

Meeting:	NHS Grampian Board Meeting
Meeting date:	10 October 2024
Item Number:	9
Title:	Annual Climate Emergency and Sustainability Report 2023/24
Responsible Executive/Non-Executive:	Alan Wilson – Director of Infrastructure, Sustainability and Support Services
Report Author:	Jillian Evans, Head of Health Intelligence and Learning Health Systems Robert Hobkirk, Head of Sustainability, Compliance and Risk Debjani Sarkar, Sustainability Support Officer

1.0 Purpose

This is presented to the Board for:

- Decision

The Board is asked to:

- Approve the Annual Climate Emergency and Sustainability Report 2023/24.

This report relates to:

- Government Policy/Directive
- Sustainability

This aligns to the following NHS Scotland quality ambition(s):

- Safe
- Effective
- Person Centred

2.0 Report summary

2.1 Situation

The Scottish Government has acknowledged the climate change emergency through the publication of [“A Policy for NHS Scotland on the Climate Emergency and Sustainable Development \(DL \(2021\) 38\)”](#). This policy, specifically under paragraph 65, mandates that each NHS Scotland body must publish a report on its public website by November each year summarising progress against the aims of the policy, using a template approved by the Scottish Government Health and Social Care Directorate (SGHSCD) for that purpose.

The progress report must be approved by the Chief Executive and provided to:

- The NHS Scotland body’s staff
- The NHS Scotland body’s board members; and
- SGHSCD

The annual progress report will form part of each NHS Scotland body’s annual ministerial review.

In addition, all Health Boards are required to submit a Public Bodies Climate Change Duties Report to the Sustainable Scotland Network (SSN) also by November of each year.

2.2 Background

The standard template provided by SGHSCD for the Annual Climate Emergency & Sustainability Report is a series of questions designed to evaluate the environmental and sustainability performance of the health board for the financial year 2023-24 against the following key areas of action:

- a) Governance
- b) Climate Change Adaptation
- c) Building Energy
- d) Sustainable Care
- e) Travel and Transport
- f) Greenspace and Biodiversity
- g) Sustainable Procurement, Circular Economy and Waste
- h) Environmental Stewardship
- i) Sustainable Construction
- j) Sustainable Communities

The information in the report is informed in part, by the base data submitted as part of the Public Bodies Climate Change duties report due to be submitted to SSN. The specified areas of action also align with the following four themes included in the Board’s own Climate Emergency & Sustainability Strategy:

- Delivery of net-zero
- Greening health systems
- Greening places and communities

- Developing wider collaborations and contributions across local and national systems

2.2.1 Summary Performance 2023/24

The full draft annual report for 2023/24 is included at appendix 1.

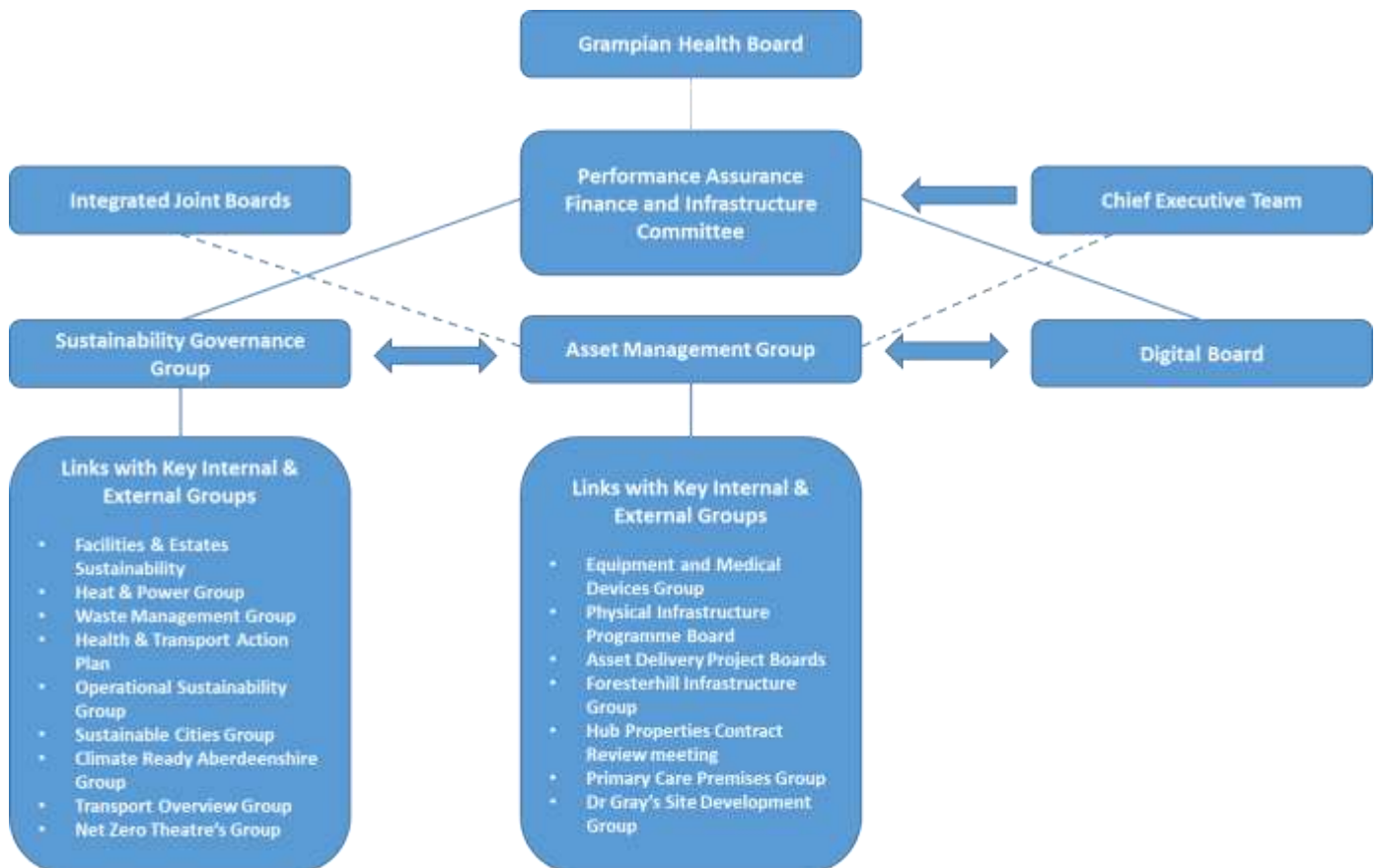
Key points against each of the areas for action are highlighted below:

a) Governance

The Performance Assurance, Finance and Infrastructure Committee (PAFIC) is the Board sub-committee tasked with providing assurance to the Board on the adequacy of the governance arrangements for infrastructure including compliance with Sustainability and Climate Emergency requirements within Scottish Government strategy and policy.

The Sustainability Governance Group oversees plans and activities towards our net zero and sustainability targets and reports regularly on progress to PAFIC. All Senior and Operational managers and groups with sustainability in their remit report to the Sustainability Governance Group.

The Director of Infrastructure, Sustainability and Support Services is the Executive Lead for Sustainability.



b) Climate Change Adaptation

Building construction and materials are maladapted for higher temperatures and warming weather, particularly in the summer months. Solar gain mixed with restricted ventilation capability is causing some buildings to regularly reach temperatures above 28°C. In addition, buildings are not designed to mitigate/cope with the current increased severity of precipitation events creating risks to business continuity.

Since 2022/23, enhanced data collection has been implemented to assess the effects of extreme weather events, informing and refining our ongoing planning efforts. The Annual Report outlines the organisation's business continuity strategies to mitigate the impacts of increasingly frequent severe weather events, alongside adaptation measures, including the integration of greenspace and retrofitting of buildings to enhance resilience.

c) Building Energy

The reported level of emissions has increased over the previous year. The Biomass Boiler was unable to operate at full capacity this season due to extended essential maintenance, leading to increased gas consumption and associated CO₂ emissions. This situation was exacerbated by heightened building inefficiencies stemming from ageing infrastructure, the degradation of heat and energy-raising equipment, as well as an increase in baseload demand from new and additional equipment. Additionally, 2023/24 experienced lower average temperatures, resulting in a rise in overall building energy usage compared to the previous year.

Recent initiatives to cut emissions from building energy use include sustainable upgrades at Braemar Health Centre and the installation of solar panels during a roof replacement at Jubilee Hospital, Huntly. Further benefits will also be delivered when our new building projects on the Foresterhill Health campus, The Baird Family Hospital, The Anchor Unit, and The Integrated Mortuary, become operational. Our ability to progress similar schemes in future from the planning to the implementation phase will however be dependent on the availability of funding and in some cases, particularly our larger sites, progress is also constrained by the lack of availability of suitable technical solutions.

In a groundbreaking first for NHS Scotland, NHS Grampian has implemented palm-free ISCC-certified Hydrogenated Vegetable Oil (HVO) as fuel for the backup generators serving the Baird Family Hospital, ANCHOR Centre and the Integrated Mortuary. This ensures that the fuel is not derived from fossil sources and can reduce our direct greenhouse gas emissions from the generators by up to 90%. Additionally, HVO's extended shelf life further reduces embodied carbon in comparison to traditional fossil fuels.

d) Sustainable Care

d) (i) Anaesthetics

Total emissions from nitrous oxide and entonox used in anaesthesia, have decreased by 27% and emissions from volatile medical gases have been reduced by 92% since 2018/19, the baseline year. These achievements are attributed to the efforts of the Green Theatres

Programme, which has actively involved local clinicians and healthcare professionals in driving sustainability initiatives.

d) (ii) Respiratory Care

The Grampian Respiratory Managed Care Network (MCN) has launched a "Greener Respiratory Care Toolkit," equipping clinicians and pharmacists with comprehensive guidance to mitigate emissions associated with metered dose inhalers (MDIs). This toolkit promotes the use of low-carbon interventions and strategies for the responsible recycling of inhalers wherever possible. Looking ahead, the MCN Group is formulating robust initiatives to elevate patient care while further curbing emissions. These include the introduction of a carbon footprint rating system for inhalers, hosting educational events to disseminate sustainable practices, and the optimisation of treatment protocols by transitioning from multi-inhaler triple therapy (MITT) to single inhaler triple therapy (SITT), thereby conserving resources and simplifying treatment for patients.

e) Travel and Transport

Actions taken to reduce travel demands include the implementation of flexible working policies for staff and the continued use of remote consultations for patients. Work is being undertaken to remove petrol and diesel fuelled cars from our fleet, replacing them with suitable low or zero carbon alternatives. Efforts to promote active travel have been enhanced through the extension of the cycle-to-work scheme for staff, the annual step count challenge, and the provision of cycle support and promotion initiatives.

In collaboration with community planning partners in Aberdeen, NHS Grampian is undertaking tests of change aimed at influencing perceptions around walking and cycling, making these modes of travel more accessible, increasing volunteering for community transport, and exploring strategies to reduce car mileage.

f) Greenspace and Biodiversity

In an effort to enhance biodiversity across the organisation, NHS Grampian ran the 'No Mow May' campaign for the second consecutive year, expanding participation to a greater number of healthcare sites and areas. In collaboration with Public Health Scotland, we will produce a map of greenspaces to identify additional areas for biodiversity enhancement.

The development of a comprehensive biodiversity strategy, as part of our broader Climate Emergency and Sustainability Strategy, will guide land management practices and grounds maintenance over the next five years. Our efforts to influence new build projects to support the creation of microhabitats, engage volunteer groups in biodiversity management at community hospitals, and participate in local authority nature campaigns all demonstrate our commitment to integrating biodiversity into mainstream planning and decision-making.

Initiatives aimed at greenspace improvements and their associated benefits included 'No Mow May,' the Active Travel Fund, the Nature Garden, Meadow in a Box, and Buglife. While these projects are primarily focused on healthcare premises and staff, their impact extends significantly into the wider community.

g) Sustainable Procurement, Circular Economy and Waste

NHS Grampian has taken steps to reduce its environmental impact and the quantity of goods and services procured by providing staff training in procurement literacy and utilising sustainable procurement tools. Ongoing product reviews have facilitated the identification of sustainable alternatives, such as transitioning from plastic to paper medicine cups in 2023/24 and replacing disposable slide sheets with reusable ones in Theatres.

Although nearly all internally set targets for waste reduction have been met, there is still room for improvement. Many staff members are deeply committed to reducing waste. Notably, a dietitian, a domestic supervisor, and the sewing team have been recognised with 'Green Star' awards for their dedication to minimising clinical and general waste and promoting reuse. Their efforts have inspired broader staff engagement and have been acknowledged by the Scottish Parliament.

h) Environmental Stewardship

The Environmental Management System (EMS) provides a structured framework to support the achievement of our environmental goals through continuous performance monitoring and review. Legal compliance is required in several key areas, though the evolving nature of legislation makes this a complex and time-intensive process. Currently, two management areas are actively working towards compliance, including the establishment of a local register for asbestos management and waste management.

In addition, new local processes and targets are being developed in collaboration with department heads to enhance understanding of our legal obligations and compliance status. However, the capacity, resource demands, and complexity of legal requirements present challenges in implementing and maintaining an EMS that meets the ISO 14001 standard.

i) Sustainable Construction

Each of our major construction projects, the Baird Family Hospital, the ANCHOR Centre, Aberdeen Integrated Mortuary and Foresterhill Greenspace include a comprehensive list of measures aimed at reducing emissions and ensuring a sustainable building. These include:

- EPC rating of A and BREEAM rating of Very Good.
- Photovoltaic panels to generate electricity.
- Specification of natural and low/zero emission materials where possible.
- A thermally comfortable and efficient building fabric.
- Use of a biofuel alternative of Hydrotreated Vegetable Oil in lieu of oil fuelled generators.
- Hard landscaping surfaces that are permeable to aid surface water run-off and mitigate the effect of flooding.
- Automated heating, cooling, ventilation and lighting to ensure efficient use of resources and use of Building Management Systems (BMS).
- Investment in natural habitat and outdoor space to promote wellbeing of staff, patients and members of the public.
- Flood alleviation including attenuation and water management

We have integrated net zero and sustainability principles into our procurement processes for Measured Term Contract activities, incorporating the Scottish Technical Notes as a contractual supplement. This integration emphasises key areas such as wellbeing, circularity, and climate change. We intend to extend the application of these technical notes to design consultancy services and enhance project team capabilities in sustainability. Additionally, we will continue to install electric vehicle charging infrastructure at various sites throughout Grampian.

j) Sustainable Communities

NHS Grampian has developed the “*Anchors Strategic Plan 2024-2029*” which articulates our vision to ensure that our financial expenditure, land management, and employment practices actively support the health and wellbeing of our communities.

Over the past year, we have accomplished several key milestones, including achieving accreditation as a Real Living Wage employer, creating new jobs through the Baird & Anchor construction projects, and collaborating with Barnardos to implement a supported employability programme. Furthermore, we have partnered with Aberdeen City and Aberdeenshire Councils to explore opportunities for enhancing local procurement, approved a Community Asset Transfer for Leancoil Hospital, and established a vaccination centre in Aberdeen City to improve footfall and stimulate the local economy. We are now considering how to strategically advance our Anchors initiatives over an extended period, with the goal of embedding this ethos more deeply within the organisation’s long-term framework.

The Annual Report also highlights the significant contributions of public health teams in adaptation planning and capacity building, as well as examples of direct actions that provide co-benefits at the local level. These initiatives include a Warm Home Prescription Project aimed at reducing fuel poverty and carbon emissions, and social prescribing efforts that promote nature and climate-resilient communities through volunteer ice crews.

2.3 Assessment

NHS Grampian’s Climate Emergency and Sustainability Strategy for 2023-2028 emphasises the necessity of a holistic approach to mitigate and adapt to the impacts of climate change. This strategy is designed to ensure a sustainable health system where planetary and human health are fundamentally intertwined. Our commitment entails embedding sustainability principles across all healthcare activities, supporting communities in this endeavour, and collaborating with various partners. These principles are foundational to Grampian’s *Plan for the Future* and reflect our stewardship aspirations both within our healthcare system and as an Anchor Institution in the North East of Scotland.

This Annual Report reflects on our activities and progress during 2023/24. It highlights the successes and challenges towards our Annual Delivery Plan objectives and more, and provides a trailer for work we have already begun in 2024/25. We have made significant progress from 2022/23 in increasing awareness and gaining ownership of this crucial agenda. Organisationally there are many high-profile efforts to create the conditions for change, including educational programmes, our work as an anchor institution, facilitating change alongside and within communities, and the development of tools and resources to improve understanding about health and climate.

The health board continues to face considerable challenges in its pursuit of reducing emissions and achieving net zero status. A significant obstacle is the high cost associated

with transitioning to renewable energy sources and implementing sustainable practices across various sectors, especially during a period marked by financial constraints within the organisation.

Climate change exposes our health service to unprecedented threats, including extreme weather events, rising temperatures, and altered precipitation patterns, which can strain infrastructure designed for different climatic norms. This issue is inherently multifaceted and necessitates a comprehensive approach. The development and deployment of clean technologies, as well as the adaptation to evolving climate conditions, require significant investments.

Addressing these challenges demands a collaborative effort with partners and stakeholders, alongside targeted financial support. Additionally, establishing policy frameworks that prioritise feasibility and affordability is essential in the pursuit of a sustainable, net zero future.

We are identifying areas where we can advance our sustainability agenda. This includes the publication of a biodiversity strategy aimed at enhancing our greenspaces, the implementation of sustainability eLearning programs designed to empower and enable our workforce, celebrating the achievements of sustainability conscious individuals and teams within the organisation.

Collectively, we have made meaningful progress in the past year while recognising that the development of climate-informed healthcare is a continuous journey, one that will evolve rather than conclude at a fixed endpoint

3.0 Quality/ Patient Care

The climate emergency is a global issue with health, workplace and community impacts. The causes of health inequalities and poorer health are intrinsically linked to our response to the climate emergency. If we are to continue providing the healthcare that our communities require, our approach to delivery will benefit from shifting away from hospital-based care to preventative, primary-based care in the community. This is the underpinning philosophy of Plan for the Future and the Sustainability Strategy

4.0 Workforce

Achieving net-zero means looking beyond 'hard' facilities management towards the culture of work undertaken with our organisation. Through the actions of listening, involving, educating and feedback, sustainability will become embedded with staff feeling empowered and supported to create a culture of stewardship and responsibility for our environment.

5.0 Financial

We aim to embed sustainability in all that we do and this includes our medium to long term financial planning. There are likely to be tensions between environmental sustainability and cost, however they are not always mutually exclusive, and our delivery plans will evaluate this on a case-by-case basis, taking co-benefits, risk and impact into account.

6.0 Risk Management

Our strategy is ambitious and there are a number of conditions for success. These include: -

- Whole-system collaboration and changes in routine practice
- Partnering with other public and private sector organisations
- Securing investment funding to enable the transition to net-zero operations
- Adapting to the climate change and restoring diversity

As we strive to secure investment funding, active engagement, learning from each other and good stewardship remain the key to our success in mitigating and managing risk.

7.0 Equality and Diversity, including health inequalities

Based on existing Equality Impact Assessments and Fairer Scotland Assessments associated with Plan for the Future, we know that a failure to adapt to climate change and to enhance environmental sustainability and biodiversity is likely to affect people across the Grampian population. We can anticipate that is more likely to affect people experiencing existing inequalities more than others. In the context of the Fairer Scotland duty, our approach to net-zero and beyond are developed in a manner that can deliver just transitions. We are undertaking a specific scoping equality impact assessment currently and expect this to lead to a full equality impact assessment, including assessment against the Fairer Scotland Duty to help guide detailed planning and delivery.

8.0 Communication, involvement, engagement and consultation

The promotion of sustainability remains a key priority for the organisation. This is as much about hearts and minds and helping everyone take individual action, however small. Our robust network of Sustainability Champions are actively enhancing sustainability practices within their departments and cultivating grassroots initiatives across the organisation. This is promoted a culture of sustainability stewardship within NHS Grampian. We have also recognised and celebrated the contributions of teams and individuals in advancing sustainability within NHS Grampian through the Green STAR Award, with stories shared through internal channels, social media, local media and within Scottish Government.

We are committed to empowering and engaging our colleagues by launching a sustainability eLearning module during Scotland's National Climate Week (23rd-29th September 2024), along with highlighting success stories and practices within the organisation throughout this week. In addition, we will maintain our efforts to host awareness sessions with the Board, focusing on highlighting both successes and challenges in our sustainability initiatives.

9.0 Route to the Meeting

Sustainability Governance Group on 18th September 2024

10.0 Conclusion

Governance arrangements are in place through the Sustainability Governance Group for the oversight of plans to deliver our sustainability targets. There has been much progress in this area, but the annual report reflects the effect of limitations on available technology and funding on the programming of action necessary to reduce carbon emissions from heat and power generation on our largest sites, an essential step to achieving a net zero carbon estate by 2038. Achieving this goal necessitates substantial investment in both a "fabric first" approach—focusing on enhancing the energy efficiency of building structures—and in the adoption of new technologies.

These initiatives require considerable ongoing financial commitment to address the multiple horizons and uncertainties surrounding current technologies ("known unknowns") and the recognised gap in availability of capital funding which currently present significant barriers to progress. Without the necessary investment, there is a risk of stagnation, resulting in a compressed timeline to meet the 2038 targets. This, in turn, could exacerbate the environmental and health impacts of NHS Grampian's operational activities, particularly if the required levels of funding are not secured in time to support the necessary interventions.

Beyond targets and hard infrastructure, this Annual Report highlights where we are building capacity and scaling up action in our own organisation and with communities towards becoming more climate resilient. These combined efforts are helping to reduce health harms, inequalities and carbon emissions.

11.0 Recommendation

The Board is asked to:

- Approve the Annual Climate Emergency and Sustainability Report 2023/24.

12.0 Appendix

The following appendix is included with this report:

Appendix 1: NHS Grampian's draft Annual Climate Emergency and Sustainability Report 2023/24.