



# 2022-2023 Annual Climate Emergency and Sustainability Report









# **Sustainability Overview**

NHS Lothian launched our new **Sustainability Development Framework and Action Plan** in December 2020, to guide our journey to net zero by 2040 and our commitment to the UN Sustainability Goals.

Incorporating a new and broader approach, the Framework not only provides direction on reducing the climate impact of NHS activity but also looks at our role as advocates and partners for wider change. The NHS Lothian Framework gives us a strong vision and clear ambitions.

This report includes an update on our progress.

As a founder signatory of the **Edinburgh Climate Compact**, NHS Lothian hosted a
quarterly meeting. A wide range of
organisations from across the city attended to
hear about the work in NHS Lothian to
address climate change and to share
experience of the challenges across sectors.

**£2.4M** invested in energy efficiency decarbonisation projects. Over 9,000 LED lights installed at St John's Hospital in 4 months, reducing demand by almost **3 million kWh's and saving 620 tonnes of carbon**.

The Green Health microwebsite was launched and newsletters have increased awareness of the positive health impacts of greenspace and biodiversity. We developed strategic plans to improve biodiversity on 3 of our major sites.

NHS Lothian Appointed its first **Medical Education Fellow in Environmental Sustainability**.

NHS Lothian emissions for 2022/23 are **60,927** Tonnes  $CO_2$ , a reduction of **8.3%** and **5,491** Tonnes  $CO_2$  from 2021/22.

**71.8%** against 1990 target, currently ahead of net-zero target by **over 10%**.

2 webinars were delivered by the
Sustainability Group during the last year
attended by around 150 people: Our
Carbon Pathway Understanding NHS
Lothian Carbon Emissions Report for 202120 and Grounds for Health Improving the
NHS Estate for people and planet

NHS Lothian won 2 national awards at the conference held by NHS Assure: Best Practice in Property and Asset Management Award – NHS Lothian Biodiversity Audit and the Facilities Innovation Award – e-cargo bike pilot.

**202 Electric Fleet Vehicles** on the road and **more due**, over a quarter of NHS Lothian's Fleet.

e-bike trial commenced with **27 e-bikes** issued to departments across the organisation.





# **Snapshot of achievements**

We continued to work on our data and reporting dashboards, with significant progress being made on our dashboards for Anaesthetic Gases and for Waste. Some of the graphics and data directly from our dashboards have been used in this report.

We also commenced work on our Scope 3 emissions working with consultants using AI to analyse all our spend in terms of cost and carbon.

Dr Shauna Golden was appointed as NHS Lothian's first Medical Education Fellow in environmental sustainability. The aim of the role is to raise awareness of environmental issues, facilitate collaboration and provide education and support to clinical colleagues and service teams. <u>First Medical Education Fellow in Environmental Sustainability – News & Media (nhslothian.scot)</u>

NHS Lothian completed a project to make 6 of our sites more energy efficient. Thanks to funding of £2M by the Scottish Government and further investment within NHS Lothian, a number of changes across 6 sites have been implemented to both reduce carbon and costs. These changes included installing solar panels, LED lighting, Gas CHP (Combined Heat and Power) and Air Handling Unit upgrades. These new energy efficiency measures will create a saving of 25.7% in energy costs against the 6 sites as well as reducing carbon emissions.

The success of this project and other energy efficiency work allowed us to make the case for further investment in the energy efficiency team in 2023-2024. This will allow us to carry out more of the "switch off" campaigns like the one run this year and to help maintain progress as well as look in detail at how our sites utilise energy and optimise this use. Investing in Sustainability – News & Media (nhslothian.scot)

The Energy and Environment Team were also successful in achieving part funding from the Graduate Career Advantage Scotland scheme allowing them to appoint an intern in sustainability to support the work on energy efficiency.

We commenced a wider trial of e-Bikes. 24 e-bikes were allocated to a range of services who applied to allow nearly 200 staff members to access this healthier and more eco-friendly way of getting around as part of their work. New e-Bikes in NHS Lothian – News & Media

We welcomed a delegation from Spain to the Western General Hospital today (Thursday 7 July) to learn about NHS Lothian's commitment to delivering sustainable healthcare. NHS Lothian was one of two health boards in the UK selected to host the delegation, which included officials from the British Embassy in Madrid and senior specialists, including clinicians, working across sustainability in Spanish healthcare. <a href="NHS Lothian welcomes sustainability delegation from Spain - News & Media">NHS Lothian welcomes sustainability delegation from Spain - News & Media</a>

NHS Lothian took its turn to host the Edinburgh Climate Compact Quarterly Meeting. The Edinburgh Climate Compact is a commitment by the leading businesses and employers in Edinburgh to act within their own organisation to contribute to a green recovery and radically reduce the city's carbon emissions. The Climate Compact outlines clear actions that organisations commit to in signing the document. NHS Lothian Hosts Edinburgh Climate Meeting — News & Media

NHS Lothian invested over half a million pounds into its electric fleet – 58 vehicles and 46 charging stations across NHS Lothian. This brought the total number of electric vehicles in the fleet to 187. Since 2019, the electric fleet has travelled over 1.5M miles preventing over 500 tonnes of CO2 being emitted. NHS Lothian invests over half a million pounds into electric fleet – News & Media

Our transport service was successful in securing a grant offer of nearly £1M to invest in electric vehicles from Transport Scotland.

The Climate Challenge Grants offered by NHS Lothian Charity continued to build momentum with a wider range of suggestions to environmental projects coming forward from services across NHS Lothian.

We reviewed the NHS Lothian Sustainable Development Framework following the launch of the NHS Scotland Climate Emergency and Sustainability Strategy in August 2022, amending the timescale to achieve net zero to 2040.





Activity and engagement in greenspace and biodiversity projects increased significantly. Information from Greenspace and Biodiversity audit was included in our Property and Asset management Strategy. The launch of the Green Health micro-website (<a href="https://greenhealth.nhslothiancharity.org/">https://greenhealth.nhslothiancharity.org/</a>) and newsletters has increased awareness of the impact greenspace and biodiversity.

The Green Health Activity Pathway Project at the Royal Edinburgh Hospital has demonstrated it is having a positive impact. All the referral spaces were filled and there were more requests from wards to participate.

The Go for Green network of NHS Lothian staff to develop a systems-based approach to green prescribing was established.

NHS Lothian won two national awards at the NHS Assure conference: Best Practice in Property and Asset Management Award – NHS Lothian Biodiversity Audit and the Facilities Innovation Award – e-cargo bike pilot.





# **Purpose of this Report**

Managing and reducing our impact on the environment is essential if the NHS is to play its part in tackling climate change and environmental degradation through the effective management of resources and through changes in the way we provide care to maximise outcomes for patients and our communities whilst protecting or enhancing the environment.

This report on our activities in 2022/23 gives detail on carbon emissions associated with the operations of NHS Lothian. The Scottish Government has adopted an ambitious new target to reduce emissions by 75% by 2030 – the toughest statutory target of any country in the world, while NHS Scotland will target net-zero by 2040. While only buildings data is available over this period, a reduction of 72% against the 1990 baseline is positive.

Annual reporting on carbon emissions has been required since 2007/08 when a Carbon Management Plan was developed to formalise our strategy and activities in reducing carbon emissions. This report gives an update on our emissions, a breakdown of emissions sources, insight on changes and an overview of the activities, challenges and planned activities.

Reducing carbon emissions is crucial to tackling climate change but there are other ways in which we impact negatively or positively on the environment and as a UK public body we have a Duty to promote Biodiversity and report on out activities in this respect. This annual report also includes our report on our Biodiversity Duty.

### **Carbon Emissions Overview**

Addressing carbon emissions and greenhouse gases is fundamental to addressing climate change and delivering services in a sustainable manner. Establishing targets and systems that provide continuous monitoring is paramount to shaping our actions and tracking our progress. NHS Lothian has calculated and reported emissions from traditional energy and fuel sources since 2008. We continue to improve the collection and utilisation of data to better understand the hotspots, opportunities, impacts and trends. We also recognise the need for understanding and engaging on the wider impact of our operations, through our partners and supply chain.

Our Aim: Contribute to national net-zero targets through reducing carbon emissions and other Green House Gases.

We continue to recognise the wider contribution that services have on the environment and need to broaden our scope of measurement. We first included emissions from Anaesthetic Gases in our 2018/19 report and continue to report these emissions.

The addition of a wider range of emissions sources in our reporting increases the challenge but is essential if we are to embed sustainability across the whole organisation and harness the enthusiasm and determination of the widest range of our staff.

Overall, there has been a reduction in emissions from last year, by 5,641 Tonnes of  $CO_2$ , a reduction of 8.5% from last year. There have been increases in some emissions sources, but overall there is confidence that the strategy and activities across the organisation are supporting our corporate aims and targets to increase sustainability of the organisation.





# **Glossary**

RIE – Royal Infirmary of Edinburgh

CO<sub>2</sub> – Carbon Dioxide

RHSC – Royal Hospital for Sick Children

RYCYP & DCN – Royal Hospital for Children and Young People

WGH - Western General Hospital

SJH – St John's Hospital

kWh – Kilowatt Hours (measurement of energy)

EV – Electric Vehicles

T – Tonnes

Kg - Kilograms

### **Contributors**

Jane Hopton

Daniel Mill

Ian Mackenzie

Jan Cassels

Iain Sneddon

Andrew Goddard

**Andrew Grant** 

Katie Johnston

Douglas McCabe

Shauna Golden





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# Introduction

This is NHS Lothian's Annual Climate Emergency and Sustainability Report which is part of the reporting requirements of NHS Scotland Climate Change and Sustainability Policy (2021) and in line with NHS Scotland Climate Emergency and Sustainability Strategy published in August 2022.

This report is based on progress on NHS Lothian's Sustainable Development Framework (SDF), Public Bodies Climate Change Duties Report, Biodiversity Duty Report and accompanying areas of activity in relation to Climate Change activities.

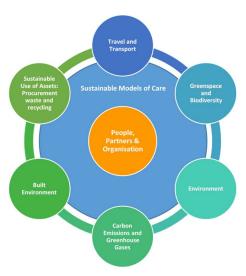
Our SDF, available on the NHS Lothian website, sets out our vision and commitments. We are proud of the contribution that the NHS makes to health, as a provider, developer and researcher of universal health services and treatments, as a major employer and contributor to national and local economies and as an institute responding to social and economic change and promoting public health.

In the face of climate change, the biggest threat to global health of the 21st century, we need to reassess and adapt to the challenge as an organisation and as individuals within the organisation.

This means understanding the impacts of climate change on health and illness, recognising that the NHS needs to be sustainable for future generations and understanding the interdependence and opportunity of sustainability goals such as those set out by the United Nations (UN).

The social, financial and environmental resources of the NHS are limited and need to be used and managed sustainably. Environmental sustainability, good financial management and better, more equal health need to be driven forward hand in hand. Sustainability means that we consider these elements together and prioritise action where positive change in one can benefit others. For example, a significant success last year has been switching to more sustainable anaesthetic gases which has reduced carbon emissions, but also reduced costs. That is why our approach to sustainable development is based on:





#### **Our Vision**

Our vision is to be a lead organisation in sustainable health care with all our staff empowered to put sustainable healthcare at the heart of their practice. We will work with our partners and the communities we serve to put in place work practices, procurement systems and preventative interventions to minimise our environmental impact, protect the natural environment and enhance social value so that we are a sustainable service promoting good health and enhancing quality of life.





#### Goals / strategic objectives

- 1. NHS Lothian will have zero carbon emissions by 2040
- 2. NHS Lothian will contribute to enhancing our natural environment
- 3. NHS Lothian will promote climate resilience and ensure that its services are adapted to climate change
- 4. NHS Lothian will ensure that sustainable development is embedded in all its activities including governance and decision making, clinical practice, partnership working and advocacy
- 5. NHS Lothian will put sustainability at the core of its strategies for promoting health and well-being among staff, patients and the wider community

#### **About NHS Lothian**

NHS Lothian is Scotland's second largest territorial Health Board and provides a comprehensive range of primary, community-based and acute/tertiary hospital services for the populations of Edinburgh, Midlothian, East Lothian and West Lothian with an annual revenue budget of £1.6bn.

As a healthcare system we provide around 250,000 A&E attendances, 5.4m GP contacts and 142,000 elective procedures. We deliver care and treatment for the population that we serve through 4 local health and social care partnerships and four main acute hospital sites: Royal Infirmary of Edinburgh, St John's Hospital, Western General Hospital and Royal Hospital for Sick Children.

- NHS Lothian serves a population of more than 880,000 people living in and around Edinburgh, Scotland's
  historic capital city. The population comprises both urban and rural communities across the City of Edinburgh
  with smaller communities living in towns and villages in West Lothian, East Lothian and Midlothian. In addition,
  Edinburgh is a major tourist area and also the home of the Scottish Parliament. The geographical area known
  as Lothian region covers 700 square miles.
- Whilst the health status of the Lothian population overall is better than that for the whole of Scotland there are areas of significant deprivation in communities on the perimeter of Edinburgh and in Midlothian and West Lothian
- NHS Lothian has a budget of c£1.6 billion with circa 22,824 FTE employees.
- Our built environment comprises 4 major acute sites and 14 other hospital sites as well as approximately 120
  health centres, clinics and other premises with a total GIA of 694,857 m2 including 4 major and 6 smaller
  PFI/PPD premises GIA 223,070 m2.
- Our external estate comprises 174 hectares, 81 hectares of greenspace with a biodiversity score of 484.



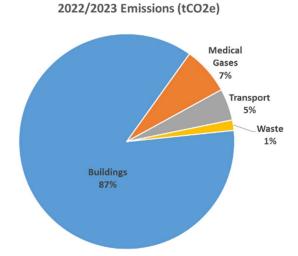


# **Carbon Emissions**

NHS Lothian aims to become a net-zero organisation by 2040 for the sources of greenhouse gas emissions set out in the table below. The table sets out the amount of greenhouse gas produced annually by NHS Lothian.

### **Key Stats**

- Overall decrease of **5,486** Tonnes CO<sub>2</sub> from 2021/2022 report.
- Overall reduction of 134,259 Tonnes CO<sub>2</sub>, 62%, from 1989/1990 national targets baseline (buildings only).
- Buildings reduction of 5,447 Tonnes CO<sub>2</sub> (-9.4%)
- Medical Gases reduction of 236 Tonnes CO<sub>2</sub> (-5.2%)
- Transport increase of 237 Tonnes CO<sub>2</sub> (+8.9%)
- Waste reduction of 11 Tonnes CO<sub>2</sub> (-1.1%)



NHS Lothian aims to become a net-zero organisation by 2040 for the sources of greenhouse gas emissions set out in the table below. The table sets out the amount of greenhouse gas produced annually by NHS Lothian.

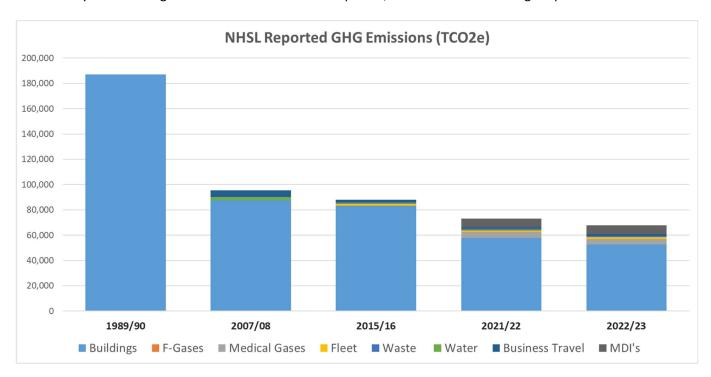
#### Greenhouse gas emissions tonnes CO2 equivalent

Source	2021/22 – emissions	2022/23 – emissions	Percentage change – 2021/22 to 2022/23	2022/23 – target emissions	Percentage difference between actual and target
Building energy	58,124	52,558	-9.4%	56,224	-7.0%
Non-medical F-gas use	NYA	NYA	NYA	0	NYA
Medical gases	4,579	4,343	-5.2%	4,441	-2.3%
NHS fleet use	1,319	1,497	13.5%	1,280	15.1%
Waste	967	950	-1.7%	938	1.3%
Water	254	199	-1.0%	246	-23.7%
Business travel	1,338	1,324	-1.0%	1,297	6.1%
Total greenhouse gases emitted	66,419	60,939	-8.3%	64,426	-5.7%
Metered dose inhaler propellant	6,830	6,881	-0.7%	6,625	3.7%
Total greenhouse gases emitted	73,249	67,820	-7.4%	71,051	-4.8%
Carbon sequestration	282	282	0.0%	274	3.0%
Greenhouse gas emissions minus carbon sequestration	72,967	67,538	-7.4%	70,778	-4.8%

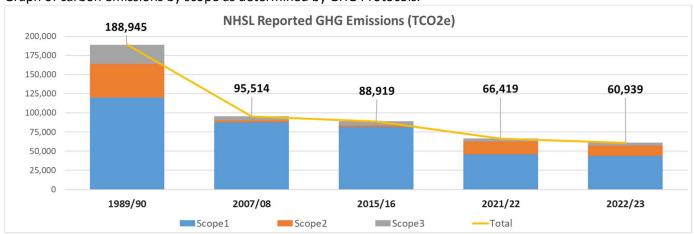




Graph of carbon emissions over period of historic baseline (1989/90), 1<sup>st</sup> Carbon management Plan (2007/2008) and recent years showing emissions reductions in each period, even with an increasing scope of emissions.



Graph of carbon emissions by scope as determined by GHG Protocols.



Year	2007/08	2018/19	2019/20	2020/21	2021/22	2021/22		
Scope 1	87,800	39,786	49,814	50,455	45,450	43,645		
Scope 2	2,302	22,783	18,057	16,841	17,070	13,539		
Scope 3	5,412	2,680	2,770	1,802	3,898	3,743		
Total	95,514	65,249	70,641	69,097	66,419	60,927		
<b>Annual Performa</b>	nce							
Change %			-17.2%	8.3%	-3.9%	-8.3%		
Reduction TCO2			-13,561	5,392	-2,676	-5,487		
Baseline Performa	Baseline Performance							
Reduction %			-31.7%	-26.0%	-30.5%	-36.2%		
Reduction TCO2			-30,265	-24,873	-29,095	-34,587		





### **Commentary**

- Buildings are the most significant emissions source, based on the scope of emissions that we are currently reporting. The high proportion of emissions associated with the major acute sites (RIE, WGH and SJH) account for 66% of the total buildings emissions, the top 10 account for 90%.
- Anaesthetic gases contributed 7.1% of our CO<sub>2</sub> emissions. There has been a decrease of 5.2% compared to the previous year, with the long-term trend showing significant reductions which has been a real success, with further reductions expected due to the sustained activities across the system.
- Waste figures show a decrease of 16 TCO<sub>2</sub>. We have made significant progress in improving the scope and quality of our waste data, but concerns remain so caution is needed in interpreting this small reduction as progress. Waste is a relatively small carbon contributor but an important area for action from a cost and sustainability perspective.
- Transport emissions have increased by 231 Tonnes CO<sub>2</sub>. An approximate mileage increase of 0.5 million km's.
- NHS Lothian is the first board in Scotland to deliver a biodiversity, climate change and nature-based health benefits assessment of the natural capital assets (habitats) of their estate. We have established a base line of carbon sequestration, air quality regulation and biodiversity.





# **Buildings**

We aim to use renewable heat sources for all the buildings owned by NHS Lothian by 2038.

NHS Lothian has in excess of 120 sites, including three acute campuses, community hospitals, health centres and other supporting infrastructure. The key sites include the Royal Infirmary of Edinburgh, the Western General Hospital, St John's Hospital and the Royal Edinburgh Hospital.

### **Key Stats**

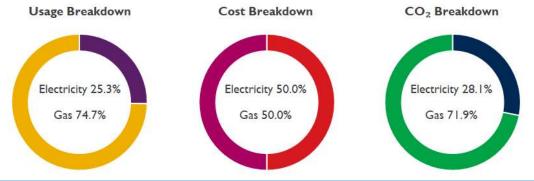
- In 2022/23, 52,757 tonnes of CO2 equivalent were produced by NHS Lothian use of energy for buildings. This was a decrease of 9.4 % since the year before.
- In 2022/23, NHS Lothian used 274,833,732 kWh of energy. This was a decrease of 6.6% since the year before.
- In 2022/23, NHS Lothian generated 3,042,916 kWh of energy from renewable technologies.
- Carbon reduction of **5,583** TCO<sub>2</sub> (-9.7%) from the previous year.
- Buildings account for 87% of total reported emissions, 75% of associated scope cost
- Gas use decreased by over 8.7 million kWh's (1,738 TCO<sub>2</sub>, -4.4%) 733 equivalent average homes
- Electricity use decreased by over 10.5 million kWh's (2,281 TCO<sub>2</sub>, 13.2%) 3,653 equivalent average homes
- The three largest sites (Little France, WGH & SJH) account for 73% of building emissions, the ten largest 85%.
- Total energy is equivalent to **24,019** average homes electricity and **17,098** gas consumption.
- £2.4M invested in energy efficiency measures last year

#### **Building Utilities Emissions**

Carbon Emissions tCO₂e			2022-2023 change to previous year		2022-2023 to 2015-16		
	2015/16	2021/22	2022/23	Variation	% Change	Variation	% Change
Electricity	42,155	18,548	14,702	-3,845	-20.7%	-27,453	-65.1%
Gas	41,122	39,191	37,453	-1,738	-4.4%	-3,669	-8.9%
Water	267	254	199	-55	-21.6%	-68	-25.4%
Total	83,277	57,738	52,155	-5,583	-9.7%	-31,122	-37.4%

#### **Building Utilities Consumption**

	Energy Consumption (kWh)			2022-2023 change to previous year		2022-2023 to 2015-16	
	2015/16	2021/22	2022/23	Variation	% Change	Variation	% Change
Electricity	84,250,610	69,628,248	69,655,827	-10,594,731	-13.2%	-14,594,783	-17.3%
Gas	222,944,82 9	214,172,124	205,177,905	-8,791,800	-4.1%	-17,766,924	-8.0%
Water	775,728	877,878	686,800	-159,791	-18.9%	-88,928	-11.5%







### **Commentary**

#### What did we do in 2022-2023 to reduce carbon emissions from buildings?

- The reduction in carbon emissions from buildings of 5,477 TCO<sub>2</sub>, is due to a combination of a reduction in utilities demand, reducing utilities carbon factors and impacts of investment in energy efficiency and renewable technology.
- Gas and electricity have significantly decreased over this period, with an overall reduction in energy demand by 6.6%.
- During this reporting cycle, NHS Lothian, with support from Scottish Government, invested over £2.5 million in a programme of works to reduce energy demand, carbon emissions and energy costs. Over 9,000 LED light fittings were installed at St John's Hospital, reducing demand by almost 3 million kWh's and saving 620 tonnes of carbon.
- Other initiatives include the ongoing de-steaming activities at the Western General Hospital, where thermal
  energy for heating and hot water is being transitioned from the steam network to a new low-temperature
  heat network system. The first phase has resulted in emissions savings of 1,732 TCO<sub>2</sub>, with further savings
  expected in future phases of the programme.
- Phase 2 of the WGH Energy Infrastructure project was approved for progression, which will extend the heat network and further reduce demand on the in-efficient steam heat network.
- A high proportion of emissions are directly associated with the major acute sites. The RIE, WGH and SJH account for 64% of the total buildings emissions, with the 10 largest consumers accounting for 85%.
- The Energy Team have focused on developing the energy data systems and report functions to drive forward identification of changes in demand and opportunities for improvements.
- The difference in figures for electricity and gas shown in the two tables is due to a difference in invoiced utilities and reportable emissions. In-line with international standards we deduct energy consumption associated with external organisations operating within our property boundaries. The majority is apportioned to the University of Edinburgh who have large footprints at the RIE and WGH. Other partners include City of Edinburgh Council and West Lothian Council, all of which report their emissions under the same regulations.

#### Over the next year 2023-2024, NHS Lothian is planning the following;

- Application to GPSEDS for capital funding support for further investment in energy efficiency and carbon reduction measures
- Energy Switch-off Campaign
- Development of the Energy Team to focus on optimising the existing estate
- Development of net-zero strategy for buildings, developing the report produced through NHS Assure funded support.
- Working with local stakeholders to work in partnership and identify opportunities for collaborative energy projects options, in particular Heat Networks.

#### What projects are we planning for the longer-term to reduce emissions from building energy use?

- Energy Switch-off Campaign,
- Development of the Energy Team,
- Development of net-zero pathways through NHS Assure funded support.





# **Transport**

Domestic transport (not including international aviation and shipping) produced 26% of Scotland's greenhouse gas emissions in 2021. Car travel is the type of travel which contributes the most to those emissions.

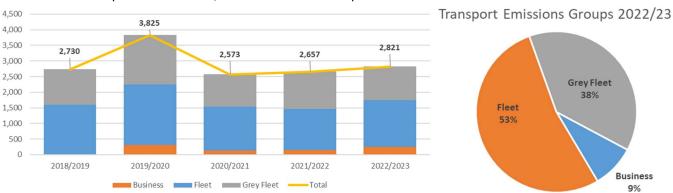
Travel and transport of goods, services, staff, patients and visitors has a significant impact on local air quality, congestion and health. Delivering more remote working and consultations as part of a Sustainable Travel Plan and where travel is necessary, supporting staff, patients and visitors to use more active and sustainable travel methods will reduce the impact of these activities, leading to cost savings and health benefits.

**NHSL SDF Aim:** To encourage remote working and consultations where possible and support sustainable and active travel in order to reduce the carbon and air quality impacts of our organisation and supply chain.

NHS Scotland is supporting a shift to a healthier and more sustainable transport system where active travel and public transport are prioritised.

### **Key Stats**

- Transport increase of 237 TCO2 (+8.9%)
- 4.7% of total reported emissions, 13% of associated scope cost.



Tuesday	Consumption Emissions (tCO2e)					
Transport	(2022/	(2022/23)		2022/23	Variation	% Change
Diesel (Fleet)	429,902	litres	1,012	1,099	101.1	10.1%
Car - petrol (Grey fleet)	2,747,646	km	680	468	-212.0	-31.2%
Car - diesel (Grey fleet)	2,149,320	km	290	367	77.5	26.8%
Petrol (Fleet)	168,424	litres	293	364.11	67.2	22.6%
Average Car <sup>1</sup> (Grey fleet)	1,143,227	km	200	195.11	-5.1	-2.6%
Car - hybrid (Grey fleet)	171,731	km	15	20.61	5.5	36.4%
Taxi - Business	5,2922	km	1	1.08	0.5	98.4%
Train - Business	508,7452	km	14	18.06	4.9	37.6%
Air - Business	139,8392	km	3	34.38	31.5	1085.9%
Bus - Business	114,8172	km	12	12.37	0.6	5.5%
EV's - Business	102,463	kWh	8	21.63	14.6	206.5%
EV's - Fleet	223,502	kWh	27	47.17	23.4	98.1%
Taxi - Business	1,195,850	km	114 <sup>2</sup>	244	127.3	109.0%
eBikes		km	-			
Total			2,669	2,894	237	+8.9%
Unknown Fuel     Values calculated from cost information	,			,		





The following table sets out how many Zero Tailpipe Emission and fossil fuel vehicles were in NHS Lothian fleet at the end of March 2022 and March 2023:

	March 2022		March		
	Total vehicles	% Zero Emissions Vehicles	Total vehicles	% Zero Emissions Vehicles	Difference in % Zero Emissions Vehicles
Cars	343	25%	406	37%	18%
Light commercial vehicles	159	31%	167	34%	5%
Heavy vehicles	29	0%	27	0%	0%

The following table sets out how many bicycles and e-bikes were in NHS Lothian's fleet at the end of March 2022 and March 2023:

	March 2022	March 2023	Percentage change
Bicycles	0	0	0%
e-bikes	2	27	1,350%

#### **Commentary**

- Overall, there has been an increase in transport emissions, across most groups. The exception is Grey fleet petrol mileage.
- There has been an increase in the mileage from Grey Fleet of approximately 0.5 million km's. This is a modest increase on the previous year and whilst disappointing, it does show that some of the changes made which reduced travel during covid have been maintained.
- The tables above show comparisons of emissions against 2021/22 for comparison against the previous year. Transport data is collated through a variety of sources, including expenses returns and is therefore based on available indicators to convert costs to distance.

#### What did we do last year to improve active travel?

- Significant progress on transition of the fleet to Electric Vehicles. Over £525,000 has recently been approved for electric vehicles and 46 charging points. The additional electric vehicles bring the total number of electric vehicles in NHS Lothian to 202, with more on order, which is almost 40% of NHS Lothian's fleet.
- Roll-out of eBike fleet across NHS Lothian
- We worked with Travelknowhow Scotland to produce a draft NHS Lothian Sustainable and Active Travel Strategy and held a series of staff consultations on the draft.

#### What did we do last year to improve public and community transport links to NHS sites and services?

• Our Transport Manager is in regular dialogue with public transport teams and local bus operators. Through this dialogue we succeeded in agreeing a diversion of bus service to increase bus options to one of our sites.

#### What are we going to do this year to reduce the need to travel?

• Continue with 2nd staff travel survey on 1 site and expand to another.

#### What are we going to do this year to improve active travel?

Progress Active and Sustainable Travel Strategy

#### What are we going to do this year to improve public and community transport links to NHS sites and services?

• We will continue our dialogue with transport providers and work with SEStrans to promote their app





# **Anaesthetic Gases**

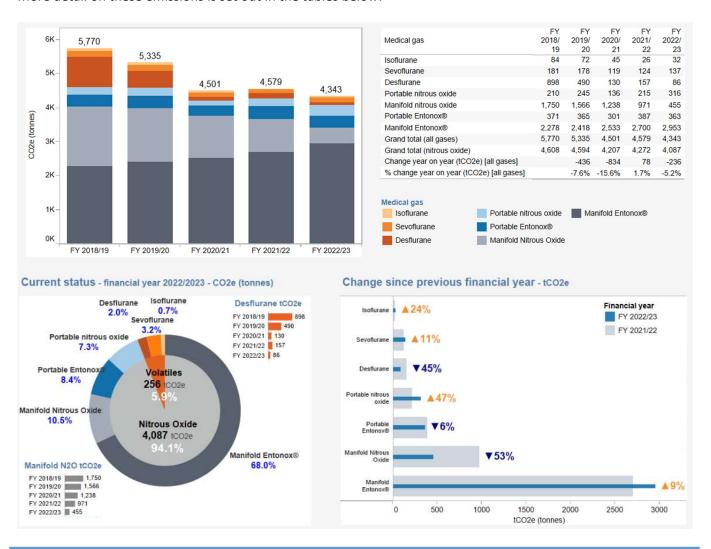
Greenhouse gases are used as anaesthetics and for pain relief. These gases are nitrous oxide, Entonox (a mixture of oxygen and nitrous oxide) and the 'volatile gases' - desflurane, sevoflurane and isoflurane.

Through improvements to anaesthetic technique and the management of medical gas delivery systems, the NHS can reduce emissions from these sources.

#### **Stats**

- NHS Lothian's total emissions from gases in 2022/23 were 4,343 TCO<sub>2</sub>, a decrease of 236 (-5.2%) from the year before.
- 7.1% of total reported emissions, 2% of associated scope cost

More detail on these emissions is set out in the tables below:







#### Volatile medical gas emissions - tCO₂e

Source	2018/19 (baseline year)	2021/22	2022/23	Percentage change 2018/19 to 2022/23
Desflurane	929.3	157.1	86.4	-90.4%
Isoflurane	87.2	25.9	32.1	-61.9%
Sevoflurane	182.3	123.5	137.3	-24.2%
Total	1,198.8	306.5	255.8	-78.0%

#### Nitrous oxide and Entonox emissions - tCO2e

Source	2018/19 (baseline year)	2021/22	2022/23	Percentage change 2018/19 to 2022/23
Piped nitrous oxide	1,750	971	455	-74.0%
Portable nitrous oxide	210	215	316	50.4%
Piped Entonox	2,278	2,700	2,953	29.6%
Portable Entonox	371	387	363	-2.1%
Total	4,609	4,278	4,087	-11.3%

### **Commentary**

- The graphs and data above highlight the impact of the sustained action to reduce emissions from anaesthetic gases. Over the last reporting year there has been a reduction in emissions from all Medical Gases of 236 TCO<sub>2</sub> which equates to a 5.2% in year and 24.8% from the baseline year 2018/19.
- Emissions are calculated from two distinct groups, Volatiles and Nitrous Oxide, with reductions of 51 TCO₂
  and 186 TCO₂ respectively. This a hugely positive result, with a reduction of volatiles by 78% from the baseline
  in such a short period, mainly due to a switch in gases.

#### What did we do last year to reduce emissions from anaesthetic gases?

- Significant switch from manifold Nitrous Oxide to portable.
- Switch in Volatile gas use, reducing the use of Desflurane.
- The key activities have been focused on closure of manifold systems with high leakage rates, which are expected to herald results over the coming period. Data is robust but has an inherent lag due to measurement of returns and not consumption.

#### What are we doing this year to reduce emissions from anaesthetic gases?

Further improvements are considered possible and being investigated across multiple service lines, with the changes realised over the last 12 months there is a high level of confidence in further reductions. The primary areas of focus are the continued closure of manifolds supplying Nitrous oxide and Entonox. NHSL continues to review adoption of new technologies to support increased capture of gases and lower flow techniques.

#### What are we doing this year to make surgery more sustainable?

NHSL is seeking to establish a Green Theatres Programme, as part of the national initiative, covering various sustainability initiatives in this resource intensive environment.





### Waste

Earth Overshoot Day marks the date when our demand for resources exceeds what earth can regenerate in that year. In 2023, Global Earth Overshoot Day is 2 August.

For the UK, the picture is more worrying. In 2023, the UK's Earth Overshoot Day is 19 May. The current level of consumption of materials is not sustainable and is the root cause of the triple planetary crises of climate change, biodiversity loss and pollution.

We aim to reduce the impact that our use of resources has on the environment through adopting circular economy principles, fostering a culture of stewardship and working with other UK health services to maximise our contribution to reducing supply chain emissions to net-zero by 2045.

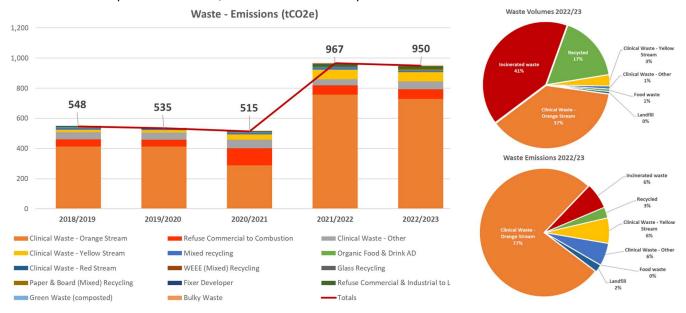
The goods we use constitute the largest proportion of our carbon footprint and reducing unnecessary use of resources across NHS Lothian will have a major impact. This is evident on a daily basis to our staff, patients and visitors. The level of concern amongst staff and level of motivation for change is high.

Procurement and waste management are therefore priority areas for action. NHS Lothian generates large volumes of waste and is committed to managing waste in a way that promotes sustainable development. By applying the waste hierarchy, rethinking traditional waste models and working closely with our staff and supply chain, we can move towards a circular economy approach.

Good food is essential for patient and staff well-being and a key area for improvement in procurement and waste management. Increasing local, seasonal food and more sustainably sourced fish with less reliance on meat products will potentially pay health, environmental and financial dividends. Such a move needs to be backed by a sustainable catering strategy (which embodies and exceeds national nutritional guidelines), procurement that enables the sourcing of local and seasonal food and imaginative presentation to support healthy choices. Food waste is an important area and the NHS Scotland Food Waste Guidance and Food Waste Calculator, recently developed by Zero Waste Scotland, will inform progress in this key area.

#### **Key Stats**

- Waste decrease of 17 TCO<sub>2</sub> (-1.7%)
- 1.6% of total reported emissions, 10% of associated scope cost







Waste	CO2	Waste Volume (Tonnes)	Carbon Variation	% Carbon	% Volume
Clinical Waste - Orange Stream	730	2,675	-27.3	76.9%	38%
General Waste Combustion	62	2,904	0.3	6.5%	41%
Clinical Waste - Other	54	54	14.8	5.7%	1%
Clinical Waste - Yellow Stream	60	203	-3.9	6.3%	3%
Mixed recycling	10	485	-6.6	1.1%	7%
Organic Food & Drink AD	0	47	-1.3	0.0%	1%
Clinical Waste - Red Stream	0	0	0.0	0.0%	0%
WEEE (Mixed) Recycling	0	21	0.2	0.0%	0%
Glass Recycling	0	14	0.1	0.0%	0%
Paper & Board Recycling	10	468	9.1	1.1%	7%
Fixer Developer	0	0	0.0	0.0%	0%
Refuse to Landfill	18	39	-1.9	1.9%	1%
Green Waste (composted)	0	9	-0.2	0.0%	0%
Bulky Waste	4	210	-0.7	0.5%	3%
Totals	950	7,128	-17		

We want to reduce the amount of waste we produce and increase how much of it is recycled. The table below sets out information on the waste we produce and its destination for the last three years:

Туре	2020/21 (tonnes)	2021/22 (tonnes)	2022/23 (tonnes)	Percentage change
Waste to landfill	4	43	39	922%
Waste to incineration	2,638	2,889	2,904	10%
Recycled waste	609	1,125	1,207	98%
Food waste	221	196	47	-79%
Clinical waste	1,183	3,030	2,932	148%

In relation to apparent reduction in food waste, it should be noted that there were substantial gaps in the data provided by our contractor during this year and this data gap accounts for the apparent reduction. Data for the coming year on food waste will be more meaningful.

Similarly, there were known gaps in the clinical waste data provided to us in 2020/2021 making the reported 148% increase from 2021 invalid.

Scottish Government have set targets to reduce the amount of waste produced and how this is treated.

The tables below provide information on our performance against those targets, but where we know our data sets do not align with the target, for example, because we do not have reliable data for the specified baseline year, we have used a best fit approach:





SG: Reduce domestic waste by a minimum of 15%, and greater where possible compared to 2012/2013 – by 2025  NHSL: Reduce business waste (domestic) waste by a minimum of 15% and greater where possible,			
compared with 2021/2022 – by 2025			
Baseline 2021-2022 3,147 tonnes			
Performance – 2022-2023 4,117 tonnes			
% change from baseline +11.2%			
utcome NOT ACHIEVED YET			
Further reduction required 970.4 tonnes			

Ensure that no more than 5%, and less where possible, of all domestic waste is sent to landfill – by 2025

% waste to landfill 2021-2022	0%
Performance waste to landfill – 2022- 2023	6.6 tonnes
% waste to landfill 2022-2023	0.15%
Outcome	ACHIEVED
Further reduction required	0 tonnes

SG: Reduce the food waste produced by 33% compared to 2015/16 – by 2025

NHSL: Reduce food waste by 33% compared to baseline year FY 2020/21

Baseline year 2020-2021	232.4 tonnes
Target – reduce food waste by	46.6 tonnes
Perdormance year 2022-2023	185.9 tonnes DATA INCOMPLETE
Outcome	DATA INCOMPLETE
Further reduction required	DATA INCOMPLETE

Ensure that 70% of all domestic waste is recycled or composted – by 2025

Baseline 2022-2023 (all business waste)	2,882 tonnes
Performance 2022-2023 – recycled or composted	1,231 tonnes
Outcome	29.9% - NOT ACHIEVED
Further increase required to recycling	1,651 tonnes
Comment	21% of domestic waste is currently recycled, with the majority of waste directed to Energy from Waste (EfW) plant.





#### NHSL waste - progress against baselines (tbc) % change and tonnage

NB Bulky waste is treated as on-site recovery, which means some/all may be recycled so should be separate from DW?

The 'Recycled waste' group excludes bulky waste (treatment is onsite recovery), food waste, green waste, construction, commerical or industrial waste and clinical waste

	I waste ge since FY 2021/22
FY 2021/22	FY 2022/23
0.0%	-3.3%
3,030.6t	2,931.7t

Domestic w Tonnage since FY	
FY 2017/18	FY 2022/23
2,914.6t	2,910.4t
Bulky Waste - FY 2020/21 - 238.75t	210.5t

	ed waste ge since FY 2017/18
FY 2017/18	FY 2022/23
0.0%	25.4%
787.8t	987.8t

[BW	categ	огу а	ppear	red in	FY 20	20/21.
Unk	nown	whet	her DI	N incl	uded	BW
prio	to F	202	0/211			

	Food wast & tonnage sinc			waste ge since FY 2021/22		nmerical/industrial ge since FY 2017/18
FY 2020/2	21	FY 2022/23	FY 2020/21	FY 2022/23	FY 2017/18	FY 2022/23
0.0% 232.4t		-80.0% 46.6t	0.0% 21.2t	-59.1% 8.7t	0.0% 66.8t	-51.7% 32.3t
FY 2020/21 232 4t	FY 2021/22 196.2t	FY 2022/23 46.6t	Green waste was measured as a 2020/21. Unknown whether DW FY 2020/21.	a separate category wef FY / contained Green Waste prior to	We have separated Domestic Wa Commerical/ Industrial waste. Doe Waste definition include this busin	es the Domestic Waste/Municipal

Food waste data of very poor quality, with many gaps due to on board weighing gear issue which continues into FY 2023/24 separated Domestic Waste from Construction/ cal/ Industrial waste. Does the Domestic Waste/Municipal finition include this business waste? Need clear definition

#### Notes

The national target states that Ensure that 70% of all domestic waste is recycled or composted
What is the definition of 'Domestic Waste'? since this target could imply Domestic Waste includes green waste? Above we separate Green waste from Domestic Waste. We assume Domestic Waste excludes other business waste (construction,commercial and industrial waste).

#### Recycling rate for FY 2022/23 - various methods

- (1) Of 3898.2 tonnes of Domestic/Recycled waste (excludes Bulky Waste), 987.8t tonnes of waste was Recycled Waste (excludes Bulky Waste), equivalent to recycling rate of 25.3%.
- (2) Of 4108.7 tonnes of Domestic/Recycled/Bulky waste, 987.8t tonnes of waste was recycled, giving a recycling rate of 24.0% [assumes all Bulky waste was not recycled]
- (3) Of 4108.7 tonnes of Domestic/Recycled/Bulky Waste, 1198.3 tonnes of waste were recycled/onsite recovery, giving a recycling/onsite recovery rate of 29.2% [ assumes all Bulky waste was onsite recovery]
- (4) Of 3906.9 tonnes of Domestic/Recycled/Green Waste, 996.5 tonnes of waste was recycled or composted, giving a recycling/composting rate of 25.5% [excludes Bulky Waste]
- (5) Of 4117.4 tonnes of Domestic/Recycled/Green Waste/Bulky Waste, 996.5 tonnes of waste was recycled or composted, giving a recycling/composting rate of 24.2% [assumes all





### **Commentary**

- Waste represents 1.6% of total emissions
- Waste decrease of 17 TCO<sub>2</sub> (-1.7%)
- Clinical Waste remains the highest emissions source, predominately due to intensive treatment method. Importance of waste streams and segregation
  - 1 Tonne of clinical waste = 273 kg CO<sub>2</sub>
  - 1 Tonne of general waste = 21 kg CO<sub>2</sub>
- Waste data continues to be challenging and typically has low certainty. The historic lack of concise data did not allow trend analysis and granular understanding.
- While waste is a very small portion of total emissions, around 1.3%, waste is recognised as a high priority based on feedback from frontline staff during sustainability engagement events.

#### What did we do last year to reduce our waste or improve the proportion of business waste being recycling?

We have made significant progress on our waste data so that in future years we will be able to use this data for planning and monitoring.

We significantly increased the number of recycling bins at our largest site, Edinburgh Royal Infirmary. We also introduced new segregation equipment and undertook a detailed audit of waste segregation at ERI.

#### What are we doing this year to reduce our waste?

We are going to develop plans to increase waste management and circular economy expertise in line with the Resource Management Association Scotland recommendations.

We are going to ensure that waste segregation forms an important part of our Green Theatres Programme.

We are going to set targets for the reduction of clinical waste and develop an invest to save plan to deliver on these carbon and cost savings.





# **Greenspace and Biodiversity**

### **Biodiversity**

Biodiversity, or the wide variety of living organisms within an environment, has declined at a rapid rate in the last 50 years. Evidence demonstrates that these trends are attributed to human activities, such as land use change, habitat degradation and fragmentation, pollution, and the impacts of climate change. The State of Nature report published in 2023 has highlighted the decline of nature across Scotland, with 11% of species now classed as threatened with extinction.

Public bodies in Scotland have a duty under the Nature Conservation (Scotland) Act 2004 (Nature Conservation Scotland Act 2004) to further the conservation of biodiversity, taking care of nature all around us. Furthermore, the Wildlife and Natural Environment (Scotland) Act 2011 (Wildlife and Natural Environment Scotland Act 2011) requires every public body to summarise their activities to meet this duty, through the production of a publicly available report.

#### What actions have been taken to identify, protect and enhance biodiversity across your organisation?

The NHS Lothian Greenspace and Health Strategic Framework sets the vision, strategic objectives and priorities for the NHS estate, publicly accessible greenspaces and greenspace based activities that support health and wellbeing. The delivery of this strategy is led by the NHS Lothian Charities Green Health Programme. The programme has integrated these objectives into key focus area of NHS Lothian Sustainable Development Framework and Action Plan.

#### Pan Lothian strategy

We published the first greenspace and biodiversity audit of the NHS Lothian estate with recommendations to protect, enhance and expand our environmental assets (read the summary and full report here). This natural capital account has been present to NHS Lothian Finance and Resource Committee and the Lothian Capital Investment Group. As a result of this work a commitment to produce a Biodiversity Action Plan was included in our corporate objectives.

#### Master planning and place making

We have worked with NHS Lothian master planning teams and capital project teams to provide advice and guidance on how good quality greenspace design is incorporated into new build hospitals and refurbishment programmes for Royal Edinburgh Hospital masterplan, Western General masterplan, Edinburgh Cancer Centre, National Treatment Centre, Alexander Eye Pavilion.

Greenspace management plans have been created for the <u>Royal Edinburgh Hospital</u> and the <u>Astley Ainslie Hospital</u> to improve biodiversity, climate resilience and encourage greater use.

We have supported the development of an urban realm strategy for the Western General Hospital masterplan. Through this process we engaged local and national partners such as Nature Scot, Local Authority Biodiversity teams and local interest groups (such as the Astley Ainslie Community Trust).

At the newly built East Lothian Community Hospital we are co-creating a Climate Change Action Plan with local community groups. This has involved commissioning local organisations such as Low Impact Living and local professional ecologists to carry out community engagement and provide specialist local advice.

#### Site level interventions

Our programmes support a wide range of staff and partners to take actions that enhance biodiversity on our estate and a full list of projects is included below but highlights include:

- NHS Lothian Community Gardens NHS Lothian has three community gardens that create valuable wildlife habitat. These spaces have been developed and managed in partnership with third sector organisations with sustainability at their core. Actions to improve biodiversity include the creation of a heritage orchard at Belhaven Hospital Community Garden, bog gardens and scrapes for amphibians at Midlothian Community and pollinator friendly planting and habitat creation at The Royal Edinburgh Hospital.
- NHS Ground and Gardens We have tested new approaches to improving wildlife habitats with the NHS
   Lothian Grounds and Gardens teams. At the Western General Hospital pollinator patches have been created





to diversify amenity grassland (watch the Western General Grounds and Gardens Supervisor talk about his work <a href="here">here</a>). In West Lothian the estates teams have changed their mowing regimes to reduce pesticide use and increase grassland diversity.

 Staff action – Through our work we have supported a wide range of NHS staff to take forward biodiversity project on our estate through the Green Health Programme, Climate Challenge grants and core facilities funding. A list of these projects is below.

#### **Future Plans**

- Through the development of our Biodiversity Action Plan we aim to identify priority projects and activities to take forward.
- We are continuing to deliver on the greenspace management plans created an plan to extend this to other sites with significant areas of greenspace

We are integrating biodiversity into our new Environment Management System to support our ISO 14001 certification.

# What actions have been taken to contribute to the NHS Scotland Estate Mapping programme, or to develop an internal mapping programme?

NHS Lothian commissioned Natural Capital Solutions and collaborators to deliver a biodiversity, climate change and nature-based health benefits assessment of the natural capital assets (habitats) of our estate (read the full report here). Following this we have supported the national mapping programme with our methodology, experiences and data. Based on this national work we have reviewed our site boundaries to improve the quality of the data we hold so that we are in a better position to share them with other organisations.

#### What actions have been taken mainstream biodiversity across the organisation?

We have taken the following actions to ensure that biodiversity, and the services it provides, are appropriately and adequately factored into policies and practices that rely and have an impact on it:

- Raised understanding of biodiversity duty and opportunity with key decision-making groups such as Finance and Resource Committee and Lothian Capital Investment Group.
- Briefed key decision makers and hosted site visits to raise awareness of the boards duty, responsibilities and opportunities including:
- NHSL Chair and non-executives
  - o Chief Medical Officer Deputy Chief Medical Officer, & Chair of Faculty of Public Health
  - A non-executive board member chairs the NHS Lothian Charity Greenspace work and champions greenspace and biodiversity across the NHS Board
- Engaged with Master Planning and Capital Planning teams on specific projects

#### How have nature-based solutions been utilised to address the climate and biodiversity emergencies?

Nature-based solutions refer to the use of nature and natural environments to help tackle socio-environmental challenges, providing benefits to people and nature. NHS Lothian is taking this approach to tackle the following challenges:

Challenge: Negative environmental and social impact from ground maintenance operations. Traditional fossil fuelled machinery used in grounds maintenance can have a significant negative impact both in terms of carbon emissions, air quality and health.

**Solution**: NHS Lothian is changing the way that it maintains amenity grassland. We piloted projects to convert areas into low maintenance grassland and wildflower areas reducing the need for cutting and improving biodiversity. Projects to electrify tools and vehicles at the Western General and West Lothian have reduced risk of Hand and Arm Vibration Syndrome for operatives, lessened the noise impact and reduced emissions.

# What actions have been undertaken to raise awareness, engagement and understanding of biodiversity and nature?

We work with a wide range of partners to enhance the NHS Lothian estate and deliver activities that engage key audiences.





- NHS Lothian patients Our ongoing programme of green health activities create opportunities for a wide range of patients to participate in nature-based activities. This ranges from delivering 800 nature-based activity bags to wards with no access to green space through to supporting over 200 patients take part in green health session within acute and community hospital settings.
- NHS Lothian staff We support the NHS Lothian WorkWell team to integrate nature base activities in their staff wellbeing programming and have delivered staff only nature-based activities at the Western General, St Johns and Royal Edinburgh Hospitals. We support Grounds and Gardens Teams and Capital Planning Teams understand how their actions impact biodiversity and what steps they can take. We have developed a network of over 60 NHS staff and partners who want to share their learning and enthusiasm for green health projects as part of our Green Health Network (read more <a href="here">here</a>).
- Communities Through the community gardens we create opportunities for surround communities to engage
  with nature on the NHS estate. The development of greenspace management plans has allowed us to take
  account of local perspective of how our sites are managed and respond to community needs.
- Research We contribute to and learn from research in nature and health. We have commissioned research
  into green social prescribing role in COVID recovery (read more <a href="here">here</a>), have contributed to the design of green
  health intervention for people with poor mental health and problem substance use (read more <a href="here">here</a>) and
  transformation of urban blue and greenspace for community health (read more <a href="here">here</a>).

### **Greenspace**

The design and management of the NHS Scotland green estate for human and planetary health, offers an opportunity to deliver a range of mutually beneficial outcomes. These include action on climate change (both mitigation and adaptation), biodiversity, health and wellbeing for patients and staff, community resilience building and active travel.

### **Key Stats**

- In 2020/21 we established a base line of carbon sequestration, air quality regulation and biodiversity.
- We are now enhancing the greenspace and biodiversity at multiple scales:
  - o Strategic integrating greenspace into corporate targets and Property Asset Management System
  - Site/campus informing site masterplans and greenspace management plans deliver more, better quality greenspace
  - o Grounds & gardens test of change projects to improve habitat quality and plant more trees

	2020/21	
Carbon capture	Annual physical flow	Annual monetary flow £(2020)
Carbon sequestration by greenspace (tCO2e/year)	282	£19,501
Air quality regulation tPM2.5/year	0.98	£225,993
Biodiversity units	484	N/A

The table below outlines any key greenspace projects and their benefits.

Project name/ location	Benefits of project	Details of project
Small scale interve	ntions (<£15k, most recen	t first)
Access Place therapeutic (Ongoing)	Improve greenspace biodiversity Encouraging more nature-based health activities	Turning neglected spaces into vibrant greenspaces, provides opportunities for both staff and service users to engage in activities proven to enhance mental and physical health. For staff, it means having a resource to improve patient care. (Watch video about the project approach <a href="here">here</a> )
Grounds for Health Pathfinder –	Improve greenspace biodiversity	Opportunities to improve carbon sequestration and air quality were identified in the Biodiversity Audit. This pathfinder project will test the feasibility of delivering them within two different settings at Western





		(J-2, 23 33 33 2
making the most of the NHS estate (Western General & Comely Bank Centre (Complete 2022)	Encouraging more nature- based health activities Promote the use of the estate as a health asset	General and Comley Bank Centre . Based on the recommendations from the audit the following enhancements were delivered: Increasing and improving the extent of mixed hedges; creating wooded tiered edge habitats; introducing perennial wildflower planting; signage and interpretation to communicate the benefit of the changes. (Read more about wildlife at the western here)
Mill Lane Surgery's Health and Wellbeing Garden (complete 2022)	Improve greenspace biodiversity. Encouraging more nature-based health activities. Promote use of the estate as a health asset	The Surgery applied to NHS Lothian Charity Small Grants fund to create a small garden with raised beds and one or two fruit trees. The paved area outside the surgery is now a more inviting space where patients can wait for appointments or prescriptions, or where patients and staff can come together in an informal way (and at a correct social distance) to enjoy the outdoors. (Read case study <a href="here">here</a> )
Astley Ainslie Ward Gardens (Complete 2021)	Improve greenspace biodiversity Encouraging more nature-based health activities	Hospital management requested improvements to two areas for patient use. We collaborated SRUC garden design and horticulture students and created two accessible garden areas with native planting.
Emergency Department Staff Wellbeing Garden (Royal Infirmary of Edinburgh) (Complete 2021)	Improve greenspace biodiversity Encouraging more nature-based health activities Promote the use of the estate as a health asset	There are over 200 staff in the Emergency Department, many whom work 12 hour shifts. The staff had no suitable outside area where they could take some time to relax and get some fresh air during long and busy shifts. Funding was used to buy garden furniture, plant pots and plants and help transform the area into a calm and inviting space for staff to enjoy their well-earned break. (Read case study <a href="here">here</a> )
Large projects and m	nulti yea interventions (>£15k)	
Astley Ainslie Greenspace Management plan (ongoing)	Improve greenspace quality & quantity Connect with surrounding green infrastructure Encouraging more nature- based health activities Promote the use of the estate as a health asset Develop a co-ordinated strategic approach	PHASE 1 (complete)- In 2022, NHS Lothian engaged landscape architect, Liz Thomas, to produce a Greenspace Management Plan for the site. After a period of public consultation – with online and face-to-face events in the AAH grounds and with NHS Lothian staff and patients as well as local groups and partners – a plan was produced. (Read more <a href="here">here</a> )  PHASE 2 (ongoing) – Delivery plan has been drafted and Nature Rehabilitation Ranger post approved. 16 large standards trees have been secured for planting in winter 2023.
Royal Edinburgh Hospital Greenspace Management Plan (ongoing)	Improve greenspace quality & quantity. Connect with surrounding green infrastructure. Encourage nature-based health activities. Promote use of estate as a health asset. Develop a co-ordinated strategic approach	PHASE 1 (complete) - Edinburgh and Lothians Greenspace Trust (ELGT) received funding from the Edinburgh and Lothians Health Foundation, part of NHS Lothian, to create a Greenspace Management Plan for the Royal Edinburgh Hospital with the aim of gaining a Green Flag Award. (Read about our green flag award)  PHASE 2 (ongoing) — working with partners across the sites trees have been planted, and areas of wildflower improved. Strategy for implementation in parallel to REH masterplan under development with ERZ landscape architects.
Western General Hospital Urban Realm Strategy (Ongoing)	Improve greenspace quality & quantity. Connect with surrounding green infrastructure. Encouraging more nature-based health activities.  Promote the use of the estate as a health asset.  Develop a co-ordinated strategic approach	PHASE 1 (complete) - Following a competitive tender process by NHS Lothian, Harrison Stevens (Landscape Architects) have been appointed to prepare a high-level Green Space and Public Realm strategy at the Western General Hospital (WGH), Edinburgh. The commission involves the development of a site strategy that will align with all currently planned and future developments within the site. Harrison Stevens will undertake baseline studies of the site and provide strategic design proposals based on the current site conditions and the strategic development masterplan prepared by NHS Lothian.
Staff Wellbeing Courtyard at Royal Infirmary of Edinburgh (Ongoing)	Improve greenspace quality. Encouraging more nature-based health activities Promote the use of the estate as a health asset	PHASE 1 (COMPLETE) – Following a competitive commission, plans have been developed for a staff wellbeing garden. The concept and detail design have been developed with staff and key stakeholders for a wellbeing space and funding has been secured.  PHASE 2 (Ongoing) – Implementation will commence once all approvals have been secured from site partners.





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Patient courtyard at Royal Infirmary of Edinburgh (Ongoing)	Improve greenspace quality. Encouraging more nature-based health activities. Promote use of the estate as a health asset	PHASE 1 (ONGOING) – Following a request form staff a courtyard has been identified that could be used by ITU and other patients. Concept and details designs are in development with key stakeholder
Engagement/activity		
Royal Edinburgh Hospital Community Garden Green Health Activity Pathway (Year 2 of 3)	Encouraging more nature- based health activities Promote the use of the estate as a health asset	This three-year project led by the Cyrenians will establish a sustainable person-centred green health activity pathway at the Royal Edinburgh Hospital. The therapeutic activities will support the patient community to use the community gardens and associated greenspace to improve their health and wellbeing. From the first connections with nature and gardens on the wards through to ongoing support on discharge the project will support people to move towards positive more stable futures. Working with staff and partners across the site, the project will embed this pathway for the future. (Read more here)
Wild Ways Well at St Johns Hospital (Year 1 of 3)	Encouraging more nature- based health activities Promote the use of the estate as a health asset	Three-year project in partnership with The Conservation Volunteers (TCV), Ladywell Neighbourhood Network (LNN), National Lottery Community Fund and NHS Lothian Charity is creating beneficial links between spending time amongst nature and people's wellbeing.  The project supports patients, staff and visitors to St John's Hospital in Livingston to access and experience the natural spaces, species and activities that are on their doorstep. By doing this we want to support more people to live happier, healthier lives. By taking part, people will be supported to realise how easy it is to build contact with nature into their daily lives and the benefits that this can bring. (Read more here)
Nature Prescription at the Western General Hospital (Ongoing)	Encouraging more nature- based health activities Promote the use of the estate as a health asset	Working in partnership with the RSPB on a pilot project to deliver Nature Prescriptions to support the health of people and nature at the Western General Hospital in Edinburgh.  NHS Lothian Charity's Green Health team has partnered with the Royal Society for the Protection of Birds (RSPB) in a pioneering pilot project to introduce Nature Prescriptions that support both people and nature at the Western General in Edinburgh. (Read more here)
Havens (Ongoing)	Promote the use of the estate as a health asset	A series of portraits and stories documenting the work-life experiences of NHS Lothian staff uncovering the places where they find time for quiet within hectic work life. Award-winning photographers interviewed and photographed over 75 NHS Lothian staff members holding a variety of posts across a wide range of NHS Lothian sites. The result of their year of working within the hospitals will be a collection of portraits & stories that will be displayed at various NHS Lothian sites and at Stills Gallery in Edinburgh's City Centre in the summer of 2024 (details TBC). (Read more here)
Your Place For Greenspace: Royal Edinburgh Hospital (Complete 2023)	Encouraging more nature- based health activities Promote the use of the estate as a health asset	As part of a move to create a more inviting atmosphere for patients, staff and visitors at the Royal Edinburgh Hospital we've teamed up with a local artist, Andy Archer, to create a series of hand-drawn illustrative artworks celebrating the site. These artworks highlight the green spaces and charity partners connected to the Royal Edinburgh Hospital. (Read more <a href="https://example.com/here">here</a> )





# **Climate Change Adaptation**

The climate is changing due to the greenhouse gases already emitted into the atmosphere. While efforts to reduce the rate and scale of climate change continue, we must also adapt to new conditions we are facing.

The changing climate is increasing risks for health and health services. More information on these risks in the UK can be found in the UK Climate Change Committee's Health and Social Care Briefing available here: <a href="https://www.ukclimaterisk.org/independent-assessment-ccra3/briefings/">www.ukclimaterisk.org/independent-assessment-ccra3/briefings/</a>.

Adaptation to climate change is becoming increasingly important for the NHS as extreme weather conditions become more frequent and severe, posing a risk to public health and to the resilience of our services. Adapting to our changing climate and mitigating the negative effects as well as raising awareness among our staff, patients and partners will be a major priority. Producing an NHS Lothian Climate Change Risk Assessment and Mitigation Plan is a statutory requirement.

**SDF Aim**: To work with our partners to make sure that NHS Lothian is prepared to deal with the effects of climate change by ensuring that we have invested in appropriate adaptation and mitigation measures.

#### What did we do in 2022-2023 to Adapt to Climate Change?

NHS Lothian recognises that significant progress needs to be made in our progress on Adaptation and this is reflected in Adaptation being one of the lowest scoring areas in the NSAT assessment.

NHSL have completed a Climate Change Risk Assessment (CCRA) using the tools developed by NHS Assure. At this time further support and development is required, including in relation to links to Facilities, Capital Planning, Property and Asset Management, Public Health and Resilience planning.

#### What are we doing in 2023-2024 to Adapt to Climate Change?

Further action is required to develop an Adaptation Plan based on outputs of the Risk Assessment. NHSL are requesting external support from NHS Assure to further develop the CCRA.

NHSL are active participants in the Infrastructure Investment Programme Board (no Net Zero Leadership Board) developed as part of the City of Edinburgh Council's 2030 Climate Strategy. This includes participation in Edinburgh Adaptation Partnership which will add value to the city-wide approach to key themes including a subgroup on adaptation.

# Sustainable construction

Where there is a need for new healthcare facilities, we want both the buildings and grounds to be safe, nature-rich, sustainable, resilient and accessible. NHS Lothian is working on the following building projects:

- NTC St John's Hospital, Livingston.
- Edinburgh Cancer Centre at The Western General Hospital, Edinburgh
- Eye Pavilion, Edinburgh

#### What did we last year to make our construction projects more environmentally sustainable?

The building projects are at early design phase stages, therefore NHS Lothian has adopted the new Sustainable Design and Construction (SDaC) Guide as set-out in SHTN 02-01 to guide the design development process for considering sustainable performance outcomes.

#### What are doing this year to make our construction projects more environmentally sustainable?

NHS Lothian will continue to develop these projects using the SDaC Guide to evaluate the opportunities and measures for inclusion in the design.





# **Environmental stewardship**

Environmental stewardship means acting as a steward, or caretaker, of the environment and taking responsibility for the actions which affect our shared environmental quality.

This includes any activities which may adversely impact on land, air and water, either through the unsustainable use of resources or the generation of waste and pollution. Having an Environmental Management System (EMS) in place provides a framework that helps to achieve our environmental goals through consistent review, evaluation, and improvement of our environmental performance.

#### What steps did we take last year to develop and implement our EMS?

A significant step was implemented in October 2022, when the new role of Environmental Management System Co-ordinator was filled, with Mukhtar Abdullah joining NHS Lothian. Mukhtar brings knowledge and experience of EMS, and with this dedicated resource we are well placed to develop the information, systems and processes to better manage our impacts on the environment.

#### What did we do last year to improve our environmental performance?

The activities described under the emissions sources' headings give insight into some of the activities that contribute to reducing harm to the environment.

#### What steps will we take this year to further develop and implement our EMS?

We will continue to develop and design our EMS, with the aim of achieving key milestones on the path to embedding the system across the entirety of the organisation.

The first step will be to develop an implementation work plan, that provides clarity on the activities, milestones and an ability to track our progress.

A significant aspect of implementing the system will be the design and implementation of the governance and reporting structure that will be critical in both the implementation and management of the system for the long-term success.

#### What are we doing this year to improve our environmental performance?

The activities described under the emissions sources headings give insight into some of the activities that contribute to reducing harm to the environment





# Sustainable communities

The climate emergency undermines the foundations of good health and deepens inequalities for our most deprived communities.

The NHS touches every community in Scotland. We have a responsibility to use our abilities as a large employer, a major buyer, and one of the most recognised brands in the world – an 'anchor' organisation – to protect and support our communities' health in every way that we can.

#### What are we doing to act as an anchor institution for our local community / communities?

Our role as an Anchor Institution is a key pillar of NHS Lothian Strategic Development Framework <u>Strategic</u> <u>Development Framework – Strategies (nhslothian.scot).</u>

Key outcomes for 2022-2023:

- · Lothian hospitals income maximisation service established
- NHS Lothian is Living Wage Accredited
- NSS Community Benefits portal established and in use with local partners
- NHS Lothian Staff Cost of Living working group
- Established outcomes framework and step diagram

In 2022-2023 an Anchor Institution Programme Board was established and an Implementation Plan developed setting out priority areas for 2023-24 and these include reducing our environmental impact.

A key success in 2022-2-23 was that NHS Lothian became a Living Wage Employer.

What are we doing to improve the resilience of our local community / communities to climate change?

Anchor Institution Programme Board committed to develop a 5 year plan for our land and assets which is based on Anchor Institution Principles.

# Anchor Institution A good

neighbour, good consumer and good employer Priority 2: Widening access to quality

Priority 2: Widening access to quality work (Employer)

Priority 3: Using buildings and spaces to support communities

Priority 4: Reducing our environmental impact

Priority 5: Working more closely with local partners

NHS Lothian Sustainability Team continues to embed considerations in relation to inequalities and specifically food poverty in the planning to implement Net Zero Pathways and in scoping our engagement in the development of Heat Networks.





## **Sustainable Care**

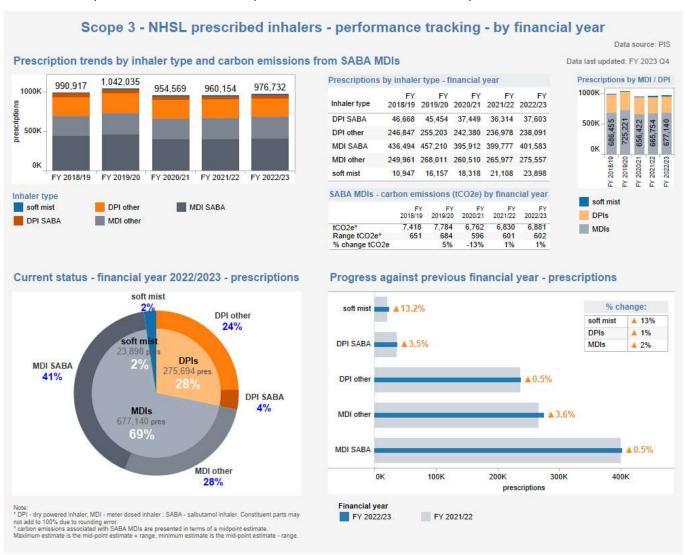
### **Respiratory medicine**

Greenhouse gases are used as a propellant in metered dose inhalers used to treat asthma and COPD. Most of the emissions from inhalers are from the use of reliever inhalers – Short Acting Beta Agonists (SABAs). By helping people to manage their condition more effectively, we can improve patient care and reduce emissions.

As part of NHS Scotland's commitment to greener health care, the environmental impact of inhalers has been examined. The majority of carbon emissions from inhalers come from the propellants in pressurised metered-dose inhalers (pMDIs), which currently account for 66.6% of all inhaler device types prescribed in NHS Scotland. We estimate that emissions over the 2022/23 reporting period from inhalers in NHS Lothian were 6,881 tonnes of CO<sub>2</sub> equivalent.

The Scope 3 emissions section of our Carbon Emissions report shows the significant impact the NHS has on emissions through the services delivered. An area of importance is the use of MDI inhalers, due to the environmental impact of these devices due to the resources used in manufacture of the devices and propellants used in these devices.

A key first step was to be able to baseline and monitor the carbon emissions from MDIs and thanks to Jan Cassels, senior data analyst, NHS Lothian has a comprehensive dashboard under development.



Katie Johnston and Douglas McCabe, Pharmacists in NHS Lothian, have been active advocates in encouraging quality improvement in prescribing practice and management of MDI inhalers to ensure that 'every puff counts'.





#### Key messages are;

- · Recognise it's not simply about switching from MDIs to a DPI inhaler
- Education to prevent waste of inhalers and reduce unnecessary admissions.
- Promote behaviours that improve disease control reduce use of rescue medication including smoking cessation.
- Ensuring inhalers are used until they are empty, including through lower prescription rates
- Push for movement on the recycling scheme
- Ensure discarded MDI inhalers are incinerated so that any residual hydrofluorocarbons are destroyed
- Remember a device or medication is not greener if a patient can't use it effectively

#### What did we do last year to reduce emissions from inhalers?

We continued to work on the development of our inhaler prescribing dashboard.

We introduced waste guidelines and publicised the pathway for disposal of used inhalers ensuring that these are destroyed through incineration.

#### What are we doing this year to improve patient care and reduce emissions from inhalers?

We are working to set a target for reducing emissions from inhalers for 2023-2024.

The East Region Formulary encourages prescribers to have a full discussion of inhaler choices with patients, taking into account environmental impact, inhaler technique and patient factors and when clinically appropriate to prescribe a dry powder inhaler (DPI) as first choice. Further information can be found through PrescQIPP and the NICE Patient decision aid: Inhalers for asthma.

We continued to build networks in advance of the planned Quality prescribing for respiratory illness 2024 to 2027 - draft guidance: consultation

# What else did we do last year to make care more sustainable?

# **Medical Education Fellow in Environmental Sustainability**

Dr Shauna Golden was appointed as NHS Lothian's first Medical Education Fellow in environmental sustainability. The aim of the role is to raise awareness of environmental issues, facilitate collaboration and provide education and support to clinical colleagues and service teams. First Medical Education Fellow in Environmental Sustainability – News & Media (nhslothian.scot)





### **Primary Care**

• We undertook an initial scoping exercise to identify work that was already on-going in primary care as a basis for building networks and support environmentally sustainable primary care.

### **Green Social Prescribing**

- The NHS Lothian Charity committed £20k to supporting this test of change and the participating groups decided between themselves how the money should be spent. Three groups received £5k each to run activities, improve infrastructure and equipment to allow them to take more referrals, the rest of the money was used to develop resources and materials to promote referrals and evaluate the project. Other groups did not want funding but took part to increase the referrals to existing services.
- This test of change was designed to see how we can integrate green social prescribing into the health and social care system and was not about just funding more activity. The evaluation report, copy attached, highlights how our strategic approach was successful in this short-term test. The findings from the Exec. Summary really hit home when they said that we have been able to show a big impact in a small amount of time and with limited resources. Beyond the benefits to the participants there has also been positive impacts on the prescribers and providers, allowing people to step out of the normal roles and find new ways of working together flexibly. One key thing was because of this project the Midlothian Wellbeing Service (community link workers) were able to develop a Mindfulness in Nature course that they now offer as part of their core service.
- Next steps are for this approach to expand to more primary care clusters in Midlothian and to use the results to influence other green prescribing activity in Lothian

#### What else are we doing this year to make care more sustainable?

Our corporate objectives in relation to Sustainable Care in 2022-2023 are as follows.

Strengthen NHS Lothian's strategy and delivery of sustainable models of care by developing clinical leadership, engagement and delivery structures in relation to clinical services, quality improvement and patient engagement.

- Reduction of 10% carbon emissions from medical gases
- Establish targets for reduction in carbon emissions from inhalers
- Green Theatres Programme has comprehensive costed action plan costed in terms of finance and carbon
- Increase in green health care interventions
- Action plan in relation to sustainable use of medications
- Primary care climate change and sustainability action plan
- Standard generic tool for Climate Change and Sustainability review of care pathways and service provision developed and in use
- Climate Change and Sustainability champions network in place
- Opportunities for Research, Development and Innovation scoped.

# **Leadership and governance**

NHS Lothian Sustainability Champion is Angus McCann, Non-executive member of the board, Chair of Finance and Resource Committee (FRC). The NHS Lothian Committee with responsibility for Climate Emergency and Sustainability Governance is the Finance and Resources Committee.

The Executive Lead is Jim Crombie, Deputy Chief Executive. Reporting on Climate Emergency and Sustainability is to CMT.





NHS Lothian demonstrated strong vision and commitment to tackling Climate Change and Sustainability when it endorsed the Sustainable Development Framework and Action Plan in December 2020 and included the delivery of this plan as a Corporate Objective for the year of this report, 2021-2022.

The Finance and Resource Committee have received update reports at every meeting and there has been regular reporting to the CMT.





# **Sustainable Development Framework Update**

Review of progress on NHS Lothian Sustainable Development Framework (SDF) and Action Plan (to end of March 2023).

		Total actions in framework									
		Action Plan Report					Action Plan Report 2022-23				
	SDF	Total no. of Actions	Not started	Some progress	Good progress	Complete	Actions in cycle	Not started	Some progress	Good progress	Complete
People, Partners & Organisation	34	33	8	18	2	5	11	4	6	0	1
Governance and decision-making for sustainability	7	7	0	4	0	3	0	0	0	0	0
Performance Management/Resource Analysis	3	2	0	2	0	0	1	1	0	0	0
eHealth	1	1	0	0	0	1	4	3	1	0	0
Sustainability & Value	0	0	0	0	0	0	0	0	0	0	0
Our People	5	5	1	2	1	1	5	0	4	0	1
Inequalities, Partners and Communities	10	10	5	4	1	0	0	0	0	0	0
Quality Improvement	3	3	0	3	0	0	0	0	0	0	0
Adaptation to Climate Change	5	5	2	3	0	0	1	0	1	0	0
Sustainable Models of Care	45	46	10	30	4	2	2	0	1	0	1
Primary Care	10	10	1	8	0	1	1	0	0	0	1
Theatres and Anaesthetics	13	13	2	9	2	0	0	0	0	0	0
Pharmaceuticals	16	16	4	10	1	1	0	0	0	0	0
Outpatient Departments	2	3	1	2	0	0	1	0	1	0	0
Laboratories	0	0	0	0	0	0	0	0	0	0	0
Respiratory Health Care	0	0	0	0	0	0	0	0	0	0	0
Critical Care	4	4	2	1	1	0	0	0	0	0	0
Organisation wide	0	0	0	0	0	0	0	0	0	0	0
Focus Areas	58	58	11	21	17	9	9	0	0	1	8
Built Environment	13	13	0	4	5	4	3	0	0	0	1
Carbon Emissions and Greenhouse Gases	7	7	0	1	4	2	0	0	0	0	2
Greenspace and Biodiversity	8	8	0	3	3	2	3	0	0	1	2
Environmental Impact	5	5	2	1	1	1	3	0	0	0	3
Sustainable Use of Assets and Resources	16	16	8	8	0	0	0	0	0	0	0
Travel and Transport	9	9	1	4	4	0	0	0	0	0	0
SDF Total	137	137	29	69	23	16	22	4	7	1	10
								18%	32%	5%	45%

The table above highlights the areas of activities and progress across the NHS Lothian Sustainable Development Framework and actions identified within this reporting cycle.









# **Areas of Development**

### **Scope 3 Emissions**

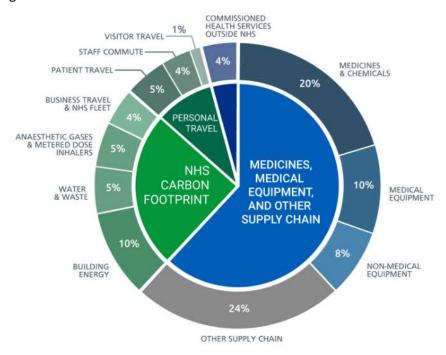
Greenhouse gas emissions are categorised into three groups or 'Scopes' by the most widely used international accounting tool, the Greenhouse Gas (GHG) Protocol. Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company. Scope 3 includes all other indirect emissions that occur in an organisations value chain.

#### These include;

- · Purchased goods and services
- Business travel
- Employee commuting
- Waste disposal

- Use of sold products
- Transportation and distribution (up- and downstream)
- Investments
- Leased assets and franchises

The chart below, from NHS England and NHS Improvement - Delivering a Net Zero National Health Service 2020, shows the proportional impact of scope 3 emissions in blue to be in the order of 66% of total emissions sources. The data quality and quantification of these emissions are still being understood and developed, but this highlights the importance of tackling non-direct emissions.



There are several benefits associated with measuring Scope 3 emissions. For many organisations, most emissions and cost reduction opportunities lie outside their own operations. By measuring Scope 3 emissions, organisations can:

- Assess where the emission hotspots are in their supply chain;
- Identify resource and energy risks in their supply chain;
- Identify which suppliers are leaders and which are laggards in terms of their sustainability performance;
- Identify energy efficiency and cost reduction opportunities in their supply chain;
- Engage suppliers and assist them to implement sustainability initiatives
- Improve the energy efficiency of their products
- Positively engage with employees to reduce emissions from business travel and employee commuting.





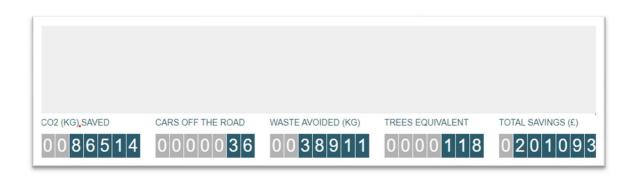
# **Circular Economy**

NHS Lothian Sustainable Development Framework has a focus area on Sustainable Use of Assets, Waste and Recycling and an action to Engage with National Procurement and Zero Waste Scotland to support changes which accelerate the move to a circular economy in health care.

This Annual Climate Change and Sustainability Report seeks to make a start on reporting on the Circular Economy in health care by including data from Warp-it resource re-distribution network of which NHS Lothian is a member and on some indicative commodities.

#### Warp-it

Report for 2022-2023



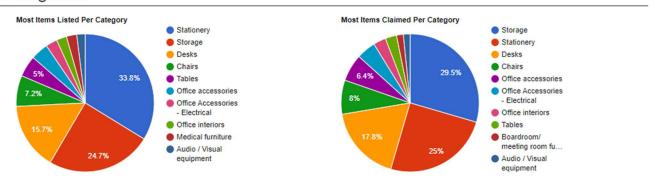
#### Report for 2021-2022







#### Categories



### **Total Savings**



Our Annual Reuse Report from the portal is as below.

Membership 1,099 in total with 51 active members and 20 partners in current year.

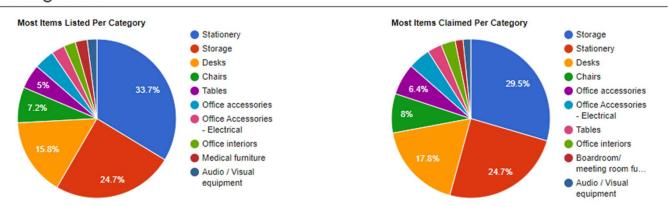
Avoided procurement and waste charges £2,845

Amount of waste diverted 483kg

Amount of carbon emissions avoided 1,435 kg CO2

The graphs below show the split in items being listed or claimed through the portal.

# Categories



Total NHS Lothian Performance to date





This does not represent the full extent of NHS Lothian's activities in relation to re-use – our eHealth and medical physics departments have arrangements in place to donate obsolete equipment to charities and the decommissioning of RHSC has sought to ensure that opportunities for recycling is maximised, however there is currently no organisational overview of practice or accounting for the wider contribution to re-use.





# What next?

This report has outlined the significant progress made this year both in reducing our carbon emissions and in strengthening the organisation to make gains in sustainable development in the coming period. Our Sustainable Development Framework and Action Plan lays out the urgency, scope and focus of the action we need to take. Priorities in the coming year will include

- ▶ **Buildings** Continued focus on energy efficiency, development of Energy Management Team and collaboration with regional stakeholders on decarbonisation planning.
- Carbon Further development of reporting process for F-gases, waste and data quality.
- Environmental Management Development of EMS Policy and legal register. System wide engagement.
- Transport eBike pilot.
- Transport Continuation of the Fleet Electric Vehicle strategy.
- ▶ Waste Small emissions, but really important. Need to increase recycling, but reducing the volume of waste is key!
- Waste reducing Clinical waste through effective segregation is critical due to intensive waste process.
- ▶ Medical Gases Further decommissioning of manifold systems to reduce waste.
- **Data** Building on the progress made with data collection and analysis to provide greater insight of where action is needed and the progress being made
- **Biodiversity and Greenspace** Build on the Grounds for Health Network to connect more staff and partners and support them to enhance biodiversity and deliver green health activities
- **Biodiversity and Greenspace** Develop Greenspace Management Plans for all major sites and support NHSL teams to deliver on the Biodiversity Duty
- **Biodiversity and Greenspace** Expand provision of green health activity on NHS Lothian sites focused on provision to those facing the highest health inequalities (mental health, long term conditions etc.)

Please visit our Sustainability pages on the following links;

External website - https://org.nhslothian.scot/Sustainability/Pages/default.aspx

Intranet pages – <a href="http://intranet.lothian.scot.nhs.uk/Directory/SDF/Pages/default.aspx">http://intranet.lothian.scot.nhs.uk/Directory/SDF/Pages/default.aspx</a>

Other useful resources:

NHS Scotland - Sustainability Action - https://nhssustainabilityaction.co.uk/

NHS Scotland climate emergency and sustainability strategy 2022 to 2026 - draft: consultation -

https://www.gov.scot/publications/nhs-scotland-draft-climate-emergency-sustainability-strategy/

Warp-It - Resource re-use network - https://www.warp-it.co.uk/

NHS England - Greener NHS - https://www.england.nhs.uk/greenernhs/

Edinburgh Climate Compact - https://www.edinburghclimate.org.uk/edinburgh-climate-compact

#### Contact Us

If you have feedback, questions about this report or other ideas please contact <a href="mailto:sustainability@nhslothian.scot.nhs.uk">sustainability@nhslothian.scot.nhs.uk</a> email account

A Greener NHS Lothian Facebook group https://www.facebook.com/groups/634498887306205/about/