Decarbonisation

Final Internal Audit Report

May 2024

Swansea Bay University Health Board

GIG CYMRU NHS WALES
Partneriaeth Cydwasanaethau
Gwasanaethau Archwilio a Sicrwydd
Shared Services Partnership
Audit and Assurance Services

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Bae Abertawe
Swansea Bay University Health Board

Contents

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Auditors:	Osian Lloyd, Head of Internal Audit; Felicity Quance, Deputy Head of Internal Audit; Donna Morgan, Internal Audit Manager
Executive sign-off:	Nerissa Vaughan, Interim Director of Strategy
Distribution:	Kerry Broadhead, Assistant Director of Strategy, Des Keighan, Assistant Director of Estates; Hannah Roan, Head of Strategic Commissioning; Hayley Beharrell, Sustainability Manager; Patricia Jones, Commissioning & Contract Manager
Committee:	Audit Committee

Audit and Assurance Services conform with all Public Sector Internal Audit Standards as validated through the external quality assessment undertaken by the Chartered Institute of Public Finance & Accountancy in April 2023.

Acknowledgement:
NHS Wales Audit and Assurance Services would like to acknowledge the time and co-operation given by management and staff during the course of this review.

Executive Summary

Report Opinion

	Trend
 Limited More significant matters require management attention. **Moderate impact** on residual risk exposure until resolved.	N/A

Assurance summary[1]

Objectives		Assurance
1	Governance	Reasonable
2	Localised Strategies	Limited
3	Funding Strategy	Limited
4	Monitoring and Reporting	Reasonable
5	Project Delivery	Reasonable

Purpose

The NHS in Wales faces unprecedented challenges balancing the management of the delivery of the decarbonisation agenda and associated risks, against other competing priorities and within existing funding constraints.

The primary source of funding being Estates Funding Advisory Board (EFAB) and the requirement for the health board to contribute 30% from their discretionary funding.

The audit sought to consider progress against the NHS Wales Decarbonisation Strategic Delivery Plan and the health board's Decarbonisation Action Plans - demonstrating how the health board will implement the NHS Wales Decarbonisation Strategic Delivery Plan initiatives.

It is recognised that prior to the development of the Strategic Delivery Plan, NWSSP commissioned a Carbon Footprint assessment for the whole of NHS Wales (2018/19). This assessment influenced the approach set out in the Strategic Delivery Plan and provides the initial baseline emissions data for target setting. However, it should be acknowledged there isn't currently a baseline for the health board due to the Bridgend boundary change in 2019 with the current baseline being that of Abertawe Bro Morgannwg UHB. The health board is awaiting Welsh Government to formally provide a revised baseline specific to SBUHB.

Overview

We recognise the significant work the health board has been undertaking to address the requirements of the Decarbonisation Strategic Delivery Plan. In particular, the opening of the solar farm at Morriston Hospital in 2021, which was the first of its kind in the UK and has been successful in contributing to cutting carbon emissions at the health board; as well as exceeding the expected financial savings in its first year of operation. We recognise that other projects have also been undertaken within the health board to work towards reducing carbon emissions.

However, given the complexity and range of risks associated with this area, including the issues with the baseline data, and noting that these cannot be managed by the health board within the existing funding, to meet the targets set by the Welsh Government, an overall **limited** assurance has been determined. Further, recognising the financial shortfalls and being cognisant of the wider financial pressures across NHS Wales, the risks associated with the achievement of the Decarbonisation Action Plan and the ability to deliver on the wider decarbonisation agenda will be a challenge going forward

This assurance opinion is in line with that determined across NHS Wales, given the common challenges faced by each organisation.

Further matters arising (see **Appendix A**) concerning the areas for refinement and further development have also been noted including:

[1]The objectives and associated assurance ratings are not necessarily given equal weighting when formulating the overall audit opinion

- Attendance at Decarbonisation Action Plan Implementation Group meetings should be reviewed; and
- Inclusion of a decarbonisation risk at the health board risk register.

Key Matters Arising		Objective	Control Design or Operation	Recommendation Priority
1	Attendance at Decarbonisation Action Plan Implementation Group	1	Operation	Medium
2	Delivery of the Decarbonisation Action Plan	1, 2, 3, 4	Operation	High
3	Risk Management	2, 3	Operation	Medium
4	Funding Strategy	3	Design	High

[1]The objectives and associated assurance ratings are not necessarily given equal weighting when formulating the overall audit opinion

1. Introduction

1.1 The Welsh Government is party to international agreements to reduce carbon emissions and control climate change, most notably as arising from the 2016 Paris Accord. Accordingly, they have sought to create a framework of controls, guidance and support to achieve these aims.

1.2 The Welsh Government declared a climate emergency in 2019 and committed to achieving a Net Zero public sector by 2030.

1.3 The *NHS Wales Decarbonisation Strategic Delivery Plan* was published in March 2021 and responds to the climate emergency declaration and recognises that the NHS has a critical role to play in contributing towards this target as the largest public sector organisation in Wales.

1.4 The plan sets interim targets for the whole of the NHS (from a 2018/19 base) of carbon reduction of 16% by 2025 and 34% by 2030.

1.5 Category targets were also set for:

- Buildings;
- Procurement;
- Fleet and business travel; and
- Staff, patient and visitor travel.

1.6 All Wales activity support streams have been created, including Estates planning, and approaches to healthcare.

1.7 The Welsh Government (WG) has made funding available NHS-wide of circa £8.1m (which includes each organisation matching 30% of the WG contribution from their own discretionary programme) for decarbonisation initiatives via the Estates Funding Advisory Board in both 2023/24 and 2024/25.

1.8 This audit seeks to build upon our advisory review undertaken in 2022/23, which identified that the implementation plans had not been sufficiently developed to allow meaningful testing and to provide an assurance rating to respective Audit Committees. Accordingly, the decision was taken to provide an overview of the overarching position across NHS Wales and provide an action plan of common themes which were considered by the health board. Noting the provision of information to support the decarbonisation arrangements in place, a specific action plan was also reported for the health board. Refer to **Appendix B** for a status update on the agreed management actions. We have also included updates on some of the recommendations (where relevant) within the body of this report which demonstrates that they are being taken forward by the health board.

1.9 The key risks considered in this review were:

- Regulatory / legislative risk through not achieving mandated reductions in carbon emissions.

- Reputational risk by failing to meet emission targets.
- Failing key stakeholders by not reducing carbon emissions which have a detrimental effect on health. In so doing not meeting the requirements of the Well-being of Future Generations Act (2015).

1.10 The wider role of NWSSP Procurement, in the decarbonisation agenda, has not been audited as part of this review.

2. Detailed Audit Findings

2.1 The table below summarises the recommendations raised by priority rating:

	Recommendation Priority			Total
	High	Medium	Low	
Control Design	1	1	-	2
Operating Effectiveness	1	1	-	2
Total	2	2	-	4

2.2 Our detailed audit findings are set out below. All matters arising and the related recommendations and management actions are detailed in Appendix A.

Objective 1: Appropriate governance arrangements have been established in relation to decarbonisation that integrate with existing organisational accountability and reporting structures.

2.3 Our national report for 2022/23 highlighted that internal reporting had been limited, and that there was therefore a need to fully roll-out the structures to support appropriate monitoring and reporting within NHS Wales organisations. We recognise that the health board's governance arrangements were already in place when we undertook our advisory review last year.

2.4 The governance framework includes:

- A Decarbonisation Action Plan Implementation Group (now the Climate Action Plan Implementation Group - see para 2.7);
- Sustainable Swansea Bay Steering Group;
- Green Group (voluntary staff group) led Interest Groups e.g. sustainable food, greener theatres, waste and recycling; and travel (including a cycle user group);
- Partner Groups e.g. Swansea Sustainable Healthcare (SwaSH), Net Zero Signatories Group and Swansea Environment Forum;
- Topic Specific Project Groups (Sustainable Travel Group, chaired by the Sustainable Travel Lead);

- Representation at Committee level (see para 2.9 and **MA2**); and
- Representation at Board level.

2.5 The Decarbonisation Action Plan Implementation Group (DIG) was established in May 2022 and acts as a central forum for senior management across the health board to oversee the decarbonisation agenda. The group has responsibility for the management and review of the decarbonisation risk register, contained within the Risk Action Issue Decision (RAID) log. It is chaired by the Assistant Director of Commissioning and Sustainability, with the Executive Director of Strategy as Senior Lead Officer (SLO).

2.6 The terms of reference for the DIG details membership of 15 named officers, with representation across a number of health board departments. From review of the minutes, whilst all have been quorate, attendance appears to have been a challenge noting the number of apologies and non-attendance recorded; and with limited evidence of an appropriate delegated officer in the absence of a named member. See **MA1.** However, it was apparent that no issues arose in terms of the ability of the DIG to effectively discharge its duties due to this issue.

2.7 The terms of reference for the DIG were due for review in December 2023, however this has not been undertaken. Management advised that is due to the DIG being succeeded by the Climate Action Plan Implementation Group (CAPIG) with effect from April 2024, for which terms of reference are to be drafted and approved (scheduled for the first meeting on 16 April 2024). Noting the issue of membership attendance at DIG, the establishment of the CAPIG terms of reference provides an opportunity to review the appropriateness of membership at this current juncture of the health board's wider climate plans; and to refine the recording of 'delegate' attendance to ensure sufficiency of representation. See **MA1**.

2.8 A Risk Action Issue Decision (RAID) log is in operation to monitor and manage such. The RAID log will continue to be monitored and reviewed at the CAPIG. At the date of audit fieldwork, five critical and three high rated risks were captured (see para 2.35) with mitigating actions in place, refer to ***audit objective 2.***

2.9 The DIG reports to the Management Board on a quarterly basis, including providing updates on delivery against the priorities set out within the health board's Integrated Medium-Term Plan (IMTP) (see para 2.49). Updates have also been provided to the Performance and Finance Committee and Board. Regular reporting and liaison with Welsh Government and NHS Wales Shared Services Partnership (NWSSP) was also evident. For further details in relation to reporting, refer to ***audit objective 4.***

2.10 Our prior year report raised that recruiting to additional operational posts had proven difficult across Wales, with the limited appointments to date coming from the existing public sector staff pool. Noting that these appointments are key to being able to implement the agreed strategies, it is positive to note that the health board has not experienced these issues. An internal team structure for meeting the decarbonisation initiatives has been established. Executive leadership is provided by the Interim Director of Strategy, who is supported by the Assistant

Director of Strategy. The latter is further supported by the Sustainability Clinical Leads and the Sustainability Planning Manager. There were no vacancies in the internal structure at the time of audit.

2.11 As recommended in the prior year report, job descriptions for the above officers have been updated to be explicit in respect of their respective decarbonisation obligations, roles & responsibilities.

2.12 Our prior year report also noted that in accordance with the NHS Wales Decarbonisation Strategic Delivery Plan (DSDP), HEIW/collaborative training should be commissioned on an All-Wales basis to provide both common and tailored decarbonisation training. We understand that HEIW is currently developing a suite of training to address this requirement, therefore no recommendation has been raised at this report.

2.13 We are advised that there is a lack of external funding resources to source training. However, guidance, support and continuous internal training is provided (where possible) which is tailored to the specialist area, examples include Therapies and Health Sciences, Primary Care Clusters and Obstetrics. We are advised that the health board has developed a draft training programme with the intention to extend training sessions via the newly appointed clinical leads. Sessions are already in development for Dental and Quality Improvement Community of Practice.

2.14 There is ongoing work to ensure the emissions reduction approach is integrated into the Environmental Management System (EMS), including associated training components. Training was also provided to the Management Board on 4th October 2022 by the Centre for Sustainable Healthcare.

Conclusion:

2.15 Appropriate governance arrangements are in place with clear roles and responsibilities defined. Whilst the terms of reference for the DIG had not been reviewed in line with expectation, it is recognised this forum is to be replaced by the CAPIG which will have its own set drafted and such should consider expected membership noting attendance issues identified at DIG. We have assigned **reasonable** assurance to this objective.

Objective 2: A tailored decarbonisation strategy and action plan has been developed in accordance with available legislation and guidance; documents have been appropriately scrutinised and approved prior to submission to Welsh Government; and the strategy and plan are adequately reflected within wider organisational documentation such as the IMTP.

2.16 Action plans have been developed by the health board to outline how it will meet the specific objectives required by the national NHS Wales DSDP. The Decarbonisation Action Plan (DAP) was originally developed in March 2022 to support the All-Wales approach.

2.17 It was most recently reported to the NWSSP Decarbonisation Co-ordination Reporting (DCR) Team in January 2024, and outlines how the health board will

meet the requirements of the NHS Wales DSDP. It is subject to regular review at the DIG, Management Board, and will continue to be reported to the DCR team on a six-monthly basis.

2.18 The health board has 77 mandatory actions within the NHS Wales DSDP that require integrating. The quarter 3 DAP update reported to Management Board in January 24 highlighted the following:

- 18 are rated blue (closed).
- 20 are rated green (ongoing and on track).
- 19 are rated amber (ongoing with mitigating actions in place).
- 18 are rated red (note: these are considered as 'undeliverable' until suitable funding can be identified – see **MA2)**; and
- 2 are noted as the health board not the owner (one relates to the national business travel policy and the other sits with Digital Health & Care Wales).

2.19 In addition to the DAP, as required by the NHS Wales DSDP, the health board has developed a separate DAP which outlines the decarbonisation initiatives being pursued locally including actions via its work with public service boards; pre-empting climate change adaptation works (we recognise that other NHS Wales organisations are adopting a similar approach). The benefit of this approach is that the health board is proactively making progress against decarbonisation initiatives beyond the requirements of the All-Wales approach.

2.20 These initiatives are monitored monthly at the DIG meetings (to be succeeded by the CAPIG from April 2024), and every two months at the Sustainable Swansea Bay Steering Group.

2.21 The local DAP will be succeeded by the health board's Climate Action Plan (CAP) 2024-26, which was approved in principle by the DIG in January 2024, the Sustainable Swansea Bay Steering Group in February 2024, and Management Board in March 2024. The CAP was also submitted to Welsh Government alongside the health board's IMTP in March 2024.

2.22 The CAP has been developed recognising that it goes beyond the original purpose of reducing emissions, with it furthering the seven goals and five ways of working in the Well-Being of Future Generations Act[1]. Whilst it was reported that not all initiatives directly reference the specific objectives required by the national NHS Wales Decarbonisation Strategic Delivery Plan, they have been cross-referenced where appropriate. Actions have been included to state that the health board will undertake NHS Wales Decarbonisation Strategic Delivery Plan specific projects when funding becomes available.

2.23 Responsibilities and accountability are referenced in both plans for ownership of actions as recommended in our prior year report (see Appendix B, SBHUB 4). The

[1] The Well-being of Future Generations | GOV.WALES

efficacy of monitoring arrangements occurs when the DAPs are reviewed at DIG (CAPIG from April 2024 onwards).

2.24 An annual Management Board paper on the Decarbonisation Action Plan (dated March 2023, noting the 2024 annual update has yet to be published) stated that '*confidence in HB ability to meet the 16% carbon reduction by 2025 is rated RED due to continuing issues of accuracy relating to emissions data and baseline, as well as increased service demand. The HB DAP delivery is rated as AMBER mainly due to funding requirements*.'

2.25 Accordingly, the risk remains that the health board may not be able to contribute effectively to the NHS carbon reduction targets and the Welsh Government's ambition for public sector carbon neutrality by 2030. See **MA2**.

2.26 The NHS Wales DSDP baseline emissions data was established in 2018/19 for target setting, and included data for Abertawe Bro Morgannwg UHB (ABMU), prior to the Bridgend boundary change to Cwm Taf Morgannwg University Health Board. As noted in our prior year report, issues were identified with the baseline data and the disaggregation of the data for reporting purposes. We therefore recommended that each organisation should seek assurance on the accuracy of the baseline data.

2.27 It is reported (in the Public Sector Emissions report for submission to WG, August 2023), that it has not been possible to disaggregate the baseline data to reflect the boundary change. Currently the 2018/19 baseline remains, with an emphasis on the targets being a collective effort across NHS Wales. We acknowledge that the health board continues to seek assurance on the accuracy of the baseline data and that it has been reported that work is underway by WG to revisit this, subject to data feasibility, and to include evaluation by WG Energy Services of available methodologies and data quality improvement opportunities. Accordingly, a recommendation has not been raised at this report.

2.28 As per the requirements of the WG, the health board undertakes an annual assessment of emissions data to understand its performance towards meeting the 16% reduction target (ABMU 2025 target set as 151,408tCO2e). The following table was reported to Management Board in August 2023 and sought approval of the 'annual public sector carbon emissions report' for submission to WG. It sets out a comparison of the health board emissions data between 2018/19 and 2022/23; including the health board's baseline calculation for 2019/20 to reflect the impact of the boundary change (in the absence of a formal updated baseline from WG - see also risk ref 010 in para 2.35):

Year	Covering	Emissions (tCO2e)	% Change from 2018/19	% Change from 2019/20
2018/19	ABMU	180,248.00	--	--
2019/20	SBUHB	79,000.58	-56.17	--
2020/21	SBUHB	78,202.33	-56.61	-1.01
2021/22	SBUHB	137,181.80	-23.89	+73.65
2022/23	SBUHB	149,977.33	-16.79	+89.84

Whilst the data for 2019/20 and 2020/21 (as originally calculated and submitted by an external consultancy firm) has been reported through the relevant channels, the health board has further reviewed and it is incorrect. Welsh Government have been advised accordingly.

2.29 Concerns have been expressed over the ability to influence reported carbon emissions in relation to procurement activity (which represent circa 77% of emissions), noting currently there is no mechanism for applying a favourable adjustment to carbon figures where green/sustainable procurement options are chosen. We recognise that this is outside of the health board's control; and note that the health board is proactively considering opportunities to reduce emissions with its supply chain.

2.30 The overall indication of emissions performance since 2019/20 is that they have increased by 89.84% at the health board. However, the health board has achieved a 12.21% reduction across Scope 1[2] and 2[3] emissions.

2.31 Scope 3[4] emissions are more complicated, due in part to issues including cost inflation in 2022/23, external consultant miscalculation of commuting data in 2019/20 and 2020/21 and change in waste emissions factors (from 60kg CO2e to 1074kg CO2e), resulting in a 130.7% increase since 2019/20.

2.32 We note that decarbonisation is linked to each of the strategic ambitions in the IMTP, with the decarbonisation targets expressly stated. The Goals, Methods and Outcomes (GMOs) from the CAP have been reflected in the IMTP.

2.33 In terms of wider strategies and policies, we note that a Sustainable Travel Strategy has been developed, which aligns to the requirements of the NHS Wales DSDP.

2.34 The health board's Estates Strategy (approved November 2023) was developed following the completion of the six-facet survey. The Strategy outlines how the health board plans to become net zero by 2030, including through culture and ways of working; buildings, estates planning and land use; transport and travel; procurement; and approach to healthcare.

2.35 The risk register for decarbonisation is maintained within the RAID Log and addresses recommendation 3 within the previous year's Advisory Report (see Appendix B). As of March 2024, ten open risks were currently recorded, with five recorded as critical and three recorded as high:

Risk number	Detail	Risk score
001	Leadership and Staff Engagement: climate change and decarbonisation considered a 'trade off' between costs and patient safety	High (12)
003	Capacity: staff time and capability to delivery the DAP may be a restricting factor	High (12)

[2] Scope 1 emissions include natural gas, gas oil, kerosene, fleet vehicles and equipment, FGas and anaesthetic gases.

[3] Scope 2 emissions relate to grid electricity.

[4] Scope 3 emissions include supply chain, commuting, business travel – grey fleet, grid electricity (transmission & distribution), water, waste and well to tank GHG emissions.

Risk number	Detail	Risk score
006	Financial investment required for installation of EV charging points and ensuring electrical capacity is sufficient e.g. Morriston Hospital	Critical (16)
010	Baseline is not clear (NHS Wales using 2018/19 date when the health board was ABMUHB)	Critical (16)
012	Understanding which emissions can be impacted by what actions is not fully understood at present	Critical (16)
014	Prescribing of carbon intensive inhalers seems to be increasing (although data is 3 months behind)	High (12)
016	Capital and revenue funding is not available to support projects that would support emissions reduction at the health board	Critical (16)
017	Funding needed to support roll-out of compliant recycling system by 6th April 2024 in non-bedded sites across the health board	Critical (16)

2.36 We note that work continues to articulate the level of corporate risk for consideration at Board level, and that this has been recorded as an action in the DAP (and more latterly the CAP) with a target date of '*during 2024'* assigned. See **MA3**.

Conclusion:

2.37 A Decarbonisation Action Plan (DAP) has been approved by the health board and reported to Welsh Government in accordance with the requirements of NHS Wales Decarbonisation Strategic Delivery Plan. However, the health board has redeveloped the DAP into a Climate Action Plan 2024-26, which details the decarbonisation initiatives as well as the collaboration with public service boards on adaptation. The risk register is reviewed and updated regularly; however, work is required to review the decarbonisation risk for potential inclusion in the Health Board Risk Register, as detailed in the CAP. We recognise that the health board's carbon footprint has increased in value since the initial baseline assessment, as a result of the inclusion of aspects of emissions data which were previously not applicable; however, a formal revised baseline, specific to SBUHB, is awaited from Welsh Government. Current reporting indicates that there remains a real risk that the health board may not be able to contribute effectively to the NHS carbon reduction targets and the Welsh Government's ambition for public sector carbon neutrality by 2030. Accordingly, we have assigned **limited** assurance.

Objective 3: An appropriate funding strategy targeting discretionary, EFAB and All-Wales funding is in place.

2.38 As recommended in our prior year report, DAPs should be supported by funding strategies e.g., differentiating between local / national funding, revenue, or capital funding. The health board continues to prioritise schemes and bid for additional resources against existing funding streams; however, and as has been reported by the health board to Welsh Government, there remains a material risk that such is unaffordable noting the current financial climate and considering the total funding requirements across NHS Wales.

2.39 Funding needs have been identified (circa £65m for capital build requirements and circa £1.7m for travel/transport initiatives) but it is noted that not all pipeline projects have a cost allocated. **See MA4**

These do not currently consider Neath Port Talbot Hospital, due to the Private Finance Initiative (PFI) arrangement in place which sets it apart from the remainder of the health board's estate.

2.40 EFAB funding of £1.050m was allocated to the health board for fire, infrastructure and decarbonisation, for the period 1 April 2023 to 31 March 2025, of which the health board contributes 30% (£315k). Two EFAB funded schemes were underway at the health board, for which business cases were submitted and approved by Welsh Government, with those specifically identified as decarbonisation totalling £86.4k for 2023/24. Welsh Government had funded 70% (£60.48k) and the health board had funded 30% (£25.9k) from its discretionary capital. Refer to ***audit objective 5*** for further details.

2.41 For 2024/25, the health board has been successful in obtaining £674.5k of funding under the EFAB scheme to introduce more decarbonisation workstreams totalling £963.6k (inclusive of the health board's 30% contribution). This work will include the replacement of windows at Morriston Hospital.

2.42 We note that for 2023/24, decarbonisation projects were not included in the discretionary capital funding allocation following a prioritisation exercise led by the Assistant Director Strategy – Capital, Assistant Director of Capital Planning and Assistant Director of Finance. This decision is reflective of the limited funds available. The discretionary capital programme for 2024/25 has yet to be approved. The latest version was presented to Management Board in March 2024.

2.43 The Estates Strategy focuses on sustainable investments for the future and outlines the following in respect of decarbonisation related works specifically:

- The health board has completed energy audits across its community premises highlighting decarbonising opportunities.
- The health board has recently commenced a £3.6m project to extend its solar farm with the installation of a 2 MW battery. Re:Fit funding has been secured for this work (2022/23: £300k; 2023/24: £3.3m).
- Proposals have been completed for decarbonising both Morriston and Singleton Hospitals at £26m and 24.6m respectively.
- A high-level assessment was undertaking on the viability of a solar array on the Neath Port Talbot Hospital site. However, this is reportedly not currently viable, and the project is dormant at present.

2.44 We are advised that the Estates Department that they are in regular contact with Welsh Government Energy Services Department and are awaiting confirmation of whether other funding will be made available. The health board will continue to reference decarbonisation related solutions for each business case; proportionate to the investment and existing estate constraints, and investigate alternative funding opportunities to support these initiatives.

Conclusion:

2.45 The development of a comprehensive Estates Strategy, following the completing of a 6-facet survey of all health board owned sites, has enabled the health board to prioritise schemes and bid for additional resources against existing funding streams. However, recognising the financial shortfalls, and being cognisant of the wider financial pressures across NHS Wales, and the impact that this may have in being able to deliver on the decarbonisation agenda, we assign this objective as providing **limited** assurance.

Objective 4: Appropriate monitoring and reporting arrangements are in place to provide ongoing assurance on the implementation of the strategy and action plan.

2.46 As noted under ***audit objective 1***, our national report for 2022/23 highlighted that internal reporting had understandably been limited, with the level of reporting increasing after Welsh Government's review of the DAPs. The recent changes made to the governance arrangements within the health board supports that the profile of decarbonisation has increased to reflect the challenge faced.

2.47 The DIG (the CAPIG from 2024) is responsible for recommending and monitoring the developments and delivery of the DAPs. The Group meets monthly and provides ongoing assurance on the implementation of the strategy.

2.48 Two action plans are currently maintained at the health board for monitoring progress against the Decarbonisation agenda:

1. The NHS Wales Decarbonisation Strategic Delivery Plan which captures progress against the national NHS Wales DSDP and is reported every six months to the NWSSP DCR Team and collates information from all health organisations in Wales for reporting to Welsh Government (see para 2.16-2.20); and
2. An internal decarbonisation action plan – the health board's recently approved Climate Action Plan (CAP) which monitors decarbonisation initiatives pursued locally. (see para 2.21-2.22).

2.49 As per paragraph 2.9, decarbonisation is included in the quarterly IMTP delivery updates reported to Management Board. However, whilst the health board recognises that it is unlikely to meet its national targets, reporting further detail to Board or its assigned Committees has been limited to the current position of EFAB schemes to the Performance and Finance Committee in August 2023. See **MA2**.

2.50 In addition to the DIG (now CAPIG), a Sustainable Swansea Bay Steering Group is in place that feeds into Management Board and the Population Health Programme Board.

2.51 We also note that the health board attends a significant number of external groups pan Wales to liaise and share information in respect of the decarbonisation agenda. Groups including, but not limited to the following:

- Welsh Health Environment Forum (WHEF)

  - Waste Group;
  - Energy Group
- All Wales Clinical Waste Forum.
- Community of Experts: National Programme for Climate Change and Decarbonisation for Health and Social Care in Wales, supported by the following groups:
  - Buildings (new and existing) / Estate planning and land use;
  - Transport and Procurement;
  - Adaptation; and
  - Approach to healthcare (education, healthcare and medicines and waste). *Note: it has been requested that a representative from the health board be included in this programme board; and discussions are ongoing with WG.*
- Decarbonisation Co-Ordination Reporting ((DCR), hosted by NWSSP).

2.52 The health board is required to submit annual quantitative and qualitative reports (the latter of which was formerly required every six months) to Welsh Government detailing the progress of their contribution to the Climate and Nature Emergency and associated targets as outlined in the health board's plan.

2.53 The health board is also required to present a quarterly report (which we note will be bi-annual in 2024/25) to NWSSP's DCR Group led by NWSSP on behalf of the Welsh Government. The DCR is responsible for collating the reporting of the delivery of the NHS Wales DSDP for the health boards and Trusts pan NHS Wales. Only 'red RAG rated' actions are discussed with Welsh Government; accordingly it was stressed that it is important for organisations to highlight any actions that cannot be completed without additional funding. The health board continues to do this.

2.54 Similarly to other NHS Wales organisations, we note that reporting arrangements account for a significant proportion of the small team's work. We recognise the amount of work that this involves despite the fact that there are limited funds available to undertake the work needed to address the actions in the NHS Wales Decarbonisation Strategic Delivery Plan.

Conclusion:

2.55 Appropriate internal monitoring and reporting controls are in place for providing assurance on the decarbonisation agenda at the health board. We also noted that routine external reporting was in place. Similarly to other health organisations we recognise that the number of outputs required is significant for the health board's small team. The reporting requirements potentially distracts from the ability to focus on progressing actions, particularly noting that the health board is unable to progress further projects in the NHS Wales Decarbonisation Strategic Delivery Plan due to the limited funds available. Accordingly, we have provided **reasonable** assurance in this area.

Objective 5: Projects included within the 2023/24 funding commitments have been successfully delivered, and appropriate arrangements are in place to secure available funding during 2024/25.

2.56 Further to para 2.40, EFAB funding of £1.050m was allocated to the health board for decarbonisation schemes for the period 1 April 2023 to 31 March 2025. The decarbonisation schemes identified for EFAB funding for 2023/24 were Building Management System upgrade projects at Cimla and Tonna.

2.57 At the date of audit, all projects remained ongoing and current reporting forecast that each project was to be delivered on time and within budget (see Appendix B). EFAB funding has also been received for 2024/25 at the health board.

2.58 Our prior year report noted that NHS Wales organisations were also self-funding decarbonisation initiatives from their discretionary programme; and that it is important that the cost benefit of these schemes is also subject to challenge and scrutiny for inclusion within the overall data. Management confirmed that bids for funding will be considered for presentation to Management Board; but we note that for 2023/24, there were no health board funded decarbonisation projects given the limited discretionary capital funds available.

2.59 Whilst there was no direct funding for decarbonisation specific schemes in the discretionary capital programme for 2023/24, the utilisation of double glazing at two sites for window and door replacement schemes contribute to decarbonisation and energy efficiency.

2.60 In respect of capital funding, a £3.6M project to extend the solar farm, with the installation of a 2 MW battery has recently completed, but some commissioning works are ongoing, as noted in para 2.45 above. The development of the solar farm at Morriston Hospital in 2021 was the first of its kind in the UK and by July 2022, it was reported that it had amassed savings of £778k, exceeding the health board's expectations. The project has been successful, to date, reportedly in cutting carbon emissions by 1,933 tonnes per year. It is reported that the farm has provided around a quarter of Morriston Hospital's electricity needs and exported excess energy to the national grid.

2.61 It is anticipated that the solar extension and battery energy storage system will deliver a further 1MW of clean energy for the health board and make an additional annual saving of around £325k to the £900k already being saved each year on electricity costs. The additional 1MW will increase the overall generation of power to 5MW per year.

2.62 In light of the challenging financial climate that the health board faces, Welsh Government has requested the need for clearer prioritisation of capital schemes across all NHS Wales organisations. Proposed schemes will be assessed against the health board's GMOs (Goals, Methods and Outcomes) prior to circulation for formal scrutiny and approval.

2.63 We were advised that the health board has completed prioritisation forms, for submission by 31 March 2024, for all business cases where FBC (Full Business Case) or BJC (Business Justification Case) approval has yet to be received from

WG. The health board will be submitting prioritisation forms for twenty-one schemes including Emergency Department and Critical Care, PET-CT Scanner (Singleton), Permanent CT-SIM (Singleton) and refurbishment of wards (Morriston).

2.64 Whilst the schemes outlined above are not solely decarbonisation driven projects, decarbonisation is considered at each stage of the projects to ensure carbon reduction improvements where practicable.

2.65 In addition, the health board has undertaken other project work such as the inhaler recycling project (which involves the incineration of used devices rather than being sent to landfill in order to prevent greenhouse gases leaking into the atmosphere) and further engagement to positively contribute to the reduction of emissions at the health board.

Conclusion:

2.66 At the time of audit, projects in receipt of 2023/24 EFAB funding were underway and reported to be delivered within the expected budget and delivery profiles; and EFAB funding has been secured for 2024/25 projects. The solar farm extension was underway and almost complete. However, there are no further decarbonisation projects whilst the health board awaits the outcome of the WG prioritisation approval process. There is also recognition of other projects undertaken by the health board which are helping to play a part in the health board, as a collective, reduce carbon emissions. Noting the current reported progress of these projects to date, we are providing **reasonable** assurance.

Appendix A: Management Action Plan

<table>
<tr><th>Matter Arising 1: Terms of Reference for CAPIG (Design)</th><th>Impact</th></tr>
<tr><td>The terms of reference for the DIG details membership of 15 named officers. From review of a sample of minutes, whilst all have been quorate, attendance appears have been a challenge noting the number of apologies and non-attendance recorded, and with limited evidence of an appropriate delegated officer in the absence of a named member:
<table>
<tr><th>Meeting date</th><th>Attendance recorded</th></tr>
<tr><td>June 2023</td><td>8 of the 15 named officers attended</td></tr>
<tr><td>July 2023</td><td>9 of the 15 named officers attended. An Estates representative was sent in place of the Assistant Director of Estates</td></tr>
<tr><td>August 2023</td><td>Meeting cancelled due to unavailability of members</td></tr>
<tr><td>September 2023</td><td>9 of the 15 named officers attended</td></tr>
<tr><td>October 2023</td><td>9 of the 15 named officers attended. Representatives from pharmacy attended in place of the Head of Prescribing and Medicines Management</td></tr>
<tr><td>November 2023</td><td>12 of the 15 named officers attended</td></tr>
<tr><td>December 2023</td><td>Meeting cancelled due to unavailability of members</td></tr>
<tr><td>January 2024</td><td>8 of the 15 named officer attended</td></tr>
<tr><td>February 2024</td><td>Meeting cancelled due to unavailability of members</td></tr>
</table>
However, it was apparent that no issues have arisen in terms of the ability of the forum to discharge its duties due to the attendance issues. Noting that the DIG is to be succeeded by the CAPIG from 1 April 2024, for which terms of reference are to be drafted and approved, such provides an opportunity to review the appropriateness of membership at this current juncture of the health board's wider climate plans; and to refine the recording of 'delegate' attendance to ensure sufficiency of representation.</td><td>Potential risk of:
DIG / CAPIG is not operating in the manner intended.
Inadequate controls to mitigate risks due to lack of ownership or accountability of risks; resulting in failure to achieve mandated reductions in carbon emissions.</td></tr>
</table>

Recommendation		Target Date	Priority
1.1	Prior to formal approval of the CAPIG terms of reference: a) Membership should be reviewed for adequacy noting the non-attendance of delegates at the former DIG; and b) Consideration should be given to refinement of the recording of 'delegate' attendance to ensure sufficient of representation.		**Medium**
Agreed Management Action		**Target Date**	**Responsible Officer**
1.1	a) Membership of CAPIG is being refreshed to ensure appropriate representation from across the Health Board in order to deliver the actions in the CAP. Revised Terms of Reference to be developed and agreed by CAPIG.	14-May-24	Commissioning & Contracting Manager
	b) Minutes of Meeting will reflect whether the representative is a 'member' or 'Deputy/ Delegate' attendee, per meeting	14-May-24	Commissioning & Contracting Manager

Matter Arising 2: Delivery of the DAP (Operation)	Impact
The health board has 77 mandatory actions in the NHS Wales Decarbonisation Strategic Delivery plan that require integrating. The DAP Q3 Report was reported to Management Board in January 24 providing the following update: • 18 are RAG rated blue and are closed, • 20 are RAG rated green and are ongoing but on track, • 19 are RAG rated amber and are ongoing with mitigating actions in place, • 18 are RAG rated red (and deemed 'undeliverable' until suitable funding can be identified), and • 2 are noted as health board is not the owner (one action relates to the national business travel policy and the other sits with DHCW). An annual Management Board paper on the Decarbonisation Action Plan (dated March 2023 – noting the 2024 annual update has yet to be published) stated that 'confidence in HB ability to meet the 16% carbon reduction by 2025 is rated RED due to continuing issues of accuracy relating to emissions data and baseline, as well as increased service demand. The HB DAP delivery is rated as AMBER mainly due to funding requirements.' Accordingly, the risk remains that the health board may not be able to contribute effectively to the NHS carbon reduction targets and the Welsh Government's ambition for public sector carbon neutrality by 2030. The NHS Infrastructure Investment Board (IIB) has agreed a framework to provide a common basis for investment decision making. Decarbonisation is included in the quarterly IMTP delivery updates reported to Management Board. The most recent report was presented in January 2024. However, whilst the health board recognises that it is unlikely to meet its national targets, reporting of further detail to Board or its assigned Committees has been limited to the current position of EFAB schemes to the Performance and Finance Committee in August 2023.	Potential risk of: • Failure to meet the mandated carbon reduction targets set out in the NHS Wales Decarbonisation Strategic Delivery Plan.

Recommendation			Priority
2.1	Challenges and risks to the achievement of the objectives within the health board's Decarbonisation Action Plan, along with any mitigating factors, should continue to be monitored with regular updates provided via the established governance routes through to the Board.		**High**
Agreed Management Action		**Target Date**	**Responsible Officer**
2.1	As per the agreed governance structure, progress reports for the Climate Action Plan will continue to be approved by the Management Board however, improved visibility at Board level will be achieved through an annual update.	30-May-25	Assistant Director of Strategy (Commissioning & Sustainability)
	CAPIG recognises that a champion for Sustainability would be beneficial in raising its profile/ visibility. Nomination of an Independent Member of the Board to be secured.	30-Sep-24	Interim Director Strategy
	Raising awareness of Sustainability across the Health Board through inclusion within the Team Brief or other appropriate communications	30-Sep-24	Interim Director Strategy

Matter Arising 3: Risk Management (Operation)			Impact
The risk register for decarbonisation is managed through a RAID Log and is monitored by the DIG. This is in line with recommendation 3 of the 2022/23 Advisory Report (see Appendix B). As of March 2024, ten open risks were currently recorded, with five recorded as critical (risk score 16) and three recorded as high (risk score 12). We note that work continues to articulate the level of corporate risk for consideration at Board level, and that this has been recorded as an action in the DAP (and more latterly the CAP) with a target date of 'during 2024' assigned.			Potential risk of: • Inadequate controls to mitigate risks due to lack of ownership or accountability of risks; resulting in failure to achieve mandated reduction in carbon emissions.
Recommendation			**Priority**
3.1	Inclusion of the risk around the potential failure to deliver the Welsh Government NHS Wales Decarbonisation Strategic Delivery Plan should be finalised to ensure the Health Board's Corporate Risk Register is appropriately reflective of prevalent risks.		**Medium**
Agreed Management Action		**Target Date**	**Responsible Officer**
3.1	Review of the Decarbonisation RAID log to develop overarching risk which will reflect health board's risk of compliance with the emissions reduction targets. Proposed wording to agreed CAPIG.	30-Jun-24	Assistant Director of Strategy (Commissioning & Sustainability)/ Commissioning & Contracting Manager
	Proposed risk (including score and mitigating actions) to be submitted to Risk Scrutiny Panel for consideration for inclusion in corporate operational risk register	30-Sep-24	Interim Director of Strategy

Matter Arising 4: Funding Strategy (Design)	Impact
As recommended in our prior year report, DAPs should be supported by funding strategies e.g., differentiating between local / national funding, revenue, or capital funding. The health board continues to prioritise schemes and bid for additional resources against existing funding streams; however, there remains a material risk that such is unaffordable noting the current financial climate and considering total funding requirements across NHS Wales. Funding needs have been identified (circa £65m for capital build requirements), but it is noted that not all pipeline projects have a cost allocated. Details of some travel/transport initiatives, at this time, have been shared: • Pump priming new bus routes £200,000 per annum per route; • £45,000 per annum for staff engagement application; • Project Managers to support clinical staff in implementing programmes; • Electric vehicle charging infrastructure £794,414.45 exc. VAT; • Electric vehicle fleet £636,896 net revenue over 5 years; • Car share £14,000 per annum; and • Clinical Lead approx. £25,000 per annum (1 day a week). These do not currently consider Neath Port Talbot Hospital, due to the Private Finance Initiative (PFI) arrangement in place which sets it apart from the remainder of the health board's estate.	Potential risk of: • The health board is not investing sufficient resources to achieve its decarbonisation programme. • Failure to achieve the Welsh Government targets for carbon emissions.

Recommendation			Priority
4.1	The health board should finalise its long-term financial model for the financial support required to support the decarbonisation programme to provide assurance to the Board regarding achievement of the Welsh Government targets. A clear timeline should be determined for undertaking this exercise, with progress monitored at a relevant forum.		High
Agreed Management Action		**Target Date**	**Responsible Officer**
4.1	The Health Board has undertaken the financial modelling but has only been able to progress actions that are within the financial envelope available from Welsh Government. It would not be feasible or best use of resources to redo the financial modelling until Welsh Government publish their refreshed NHS Wales Decarbonisation Strategic Delivery Plan. The indicative timeline for this publication is 2025. The Health Board will refresh the financial modelling when the new plan has been received.	31 March 2026	Interim Director of Strategy

Appendix B: EFAB Funding Tracker 2023/24 (January 2024 update)

Location	Project overview (Proposal Summary)	Current WG Approved Spend Total 2023/24	Current WG Approved Spend Total 2024/25	Current Overall Total Recommendation	Health Board Forecast Spend 2023/24	Health Board Total Forecast	Spend to date	% Spend to date	Staged Reached	Forecast variance from WG approved spend 2023/24	Total Over / Underspend	Overall RAG (Delivery /Prog/£/ Quality)
Cimla	BMS UPGRADE	£43,200	£0	£43,200	£43,200	£43,200	£40,762	94%	Works & Commissioning	£0	£0	Green
Tonna	BMS UPGRADE	£43,200	£0	£43,200	£43,200	£43,200	£34,838	81%	Works & Commissioning	£0	£0	Green
Morriston	Window replacement 1st Floor	£0	£594,000	£594,000	£	£	£	0%	N/A	£0	£0	
Morriston	Window replacement Ground floor	£0	£264,000	£264,000	£	£	£	0%	N/A	£0	£0	
Morriston	Window replacement Lower Ground Floor	£0	£105,600	£105,600	£	£	£	0%	N/A	£0	£0	

Appendix C: Follow Up from 2022/23 Advisory Report

Ref.	Recommendation	Management Comment/ Agreed Action	Responsible Officer/ Deadline
SBUHB 1	The Terms of Reference for the Decarbonisation Implementation Group should identify the Senior Responsible Officer for this scheme or those with responsibility for delivery of the plan.	**COMPLETE** The DIG ToRs reflect the SRO and references the Decarbonisation Delivery Plan 2022-2024 as the data source for agreed action owners with responsibility for delivery.	Kerry Broadhead (Assistant Director of Commissioning and Sustainability)
SBUHB 2	Duties should be defined and accepted for key positions.	**COMPLETE** The DIG ToRs were approved at the June 2023 meeting. However please refer to **MA1** above as the terms of reference require review.	Kerry Broadhead (Assistant Director of Commissioning and Sustainability)
SBUHB 3	A decarbonisation risk register should be developed to consolidate all decarbonisation risks.	**COMPLETE** The DIG RAID Log includes a risk register linked to the delivery status RAG ratings for the decarbonisation action plan.	Kerry Broadhead (Assistant Director of Commissioning and Sustainability)
SBUHB 4	Moving forward, accountability must be assigned for delivery of the separate local action plans.	**COMPLETE** The decarbonisation action plan includes action owners for all actions including local actions.	Kerry Broadhead (Assistant Director of Commissioning and Sustainability)

Appendix D: Assurance opinion and action plan risk rating

Audit Assurance Ratings

We define the following levels of assurance that governance, risk management and internal control within the area under review are suitable designed and applied effectively:

	**Substantial assurance**	Few matters require attention and are compliance or advisory in nature. **Low impact** on residual risk exposure.
	**Reasonable assurance**	Some matters require management attention in control design or compliance. **Low to moderate impact** on residual risk exposure until resolved.
	**Limited assurance**	More significant matters require management attention. **Moderate impact** on residual risk exposure until resolved.
	**Unsatisfactory assurance**	Action is required to address the whole control framework in this area. **High impact** on residual risk exposure until resolved.
	**Assurance not applicable**	Given to reviews and support provided to management which form part of the internal audit plan, to which the assurance definitions are not appropriate. These reviews are still relevant to the evidence base upon which the overall opinion is formed.

Prioritisation of Recommendations

We categorise our recommendations according to their level of priority as follows:

Priority level	Explanation	Management action
High	Poor system design OR widespread non-compliance. Significant risk to achievement of a system objective OR evidence present of material loss, error or misstatement.	Immediate*
Medium	Minor weakness in system design OR limited non-compliance. Some risk to achievement of a system objective.	Within one month*
Low	Potential to enhance system design to improve efficiency or effectiveness of controls. Generally issues of good practice for management consideration.	Within three months*

* Unless a more appropriate timescale is identified/agreed at the assignment.

NHS Wales Shared Services Partnership
4-5 Charnwood Court
Heol Billingsley
Parc Nantgarw
Cardiff
CF15 7QZ

Website: Audit & Assurance Services - NHS Wales Shared Services Partnership