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Ambulance
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Biodiversity Duty Report 2018-2020

DRAFT



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Owners: National Services Scotland, NHS Education for Scotland, NHS State Hospital, Scottish Ambulance Service, NHS 24 and NHS Healthcare Improvement Scotland
Authors: Written in collaboration by a Short Life Working Group with representation from each National Board.

1 Introduction: Biodiversity and NHS National Health Board duties

1.1 The statutory framework

Under the Nature Conservation (Scotland) Act (2004), all public bodies in Scotland are required to further the conservation of biodiversity when carrying out their responsibilities.

In addition, it is required under the Wildlife and Natural Environment (Scotland) Act (2011) to provide a public report on the actions which they have taken to meet this biodiversity duty.

This report covers the period between 2018-2020 for the following six National Health Boards;

- NHS Healthcare Improvement Scotland (HIS),
- NHS Education for Scotland (NES),
- NHS National Services Scotland (NSS),
- NHS 24,
- The State Hospital and
- Scottish Ambulance Service (SAS).

The incentive for publishing a collaborative report is due to a number of reasons. First, there is a considerable co-tenancy within the existing estate's properties and further peripheral support (e.g. domestic services) amongst some of the boards. Second, the six boards have been working closer together in response to strategic, quality and efficiency drivers such as Health and Social Care integration, shared services, mandatory public bodies climate change reporting and sustainable procurement duties. Finally, each of the boards is an active member of national and local sustainability, energy and public health networks and often combines resources for initiatives that benefit staff across all organisations and reduce the environmental impact in our shared office spaces.

- **Healthcare Improvement Scotland, (HIS)** is a statutory body, part of NHS Scotland, that works with healthcare and social care providers across Scotland to enable the people of Scotland to experience the best quality of health and social care. HIS supports the integration of health and social care services and helps build stronger community-based care services. HIS strengthens the effectiveness of the governance of quality of care across Scotland to support the Scottish Government's [Health and social care delivery plan](#) and its ambition to build a safer, healthier and fairer society.
- **NHS Education for Scotland, (NES)**, is an education and training body and a special health board within NHS Scotland, with responsibility of developing and delivering education and training for the healthcare workforce in Scotland. NES has a Scotland wide role in undergraduate, postgraduate and continuing professional development and maintains a local perspective through centres in Edinburgh, Glasgow, Dundee, Aberdeen and Inverness.

- **NHS National Services Scotland (NSS)** is a Non Departmental Public Body which provides advice, services and common support to the rest of NHS Scotland. Accountable to the Scottish Government, NSS works at the heart of the health service, providing national strategic support services and expert advice to NHS Scotland. It is comprised of six strategic business units with specialist functions. One of these is the Scottish National Blood Transfusion service (SNBTS). Another is Public Health Intelligence (PHI) who, along with colleagues from COSLA and Health Scotland, became part of Public Health Scotland (PHS) on 1st April 2020.
- **NHS 24** is the national provider of a range of telephone and digital services including 111, NHS inform and Breathing Space. Working with partners across the health and care sector, NHS 24 provides health and social care information and access to urgent and out of hours care for people across Scotland via a range of channels including telephone, website and webchat.
- **The State Hospital** is a psychiatric hospital that provides care and treatment in conditions of high security for around 140 patients from Scotland and Northern Ireland. The hospital is managed by the State Hospitals Board for Scotland which is a public body accountable to the First Minister of Scotland through the Scottish Government Health and Social Care Directorates. It is a Special Health Board, part of the NHS Scotland and the only hospital of its kind within Scotland.
- The **Scottish Ambulance Service (SAS)** is a statutory body, part of NHS Scotland, and the sole public emergency medical service covering Scotland's mainland and islands. SAS provides a paramedic-led accident and emergency service to respond to 999 calls, a patient transport service to lower-acuity patients, and provides for a wide variety of supporting roles including air medical services, specialist operations including response to HAZCHEM or CBRN incidents and specialist transport and retrieval.#

1.2 Governance and management for biodiversity

A Policy on Sustainable Development for NHSScotland, CEL 2 (2012), sets out mandatory governance requirements for all NHSScotland Health Boards. Each board is compliant with the mandatory requirements and has an established governance structure supported by a board-level Champion for Sustainability.

In meeting their responsibilities, the boards align their corporate actions with those they undertake in relation to the fulfilment of their statutory duties in regard of sustainable development. However, more broadly, they include biodiversity as an aspect of all their work in the context of advocacy and development linking health, place and sustainability

The structures vary in design but provide robust governance for each of the boards based on their operational and strategic responsibilities. Four of the six National Boards (excluding HIS and NHS 24) are considered “relevant public bodies” and are required to submit annual climate change reports as part of the Public Bodies Duties of the Climate Change (Scotland) Act 2009.

The reports are the primary source of climate change reporting for all major public bodies and include information aligned with the following sections.

1. Governance, management and strategy

2. Carbon emissions, targets and projects
3. Climate change adaptation
4. Procurement
5. Other notable activities, e.g. biodiversity, resource use, etc.

The reports for 2017-2018 and 2018-2019 for the four organisations are publicly available on <https://sustainablesotlandnetwork.org/reports> and filtering for National Health Service organisations. Part 2, on Governance, Management and Strategy will provide a detailed description of each National Board's arrangements.

NHS 24 and HIS, despite not being required to submit a report, still need to comply with CEL 2 (2012) and have established governance arrangements for sustainability.

The HIS work programme is underpinned by their quality management system (QMS) outlined in the [Operational Plan 2019-20](#). HIS are committed to improving environmental sustainability, climate change, biodiversity and reducing our carbon footprint, all of which are governed by our Resilience Working Group. The Group is chaired by the Director of Evidence and the Planning Manager acts as deputy chair. The group maintains a resilience policy statement, annual sustainable action plan and annual business continuity plan, and provides quarterly resilience updates for the Audit and Risk Committee. It communicates impacts to staff and promotes good sustainable behaviours and activities.

For NHS 24, managing environmental matters is an integral part of its operations and the Director of Finance is the Executive Director responsible for ensuring that the organisation achieves these aims in a way that is cost effective and compatible with NHS 24 business objectives. The Director of Finance is also an NHS 24 Board member, responsible for championing sustainability development and reporting to NHS 24 on the Sustainable Development Strategy via the Performance & Finance Committee, the Executive Management Team and ultimately to the NHS 24 Board.

2 Actions to protect biodiversity and connect people with nature

In the spring of 2019 the First Minister committed the SG to being a world leader in climate change mitigation and declared a climate emergency for Scotland. The NHS responded swiftly with support from the newly appointed Director-General for Health and Social Care and Chief Executive of NHS Scotland. In his first meeting with the NHS CE's they endorsed the following commitments put forward to address the declaration of Climate Emergency.

1. NHS Scotland will be a 'net-zero' greenhouse gas emissions organisation by 2045 at the latest.
2. All NHS Scotland new buildings and major refurbishments will be designed to have net-zero greenhouse emissions from April 2020.
3. Each NHS Scotland Board should undertake a Climate Change Risk Assessment covering all operational areas and produce a Climate Change Adaptation Plan to ensure resilience of service under changing climate conditions.
4. NHS Scotland transport greenhouse gas emissions from its owned fleet (small/medium vehicles) will be net-zero by 2025.
5. The NHS supply chain will be reviewed to determine the extent of associated greenhouse gas emissions and environmental impacts. Once the extent of environmental impacts is established, a programme of work will be undertaken to minimise these impacts.
6. Each NHSScotland Board should establish a Climate Change/ Sustainability Governance group to oversee their transition to a net-zero emissions service.

These six objectives build on the existing public bodies duties of the Climate Change (Scotland) Act 2009¹;

1. Mitigation - Reducing Greenhouse Gas Emissions
2. Adaptation - Adapting to the Impacts of a Changing Climate
3. Acting Sustainably - Sustainable Development as a Core Value

Lastly, they provide further support on delivering Scotland's National Outcomes which are intrinsically linked and aligned to the United Nations Sustainable Development Goals (SDGs). In particular Indicators such as Natural Capital, Biodiversity, and Carbon footprint.

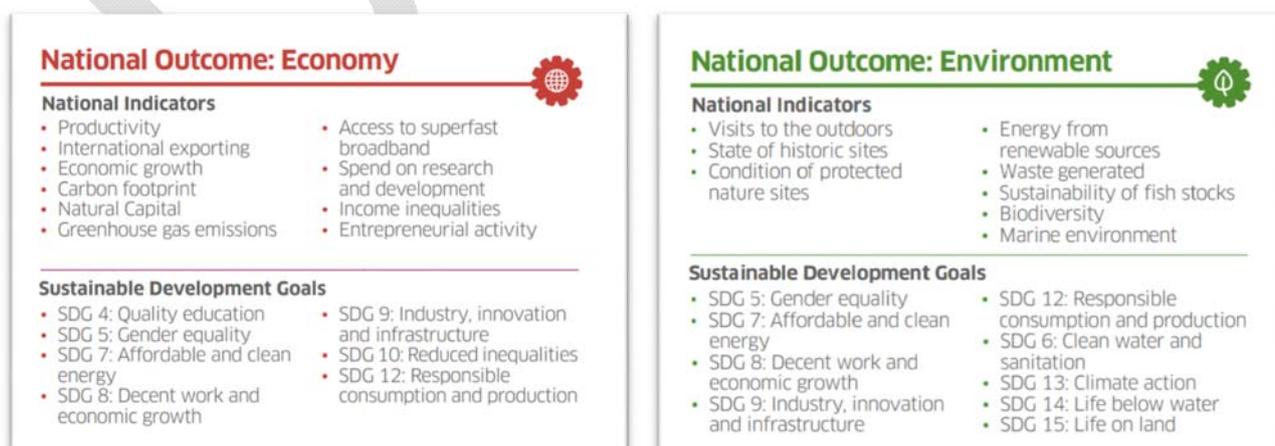


Figure 1 – National Performance Framework National Outcomes and United Nations SDGs

¹ <http://www.legislation.gov.uk/asp/2009/12/contents>

Additional information on the National Outcomes can be found on the Scotland Performs website via this link: <https://nationalperformance.gov.scot/>

Meeting our carbon reduction targets will require the largest, systemic change to health and social care ever. Furthermore, forecasted impacts from climate change will increase in the coming decades because of the delayed impacts of past and current greenhouse gas emissions. Therefore, by prioritising a coherent, joined up approach it is cheaper to take early, planned adaptation action than to pay the destructive price associated with not adapting.

It is with this spirit of collaboration that the National Boards approached this report. However, the estate property portfolio for the reporting Boards, by definition of its function and services to the wider NHSScotland, is mostly based within offices, laboratories, training sites, call centres or warehouses and has very little green space when compared with the territorial Boards.

The SAS estate, for example, is quite spread out and comprises of Headquarters based in the Edinburgh NSS offices and 130 operational sites across Scotland. These sites consist of ambulance control centres, ambulance stations, educational and development centres, fleet workshops, three Specialist Operations Response Team bases and administrative offices.

The State Hospital is the only facility with substantial green space but due to the high security design, it has its own limitations. Lastly, the SNBTS state of the art laboratory, the Jack Copland Centre (JCC) albeit compact in physical footprint, is located on the grounds of Heriot-Watt University with ample access to greenspace accessible to staff and visitors. More information is available on the University Campus Guide Book via this link: <https://www.hw.ac.uk/documents/campus-guidebook.pdf>

Each of the reporting Boards, despite their mainly urban, office base settings take steps to reduce their environmental impact and positively influence Scotland's biodiversity. The selected actions below vary across service areas but are a clear indication of the commitment from each Board to meet the public bodies duties.

- **Carbon Footprint** – The collective impact of the National Boards is a small fraction of the total NHSScotland emissions but they must still comply with Public Bodies Duties and the latest targets to become net-zero operations no later than 2045. Detailed information is available via the Climate Change Reports, but some highlights are noted below:
 - NSS reduced its footprint, 6,837 tCO₂e for 2019/20, 18% in the last five years, and 37% since its 2010/11 baseline of 10,919 tCO₂e.
 - NHS 24's Norseman House, the sole property where measurements are possible, has combined year-on-year reductions for electricity, gas, water and waste totalling over 160 tCO₂e
 - SAS reduced its footprint, 23,777 tCO₂e for 2019/20, 3% in the last five years and nearly 15% since its 2011/12 baseline of 27,926 tCO₂e. Keeping in mind the critical support functions of its fleet and Air Ambulance support for Scotland.
 - The State Hospital reduced its footprint, 2,339 tCO₂e for 2019/20, 7% since its baseline five years ago 2014/15.

- NHSScotland launched eSight, a cloud-based utility management software, that pulls AMR (automated meter reading) energy and water meter information up to half-hourly frequency. eSight allows Boards to proactively manage and report on consumption and deliver greater savings.
- **Enhancing greenspace and biodiversity** – Tenants of Gyle Square, Edinburgh (HIS, SAS, NSS and PHS) co-funded, with considerable additional financial support from the Green Exercise Partnership (GEP), the “Courtyard Transformation Project” to great success.



Figure 2 – Gyle Square courtyard before and after transformation

The transformation from a barely used space to a welcoming, attractive (to staff and wildlife), accessible area has been extraordinary. The case studies for the project, along with other GEP work can be downloaded via this link: <https://www.sustainabilityaction.scot.nhs.uk/areas-of-focus/greenspace/>



Figure 3 – Gyle Square courtyard in 2019

- **Active travel and health promotion** – A strong area for all participating Boards that assists with reducing traffic congestion, improving air quality and encourages staff to spend time outdoors through running and walking clubs and cycling to work.

- HWL Gold award accreditations for NES, NSS, The State Hospital. HIS were awarded Bronze in 2018, Silver in 2019 and now have their targets set target for Gold by 2021
- Cycle Friendly Employer Awards for multiple locations supported and evidenced by Increased cycle storage capacity and security, improved changing facilities and raising the spend limit for the Cycle to Work Scheme.
- Cycling Scotland Development Funds allowed for match-funded capital projects to be implemented to further promote active travel to staff and visitors.
- **Waste reduction and recycling** – Another strong area for all Boards as reduce single use items, and increase reuse and recycling rates.
 - Introduction of Warp-it reuse portal via a National Contract available free to Boards to promote and acquire reuse of office equipment and reduce waste to landfill.
 - Near blanket removal of single –use disposable cups and plastic catering item across the estate during 2018-19.
- **Procurement** – The benefits of National Procurement (part of NSS) is that services all of NHSScotland and work in collaboration with the Board’s Heads of Procurement. As part of the Sustainable Procurement Duties, NP is supporting the transition to a circular economy applying whole life costing, early supplier involvement and encouraging innovative products and solutions. Some successes are:
 - **Making medicine measures more sustainable** - To help reduce plastic wastage, as well as costs, National Procurement encouraged health boards to review their use of 60ml measures to see where they could switch to 30ml measures instead - and it worked. So far, usage of 60ml measures has reduced by almost six million per year. This equates to 12.4 tonnes of plastic waste reduction and has generated a cost saving of £70k per annum.
 - **Continence product review** - This led to optimised routes and scheduling of deliveries which has reduced CO2 emissions by 194 tonnes (the equivalent of 40 cars, or six HGVs being off the road). Also, by removing the outer wrapping on continence products, NHSScotland has reduced plastic waste by more than eight tonnes per year, enough plastic wrap to stretch from Glasgow to Edinburgh.

3 Mainstreaming biodiversity

As part of our ongoing commitment to biodiversity, sustainable development and due to rapidly changing international commitments, Health Facilities Scotland (HFS, part of NSS) managed the development of a new assessment tool to replace the Good Corporate Citizenship (GCC) assessment model that had been used since 2012.

The new, NHSScotland-specific National Sustainability Assessment Tool (NSAT) was designed and launched in 2018 to align with Scottish and UK Government legislation and targets and also with the United Nations SDGs. This connection enables each of the Boards to demonstrate how local actions are contributing to national efforts in achieving the SDGs. Specifically, the tool has two directly relevant categories for Greenspace and Nature & Biodiversity.

Each of the 16 NSAT Categories (shown below in Table 1) are grouped into three representative pillars, Our NHS, Our People, Our Planet that align with existing NHS Sustainability Action branding and with the new NHSScotland Sustainability Strategy².



Table 1 – Structure of the NSAT our 16 Areas of Focus

Every Board is required to complete the NSAT on an annual basis and submit the results to HFS for analysis and verification. The results help to shape the strategic and operational objectives across the organisations that have a direct bearing on reducing our impact, protecting the environment and promoting biodiversity.

Each Category and questions (indicators) were assessed and referenced against the 17 SDGs. For a Board to be considered to be contributing towards a specific Goal, they must score 3 or above (on a scale 0-5) on 100% of the indicators linked to it. Table 2 below shows an example of the assortment of questions associate with Goal 15, Life on Land, and the variety of categories affected. Due to COVID-19 Boards were allowed to opt-out

² The NHSScotland Sustainability Strategy 2020-2025 was due to be published in March 2020 following the Scottish Government's publication of the Climate Change Plan. Both were impacted heavily by the COVID-19 pandemic with the later only recently published on 16th Dec 2020. The Strategy should now be early '21.

of sending the 2019/20 assessments results so the full benefits of the NSAT tool will not be evident until after the 2020/21 results are submitted by March 2021.



Area of Focus	Indicators
Governance & Policy	GP10, GP12, GP13, GP14, GP17, GP19
Capital Projects	CP1, CP8, CP10, CP11, CP12, CP14, CP18
Procurement & Supply Chain	PS1, PS2, PS5, PS7, PS8, PS10
Active Travel	AT5
Communities	WC11
Waste	WA6, WA7
Greenspace	GS1, GS2, GS3, GS4, GS5, GS7, GS8, GS9, GS10
Biodiversity	B1, B2, B3, B4, B5, B6

Table 2 – Mapping the UN SDGs to the NHScotland Sustainability indicators

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4 Nature based solutions, climate change and biodiversity

As a public sector bodies, each Board takes seriously their role in promoting biodiversity, which they do within their approach to sustainable development. Under the National Boards Collaborative programme, a number of initiatives have been taken forward to address the climate emergency and build resilience across our operations.

- **Climate Change Risk Assessment (CCRA)** – National boards risk and resilience leads participated in the consultation workshops held in 2019 to provide feedback on this vital risk management tool.
- **Target Operation Model (TOM)** programme, an initiative accountable to the Integrated Shared Services Programme Board (ISSPB), assembled representatives from each of the National Boards to consider cost-saving efficiency initiatives. Projects delivered include hybrid mail which reduced waste and transport miles and improved information governance.
- **Property and Asset Management Strategy (PAMS)** – As a result of the TOM work, five of the National boards co-authored the first collaborative PAMS in 2019 setting out key objectives to address the climate emergency. These deadlines are now subject to review due to COVID-19 but the work will go forward as planned.
 - Develop a Carbon Management Plan, including an updated energy audit programme for the combined estate and identification and implementation of carbon reduction projects, by 2020/21.
 - Collaborate with our Natural Health Service and Green Exercise Partnership to create a biodiversity strategy by 2021/22.
 - Develop a Travel & Transport Policy and Strategy incorporating staff, business and fleet journeys to ensure full decarbonisation as per Government targets by 2021/22.
 - Undertake a Climate Change Risk Assessment covering all operational areas by 2020/21 and produce a Climate Change Adaptation Plan by 2021/22.
 - The NHS supply chain will be reviewed to determine the extent of associated greenhouse gas emissions and environmental impacts. Once the extent of environmental impacts is established, a programme of work will be undertaken to minimise these impacts.
- **Active Travel Champions** programme – in collaboration with Sustrans, promoting walking and cycling to work and local cycle events and activities such as Cycle-leader training.
- **EV Infrastructure Guidance SLWG** – A five month intensive project run between Oct '19 – Feb '20, with support from Systra, Ltd. (www.systra.com), to create a comprehensive, one-stop shop guide for installing electric vehicle (EV) infrastructure. The membership of the group ranged across territorial and national Health Boards, Blue Light Services (including Fire and Ambulance), Transport Scotland and Scottish Government. Some of the key outcomes were:
 - SAS already planning to install EV chargers in 10 ambulance stations across the estate.
 - Agreement to establish a national procurement framework for installers and source a national charge point management system.

- The guidance underpins the climate emergency commitment and the National Transport Strategy objective to transition small/medium fleet to EV by 2025.
- The guidance will provide NHSScotland-wide support to Facilities and Estates staff to enable the rollout of 252 vehicles purchased via the £2.4 million of support received from the Transport Scotland Switched on Fleets Fund in 2019.
- The Guidance can be downloaded via the following link:
<https://nhsnss.org/media/4863/1607528874-sustainable-e-v-charging-infrastructure-shtn-02-02-v10.pdf>

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5 Workforce development

The support and development of our staff is of paramount importance and features across the NSAT categories under the 'Our People' pillar. This reporting year in particular due to the global COVID19 pandemic, has challenged everyone to review how staff are supported and how positive mental health is linked to having access to outdoor spaces.

- **COVID-19 pandemic** – The response to help and support staff in this unprecedented time was exceptional. Boards reacted quickly working together to facilitate ICT solutions for remote working supported by a series of policies and guidance for employees and line managers. The full suite is available via HR Connect on <https://www.nhsnational-hr.scot.nhs.uk/> but some highlights are below:
 - Covid 19 – Staying safe and well series
 - Covid 19 for First Responders
 - Covid 19 – Mental Health and Wellbeing when home working webinar
 - Guidance for Key Workers
 - Assessment for return to work after self/family isolation

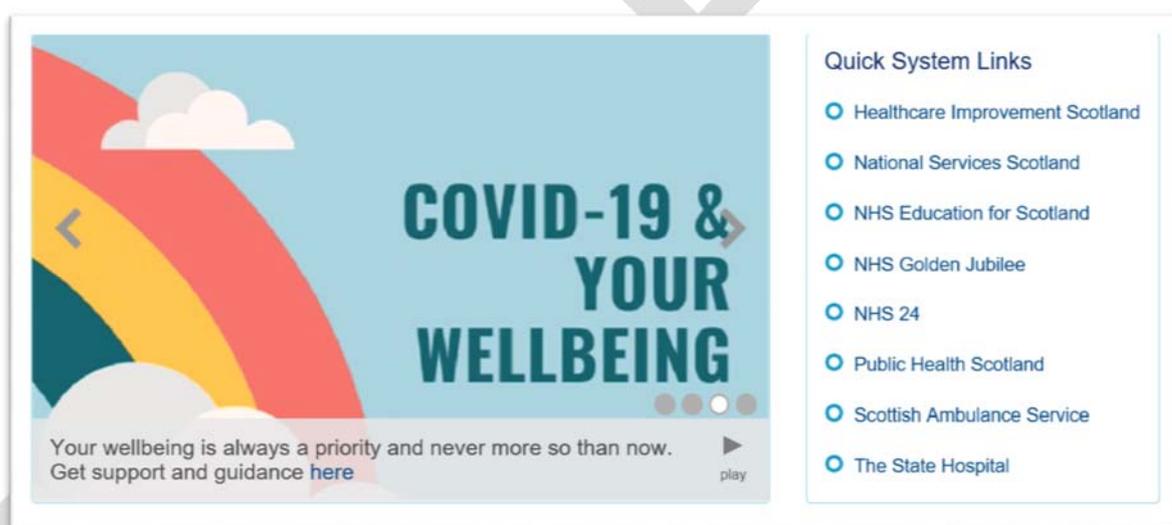


Figure 4 – HR Connect portal for staff and line managers wellbeing support

- **E-learning** - An environmental and sustainability E-Learning module has recently been developed and setup as a mandatory completion module for all staff. (NHS24)
- **NHS Scotland Sustainability Conferences** – The events are hosted by HFS on annual basis and are free to attend for NHSScotland staff. They always feature a biodiversity-focused workshop or presentation such as:
 - 2018 – Towards the UN Sustainable Development Goals featured Benedict Zucchi, Healthcare Principal at BDP, on creating successful places with a vision for sustainable user-centred design.
He focussed on award-winning Alder Hey Children's Hospital, Liverpool which as a BREEAM Excellent rating, state-of-the-art engineering and generous provision of daylight, gardens and green roofs.

Its staff note that “Nature comes into the building and into people’s lives” For a short 5 minute video of the project visit this YouTube link: <https://youtu.be/k5SsMdgkmb0>



Figure 5 – Alder Hey Children’s Hospital, Liverpool

- 2019 – Our NHS, Our People, Our Planet, A Climate Change and Sustainability Strategy for 2020 and Beyond featured Vicky Trim, Green Health Partnership Manager

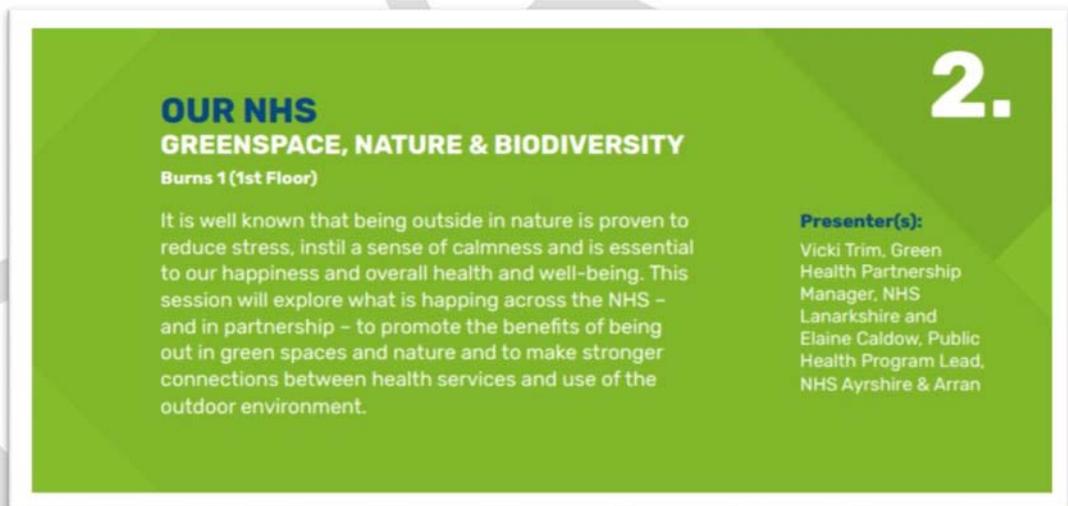


Figure 6 – 2019 Conf. Breakout session 2 – Greenspace, Nature & Biodiversity

6 Research and monitoring

The reporting Health Boards have a national remit and by default have many opportunities to work with and lead on a wide variety of groups and topic areas. Sustainability leads and representatives often attend and participate in sessions and short life working groups to support a holistic approach to partnership working. The main tool to monitor performance across the National Boards and ensure our strategies deliver on climate emergency commitments and our public bodies duties is via the NSAT.

6.1 National Sustainability Assessment Tool – In order to ensure consistency of results all Boards will be externally audited on a rolling two-year schedule and assessed against the baselines scores recorded independently by Green Business UK in 2018-2019. The overall baseline scores are noted below in Table 3 along with the top and bottom scoring Health Boards for reference. The independent audits will provide the assurance to report comprehensively for all of NHSScotland, celebrate good practice and demonstrate our contribution to delivering the SDGs.

Ayrshire & Arran	Silver	66%
Education Scotland	Bronze	53%
SAS	Bronze	49%
NSS	Bronze	48%
NHS 24	Bronze	47%
The State Hospital	Bronze	44%
Healthcare Improvement Scotland	Bronze	42%
Borders		35%

Table 3 – NSAT Overall baseline scores 2018-2019

7 Biodiversity highlights and challenges

Delivering the six climate emergency commitments made by our Chief Executives in 2019 will require a collaborative effort out with the National Boards' remits and go beyond to the wider NHSScotland and Local Authorities and community partnerships. The next decade will truly be an 'all hands on deck' movement which had its pilot run with the recent pandemic contingency arrangements. Some notable achievements and challenges looking ahead are noted below:

- **RSPB Nature of Scotland Awards 2020** - The Green Exercise Partnership (GEP) project, "**NHS Greenspace – better places for people & nature**", was shortlisted for the Innovation Category for the Nature of Scotland Awards 2020. The report "Unlocking the Potential of NHS Greenspace" published in April 2020 provides more detailed information about the NHS Greenspace Demonstration Project and can be downloaded along with case studies via this link:

<https://www.nature.scot/sites/default/files/2020-04/NHS%20Greenspace%20Demonstration%20Project%20-%20full%20report%202020.pdf>

- **Net-Zero route map 2045** – The first and most relevant commitments made by the Chief Executives for action on the climate emergency. NES is one of only three boards piloting Net-Zero pathways project starting in January 2021.
- **Climate Change Risk Assessment (CCRA)** – Another one of the six climate emergency commitments, making this part of every Board’s strategic objectives will be essential to our planning and resilience. Following on the consultation events noted previously, the final CCRA tool was launched in November 2020 and has been made available for all Boards to use. The final version can be download from the Resource section simply registering on www.sustainabilityaction.scot.nhs.uk

7.1 Conclusion and adoption

As agencies that takes a strategic lead on matters relating to sustainability and health; reducing the inequalities that arise from unsustainable development and seeking to ensure human and planetary health both benefit from its activities, we have a very specific role to play in advocating for actions which also promote and protect our biodiversity.

The National Board Collaborative Executive Management Team members are asked to formally approve the Biodiversity Report 2018-2020

National Collaborative Biodiversity Duty Report 2018-2020 for NSS, HIS, NES, NHS 24, Healthcare Improvement Scotland and The State Hospital is approved for adoption:

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Chief Executive (NSS)

Date.....

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Chief Executive (SAS)

Date.....

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Chief Executive (HIS)

Date.....

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Chief Executive (NHS 24)

Date.....

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Chief Executive (The State Hospital)

Date.....

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Chief Executive (NES)

Date.....