed active, clean, low carbon travel

Procurement
Work with our supply chain to decarbonise

Care
Develop low carbon care pathways adapted to our changing climate

People
Inspire, inform and empower our people to deliver sustainable healthcare

4.1 Energy & Water

AIM: ENERGY

Reduce carbon emissions from energy use, in line with science informed budgets, to be on track for net zero by 2030:

- Use less energy.
- Replace fossil fuels with low and zero carbon energy sources.
- Investigate options to offset, or inset, our residual carbon emissions.

AIM: WATER

Minimise water use in our buildings:

- Eliminate wasted water.
- Increase water efficiency.

Despite the challenges, Newcastle Hospitals, working closely with PFI partners managed to reduce overall emissions from both electricity and gas.

PERFORMANCE

The Trust have faced significant challenges as a result of instability within the energy sector, increasing demand for electricity, limited funding for net zero projects and vacancies in our Energy Team and Net Zero Estates Team.

Despite the challenges, Newcastle Hospitals, working closely with PFI partners managed to reduce overall emissions from both electricity and gas.

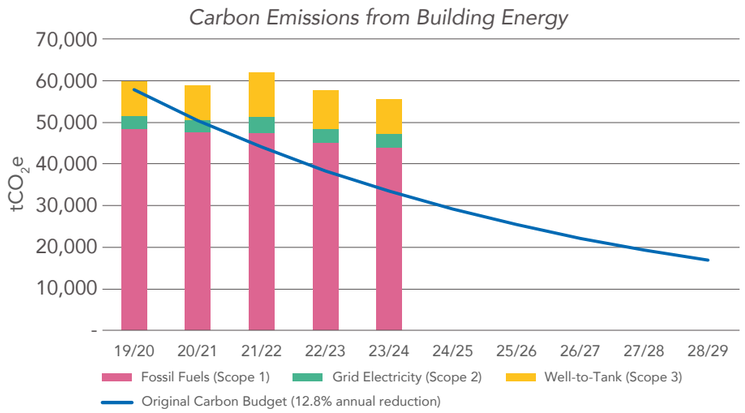
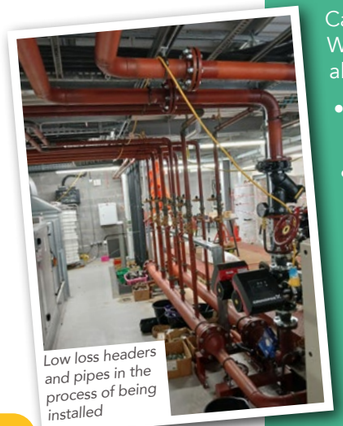


Figure 8: Carbon Emissions from Building Energy

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR

Carbon emissions from building energy for 2023/24 are 2.5% lower than in 2022/23. While these are our lowest emissions to date, they still fall short of our science-aligned carbon budget target.

- Decarbonisation work at Regent Point began as part of the PSDS funded programme of works
- Completion of hydronic modelling of the Freeman building as part of a Heat Network Efficiency Scheme (HNES) funded project
- Completion of alpha phase of the Energy Catapult inform project, to create a tool for modelling energy use
- Continued roll out of LED lighting at RVI and Freeman, including 30% of lighting in the Clinical Resources Building
- Application for LCSF Phase 5 funding to complete a geothermal desktop survey
- Successful on boarding of a Net Zero engineer and Assistant Energy Manager.



Low loss headers and pipes in the process of being installed

PLANS FOR THE NEXT YEAR

- Recruitment to remaining vacancies
- Continue to improve energy and water metering
- Continued roll out of LED lighting and installation of solar panels
- Development of heat decarbonisation plans for community properties
- Estates rationalisation: withdrawal from the Campus for Ageing and Vitality (CAV) site
- PSDS phase 4 application
- Further exploration into sourcing heat from geothermal energy and city heat networks

Electrical cable for PV being installed on the roof of Regent Point

LED lights being installed

CASE STUDY: REGENT POINT

PV panels being installed onto the frame, on the roof of Regent Point

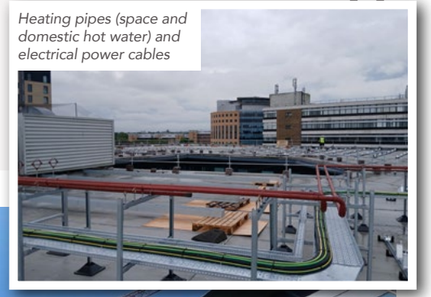
Work has begun to decarbonise Regent Point. £1m+ was allocated to the project, with 50% match funding provided by SALIX via the PSDS Phase 3b.

The project is expected to finish in the autumn.

The works involve:

- LED lights in place of less efficient fluorescent tube panels
- Heat pumps for the entire energy demand of the building – space heating and domestic hot water
- Solar panels to generate ultra-low carbon electricity
- Building management system (BMS) upgrades to allow better control of heating.

The project is anticipated to save 120 tonnes of carbon dioxide per year and is the first building in our estate to fully transition away from fossil fuels.



Heating pipes (space and domestic hot water) and electrical power cables

A heavy duty crane was required to lift the solar panels, structural steel and heat pumps onto the roof of the building

4.2 Journeys & Clean Air

AIM

Embed active, clean and low carbon travel to improve air quality and reduce carbon emissions from journeys:

- Reduce air pollution and carbon emissions from our owned and commissioned transport operations
- Use our influence to help fast-track the decarbonisation of transport in our supply chain
- Increase the proportion of people accessing our sites by active and sustainable travel methods
- Provide more care closer to, or at, home

PERFORMANCE

We have seen an increase in the emissions from our Trust Fleet, as additional data has been identified and incorporated into our calculation, and slight increases in emissions from business travel.

Travel within Newcastle Hospitals Carbon Footprint

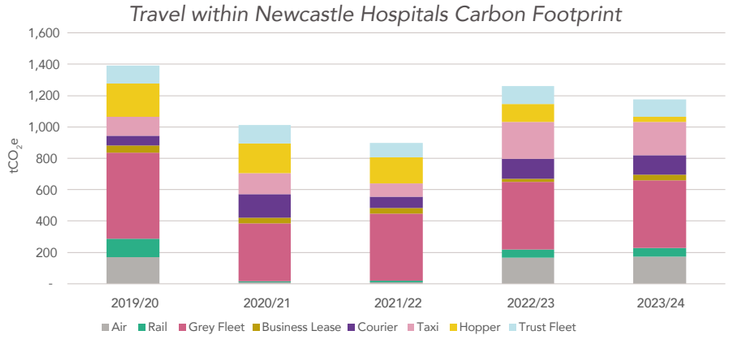


Figure 9: Carbon footprint from travel within the Newcastle Hospitals Carbon Footprint

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR, JOURNEYS

- Tesla pool cars have been loaned for community nurses, with two electric vehicles based at Newburn and two based at Regent Point
- A trial for transporting patients via an EV minivan for dialysis has commenced. There will therefore be fewer journeys as multiple patients can be transported, and they will travel with no tail pipe emissions
- The road works on Queen Victoria Road will improve the safety of the route into the hospital for cyclists and pedestrians and bring a bus stop to just outside the hospital
- Solar panels have been installed on the roof of the new multi-storey car park on our RVI site (providing zero carbon electricity for its LED lighting and electric vehicle charging points)

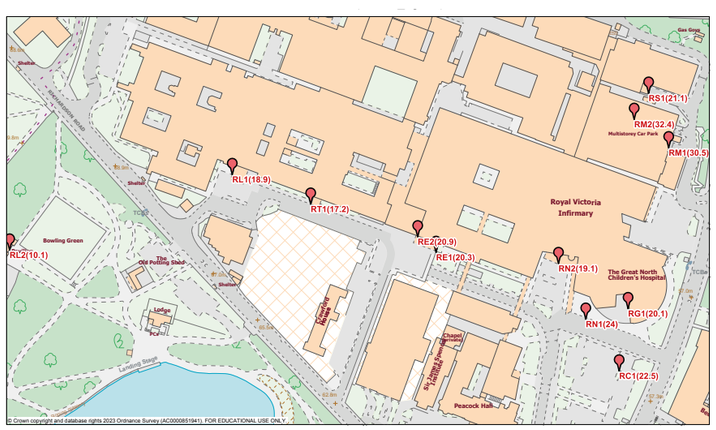


Figure 10: NO_2 Air Quality Monitor locations and readings (September 2023) at Royal Victoria Infirmary (RVI)

Babatunde Okeowo presenting his PhD research on Newcastle Hospitals Clean Air Hospital Framework

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR, CLEAN AIR

- We have 48 indoor and outdoor air quality monitoring devices across both the Freeman and RVI Hospital Estates, including an Urban Observatory Environmental Monitoring Unit, integrated into the wider city Air Quality Monitoring data
- Our PhD Research Student has completed extensive analysis of monitoring data and produced maps of air quality levels across the estate
- Held our first Clean Air Day to raise awareness of the impact of poor air quality and actions that can be taken to reduce exposure
- Our self-assessed score against the Clean Air Hospital Framework (CAHF) has increased from a baseline of 17% to 38%, representing progress from starting out to getting there within the framework
- Developed a prioritised action plan detailing projects and interventions to tackle indoor and ambient air quality at our hospitals
- Non-smoking multi-team collaboration work to reduce smoking on-site

We would like to use our influence to help fast-track the decarbonisation of transport in our supply chain

PLANS FOR THE NEXT YEAR

- Continue to work to move our Trust fleet to electric vehicles
- Improve infrastructure for active travel
- Achieve a score of 50% on the Clean Air Hospital Framework as we progress towards our published target of excellent status by 2025 (over 70%)

CASE STUDY: HOPPER BUS

The staff 'Hopper' bus service, which transports staff between our RVI and Freeman hospital sites, has operated via an all-electric bus since December 2022. The move from a vehicle powered by fossil fuels to an electric vehicle means we have saved 144 tonnes of CO_2e and improved the quality of the air for our patients, staff and our local communities.

4.3 Waste

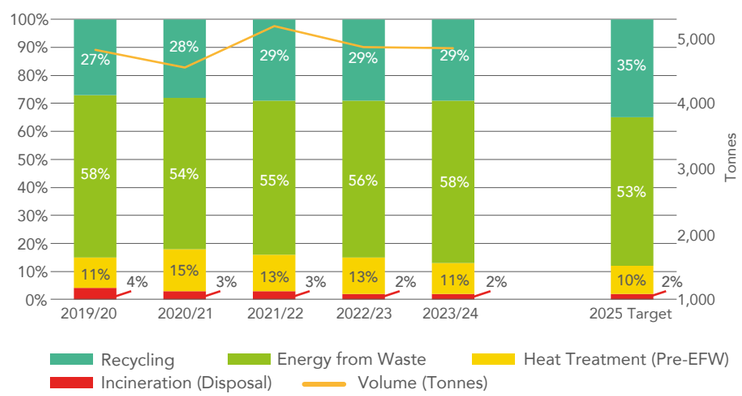
AIM

Generate less waste; reuse and recycle more, and ensure unavoidable waste is disposed of in the most sustainable way:

- Reduce the amount of waste we create by working and purchasing in more resource-efficient ways
- Increase the number of items we reuse with a focus on reducing single-use plastics
- Repair or reuse more items that can be repaired or reused
- Increase the amount of waste that we reuse or recycle to 35% of consigned waste by volume

PERFORMANCE

Annual Waste Performance



Total annual waste disposed of by waste outcome

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR

- Waste volumes are very slightly lower than last year, however still marginally higher than our 2019-20 baseline year
- Work is ongoing to reduce waste volumes, including via a number of working groups in Pharmacy, Theatres and Integrated Laboratory Medicine
- The majority of Trust waste is sent for energy recovery and 29% of waste is currently recycled. No Trust waste has been sent to landfill since 2011
- We are ahead of national targets to reduce the clinical waste that we send for incineration
- Using large reusable sharps boxes (MR64s), for capturing single-use metal instruments in theatres and key departments, has enabled greater recycling of a waste stream that was previously incinerated. Last year over 4 tonnes of metal instruments were recycled
- Waste segregation training is now featured as part of the corporate induction for all staff, as part of the sustainability section
- A New2you clothes swap event was held at the RVI and the Freeman. Helping to facilitate the reuse of clothing and textiles

▲ *RVI Ward 23 and Pharmacy Teams nominated for a Celebrating Excellence award for their work on reducing wasted medicines*

PLANS FOR THE NEXT YEAR

- Continue to embed waste management into corporate induction and improve local induction guidance, including specialised training for key departments
- Develop metrics for measuring and reporting waste prevention and re-use
- Increase opportunities for recycling and implement the non-infectious waste stream in our Emergency Department and in community sites where appropriate
- Continue to work with established working groups and clinical departments to identify opportunities for waste reduction and removal of single use items
- Expand food waste recycling at our main hospitals

▲ *New2you clothes swap event*

CASE STUDY: THEATRE SUSTAINABILITY WORKING GROUP

A Theatres Sustainability Working Group has been set up which is a cross directorate working group to embed sustainable projects into theatres across the Trust. They have been working on pilot projects with support from funding from the **Climate Emergency Action Fund**, focusing on avoiding single use items and reducing energy consumption. Projects include reusable laryngoscopes, reusable cloth theatre hats, reusable drapes and gowns and shutting down ventilation and other theatre equipment when not in use.

Small amounts of funding from the Climate Emergency Action Fund has allowed this committed group of staff to pilot these projects with an aim to overcome hurdles to implementation and showing carbon and cost savings and rolling them out across the Trust.

Staff in the Day Treatment Centre (DTC) at Freeman Hospital have been trialling various reusable options, including laryngoscopes, theatre hats and containers for transporting theatre instruments. The hats have received a warm welcome within the DTC. Staff are engaged in their use and report increased familiarity with members of the MDT, which is impacting positively on working relationships within theatres.

"The DTC should be massively commended for their approach to sustainability. They really are a great example of how effective a healthcare team can be in initiating change." Dr Louise Sanderson, Consultant Anaesthetist

DTC staff with their reusable cloth theatre hats

4.4 Procurement

AIM

Embed sustainability and support for climate emergency action into all purchasing decisions, working towards a net zero carbon supply chain:

- Consume less
- Embed carbon reduction into our procurement processes
- Establish positive relationships with key suppliers
- Engage in research and innovation in order to reduce impact across whole value chain
- Improve confidence in our supply chain carbon data
- Invest more in our local supply chain
- Increase the amount of sustainable, local, healthy food available to staff, patients and visitors

To improve our confidence in the accuracy of our supply chain carbon data, and track progress towards our 2040 Net Zero target, we have developed a 5-step Net Zero Carbon Supplier Framework to enable us to collect data from our suppliers

PERFORMANCE

Carbon emissions associated with our purchased goods and services are included in our Carbon Footprint Plus results on page 14. To improve our confidence in the accuracy of our supply chain carbon data, and track progress towards our 2040 Net Zero target, we have developed a 5-step Net Zero Carbon Supplier Framework to enable us to collect data from our suppliers. The framework supports organisations of all sizes to report and reduce carbon emissions. 840 suppliers engaged with the 5-step framework this year and 87% confirmed their support for our Net Zero 2040 target. 40% of our reported data now comes directly from suppliers improving our data quality and ability to influence suppliers to reduce their carbon emissions.

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR

- Following a 3-year voluntary engagement phase, which saw approximately 25% of our supplier base take part, we have mandated our 5-step Net Zero Carbon Supplier Framework for all suppliers to the Trust
- We continue to build a bank of case studies and resources to support suppliers with their journey to Net Zero and we host these on our Sustainable Supplier Webpage: https://www.newcastle-hospitals.nhs.uk/about/sustainable-healthcare/sustainable-suppliers/
- Over 100 local supply chain companies attended the Annual Sustainable Supplier Event held at St James Park Newcastle. Recordings of event presentations were added to the Sustainable Suppliers webpage so accessible to our global supplier community
- Joined the Net Zero North East Public Sector Sustainable Procurement Workshop series to Collaborate and share learning with other organisations
- Initiated conversations with one supplier to investigate the feasibility of an off-site furniture reuse scheme
- Social Value included in every tender process (10% weighting)

▲ *Procurement Team nominated for a Celebrating Excellence award for their work with suppliers supporting our net zero goal*

820 suppliers engaged with the 5-step framework this year and 87% confirmed their support for our Net Zero 2040 target

PLANS FOR THE NEXT YEAR

- Increase levels of reporting via our 5-step Net Zero Carbon Supplier framework, in order to Improve confidence in our reported supply chain carbon emissions and progress towards Net Zero
- Launch a Low Carbon Supplier Hub on LinkedIn to promote knowledge share and collaboration within the supplier community
- Complete feasibility study for an off-site furniture reuse scheme
- Upskilling all procurement staff B4 and above in Carbon Literacy
- Develop and implement a Sustainable Procurement Decision Making Tool
- Continue to collaborate and share learning with other organisations, in order to standardise approaches to sustainable procurement

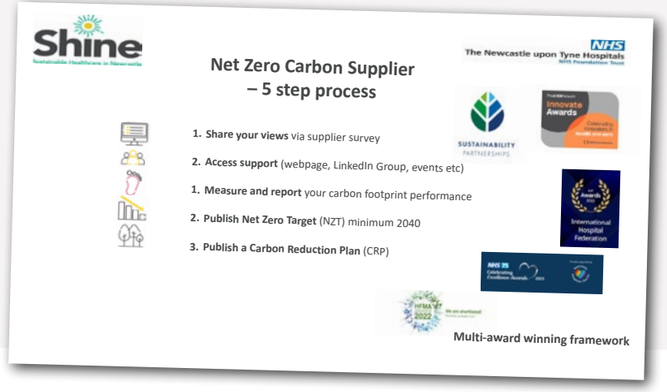
CASE STUDY: ANNUAL SUSTAINABLE SUPPLIER EVENT

We held our third annual Net Zero Carbon Supplier event on 12 July 2023, at Newcastle United Football Club.

Sponsored by the Academic Health Science Network for the North East and North Cumbria (AHSN NENC), and attended by over 100 local businesses (online recordings were also available to the wider supplier community), the event explored the role of suppliers in supporting Newcastle Hospitals Net Zero aspirations as well as wider goals for the City, Region and the National NHS.

The event outlined the new contractual requirements for all suppliers to follow our 5-step Net Zero Carbon Supplier Framework to promote innovation, collaboration, and knowledge share. There were also meet the buyer sessions to provide the opportunity for suppliers to discuss low carbon products and services.

Suppliers at our annual Sustainable Suppliers event



4.5 Models of Care

AIM

Develop low carbon care pathways adapted to our changing climate:

- Engage in research and innovation in order to lower carbon across our care pathways
- Lead on the systematic reduction of anaesthetic gas environmental impact across all care pathways
- Collaborate to reduce the carbon footprint of respiratory care through a detailed review of inhaler prescription and use
- Empower our clinicians to improve the sustainability of their models of care

Piped nitrous oxide has been decommissioned at Freeman Hospital and we are working with clinical teams at RVI to reduce nitrous oxide waste where it is still clinically required

PERFORMANCE

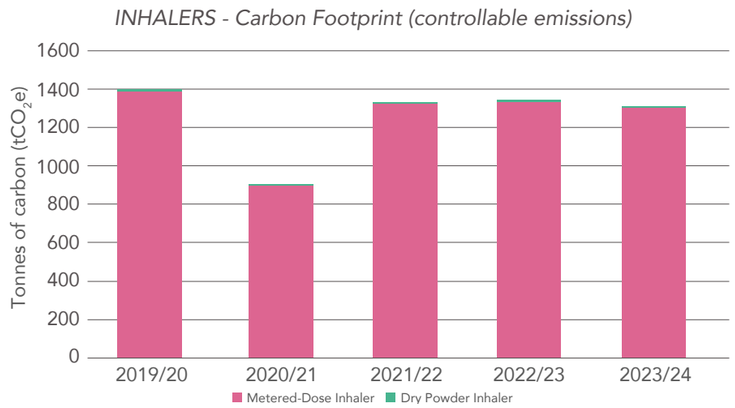


Figure 11: Carbon Footprint from inhaler prescribing at Newcastle Hospitals

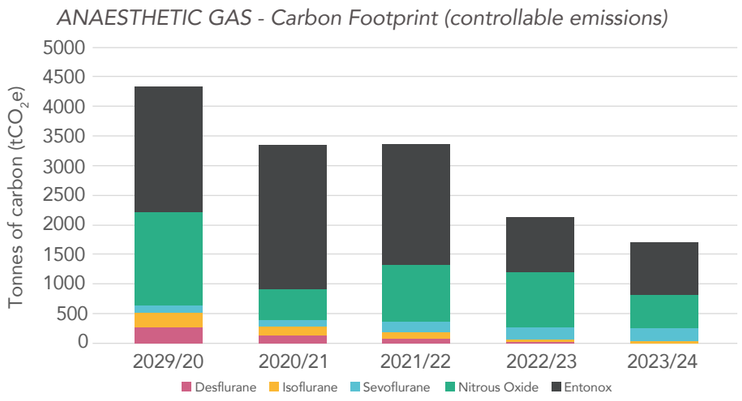


Figure 12: Carbon emissions from anaesthetic gas use at Newcastle Hospitals

Katy Whitehouse nominated for a Celebrating Excellence Award for her work in reducing emissions from anaesthetic gases

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR

- Desflurane, which has a global warming potential 2,500 times greater than carbon dioxide, has been decommissioned. This volatile anaesthetic was last used in the Trust in June 2022, ahead of NHS England's commitment to decommission it nationally by early 2024[5]
- Nitrous oxide cracking technology is now well established in Maternity Services at RVI, which has led to a significant reduction in carbon emissions associated with our use of pain-relieving gas & air (Entonox)
- Piped nitrous oxide has been decommissioned at Freeman Hospital and we are working with clinical teams at RVI to reduce nitrous oxide waste where it is still clinically required
- Funded by the Newcastle Hospitals Charity, and co-managed by the Centre for Sustainable Healthcare, we have two part-time Clinical Sustainability Fellows, Emma Vittery with a Paediatric background and Fatima Tahir working part time in Oncology. Fatima has concluded work on a project showing that switching from oral morphine solution to pills significantly reduces the carbon footprint of this medication. Emma has worked on embedding sustainability into Trust governance, calculating carbon and cost savings (including medication formulation switches, and paper to electronic reporting), smoke-free air and engaging young patients in nature
- The Sustainability Team have supported the Emergency Preparedness Resilience and Response Team, to review the existing Severe Weather Plan and the Business Continuity Plans to ensure climate risks have been identified and planned for. The outcomes fed into the board approved Climate Adaptation Plan, which will be governed by the newly established Climate Adaptation Operational Group. With a commitment to continually review and refresh these documents, we have led a region wide series of workshops to collaborate on an updated master Climate Risk Register

PLANS FOR THE NEXT YEAR

- Work on the Born Green Generation project to embed sustainability into maternity care and protect the next generation from the harmful effects of plastics and chemicals
- Continue our work on mitigating the impact of our nitrous oxide and Entonox gas emissions by reducing wastage, for example by reducing piped nitrous oxide at the RVI (building on the successful decommissioning work at Freeman)
- Re-invigorate our work on reducing the impact of inhalers both by educating patients on effective use and whether a change can be made from Metered-Dose Inhaler to a lower carbon Dry Powder Inhaler
- Work with clinical teams to support them in identifying how they can embed sustainability into care pathways
- Hold an event for suppliers to showcase climate adaptation solutions, to be facilitated by HINENC (Health Innovation North East and North Cumbria)

[5] Association of Anaesthetists and Royal College of Anaesthetists Joint statement on NHSE's plan to decommission desflurane by early 2024

CASE STUDY: BORN GREEN

We are proud to confirm the launch of the Born Green Generation at Newcastle Hospitals; a movement to protect babies from the harmful effects of plastics and chemicals.

Over the next 3 years, the Trust is embarking on a unique project with **Health Care Without Harm Europe** and European healthcare institutions and universities. We will work together to show that toxic-free healthcare is possible and to make it a global norm.

The experiences and environments that shape babies' first 1,000 days, from conception to their second birthday, play a crucial role in influencing their future health. In this vulnerable stage, babies are routinely exposed to harmful chemicals and plastic products during their hospital care from items that could have safer alternatives like disinfectants, plastic gloves and disposable gowns. Exposure can lead to severe and lasting health issues, from chronic diseases, diabetes and even cancer, as babies' defence systems are not yet developed.

Research Midwife Aly (Alison) Kimber and Obstetrics and Gynaecology Registrar Dr Amy Manning who lead on the project

4.6 Buildings and Land

AIM

Provide healthy, sustainable and biodiverse spaces for patients, staff and visitors:

- Include opportunities for sustainability innovations in all new builds and refurbishments based on recognised standards
- Build climate adaptation and resilience into our management of existing estate as well as all new builds and refurbishments
- Expand our green space and enhance the biodiversity of our land

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR

- Launched our 30-year Biodiversity Management Plan
- Improved the existing hedgerows at the Freeman hospital with more indigenous planting and enhanced wooded areas with woodland bulb planting, bat and bird boxes
- Completed our 3rd annual biodiversity metric audit to enable us to track the impact of the Biodiversity Management Plan
- Using funding from our Climate Emergency Action Fund, and Newcastle Charities, completed two Green the Grey projects in areas of courtyard identified by green champions as ideal locations to create green space for the benefit of patients, staff and visitors
- A sensory garden has been co-designed with hospital staff and contributions from child patients, by way of a design competition, for the courtyard in the RVI outpatients department
- Staff continue to contribute to the Green Gym established by Dr Suren Kanagasundaram who co-leads it with his Green Nephrology colleague Toni Poole, for example by planting hedgerow on the Town Moor

"Since we launched the Newcastle Hospitals Green Gym in May 2018, we have held nearly 50 conservation events for staff, family and friends ranging from beach cleans and tree and hedgerow planting, to habitat creation, wildlife walks and the restoration of a Victorian walled garden. We were runners up on the 2019 Celebrating Excellence awards and played our part in an Environment Agency award for a wetland development in Northumberland. However, the most satisfying part of Green Gym for me has been the way that participants have not only done their bit for nature but have felt empowered to speak up about the environment in their workplaces and schools."

DR SUREN KANAGASUNDARAM
Founder and co-lead of the Green Gym

PLANS FOR THE NEXT YEAR

- Create a pond on site to boost our biodiversity metric and provide a wonderful resource to boost health and wellbeing of patients, visitors and staff at Freeman Hospital
- Create a map showing walking routes around our Estate and promote use of greenspace by patients, staff and visitors
- Access funding to complete Ismail's garden, a redesign of the children's playground area at the RVI by a young patient
- Access funding to complete the sensory garden in the RVI outpatients department

CASE STUDY: THERAPY SERVICES COURTYARD

Approximately 100 clinical and admin staff from Physiotherapy, Occupational Therapy, Dietetics, Podiatry and Speech and Language Therapy are based at the Freeman. Staff accessed funding from the Climate Emergency Action Fund project to 'green the grey'. The installation of planters, a couple of which have trellises, has greatly enhanced the environment, and bedding plants, herbs and climbers have been included following input from staff around what they would like to see. It has created a much more attractive space for staff to spend breaks in, when weather allows, after working on the wards, but importantly also to view from the inside of the building in the rest room/ kitchen which we hope enhances wellbeing and has generated a lot of conversation and further ideas! An additional impact will be in maintaining the plants and flowers, staff can be part of the 'green gym' initiative, consequently reducing maintenance costs for the Trust.

Therapy Services Courtyard

Using funding from our Climate Emergency Action Fund, and Newcastle Charities, completed two Green the Grey projects in areas of courtyard identified by green champions as ideal locations to create green space for the benefit of patients, staff and visitors

4.7 People

AIM

Inspire, inform and empower our people to deliver sustainable healthcare:

- Embed Shine and climate emergency action into the culture of our organisation, demonstrated in staff behaviours
- Upskill our workforce and ensure capacity to address the climate emergency
- Empower our people to make the most sustainable choice
- Extend our reach to influence action amongst our wider stakeholders, including patients

PERFORMANCE

- 38 Green Champions Plus
- 540 Green Champions
- 22 Sustainability Ambassadors
- 59 tonnes of CO_2 avoided through Shine Reward App actions
- 22 Climate Emergency Action Fund projects funded
- 1,440 @sustainableNUTH Twitter followers
- 98% of staff think sustainability is important

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR

- Our Shine 10 step framework is being followed by a number of departments and directorates, including Clinical Research, Dietetics, ILM and procurement
- Integrated Laboratory Medicine launched their sustainability work at events across Great Big Green Week in June 2023. They have been awarded a bronze award for the laboratory Efficient Assessment Framework (LEAF), which are standards set by University College London, and are working towards a silver award. They have been nominated for their sustainability work in the Institute of Biomedical Sciences awards. More information about their progress can be found here
- There is a sustainability slot on Corporate Induction for new starters to learn about the Climate Emergency Strategy, and key information about our waste policies
- Procurement were awarded the Shine Award, at the Trust Celebrating Excellence Awards 2023, for their work on embedding sustainability into tenders and their sustainable work with suppliers

Integrated Laboratory Medicine Sustainability Team nominated for a Celebrating Excellence Award for their work on embedding sustainable practices

Procurement Team: winners of the Sustainable Healthcare in Newcastle (Shine) Celebrating Excellence Award 2023

PLANS FOR THE NEXT YEAR

- Work with clinical boards to embed sustainability using our Shine 10 step framework
- Embed sustainability training further by including it in statutory and mandatory training
- Ensure we continue to empower and engage our Green Champion network by raising their profile through regular Trust wide and external communications.

CASE STUDY: GREEN CHAMPION NETWORK ENGAGEMENT

At an in-person Green Champions network meeting in December it was agreed to issue a collective call for action to the Executive Oversight Group (EOG) for Climate Emergency. A draft letter was prepared and shared with the wider network. At short notice, it gained over 100 endorsements from Green Champions ahead of being tabled at the January EOG. The letter, and its proposal for three zero-cost high-impact actions, was supported at the meeting with an action to take it to Trust Management Group to gain formal approval. In the meantime, our new CEO Sir Jim Mackey was listening to staff concerns and working with his new Executive Team on the work to prioritise across the Trust. One of these priorities was the Climate Emergency and our next steps. James Dixon, Associate Director – Sustainability, and Dr Suren Kanagasundaram, Consultant Nephrologist and clinical representative at EOG, attended the Executive Team meeting on 6th March 2024 to discuss this. At the meeting, James shared the Green Champion letter and outlined each of the three 'asks', which received support from Sir Jim. He reiterated his support for making climate emergency action business as usual for the Trust and that he wanted to help deliver visible actions on the ground.

Dear Sir Jim,
we are writing as a collective to ask you to make three simple, zero cost decisions that we believe will have a big impact:

1. Include Sustainability within the mandatory training requirements, and in Trust Induction for all new starters.

2. Introduce a 6th P for Planet within the Trust strategy – ensuring all strategic decisions consider the Climate Emergency as standard.

3. Mandate the Shine 10-step framework for each Clinical Board, meaning that each board will be required to nominate a sustainability lead working on the most significant areas of impact, supported by expertise from both the Sustainability and Newcastle Improvement Teams.

Yours sincerely,
Green Champions

Shine GREEN CHAMPION

5. Technical Appendix

In our Climate Emergency Strategy 2020-2025 we included a commitment to measure our performance across each of our eight Shine themes and report this publicly. We appreciate that this level of detail would make our Annual Shine Report very lengthy and hard to read, so we have included some headline performance data within this report. Our full key performance indicators are available on request along with our SECR compliant carbon footprint, by emailing nuth.environment@nhs.net

5.1 Overall Performance

In our Climate Emergency Strategy we set out three long term goals, and the actions we planned to take by 2025 for the eight Shine themes.

This is an overall summary of how we are progressing towards those goals, and the published actions. More detailed progress reports are included for each area in the next section of the report.

KEY

Red
Not on track and at serious risk of not being achieved

Amber
Not on track but still achievable by target date

Green
On track to be achieved by target date

GOAL	RAG RATING	DESCRIPTION
Zero Carbon Care		By 2030 the emissions we control will be net zero – our 'Newcastle Hospitals Carbon Footprint'
Clean Air		By 2030 our operational transport activities generate no harmful air pollution
Zero Waste		By 2030 we will reuse and repair everything that can be reused and repaired

SHINE THEME	RAG RATING	What do we want to achieve by 2025 (Climate Emergency Strategy commitment)
Energy & Water		Reduce carbon emissions from energy use, in line with science-informed carbon budgets, to be on track for net zero by 2030: • Use less energy • Replace fossil fuels with low and zero carbon energy sources • Investigate options to offset, or inset, our residual carbon emissions Minimise water use in our buildings: • Eliminate wasted water • Increase water efficiency
Journeys & Clean Air		Embed active, clean and low carbon travel to improve air quality and reduce carbon emissions from journeys: • Reduce air pollution and carbon emissions from our owned and commissioned transport operations • Use our influence to help fast-track the decarbonisation of transport in our supply chain • Increase the proportion of people accessing our sites by active and sustainable travel methods • Provide more care closer to, or at, home
Waste		Generate less waste; reuse and recycle more, and ensure unavoidable waste is disposed of in the most sustainable way: • Reduce the amount of waste we create by working and purchasing in more resource-efficient ways • Increase the number of items we reuse with a focus on reducing single-use plastics • Repair or reuse more items that can be repaired or reused • Increase the amount of waste that we reuse or recycle to 35% of consigned waste by volume
Procurement		Embed sustainability and support for climate emergency action in to all purchasing decisions, working towards a net zero carbon supply chain: • Consume less • Embed carbon reduction into our procurement processes • Establish positive relationships with key suppliers • Engage in research and innovation in order to reduce impact across whole value chain • Improve confidence in our supply chain carbon data • Invest more in our local supply chain • Increase the amount of sustainable, local, healthy food available to staff, patients and visitors

SHINE THEME	RAG RATING	Actions published in our Climate Emergency Strategy to be achieved by 2025
Models of Care		Low carbon care pathways adapted to our changing climate: • Engage in research and innovation in order to lower carbon across our care pathways • Lead on the systematic reduction of anaesthetic gas environmental impact across all care pathways • Collaborate to reduce the carbon footprint of respiratory care through a detailed review of inhaler prescription and use • Empower our clinicians to improve the sustainability of their models of care • Resilient care services that are adaptive to our changing climate
Buildings & Land		Provide healthy, sustainable and biodiverse spaces for patients, staff and visitors: • Include opportunities for sustainability innovations in all new builds and refurbishments based on recognised standards • Build climate adaptation and resilience into our management of existing estate as well as all new builds and refurbishments • Expand our green space and enhance the biodiversity of our land
People		Inspire, inform and empower our people to deliver sustainable healthcare: • Embed Shine and climate emergency action into the culture of our organisation, demonstrated in staff behaviours • Upskill our workforce and ensure capacity to address the climate emergency • Empower our people to make the most sustainable choice • Extend our reach to influence action amongst our wider stakeholders, including patients

6. Contact Details

This Annual Report has been produced by the Sustainability Team at Newcastle Hospitals but reflects work taking place across the Trust. All information contained within it is, to the best of our knowledge, accurate at the time of publishing.

Let us know your thoughts on this report, and how it could be improved

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7. Glossary

BREEAM – Building Research Establishment Environmental Assessment Method used to assess, rate and certify the sustainability of buildings.

Carbon dioxide equivalent (CO_2e) – A carbon dioxide equivalent or CO 2 e, is a metric measure used to compare the emissions from various greenhouse gases on the basis of their global-warming potential (GWP), by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential.

CHP – Combined Heat and Power, the production of electricity or power from a single source of energy, in this case gas.

Climate emergency – A climate emergency declaration is action taken to acknowledge that humanity is in a climate emergency, and urgent action is required to reduce or halt climate change and avoid potentially irreversible damage resulting from it.

Greenhouse gas protocol – global standardised framework to measure and manage greenhouse gas emissions.

Hybrid method – used to calculate emissions from purchased goods and services. Method uses a combination of supplier-specific activity data (where available) and secondary data to fill the gaps. This method involves collecting allocated scope 1 and scope 2 emission data directly from suppliers; and using secondary data to calculate upstream emissions wherever supplier-specific data is not available.

ICS – a statutory committee jointly convened by Local Authorities and the NHS, comprised of a broad alliance of organisations and other representatives as equal partners concerned with improving the health, public health and social care services provided to their population.

NHS E&I Net Zero Supplier Roadmap & Evergreen Framework – NHS England and NHS Improvement (NHS E&I) work together as a single organisation. In September 2021 a supplier roadmap was approved to help suppliers align with the NHS net zero ambition. The Evergreen sustainable supplier assessment is the mechanism for suppliers to engage with the NHS on the requirements of the roadmap. https://www.england.nhs.uk/greenernhs/get-involved/suppliers/

PPN 06/20 – Procurement Policy Note 06/20 (PPN06/20) applies to procurements covered by the Public Contracts Regulations 2015 and requires a minimum of a 10% weighting for social value questions.

PPN 06/21 – Public Procurement Notice 06/21 (PPN06/21) requires all companies and organisations who apply for central government contracts (above £5m framework value) to publish a Carbon Reduction Plan and demonstrate their alignment with the government's 2050 Net Zero goals.

PSDS – The Public Sector Decarbonisation Scheme (PSDS) provides grants for public sector bodies to fund heat decarbonisation and energy efficiency measures.

Shelford Group – is a collaboration between ten of the largest teaching and research NHS hospital trusts in England.

Spend-based method – used to estimate emissions from purchased goods and services by collecting data on the economic value of goods and services purchased and multiplying it by relevant secondary (e.g. industry average) emission factors.

Waste hierarchy – The waste hierarchy ranks waste management options according to what is best for the environment.

8. End Notes

Notes about methodology:

- *Newcastle Hospitals NHS Foundation Trust has adopted an operational control approach to establishing the boundary. The methodology adopted in line with the Greenhouse Gas Protocol and the BEIS Environmental Reporting Guidelines. The calculations were completed on the SmartCarbon™ Calculator using the latest UK Government emissions factors.*
- *CO_2e is the universal unit of measurement to indicate the global warming potential (GWP) of Greenhouse Gases (GHGs), expressed in terms of the GWP of one unit of carbon dioxide. There are seven main GHGs that contribute to climate change, as covered by the Kyoto Protocol: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF6) and nitrogen trifluoride (NF_3). Different activities emit different gases. Using CO_2e allows all greenhouse gases to be measured on a like-for-like basis.*
- *For National grid electricity consumption, Newcastle Hospitals NHS Foundation Trust has included factors for the transmission and distribution of electricity (T&D) losses, which occur between the power station and site(s). The emissions from T&D has been accounted for in Scope 3. As with other Scope 3 impacts, reporting T&D is voluntary but is recommended standard practice by UK Government.*
- *Well-to-tank (WTT) fuels conversion factors have been included to account for the upstream Scope 3 emissions associated with extraction, refining and transportation of the raw fuel sources to an organisation's site (or asset), prior to combustion. As with other Scope 3 impacts, reporting WTT is voluntary but is recommended standard practice by UK Government.*
- *Procurement carbon emissions are calculated using a hybrid method – deducting known scope 1 & 2 reported carbon data from suppliers from the carbon footprint calculated using a spend based method - £ spent in eclass spend categories multiplied by average carbon factors for those categories.*
- *A full SECR compliant report is available on request* https://sciencebasedtargets.org/resources/files/Net-Zero-Standard.pdf


No-one is too
small to make
a difference