

Annual Climate Emergency and Sustainability report 2023/24 for The State Hospitals Board for Scotland

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1. Introduction

This is The State Hospitals Board for Scotland's annual Climate Emergency and Sustainability Report.

The State Hospitals Board is very much an integral part of NHS Scotland and one of eight National Boards providing specialist services. It has a unique function in Scotland of providing high quality forensic mental health assessment, care, treatment and rehabilitation for male patients who require a high secure environment. The Hospital has 140 beds and admits patients from Scotland and Northern Ireland. It is based in South Lanarkshire and employs around 650 people.

The State Hospital operates from 15 buildings and manages land and buildings covering an area of 63 hectares.

2. Leadership and Governance

- The Board Sustainably Champion is Cathy Fallon, Non-Executive Director.
- The Executive lead is David Walker, Director of Security, Estates and Resilience. (This is correct for the reporting period)
- Within organisational governance, the Climate Change and Sustainability Group has the lead responsibility and is accountable to the Security, Resilience, Health and Safety Oversight Group through the Director of Security, Estates and Resilience. Its purpose is to ensure that the principles of sustainability are embedded in The State Hospital's strategic programme. The Group will ensure an integrated approach to sustainable development, harmonising environmental, social and economic issues. The Group provides assurance to the Security, Resilience, Health and Safety Oversight Group that robust arrangements are in place for monitoring and review of the effectiveness of management arrangements within the Board.
- Corporate and Operational Management Teams are responsible for operational delivery of services. The Climate Change and Sustainability Group focus on issues of strategic or corporate significance, with reports by exception from CMT as required.

The Group are currently working on the update of The State Hospitals Corporate Strategy, organisational values, mission statement, vision and principles that explicitly reflect our commitment to all aspects of sustainability.

In addition to the leadership and governance arrangements outlined above The State Hospital commissioned an independent audit in regard to Environmental, Social and Governance Review by external auditors RSM. The purpose of the audit was to benchmark our progress against the Policy for NHS Scotland on the Global Climate Emergency and Sustainable Development - DL (2021) 38.

The findings of the audit against TSH's progress towards the 68 DL 38 requirements, the audit identified that given the resource and financial restrictions faced in terms of sustainable development, TSH is in a position to fulfil the requirements by 2040. We evidenced that TSH has already reduced its emissions by 81% since 1990, established a strong governance structure and is meeting its various reporting requirements set out by NHS Scotland.

Recognised positive progress was identified against the requirements of DL 38 but, through benchmarking across the RSM client base, opportunities were identified to implement sustainable structures to drive continuous improvement and oversight. The State Hospital and the Climate and Sustainability Oversight Group have taken on board the recommendations made and will look to deliver, where possible. In particular, the development of a Sustainability Co-ordinator and the development of a sustainable action plan which could incorporate the recommendations from the Net Zero Route map and set out SMART sustainable targets that are accompanied by corresponding timelines, interim targets, KPIs and financing options.

3. Summary of Impacts

The State Hospitals Board for Scotland aims to become a net-zero organisation by 2040 for the sources of greenhouse gas emissions set out in the table below. The table sets out the amount of emissions produced annually by The State Hospital.

Greenhouse gas emissions 2022-2023 & 2023-2024, tonnes CO2 equivalent

Source	2022/23 emissions (tCO2e)	2023/24 emissions (tCO2e)	Percentage change – 2022/23 to 2023/24	2023/24 – target emissions	Percentage difference between actual and target emissions – 2023/24
Building energy	1547.62	1569.22	1.39% Increase	No target set	No target set
Non-medical F-gas	Was not available	8.33	First year recording information	Not applicable	Not applicable
Medical gases	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Metered dose inhaler propellant	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
NHS fleet travel	8.63	20.47	137.2% Increase	No target set	No target set
Waste	43.95	52.72	19.9% Increase	No target set	No target set
Water	2.67	3.74	40.1% Increase	No target set	No target set
Business travel	4.08	3.42	16.2% Decrease	No target set	No target set
Total emissions	1606.95	1657.90	3.17% Increase	No target set	No target set
Carbon sequestration	Not recorded	Not recorded	Not applicable	Not applicable	Not applicable
Greenhouse gas emissions minus carbon sequestration	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

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

Source	2022/23 Use	2023/24 Use	Percentage change – 2022/23 to 2023/24
Building energy (kWh)	9,582,640	9,131,167	4.7% Decrease
NHS fleet travel (km travelled)	Not recorded	60,542	Not applicable
Waste (tonnes)	125	111	11.2% Decrease
Water (cubic metres)	12,232	18,225	48.9% Increase
Business travel (km travelled)	14,838	12,750	14.1% Decrease

4. Climate change adaptation

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

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

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

The changing climate is increasing risks for health and health services. More information on these risks in the UK can be found in the UK Climate Change Committee's Health and Social Care Briefing available here: www.ukclimaterisk.org/independent-assessment-ccra3/briefings/

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

The State Hospital have identified the extremes of weather as the main risks and includes higher average temperatures with extended periods of hot weather, heavy rainfall, and cold spells. The main impacts would affect transportation, site access, delivery of essential supplies and disruption to the electrical supply.

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

The State Hospital are currently updating the associated adaption plan with assistance from NHS Assure. The adaption plan will specify equipment, buildings and processes that could be affected by the extremes of weather and increased weather events that the site could experience over the next 10 to 20 years. The State Hospital also have business continuity plans for an event involving loss of power, adverse weather etc., and also have internal resource to manage the power on-site for a protracted period of up to 7 days if required.

Since last years report all relevant business continuity plans have been reviewed, with particular attention placed on adverse weather conditions and the impact on transportation, site access and essential deliveries.

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

The State Hospital are working through a list of actions following completion of the adaption plan and taken forward through the Sustainability Group. There is an expectation that this will be presented during the next year.

5. Building energy

We aim to use renewable heat sources for all the buildings owned by The State Hospitals Board for Scotland by 2038.

The State Hospital site has 15 buildings including patient accommodation, off ward therapy areas, offices, carers' facilities, security buildings and estates buildings.

In 2023/24, 1569.21 tonnes of CO2 equivalent were produced by The State Hospital use of energy for buildings. This was an increase of 1.4% since the year before.

In 2023/24, The State Hospital used 9,131,167 kWh of energy. This was a decrease 4.7% since the year before.

In 2023/24, The State Hospital generated 1,819,670 kWh of energy from renewable technologies.

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

	2015/16 energy emissions	2022/23 energy emissions	2023/24 energy emissions	Percentage change 2015/16 to 2023/24
Building fossil fuel emissions	832.7	1014.72	997.87	19.8% Increase
District heat networks and biomass	57.3	24.91	19.54	65.9% Decrease
Grid electricity	1425.3	507.99	551.80	61.3% Decrease
Totals	2315.3	1547.62	1569.21	32.2% Decrease

Building energy use, 2015/16, 2022/23 and 2023/24 – MWh

	2015/16 energy use	2022/23 energy use	2023/24, energy use	Percentage change 2015/16 to 2023/24
Building fossil fuel use	3096	4530	4652	50.3% Increase
District heat networks and biomass	4342	2365	1819	58.1% Decrease
Grid electricity	2848	2686	2659	6.6% Decrease
Renewable electricity	0	0	0	0%
Totals	10,288	9,582	9130	11.3% Decrease

- *What did we do in 2023/24 to reduce emissions from building energy use?*

There was a greater focus to use the biomass boiler as the primary heat source for the site instead of LPG last year, however boiler faults resulted in greater ‘down time’ than expected. A project to update the Building Management System commenced during the year.

External lighting around various buildings has been changed to LED lighting, with further work to take place this year.

- *What are we doing in 2024/25 to reduce emissions from building energy use?*

The State Hospital were unsuccessful in obtaining a grant for all the lighting in 5 buildings to be changed to LED. We will now look at internal funding to allow the work to progress

- *What projects are we planning for the longer-term to reduce emissions from building energy use?*

Further information contained within the conclusion section.

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

6.2 Anaesthesia and surgery

Greenhouse gases are used as anaesthetics and for pain relief. These gases are nitrous oxide (laughing gas), entonox (a mixture of oxygen and nitrous oxide) and the ‘volatile gases’ - desflurane, sevoflurane and isoflurane.

Through improvements to anaesthetic technique and the management of medical gas delivery systems, the NHS can reduce emissions from these sources.

The State Hospital does not have any emissions from these gases due to the nature of patient care that takes place within the Board. The Board has no operating theatres or treatment rooms where anaesthetics could be administered

6.3. Respiratory medicine

Greenhouse gases are used as a propellant in metered dose inhalers used to treat asthma and COPD. Most of the emissions from inhalers are from the use of reliever inhalers – Short Acting Beta Agonists (SABAs). By helping people to manage their condition more effectively, we can improve patient care and reduce emissions.

There are also more environmentally friendly inhalers such as dry powder inhalers which can be used where clinically appropriate.

The Scottish Government provide all territorial health boards with an assessment of emissions from medical gases and inhaler propellant annually. The State Hospital are not included in these figures for 2023/24 as no prescribing takes place within the health board for these purposes.

7. Travel and transport

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

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

- *What did we do in 2023/24 to reduce the need to travel?*

As a single site Board there is no requirement for travel across various sites. Currently the level of business travel within the Board has reduced post Covid. This is quantified by a 61% drop in travelling expenses in 2023 compared to 2019, and then a further 14% this year.

The introduction of flexible / home working arrangements for existing and new employees, and the ongoing management of these arrangements, has also seen a reduction on staff having to travel to and from work.

- *What did we do in 2023/24 to improve active travel?*

Active Travel has been incorporated as an agenda item for Climate Change and Sustainably Group meetings. Alongside this, the Health and Wellbeing Strategy Group also have oversight of active travel within the groups standing agenda. This Wellbeing group looks at specific staff benefits, and opportunities in regard to active travel. The hospital has introduced cycle to work schemes and is also looking at options for salary sacrifice schemes for cars and other modes of transport. The hospital has also looked at enhanced options for staff around lease vehicles especially electric options. Both groups are still at the scoping stage of options to improve travel arrangements for staff looking at potential for hub pick up points for staff working shifts.

- *What did we do in 2023/24 to improve public and community transport links to NHS sites and services?*

No specific items to report for last year.

- *What are we going to do in 2024/25 to reduce the need to travel?*

The State Hospital will continue to look at options to improve travel arrangements for staff. Most operational meetings are via Microsoft Teams to reduce the need for everyone to be on-site or to indeed travel to different locations or sites. We also encourage that our external partners use the teams format if meetings are required to take place. The hospital will continue to encourage this, and this practice along with flexible working options for staff, where possible, will allow us to continue to maintain a reduced need to travel.

- *What are we going to do in 2024/25 to improve active travel?*

The State Hospital will continue to look at options to improve active travel. Due to the remote location of the site, the Board will look to explore processes to make travel from various locations local or city locations more sustainable and reduce the need for staff, visitors and volunteers to use their own cars. The option to increase public transport to the area is difficult as we have no control of the third parties involved, but we may look to try to work with them to explore an option to seek reduced rail or bus fares to Carluke and then provide transport to bring staff from the station to the hospital, as an example.

- *What are we going to do in 2024/25 to improve public and community transport links to NHS sites and services?*

The location of the hospital makes it difficult to enhance public and community transport links, as these are dependent on third party interaction. The demand in the local vicinity is low therefore to promote better transport opportunities is limited. We currently offer visitor pick up and drop off services from the local train station using a local taxi service. This is mainly to support visitors who struggle with car transport, but we are looking at options to extend this service to offer to all, managed by the site transport. This will be reviewed, and where possible developed, by the Climate Change and Sustainability Group.

We are working to remove all petrol and diesel fuelled cars from our fleet.

The following table sets out how many renewable powered and fossil fuel vehicles were in The State Hospitals Board for Scotland's fleet at the end of March 2023 and March 2024:

	March 2023 Total vehicles	March 2023 % Zero tailpipe emissions vehicles	March 2024 Total vehicles	March 2024 % Zero tailpipe emissions vehicles	Difference in % zero tailpipe emissions vehicles
Cars	0	0	0	0	
Light commercial vehicles	7	2	7	2	No difference
Heavy vehicles	2	0	0	0	No difference (see note below)
Specialist vehicles	5	0	5	0	No difference

Specialist vehicles was not a category in last years return. The State Hospital have the following list of specialist vehicles, that are used on site for grounds maintenance.

- 2 tractors (these were reported last year as heavy vehicles)
- 2 sit-on grass cutting machines
- 1 quad bike

The following table sets out how many bicycles and eBikes were in The State Hospitals Board for Scotland's fleet at the end of March 2023 and March 2024:

	March 2023	March 2024	Percentage change
Bicycles	0	0	No difference
eBikes	0	0	No difference

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

Distance travelled, kms	Cars	Light commercial vehicles	Heavy vehicles	Specialist vehicles	Total
2023/24	0	60,542	0	Not Recorded	60,542

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

Business travel emissions, tCO ₂ e	Cars	Public transport	Flights	Total
2023/24	3.41	0	0	3.41

8. Greenspace and biodiversity

Biodiversity

Biodiversity, or the wide variety of living organisms within an environment, has declined at a rapid rate in the last 50 years. Evidence demonstrates that these trends are attributed to human activities, such as land use change, habitat degradation and fragmentation, pollution, and the impacts of climate change. The State of Nature report published in 2023 has highlighted the decline of nature across Scotland, with 11% of species now classed as threatened with extinction.

Public bodies in Scotland have a duty under the Nature Conservation (Scotland) Act 2004 ([Nature Conservation Scotland Act 2004](#)) to further the conservation of biodiversity, taking care of nature all around us. Furthermore, the Wildlife and Natural Environment (Scotland) Act 2011 ([Wildlife and Natural Environment Scotland Act 2011](#)) requires every public body to summarise their activities to meet this duty, through the production of a publicly available report.

- *What actions have been taken to identify, protect and enhance biodiversity across your organisation?*

In the last year The State Hospital have not taken any specific actions with regards identifying, protecting and enhancing biodiversity across the organisation.

- *What actions have been taken to contribute to the NHSScotland Estate Mapping programme, or to develop an internal mapping programme?*

The State Hospital have not taken any specific actions with regards an estate mapping programme.

- *What actions have been taken to mainstream biodiversity across the organisation?*

The State Hospital have not taken any specific actions with regards mainstream biodiversity across the organisation.

- *How have nature-based solutions been utilised to address the climate and biodiversity emergencies?*

The State Hospital have not utilised any nature-based solutions, however, the site has approximately 32 hectares of unused land that is made up of mainly grassland and existing trees.

- *What actions have been undertaken to raise awareness, engagement and understanding of biodiversity and nature?*

The State Hospital have not taken any specific actions with regards raising awareness, engagement and understanding of biodiversity and nature.

- *What surveys, monitoring or assessment of biodiversity have been undertaken? If you have – have systems been developed to continue monitoring long-term?*

The State Hospital have not undertaken any surveys, monitoring or assessment of biodiversity. This will form part of the work for future years, as all public bodies in Scotland are required to further the conversation of biodiversity when carrying out our responsibilities.

Greenspace

The design and management of the NHSScotland green estate for human and planetary health, offers an opportunity to deliver a range of mutually beneficial outcomes. These include action on climate change (both mitigation and adaptation), biodiversity, health and wellbeing for patients and staff, community resilience building and active travel.

The State Hospital have no current projects that have been implemented in relation to key greenspace within the site.

Currently all greenspace is managed and maintained to a standard that meets the Security requirements of the site.

9. Sustainable procurement, circular economy and waste

Earth Overshoot Day marks the date when our demand for resources exceeds what earth can regenerate in that year. In 2024, Global Earth Overshoot Day is 1 August, a day earlier than in 2023.

For the UK, the picture is more worrying. In 2024, the UK's Earth Overshoot Day was 3 June. The current level of consumption of materials is not sustainable and is the root cause of the triple planetary crises of climate change, biodiversity loss and pollution.

We aim to reduce the impact that our use of resources has on the environment through adopting circular economy principles, fostering a culture of stewardship and working with other UK health services to maximise our contribution to reducing supply chain emissions to net-zero by 2045.

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

All regulated tenders have a Procurement Strategy document which includes a sustainability assessment using the Scottish Government Sustainability test. For non-regulated Quick Quotes we also assess sustainability as part of the Invitation to Quote process.

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

All regulated tenders have a Procurement Strategy document which includes a sustainability assessment using the Scottish Government Sustainability test. For non-regulated Quick Quotes we also assess sustainability as part of the Invitation to Quote process.

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

The table below sets out information on the waste we produce and its destination for the last three years:

Type	2021/22 (tonnes)	2022/23 (tonnes)	2023/24 (tonnes)	Percentage change – 2021/22 to 2023/24
Waste to landfill	79	90	81	2.5% Increase
Waste to incineration	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Recycled waste	26	28	26	0%
Food waste	Not Recorded	Not Recorded	Not Recorded	Not Applicable
Clinical waste	5	7	4	20% Decrease

The State Hospitals Board for Scotland are not one of the health boards that have been included in the high-level waste route maps that are being developed in tandem with the Net Zero Route Map. The State Hospital will require to apply the learnings from this process when they are made available.

Once The State Hospital receives the learnings from the process, we will set targets to reduce the amount of waste we produce and be in a position to populate the tables below. This will focus on six priority waste streams (residual, cardboard, dry mixed recycling, food waste, confidential waste paper, plastics and high grade non-infectious plastics from healthcare) and be in a position to fully populate the tables below.

In 2012/2013 the recorded domestic waste sent to landfill was 191 tonnes.

Reduce domestic waste by a minimum of 15%, and greater where possible compared to 2012/2013 – by 2025

Target – reduce domestic waste by	30 tonnes
Performance – domestic waste reduced by	84 tonnes
Outcome	ACHIEVED
Further reduction required	None

Ensure that no more than 5%, and less where possible, of all domestic waste is sent to landfill – by 2025

Target – reduce waste sent to landfill by	70 tonnes
Performance – waste sent to landfill reduced by	0 tonnes
Outcome	NOT ACHIEVED YET
Further reduction required	70 tonnes

Reduce the food waste produced by 33% compared to 2015/16 – by 2025

Target – reduce food waste by	Currently not recorded
Performance – food waste reduced by	Currently not recorded
Outcome	Currently not recorded
Further reduction required	Currently not recorded

Ensure that 70% of all domestic waste is recycled or composted – by 2025

Target – recycle or compost	83 tonnes
Performance – recycled or composted	26 tonnes
Outcome	NOT ACHIEVED YET
Further increase required	57 tonnes

- *What did we do in 2023/24 to reduce our waste?*

We continued to promote the recycling of waste at source within each department / building.

- *What are we doing in 2024/25 to reduce our waste?*

The State Hospital will look to develop our own high-level waste route map which will prioritise activity to meet national target requirements.

National Procurement have introduced a new framework for Recyclates and General Waste Management in April 2024. The State Hospital are required to use mini completion to be able to refine our individual service requirements for waste management, and this will include a focus on being able to reduce our waste and increase recycling.

10. Environmental stewardship

Environmental stewardship means acting as a steward, or caretaker, of the environment and taking responsibility for the actions which affect our shared environmental quality.

This includes any activities which may adversely impact on land, air and water, either through the unsustainable use of resources or the generation of waste and pollution. Having an Environmental Management System (EMS) in place provides a framework that helps to achieve our environmental goals through consistent review, evaluation, and improvement of our environmental performance.

- *What steps did we take in 2023/24 to develop and implement our EMS?*

The State Hospital continued to populate the EMS with relevant data to allow action plans to be produced. This has been a protracted process due to not being able to dedicate time to the tasks, and therefore unable to report any meaningful progress.

- *We have fully implemented EMS to ISO14001 standard at the following sites:*

The State Hospital only have one site within the board. For the reasons given above, we are still progressing a fully implemented EMS.

- *What steps will we take in 2024/25 to further develop and implement our EMS?*

The State Hospital will look to free up a dedicated resource to further develop and implement our EMS.

- *What did we do in 2023/24 to reduce our environmental impacts and improve environmental performance?*

No specific work/projects were undertaken to reduce environmental impacts and improve environmental performance.

- *What are we doing in 2024/25 to reduce our environmental impacts improve environmental performance?*

No specific plans have been devised for this year.

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

The State Hospital have been unable to provide a dedicated resource to further develop and implement our EMS.

11. Sustainable construction

Where there is a need for new healthcare facilities, we want both the buildings and grounds to be safe, nature-rich, sustainable, resilient and accessible. The State Hospitals Board for Scotland currently have no planned or ongoing building projects.

12. Sustainable communities

The climate emergency undermines the foundations of good health and deepens inequalities for our most deprived communities.

The NHS touches every community in Scotland. We have a responsibility to use our abilities as a large employer, a major buyer, and one of the most recognised brands in the world – an ‘anchor’ organisation – to protect and support our communities’ health in every way that we can.

- *What are we doing to act as an anchor institution for our local communities?*

Scottish Government have commissioned all NHS Boards to produce an Anchors Strategic Plan as an initial 3-year strategy to demonstrate how The State Hospital plans to take action to contribute to community wealth.

The Anchors Strategic Plan includes data to provide a baseline in relation to workforce and local procurement.

Initial themes that The State Hospital have focused on as part of the Anchor Strategic Plan include:

- Progressive Procurement - TSH can direct investment into the local region through procurement practices. It may be possible to consider giving local suppliers greater weight in procurement processes, which in turn can create new employment locally.
- Employment - TSH is a relatively large local employer within an area of deprivation. Development of recruitment practices to encourage community members to consider employment in TSH would be useful to consider.
- Sustainable use of land and property - consideration given to the use of land and sustainable practices.

- *What are we doing to improve the resilience of our local communities to climate change?*

There are no current areas of improvement that have been identified. The location and nature of the hospital makes it difficult to engage with the local community to improve resilience with regards to climate change.

13. Conclusion

The tables below contain the current modelling report for TSH's Net Zero performance on a BAU scenario.

As a Board the emissions have decreased by a massive 83.7% against the baseline year 1993/94, which is within the 5-year 1990 Kyoto window.

Prior to 1993/94, the site was operated and maintained by the Department of Environment (DoE) on behalf of the UK Government and Scottish Executive.

NHS State Hospital

CO2e Emissions Targets		1993/94	2023/24 Reported Figures	2025 Interim Target	2030 Interim Target	2035 Interim Target	2040 Net Zero Target
The New % Pathways to a 2040 Net Zero Outcome	CO2e Emissions Targets	Baseline	-63.6%	-65.5%	-75%	-87.5%	-100%
Target – Our Current Usage Trend will have to follow these trajectories	Tonnes	10,678	3,887	3,684	2,670	1,335	0
Actual and Predicted CO2e Emissions from now to 2040	Tonnes	10,678	1,739	1,653	1,446	1,332	1,264
CO2e Emissions – Current Pathway based on current anticipated energy use	Based on 1993/94 usage levels	-	-83.7%	-84.5%	-86.5%	-87.5%	-88.2%

Potential Shortfall

CO2e Emissions Targets	2023/24 Reported Figures	2025 Interim Target	2030 Interim Target	2035 Interim Target	2040 Net Zero Target
	-20.1%	-19.0%	-11.5%	0.0%	11.8%

From the data above, TSH are already 20% ahead of the Net Zero target with the reported figures in 2023/24.

To meet the decarbonising of heat sources target, TSH will require to commission a feasibility study to explore the use of new technologies such as ground source/air source heat pumps, and any emerging technologies that would be suitable for the site.

With the target year being 2038, this will require to be completed over the next 5/6 years.

Electrical renewable technology to be explored for the site includes wind (turbine) and solar PV. This work will coincide with the feasibility study for the decarbonising of heat sources over the next 5/6 years.

During the next 5/6 years, as Net Zero plans are developed, funding sources will also have to be identified to allow TSH to implement the technology for Net Zero to be achieved.

Focus for this year will be to develop and implement a high-level waste route map, move forward with an active travel agenda, increase biodiversity/greenspace awareness and fully implement an EMS for The State Hospital.