

NHS Ayrshire & Arran



Meeting:	Ayrshire and Arran NHS Board
Meeting date:	Monday 31 March 2025
Title:	Annual Climate Emergency and Sustainability Report 2023/24
Responsible Director:	Nicola Graham – Director of Infrastructure & Support Services (I&SS)
Report Author:	Fraser McNeil – Head of Estates Alastair Kay – Energy Manager Helen Gemmell – Assistant Director of Estates & Support Services

1. Purpose

This is presented to the Board for:

- Decision

This paper relates to:

- Annual Operational Plan
- Government policy/directive

This aligns to the following NHSScotland quality ambition(s):

- Safe
- Effective
- Person Centred

2. Report summary

2.1 Situation

The NHS Board is asked to approve the 2023/24 Annual Climate Emergency and Sustainability report requested by Scottish Government which forms part of the requirements in policy DL38(2021). This is the third year of reporting for Scottish Government (SG) where they require a summary report of our climate and sustainability activities across the organisation.

2.2 Background

As part of the duties placed on public bodies within the Climate Change Act Scotland 2019, we are mandated to report on our progress in meeting the requirements in the act around what actions we are taking towards climate change mitigation, adaptation, sustainable procurement, and board governance. Also within the act is states we are

required to “*Act Sustainably – putting sustainable development as a core value*” requiring us to act in a manner which is considered most sustainable.

All decision making should encompass social, economic, and environmental factors as set out in our climate change and sustainability strategy 2021-32 document over the short and longer terms, considering our impact on carbon emissions and the NHS net zero target date of 2040.

2.3 Assessment

As part of the leadership requirements, we must establish strong governance structures for reporting of performance and demonstrate how we are implementing the National policy and strategy.

The information contained within the report was compiled from a number of sources, from internal systems, national systems and some required to be compiled using manual calculations due to the absence of reporting systems for some of the workstreams.

The Climate Emergency and Sustainability Operational group (CESOG) and Climate Emergency and Sustainability Strategic group (CESSG) are responsible for overseeing this area of compliance and obtaining assurance and to ensure sufficient resource is in place to complete all national reporting requirements.

Overall, in 2023/24 the Board reported a 0.8% reduction in greenhouse gas emissions against an emissions reduction target of 3%. This was attributed due to a 7% increase the electricity grid emissions factor in which the National Network burned more gas to generate power which resulted in an increase in emissions. This added an uplift to our scope 2 carbon emissions total.

Carbon reduction work was highest achieved in the area of Transport reporting a reduction in our fleet emissions by 46% attributed to the EV fleet transition program from ICE vehicles over to electric. This was also the first year we had no carbon emissions from Desflurane anaesthetic as it's use is being phased out and a move over to the more environmentally friendly Sevoflurane. This saw our lowest ever emissions generated by our operating theatres due to the proactive work being led by the Boards Green Theatre Team.

2.3.1 Quality/patient care

This will not directly affect patient care at this time but reviewing services which consider the Environmental and Sustainability impact will result in better health outcomes for our local population in coming years

2.3.2 Workforce

Board wide area of work, with data collation, analysis and statutory reporting duties falling within ISS directorate.

Currently the work programme has 24 individual areas of focus which includes departments across the whole organisation from estates, theatres, acute and nursing, pharmacy, human resources, public health, primary care, emergency and ICU care, medical physics, procurement, digital services, transport, resilience, catering and waste, which all manage multiple areas over several topics.

2.3.3 Financial

Climate change requirements are set out in the NHS Board annual accounts – net zero disclosure reporting which covers all aspects of planning and risk for climate change activities. Sustainability reporting is increasing in the financial sector with increasing burden on board reporting in the years ahead which will need resourced.

2.3.4 Risk assessment/management

The completion of this report has no operational risks associated to it. The Board are making good progress in achieving the aims contained within the 10-year strategy. The associated workplan and workstreams capture the risks and action have been allocated to these with the expectation that the strategic aims will be achieved within the set timescales.

There is an operational risk and issues register for this programme of work which is updated on a regular basis.

2.3.5 Equality and diversity, including health inequalities

The community wealth building element of the strategy should help to address health inequalities through the provision of local employment, local procurement and better access to services.

2.3.6 Other impacts

- Compliance with Corporate Objectives as this report evidences the Board's progress in meeting the key deliverables associated with our Climate Change and Sustainability Strategy (2021 – 2032) to the end of March 2024.
- Best value - Supports best value through improving our sustainability performance.

2.3.7 Communication, involvement, engagement and consultation

The Board has carried out its duties to involve and engage external stakeholders where appropriate:

- Relevant teams have been consulted in the compilation of information contained within this report.

2.3.8 Route to the meeting

This has been previously considered and approved by the following groups as part of its development. The groups have either supported the content, or their feedback has informed the development of the content presented in this report.

- Climate Emergency and Sustainability Operational Group, virtually 23 January 2025
- Climate Emergency and Sustainability Strategic Group, virtually 28 January 2025
- I&SS Extended Management Team, 30 January 2025
- Integrated Governance Committee, 10 February 2025

2.4 Recommendation

For decision. Board members are asked to review the report content and approve this report. Following approval, the report will be shared with Scottish Government as part of the annual reporting requirements.

3. List of appendices

The following appendices are included with this report:

- Level 1 Annual Health Board Climate and Sustainability Report 2023-24
- Level 1 Biodiversity Duty Report

Annual Climate Emergency and Sustainability report 2023/24

1. Introduction

- The organisation's name – NHS Ayrshire and Arran.
- What the report is about – The Boards annual climate change and sustainability report as required under the DL2021-38.
- The organisation's purpose - To provide health care to the citizens of Ayrshire and Arran.
- The number of employees that work for it – Whole time equivalent for 23/24 at its peak was 9,564 staff, and 12,356 employed.
- The number of buildings it manages, and they size of the area of its estate. – The estate size was 248,877m2 with several campus sites, health & resource centres, clinics, houses, and a variety of hospital buildings totalling 151.

3. Leadership and governance

- How is the health board showing leadership in tackling climate change and becoming environmentally sustainable?

NHS Ayrshire and Arran has the Climate Emergency and Sustainability Operational Group (CESOG) which is chaired by the director of Infrastructure and Support Services. The group is responsible for delivering the climate change and sustainability requirements placed on the board as set out in the Chief Executives letter CEL (2021)38 "A Policy for NHS Scotland on the Climate Emergency and Sustainable Development" and the Scottish Government's Climate Change Act 2009. This work is linked nationally with NHS Scotland's National Services Scotland Health Facilities Scotland division / NHS Assure, where all sustainability topics sit under this umbrella proving oversight to the Scottish Government of progress on the current policy.

The non-executive role in climate change and sustainability have been defined and we have a non-exec champion who sits on the board. The operational group reports directly into the Climate Emergency and Sustainability Strategic Group (CESSG) as shown on the chart. This group is chaired by the boards champion for sustainability and climate change who is responsible for challenging the organisation to ensure that the policy requirements are being met and whose role is to oversee the progression in terms of sustainability and climate change actions. This provides a governance route that reports directly to the corporate management team and then to the performance management group, and further into the board. The strategic group has overall responsibility for delivering on policy and strategy as set out internal and by Scottish Government.

The NHS Scotland National Environmental Sustainability Group (NESG) meets every 2 months overseeing the national agenda on climate change and sustainability. There are many national groups which feed into this group such as the national waste forum, the national energy forum, the national

environmental management group, the national transport and active travel group, and the newly formed national greening the estate group which all feed directly into NESG.

Internally the CESOG (Climate Emergency and Sustainability Operational Group) has a remit to develop and promote climate change and sustainability and implement staff engagement to increase awareness of climate change and environmental initiatives which help us improve our performance in mitigating and adapting to climate change. The group is integral to providing projects to promote the board's actions on climate change and sustainability which are in turn linked to the UN Sustainability Goals and the national performance framework indicators. These actions help to drive down carbon emissions, reduce the amount of waste, lowering energy and water consumption, increasing active travel, and improve the board's biodiversity and greenspace.

The operational groups have a work program in place to tackle the climate change and sustainability agenda and improve its performance in all measured aspects. The group also manages legal compliance with environmental laws and is tasked with embedding management systems to ensure these requirements are tracked, monitored, evaluated, and improved upon. Climate Change risks are also being addressed in line with the boards own risk reporting, and a board wide climate change risk assessment has been undertaken.

Funding for energy efficiency projects comes directly from the Infrastructure Programme Board Advisory Group (IPBAG) who oversees all Board capital spend. The Director of Infrastructure and Support Services (I&SS) chairs this group and provides assurance on all capital projects to the Infrastructure Programme Board (IPB). As outlined in the diagram the subgroups within the organisation such as the Energy Focus Group, Waste Management group, Procurement Steering group, Workforce planning and development group, Infection control, Greening the Estate, Health Safety and Wellbeing Committee, and the Health Promoting Health Service all feed into the operational group CESOG.

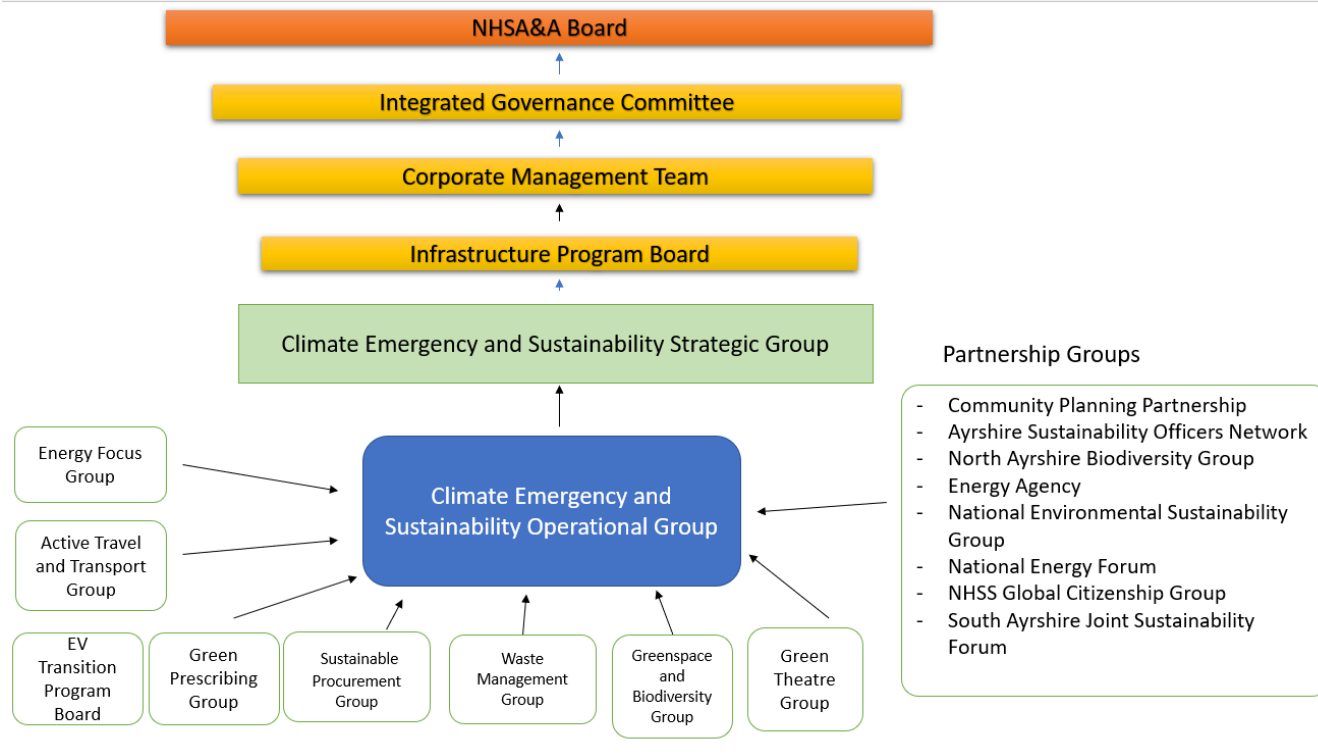
- Who is the Executive Lead?

The executive lead is the Director of Infrastructure and Support services.

- Who is the Sustainability Champion on the board?

The Sustainability Champion is Linda Semple - [Linda Semple - NHS Ayrshire & Arran](#)

- An outline of the organisation's governance structure for climate action and sustainability



4. – Summary of impacts

NHS Ayrshire and Arran 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 number of emissions produced annually by NHS Ayrshire and Arran.

Greenhouse gas emissions 2022-2023 & 2023-2024, tonnes CO2 equivalent					
Source	2022/23 emissions (tCO2e)	2023/24 emissions (tCO2e)	Percentage change – 2022/23 to 2023/24	2023/24 – target emissions	Percentage difference between actual and target emissions – 2023/24
Building energy (including Scope 3 and WTT)	19,939	20,115	+ 0.9%	-3%	+3.9%
Non-medical F-gas	80	31	-61%	-3%	-58%
Medical gases	1001	1072	+7%	-3%	+10%
Metered dose inhaler propellant (primary and secondary care)	5902	5899	-	-3%	-3%
NHS fleet travel (includes scope 1, 2 and 3 WTT emissions)	1465	866	-41%	-3%	-38%
Waste	445	450	+1%	-3%	-4%
Water	92	95	+3%	-3%	+6%
Business travel					
Grey & Leased Fleet	1273	1298	+2%	-3%	+5%
Staff Business Travel	64	154	+140%	-3%	+143%
Taxi's	85	107	+26%	-3%	+29%

(includes WTT emissions)					
Total emissions					
Scope 1	12,797	12,512	-2%		
Scope 2	5,111	5,355	+4%		
Scope 3	12,771	12,541	-2%		
Total Emissions	30,681	30,409	-0.8%	-3%	+2.2%
Carbon sequestration				-	-
Greenhouse gas emissions minus carbon sequestration	N/A	N/A	N/A	-	-

The table below sets out how much of key resources we used over the last two years

Source	2022/23 Use	2023/24 Use	Percentage change – 2022/23 to 2023/24
Building energy (kWh)	99,816,495	96,271,221	-3.5%
NHS fleet travel (km travelled)	1,989,632	2,147,251	+8%
NHS Grey and Leased Business Travel (km travelled)	6,058,915	6,444,544	+6.4%

Waste (tonnes)	445	450	+1%
Water (cubic metres)	317,999	328,088	+3%
Business travel (km travelled) (taxi, bus, train, plane, ferry)	396,134	817,619	+106%

5. Climate change adaptation

Scotland’s climate is changing faster than expected according to research published by the James Hutton Institute in December 2023. According to this research:

- “Between 1990 to 2019, February and to a lesser extent April have become wetter, particularly in the west, by up to 60%, exceeding the projected change by 2050 of 45-55%.”
- “Scotland is on track to exceed “a 2°C increase in temperature by the 2050s, with the months from May to November experiencing up to 4°C of warming over the next three decades (2020-2049).”
- “The number of days of consecutive dry weather – an indicator for drought and wildfire risk – are also expected to increase in drier months, such as September.”

Climate change exacerbates existing health risks and introduces new challenges, ranging from the spread of infectious diseases to the intensification of heatwaves and extreme weather events that will impact the health of the population, healthcare assets and services. NHS Scotland plays a pivotal role in safeguarding the life and health of communities by developing climate-resilient health systems capable of responding to these evolving threats.

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: www.ukclimaterisk.org/independent-assessment-ccra3/briefings/

- *What are the main risks from climate change that the Health Board has identified through its Climate Change Risk Assessment?*

Overheating, extreme weather events, flooding risks fluvial and coastal, service delivery impacts.

- *What actions has the health board taken to reduce those risks – what has changed since the last report?*

The Board use a variety of tools to monitor and check progress towards adaption workstream. The CCRA (Climate Change Risk Assessment) tool is used to monitor, mitigate, and provide adaptation measures highlighting climate change risks and providing a costed action plan. We have still to set out monitoring and evaluation criteria for adaptation and require widening our stakeholder group to carry out the assessment work. We have still to agree a suitable benchmarking tool to help us with our monitoring and evaluation.

- *What are we doing to be prepared for the impacts of climate and increase the resilience of our healthcare assets and services?*

NHS Ayrshire & Arran are part of a multi-agency group called the Ayrshire Local Resilience Partnership. (ALRP). The ALRP has a disruptive weather plan, and this outlines the actions to be taken depending on level of warning received. The ALRP will also co-ordinate volunteer groups if required during the severe weather, for example the 4x4 vehicle volunteer group. West of Scotland Regional Resilience Partnership (WoSRRP) would delegate priority of these services to those with the greatest need. The Civil Contingency Act (CCA) 2004 designates agencies as category 1 or 2 Responders, NHS territorial Boards are designated as a Category 1 Responders as responding to emergency situations is part of our day-to-day business. The National Risk Assessment which is a UK Government document is used as the basis for the Community Risk Register. NHSAA as part of the Ayrshire Local Resilience Partnership. This work addresses flooding risks, high temperatures, heat wave planning, major flood and fluvial risks, storms and high winds, failure of water, severe weather warning by the MET office, local coastal and tidal flooding, and flash flooding. SEPA feeds into the Community Risk Register as they are the agency that leads on the flooding risks. SEPA provides daily updates on flooding / drought risks. In addition, we sit in the

council climate change groups across Ayrshire feeding into local delivery plans. NHS Ayrshire and Arran is part of the Ayrshire Local Resilience Partnership which is a group composed of agencies designated under the Civil Contingencies Act 2004 as a Category 1 and 2 responders who based within Ayrshire including Scottish Fire and Rescue Service, Police Scotland, Scottish Ambulance Service, SEPA, MET office, Scottish Water and Transport operators such as CalMac and Glasgow Prestwick International Airport. The impact of climate change are issues that the group reviews on a periodic basis through the Risk Preparedness Assessment.

6. Building energy

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

NHS Ayrshire and Arran has 151 buildings such as large acute hospitals, health centres, clinics, houses, and leased buildings and accommodation.

In 2023/24, 20,115 tonnes of CO2 equivalent were produced by NHS Ayrshire and Arran use of energy for buildings. This was an increase of 0.9 % since the year before.

In 2023/24, NHS Ayrshire and Arran used 96,271,221 kWh of energy. This was a decrease of 3.5% since the year before.

In 2023/24, NHS Ayrshire and Arran generated 227,687kWh of renewable electricity and 13,633,598kWh of renewable heat energy from various technologies. This equated to 20% of the total energy of the board and was a reduction over all of 5.4% over last year.

Building energy emissions, 2015/16, 2022/23 and 2023/24 – tCO2e				
	2015/16 energy emissions	2022/23 energy emissions	2023/24 energy emissions	Percentage change 2015/16 to 2023/24

Building fossil fuel emissions (includes scope 3)	14,727	12,158	12,356	-16%
District heat networks and biomass (includes scope 3)	391	864	650	+66%
Grid electricity (includes line losses, T&D and WTT scope 3 emissions)	17,138	6,917	7,108	-59%
Totals	32,256	19,939	20,114	-38%

Building energy use, 2015/16, 2022/23 and 2023/24				
	2015/16 energy use	2022/23 energy use	2023/24, energy use	Percentage change 2015/16 to 2023/24
Building fossil fuel use	69,757,244	55,035,830	56,775,676	-19%
District heat networks and biomass	8,793,466	18,347,494	13,633,598	+55%
Grid electricity	29,809,637	26,415,548	25,861,947	-13%
Renewable electricity	157,815	228,577	227,694	+44%

Totals	108,518,162	100,027,449	96,498,915	-11%
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- *What did we do in 2023/24 to reduce emissions from building energy use?*
 - The board has allocated funding to manage backlog and to progress efficiency improvements. Examples of such initiatives have included boiler replacements at Ayrshire Central Hospital Horseshoe building and Pavilions 10 & 11, Ailsa Hospital main building, and redesign proposals to upgrade the University Hospital Ayr glazed conservatory. (Total project budget cost £143k)
 - Completion of Scottish Government funding (Green Public Sector Estates Decarbonisation Scheme) completed LED lighting upgrade projects at Girvan Community Hospital, University Hospital Crosshouse Laboratories ground and lower, Brooksby House and Medical Resource Centre, Ardrossan Health Centre and Dalry Health Centres were all completed. (Total project budget cost £919k)
- *What are we doing in 2024/25 to reduce emissions from building energy use?*
 - The board have allocated £300k within the Capital Investment Plan (CIP) to target energy efficiency initiatives which will include the continuation of LED lighting upgrades at University Hospital Crosshouse Labs, Patna Resource Centre, Ayrshire Central Hospital Training centre, and Stewarton Health centre.
 - New electrical power supplies will be energised by Designated Network Operator (DNO) at our main hospital sites to support the Board commitment to transition our crown cars and commercial fleet to EV. This will ensure we are able to maximise our charging infrastructure capability to support local services to use electric vehicles.
- *What projects are we planning for the longer-term to reduce emissions from building energy use?*

- University Hospital Crosshouse fully digital hydronic modelling work which will enable the requirements and pathways to decarbonise heat in our largest acute hospital building. This shows the areas for improvement required internally at a detailed engineering level to show the savings that will be made, along with options for plant replacement to low carbon heating systems.
- Planning permission has been granted to install a Wind Turbine on our Ailsa/University Hospital Ayr campus, and we have a period of 3 years to design, procure and construct. The Planning Approval has a number of conditions which will involve detailed studies to be undertaken, noise monitoring, ecological and water drainage planning to be adhered to. The project has been included with the Boards Business Continuity Plan for consideration by Scottish Government. The project will add to the Boards existing onsite renewable technology within the estate.
- University Hospital Ayr – BEIS Energy Catapult Project – achieving a 50% carbon reduction by 2030 – a large project circa £8-20M investment program to take forward decarbonisation projects and efficiency measures to reduce energy and carbon emissions. (includes wind turbine & ground mounted solar with battery)
- PPA / HPA projects – progression with the North Ayrshire Council Nethermains solar project (12MW), and the East Ayrshire Crosshouse 4MW solar project with SSE. Progression of a West Coast PIN notice to market to invite discussions with prospective 3rd party private investment companies to provide renewable energy solutions to our sites.
- Girvan Community Hospital – HVAC efficiency measures – 60% reduction in power using straight through high efficiency fans and direct drive motors. A pilot project to demonstrate the savings to the board from moving to high efficiency fans and motors.

7.1 Sustainable care

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

7.2 Anaesthesia and surgery

Greenhouse gases are used as anaesthetics and for pain relief. These gases are nitrous oxide (laughing gas), 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.

NHS Ayrshire and Arran total emissions from these gases in 2023/24 were 1,072 tonnes CO₂e, an overall increase of 71 tonnes from the year before has been reported, up 7%. More detail on these emissions is set out in the tables below:

Nitrous oxide and entonox emissions, 2018/19, 2022/23, 2023/24 – tCO₂e				
Source	2015/16 (baseline year)	2022/23	2023/24	Percentage change 2015/16 to 2023/24
Piped nitrous oxide	421	274	329	-22%
Portable nitrous oxide	11	12	9	-18%
Piped entonox	744	53	54	-93%
Portable entonox	83	10	9	-89%
Total	1,259	349	401	-68%

Volatile medical gas emissions, 2018/19, 2022/23, 2023/24 – tCO₂e				
	2015/16 (baseline year)	2022/23	2023/24	Percentage change 2018/19 to 2023/24
Desflurane	619	36.4	0	100%
Isoflurane	0.2	1	0	100%

Sevoflurane	67	49.5	52.2	-22%
Total	686.2	86.9	52.2	-93%

• *What did we do in 2023/24 to*

reduce emissions from anaesthetic gases?

- This was the first year we saw the removal of desflurane in theatres which we have now phased out the use (ordering of this has come off the normal order sheet, but still can be special ordered which needs to be noted and tracked)
- *What are we doing in 2024/25 to reduce emissions from anaesthetic gases?*
 - We have a program schedule of work to decommission nitrous oxide piped manifolds in dentistry. These include:
 - University Hospital Ayr – Dental manifold closure 28th Oct 2024.
 - Northwest Area Centre – Dental Services – decommissioning 18th Dec '24 – cylinders in place
 - Ayrshire Central Hospital – Dental Services – Decommissioning 8th Dec '24 – with cylinders expected 16th Dec.
 - University Hospital Crosshouse – Plans being discussed and developed to review manifold decommissioning.

A National Green Theatres Programme was officially launched in 2023 to help reduce the carbon footprint of theatres across NHS Scotland and enable more environmentally sustainable care by:

- Working with clinicians and professionals to develop actions that reduce carbon emissions, waste and resource use.
- Supporting Boards to implement, measure and report on these improvements.

The Green Theatres Programme is based on actions developed by frontline staff and the Green Theatre Project at Raigmore, NHS Highland.

In 2023/34, NHS Ayrshire and Arran did the following to make operating theatres more sustainable:

- *What we did in 2023/24*

- Green Theatre Team continued to meet at regular intervals to review and monitor the progress of agreed group initiatives.
 - Fully decommissioned existing nitrous manifolds at University Hospital Ayr.
 - Desflurane gas now removed from sites and removed from available order.
 - IV Paracetamol now no longer routinely used with patients given table pain relief prior to surgery.
 - Reduced in the number of instruments on surgical trays (Ortho / Urology).
 - Reduced timings on theatres HVAC for all theatres (excluding emergency) on all sites.
 - Warmer kits now no longer routinely used.
 - Rub not scrub – training to all staff ongoing but underway.
 - Signage and staff awareness to switch off equipment prior to leaving within all areas of the theatre complex.
- *What are we doing in 2024/25 to make surgery more sustainable?*
 - Continue to progress agreed actions on action tracker.
 - Virtual Reality Headset purchased to aid anaesthetics (reduction in IV Sedation).
 - Ongoing review of instrument kits – moving on to General Surgery teams for kit review.
 - Staff yearly training for segregation of waste streams and to fully embed in local induction and yearly learn pro completion.
 - Review Gases Scavenging Systems (AGSS) for both main acute hospital sites. Explore funding opportunities and progress relevant business cases have been submitted for corporate review.
 - Focus on the expansion of Surgical Fluid Suction System, currently in use within University Hospital Ayr. Move to fund the deployment of same units within University Hospital Crosshouse main operating theatre block. Explore funding opportunities and progress relevant business cases have been submitted for corporate review.

7.3. 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 Ayrshire and Arran were 5,899 tonnes of CO2 equivalent in 2023/24.

Inhaler propellant emissions, 2015/16, 2022/23, 2023/24 – tCO2e				
Source	2015/16 (baseline year)	2022/23	2023/24	Percentage change 2018/19 to 2022/23
Primary care	6,022	5,760	5,763	-4.3%
Secondary care	179	142	136	-24%
Total	6,201	5,902	5,899	-4.9%

- *What did we do in 2023/24 to reduce emissions from inhalers?*
 - Local guidelines were changed from MDI-first to a DPI-first format, with greener DPI and soft-mist devices moved into separate, green-coloured sections which were located at the start of the guidelines in order to encourage preferential use of these devices. MDI options were located in a separate table after the MDI options, shaded yellow to differentiate from the greener options.

- *What are we doing in 2024/25 to improve patient care and reduce emissions from inhalers?*
 - Promoting use of the new guidelines at prescribing meetings with GP partners and key prescribers; using input from specialist nursing colleagues to promote greener prescribing by practice nurses and ensuring that practice pharmacy teams are aware of the guidelines and the rationale for change. Pilot switch work by practices has been commenced in some practices.
 - Reducing over-use of SABA inhalers remains a key clinical priority for our respiratory specialist nurses and a key message delivered at training by specialist nurses and senior pharmacists at educational sessions with GP practices.
- *What are we doing to raise awareness with staff and patients, including primary care?*
 - As noted above, educational sessions have been delivered to healthcare professionals in primary care; posters are in development to raise awareness amongst patients. These posters can be displayed in waiting areas and in clinical rooms. Patients are also being counselled on the change to dry powder inhalers at annual reviews. The intention is to also disseminate the information from these posters via social media platforms.

7.4. Other sustainable care

- *What else did we do in 2023/24 to make care more sustainable?*
 - ***Diabetes in Dalmellington: Living and Caring*** is a two-year SG VIF pilot project that aims to improve the self-management of pre-diabetes and diabetes to reduce the incidence of diabetes and its complications, enabling people to live longer and healthier lives, whilst ensuring this is delivered in an equitable and sustainable way which recognizes the importance of planetary health. Quality improvement methods have been utilised to identify health impacts through process and outcome markers. Alongside this runs an evaluation of the Diabetic Eye Screening Service pre- and post-intervention to determine if the carbon footprint of this service has been reduced, the results of which will inform future service design as well as be submitted to peer review publication to contribute to the much-needed literature on sustainability and planetary health.
 - We have been working with external consultants on the development of a whole system plan and redesign of services. This will bring sustainable benefits such as care closer to home, centralising expertise on single sites and improving the patient journey.

- Increase the use of video consultations – exploring an uptake of NearMe software, working with appropriate specialities around this. An example of this is in social care in South Ayrshire. Medical specialities have been asked who can move to non-face to face. Pre op assessments are being addressed using near me to help reduce face to face consultations.
 - Pharmacy waste reduction initiatives
 - Use of the Neptune waste capture system in both acute hospital sites with pilot’s introduced in both Ayr and Crosshouse hospitals. Full business cases are being worked through the help develop the technology to be taken forward, though capital will be required to make these savings, and these will come from differing budgets out with theatre budget so wider savings discussions are needed here.
 - CD forum – asking clinical departments if they have an Environmental sustainability strategy in place. Most of the Royal colleges have a national guidance on this, each department should be developing these strategies locally and carrying out projects to reduce the department’s environmental footprint.
- *What else are we doing in 2024/25 to make care more sustainable?*
 - In addition, we will be addressing how we communicate with patients and scoping digital methods to reduce the use of paper and postage
 - We have a project to move over to rechargeable hearing aids to patients across Ayrshire
 - We will continue to promote near me consultation opportunities.
 - Ongoing works with Boards appointed external financial support resource (e.g. Viridian) on improvement plan will feed into the realistic medicine areas so future care modelling is focused directly on savings and bringing the board back into financial alignment.
 - Blood testing and test requests - labs and CDF’s – looking at reducing the waste in this area and a reduction of tests ordered – addressing test results going back a few months to review the results to stop repeating of tests. Labs to develop systems to see when tests are carried out and check on the requests for bloods coming in from the clinical teams. Digital solutions are required to be addressed here. Automating this process would be useful so test results can be sent out, and checks can be carried out without manual intervention very similar to the digital technology innovation which was carried out in the urology department to notify patients automatically of test results.

10. Travel and transport

Domestic transport (not including international aviation and shipping) produced 28.3% of Scotland's greenhouse gas emissions in 2022. Car travel is the type of travel which contributes the most to those emissions.

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

- *What did we do in 2023/24 to reduce the need to travel?*
 - Staff travel increased during this period. More long-haul flights and increased travel for staff. Leased cars mileage decreased as the total number of cars declined, however emissions from grey fleet increased as more staff travelled in their own cars. We did see an increase uptake in public transport with a flattening of grey fleet which suggests a shift towards more sustainable transport methods.
 - Online training sessions are now being offered online to stop the need to travel.
 - Some directorates are requiring staff to come in on an increased basis which increases staff travel, but this is to increase connections and stop people from working in silos.

- *What did we do in 2023/24 to improve active travel?*
 - Continuing to offer active travel input at corporate induction, promoting of the cycle to work scheme. We had an increase in the scheme over the previous year showing a 10% increase.
 - We had a Workplace engagement project officer in place funding through Transport Scotland / Sustrans funding routes – in post Nov '22 until August 2023 when the funding was removed. She helped develop our infrastructure across our hospital and clinical sites to promote active travel providing installation of 3 new bicycle shelters.
 - We created a promotional video campaign to help promote active travel starring our Chief Executive Officer Claire Burden which was promoted internally through comms to all staff.
 - Created an info graphic promoting active travel facilities at key hospital sites was updated and the link to the promotional video was linked to these.
 - Doctor bike sessions were arranged at main acute sites where staff could come along to these bike maintenance sessions.
 - We achieved a cycle friendly employer award plus at Ayrshire Central Hospital (March 2024).
 - Social media and staff comms we promoted Bike Week / Cycle to Workday / Cycle September /Challenge Poverty Week.

- Staff step count challenge was undertaken across all sites with large participation.
 - Consultation around linking Crosshouse hospital into the national cycle routes and linking with the town centre in Kilmarnock.
 - Developing the Ayrshire Link – active travel pathways development planning – contributing to the planning meetings.
- *What did we do in 2023/24 to improve public and community transport links to NHS sites and services?*
 - Undertake a 4-week pilot community transport scheme, carried out at the Dalmellington Health hub to encourage the use of community transport to NHS appointments which provided and a lunch club to support.
 - Scoping community transport work to connect villages in South Carrick as part of that linking with a GP practice in Ballantrae which has no existing bus service.
 - We had representatives Stagecoach attend our main hospital sites to promote a staff discount of 10%.
 - *What are we going to do in 2024/25 to reduce the need to travel?*
 - Formally appoint a new Transport Manager into the role following retirement of postholder and review existing Transport related policies and procedures.
 - Increased use of near me technology.
 - Distributed working areas being created to aid staff to touch down at various central locations to aid agile working reducing the need to travel.
 - Encourage staff to work from home where they can.
 - Given essential spend is in place staff travel is only permitted with director sign off.
 - *What are we going to do in 2024/25 to improve active travel?*
 - Working towards achieving our re-certification for becoming a “Cycle Friendly Employer” award at Ayr / Ailsa and Crosshouse hospital sites.
 - We are working towards this at smaller sites this year to encourage the update – Girvan Community Hospital, Biggart Hospital, Three Towns Resource Centre, East Ayrshire Community Hospital, and North Ayr Health Centre.

- Working with Bright Green Business to recruit a 6-month intern opportunity in active travel to support and promote active travel amongst staff patients and visitors, funded through Ayrshire Roads Alliance with the post hosted by the NHS A&A.
- Promote active travel campaigns through digital media platforms to staff – cycle to work scheme – corporate induction training scheme
- Ayrshire Central Staff travel survey will be carried out to show how people commute at this site which will help provide options for travel and transport planning requirements. This was required as we sold land at this site and data was needed on staff behaviours to travelling and helping to plan for people who don't need to work on site.
- CoRe project in East Ayrshire – contributing to the development and planning of the active travel routes through Cumnock increasing safety and lighting of active travel routes.
-
- *What are we going to do in 2024/25 to improve public and community transport links to NHS sites and services?*
 - Continuing to hold information stalls with Stagecoach bus provider to promote staff discount on travel.
 - Delivery of the South Carrick community transport pilot scheme which includes transport to local GP practice in Ballantrae.
 - We are working to remove all petrol and diesel fuelled cars from our fleet.

The following table sets out how many renewable powered and fossil fuel vehicles were in NHS Ayrshire and Arran fleet at the end of March 2023 and March 2024:

	March 2023		March 2024		Difference in % zero tailpipe emissions vehicles
	Total vehicles	% Zero tailpipe emissions vehicles	Total vehicles	% Zero tailpipe emissions vehicles	
Cars	248	41%	248	54%	+13%
EV Cars	102		132		
Light commercial vehicles	107	7%	107	7%	0%
EV Vans	7		7		

Heavy vehicles	8	0%	8	0%	0%
Specialist vehicles	0	0%	0	0%	0%

The following table sets out how many bicycles and eBikes were in NHS Ayrshire & Arrans fleet at the end of March 2023 and March 2024:

	March 2023	March 2024	Percentage change
Bicycles	0	0	0
eBikes	0	0	0

The following table sets out the distance travelled by our cars, vans and heavy vehicles in 2023/24.

Distance travelled, kms	Cars	Light commercial vehicles	Heavy vehicles	Specialist vehicles (HGV & Bus)	Total
2023/24	2,177,206	290,849	1,238,277	42,730	3,749,062
2022/23	2,210,252	280,256	1,389,358	41,852	3,921,718
2021/22	2,144,160	277,773	1,329,452	42,307	3,793,692

2020/21	2,394,156	322,445	1,389,225	47,099	4,125,925
2019/20	2,466,526	316,126	1,408,326	48,465	4,239,443
2018/19	2,337,474	332,523	1,406,098	49,407	4,125,502
2017/18	2,456,231	348,271	1,415,112	51,888	4,271,502

Business travel is staff travelling as part of their work in either their own vehicles or public transport. It covers travel costs which are reimbursable and doesn't cover commuting to and from work. The table overleaf shows our emissions from business travel by transport type.

Business travel emissions, tCO2e	Cars (Grey and lease fleet)	Taxi's	Flights	Trains	Busses	Ferry	Hotel Stays	Total
2023/24	1,298	0.3	98	10	4	4.3	8.4	1,423
2022/23	1,274	0.2	23	6.3	1.6	2.3	4.3	1,332
2021/22	1,418	0.1	2.1	1.4	2.7	2.5	1.1	1,427

11. 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?*
 - Some citizen science recording and green gym work was undertaken at Ailsa / Ayr site by the Conservation Volunteers (TCV).
- *What actions have been taken to contribute to the NHSScotland Estate Mapping programme, or to develop an internal mapping programme?*
 - NHSA&A was a pilot scheme in the greenspace mapping tool and helped to showcase the boundary links with the property software. This provided us with a GIS map of our greenspace and mapped out the large areas of land not used for buildings.
- *What actions have been taken to mainstream biodiversity across the organisation?*

- We have set up a new Greenspace and biodiversity group within the board to address all the actions contained within this area of work, to help drive the prominence of this area, and develop plans on how we are to meet the 2030 targets halting biodiversity loss and to make improvements and links with our neighbouring communities and greenspace corridors.
- *How have nature-based solutions been utilised to address the climate and biodiversity emergencies?*
 - NHTA&A have set up a Greenspace for Health programme which is being promoted widely with NHS colleagues, partners and on NHS apps. We have a jointly funded post and have appointed a Senior Project officer from The Conservation Volunteers (TCV) who continues to provide a range of events including weekly health walks and Green Gyms.
- *What actions have been undertaken to raise awareness, engagement and understanding of biodiversity and nature?*
 - Some signposting and interpretation panels renewed to give awareness and engagement of our greenspace and nature conservation
- *What surveys, monitoring or assessment of biodiversity have been undertaken? If you have – have systems been developed to continue monitoring long-term?*
 - We delivered citizen science workshops in North and South Ayrshire in 2023/24 which helped participants to identify and record species of flora and fauna on our land.

Greenspace

The design and management of the NHSScotland 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.

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

Project name/ location	Benefits of project	Details of project
NHS A&A Green Health App	Wellbeing, Climate Change mitigation	Widely promoted to staff patients and visitors is our green health app with a raft of information on outdoor activities, green gyms, gardening, walks and community links.

12. 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 2024, Global Earth Overshoot Day is 1 August, a day earlier than in 2023.

For the UK, the picture is more worrying. In 2024, the UK's Earth Overshoot Day was 3 June. 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.

- *What did we do in 2023/24 to reduce the environmental impact and the quantity of the goods and services we buy?*

The Procurement team participate in the Climate Emergency and Sustainable Operational Group and are involved in the implementation of multiple separate actions to ensure more environmentally sustainable products are considered, such as, reviewing the use of rechargeable hearing aids and reduction of emissions from our supply chain. Procurement Officers have also undertaken Procurement Climate Literacy Training and are aware of Scottish Government Sustainable Procurement Tools.

- *What are we doing in 2024/25 to reduce the environmental impact of the goods and services we buy?*

The team will continue to review and adopt the Scottish Government Sustainability Procurement Tools to identify targeted contracts to influence sustainability requirements, to support the prioritisation of contracts that will support our ambition for net zero.

In the next year, NHS Ayrshire & Arran will:

- Embed sustainability requirements within local tendering activity by ensuring that these are built into contract selection and/or award criteria and ensure whole lifecycle costing methodology is used in commercial criteria where appropriate.
- Ensure sustainability is an agenda topic during the Key Supplier Performance Meetings. This will allow particular ideals such as packaging and carbon footprint reduction to be monitored and identify opportunities for improvement.
- Continue to support and deliver the ambitions on the NHS Ayrshire & Arran ambitions within the Sustainability Action Plan in our Climate Change and Sustainability Strategy 2021-2032

We want to reduce the amount of waste we produce and increase how much of it is recycled.

The following table sets out information on the weight of waste (tonnes) we produce and its destination for the last three years:

Type	2021/22 (tonnes)	2022/23 (tonnes)	2023/24 (tonnes)	Percentage change – 2021/22 to 2023/24
Waste to landfill	0	0	0	0
Waste to incineration	2,318	2,881	3,669	+58%
Recycled waste	383	405	857	+124%
Food waste *lack of data	3*	49	29	+967%
Clinical waste	1,275	1,466	1,389	+9%

We have set targets to reduce the amount of waste we produce, and the tables below provide information on our performance against those targets:

Reduce domestic waste by a minimum of 15%, and greater where possible compared to 2012/2013 – by 2025	
Target – reduce domestic waste by	312 (tonnes)

Performance – domestic waste reduced by	649 (tonnes)
Outcome	ACHIEVED
Further reduction required	0 (tonnes)

Ensure that no more than 5%, and less where possible, of all domestic waste is sent to landfill – by 2025	
Target – reduce waste sent to landfill by	1,358 (tonnes)
Performance – waste sent to landfill reduced by	1,358 (tonnes)
Outcome	ACHIEVED
Further reduction required	0 (tonnes)

Reduce the food waste produced by 33% compared to 2015/16 – by 2025	
Target – reduce food waste by	53 (tonnes) – 80 tonnes 2015/16

Performance – food waste reduced by	49 tonnes 2023/24
Outcome	ACHIEVED
Further reduction required	0 (tonnes)

Ensure that 70% of all domestic waste is recycled or composted – by 2025	
Target – recycle or compost	1000 (tonnes)
Performance – recycled or composted	857 (tonnes)
Outcome	NOT ACHIEVED YET
Further increase required	143 (tonnes)

- *What did we do in 2023/24 to reduce our waste?*
 - Albion Environmental clinical waste bag audits have been completed with non-compliance issues arising being flagged to that specific area where the waste came from. This has helped us make increases in general waste and recycling waste streams.

- Pre-Acceptance Audits (PPA's) were carried out in every building site which generates clinical waste giving us insightful information as to future planning for waste recycling increases. These are regulatory requirements to allow this waste stream to be uplifted.
 - We produced new waste segregation posters to assist the various hospital departments on how to segregate their waste according to national guidelines.
-
- *What are we doing in 2024/25 to reduce our waste?*
 - Continued work with Albion Environmental and Financial consultants to help reduce clinical waste costs and carbon. Baselineing each ward and assessing what bins are available.
 - Working on educating staff on how to bag and label clinical waste streams correctly in order to assist with our licensing requirements.
 - Crosshouse waste compound improvement works to help assist with waste collections which will support increases in waste segregation.
 - Estates to introduce multiple waste skips for separation of waste streams – wood, plaster, electrical
 - Current general waste contract supplier Duty of Care visit provides assurance that 0% to landfill – all recycled
 - General waste contract – Invitation to Quote under the framework requirements – which will see award new contracts for up to 15 lots of waste recycling. This will support increasing our recycling rates across the estate.

13. 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 in 2023/24 to develop and implement our EMS?*
 - The development of an effective Board wide Environmental Management System (EMS) remains on the boards Annual Delivery Plan as a live action.
- *We have fully implemented EMS to ISO14001 standard at the following sites:*
 - None.
- *What steps will we take in 2024/25 to further develop and implement our EMS?*
 - We are working through our aspects and impacts register along with our legal register to ascertain what services are carried out in each building to assign the correct legislation to each activity and its impact and aspect applicability.
- *What did we do in 2023/24 to reduce our environmental impacts and improve environmental performance?*
 - Our greenhouse gas emissions dropped by 240 tonnes year on year against a myriad of issues. Battling against an increase in service provision, a higher number of patients being treated and higher waiting times which increasing resources, waste, and transport. We also saw a 7% increase in the electricity grid emissions which impacted us by increasing our scope 2 emissions. However, we made reductions in other areas such as fleet transportation and green theatre programs which drove down emissions in these areas, helping us to break even at the end of the year. However, we missed our 3% target which is now compounded into the next 5 years 3% target meaning that we must achieve much more in the years ahead.
- *What are we doing in 2024/25 to reduce our environmental impacts improve environmental performance?*
 - Work is ongoing in a variety of areas to improve performance. Carbon reduction projects will continue to be identified and progressed against the agree funding level by the Estates and Capital Planning, over and above our demolition program which is set to reduce the footprint of the estate.
 - We are progressing our legal register which will then be sent out the various departments to address the compliance areas to help us start the GAP analysis work.
 - EPR regulations will potentially impact us, and this legislation will need to be assessed and worked through to ensure compliance in this area.
 - Integrating with our partners public and private to forward our strategic goals and reduce our footprint through private PPA / HPA agreements. Working through the LHEES schemes, and address community initiatives as part of our LOIP planning process. (Local Outcomes Improvement Plan).

- *What factors have prevented implementation of EMS to ISO14001 Standard for any sites in [x's] estate which have not yet reached that standard?*

The following factors have impacted the Boards ability to fully complete this requirement.

- The availability of capital and revenue funding required to support.
- The identification of resourcing required to support implementation and ongoing management and maintenance requirements.
- Increased operational service pressures throughout the system.

The development of an effective Board wide Environmental Management System (EMS) remains on the boards Annual Delivery Plan as a live action and the above factors will have focus and direction as we move forward to effectively mitigate and ensure progress is made.

14. 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 Ayrshire and Arran is working on the following building projects:

- NSAIS – National Secure Adolescent Inpatient Service (Foxgrove) – Ayrshire Central Hospital.
- Ward 4A University Hospital Crosshouse upgrade.
- Improving the standard of accommodation – distributed working hub at Ailsa Hospital – helping to create an agile working office hub for staff as part of our drive towards the rationalisation of our estate.
- New Pharmacy robot installation at University Hospital Ayr.
- Additional consulting rooms extension at Stewarton Medical Practice.
- Ayrshire Central Hospital – Traffic management study – improvement for active travel facilities, and how staff commute to and from work. This study addressed safe access to surrounding woodland walks for staff and patients.

- *What did we do in 2023/24 to make our construction projects more environmentally sustainable?*

- Design work for all new build capital projects was paused until further funding is made available, so all our net zero hospital design projects came to a pause.
- *What are we doing in 2024/25 to make our construction projects more environmentally sustainable?*
 - We will be creating a Climate Change Impact Assessment for all capital projects so that benefits and impacts can be captured within the board. This will help us collate and capture and report on the progress in this area and show how we are aligning our capital spend with our climate change strategic objectives.
 - The focus for this year will be predominantly focus on backlog maintenance reduction across the Board wide estate and the development of the Business Continuity Plan which is aimed at maintaining our current building stock to meet the legislative requirements.

15. 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 annual report outlines all the work in this area and the goals and strategies for the years ahead
[Community Wealth Building - NHS Ayrshire & Arran](#)
- *What are we doing to improve the resilience of our local community / communities to climate change?*
 - NHS Ayrshire & Arran are part of a multi-agency group called the Ayrshire Local Resilience Partnership. (ALRP). The ALRP has a disruptive weather plan, and this outlines the actions to be taken depending on level of warning received. The ALRP will also co-ordinate volunteer groups if required

during the severe weather, for example the 4x4 vehicle volunteer group. West of Scotland Regional Resilience Partnership (WoSRRP) would delegate priority of these services to those with the greatest need. The Civil Contingency Act (CCA) 2004 designates agencies as category 1 or 2 Responders, NHS territorial Boards are designated as a Category 1 Responders as responding to emergency situations is part of our day-to-day business. The National Risk Assessment which is a UK Government document is used as the basis for the Community Risk Register. NHSAA as part of the Ayrshire Local Resilience Partnership. This work addresses flooding risks, high temperatures, heat wave planning, major flood and fluvial risks, storms and high winds, failure of water, severe weather warning by the MET office, local coastal and tidal flooding, and flash flooding. SEPA feeds into the Community Risk Register as they are the agency that leads on the flooding risks. SEPA provides daily updates on flooding / drought risks. In addition, we sit in the council climate change groups across Ayrshire feeding into local delivery plans. NHS Ayrshire and Arran is part of the Ayrshire Local Resilience Partnership which is a group composed of agencies designated under the Civil Contingencies Act 2004 as a Category 1 and 2 responders who based within Ayrshire including Scottish Fire and Rescue Service, Police Scotland, Scottish Ambulance Service, SEPA, MET office, Scottish Water and Transport operators such as CalMac and Glasgow Prestwick International Airport. The impact of climate change are issues that the group reviews on a periodic basis through the Risk Preparedness Assessment.

16. Conclusion

This year was challenging in terms of meeting our 3% carbon reduction target. Good progress was made in a variety of areas across the organisation where ongoing initiatives and workstreams were implemented and completed, which the data reflected this. Challenges faced were the increase of 7% in the emissions factors for grid electricity which increased our scope 2 emissions however overall, we have managed to break even at the end of year with a very small decrease overall in emissions.

Transport saw the greatest area of reduction where emissions from fleet fell by 46%. This was due to increased EV vehicle and infrastructure uptake across our main sites as we decarbonise the fleet vehicles. We are currently still on track to meet the December 2025 target to decarbonise our small and medium size fleet, and the board has capitalised on all the available funding to meet this target and making excellent headway in this area.

The Green Theatre program comprising of multiple specialities is leading the way in reducing emissions. Increased recycling rates, large reductions in anaesthetic gas greenhouse gas emissions, moves to more sustainable materials and demanding more circular economy goods. Promoting and showcasing

the national program of work. Trials of anaesthetic gas collection took place to reduce these volatiles into the air in theatres. Work has been undertaken in the nitrous oxide net zero program with dentistry stepping up and putting in place a decommissioning program of piped gasses taking us into 24/25.

With only a decrease in emissions of 0.8% this year, we will need to carry over the 2.2% we missed our target by into the next 5 years to meet the 75% target set for 2030. This will increase the challenge in meeting our climate change requirements and compound into our existing 3% target till 2030. Decarbonisation of heat proves challenging in the current economic climate and electricity prices are 5 times higher than gas prices and will continue into the coming years ahead which will impact on business cases for decarbonisation.

The Board will continue to make best use of local, regional and national based funding and 3rd party external expert and technical based support (where appropriate) in order progress workstream initiatives related to Estate decarbonisation and emission reduction. Notwithstanding the challenging financial environment we will continue to maximise the current levels of internal resourcing required to progress the board strategy, annual delivery plan, legislative requirements, annual government reporting, statutory reporting, sustainability & climate change financial reporting requirements in order to outline how the board is meeting its requirements contained within the NHS Scotland policy for climate change and sustainability.

The organisation has an engaged team of enthusiastic staff who are working towards making changes in a safe duality working environment which are delivering local change helping us as an organisation to work towards our strategic goals. Putting people at the heart of our decision making is key especially in the care we provide not to mention our climate change and sustainability goals. Upstream health care and learning are essential to reducing disease and illness, protecting the people in which we are tasked with “do no harm”. As health care providers we must lead in reducing the impacts of environmental harm, clean air to breathe, play our part in ensuring clean drinking water, sustainable food production, all of which are required to make people healthy and thrive.

11. 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?*
 - We engage with the North Ayrshire biodiversity group in the development and linkages with their biodiversity planning (LBAP) work stream. Our GIS mapping and North Ayrshire Green Health program feeds into the greenspace and biodiversity workstream
 - We have started to develop the boards grassland management plan by trialling two site Ayrshire Central Hospital and Ailsa Hospital, carrying out sustainable management practices addressing reduced cutting and wild seed planting.
 - Natural capital costs were worked up for a board wide study to assess our biodiversity GIS mapping, natural habitat assessment, ecosystem and monetary flow mapping, opportunity planning for greenspace development (which would then help us write our greenspace plan), with a natural capital web portal. However no in year funding was available to take forward this work internally or externally.
 - Species counting groups were arranged through our CVT outdoor activity lead for community groups to come along to sessions where flora and fauna counts were arranged and this data collected and added to the Ayrshire wide information database.
 - Nature Network opportunities were initially discussed with the 30/30 workstream for biodiversity and how we can help to create nature corridors linking estates up across Ayrshire.
 - Signed up to the Ayrshire Nectar Network as a partner, enabling engagement with the excellent resources open to us to increase biodiversity and increase pollinator species.
 -

- *What actions have been taken to contribute to the NHSScotland Estate Mapping programme, or to develop an internal mapping programme?*
 - As above, we have costed up work to help us carry out our biodiversity and ecology mapping including health monetary benefits and carbon sequestration work. This workstream will sit with the newly formed Greenspace and Biodiversity Group to take forward. This group will also explore alternative funding opportunities
 - This GIS would then be added to our greenspace GIS map already undertaken [ArcGIS - NHS property map](#)
 - We recognise that this is just a snapshot in Sept '2021 and we do need to update this map to reflect our current estate.
- *What actions have been taken to mainstream biodiversity across the organisation?*
 - We have not carried out an assessment of our supply chain on the impacts of biodiversity at present, however we are starting to work with our suppliers on certain aspects through the creation of our community wealth building portal. Hewlett Packard approached us to sponsor a biodiversity project to support our climate change and biodiversity ambitions through a UK charity called re-pollinate. This included several wildflower beds to increase bee pollination, creation of grassland wildflower meadows across various large hospital sites. These were to help increase pollinating insects and enhance the appearance of the estate while reducing the maintenance needs of grass cutting. This supports our actions in our current biodiversity workplan, which are looking to progress into the next year.
 - Developing an approach to monitoring biodiversity has been addressed looking at various tools to assist. The Nature Tool was updated this year to version 1.1 which gives us a framework to help score our land.
- *How have nature-based solutions been utilised to address the climate and biodiversity emergencies?*
 - During our design program for the new National Treatment Centre, Ayr we addressed biodiversity net gain, wild and local planting strategies, SuDS (Sustainable Urban Drainage Management) for rainwater, and potential green and blue roof solutions. Baselineing was key to ensure that the project did indeed end up with the required 10% biodiversity increases within the new hospitals design. A lot of the greenspace for this project would be removed to build the new hospital on, so a variety of solutions were addressed to help increase biodiversity and not create losses on this site. These included the widening of water gullies, rainwater run off strategies into the local river course which runs beside the hospital, green walls with a variety of species of plant along the perimeter. Creation of a SUDS area with wild planting, woodland management with new pathways for staff and patients to use for rehabilitation purposes. The central courtyard areas of the hospital also had raised beds included to increase pollinators.
 - Nature-based solutions which includes tree and wildflower planting opportunities and initiatives across our property portfolio continue to be explored and discussed with those services responsible for grounds maintenance provision. Public Health and grounds maintenance work in close partnership along with supporting external organisation through our newly formed Greenspace and biodiversity group.

- *What actions have been undertaken to raise awareness, engagement and understanding of biodiversity and nature?*
- Biodiversity forms part of the boards Climate Emergency and Sustainability Work plan and has a key focus in the organisation. Regular updates on progress are provided and we have started to work with our local partners round the table to look at ways we can work together and develop our formal plans. This work is taken through the newly formed Greenspace and Biodiversity group. Jointly chaired by public health and clinical support services.
- Raising awareness and engagement of our staff, visitors alike to help understand biodiversity at nature by some new signage in our greenspace areas. This helps to point out the natural areas created for pollination, our wild meadow planting areas and also provide information on the habitat.
- TVC organisation worked with us in providing outdoor activities in the form of green gym and outdoor species counting and conservation measures.
- Examples of the communication used to promote the outdoor activities is detailed below:-



Greenspace for Health

North Ayrshire	WEEKLY SESSIONS	South Ayrshire
AYRSHIRE CENTRAL HOSPITAL Monday Get Moving Health Walk 12:30 A slow paced, small group health walk, time to enjoy nature, chat and be active (Duration: approx. 45 minutes)		AYR/AILSA HOSPITAL Thursday TCV Ayr Hospital Green Gym 10:00 Group based outdoor activity with a purpose such as gardening and citizen science. (Duration: up to 3 hours)
Monday Ayrshire Central Walking Group 14:00 A longer distance health walk, time to enjoy nature, chat and be active. (Duration: 1.5 hours)		Thursday Ayr Greenspace Walk 14:15 A slow paced , small group health walk in the hospital greenspace, time to enjoy nature, chat and be active (Duration: 1 hour)
Tuesday Irvine Green Gym 10:00 Group based outdoor activity with a purpose such as gardening and citizen science. (Duration: 3 hours)		



If interested in attending please contact

Lindsay Twilley

lindsay.twilley@tcv.org.uk

(limited spaces available)

TCV Greenspace for Health Project

- *What surveys, monitoring or assessment of biodiversity have been undertaken? If you have – have systems been developed to continue monitoring long-term?*
- We have completed some monitoring and assessment of our flora and fauna with the TVC volunteering groups.

- Continuous monitoring of our estate is not yet in place, as there are no identified revenue streams to undertake this work at this time, but forms part of the Boards ambition as set out in our climate change and sustainability strategy.
- Regular tree surveys are undertaken where the board has a dedicated budget for tree management associated actions are undertaken to ensure that our woodlands are proactively managed.

Greenspace

The design and management of the NHSScotland 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 and community resilience building.

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

Project name/location	Benefits of project	Details of project
Project name or location used as an identifier	Indicate/list the benefits of the project	Provide any key information regarding the project. This may include costs, timelines, collaborative working, lessons learned, future planning.
Ailsa Hospital Acorn Gardens	Biodiversity Health and Wellbeing	Community Mental Health Teams continue to run the Acorn Garden on the site which is run by the head clinical nurse. The team work with patients who are referred with issues of low mood, anxiety, or other mental health issues to engage and work in the garden creating new spaces, increasing our planting and biodiversity by reinvigorating the land back to its former gardens.
Woodland Walks Ayr / Ailsa & Ayrshire Central Hospital (ACH)	Health and Wellbeing	Woodland walks continue to be extensively used by local people on both sites, particularly important at Ayrshire Central Hospital as the local community of Castlepark is within deciles 1& 2 of the most deprived. The Conservation Volunteers deliver a programme engaging people in health walks from Eglinton Medical Practice on site at ACH using the woodland walk regularly. They also deliver walks and green gyms at Castlepark Community Centre close to the hospital site and a green gym at Kilwinning Library.
Woodland View Walking	Health and Wellbeing	12 staff at Woodland View Walk Leader trained summer 2023, patient walking groups daily on site within Ayrshire Central Hospital.

Greenspace forms part of the boards Climate Emergency and Sustainability Work plan and has a key focus in the organisation. Regular updates on progress are provided and we have started to work with our local partners round the table to look at ways we can work together and develop our formal plans. We continue to review biodiversity targets against all new capital development projects where applicable and appropriate.