



Sustainable Healthcare in Newcastle

**Putting the pieces together
to care for people and planet**

Sustainable Healthcare in Newcastle (Shine)

Annual Report 2024-25



Staff on a tour of the renewable energy technology installations at our Regent Point site



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▲ The Integrated Laboratory Medicine sustainability team who piloted the Shine-10 Step Framework and won the Sustainability Award at the Institute of Biomedical Science Awards 2024

1. Foreword

As the Acting Chief Executive of Newcastle Hospitals, I am delighted to share with you our annual Shine Report. We share in this report how we are putting the pieces together to care for people and planet. We do not have all the answers, but we will continue to seek to mitigate our impact in line with our science aligned targets and adapt to a changing climate.

We know that our staff do not want to work for a wasteful organisation. Our award-winning waste management team have developed a Waste Strategy, so that we can take a strategic approach to waste management, and ensure we are working towards a circular economy

I am delighted to share in this report our success in being **awarded over £40 million, the second biggest NHS grant ever** from the Public Sector Decarbonisation Scheme, to help us cut the greenhouse gas emissions from the Freeman Hospital and two community clinics. The work being done over the next 3 years will include installing solar panels, heat pumps and energy efficiency measures. We were able to access this funding thanks to the fantastic work of our in-house energy management and estates net zero teams. The development of these teams has enabled us to have a direct impact on areas where we have struggled in the past, ensuring we will make a step change in reducing direct carbon emissions and controlling costs.

The funding is estimated to **cut the carbon emissions** from the Freeman

Hospital by half and reduce our carbon emissions overall by a quarter. This is still not enough to achieve Net Zero by 2030, and so we acknowledge in this report we do not have all the answers. Our in-house experts are looking at innovative options to power our buildings such as geothermal energy and city heat networks, which harness the power of waste heat.

I know that **sustainability matters to our staff**. In our sustainability survey 99% of respondents said that it was important the Trust works in a more sustainable way. In this report we share how we are supporting staff to embed sustainability across the organisation. We have over 900 members of staff signed up as Green Champions, so that they can spread the word in their wards and departments. 65% of our staff have now completed the Building a Net

Zero e-learning module, helping them to understand their role in this journey. We have also embedded sustainability into our corporate induction that all new starters attend.

In collaboration with our green champions, we are embedding sustainability into the **Trust strategy**. This commitment will be included in our new 5-year strategy which will be developed this year.

We know that our staff do not want to work for a wasteful organisation. Our award-winning waste management team have developed a **Waste Strategy**, so that we can take a strategic approach to waste management, and ensure we are working towards a circular economy. The government have brought in simpler recycling legislation and a task force on the circular economy, and we want to maintain our position as a sector leader in this field.

Medication management was identified as an issue in our latest CQC report and we are working on improving this, to ensure staff know how to safely store medication and how to avoid waste, which comes at a significant financial and environmental cost.

We were the lucky recipients of funding to bring a team together to address the impacts of plastics and chemicals on some of our most vulnerable patients, the newborn child. You can read about how our **Born Green Generation** team take a hands-on approach to making improvements in the maternity wards.

We also share our progress in engaging with our suppliers, via our **5-Step Net Zero Carbon Supplier Framework**, to address the emissions from the goods and services that we procure. We held an event at Northumbria University last year,

which was opened by Sir Paul Ennals, Chair of our Board, who shared with suppliers the need for them to join us on our journey to Net Zero 2040. Sir Paul reminded us of the legal and policy requirements, but perhaps more potently, the moral imperative we all have, to consider the impact of decisions we make today on future generations.

I hope you enjoy reading this report.

Rob Harrison
Acting Chief Executive,
Newcastle Hospitals



▲ Midwives outside the Leazes Wing (RVI) where a Shine Award winning project sought to reduce the impact of smoking on site for our most vulnerable patients

2. Introduction

As Executive Lead for Climate Emergency, and Chair of the Sustainable Healthcare Committee, I am pleased to introduce the Sustainable Healthcare in Newcastle (Shine) Annual Report

In 2019 Newcastle Hospitals declared a climate emergency, acknowledging that this was also a health emergency. As we have reported every year since we launched the strategy, we are not reducing our emissions fast enough. This is the highest risk in our estates risk register and is reviewed by the Trust Board. We have quarterly Sustainable Healthcare Committee meetings, and we are in the process of ensuring our red flags, identified in the 2021-22 annual report, are embedded into our refreshed trust governance processes, following our CQC inspection and changes in our executive leadership.

Despite the challenges, in this report we share how we are **putting the pieces together to care for both people and the planet**. One of the red flags we identified was capacity. We did not have the expertise within the Trust to look at how we could reduce our reliance on fossil fuels in heating and powering our buildings. Over the last 18 months we have built that team, and they have in turn been successful in addressing another of the red flags, the capital we require

We recognise that working collaboratively is essential to realising the co-benefits of sustainability, in improving health inequalities and financial affordability

to invest in energy efficiency and renewable energy. Our net zero and energy teams have been in a position to bid for funding, and the Trust has recently received the second single biggest grant to the NHS from the Public Sector Decarbonisation Scheme, of £40.5 million, which will allow us to switch off fossil fuel gas at our Ponteland Road and Benfield Park sites, and to halve the carbon emissions from the Freeman Hospital. The team are continuing to look at funding to decarbonise the RVI, including the feasibility of adopting

innovative technologies such as geothermal and citywide heat networks.

To further support the red flag of funding the Trust Board have agreed that **Newcastle Hospitals' Charity will have a strategic focus on supporting sustainability and have allocated £500,000 of funding** to help improve our recycling facilities, making more green space for staff, patient and visitor wellbeing, clinical capacity for sustainability, staff led projects and to fund support for active travel.

We now have **over 900 Green Champions** at Newcastle Hospitals. In our last report we shared that they had made three asks to our then CEO Sir Jim Mackey, when he started at Newcastle Hospitals. The first no cost ask was for mandatory training on sustainability. 65% of our staff have completed the Building a Net Zero NHS e-learning module, so that they understand the role the NHS plays in mitigating and adapting to climate change and we have embedded sustainability into our corporate

induction for all staff. The second ask, for clinical boards to follow the Shine 10 Step Framework for embedding sustainability, has been agreed and some progress made. There are challenges for clinicians and front-line staff in being able to prioritise this work, and so embedding sustainability into everything we do remains a challenge. We recognise that working collaboratively is essential to realising the co-benefits of sustainability, in improving health inequalities and financial affordability. Lastly James Dixon, our Associate Director for Sustainability, is part of the Steering Group for developing our new Trust wide strategy, to take forward the ask of our Green Champions that there be a clear strategic priority to care for people and planet (and their suggestion of a '6th P for Planet' in our strategic framework).

I am also pleased to formally launch **Newcastle Hospitals' Waste Strategy**, seeking to implement the waste hierarchy and a transition to a circular healthcare economy. This is an innovative approach taken by our

award-winning waste management team who are committed to supporting staff and patients to reduce the environmental impact of our waste.

We have seen an **increase in our score on the Clean Air Hospital Framework**. This is thanks to work, coordinated by our PhD student Babatunde Okeowo, and projects such as our renal dialysis full-electric minivan picking up multiple patients to bring them to hospital, and the work of our Stop Smoking teams to minimise and mitigate the impact of smoking.

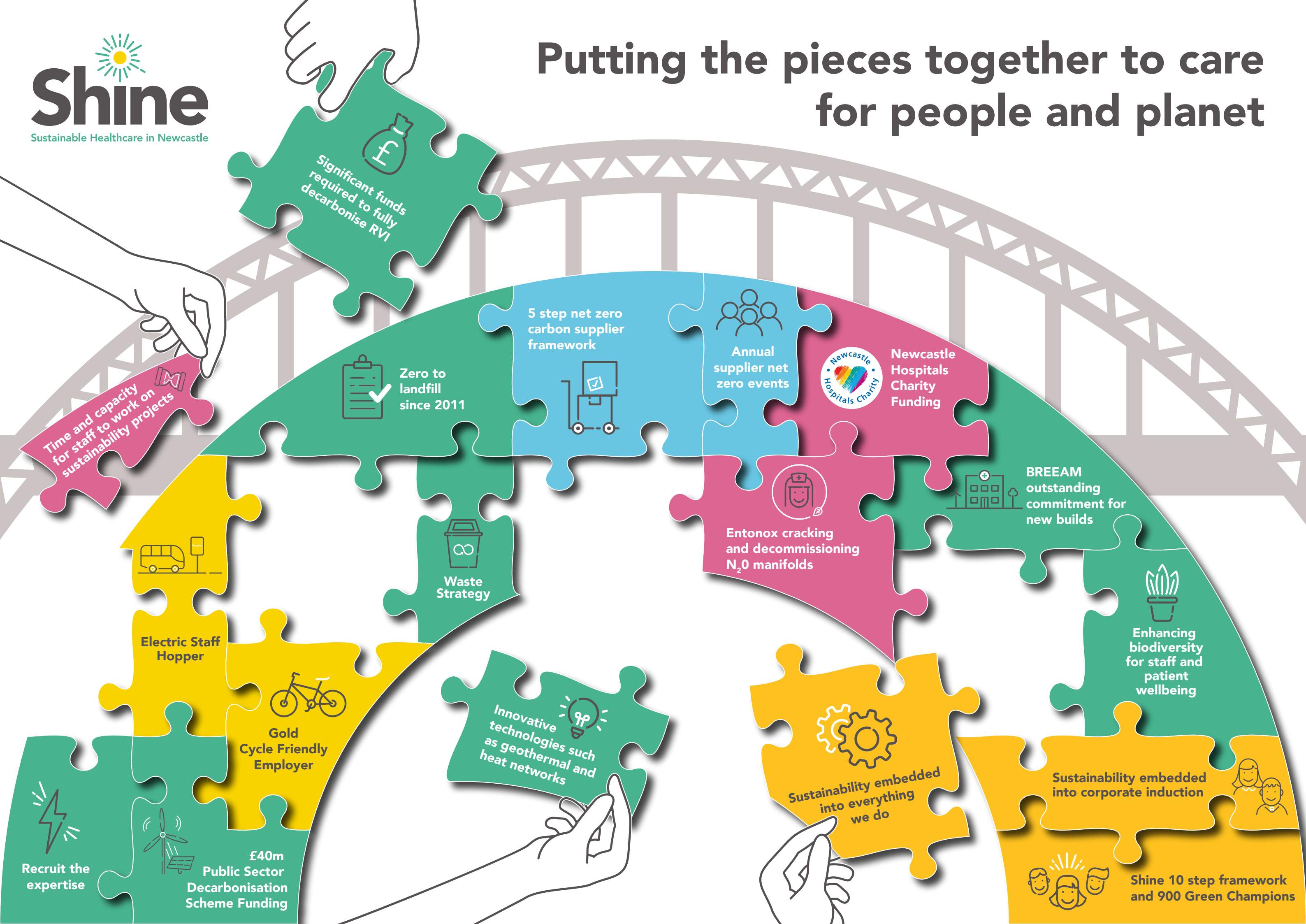
Our supplier engagement continues to go from strength to strength, via our **5 Step Net Zero Carbon Supplier Framework**. We held our fifth annual supplier event, which included talks from Sir Paul Ennals, Chair of our board, Dan Shelley, director of procurement and Anna-Lisa Mills, sustainability manager. They were able to share with our suppliers the need for them to join us on the journey to net zero by 2040 for our supply chain. As a result of this

engagement, we continue to improve the methodology for calculating our supply chain emissions and stimulate reductions in the largest portion of our carbon footprint.

We have a legal obligation to work towards net zero and address the environmental impacts of our services. New national guidance was launched this year to support provider Trusts in refreshing their Green Plans. The Climate Emergency Strategy 2020-25 (our Green Plan) expires in the next year so we will be working to develop a new strategy & plan. Our new strategy will be no less ambitious, and we will continue to advocate for a one health approach. The health of our local population cannot thrive unless we look after the environment in which they live.

Victoria McFarlane Reid
Executive Director Lead for Sustainability

Putting the pieces together to care for people and planet



3. Performance

Please see our [Climate Emergency Strategy](#) 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 ₂ e			% change from previous year	% change from baseline year
		2019-20 (baseline)	2023-24	2024-25		
Newcastle Hospitals carbon footprint	Scope 1					
	Building energy – fossil fuels	54,858	51,170	50,145	-2	-9
	Refrigerant gases	477	246	203	-18	-58
	Anaesthetic gases	4,336	1,704	1,348	-21	-69
	Trust fleet	112	110	101	-8	-10
	Scope 2					
	Building energy - purchased electricity	4,933	5,187	5,146	-1	4
	Scope 3					
	Water	441	207	185	-11	-58
	Waste	558	496	419	-15	-25
	Inhalers	1,399	1,319	1,322	0	-6
	Business Travel	1,278	1,020	919	-10	-28
Newcastle Hospitals Carbon Footprint Total		68,393	61,459	59,788	-3	-13
Patient Numbers (total patient contacts)		1,788,469	1,836,116	1,906,701	4	7
Footprint Carbon Intensity (tCO ₂ e per patient contact)		0.038	0.033	0.031	-6	-18
Medicines, medical equipment and other supply chain	Medicines and chemicals	67,952	132,625	89,132	-33	31
	Other supply chain	39,094	51,184	427,661	736	994
	Medical equipment	42,415	106,048	243,870	130	475
	Patient Transport Service	1,870	1,770	1,849	5	-1
	Procurement total	151,332	291,628	762,513	161	404
Personal travel	Staff commute	14,863	11,994	11,498	-4	-23
	Patient and visitor travel	20,387	20,470	20,790	2	2
Newcastle Hospitals Carbon Footprint Plus Total		254,975	385,551	854,589	122	235
Footprint Plus Carbon Intensity (tCO ₂ e per patient contact)		0.143	0.210	0.448	113	214

Table 1: Breakdown of Total Newcastle Hospitals Carbon Footprint¹

¹ Full carbon footprint report available on request

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 13% as compared to the baseline year (2019/20).

This is due to our work on seeking to reduce the impact of our anaesthetic gases, continued decarbonisation of our fleet, moving waste up the waste hierarchy and work to reduce energy wastage across our estate. We are continually trying to improve our calculation process so in some areas, the calculation methods have altered, or the data source is improved. For example there was a change nationally to the way waste emissions are calculated which has led to a more significant reduction in our carbon footprint for waste. See our full carbon footprint report for more detail².

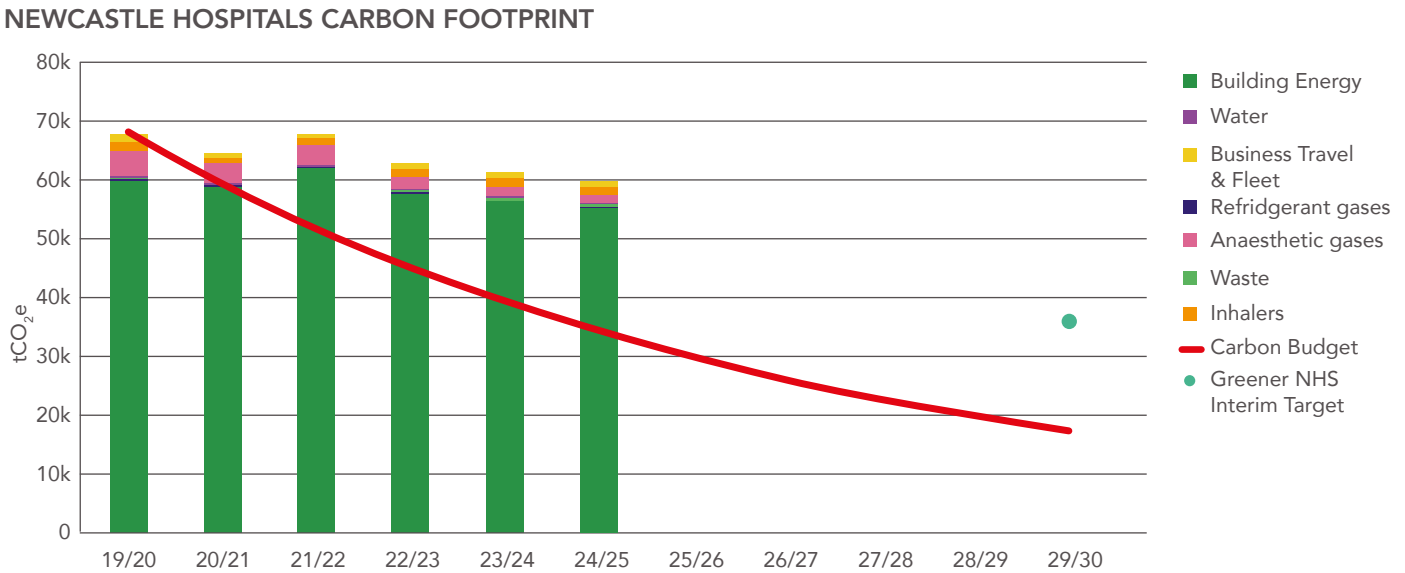


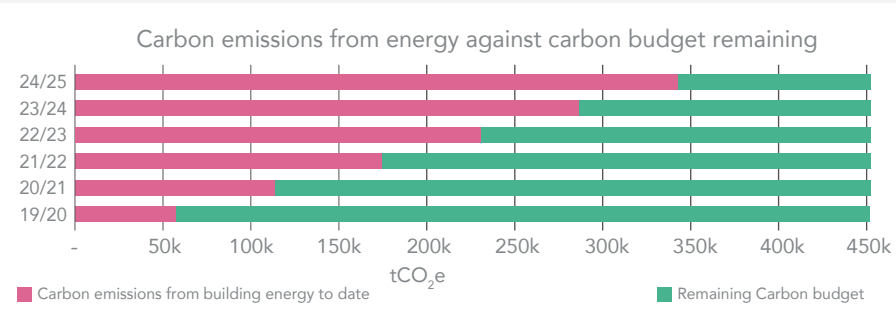
Figure 1: Newcastle Hospitals Carbon Footprint

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 for energy – 450,000 tCO₂e.

As has been reported previously, similar to the national picture, we have not achieved a sufficient reduction in emissions for the last five years and have already emitted 343,185 tCO₂e. We now predict that we will exceed our carbon budget by February 2027. This does not mean that we will stop measuring, reporting and ultimately seeking to reduce our emissions. We will continue to engage our leadership locally and nationally in the significance of this in terms of global heating and the threat to population health and to advocate for embedding sustainability into the NHS.



NEWCASTLE HOSPITALS CARBON FOOTPRINT PLUS

The methodology for reporting our carbon footprint plus has continued to evolve, following the best practice hybrid methodology of the Greenhouse Gas Protocol. In our baseline year we used a spend-based method, which provided an estimated amount of carbon dependent on how much we had spent. This does not take into account our suppliers’ efforts to decarbonise their overall organisational performance. As such we are working to **improve the accuracy of our supply chain emissions**. We now collect data directly from our suppliers, via our mandatory 5-step Net Zero Carbon Supplier Framework, so we can see supplier commitment and progress towards their own Net Zero targets.

As we **continue to capture more supplier reported performance data and further improve and evolve the methodology** (this year we have included a fuller picture of the Scope 3 emissions of our suppliers), we see a

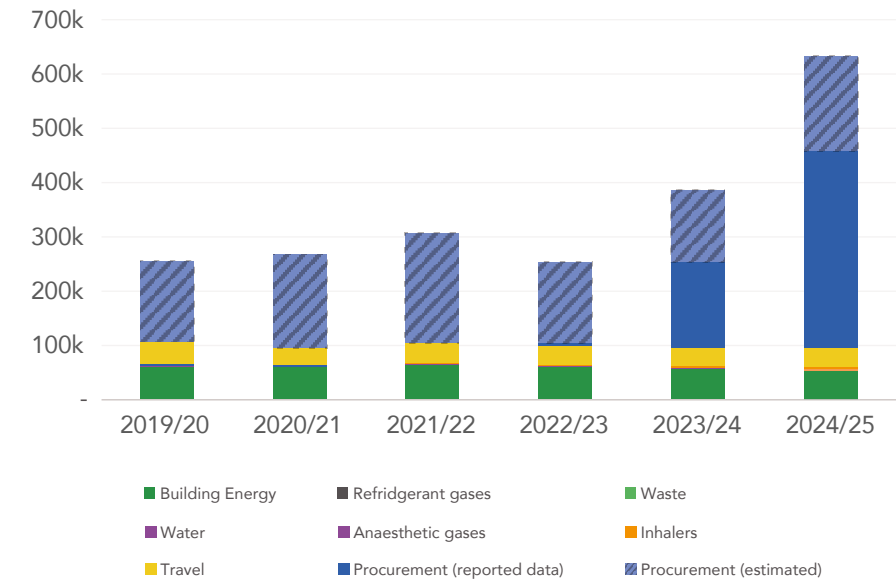


Figure 2: Newcastle Hospitals Carbon Footprint Plus

significant increase in our procurement emissions. With this new thinking and using historical finance data we will aim to re-calculate previous years emissions so that we have a better understanding of our procurement base line.

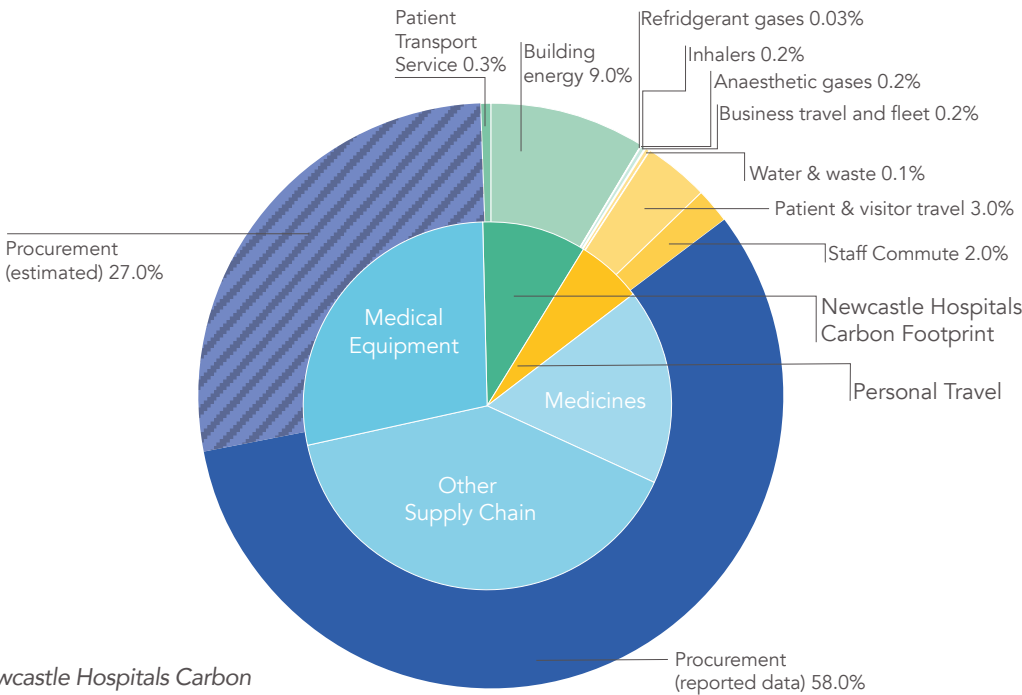
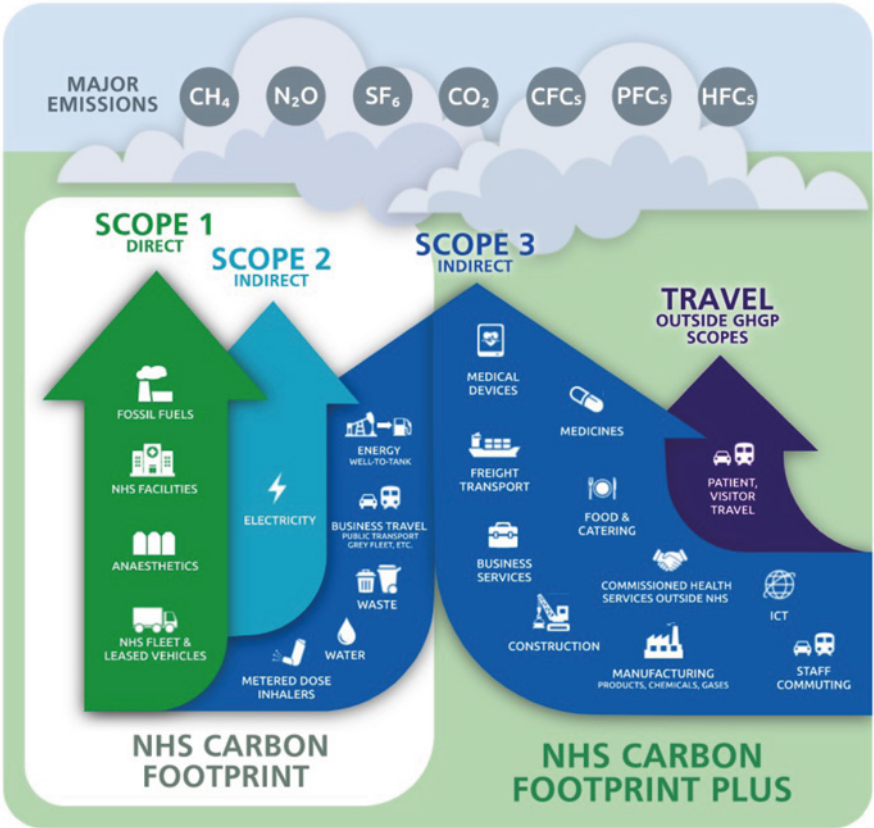


Figure 3: Newcastle Hospitals Carbon Footprint Plus Pie Chart



3.2 Staff Engagement

STAFF SUSTAINABILITY SURVEY

Every year, since 2016, we have asked our staff for their views on sustainability in our annual staff sustainability survey. Of the 665 members of staff that completed the survey this year 99% said that it is important for the Trust to work in a more sustainable way.

82% of staff that undertook the survey were aware of the sustainability work undertaken by the Trust, a minor drop of 3% since last year.

There was a slight increase in staff reporting how easy the Trust makes it for them to act in a more sustainable way when doing their jobs, and we will continue to monitor this important trend.

The methodology for reporting our carbon footprint plus has continued to improve, following the success of our 5-step Net Zero Carbon Supplier Framework

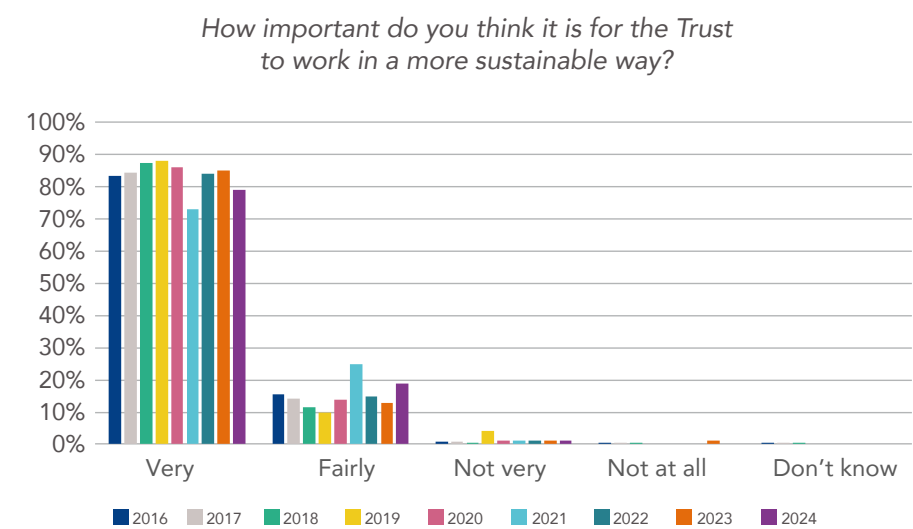


Figure 4: Staff survey – how important do you think it is for the Trust to work in a more sustainable way?

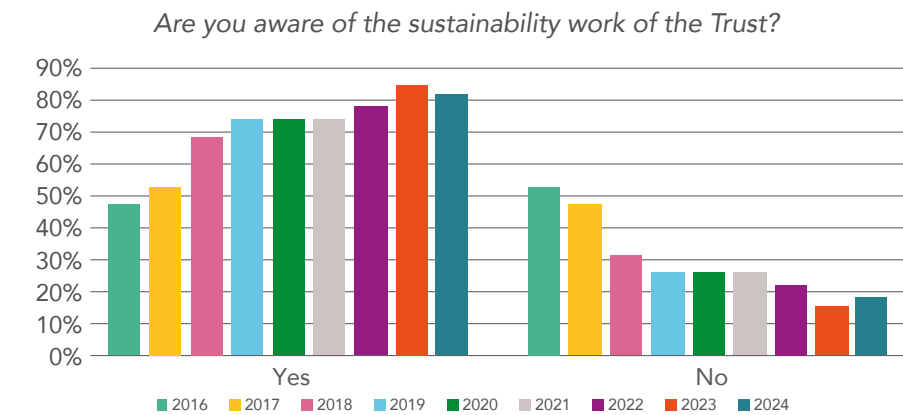


Figure 5: Staff survey – are you aware of the sustainability work of the Trust?



Figure 6: Staff survey – how easy does the Trust make it for you to act in a more sustainable way

This year we also asked:

What one thing could the Trust do to make it easier for you to be more environmentally sustainable at work?

We saw answers across the themes we work on, and most prominently were responses on improving recycling facilities, using less single use and creating less waste. Waste is the thing that staff see and deal with physically on a day-to-day basis and it is no surprise that this is therefore a top priority. We also saw trends in staff making suggestions about energy efficiency projects, and improving public transport.



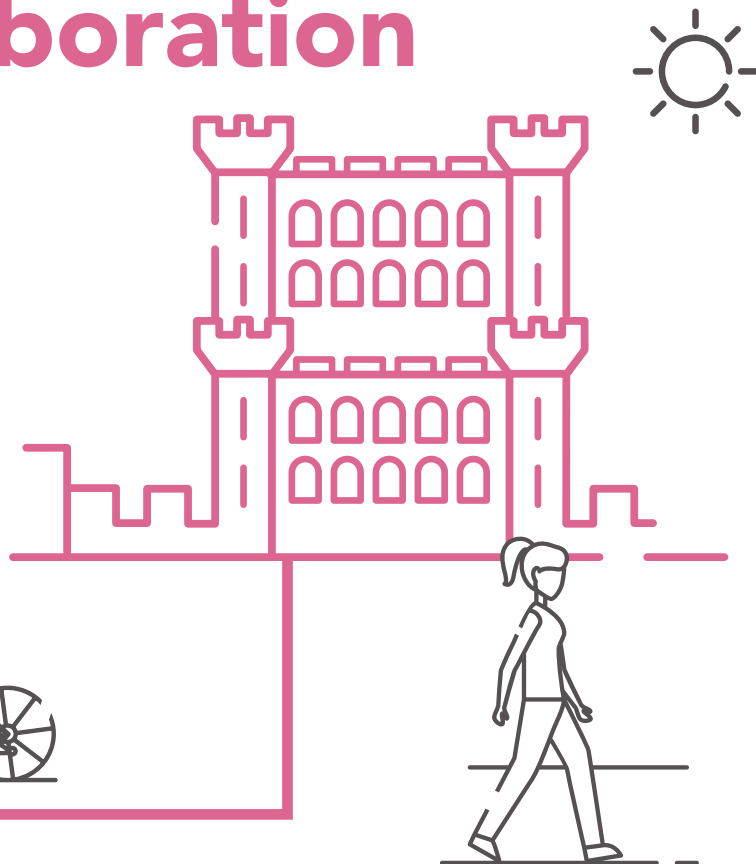
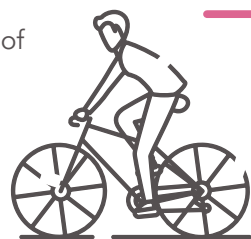
Figure 7: Word Cloud – the biggest words were most frequently mentioned in answer to the question.



4. Leadership, partnerships and collaboration

4.1 City

We continue to work with colleagues across the city, where the three anchor institutions have committed to Net Zero 2030. We worked closely with Newcastle City Council to support improvements to the active and sustainable travel routes to the Royal Victoria Infirmary, including a dedicated cycle lane on Queen Victoria Road and a new bus stop. We monitor our air quality which shows the positive health impact of the Clean Air Zone in Newcastle.

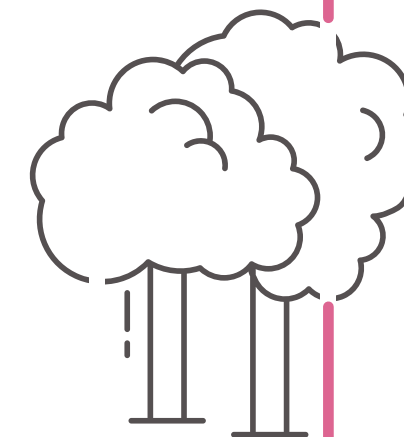
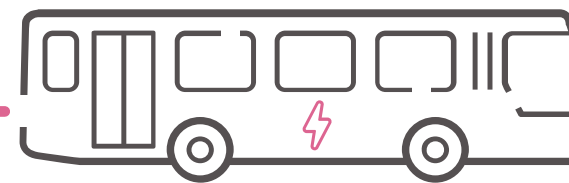


4.2 Region

North East and North Cumbria (NENC) Provider Collaborative Sustainability Lead meetings continue to take place, where NENC provider Trusts meet regularly to share best practice across a wide variety of sustainability focus areas (energy, waste, travel and biodiversity). Newcastle Hospitals co-chairs this group of 12 provider Trusts. We have also been supporting the NENC Integrated Care Board to refresh their Green Plan.

We also collaborate across the Great North Healthcare Alliance (Northumbria, Newcastle, Gateshead and North Cumbria) and regionally with waste management colleagues, including via the cross-sector North East Recycling Forum. Jason Mitchell, Waste Manager, was appointed chair of this longstanding forum and holds annual data masterclasses to support colleagues across the region with compliance and reporting requirements.

We have agreed a no-idling statement with North East Ambulance Service and Northumbria Healthcare, and there are plans to roll this out further across the region in the coming year.

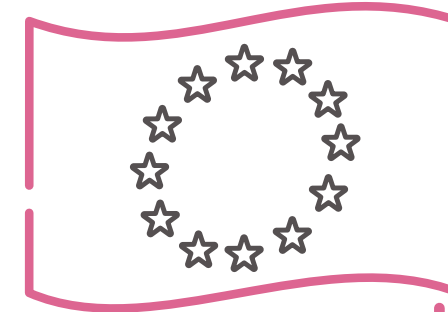


4.3 National

We continue to share our work and collaborate with other partners across the country. This includes co-chairing the Shelford Group's Sustainability Leads sub-group, regular collaboration with Greener NHS including Chief Sustainability Officer Chris Gormley and members of his senior leadership team. We actively contribute to the National Performance Advisory Groups for Sustainability Leads, Waste Managers, Energy Managers and Transport & Travel.

Our Head of Nutrition and Dietetics, James Callaghan, has shared the work on embedding sustainability into our Food and Drink Strategy with national networks including during Greener Allied Health Professional week.

Our N₂O waste mitigation MDT, incorporating clinical leadership from Dr Katy Whitehouse and technical estates input from Thomas Rutherford, helped the Greener NHS Medicines Net Zero Team to develop and improve the N₂O waste mitigation toolkit ahead of publication. We have been a pioneer Trust working with them to reduce N₂O waste at our Royal Victoria Infirmary site, where there is still clinical need for N₂O at the Great Northern Children's Hospital, following the successful decommissioning of the N₂O pipelines at the Freeman Hospital.



4.4 International

As early signatories of the Global Green & Health Hospitals network, in 2011, we have worked with other progressive health systems from across the globe with the support of Health Care Without Harm. James Dixon, Associate Director of Sustainability, is the Vice Chair of the board of directors at Health Care Without Harm Europe (HCWHE), collaborating with other senior sustainable healthcare leaders from across Europe and globally. We are in the process of supporting the refresh of the HCWHE strategic plan following publication of the international HCWH strategic plan.

Newcastle Hospitals is a pioneer partner of the Born Green Generation movement to reduce newborn exposure to plastics and harmful chemicals in maternity settings. We collaborate to share learning and best practice with HCWHE and partners from Great Ormond Street Hospital, London, the Center for Sustainable Hospitals in Region Midtjylland, Denmark, and the Centre Hospitalier Angouleme in France.

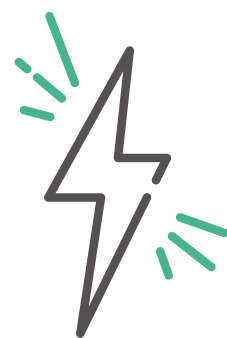
Tunde Okeowo, our PhD student working on the implementation of the Clean Air Hospital Framework, has presented at many events nationally and attended the global World Health Organisation conference on Air Pollution and Health in Colombia sharing his work and collaborating with others to draft a recommendation and call to action for governments.



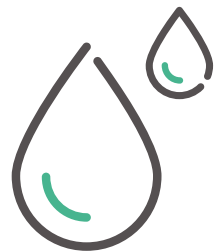
5. Key Action Areas

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



5.1 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:

- Minimise energy use
- Improve energy efficiency
- Replace fossil fuels with low and zero carbon energy sources
- Maximise generation of renewable energy on site

AIM: WATER

Reduce carbon emissions from water use in our buildings:

- Eliminate wasted water
- Increase water efficiency

To support ongoing reduced emissions we are working on schemes such as EV charging and improving energy efficiency across the estate

PERFORMANCE

The Trust have once again faced significant challenges in seeking to reduce the carbon emissions from our buildings. While there is a small reduction in overall emissions, we are not in line with our science-based target. We will hope to see some improvement in this going forward as we implement the projects funded through the public sector decarbonisation scheme.

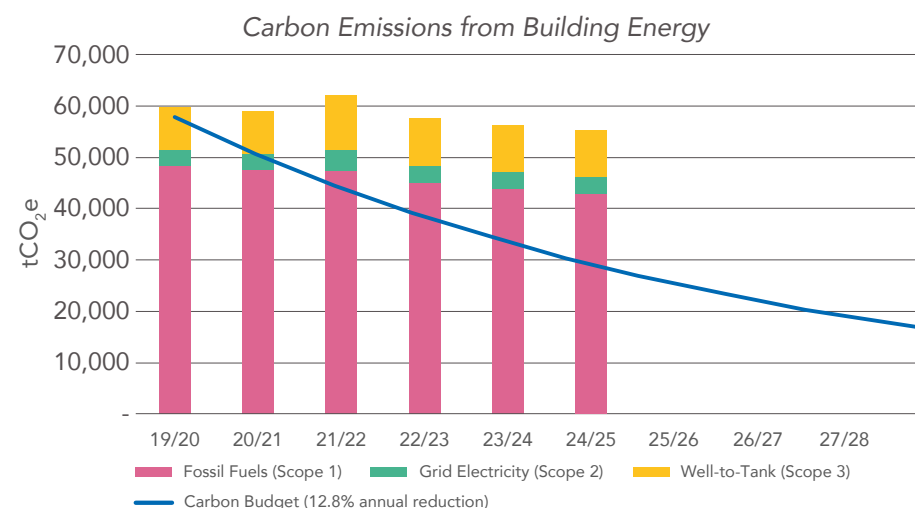


Figure 8: Carbon Emissions from Building Energy

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR

- Completion of heat decarbonisation at Regent Point; no fossil fuel gas used since August 2024.
- Funding from National Energy Efficiency Fund #3 (NEEF3) of £750,000 for LED lighting at the RVI and solar panels at Freeman Hospital, expected to be operational in early 2025/26.
- Recruitment of an Energy Manager, Estates Net Zero Delivery Manager, Estates Net Zero Project Lead and Sustainability Officer to fill these vital vacancies from last year.



PLANS FOR THE NEXT YEAR

- Delivery and installation of 1,000 additional solar PV Panels at the Freeman Hospital funded through GB Energy.
- LED Lighting upgrade programmes in: the Freeman Hospital multi-storey carpark, via PFI partners Mitie; the Disablement Services Centre (DSC), enabled via charity funding, and finalising work at the Clinical Resource Building at RVI, via NEEF3 funding.
- Commence our three-year, £46 million, heat decarbonisation programme at Freeman Hospital, via Public Sector Decarbonisation Scheme Phase 4 funding.
- Enhance our building level metering provision to further identify efficiency opportunities and validate savings.
- Expansion of theatre ventilation out-of-hours setback controls to realise significant cost and carbon savings.

CASE STUDY: SECURING INVESTMENT FOR DECARBONISATION OF OUR ESTATES

One of the biggest risks to achieving our 2030 Net Zero target has been the availability of funding for decarbonisation of our estate. Over the 2 years since this was flagged at board, the Trust has built up a dedicated Estates Net Zero Team. Tasked with targeting funding from the Public Sector Decarbonisation Scheme (PSDS), the NHS Energy Efficiency Fund (NEEF), GB Energy and the Department of Energy Security and Net Zero (DESNZ).

The first major project that the team helped deliver was the installation of solar panels and heat pumps at Regent Point to remove fossil fuel gas. Learning from that project helped them to progress, working closely with colleagues from the estates capital and operational teams and over the last year, the team have managed to secure an additional £42 million of funding for decarbonisation.

The largest grant is £40.5 million from PSDS to fund heat decarbonisation at the Freeman and community sites. The project which will be implemented over the next 3 years will include:

- Removal of the use of steam in heating the Freeman
- Installing double glazing at the ward block
- Investment in air source and water source heat pumps and electrical chillers
- Installation of solar PV panels and improvements to the electrical infrastructure

By securing this funding we hope to avoid 9,370 tonnes of CO₂e emissions annually. To support ongoing reduced emissions the team are working on schemes such as EV charging and improving energy efficiency across the estate including further investment in sub metering, LED lighting, solar PV panels and heat recovery projects.



▲ Aerial view of Regent Point



Solar panels on Regent Point



5.2 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



▲ Public Transport Champion Award

PERFORMANCE

Capacity within our estates travel and transport team remains a challenge but we have nonetheless seen a 2% reduction in the emissions that relate to journeys within our NHS Carbon Footprint. This is despite increases in the way the emissions are calculated and including emissions from electric vehicles for the first time.

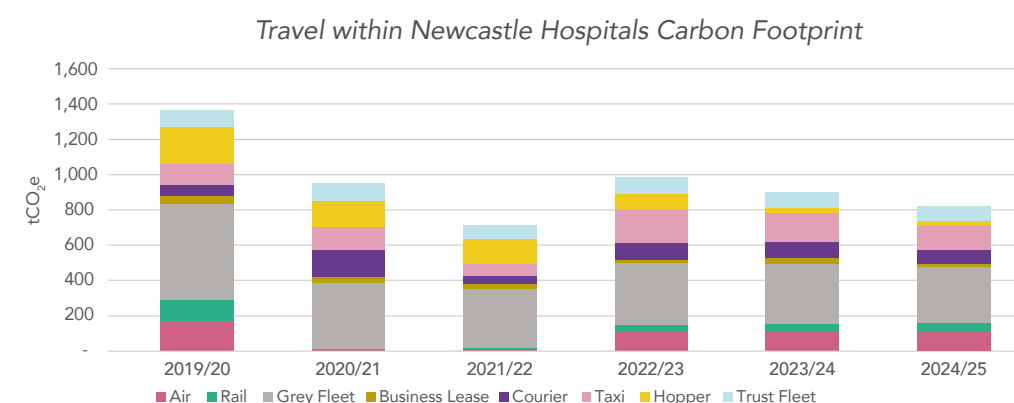


Figure 9: Carbon footprint from travel within the Newcastle Hospitals Carbon Footprint

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR, JOURNEYS

- The travel and transport team were awarded the [Public Transport Champion Award](#) in the Mobilityways Commute Zero Hero Awards for supporting staff to commute sustainably.
- Newcastle Hospitals was recognised as a Gold Cycle Friendly Employer.
- Active Travel User Group set up to look at supporting staff and advocating for changes in the organisation to improve facilities for active travel.
- Implementation of personalised travel plans for staff.
- Pool car pilot for teams working in the community.

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR, CLEAN AIR

- Improved our Clean Air Hospital Framework score to 46% (from 38%) with patient-initiated follow-up, local council collaboration, smoking cessation and EV patient journeys (see case study).
- Progressed prioritised action plan to tackle indoor and ambient air quality.
- Tunde Okeowo PhD student, attended the World Health Organisation conference on Air Pollution and Health sharing his work and collaborating with others to draft a recommendation and call to action for governments.
- Hosted a Clean Air Day stall on site to raise awareness.
- Signed up to a no-idling commitment in collaboration with North East Ambulance Service and other regional Trusts.



▲ Tyrone and Tunde replacing air quality monitors

PLANS FOR THE NEXT YEAR

- Explore integrating air quality data into patient records, promoting awareness of clinicians and conversations with patients.
- Host our third Clean Air Day 2025 to build on existing awareness initiatives, emphasising the health impacts of air pollution and strengthening the call for practical measures to reduce exposure.
- Achieve a score of over 70% on the Clean Air Hospital Framework.
- Optimise our free public transport options for staff to reduce vehicles accessing our sites.
- Promote the cycle to work scheme and host bike maintenance sessions funded by Newcastle Hospitals Charity.
- Embed sustainability into our digital services.



▲ New no-smoking signage



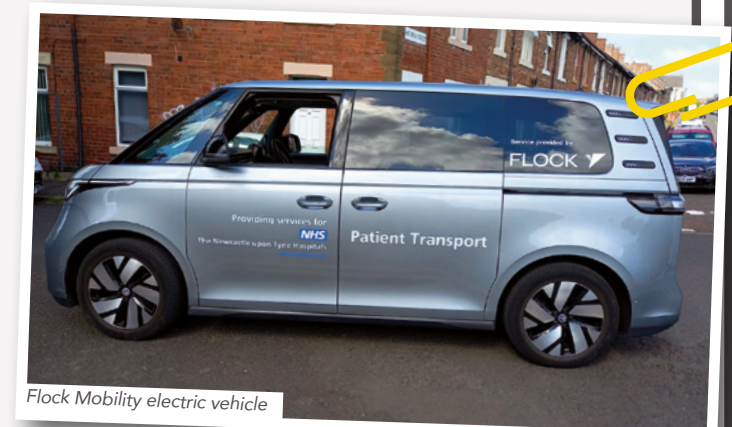
▲ Clean Air Day stall collaboration with Newcastle City Council

CASE STUDY: TRANSFORMING RENAL PATIENT TRANSPORT: Reducing the carbon footprint with shared electric vehicles from Flock Mobility

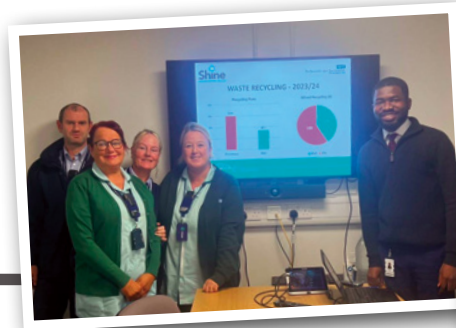
Patients requiring renal dialysis need to travel to and from hospital regularly. This was often via taxi at considerable financial and carbon cost to the Trust. To address this challenge, a demand-responsive transport system was introduced that uses shared electric vehicles to replace costly, single-occupancy taxi journeys for renal patients. By leveraging AI-powered optimisation software, patients with similar home postcodes and appointment times were grouped together, allowing up to four passengers to share a single vehicle. This significantly reduced the total number of journeys required, leading to lower costs and a reduced carbon footprint.

The result: 2 dedicated electric vehicles are now handling over 900 patient journeys per month delivering estimated avoided emissions of 12 tonnes of CO₂e per vehicle per year. In a patient survey of the service one patient said they are "able to enjoy shared experiences with fellow passengers" and another "It's quick and friendly and gets me to dialysis on time".

Next steps: the next phase involves maximising the use of the Flock Mobility fleet across various departments and hospital sites to deliver further cost and avoided emissions. For example vehicles are now being used for logistics tasks such as home ventilation equipment deliveries in between patient pickups / drop offs which has also seen a reduction in taxi usage in the Trust.



Flock Mobility electric vehicle



▲ Waste awareness week training



▲ Visit to recycling facility



▲ Waste training at staff induction



5.3 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

- Total volume of waste has increased
- The average volume of waste per patient has decreased
- Recycling has decreased for the first time since 2020, which is largely due to the fact water is now extracted from our food waste (reducing the volume of food waste recycled)

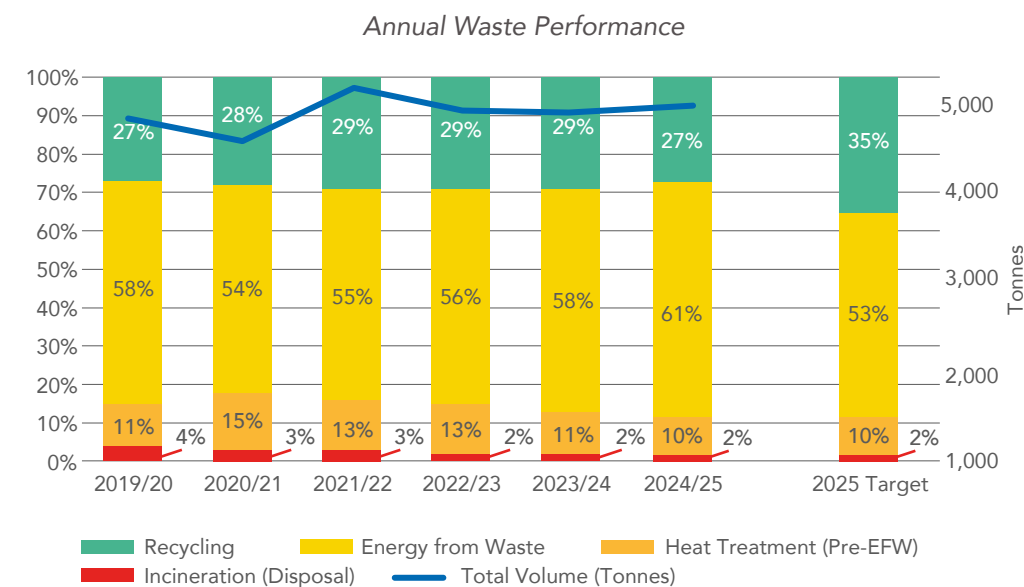


Figure 10: Total annual waste disposed of by waste outcome

PLANS FOR THE NEXT YEAR

- Under the Simpler Recycling legislation, extend the provision of recycling bins and simplify the messaging
- Extend food waste recycling into staff eating areas and rest rooms
- Work with key departments to report reuse of equipment and associated waste prevention
- Continue to work with established groups internally to report on reduction in single-use items and consumables and share work via case studies
- Complete 80+ ward waste audits
- Pharmacy work on medication management with the development of an 'enhanced service' to realise further financial savings and avoided carbon emissions

CASE STUDY: SHINE AWARD WINNER: PLASTICS REDUCTION GUIDELINE IN HOME ENTERAL FEEDING

The Home Enteral Feeding Team (HEFT) team support 370 Adult and Paediatric service users who require enteral tube feeding in the community.

It was identified that there was an excessive amount of single use plastic equipment that was being provided to patients who were to receive enteral tube feeding at home. The equipment was provided both on discharge from hospital and when the patient was in the community.

Working across the Newcastle Nutrition dietetic team, regional Dietetic departments, Infection Prevention Control, and Nutrition Specialist Nurses in the acute and community settings a guideline was developed to set out what equipment should be provided to patients to ensure the best care for HEFT patients whilst reducing the use of plastic ancillaries especially single use versions and therefore moving up the waste hierarchy by preventing waste.

By comparing data from pre and post implementation of the guideline there is an average reduction of 93kg of plastic per month across the Trust, and a cost saving of £1,413 per month in paediatrics alone. This equates to avoiding 1.76 tonnes of CO₂e entering the atmosphere annually.



Home Enteral Feeding Dietitians, Newcastle Nutrition

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR

- Waste management integrated into induction for all staff.
- Waste Awareness Week in October: trust wide communications and training for operational staff.
- 60 waste audits undertaken across the Trust.
- Jason Mitchell awarded Waste Management Champion of the Year at the Awards for Excellence in Waste Management for the NHS in England.
- Celebrated 20 years of reusable sharps containers with Sharpsmart who now cover every acute trust in the NENC region.
- Emergency Department introduced the non-infectious (tiger bag) waste stream, reducing our volumes of hazardous waste.
- Work in pharmacy to reduce medication waste generated financial savings of £50,918 and avoided an estimated 29.5 tonnes of CO₂e emissions in 5 months



Wasted medicines stall

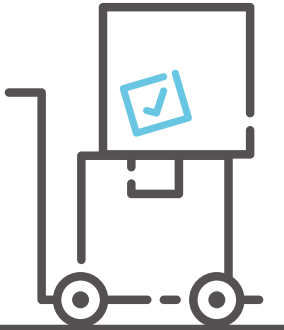


▲ Sharpsmart celebratory event



▲ QI showcase





5.4 Procurement

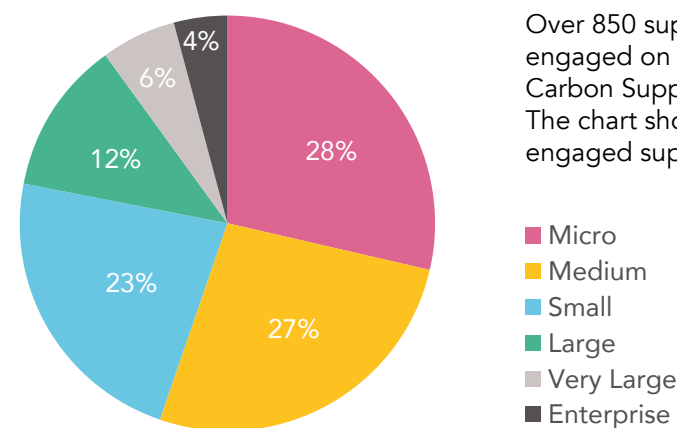
AIM

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

PERFORMANCE

As the graph on page 12 shows, carbon emissions associated with purchased goods and services are estimated to account for over 89% of our total carbon impact.



Over 850 suppliers are engaged on our Net Zero Carbon Supplier Framework. The chart shows the mix of engaged suppliers by size.

Figure 11: Mix of engaged supply chain companies by size

Figure 12 shows where we spend our money. This is based on the address of the invoicing company; we hope to improve on this methodology in the future.

	SPEND	%
NORTH EAST	£121,104,133.31	16%
REST OF UK	£622,810,847.21	83%
REST OF EUROPE	£9,212,969.84	1%
REST OF WORLD	£779,213.91	0%
TOTAL	£753,907,164.27	100%

Fig 12: % spend in local community in comparison with UK, Europe and rest of world

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR

- Carbon reduction and wider social value are woven into our procurement strategy and invitation to tender process.
- Increased attendance at our sustainable supplier event, co-hosted with Northumbria University and opened by Sir Paul Ennals.
- 165 suppliers attended a supplier webinar on carbon reporting.

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR (CONTINUED)

- 850 companies engaged in our 5 Step Net Zero Supply Chain Framework, with 88% supporting our targets.
- [Sustainable supplier webpage](#) provides companies with access to free support and tools.
- Launched a Low Carbon Supplier Hub on LinkedIn to promote knowledge share and collaboration.
- Commenced tracking of our local supply chain spend to reduce carbon and improve social value
- Sustainability is embedded as a strategic aim within our [Food and Drink Strategy](#) and Newcastle Hospitals are signatories to the [Cool Food pledge](#), seeking to reduce emissions from our food by 25% by 2030.

PLANS FOR THE NEXT YEAR

- Continue to increase levels of reporting via our 5-step Net Zero Carbon Supplier framework by
- Increase engagement of suppliers via the LinkedIn Low Carbon Group, [sustainable supplier webpage](#) and annual supplier event
- Continue to collaborate and share learning with other organisations, in order to standardise approaches to sustainable procurement
- Invest more in the local community
- Listen to more supplier ideas and solutions via the meet the buyer 1:1 sessions with the procurement team
- Implement an electronic meal ordering system (replacing the current paper based system) with sustainability embedded to realise savings of £250,000 in food waste

We are working towards a net zero carbon supply chain

CASE STUDY: SHINE AWARD WINNER: The transition to a more sustainable material for hand splinting

Within the hand therapy department, it was common practice to fabricate protective splints from products which consist of knitted fibreglass fabric impregnated with polyurethane resin. Typically a patient following a flexor tendon repair would need up to three new splints fabricating in the first four-week post-operative period.

In February 2023 with the help of climate emergency action funding the team undertook a pilot using an X-lite splinting product which was 100% cotton mesh impregnated with a non-toxic thermoplastic resin, and could be remoulded when heated. The product also had less packaging.

Challenges were faced by the team in ordering the new product, collecting data and staff turnover. However on completion of the pilot it was shown that 8 fewer splints were fabricated by switching to X-lite. The team identified that the product was more expensive however this was mitigated by financial savings in waste management and staff time, as using the sustainable product was quicker and created less waste. Clinical staff also expressed a preference for the sustainable product which supported the change.



▲ Physiotherapists showcasing the new material



▲ Annual supplier event



5.5 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

PERFORMANCE

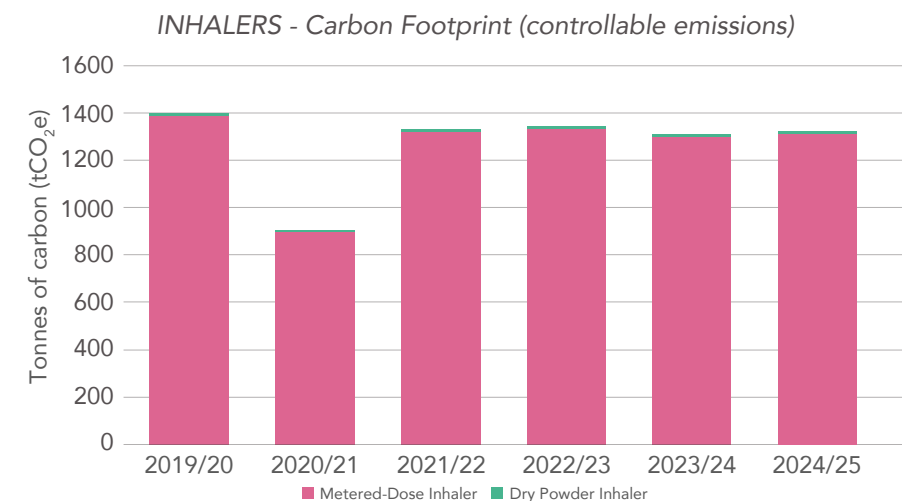


Figure 13: Carbon Footprint from inhaler prescribing at Newcastle Hospitals

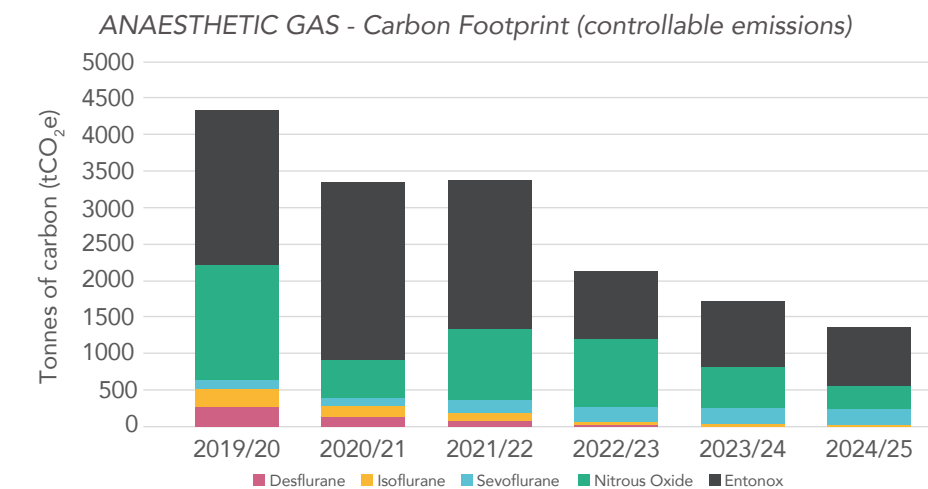


Figure 14: Carbon emissions from anaesthetic gas use at Newcastle Hospitals



▲ Theatre sustainability group win the Celebrating Excellence Shine award

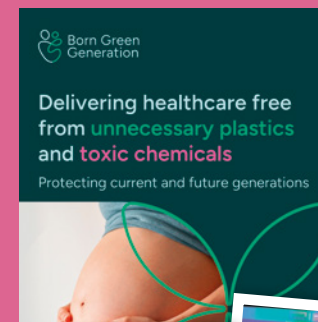


ACTIONS AND ACHIEVEMENTS FROM THIS YEAR

- Our N₂O waste project has achieved a 44% reduction in carbon emissions this year (60% reduction since baseline) and 11% reduction in carbon emissions from Entonox (52% reduction since baseline).
- Dr Fatima Tahir, clinical sustainability fellow, in Oncology won the Towards Net Zero award at the Bright Ideas in Health Awards 2024 for her work on the triple bottom line benefits of switching from oral morphine solution to tablets.

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR (CONTINUED)

- Born Green Generation project launch seeking to protect foetuses and newborn babies from exposure to harmful chemicals and plastics. The maternity department have stopped using single use urine sample plastic pots and switched from plastic to cardboard placenta disposal bins



▲ Born Green Generation

- Further to the requirement by NICE that environmental impact be considered when prescribing inhalers, the Northern Treatment Advisory Group approved new regional guidance on the management of COPD which included information about the environmental impact of recommended inhalers. Similar guidance is in development for asthma management
- Workshops were held in collaboration with regional colleagues to consider climate crisis risk assessment and adaptation planning

PLANS FOR THE NEXT YEAR

- Continue to reduce anaesthetic gas emissions via a clinician led transition to lean nitrous oxide supplies
- Work with Newcastle Health Research Partnership Sustainable Healthcare Satellite to secure funding to support research and innovation to lower the carbon in our care pathways
- With the support of Newcastle Hospitals Charity appoint a trust-wide clinical sustainability lead and a clinical sustainability fellow. This will build on our work seeking to embed the Shine 10 step framework and continue the excellent work of our clinical fellows in improving the environmental impact of our clinical care pathways
- Improve our data collection for inhalers, identifying where our hotspots are and how we can mitigate the impact of these
- Set up a Climate Change Adaptation Operational Group

CASE STUDY: SHINE AWARD WINNER: The Paediatric Bladder and Bowel Service

The Paediatric Bladder and Bowel Service identified that a high number of children were attending Paediatric A&E with symptoms of idiopathic chronic constipation, requiring invasive procedures and medications to have stool removed. Their SusQI project intended to reduce A&E attendances, reduce clinical interventions, improve patient satisfaction and make environmental and cost savings. Funding was obtained to support a nurse-led clinic which saw patients who presented to A+E within 48-72 hours, to develop a long-term care plan. Over the course of 10 months the impact was extensive:

- 10% reduction in admissions from A+E
- 59% decrease of invasive procedures
- £92,716 income generation
- 92 less attendances to A+E
- Carbon saving of 2.7 tonnes of CO₂e
- 155 bed days saved

One parent said of the service: "...We have our lives back. He no longer complains of pain or is embarrassed. His confidence has grown massively. He is a confident, happy boy. He is super confident now. We are a happy family. T and I cried when we were discharged from the service, but they were tears of gratitude. The Service will never realise how much of an impact they have made on our life. We will be forever grateful."



▲ Paediatric Bladder and Bowel Service



5.6 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

PERFORMANCE

Table 1: Statutory Biodiversity Metric Scores across the RVI and FH Sites

LOCATION AND ASSESSMENT TYPE	BASE LINE - *MARCH (YEAR)	2024 RESULT - *AUGUST	2052 TARGET
FH habitat units	24.28 (2022)	26.83	28.89
FH hedgerow units	4.22 (2022)	4.8	4.93
RVI habitat units	23.87 (2023)	16.45	25.19
RVI hedgerow units	0.5 (2023)	0.51	0.77

*Notes about method: We have appointed an independent ecology specialist to complete these audits annually, since March 2021. It has been difficult to set a reliable baseline and track our progress to date, due to changes in methodology over this time period (through multiple versions) and the time of year the assessments were completed (we have moved from completing this task close to the end of the annual reporting cycle (March) to the summer (August) when biodiversity is at its best).

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR

- BREEAM outstanding design aim for new cancer research building at Freeman
- Adopted the 10 principles to boost biodiversity
- Progressed our 30-year biodiversity management plan, enhancing the biodiversity of existing green space and increasing our biodiversity metric score across our estate
- Created a pond at Freeman Hospital Site as a resource to boost health and wellbeing of patients, visitors and staff at Freeman Hospital



▲ Regent Point courtyard

- Progressed Green the Grey staff led projects such as Regent Point Courtyard



- Contributed to the Newcastle City Biodiversity Group, NHS Biodiversity working group and NENC ICS Biodiversity Subgroup to share ideas
- Obtained free resources from Gosforth Nature Reserve to establish a Children's Nature Trail at Freeman Hospital.
- Secured funding from Newcastle Hospitals' Charities to further progress the Biodiversity Management Plan and Green the Grey initiative
- Secured a Nature Recovery Ranger for our sites in collaboration with the Centre for Sustainable Healthcare



▲ Freeman pond



PLANS FOR THE NEXT YEAR

- Enhance patient engagement with greenspace – e.g.
 - Big Pond Dip
 - Work with clinicians to complete Children's Nature Train at Freeman Hospital.
 - Work with clinicians and patients at GNCH RVI to develop an eco-influencers pebble trail for children on site
- Enhance staff engagement with green space. E.g.
 - Create a mindful maze at Freeman Hospital
- Create a map showing walking routes around our Estate and beyond, to promote use of greenspace by patients, staff and visitors. Increase links to the iconic green spaces on our doorsteps
- Establish dedicated PhD to evaluate the health and wellbeing benefits of green space to patients, staff, visitors and community and support increased green and social prescribing
- Continue with our Biodiversity Management Plan, implementing green the grey projects to improve the biodiversity metric

We have enhanced the biodiversity of existing green space and increased our biodiversity metric score across our estate



Images © Barry Pells



▲ NCCC Courtyard



CASE STUDY: STAFF LED GREEN THE GREY PROJECT AT NCCC

Staff in the radiotherapy department at the Northern Centre for Cancer Care (NCCC) saw an opportunity to transform an under-used courtyard into a vibrant place for staff, patients, and visitors to enjoy.

The project received funding from Newcastle Hospitals Charity and the Climate Emergency Action Fund to purchase benches and a range of plants.

The team wanted to equip the courtyard with tables and chairs to give people the opportunity to sit outside and enjoy the fresh air whilst waiting for treatment.

A number of large, freestanding planters with shrubs and scented/sensory plants have been added to increase the attractiveness of the space and create a calming environment. Screens are placed in the courtyard to give people privacy if needed.

On a sunny day, you can see patients, visitors and colleagues all enjoying the courtyard's greenery, marking its incredible transformation.





5.7 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

One success of our green champions engagement with leadership is that sustainability will be embedded into the Trust strategy this year



▲ Theatre sustainability Group - Celebrating Excellence winners



▲ Green champion litter pick

PERFORMANCE



GREEN CHAMPION ENGAGEMENT

60%

increase in numbers of green champions since last year



SOCIAL MEDIA COMMUNICATIONS

433 followers

New LinkedIn and Instagram accounts



SHINE REWARDS STAFF BENEFIT PROGRAMME AND APP

346 tCO₂e

avoided through staff actions since the launch of the program [number of registered users]



SHINE AWARDS FOR SUSQI PROJECTS

9 projects

awarded a Shine Award this year

ACTIONS AND ACHIEVEMENTS FROM THIS YEAR

- 65% of staff completed "Building a Net Zero NHS" e-learning module
- Green Champion meeting with Sir Jim Mackey, chief executive
- Sustainability embedded into corporate induction for all staff
- Weekly 'sustainability' story in all-staff In Brief weekly newsletter
- Clinical Diagnostic Services and Cardiothoracic services leading the way in seeking to embed the Shine 10-step framework in clinical boards
- Theatre Sustainability Working Group won the Shine category of the Celebrating Excellence Awards 2024, for their work on embedding the green theatre checklist in our theatres trust wide.

PLANS FOR THE NEXT YEAR

- Review our training offer to support staff to access relevant training on sustainability;
- Appoint a Lead Green Champion to co-ordinate the Green Champion network and increase engagement;
- Set up a Human Resources working group to identify opportunities and ensure sustainability is embedded into our People Plan and Trust policies;
- Launch a new Climate Emergency Action Fund, funded by Newcastle Hospital Charities, to support staff-led sustainability projects.

CASE STUDY: SCHWARTZ ROUND ON SUSTAINABILITY

Schwartz Rounds provide an opportunity for staff from across the health and care workforce, as well as students in training, to reflect on the emotional aspects of their work. The benefits of Schwartz Rounds are that staff feel less stressed and isolated, experience increased empathy and understanding for their colleagues, and report improved communication and reduced hierarchical barriers. Working on the climate emergency can be difficult, perhaps because of the existential threat of climate change, or because of the challenge of taking effective action. Recognising this the sustainability team decided to have a team Schwartz Round. Facilitated by Katy Woodward, Clinical Psychologist, the sustainability team found the exercise extremely helpful, to acknowledge difficult feelings in a safe space and to gain a better understanding of each other as team members. We wanted to share this opportunity with others in the Trust, and so it was agreed that a Trust-wide round would be held.

The round was called "Tipping Points" and two members of the Sustainability Team and one of the Trust's Green Champions told their stories, about the emotional impact of the climate emergency and their personal tipping points. We had a diverse audience and nearly everyone had an opportunity to share their own story.

► Team Schwartz Round



CASE STUDY: GREEN CHAMPION MEETING WITH SIR JIM

Following the letter from the Green Champions to Sir Jim he asked to meet Green Champions to discuss the issues.

The meeting was held both in person and online to ensure as much engagement as possible and 50 staff were able to take the time out of their busy days to attend.

Jim shared his views having joined the organisation recently, that sustainability should be part of business as usual. He spoke of the importance of looking at the financial implications given the cost pressures on the NHS and advised that sustainability be communicated in a way that made it real and relatable for staff and their everyday experience. Our Green Champions were able to ask him questions and flag up some of the challenges they experience in their day-to-day work, such as the problem with single-use items in healthcare and the need for staff to have time to embed sustainability into business as usual.

One success of our green champions engagement with leadership is that sustainability will be embedded into the Trust strategy this year.



GC meeting with Sir Jim

6. 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 have included some headline performance data within this report. Our full key performance indicators and carbon footprint report are available on request, by emailing nuth.environment@nhs.net

6.1 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 Section 5 of this report.

We will continue to seek to mitigate our impact in line with our science aligned targets and adapt to a changing climate

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

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



SHINE THEME	RAG RATING	What do we want to achieve by 2025 (Climate Emergency Strategy commitment)
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
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

7. 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.

If you wish to contact the Sustainability Team please email nuth.environment@nhs.net

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[Instagram](#): [Sustainable NUTH \(@sustainablenuth\)](#) • Instagram photos and videos

Website: [Sustainable healthcare - Newcastle Hospitals NHS Foundation Trust \(newcastle-hospitals.nhs.uk\)](https://www.newcastle-hospitals.nhs.uk)



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

8. Glossary

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

Carbon dioxide equivalent (CO₂e) – A carbon dioxide equivalent or CO₂e, 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, with usable heat as a by-product, 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 – Integrated Care System (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 England Net Zero Supplier Roadmap & Evergreen Framework – 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.

2 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 Protocol¹ and the BEIS Environmental Reporting Guidelines. The calculations were completed on the SmartCarbonTM Calculator using the latest UK Government emissions factors.

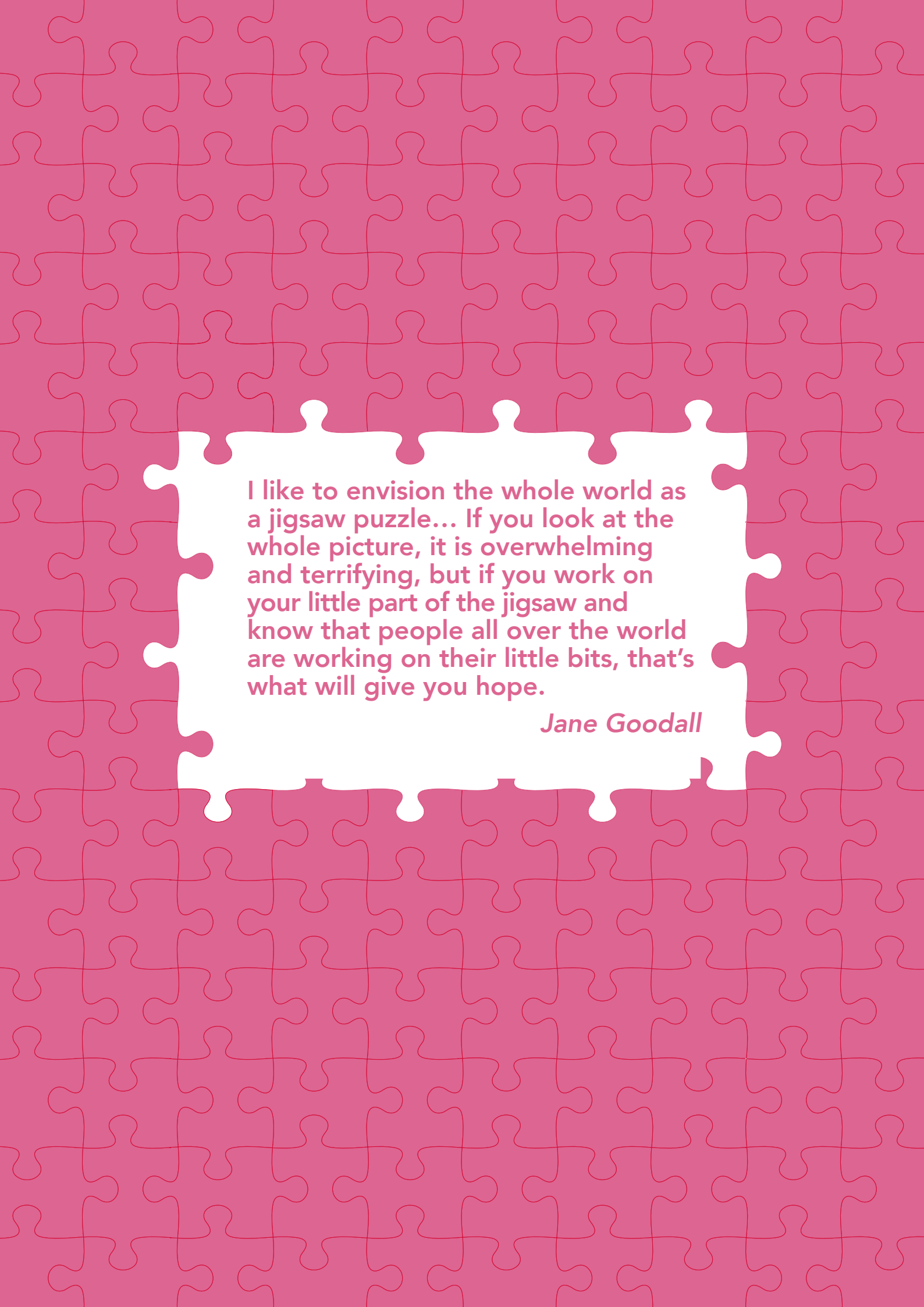
- CO₂e is the universal unit of measurement to indicate the global warming potential (GWP) of Greenhouse Gases (GHGs), expressed in terms of the GWP of one unit of carbon dioxide. There are seven main GHGs that contribute to climate change, as covered by the Kyoto Protocol: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃). Different activities emit different gases. Using CO₂e 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 each spend category multiplied by average carbon factors for those categories.

- A full SECR compliant report is available on request.



I like to envision the whole world as a jigsaw puzzle... If you look at the whole picture, it is overwhelming and terrifying, but if you work on your little part of the jigsaw and know that people all over the world are working on their little bits, that's what will give you hope.

Jane Goodall