

CLIMATE EMERGENCY & SUSTAINABILITY

ANNUAL REPORT

2021/22



WELCOME

We are pleased to present NHS Lanarkshire's (NHSL) first annual Climate Emergency and Sustainability Report detailing our progress towards becoming a net zero health service by 2040.

We recognise that we need to better understand the impacts of climate change on health and illness, and we know that NHSL needs to be responsive and adjust to continue to be sustainable for future generations. Recognising this challenge, sustainability is a key pillar underpinning the work we are advancing to develop our new Healthcare Strategy 'Our Health Together' scheduled for publication towards the end of 2023.

We are proud of the work we are progressing in this key area and have celebrated a number of successes over the last year.

- We published the Board's first Sustainability and Climate Change Strategy in late 2022, clearly setting out our improvement ambitions and objectives.
- Our Chairperson has taken on the role of Sustainability Champion
- We were delighted to be recognised for the work of our Green Health Partnership at this year's NHS Scotland Assure conference at Crieff, picking up the partnership working award.
- Our theatre teams have continued to make carbon reduction improvements across our operating theatres and are now linking into the national workstream
- We finalised the outline business case for the Monklands Replacement Hospital, which will be Scotland's first net zero hospital
- Via the Spaces for People programme, we created better routes for walking and wheeling across our major acute and community sites
- Completed our review of climate related risks
- We started work on our 'Routemap to Net Zero' supported by external consultants.
- We have commissioned a number of surveys across our estate which will identify energy saving investment opportunities.

At the time of reporting, we are focused on sizing the challenge ahead, and identifying improvement opportunities across a number of workstreams that will support delivery of our Strategy and see tangible improvements in the coming year. This includes engaging with and seeking ideas and support from our teams locally. We will also continue to build on the work we are progressing with our external partners through our Green Health Partnership and continue to develop initiatives that benefit both our staff and patients.

We look forward to sharing the output of these in future reports.

Jann Gardiner

Chief Executive

INTRODUCTION

The World Health Organisation recognises that climate change is the single biggest health threat facing humanity. Climate change impacts on health, and extreme changes in the weather and environment increase existing health problems as well as creating new ones.

We also have to consider the significant impact the NHS has on the environment and we continue to take steps to cut our greenhouse gas emissions which cause climate change. The ability to make meaningful progress requires engagement and involvement from every part of our organisation. We need to take actions which range from reducing energy used in our buildings; decarbonising our fleet; to reducing business travel, and also reviewing our procurement practices and supply chain emissions. In summary we must understand where we can, limit the impact of how we deliver care, and in doing so ensure that we carry out our duties in a manner that is ethical, fair, and just.

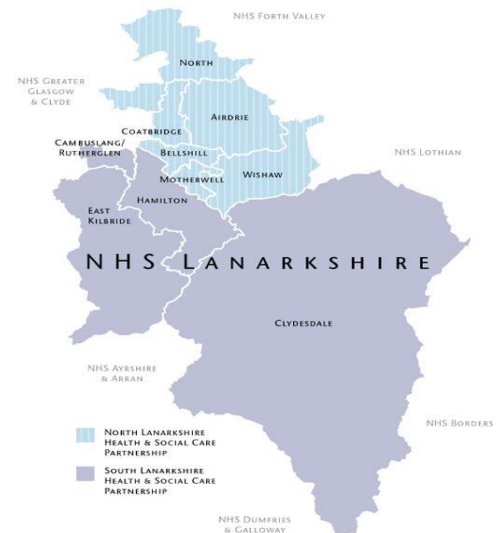
What we do

NHS Lanarkshire provides primary care, community and hospital services for more than 654,000 people living within the North and South Lanarkshire local authority areas. The Board covers an area of more 2241 square km and employs 11,895 people.

We deliver secondary care from our 3 Acute hospitals: University Hospital Monklands, University Hospital Wishaw and University Hospital Hairmyres each with an accident and emergency department and providing a range of specialist medical and surgical services.

There are 2 Health and Social Care Partnerships (North and South) who provide a broad range of community based health and social care services. Primary health care is provided in the community and includes general practitioners (GPs), dentists, pharmacists, health visitors and a wide range of health professionals.

NHS Lanarkshire also operates the West of Scotland Laundry facility, providing services for a number of NHS Boards across central and southern Scotland.



LEADERSHIP AND GOVERNANCE

Through early 2023 we will continue to re-engineer our governance structures following publication of our Sustainability and Climate Change Strategy, ensuring we have the right people from across the organisation engaged in this key agenda. This will mean we are best placed to deliver the commitments and objectives detailed in our strategy.

Our Sustainability Champion on the Board is

Martin Hill, Board Chair

The Executive Lead is

Jacqui McGeough, Deputy Director of Property, Planning and Performance

Committee with responsibility for climate change and sustainability

NHSL has a long standing Sustainability & Environment Group chaired by the Deputy Director of Planning, Property & Performance (Executive Lead), reporting to the Boards Planning Performance Resource Committee (PPRC). The Group is primarily responsible for:

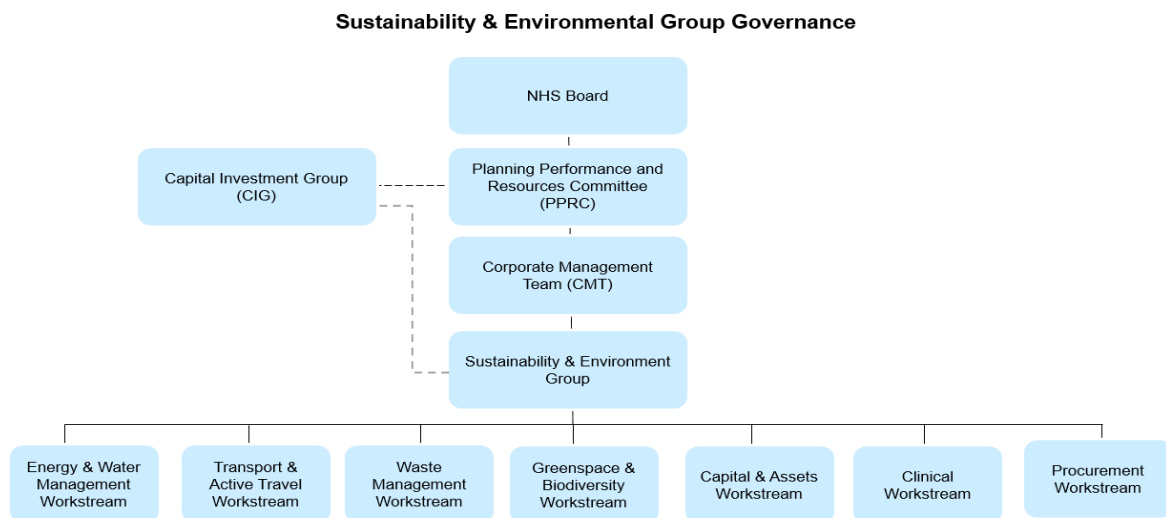
- delivery of the Boards Environment and Climate Change Strategy

- oversees the implementation of various Chief Executive letters
- acts as a reference group for other relevant national mandatory and statutory legislation, such as '[A Policy for NHS Scotland on the Climate Emergency and Sustainable Development - DL \(2021\) 38](#)'.

Leadership in tackling climate change and becoming environmentally sustainable

Strong and visible leadership, good governance, oversight and risk management will deliver an infrastructure to support delivery of our sustainability objectives. At NHS Lanarkshire Board level, key indicators are required for governance and transparency to demonstrate that we are meeting both our legal requirements and our public accountability for resources and strategic planning. 'Addressing the Challenges of Sustainability and Climate Change' is one of our existing corporate objectives, therefore ensuring visibility and oversight at the most senior level of the organisation. Every corporate director will have sustainability-linked objectives.

As part of our governance overhaul, we are formalising our sustainability workstreams and aligning a senior manager to each to provide leadership and oversight, and to develop realistic improvement targets that will deliver a reduction in carbon emissions.



Our Sustainability and Environment group oversees and co-ordinates risk management for strategic sustainability planning, climate change adaptation and service improvement across all NHS Lanarkshire services and produces reports on the Board's energy performance and carbon emissions to meet Scottish Government requirements around annual climate change and sustainability reporting.

The output of our workstreams will be integral to this work and also to our Capital Investment Group (CIG), providing business cases that support improvements in energy efficiency, waste reduction and other greenhouse gas emissions reduction initiatives as part of the Board's plan to be net-zero by 2040.

In 2022, the group developed the Board's Sustainability & Climate Strategy, which was ratified in October 2022. The overarching aims of our Sustainability & Climate Change Strategy are to ensure:

- NHS Lanarkshire is a net-zero emission Health Board by 2040;
- As part of our clinical strategy, "Our Health Together", prioritise actions which simultaneously improve patient care, community wellbeing, and reduce inequalities, while tackling climate change and broader sustainability issues;
- Plan for and make capital investments, while increasing operational efficiencies.

A Sustainability Action Plan is under development which will underpin delivery of our strategic aims over the next 5 years. This includes development of an engagement and plan to increase staff and public awareness of sustainability and environmental initiatives and engage with appropriate stakeholders.

GREENHOUSE GAS EMISSIONS

NHS Lanarkshire aims to become a net-zero organisation by 2040 for the sources of greenhouse gas (GHG) emissions set out in the table below. The table sets out the amount of reported greenhouse gas produced annually by NHS Lanarkshire over the last 3 years.

Source	Description	Amount of greenhouse gas (tonnes of CO ₂ equivalent)			Percentage change since 2019/20
		2019/20	2020/21	2021/22	2021/22
Building energy use	Greenhouse gases produced in providing electricity and energy heat for NHS buildings	23,676.5	23,642.2	22,435.2	-5.2%
Non-medical F-gas use	Greenhouse gases used for things like refrigeration and air conditioning	Not reported	Not reported	3854	
Medical gases	Greenhouse gases used in anaesthetics - nitrous oxide (N ₂ O), Entonox (which contains nitrous oxide), desflurane, sevoflurane and isoflurane	Not Currently Available	Not Currently Available	2093.3	
Metered dose inhaler propellant	Greenhouse gases used as a propellant in inhalers used to treat asthma and chronic obstructive pulmonary disorder (COPD)	Not Currently Available	Not Currently Available	10,400	
NHS fleet use	Greenhouse gases produced by NHS vehicles	756.0	739.4	660 ^[1]	-12.7%
Waste	The greenhouse gases produced by the disposal and treatment of waste produced by the NHS	54.0 ^[2]	50.6 ^[2]	652.2	+1110%
Water	The greenhouse gas produced from the use of water and the treatment of waste water	325.4	No accurate data available*	72.6	-77.7%

Table 1: The amount of greenhouse gas produced annually by NHS Lanarkshire. ^[1] Fleet tCO₂e value non-inclusive of HGV emissions; ^[2] Waste tCO₂e calculation non-inclusive of clinical waste emissions; ^[3] Water tCO₂e value underreported due to incomplete data from water supplier.

Building and Energy Use - We continue to make good progress and reported a 5.2% reduction in the GHG emissions produced from NHS Lanarkshire's energy use within its estate. This reduction in building's energy use is a further step towards achieving the interim target set for 2030, to reduce emissions by at least 75% from the baseline value in 1990, as legislated within 'A Policy for NHS Scotland on the Climate Emergency and Sustainable Development - DL (2021) 38'. NHS Lanarkshire are close to achieving this target well in advance of 2030, attaining a 74% reduction in GHG emissions from buildings energy since 1990.

	Total Energy Use		Total Energy CO2e		
	1989/90	2021/22	1989/90	2021/22	Diff
	kWh	kWh	Tonnes	Tonnes	%
Coal kWh	71,915,967	0	27,572.6	0.0	-100.0%
Electricity	34,011,490	31,785,018	25,417.8	7,346.2	-71.1%
Gas kWh	74,507,517	84,873,961	15,225.6	18,206.3	19.6%
Gasoil (Class A2)	0	793,683	0.0	250.5	0.0%
Gasoil (Class D)	0	4,243	0.0	1.3	0.0%
Historical Reporting Fuel Oil & Steam	99,018,875	0	31,572.2	0.0	-100.0%
Totals	279,453,849	117,456,905	99,788.2	25,804.3	-74.1%

Source: NHS Lanarkshire data, eSIGHT

Data Quality - As structures within governance and the EMS evolves, the data collected for GHG emissions will improve in quality and quantity. As a consequence, there may be an increase in the reported GHG emissions over the short term. Improvements in data collection and quality, will enable the formation of comprehensive net-zero route maps, which will outline a feasible plan for incremental reductions in GHG emissions.

Waste Emissions – Reported waste emissions did not include any allowance for clinical waste in years 2019/20 and 2020/21. The availability of clinical waste emission data has subsequently improved and tCO2e for clinical waste has been reported for 2021/22 and will continue to be reported going forward.

***Water Emissions** - water emissions value not available in 20/21 and have been excluded. There has since been an improvement in the quality of data provided by the new supplier which is reflected in the 21/22 reported tCO2e values.

Exclusions

The following data has not been included in reporting due to reasons detailed below. We would look to include this in future years wherever possible.

Business Travel - Data is currently incomplete and has not been fully reported through Climate Change Duties Reporting. It is set out in our Strategy that a greater understanding of Scope 3 emissions will be developed and reported on appropriately. Our reported emissions are likely to increase as information becomes available and reporting becomes more robust.

Carbon Sequestration - There is currently no available data for carbon sequestration and is not an activity undertaken by NHS Lanarkshire. As greenspace and biodiversity projects progress, NHS Lanarkshire may look to complement this work with appropriate carbon sequestration programs.

How is the Health Board addressing Carbon Emissions?

NHS Lanarkshire's Sustainability and Climate Change Strategy outlines the following areas of focus to address carbon emissions:

Objective: Achieve net-zero by 2040 in-line with NHS Scotland and Scottish Government targets for public bodies."

Our NHS

- Improve the scope and scale of reporting across all emissions sources;
- Further develop understanding of emissions sources across all of NHS Lanarkshire and report on in a transparent manner;
- Develop our route map to net-zero emissions by 2040.

Our People

- Increase staff engagement and understanding;
- Develop useful, engaging reports which share information of emissions sources and use to educate and engage staff in achieving our net-zero targets;
- Utilise the expertise and knowledge throughout our staff to develop and implement actions that reduce emissions;
- Develop learning modules for sustainability.

Our Planet

- Develop a greater understanding of Scope 3 emissions and report on these appropriately;
- Promote good environmental stewardship across the organisation and in the wider community;
- Work with key stakeholders, such as the North Lanarkshire and South Lanarkshire Councils, to maximise the impact of our actions and resources;
- Work with supply chain partners to embed a shared sustainability vision and goals

Monitoring Progress & Actions

- Frequent internal reports, available to all staff;
- NSAT, PSCCDR, statutory reports;
- Establishment of interim targets aligned with our trajectory to net-zero by 2040.

NATIONAL SUSTAINABILITY ASSESSMENT

NHS Scotland has developed a National Sustainability Assessment Tool (NSAT) which all Health Boards use on an annual basis to measure their progress across sixteen different areas of sustainability.

In 2021/22, NHS Lanarkshire **scored 67% overall, improving our score by 10%** on last year and moving from an overall award of **Bronze, to Silver** as detailed in Table 2. Our three highest scoring areas were **Greenspace at 92%, Communities 88%, and Welfare 86%**. Despite the significant improvement, we recognise other areas are not as strong and our three areas with the most room for improvement were:

- Nature and Biodiversity
- Greenhouse Gas Emissions
- Waste.

NSAT Scores		Previous Year (2020/21)				2021/22		
NHS Lanarkshire		Max score	Score awarded	% score awarded	Level	Score awarded	% score awarded	Level
Governance & policy		120	71	59%	Bronze	83	69%	Silver
Our NHS	Transport	50	29	58%	Bronze	30	60%	Bronze
	Greenspace	50	37	74%	Silver	46	92%	Platinum
	Capital Projects	90	45	50%	Bronze	61	68%	Silver
	Nature & biodiversity	30	13	43%	Bronze	14	47%	Bronze
	Active travel	40	21	53%	Bronze	25	63%	Bronze
Our people	Sustainable care	70	27	39%	N/A	38	54%	Bronze
	Ethics	15	11	73%	Silver	11	73%	Silver
	Welfare	35	30	86%	Gold	30	86%	Gold
	Communities	60	52	87%	Gold	53	88%	Gold
	Awareness	30	21	70%	Silver	24	80%	Gold
Our planet	Procurement	60	28	47%	Bronze	33	55%	Bronze
	GHG	40	19	48%	Bronze	20	50%	Bronze
	Adaptation	55	25	45%	Bronze	38	69%	Silver
	Waste	45	22	49%	Bronze	23	51%	Bronze
	Environmental	50	24	48%	Bronze	31	62%	Bronze
Total		840	475	57%	Bronze	560	67%	Silver

Table 2: Overview of 2021/22 NSAT assessment scores. Levels and corresponding scores: Platinum 90%; Gold >80%; Silver >65%; Bronze >40%; N/A <40%.

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](#).

Understanding the impact of climate change on NHS Lanarkshire and the people and places we serve?

NHS Lanarkshire has evaluated its current and future risk in relation to climate change. This work has provided detailed flood-level risks and overheating assessments for key sites as well as a review of critical functions. The critical functions were assessed according to our services along with the key topics of patient demand, vulnerable communities and business continuity.

Working in conjunction with Risk & Resilience colleagues, NHS Lanarkshire has undertaken an analysis of climate related risks to critical infrastructure across the Board area. In doing so, the Board now has an understanding of what the likely impacts of climate change on the physical estate will be and has been completed for Priority 1 sites.

Furthermore, the work is undertaken periodically to review of NHS Lanarkshire risks the and update the Board risk register; identify the risks from the Climate Change Risk Assessment (CCRA) and detail these in the site business continuity plans; complete the Audit Template developed by NHS Scotland Standards for Organisational Resilience every 6 months. Part of this audit includes climate change and supply chain.

Building resilience and preparing for the increased risks from climate change

The NHS Lanarkshire Sustainability & Environment Group provides governance and oversees delivery of NHS Lanarkshire Sustainability reporting requirements which contains actions and timescales on climate change adaptation and mitigation, as follows;

- 1. Climate Change Risk Assessment Toolkit:** Details the risk of climate change to the NHS Lanarkshire estate and how we adapt to changing needs through adaptation plans; NHS Lanarkshire has undertaken an analysis of climate risk using the NHS Scotland Climate Change Risk and Adaptation tool (CCRA). At the time of writing, an analysis of risk across critical infrastructure has been undertaken and workshops are planned with key stakeholders to form and deliver an adaptation plan.
- 2. National Sustainability Assessment Toolkit (NSAT):** (see NSAT section, above) As demonstrated in Table 2, NHS Lanarkshire achieved an adaptation score of 69% in 2021/22, gaining 24% on the previous year's scores.
- 3. NHS Scotland climate risk mapping tool:** The mapping tool is designed as a platform to display spatial data and provide information to improve understanding of how climate change impacts will affect the NHS estate and wider community.

Continuity Process

NHS Lanarkshire has a robust business continuity process, as follows;

- Risks are recorded on DATIX, which is the organisations risk management reporting tool.
- Business Continuity Plans which detail the procedures that should be undertaken in the event of disruption to business: Site level Business Continuity Plans; The Corporate Disaster Recovery Plan; The Major Incident Plan.

Collaboration

NHS Lanarkshire has been a contributor to the Climate Ready Clyde Glasgow City Region Adaptation Plan and will endeavour to be a contributor in further workshops / events.

NHS Lanarkshire is in discussion with Climate Clyde Forrester to ascertain which sites would benefit from additional tree planting. The benefits of this are twofold, with increased tree cover comes enhanced biodiversity across the estate, it provides meaningful and engaging work for NHS Lanarkshire Grounds team, and helps contribute to carbon sequestration (though, the later would not be accounted for given Scottish Government guidance).

BUILDING ENERGY

Our buildings and infrastructure are critical to delivering our health care services. The buildings we use are varied, and require the highest level of servicing to maintain safe and resilient environments for our staff and patients. It is essential we design and operate these efficiently to maximise resources and minimise environmental impact. Improving our estate and embedding best practise in new builds and refurbishment is critical to reaching net-zero, whilst also helping to improve our internal environments for all users.

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

- In 2021/22, NHS Lanarkshire used 117,456,905 kWh of energy. This was a decrease of 2.7% since the year before.

- In 2021/22, NHS Lanarkshire generated 4,889 kWh of energy from renewable technologies via Solar PV at Hunter Health Centre.
- In 2021/22, 25,804 tonnes of CO2 equivalent were produced by NHS Lanarkshire's use of energy for buildings. This was a decrease of 3.5% since the year before.

Whilst overall energy use has reduced, particularly since 1990, costs have increased significantly due to global factors, not limited to the recent and on-going energy crisis. As such, from both a cost control and environmental standpoint, we have a duty to continue to manage energy appropriately.

Planning to reduce emissions from building energy use

A series of objectives have been identified within our Sustainability & Climate Strategy that will realise a reduction in our building energy use, and embed sustainable designs as part of major refurbishments and new builds. The high level commitments are noted as follows:

Our NHS

- The NHS Scotland Sustainable Design and Construction Guide (SDaC) will be applied to all new-builds and major refurbishments;
- A net-zero route map will be developed for the existing estate to understand what building fabric and other improvements are required;
- The Monklands Replacement Project will be a net-zero hospital and a pilot site of SDaC;
- Review and embed strategic governance and commitments of sustainability within capital planning processes, such as Scottish Capital Investment Manual (SCIM);
- Utilise digital estate technology to support effective building management tools and decision-making to maximise carbon reduction opportunities.
- Reduce the amount of energy used in our buildings.

Our People

- Optimise our existing buildings to reduce consumption and improve the internal environment for patients and staff
- Improve staff engagement and education on
- Develop and set our own standards for Indoor Environment Quality (IEQ), in-line with national objectives;

Our Planet

- Manage and minimise waste in the construction and operation of new-builds and major refurbishments;
- Ensure Procurement activities for construction have sustainability at the heart of decision-making;
- Ensure our existing and future estate is net-zero and manages utilities resourcefully, exploring on-site renewable energy.

How we will monitor

- Reduction in emissions and energy consumption;
- Development of benchmarks for buildings and performance review, including post-occupancy evaluations of capital projects.

At the time of writing a series of developments are underway.

- We are in the process of developing our 'route map to net zero' in conjunction with Jacobs. At the time of reporting we have established our baseline and 'Business as Usual' projections with our route map scheduled to be concluded by end of financial year 22/23.
- In the last few months we have been working with Mott MacDonald who have carried out a series of surveys to identify opportunities for capital upgrades that will deliver energy savings. Through a prioritisation process and development of business cases, funding will for these should be secured via the Scottish Government's Green Public Sector Estates Decarbonisation Scheme (GPSEDS).
- From a building management perspective, we are also working with the same consultancy to identify opportunities to improve our building management systems, ensuring that the buildings information we receive is optimal
- We have been exploring renewable lighting opportunities and will continue to progress this work to better understand the costs and benefits that can be delivered.

SUSTAINABLE CARE

The way we provide care influences our environmental impact and greenhouse gas emissions. NHS Scotland has three national priority areas for making care more sustainable – anaesthesia, surgery and respiratory medicine.

Anaesthesia and surgery

Greenhouse gases are used as anaesthetics and pain killers. These gases are nitrous oxide (laughing gas), Entonox (which contains nitrous oxide) and the “volatile gases” - desflurane, sevoflurane and isoflurane.

NHS Lanarkshire’s emissions from these gases are set out in the table below:

Anaesthetic gas use			
Source	2018/19 (baseline year) tCO₂e	2021/22 tCO₂e -	Percentage change since 2018/19
<u>Volatile gases</u>			
Desflurane	795.7	8.9	-98.8%
Isoflurane	7.6	1.1	-85.5%
Sevoflurane	97.7	67.2	-31.2%
Volatile gas total	901	154.4	-82.8%
<u>Nitrous oxide and Entonox</u>			
Piped Nitrous oxide	733	192	-73.8%
Portable Nitrous oxide	74	66	-10.8%
Piped Entonox	1375	1598	16.2%
Portable Entonox	227	159	-29.9%
Nitrous oxide and Entonox total	2409	2015	-16.3%
<u>Anaesthetic gas total</u>	3310.3	2093.3	-36.7

Reducing emissions from anaesthetic gases?

The procurement policy for ordering volatile gases was amended to make Desflurane only available by special order. There is also work on-going to decommission piped Nitrous Oxide (N₂O) across our operating theatres, as well as a conscious effort by anaesthetists to move to less harmful gases where safe and possible to do so.

Making surgery greener

The Board has an active and successful Green Theatres Workstream that have delivered a number of improvements including the replacement of anaesthetic gases with a high global warming potential with less harmful gases as noted above. Other energy savings initiatives have included waste reduction, resulting in the removal of 32,000 single use plastic cups from the waste stream.

A national group has recently been established with a number of initial priorities identified. The Board will focus on these in line with other Boards across Scotland. These include:

1. Overall operational efficiencies and better ways of working
2. Anaesthetic gas scavenging systems (AGSS)
3. Neptune-branded fluid suction machines;

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. There are also more environmentally friendly inhalers such as dry powder inhalers which can be used where clinically appropriate. We estimate that emissions from inhalers in NHS Lanarkshire were 10,400 tCO₂e.

TRAVEL AND TRANSPORT

Travel and transport (not including international aviation and shipping) produced 24% of Scotland's greenhouse gas emissions in 2020. Car travel is the type of travel which contributes the most to those emissions.

NHS Scotland is supporting a shift to a healthier and more sustainable transport system where active travel and public transport are prioritised. NHS Lanarkshire recognises this and has made significant progress in converting small/medium fleet vehicles to electric equivalents in order to meet both national targets and improve local air quality with the removal of internal combustion engine (ICE) vehicles.

What we are we going to do this year to;

- **Reduce the need to travel**
- **Improve active travel**
- **Improve public and community transport links to NHS sites and services**
- **Reduce the impact of our fleet and other business-related travel (grey fleet)**

NHS Lanarkshire has a series of actions identified as part of our strategy that we will begin to action in relation to travel and transport. These are identified as follows:

Our NHS

- All small/medium vehicles are fully electric by 2025;
- Explore technological solutions for HGVs;
- Increase the EV charging network for fleet and support vehicles;
- Work with local partners to develop an integrated transport system;
- Support remote working and remote consultation technology and put in place service management systems to support this;
- Make minimising travel a criterion in procurement decision making.

Our People

- In conjunction with Health Improvement, further improve active travel infrastructure across all sites, whether walking or wheeling, and ensure this is accessible to everybody;
- Provide incentives for sustainable travel to work, discouraging unnecessary travel;
- Provide personalised travel plans for staff;
- Separate from the fleet, develop EV charging infrastructure for staff and public use;
- Make staff aware of the benefits of traveling sustainably.

Our Planet

- Help to improve local air quality (a major contributor to poor health) by reducing 'grey fleet' mileage and reviewing business travel and incentives;
- Through national forums, review the provision and affordability of EVs through the car leasing programme;
- Reduce the impact of staff commuting and patient attendance by making services available locally and enabling remote working and consultations;
- Plan services in a way that minimises travel between sites;

How we will monitor

- Reduction in grey fleet mileage;
- Decreased emissions from staff travel (when commuting);
- Number of EV chargers for staff/public use.

We are working to remove all petrol and diesel fuelled cars from our fleet by 2025. The following table sets out how many renewably powered and fossil fuel vehicles were in NHS Lanarkshire's fleet at the end of March 2022.

Vehicle Category	Renewable powered vehicles	Fossil fuel vehicles	Total vehicles	Percentage renewable powered vehicles
Cars	0	11	11	0%
Light commercial Vehicles	15	55	70	21%
Heavy vehicles	0	14	5 agricultural tractors; and 9 heavy commercial vehicles	0%

NHS Lanarkshire do not currently have bicycles or e-bikes within their fleet. We have replaced 21% of the fleet with EV and note that by March 2023, 52% of the small vehicle fleet will be EV with well-established plans to **replace the remaining conventional small fleet by 2025**.

As part of the **Spaces for People** investment programme, NHS Lanarkshire has made a concerted effort in enhancing accessible space for both service users and staff on select sites. Through the programme, NHS Lanarkshire was able to create better routes on both major acute and community sites to aid both access to and within the site, whether walking, wheeling, or other means. This represented the **single biggest grant fund** ever received for active travel-related activities in NHS Lanarkshire at £210,000. Some further highlights include:

- Installation of secure parking shelters on acute and community sites;
- Installation of bike repair stands;
- Improved signage and wayfinding;
- Enhanced paths for better walking and access generally;
- Utilisation of funding through Sustrans and Cycling Scotland.

GREENSPACE AND BIODIVERSITY

As well as the wider climate crisis, there also exists a biodiversity crisis with many species becoming extinct and endangered as habitats are lost.

The growing threat to public health from the current climate and ecological crisis increases the need for action. NHS Lanarkshire's estate provides diverse greenspace resources for both people and wildlife and these natural environments form the foundation of a healthy environment.

Collectively, the outdoor estate is a valuable and under-used asset. If planned and managed well, it can make a significant contribution to the physical and mental health and wellbeing of our staff, patients, visitors and local communities. It forms a key part of the NHS response to the climate emergency and to meeting Scotland's biodiversity commitments.

What we are we doing improve our greenspace and improve biodiversity?

NHS Lanarkshire covers a broad and diverse geographical area and there exists plentiful opportunities to better utilise our estate. Lanarkshire's Green Health Partnership has successfully galvanised the local community into becoming involved in a range of community growing initiatives and gardening projects, which help to support and enhance biodiversity through pollinating species.

Within our strategy there is an objective to protect, preserve, and enhance NHS Lanarkshire greenspace and ensure it is biodiverse and accessible to staff, service users, and the wider community. Our commitments in this respect are noted as follows:

Our NHS

- Promote and further the work of Our Natural Health Service and the natural links to sustainability and climate change;
- Ensure NHS Lanarkshire's continued leadership role through the Lanarkshire Green Health Partnership and share best practice and opportunities for collaboration;
- Conduct a biodiversity audit of the NHSL estate to highlight opportunities for investment.

Our People

- Encourage and support greater use of the NHS estate by patients, staff and visitors
- Develop connections between the NHS estate, community greenspaces and wider green networks;
- Employ co-production and utilise the work of Health Promoting Health Service (HPHS) in the context of climate change and sustainability;

- Engage with NHS Lanarkshire staff to raise awareness of the benefits and opportunities of increasing greenspace and biodiversity;
- Provide opportunities for development and voluntary work to improve green space and biodiversity.

Our Planet

- Prepare a greenspace management plan for each NHS site to improve biodiversity, climate resilience and encourage greater use;
- Ensure good quality greenspace design and practice is incorporated into new buildings, refurbishment programmes, and programmes of work for Estates teams;
- Facilitate wildlife on our estate wherever appropriate and safe to do so.

How we will monitor

- Yearly biodiversity audit;
- Reporting of progress through NSAT and PSCCDR;
- Staff surveys;

SUSTAINABLE PROCUREMENT, CIRCULAR ECONOMY AND WASTE

Earth Overshoot Day marks the date when our demand for resources exceeds what Earth can regenerate in that year. In 2020, the Global Earth Overshoot Day was 22nd August. In 2021, it was 29th July. The current global trend shows a concerning picture of over consumption. For the UK, the picture is more worrying. In 2022, the UK's Earth Overshoot Day was 19th May. The current level of consumption of materials is not sustainable, it 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.

What we are doing to improve the environmental impact of the goods and services we buy

NHSL has a draft Sustainable Procurement Strategy in place and has also moved to increase the weighting placed on sustainability-related questions in tender exercises, where bidders are asked to provide evidence of their ethical and sustainability credentials. Not all service and product providers have a fully developed sustainability strategy or plan, and these questions help to raise awareness and reinforce the commitment to sustainable procurement activities.

All tenders are subject to minimum environmental standards that suppliers must comply with. Some contracts also include take back schemes, for packaging and in trade-in schemes, for example for replacement beds and mattresses.

A working group of Health Improvement, Procurement, and Sustainability colleagues has been formed which aims to share best practice and capture overlapping initiatives. An informal reporting structure is in place with Procurement and Sustainability colleagues reporting to the NHS Lanarkshire Sustainability & Environment Group.

What we are doing to reduce waste and improve waste disposal

We want to reduce the amount of waste we produce and increase how much of it is recycled. The table below provides information on the type of waste we produce.

Waste type	2020/21 (tonnes)	2021/22 (tonnes)	Percentage change
Waste to landfill	0	0	0%
Waste to incineration	1485	1314	-11.5%
Recycled waste	793	509	-35.8%
Food waste	209	275	+31.6%
Clinical waste	<i>Not Available</i>	1535	<i>Not Available</i>

Data collection for waste is an important factor in waste management. Work is being undertaken with waste providers to ensure they are meeting their obligations as laid out in the national contracts, which include clauses to enable better source segregation. This will enable contractors to work with the Board to meet national waste reduction and recycling targets and will result in improved data collection to allow for improved waste management.

Our strategy details our ambitions to deliver efficient and sustainable service design, reduce resource use and improve waste management through engaging staff and suppliers by embedding circular economy principles as noted:

Our NHS

- Apply a higher weighting to sustainability and climate change aspects in tenders and procurement processes;
- Work with supply chain partners to embed a shared sustainability vision and goals;
- Ensure future planning and service design aligns with net-zero targets and provides efficient and sustainable care;
- Ensure that NHSL Catering Strategy is sustainable and embodies or exceeds national nutritional guidelines.
- Ensure that NHSL has the information it needs on waste to provide transparent information to services on waste generated and recycling

Our People

- Educate and inform staff on the sustainable use of resources;
- Review procurement processes to ensure staff can be actively engaged to provide information on the use of products;
- Implement multidisciplinary waste management groups on all major sites and across community settings;
- Promote a culture of reuse and refurbishment of items to embed a more circular economy;
- Make it easier for patients, staff and visitors to make healthy and sustainable food choices e.g. concessions and vending solutions.

Our Planet

- Collaborate with National Services Scotland (NSS) National Procurement and Zero Waste Scotland to support changes which accelerate the move to a circular economy in health care;
- Update our Waste Policy and reduce waste across NHS Lanarkshire.
- Develop greater understanding of our Scope 3 emissions, report on appropriately, and reduce wherever possible

How we will monitor

- Reduction in Scope 3 emissions;
- Reduced waste and increased recycling;
- Increased NSAT score in respective areas;
- Number of suppliers engaged with sustainability;

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 we are we doing to improve our environmental performance

NHS Lanarkshire will action the Strategy objectives for environmental impact developing quality management systems to improve our environmental impact assessment and environmental performance.

Our NHS

- Implement an organisation-wide Environmental Management System (EMS) based on ISO 14001:2015;
- Appoint a Board Environmental Management Representative (EMR) for environmental management matters;
- Apply the “Plan, do, check, act” principles to environmental management.

Our People

- Engage service leads across the organisation to understand current practices, gather information, and ensure compliance;
- Seek out environmental management training and upskilling and learning opportunities for staff;
- Communicate the importance of best practice across the organisation;

Our Planet

- Ensure the highest levels of compliance with environmental legislation;
- We will use the tool to broaden the scope of our approach to environmental management and through regular audits and reports will raise awareness of the opportunities and challenges for reducing environmental harm;
- Engage third party bodies such as Healthcare Without Harm to share best practice;

How we will monitor

- Development and roll-out of an Environmental Management System (EMS);
- Understand current levels of legislative compliance;
- Auditing of EMS compliance and progress against relevant targets;
- Seeking opportunities to go beyond compliance and become an exemplar of best practice.

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 Lanarkshire is currently working on the Monklands Replacement Project (MRP) and recently finalised the outline business case.

The MRP is NHS Lanarkshire's exciting and positive vision for University Hospital Monklands, setting out proposals to transform healthcare services for our people and communities. This is based on building a new state-of-the-art University Hospital Monklands on a new site at Wester Moffat, near Airdrie. This will allow NHS Lanarkshire to meet the needs of a modern healthcare service.

The new Monklands will be Scotland's first digital hospital and will deliver a blueprint for how clinicians will treat patients in the future – NHS Lanarkshire's 'clinical model' – bringing tangible benefits for patients, visitors and staff alike. This will help NHS Lanarkshire to achieve their vision of providing high-quality, innovative and person-centred health and social care that helps achieve a healthier life for all.

The new hospital will be the first in Scotland to be designed from the outset to be net zero for both the build and operation phases. The expectation is that the new University Hospital Monklands should be an exemplar healthcare building and we are aiming to comply with the Net Zero Carbon Public Sector Buildings (NZCPSB) standard and to the Sustainable Design and Construction Guide (SDaC), which was developed by NHS Scotland and for which the MRP will be a test piece of. The hospital will be built to have: reduced energy demand; increased efficiency; and renewable energy sources.

This design process requires an all-round, innovative approach to the delivery of a highly sustainable, low-carbon "next generation" hospital with a people-focused approach to health, wellbeing and amenity. The design of the hospital will reflect the expectation towards agile/flexible working, wellness, sustainability and embedded smart building technology. In addition, any design solution will include the ability to integrate future technologies that may not currently be available but would enhance the sustainable aspirations of the facility if utilised at a future date.

It is estimated that the new Monklands will be completed around 2031.

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.

Recognising our role as an anchor organisation, the Lanarkshire Green Health Partnership (LGHP) was formed in April 2018 and is helping to connect health & social care with nature. Lanarkshire is rich in greenspace, parks, and nature but this has, historically, been an underused asset. We are aiming to raise awareness and confidence of the workforce and community to access, promote and utilise our green health spaces.

What we are doing to act as an anchor institution for our local community

A key aim of the LGHP is the enhancement of NHS estates to offer therapeutic spaces for hospital inpatients, outpatients and community volunteers by providing growing sessions (led by a third sector organisation - Clydesdale Community Initiatives). This not only helps to facilitate health and wellbeing outcomes for the individuals but also increases biodiversity to the greenspaces. Green health sessions are held at 5 community hospitals: Coathill, Kirklands, Airbles Road, Ladyholm and Kello. The initiative was recognised nationally for the key achievements from 21/22 which include:

- 104 participants engaged with therapeutic gardening sessions
- Work continued despite Covid restrictions with mitigations put in place which included delivery of plants and seeds and running engagement sessions on line.
- 13 participants were awarded their John Muir Discovery Award
- University Hairmyres Hospital wards 19 & 20 set up a food growing site and have gone from strength to strength
- 103kgs of veg harvested from hospital gardens donated to Clydesdale Foodbank

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

As a local Anchor institution, NHS Lanarkshire works collaboratively with voluntary organisations such as Voluntary Action North Lanarkshire (VANL) and Voluntary Action South Lanarkshire (VASLAN), through groups such as LGHP and ACT Now NL, to advance community resilience in the face of climate change by sharing updates on climate-related work, sharing best practice and insight, and contributing resources.

The LGHP continues to embed green health within services such as NHS Weight Management options, outdoor opportunities with leisure colleagues and promotion of health walks through our “Get Walking Lanarkshire” programme. The LGHP work closely with sustainability and environmental sectors within the NHS to contribute to achieving sustainability targets and addressing climate challenges.

Conclusion

NHS Lanarkshire has made significant progress in emissions reductions and environmental improvement since 1990. However, the Board is acutely aware of the challenges posed by net-zero ambitions and the scale of work to be done to combat the climate crisis. With that in mind, several projects are underway which will help the Board plot a route to net-zero by 2040 from the here and now, regardless of progress made to date. Some highlights are areas for focus next year include:

- A net-zero route-map report - highlighting areas of focus, challenges, and opportunities (particularly in the decarbonisation of heat) for the Board to consider and take forward;
- Utilisation of circa £50k pre-capital funding via the [Green Public Sector Estate Decarbonisation Scheme \(GPSEDS\)](#) which, when completed, will allow specific emissions reductions and improvement projects to be taken forward and allow the Board to take advantage of up to £2m worth of funding via the same scheme next financial year;
- Finalisation and ratification of the NHS Lanarkshire Sustainability & Climate Change strategic plan. Following a lengthy development and engagement phase, the strategy was approved by the NHS Lanarkshire Board in October 2022 and forms the basis of all activity relating to sustainability and climate change. The strategy also reflects the ambitions of DL (2021) 38 and national climate change targets.
- An overall **10% increase** in our National Sustainability Assessment Toolkit (NSAT) score

Areas of Focus

- Refreshed governance of the Sustainability & Environment Group. With dedicated workstream leads, there will be a renewed focus on areas which support our journey to net-zero and allow the group to report as appropriate through to official Committees of the Board.
- Utilisation of grant funding. Through extensive “pre-capital” work done in 22/23, the Board will be in a prime position to utilise funds such as GPSEDS as referenced above.