Carbon Reduction Plan

Autumn 2025

Commitment to Achieving Net Zero

St Joseph's Hospital (SJH) has joined IHPN's (Independent Healthcare Providers Network) pledge to achieve Net Zero emissions by 2035 and Net Zero supply chain by 2045.

The hospital is currently developing a comprehensive implementation plan, which, as more detailed data becomes available in the coming years, will become increasingly specific.

St Joseph's Hospital has experienced years of growth and has initiated projects which have resulted in carbon reductions. Although the projects themselves have not measured the carbon reduction, an ongoing focus will be made to capture this information.

Company Growth & Development

Context

St Joseph's Independent Hospital Ltd operates from a single hospital site in Newport, South Wales. The company has been increasing its activities to boost revenue and support the NHS, reinvesting its surplus into facilities and equipment to expand capacity and modernise. This expansion has resulted in increased emissions overall, however, reduced emissions on a per patient basis.

During the baseline year (2020) SJH had two operating theatres. These have since been refurbished, and three additional operating facilities have been created: the Day Surgery Unit (and day theatre) in April 2021, the Clinical Treatment Centre (and minor procedures room) in Outpatients and the Surgicube (Ophthalmology operating room) in January 2022

Towards Zero Waste

SJH has achieved Zero waste to landfill since 2020. Compliance with the he Waste Separation Requirements (Wales) Regulations 2023 has been achieved since 2024, 2 years ahead of the requirement for hospitals. Whilst encouraging the correct recycling, emphasis has moved to the re-use & re-purposing of items within a hospital setting, to reduce the waste produced, regardless of the stream it would sit within.

In 2025, waste reduction became a standing agenda item within the ESG committee. The focus on, where clinically possible, moving away from single-use items has yielded significant results. Over half a tonne of waste has so far been eliminated, with a further 1.75 tonnes identified and in action.

Emissions Reporting

St Joseph's Hospital used 2020 as its baseline year, with ongoing analysis conducted each reporting year. Due to a change in personnel, reporting was not completed for the

reporting year of 2024, but for the most recent 12 months when the report was conducted in August 2025. 2026 onwards will be reported in line with the annual year.

The hospital reports on total CO_2e emissions and CO_2e per inpatient as the method of year-on-year comparison.

The vast majority of CO_2e emitted is associated with inpatient activity. An SJH inpatient will remain in the hospital for an average length of stay of 2 days, and depending on the procedure, between 30 minutes to 6 hours in the operating theatre. By contrast, an SJH outpatient appointment typically takes less than 1 hour and involves little to no energy.

Use of Offsetting

SJH not only sees itself as having a duty of care to its patients, but also for the wider determinants of health, including the environment. Hospitals are complex operations that rely on energy-intensive infrastructure. Transitioning to low-carbon systems not only takes investment but time. Whilst these projects take place, offsetting helps address unavoidable emissions in the short term. Well-chosen offset projects, especially those relating to reforestation or renewable energy, can also deliver public health benefits in low-income countries.

Offsetting is used as a last resort for residual emissions and not a substitute for direct action. It supports the hospital in acting urgently on climate, even during the complex journey of decarbonising healthcare.

Energy Usage over time 2020-2025

Energy Use per Patient	2020 (Baseline Year)	2021	2022	2024-2025	% Change (2020-2024/25)
Total No. inpatients treated	2210	6103	7985	6087	175%
Gas Consumption (kWh)	2,443,824	2,572,137	2,375,004	2,116,975	-13%
Electricity Consumption (kWh)	1,108,512	1,285,812	1,364,712	1,319,183	19%
Gas consumption per patient (kWh)	1106	421	297	348	-69%
Electricity consumption per inpatient (kWh)	502	211	171	217	-57%

Comparing energy usage to inpatient numbers illustrates the positive impact of SJH's capital projects. Comparing 2020's baseline year to 2024-25, inpatient numbers increased by a massive 175%, whilst electricity only experienced a modest 19% increase, and gas decreased by 13% respectively.

Due to the increase in activity, gas consumption per inpatient decreased by 69%, and electricity consumption decreased by 57%.

Within the impatient category, 2 subcategories that have material effects on energy consumption. Daycase patients are admitted and discharged on the same day. Longer stay patients stay within the hospital for a minimum of one night. During the 2024-25 reporting period, the hospital saw a considerable increase in 1+ night patients than previous years.

Within our outpatient category, there was also a marked increase in follow-up appointments due to the volume of overall procedures, along with a significant increase in energy-intensive diagnostics such as MRI and CT Scans.

Carbon Footprint over time

Assumptions & Estimations

Where primary emissions data could not be collected, the following assumptions and estimates were used:

- Vehicle emissions were calculated using Defra vehicle categories and HM Government Emission Factors (2024).
- Throughout the reporting period, some staff worked remotely from home. Due to the unknown primary energy data from staff at home, the energy usage was calculated based on the number of days staff worked, assuming 8 hours per day.
- Scope 3 inbound and outbound delivery emissions were calculated using estimated weight and distance, using UK DEFRA freight emission factors for the predominant delivery type.
- Transmission and distribution losses associated with electricity usage, as well as 'Well to tank' emissions from combustion fuels were included in the assessment.
- Commuting data was estimated using industry averages, based on staff days within the organisation (HM Government Travel Survey).
- On-site usage of anaesthetic chemicals accounted for 17.30 tCO2e.

Scope 1 Emissions

Direct emissions from activities controlled by SJH that release emissions into the atmosphere. This includes the consumption of gas in central heating boilers, hot water boilers, and the Hospital kitchen. It also includes the consumption of diesel in the SJH-owned vehicles.

Scope 1 Emissions	What is included within this category	tCO_2e 2020	tCO_2e 2021	tCO_2e 2022	tCO_2e 2024-25
Gas Usage	All mains gas usage & Refrigerant gas loss recharge	452	475	439	416.6

Company-owned vehicles	Emissions from 1 diesel-powered van	0.92	9.24	8.57	1.38

Scope 2 Emissions

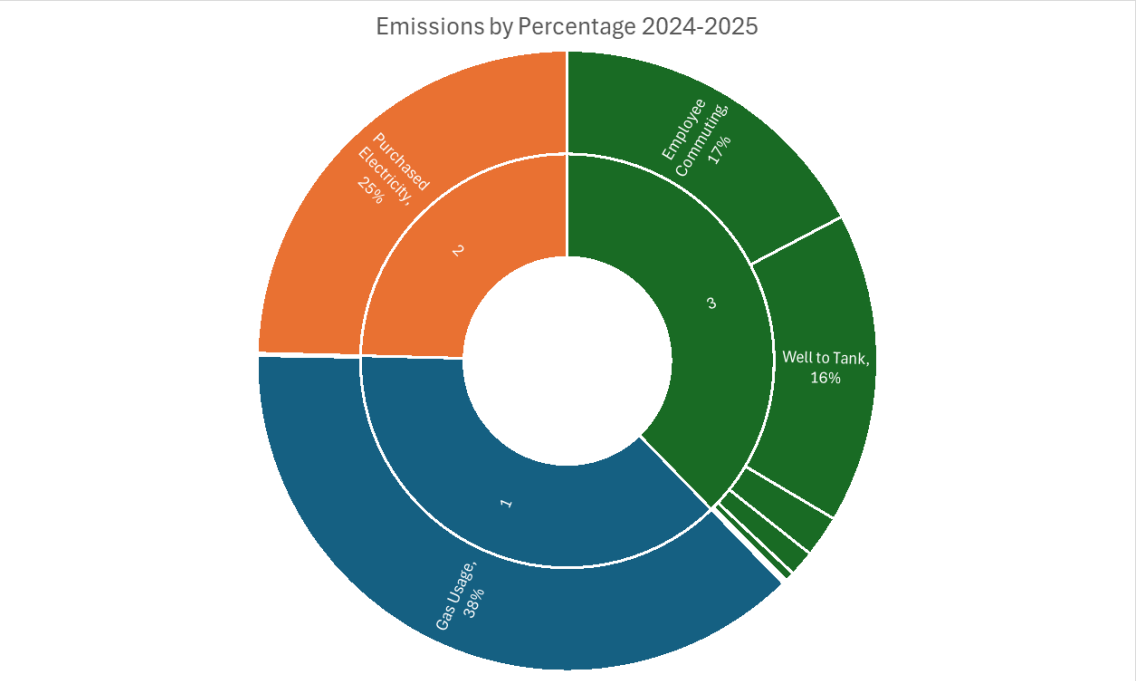
The electricity purchased for use on-site at SJH.

Scope 2 Emissions	What is included wihin this category	tCO_2e 2020	tCO_2e 2021	tCO_2e 2022	tCO_2e 2024-25
Purchased Electricity	All electricity consumed within the hospital	258.28	272.59	263.39	273.14

Scope 3 emissions

GHG emissions are released into the atmosphere by third parties as a direct result of SJH's activities. Of the 15 categories of Scope 3 emissions, those identified in the table below have been measured. In 2024/25, the operational control consolidation approach was adopted, which skews previous results. As such, 2024-25 will form the baseline year for scope 3 emissions.

Scope 3 Emissions	What is included wihin this category	tCO_2e 2024-25
Upstream transportation	Delivery services to the hospital	14.8
Organisational waste	Waste treatment	0.6
Business Travel	Employee travel for business needs & accommodation	1.0
Employee Commuting	Employee travels to and from work	192.1
Organisational Energy Use (Working from Home)	Energy used by employees that would have otherwise been used at work	0.6
Downstream transportation	Items that are transported to patients	0.5
Organisational Water Usage	All water consumed and wastage	5.4
Transmission & Distribution losses	"Lost" electricity during transmission and distribution	24.1
Well to Tank	Emissions released during the production, processing and delivery of fuel	179.8



NB – Not all subsections are included within the labels due to the sizing of the labels.

Emissions per inpatient

Emissions per inpatient	tCO_2e 2020	tCO_2e 2021	tCO_2e 2022	tCO_2e 2024-25	tCO2e 2024-26
Number of inpatients	2210	6103	7985	6087	175%
Scope 1 emissions	453.03	485.27	447.95	418.00	-8%
Scope 2 emissions	258.28	272.59	263.39	273.14	6%
Scope 3 emissions				418.95	
Total emissions	711.31	757.86	711.34	1110.09	56%
Total emissions per inpatient	0.32	0.12	0.09	0.18	-43%

Although scope 3 has been added within the 2024-25 year, carbon emissions per inpatient have reduced by a staggering 43% VS 2020.

There has been an overall increase in electrical energy emissions, it is part of the business's decrease in gas reliance and move to renewable energy.

Although not previously measured, a significant portion of these savings can be attributed to estate improvements as part of refurbishments, including:

- The adoption of LED lighting

- More efficient boiler systems
- New air handling units
- New Windows
- New Fire Doors.

Ongoing projects being considered include:

2025-26

- Use of 100% renewable electricity – Reduction 2 by 418 tCO2e
- Electrification of company vehicle – Reduction of 1.38 tCO2e
- Collection of staff commuting data for future improvements

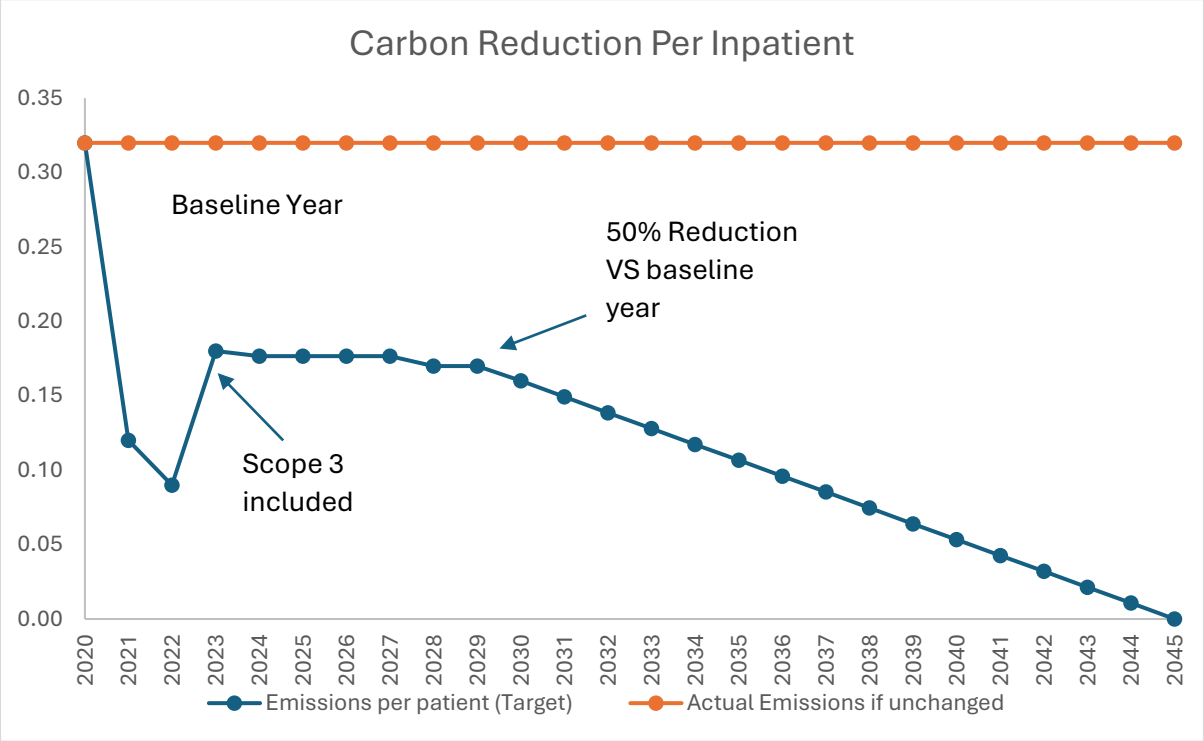
2027-28

- Installation of Solar Panels – Reduction of scope 3 well to tank
- Building heat loss audits
- Inclusion of further scope 3 categories

2029 onwards

- Exploration of alternative options to mains gas (Heat Pumps)
- Company EV salary sacrifice scheme
- EV Charger scheme

Emission Reduction Targets



SJH has set itself the following emissions reduction targets for the next 3 years VS the baseline year of 2020

Reduction Category	2026	2027	2028

Waste produced (Tonnes)	2	5	8
Gas per inpatient	5%	10%	15%
GHG producing electricity per inpatient	100%	100%	100%
Total GHG Emissions per inpatient	10%	15%	20%

Declaration and Sign Off

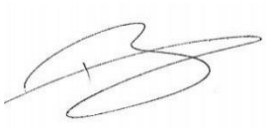
This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and the associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported (where available) in accordance with the published reporting standard for Carbon Reduction Plans.

This Carbon Reduction Plan has been reviewed and signed off by the Hospital's Executive Team.

Signed on behalf of St Joseph's Independent Hospital Ltd:



Rhys Jones

General Manager – ESG & Support Services