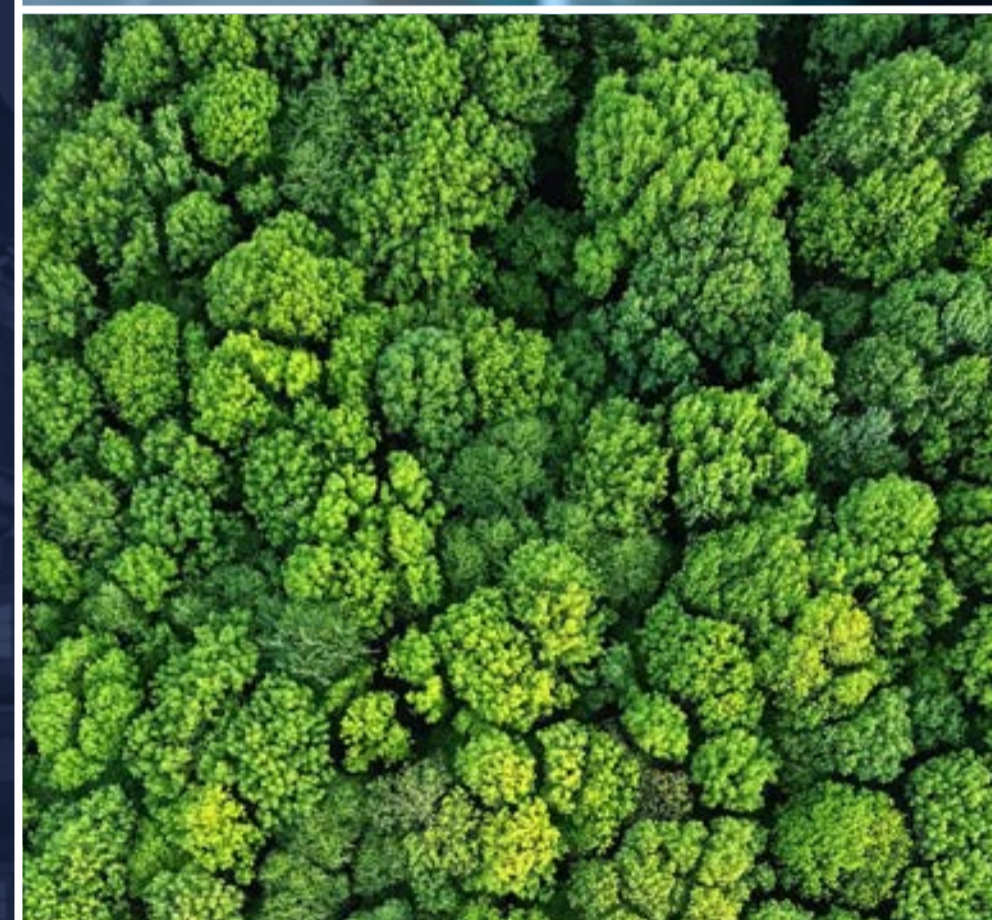




THE ROYAL VICTORIA  
EYE AND EAR  
HOSPITAL DUBLIN

SUSTAINABLE HEALTHCARE AT  
THE ROYAL VICTORIA  
EYE AND EAR  
HOSPITAL

TOWARDS NET ZERO  
ANNUAL SUSTAINABILITY REPORT 2023





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# INTRODUCTION

At the RVEEH we continue to demonstrate our commitment to confronting the global environmental challenges of our time. Our vision remains the same, to embrace sustainability, be the leaders in this space and to embed sustainability into the delivery of care for our patients. We recommit to delivering a 50% reduction in Greenhouse Gas carbon emissions by 2030 and Net Zero emissions by 2050.

Our 9 key operational priorities remain unchanged. At the end of 2023 our key achievements included:

- Hospital switched to renewable only electricity.
- Energy efficiency project on hospitals sash windows (draft proofing) commenced.
- First compostable PPE (splash aprons) purchased to replace single use disposable aprons
- Funding approval received for on-site biodigester (to manage the 20 tonnes of annual food waste).
- Full carbon footprint for base year (2022) mapped.
- Sustainability included in everyone's job description and part of all new employees inductions.

Our sustainability strategy is being centrally coordinated and is inclusive. It is designed to work collaboratively across all areas of the organization and across the value chain that we are part of. In June 2023, the HSE launched its Climate Action Strategy paper with a focus on 6 areas of priority which align very well with the strategy and operational focus

areas of the RVEEH. This partnership with the HSE is critical in ensuring we are part of the collective effort in achieving our joint success for both our organisations including our employees, our patients, and the wider community.

However, as we celebrate our collective achievements, our work is far from done. The impact of certain significant geopolitical, social, and financial events around the world have continued to exert challenges for all organisations in achieving our sustainability goals. We expect the impact across the value chains to continue for the foreseeable future and therefore makes it incumbent upon us to plan for contingencies. The ongoing, changing regulatory framework also continues to evolve, and whilst this is challenging, it also represents an opportunity for us all as more data, insights, and collaboration will strengthen the partnership and trust with the various regulators.

Finally, it goes without saying that none of these achievements are possible without the tireless efforts of the staff of the RVEEH who have all embraced sustainability as part of their daily efforts and how we continue deliver excellent patient care. Everyone in some way has contributed to our shared success and I would personally like to recognize and thank them all for their efforts.

## Ashton Dallsingh

Council Member and Chair Sustainability Committee





# THE YEAR IN BRIEF

2023



1. PPE – Personal Protective Equipment

2. Consideration – A specialist staff engagement company that leverages the knowledge and innovation of an organisation’s staff to address the major challenges faced.





# ABOUT THE ROYAL VICTORIA EYE AND EAR HOSPITAL

The Royal Victoria Eye and Ear Hospital (RVEEH) in Dublin was founded in 1897 and is the National Referral Centre for both Eye and Ear, Nose & Throat disorders. The hospital is a National Centre of Excellence providing tertiary and quaternary services in Ophthalmology and Otolaryngology and is the main tertiary provider for complex subspecialty eye disorders.

Academic and clinical training are provided to undergraduate and postgraduate medical students from Royal College of Surgeons in Ireland, University College Dublin and Trinity College Dublin. Research in both Ophthalmology and Otolaryngology is undertaken in partnership with our academic partners.

In November 2021 the hospital established the Sustainability Executive Committee and in mid-2022 the Council (Board) of the hospital approved the establishment of a Sustainability committee of the Council.

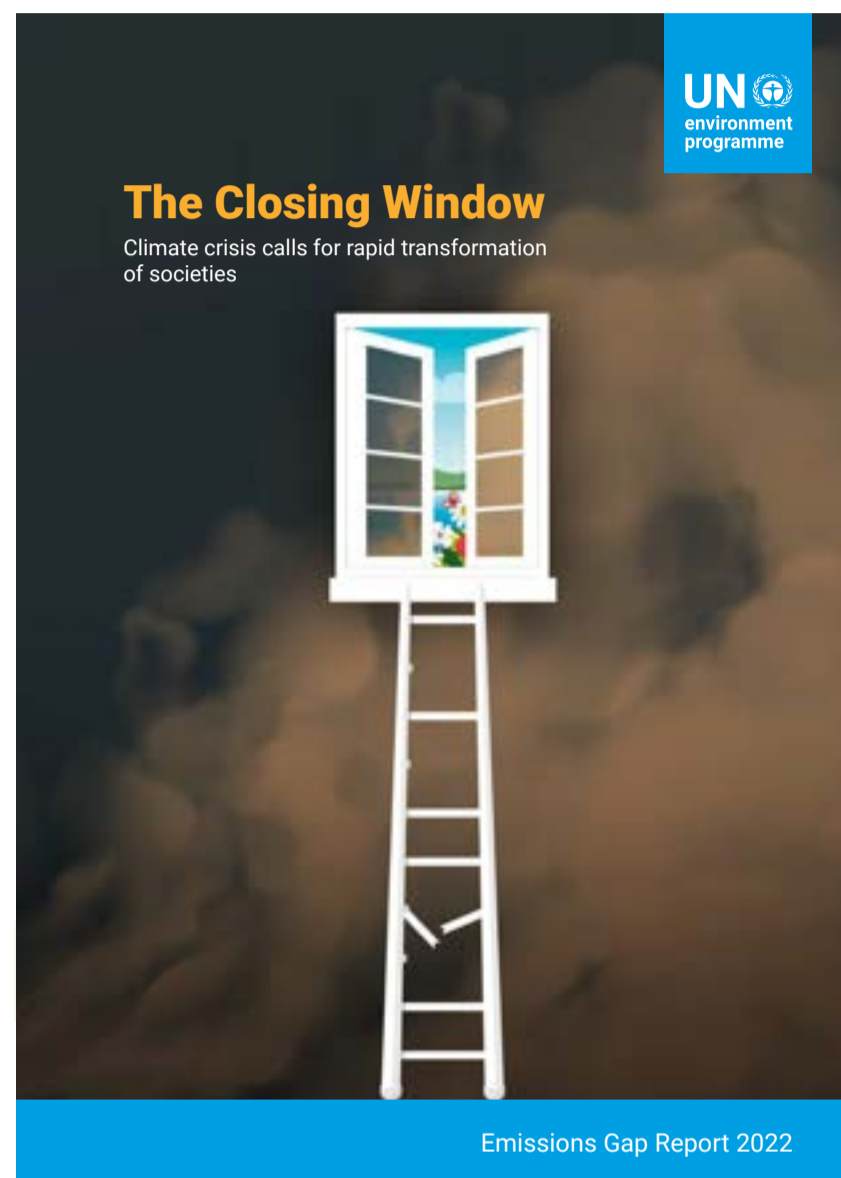
Delivery of the targets outlined in this report, and committed to by the hospital, will require:

- Integrating sustainability into the quality of care systems at the hospital
- Innovating in our approach to care delivery, procurement and energy.
- Ensuring that everyone has a role to play.





# SUSTAINABILITY CONTEXT



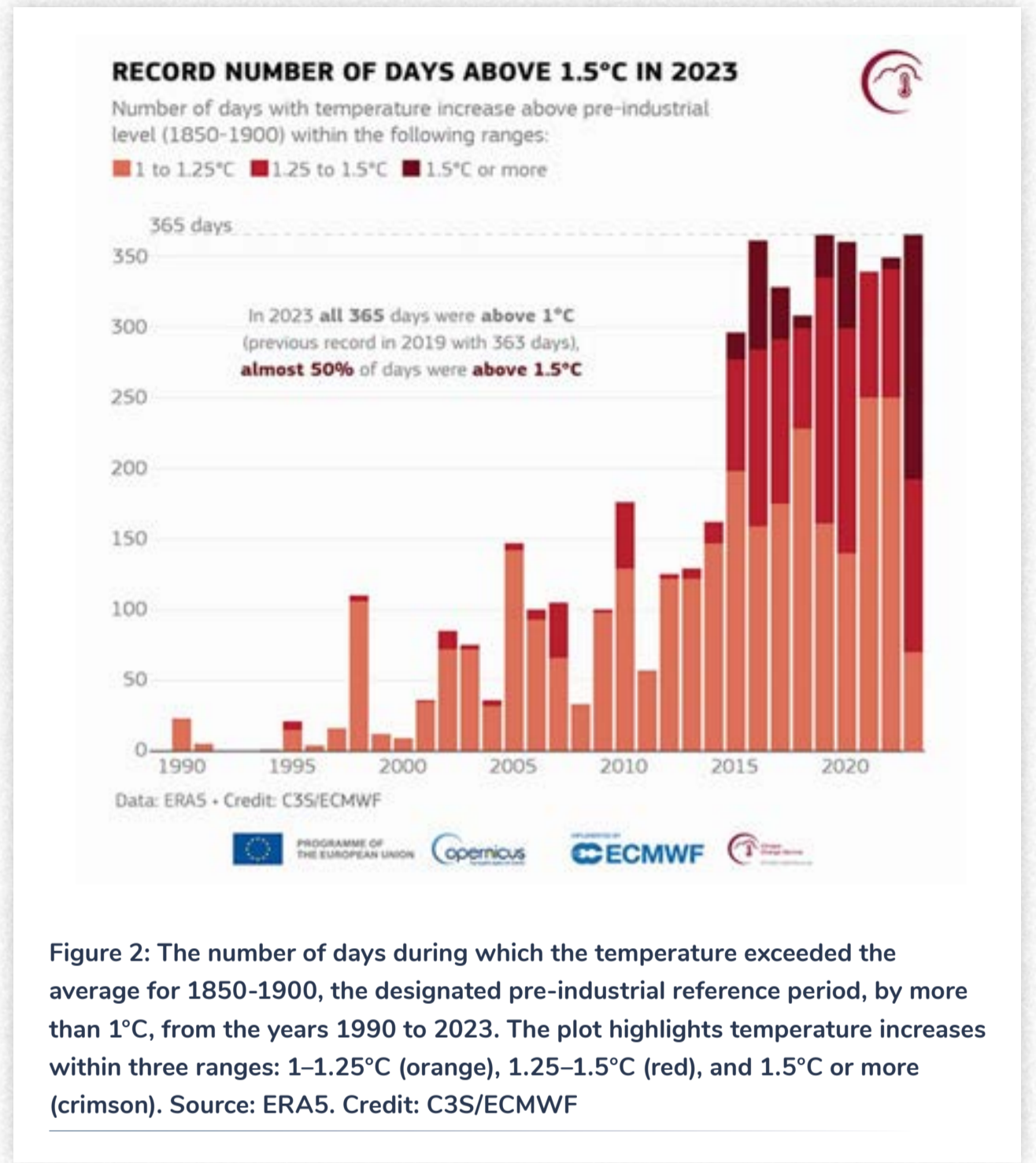
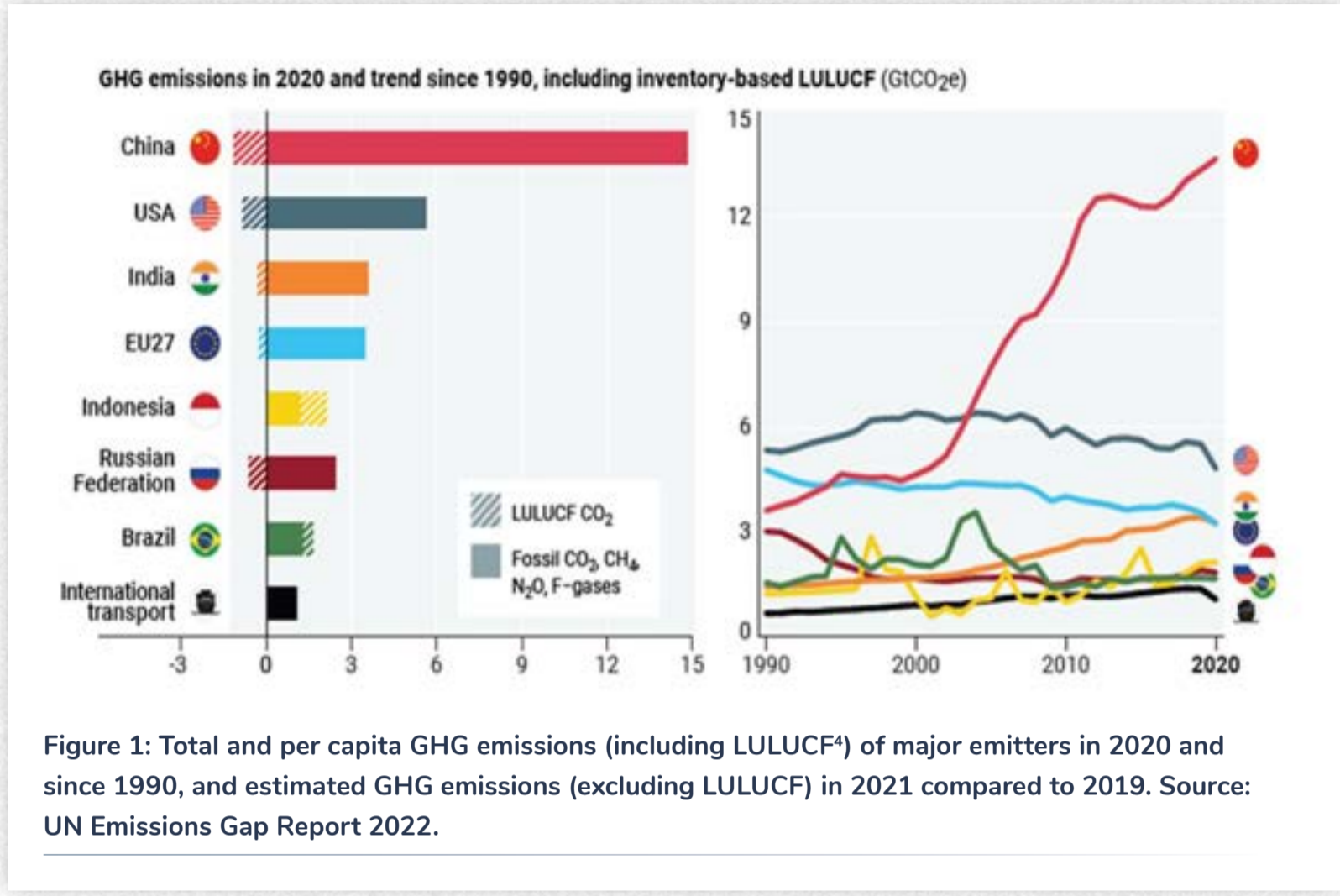
Emissions Gap Report 2022<sup>3</sup>

The United Nations *Emissions Gap Report 2022: The Closing Window* finds that the international community is falling far short of the Paris goals, with no credible pathway to 1.5°C in place. Only an urgent system-wide transformation can avoid climate disaster.

The report's Executive Summary calls out the following points:

- i. The 2022 Report is Testimony to inadequate action on the climate crisis and the need for transformation.
- ii. Global Greenhouse gas (GHG) emissions could set a new record in 2021.
- iii. GHG emissions are highly uneven across regions, countries and households.
- iv. Despite the call for countries to “revisit and strengthen” their 2030 targets, progress since COP 26 is highly inadequate.
- v. G20 members are far behind in delivering on their mitigation commitments for 2030, causing an implementation gap.
- vi. Globally, the Nationally Determined Contributions (NDCs) are highly insufficient, and the emissions gap remains high.
- vii. Without additional action, current policies lead to global warming of 2.8°C over this century. Implementation of unconditional and conditional NDC scenarios reduce this to 2.6°C and 2.4°C respectively.
- viii. The credibility and feasibility of the net-zero emission pledges remains very uncertain.
- ix. Wide-ranging, large-scale, rapid and systemic transformation is now essential to achieve the temperature goal of the Paris Agreement.
- x. The food system accounts for one third of all emissions, and must make a large reduction.
- xi. Realignment of the financial system is a critical enabler of the transformations needed.

3. United Nations Environment Programme (2022). Emissions Gap Report 2022: The Closing Window — Climate crisis calls for rapid transformation of societies. Nairobi. <https://www.unep.org/emissions-gap-report-2022>



**The 2023 Global Climate Highlights Report**, published by the Copernicus Climate Change Service, on behalf of the European Commission, monitored several key climate indicators throughout the year, reporting on record-breaking conditions such as the hottest month on record and daily global temperature averages briefly surpassing pre-industrial levels by more than 2°C.

The reports key findings showed:

- 2023 was the warmest calendar year in global temperature data records going back to 1850.
- 2023 had a global average temperature of 14.98°C, 0.17°C higher than the previous highest annual value in 2016.

- 2023 was 0.60°C warmer than the 1991–2020 average and 1.48°C warmer than the 1850-1900 pre-industrial level.
- It is likely that a 12-month period ending in January or February 2024 will exceed 1.5°C above the pre-industrial level.
- 2023 marks the first time on record that every day within a year has exceeded 1°C above the 1850–1900 pre-industrial level. Close to 50% of days were more than 1.5°C warmer than the 1850–1900 level, and two days in November were, for the first time, more than 2°C warmer.

- Annual average air temperatures were the warmest on record, or close to the warmest, over sizeable parts of all ocean basins and all continents except Australia.
- Each month from June to December in 2023 was warmer than the corresponding month in any previous year.

4. Land use, land-use change and forestry (LULUCF): A GHG inventory sector that covers emissions and removals of GHGs resulting from direct human-induced land use, land-use change and forestry activities.





- July and August 2023 were the warmest two months on record. Boreal summer (June-August) was also the warmest season on record.
- September 2023 was the month with a temperature deviation above the 1991–2020 average larger than any month in the ERA5 dataset.
- December 2023 was the warmest December on record globally, with an average temperature of 13.51°C, 0.85°C above the 1991-2020 average and 1.78°C above the 1850-1900 level for the month.

## HEALTHCARE EMISSIONS

While no national data exists for healthcare emissions in Ireland, Healthcare Without Harm estimate that globally healthcare is responsible for 4.4% of global net emissions. However they also identify that the top three emitters, the United States, China, and collectively the countries of the European Union, comprise more than half the world’s total health care climate footprint (56%)<sup>5</sup>.

All healthcare activities carry a carbon liability, from the energy consumed within the hospital’s buildings, to the vehicles used to transport patients, staff, and visitors, and the products and services used to facilitate its operations.

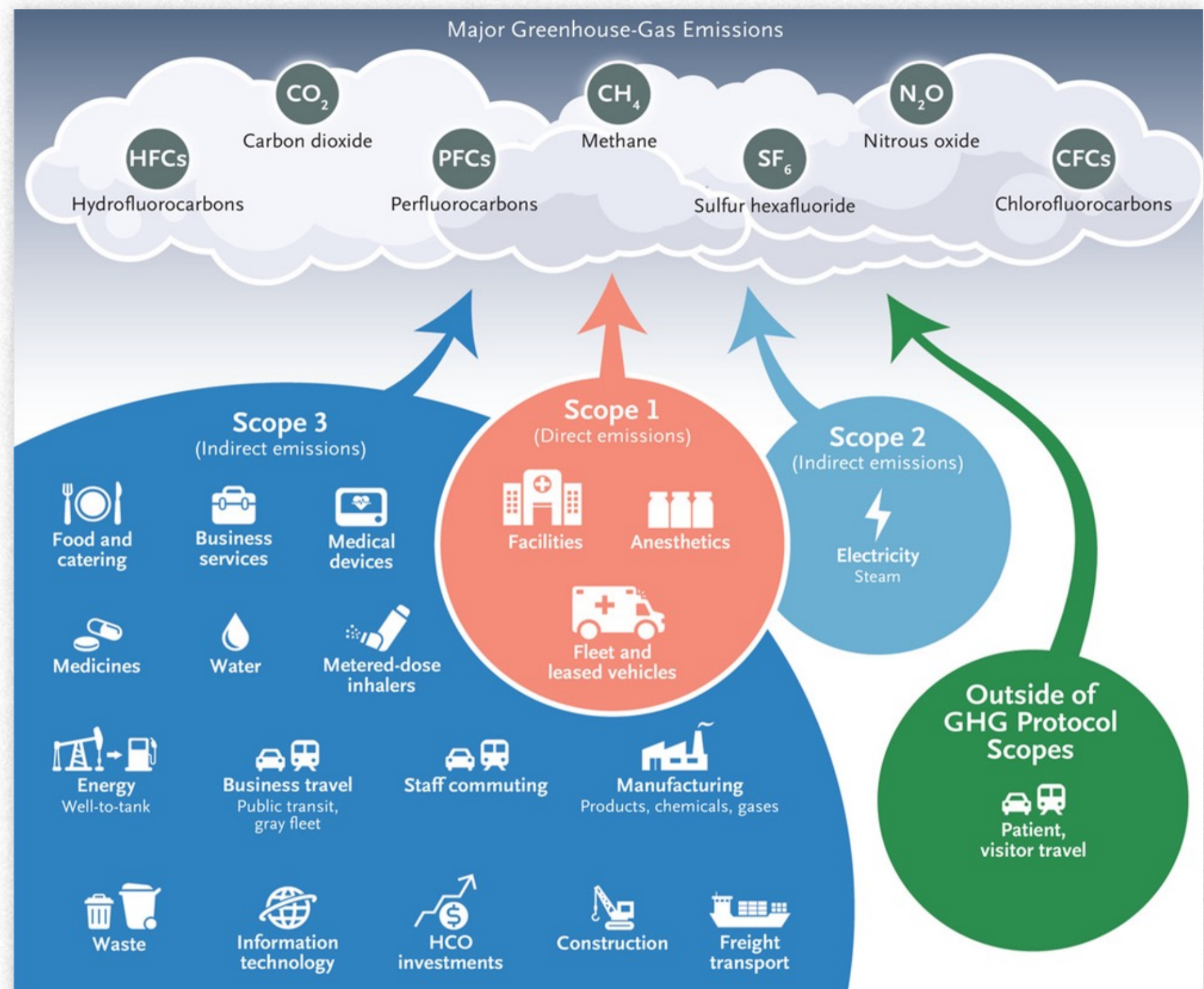


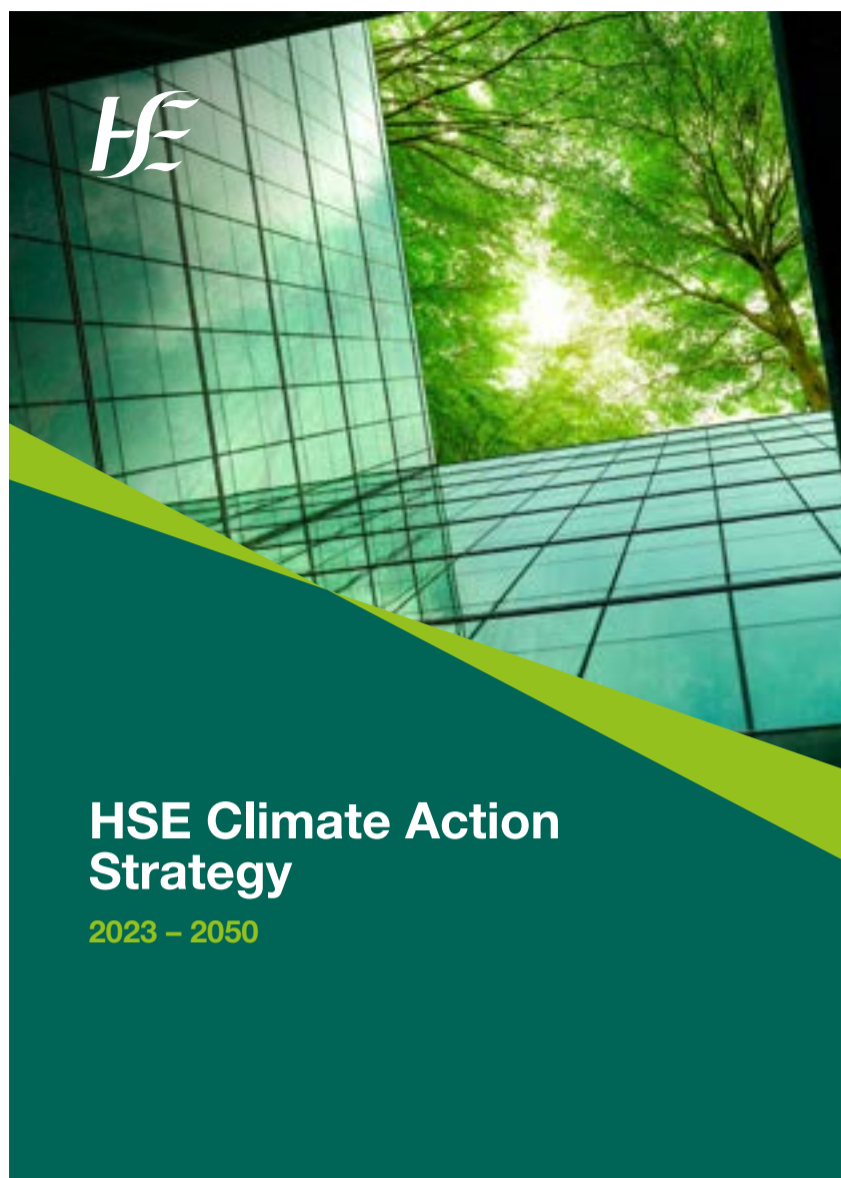
Figure 3: Major Healthcare Greenhouse Gas Emissions. (Source: H Singh et al. N Engl J Med 2022;387:2469-2476 Lenzen M). Lancet Planet Health 2020; 4:e271-9

Broadly speaking, these emissions can be divided into two categories: those it can *control*, and those it can *influence*. Emissions from scopes 1 and 2 are considered to be within the hospital’s

control, whilst emissions from scope 3 attract a more limited level of control and may require more reliance on influence.

5. Healthcare’s Climate Footprint: Healthcare Without Harm and ARUP, September 2019.





Health Service Executive (HSE) Climate Action Strategy 2023-2050

The Health Service Executive's (HSE's) Climate Action Strategy<sup>6</sup> was launched in June 2023. The Strategy provides a Climate Action Roadmap which outlines how the HSE intends to put Ireland on a more sustainable path, cut emissions, create a healthier, cleaner, and greener society, and help protect and prepare the population from the health consequences of climate change. The strategy has 6 Priority Areas of Focus captured in figure 4.



Figure 4: Climate Action Strategy six priority areas of focus.

6. HSE Climate Action Strategy 2023-2050





# RVEEH SUSTAINABILITY AGENDA

**Sustainability Vision:** The Royal Victoria Eye and Ear Hospital will embrace sustainability, be leaders in this space and embed sustainability into the delivery of care for patients.

## OUR OBJECTIVES

- A 50% reduction in Greenhouse Gas (GHG) carbon emissions by 2030 and
- Net Zero Emissions by 2050 at the latest.

## OUR PERFORMANCE

In 2023, nine key priorities were identified, and there associated requirements, that we believed would set the foundations for a successful sustainability programme at the hospital and launch us on the path to Net Zero. The priorities were:

- 1. BASE YEAR:** To establish a base year carbon footprint for the hospital.
- 2. PROCUREMENT:** Embed sustainability in all procurement policies and tenders.
- 3. ENERGY:** To move to renewable electricity and replace natural gas as the hospital's heat source with a heat pump.
- 4. FACILITIES:** Implement an energy efficiency programme for the facilities.

**5. STAFF ENGAGEMENT:** Establish stakeholder groups and broad staff engagement to harness the innovation within the organisation

**6. TRAVEL AND TRANSPORT:** Implement the travel survey action plan.

**7. DIGITAL TRANSFORMATION:** MediSight<sup>7</sup> (electronic health record for ophthalmology) fully implemented with a hybrid solution for ENT patients identified.

**8. TRAVEL AND TRANSPORT:** Establish a pilot e-bike and scooter station at the hospital.

**9. PROCUREMENT PILOT:** Establish a sustainability pilot with a supplier of medicines or medical supplies to the hospital.

**Carbon Footprint:** The selected base year for carbon footprinting is 2022. In that year the hospital emitted 3,907 tCO<sub>2</sub>. 2023 saw a 9.1% reduction in emissions to 3,552 tCO<sub>2</sub>, primarily driven by the switch to renewable electricity and the discontinuation of nitrous oxide (NO<sub>2</sub>) as an anaesthetic agent at the hospital. The reduction in Scope 1 and 2 emissions was partially offset by a 2.8% increase in Scope 3 emissions during the year, driven by an overall increase in hospital activity.

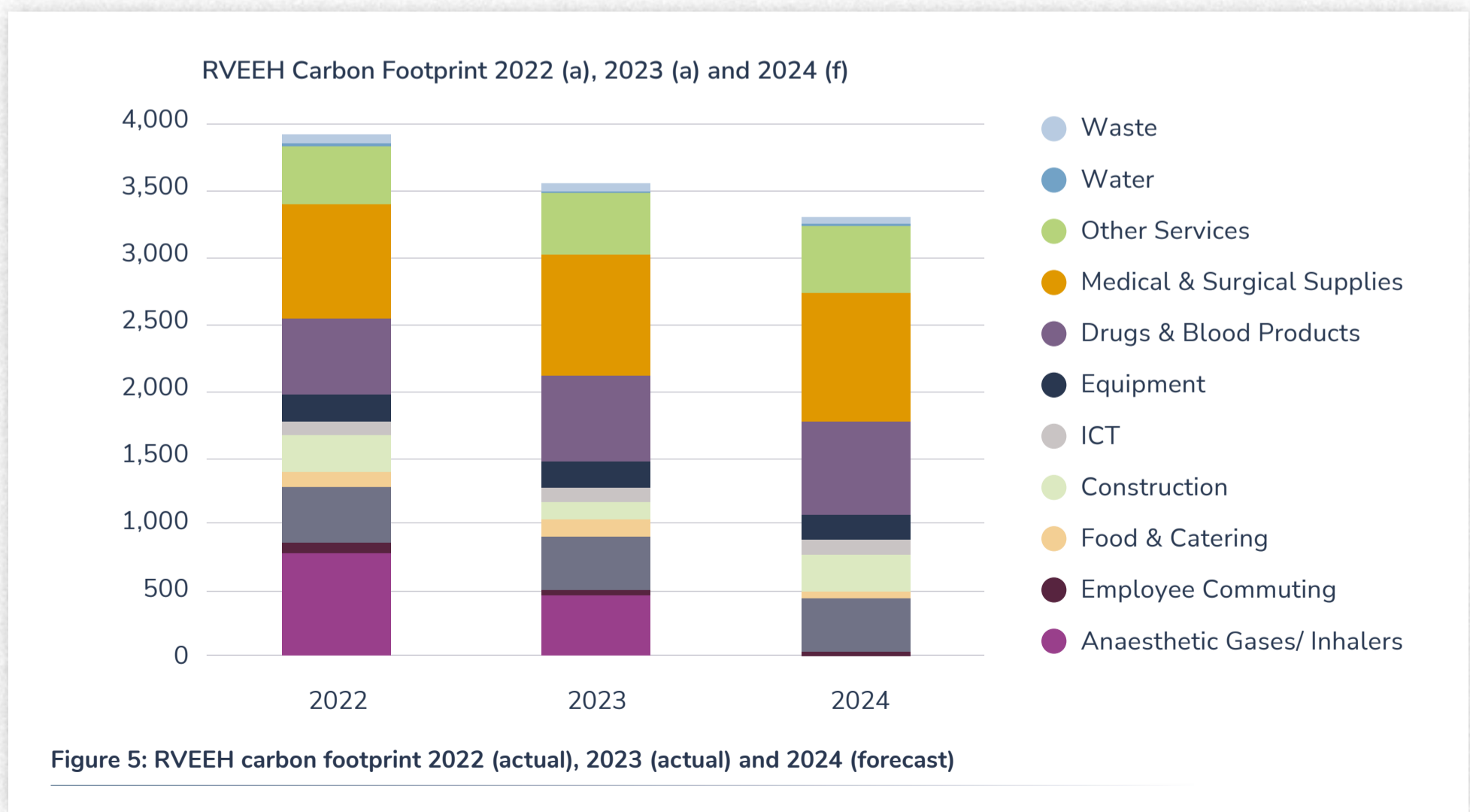


Figure 5: RVEEH carbon footprint 2022 (actual), 2023 (actual) and 2024 (forecast)

7. MediSight is an electronic health record for ophthalmology patients.





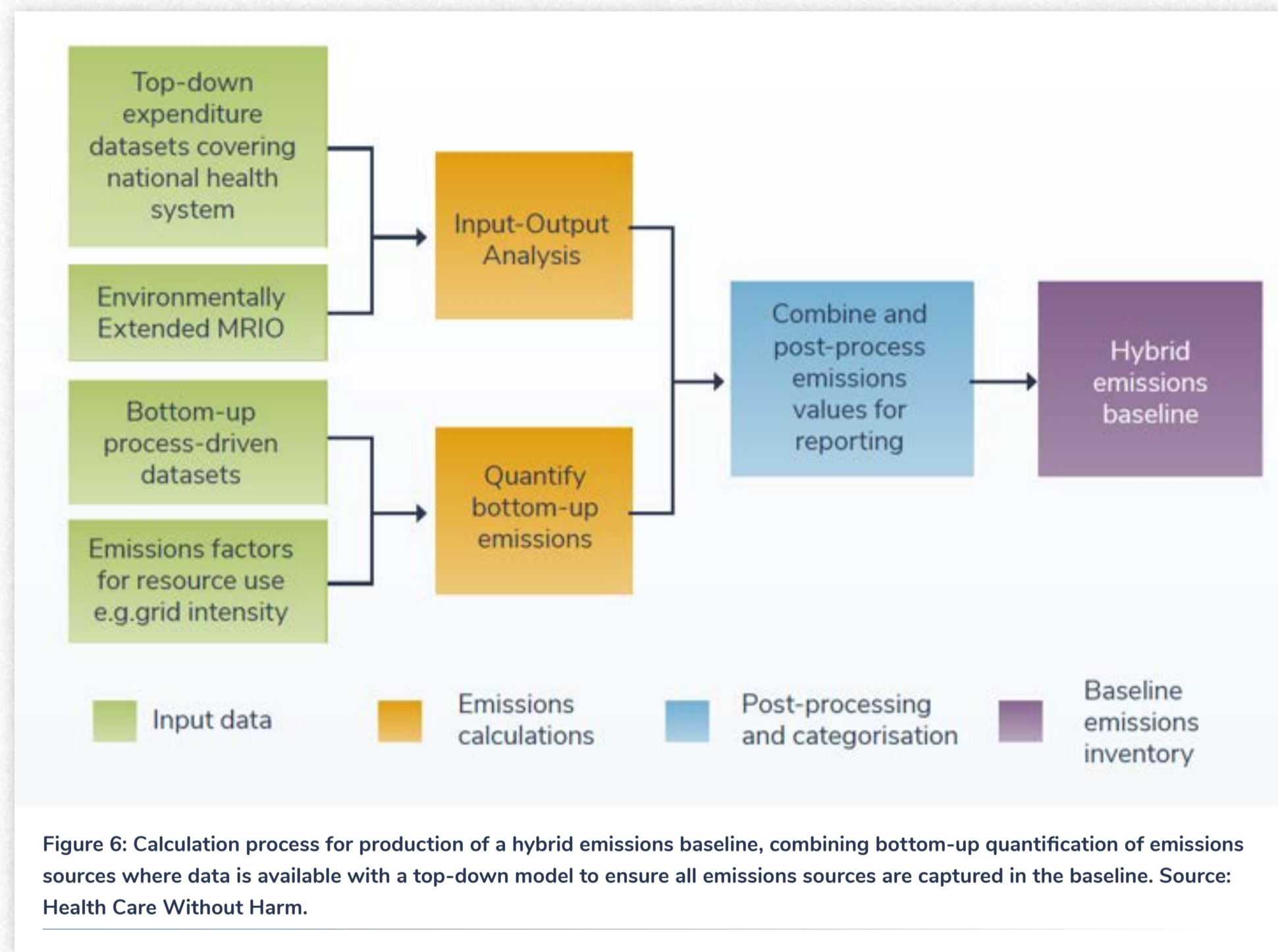
# KEY PRIORITIES PROGRESS

## ESTABLISHING AN EMISSIONS BASE: 2022 BASE YEAR

The RVEEH has good data covering the majority of scope 1 and 2 emissions (energy, anaesthetic gases, inhalers, fugitive emissions and waste) along with good data on employee commuting. However, scope 3 emissions data, through the procurement process, is poor.

It is for this reason that the hospital adopted a twin track process for the establishing of carbon emissions at the hospital. The RVEEH utilised the Global Green and Healthy Hospitals carbon assessment framework, utilising EU-wide data on scope 3 carbon emissions. In parallel, the hospital is undertaking work to map the carbon footprint for all purchased products and individual care pathways, to establish the exact emissions for all scope 3 activities.

This Carbon Footprint assessment utilises the framework and methodology developed by Global Green and Healthy Hospitals (a Healthcare Without Harm Programme) and captured in the “Technical Methodology and Guidance<sup>8</sup>” framework, using a hybrid model of emissions data per provider and utilising the EU validated Environmentally-Extended Input-Output (EEIO) and Multi-Regional Input-Output (MRIO) databases.



This Technical Methodology and Guidance framework was developed through Health Care Without Harm Europe’s Operation Zero project, specifically by and for the healthcare sector. The framework and methodology were developed in partnership with the Department

of Epidemiology Lazio, Regional Health Service (Italy), the Ministry of Health, Welfare and Sport (Netherlands), the National Institute for Public Health and the Environment (Netherlands), the Central Administration of the Health System (Portugal) and Radboud University Medical Centre (Netherlands) and Arup.

8. Designing a Net Zero Roadmap for Healthcare: Technical Methodology and Guidance, Healthcare Without Harm 2022.



## ENERGY AND FACILITIES INITIATIVES

**ELECTRICITY:** In February 2023 the hospital switched providers and moved to 100% renewable electricity for the hospital. Thereby eliminating 270 tCO2 on an annual basis.

**HEAT PUMP:** A Heating System Feasibility Study carried out at the hospital concluded:

- **Site Suitability:** A multi-functional all-electric two stage heat pump can be deployed at the hospital.
- **Heating Demand:** The deployment of a heat pump would meet 100% of the thermal load of the main boiler at the hospital.
- **Combined Heat and Power (CHP):** The CHP can be decommissioned in parallel with the deployment of the heat pump system. The removal of the CHP system will increase the draw on the electricity usage by the hospital but produces a far more efficient energy usage system.

A business case for the replacement of the current heating system was submitted to HSE Estates and has been approved subject to funding. The deployment of a heat pump system in 2024 would eliminate 510 tCO2 annually, while the increased usage in electricity will be mitigated by the hospitals move to renewable electricity.

**WASTE:** A Waste and Materials Management Committee has been established to address the significant waste generated by the hospital.

The hospital produced approximately 106 tonnes of waste in 2022 of which:

- 55% was recycled
- 20% was compostable (primarily food waste).
- 25% sent to landfill or incineration.

The hospital has undertaken an assessment of putting a biodigester on site. A biodigester would take the 20 tonnes of annual food waste plus all biodegradable items that we use at the hospital and turn it into compost. The options for use of the compost generated include use on the grounds of the hospital, sharing with local green spaces, sharing with staff or removal by a company for onward use/sale. International evidence shows that immediate composting of these products reduces the carbon footprint of the product by approx. 50%. Currently food waste at the hospital accounts for 100 tCO2 annually.

**WINDOWS PROGRAMME:** The hospital has over 160 beautiful, but highly energy inefficient, sash windows in it's main building. The hospital identified a company that deploys a brush system on both the frame and the window and reduces the energy loss by approximately 90%. We prioritised 60 of the most inefficient windows to be refurbished and that work was completed in 2023. The programme will continue in 2024.



**LED LIGHTING:** In September 2023, the hospital undertook a lighting survey that:

- Mapped each existing type of light fitting in each room or corridor in the hospital.
- Identified the fitting installation type in each room.
- Captured the bulb type and electrical wattage of each fittings in each room.
- Developed a list of proposed fittings and their associated cost.

We have developed a business case, that has been approved, subject to funding by the Energy Bureau (collaboration between the HSE and Sustainable Energy Ireland) with a view to implementing a switch project in the first half of 2024.





## STAFF ENGAGEMENT

**EMPLOYEE ENGAGEMENT:** The RVEEH has engaged a specialist employee engagement company called Consideration, to mobilise employee engagement and innovation to achieve the sustainability goals of the hospital. The following metrics will be reported during the project:

- **Employee participation:** Increased levels as measured by contributions, comments, votes, time spent.
- **Idea Translation:** The increase in ideas and implemented i.e ideas suggested and ideas implement per 100 people on a quarterly and annual basis.

- **Blockages:** Identification of blockages to behavioural change with suggested changes.

**EDUCATION:** All staff have been offered the opportunity to attend sustainability courses to upskill them to help us address the challenges we face.

The Centre for Sustainable Healthcare in the UK is a popular choice as it covers a wide range of courses from introductory to embedding sustainability in quality improvement projects.

**STAFF INDUCTION:** The hospital's induction programme now includes sustainability as a compulsory module for all new staff joining the hospital.

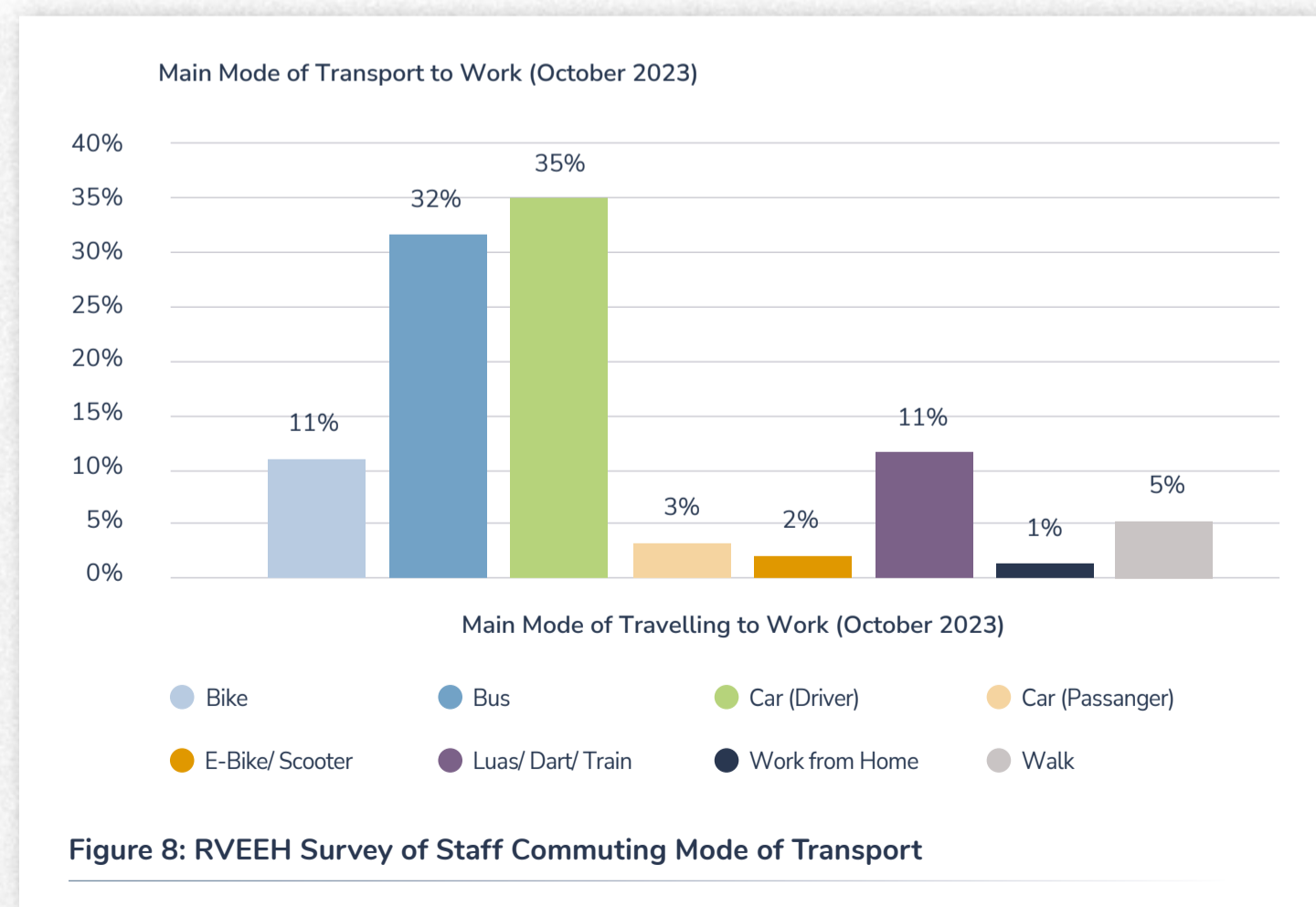
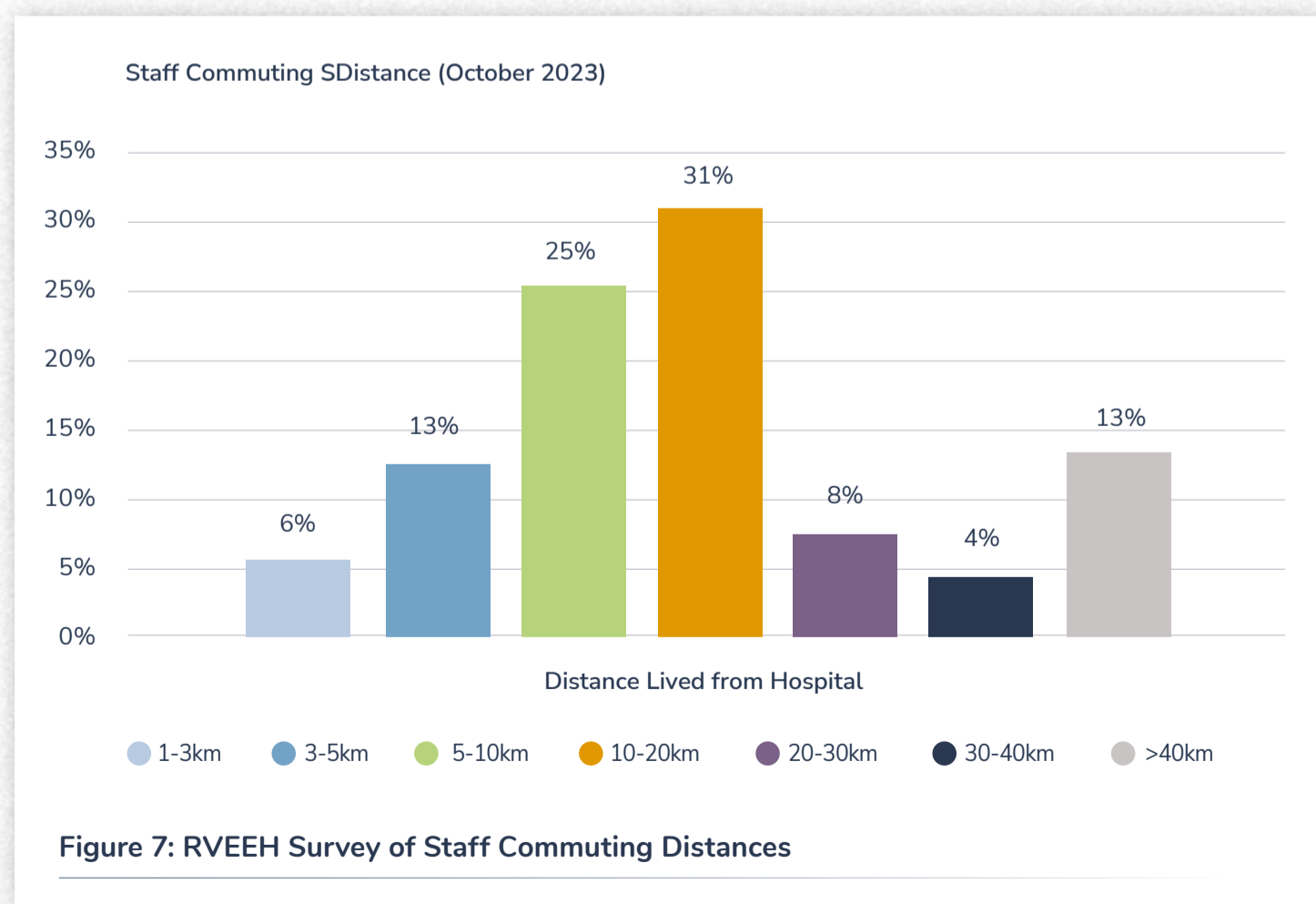
**STAFF FORUM:** The hospital has run several sustainability forums for staff. These forums have the dual purpose of informing staff of our progress/plans

to date and to encourage them to get involved in sustainability initiatives. A Sustainability Week is planned for the late spring 2024.

## TRAVEL AND TRANSPORT

Staff commuting accounts for 408 tCO2 in 2022, with business travel (primarily for medical conference attendance) accounting for a further 7 tCO2. Staff commuting emissions are reflective of geographical location and staff numbers.

Staff commute distances have been derived from travel survey data in which employee average distance from office to home, number of days per week at the hospital and method of transport is recorded.





## DIGITALISATION

**STOCK CONTROL SYSTEM:** The hospital is in the process of tendering for a new Stock Control System. The system will be a combined stock management and stock control system. The stock management component will allow us to have real time data on all products flowing into and used in the hospital. In addition, it will enable the hospital to build its “bottom up” capability for carbon emissions at the hospital. The stock control component provides a “track and trace” capability that enables the tracking of products to an individual patient level.

**MEDISIGHT:** The elimination of paper and scanning of reports is an important goal for the hospital. The ophthalmology electronic patient record (MediSight) is central to that delivery. MediSight is now fully functional in the 4 community clinics, the macular unit, the glaucoma service and the cataract unit. In 2024 we will seek to fully digitalise the Emergency Department and the remaining out-patient clinics.

On the ENT side of the house, in the absence of a national electronic patient record or a bespoke ENT electronic record, we are seeking to move forward with a hybrid option that significantly reduces the amount of physical records.

## PROCUREMENT

**Policy:** The hospital’s procurement policy was updated in 2023 and approved by Council (the Board of the hospital). The updated policy includes a sustainability component in all purchasing decisions at the hospital.

In addition, we are now actively seeking out providers of lower carbon products. For example in January 2023 we met a start-up Irish company (HaPPE Earth) that is producing compostable PPE. We completed the evaluation of their compostable single use apron. The Infection Control team reviewed and approved it’s equivalence to what was being used and the price was also in an acceptable range. A year long pilot with HaPPE Earth commenced in February, 2023. The hospital uses approximately 25k aprons per annum, with the new product reducing the carbon emissions by 65% per apron.

## SUSTAINABLE MODEL OF CARE

**SURGICAL INSTRUMENTS:** The RVEEH is looking to changing the way it purchases surgical instruments. Currently the hospital purchases approx. 2,500 disposable cataract instrument packs that go directly to landfill. We have agreed, in line with the opening of the new cataract theatre, to move to reusable instruments that will be reprocessed through the Clinical Decontamination Unit (CDU) as part of our initiative to create a sustainable cataract service.

Additional sustainable actions include:

- Electronic submission of weekly roster, digital lens implant and stock management.
- EMR for >90% of patients
- Daily monitoring of waste.

## CATARACT PATHWAY CARBON

**FOOTPRINT:** An MD student, is working with Prof Conor Murphy, whose thesis is on mapping the carbon footprint of the whole cataract pathway and will include the patient’s full journey of care. The project should yield significant information that enables the hospital to adapt it’s practices and changes it’s purchasing behaviour.





## RVEEH COMMUNITY CLINICS AND HOSPITALS

Tallaght ● ● Churchtown  
 Kildare ●  
 Wicklow ●

### COMMUNITY CLINICS:

The National Clinical Programme for Ophthalmology, (Model of Eye Care, May 2017) calls for the development of multidisciplinary primary eye care teams, enabling most patients to be seen in their own locality, and with all team members working in the same location.

This model of integrated eye care has been rolled out between the Royal Victoria Eye and Ear Hospital and Community Healthcare Organisation 6 and Community Healthcare Organisation 7. In 2023 there were four community clinics (see graphic above) who saw over 11,000 patient visits in that year.

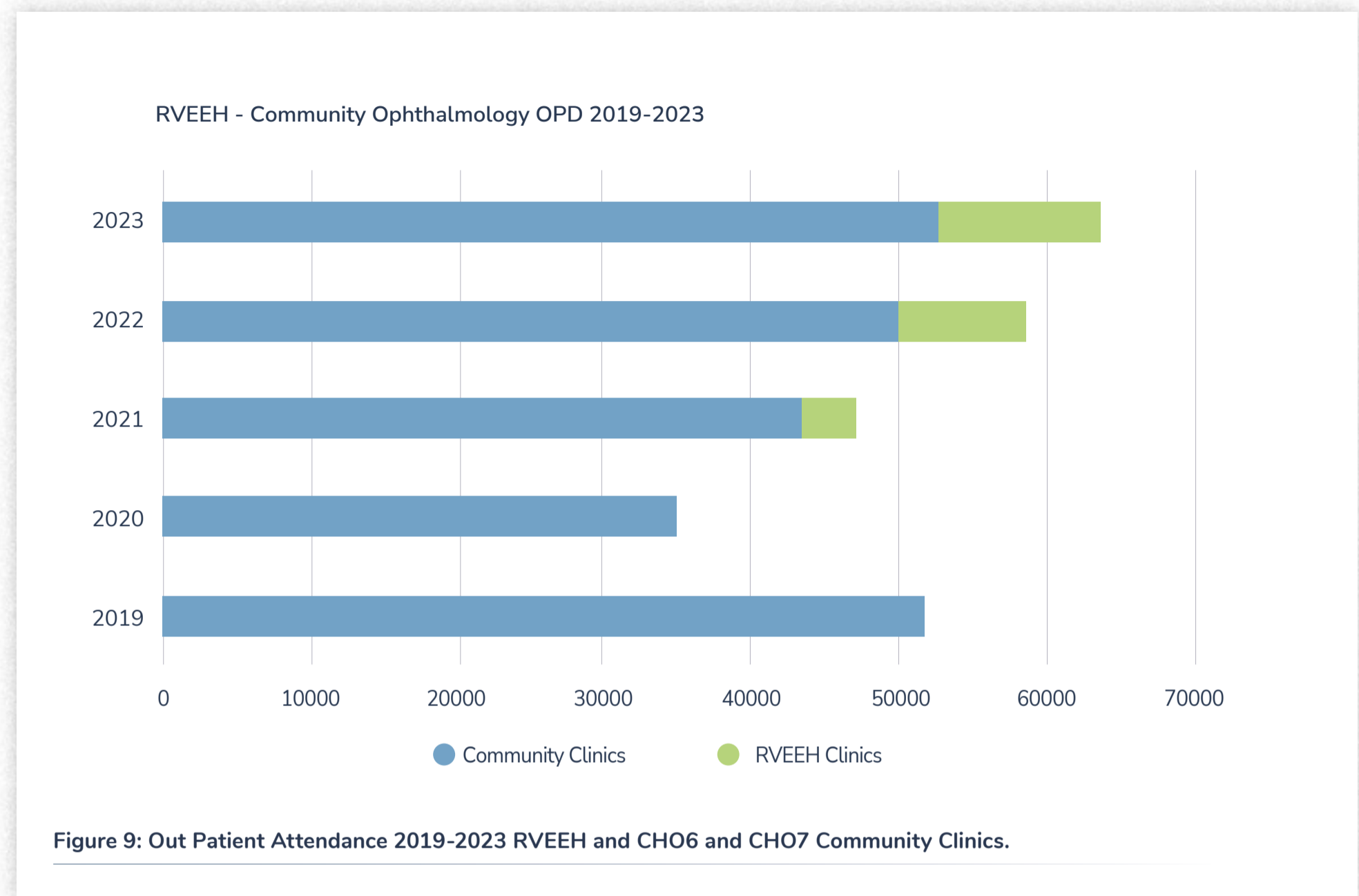


Figure 9: Out Patient Attendance 2019-2023 RVEEH and CHO6 and CHO7 Community Clinics.

While the Model of Eye Care was not developed with a sustainability agenda in mind, it does have the benefit of reducing the travel requirements for patients and a fifth community clinic is planned for the midlands in 2024.

**SUSTAINABILITY NETWORK:** The RVEEH has joined the Global Green and Healthy Hospitals (GGHH) Network of hospitals, healthcare facilities and health systems. The GGHH Network has over 1,750 members in more than 80 countries who are dedicated to reducing their environmental footprint and promoting public and environmental health.

- **Quarterly Member Meetings:** A forum for discussing sustainability issues and initiatives.
- **GGHH Connect:** Is an innovative, online platform, for the GGHH member community that provides tools resources, guidance documents and case studies.
- **Data Centre:** That shares data on initiatives, carbon footprints and other areas relating to sustainability.



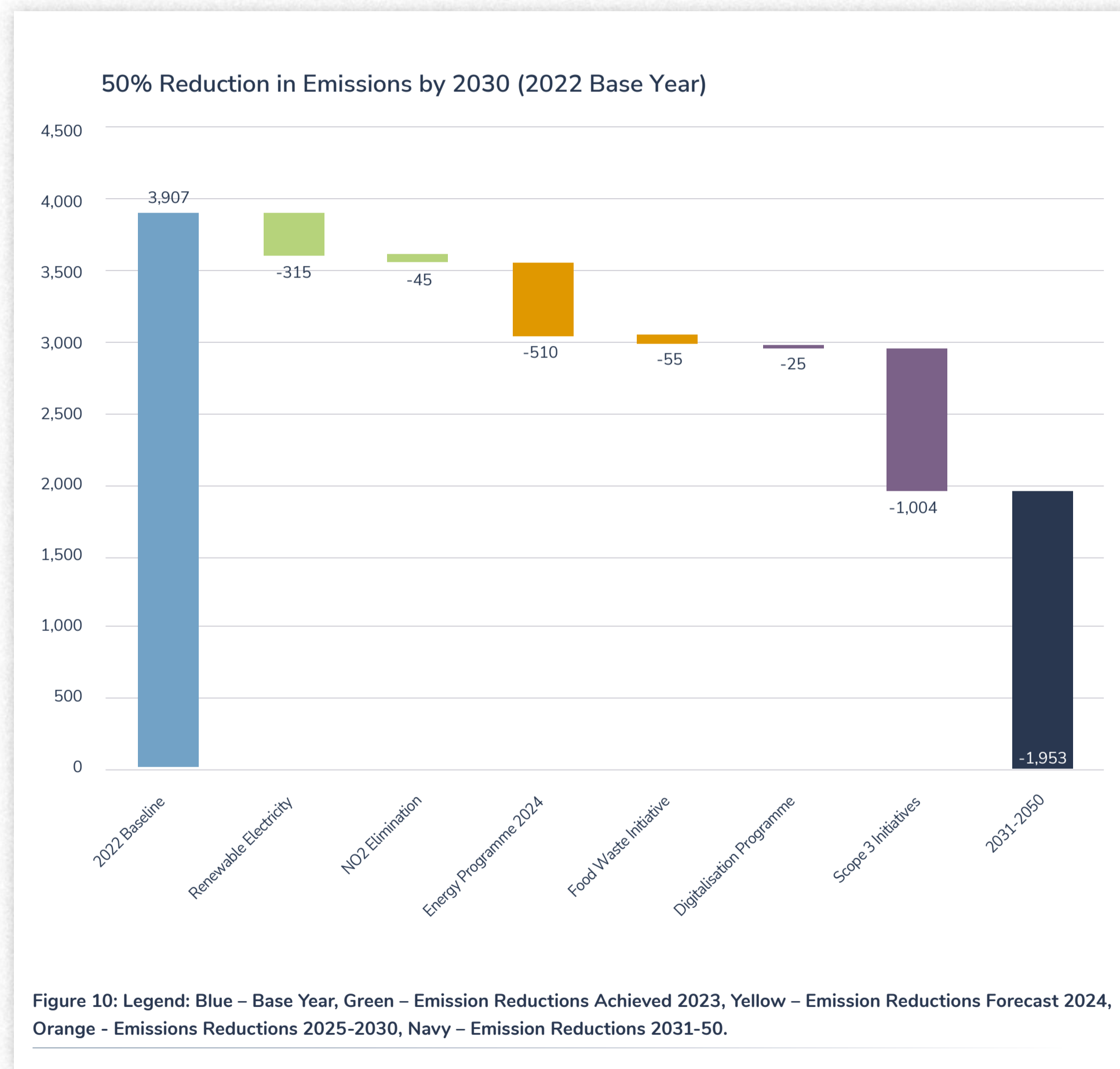


# SUSTAINABLE JOURNEY TO 2030

The Royal Victoria Eye and Ear Hospital has taken a leadership position on sustainability. The hospital recognises that we are facing a climate emergency and we are committed to working in partnership with all our stakeholders to deliver high quality care in a net zero environment.

Emission reductions have already occurred in 2023 through moving to renewable electricity and the elimination of nitrous oxide use in anaesthetics. 2024 will also deliver energy and waste savings through our move away from natural gas to heat pumps and the reduction of food waste emissions with the deployment of a biodigester on site.

A reduction of over 1,000 tCO2 from Scope 3 emissions is required for the hospital to meet its 2030 target of a 50% reduction in emissions by 2030. Utilising Health Care Without Harm’s framework we have identified high-impact procurement that will be a major part of our focus over the next 2 years. “High-impact” means the category can play a significant role in the health and safety of patients, staff, and the environment. The list of activities is outlined below and is sorted by area.







No.	Procurement Category	Sustainable Alternatives	Status
<b>Greenhouse Gas Reduction</b>			
1.	Renewable Energy	Renewable Electricity	100% renewable electricity by 2023.
2.	Renewable Energy	Natural Gas Replacement	Gas to be replaced by heat pump in 2024.
3.	Anaesthetic Gases	Remove nitrous oxide and desflurane. Set target for further reductions.	Nitrous oxide and desflurane ceased in 2023. Develop programme to deliver reductions.
4.	Lighting	Energy-efficient lighting (LED)	Hospital to switch remaining old style lighting to LED in 2024.
5.	Shipping and Distribution	Fuel efficient distribution	Incentivise through procurement process products with lower transport emissions.  Move to EV delivered procurement by 2027.

<b>Toxicity Reduction</b>			
6.	Disinfectants	Safer high-level disinfectants	Eliminate glutaraldehyde and bleach as on-site disinfectants. Alternatives include peracetic acid (acetic acid and hydrogen peroxide), steam sterilization, OPA (ASP Cidex OPA, Metrex MetriCide OPA), hydrogen peroxide.
7.	Sterilants	Safer sterilants	Eliminate the use of ethylene oxide. Alternatives include steam sterilization, ozone plasma (3M Optreoz with TSO3 Sterizone technology), low-temperature hydrogen peroxide gas plasma (Sterrad), peracetic acid (Steris 1 or 1E).
8.	Furniture and furnishings (sofas, chairs, work surfaces, built-in and modular casework, storage walls, shelving, panels, beds, window coverings, and cubicle curtains)	Furniture without chemicals of concern.	Eliminate the use of formaldehyde, per- and poly-fluorinated alkyl substances (PFAS), polyvinyl chloride, antimicrobials, and flame retardants.







No.	Procurement Category	Sustainable Alternatives	Status
Toxicity Reduction			
9.	Cleaning Services	Sustainable Cleaning	Inventory cleaning products and purchase 90% Green Seal, UL ECOLOGO-certified or Nordic Swan ecolabel cleaning products in the following categories: carpet, window, all-purpose, bathroom, and general floor care.
10.	1. Nutrition products. 2. Tubes. 3. Gloves. 4. Respiratory products	Eliminate PVC and DEHP from at least two product categories.	Incentivise through procurement process products with lower transport emissions.  Move to EV delivered procurement by 2027.
11.	Hand hygiene products	Hand hygiene products without triclosan and triclocarban.	Eliminate triclosan and triclocarban-containing hand hygiene products throughout the hospital. Achieve 80% of hand hygiene products that do not contain triclosan and triclocarban by 2026.
12.	Flooring	Resilient flooring without chemicals of concern.	Resilient flooring: All new flooring by 2026 to meet the healthy flooring silver or gold-level criteria.
13.	Products containing mercury	Mercury-free	Achieve mercury-free status by 2027 using Health Care Without Harm's mercury free alternatives.
14.	Pesticide/pest management services	Integrated pest management.	Implement an integrated pest management programme.  Eliminate the use of high-hazard pesticides.
15.	Electronics	Sustainable Electronics	Specify, purchase, and report expenditures on sustainable electronics with a goal of 80% registered with EPEAT (Electronic Product Environmental Assessment Tool) by 2026.



No.	Procurement Category	Sustainable Alternatives	Status
<b>Resource Conservation</b>			
16.	Medical and Surgical Devices	Reusable medical and surgical devices; collect and purchase reprocessed single use devices.	Collect and purchase 20% reprocessed non-invasive devices.
17.	Instruments, equipment, clothing, gowns and aprons.	Reusable, reprocessable; avoid single use disposable supplies.	Implement Practice Greenhealth's guidelines on reusing and reprocessing.
18.	Custom Surgical Kits	Review and reformulate kits for efficiency.	Review and reformulate 80% of theatre kit types by 2026.

<b>Healthier Food</b>			
19.	All Food Products	Locally produced and processed food.	Target for 2024 is 40% of total food budget is allocated locally produced and processed food.
20.	Plant-based proteins: beans, lentils, nuts, and more	Sustainable	<p>A minimum of 20% of all products are produced using sustainable production practices based upon verifiable certifications and label claims.</p> <p>Increase sourcing and menuing of whole food, plant proteins for human and environmental health benefits.</p>
21.	Meat: beef, pork, and poultry.	Sustainable	<p>A minimum of 20% of all animal products are raised without the routine use of non-therapeutic antibiotics based upon verifiable certifications and label claims.</p> <p>A minimum of 20% of all animal products are raised using sustainable production methods based upon verifiable certifications and label claims.</p>
22.	Beef, pork, poultry, and dairy.	Reduction	Reduce procurement of animal products by 5% per year for a total reduction of 25% from baseline by 2030.







# SUSTAINABLE PROCUREMENT POLICY

## PURPOSE

In support of the Royal Victoria Eye and Ear Hospital’s mission to improve the health of our patients, staff, and communities, we are committed to applying sustainable procurement guidelines and specifications to purchasing decisions.

The hospital has chosen to embed sustainable procurement practices in its day to day activities.

With Scope 3 emissions accounting for 78% of the hospital’s emissions, a sustainable procurement has the most positive environmental, social, and economic impacts for the planet and the organisation. Sustainable procurement considers these impacts over the entire life cycle of products and services purchased and strives to minimise adverse impacts. Sustainable procurement means making sure our suppliers – and the products and services they deliver – offer value and generate benefits not only for the hospital but also for the environment, society, and economy.

The Royal Victoria Eye and Ear Hospital will evaluate the social, economic (innovation, local suppliers, supplier diversity) and environmental health impacts (greenhouse gas emissions, waste, chemicals/toxicity) throughout the life cycle of products and services in an effort to select healthy and safe products and services that are also environmentally sound. Hospital personnel involved with product selection will communicate

to the marketplace that the Royal Victoria Eye and Ear Hospital expects suppliers to continuously develop price-competitive products that conform to our sustainable procurement guidelines and specifications.

## PRINCIPLES OF SUSTAINABLE PROCUREMENT FOR HEALTHCARE

**Transparency, accountability, and fairness:** The hospital is accountable for its impacts on society, transparent in its decisions and activities, and fair in its decision-making. Sustainable procurement reduces our reputational risks and upholds integrity and responsibility within supply chains.

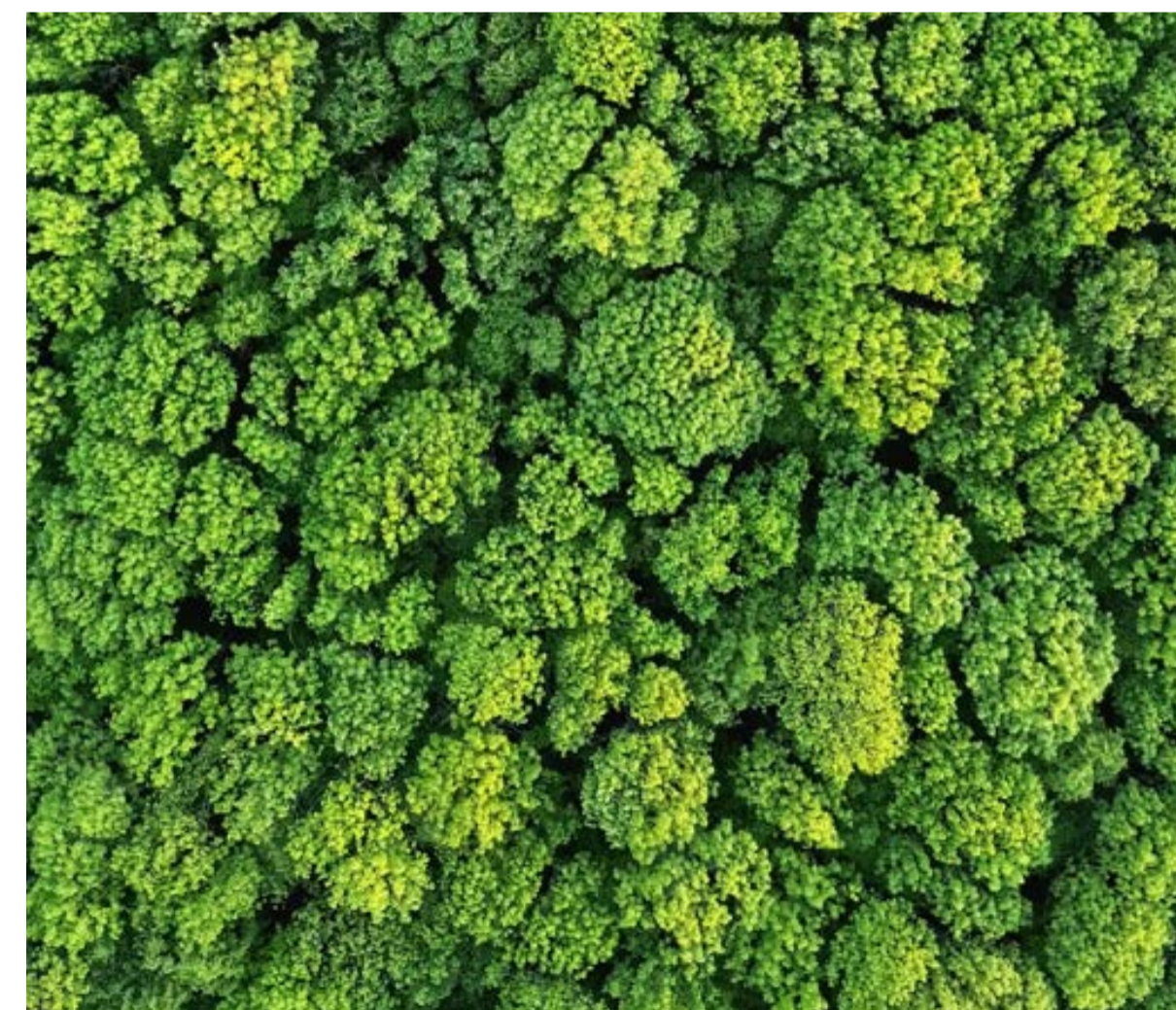
**Analyse all costs:** The hospital will consider cost incurred over the life cycle of the product or service (total cost of ownership), best value for money, and costs and benefits to society, and the environment resulting from procurement activities.

**Act ethically:** The hospital should ensure sustainable procurement has integrity, encourages diversity and avoids corruption.

**Encourage innovative solutions:** The hospital seeks solutions to address sustainability objectives and encourage innovative procurement practices to promote more sustainable outcomes throughout the entire supply chain.

**Work towards continual improvement:** The hospital seeks to continually improve its sustainability practices and outcomes through standing reviews and encourage its supply chain to do the same.

**Support local production:** The hospital seeks to implement procurement policies and practices that allow locally produced content to become an integral component of sourcing. Sourcing from local suppliers can create economic benefits for communities where health facilities reside and generate economic sustainability through job creation.



# APPENDIX 1: PROGRESS TO DATE



## Energy and Facilities

**Overarching Objective:** Reduce the environmental impact of the buildings and site.

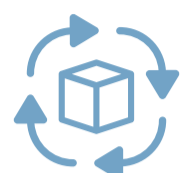
Objectives	Measures	Assessment	Comment
Transition to zero emissions for energy consumption by 2030.	<ul style="list-style-type: none"> <li>Switch to renewable electricity.</li> <li>Replace gas system at hospital with heat pump.</li> </ul>	<ul style="list-style-type: none"> <li>●</li> <li>●</li> </ul>	<ul style="list-style-type: none"> <li>Hospital switched to renewable electricity in February 2023.</li> <li>Business case for funding of heat pump submitted to HSE Estates.</li> </ul>
Implement an ongoing programme of energy and water efficiency schemes.	<ul style="list-style-type: none"> <li>Sash Window Programme to reduce heat loss.</li> <li>Roof upgrade to reduce heat loss.</li> <li>Replacement of all lighting with LED.</li> </ul>	<ul style="list-style-type: none"> <li>●</li> </ul>	<ul style="list-style-type: none"> <li>Sash window programme underway approximately 20% windows completed.</li> <li>Business case for roof upgrade submitted to HSE Estates.</li> <li>LED replacement programme to be completed by Q2 2024.</li> </ul>
Ensure new developments and major refurbishments are net zero carbon.	<ul style="list-style-type: none"> <li>Build into tender requirements on all new build projects.</li> </ul>	<ul style="list-style-type: none"> <li>●</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing.</li> </ul>
Protect and enhance biodiversity at Adelaide Road.	<ul style="list-style-type: none"> <li>Develop and implement a Biodiversity Action Plan.</li> </ul>	<ul style="list-style-type: none"> <li>●</li> </ul>	<ul style="list-style-type: none"> <li>Plan developed. Phase 1 implemented in 2023 with phase 2 in Spring 2024.</li> </ul>





# Workforce and Systems Leadership

Overarching Objective: Leverage the knowledge, expertise and innovation of all staff to deliver sustainability.			
Objectives	Measures	Assessment	Comment
Support staff to improve sustainability at work and home and empower them to make sustainable choices.	<ul style="list-style-type: none"> <li>• Include sustainability as part of induction programme for new staff.</li> <li>• Upskill staff through in-house education programmes and external experts.</li> </ul>	<ul style="list-style-type: none"> <li>• ●</li> <li>• ●</li> </ul>	<ul style="list-style-type: none"> <li>• All staff from January 2024 will have sustainability as part of induction.</li> <li>• External courses offered to staff on a phased basis.</li> </ul>
<p>All managers to have sustainability included within their annual objectives.</p> <p>All staff clear in their roles in delivering this strategy</p>	<ul style="list-style-type: none"> <li>• To be included in all roles by end of 2024.</li> </ul>	<ul style="list-style-type: none"> <li>• ●</li> </ul>	<ul style="list-style-type: none"> <li>• HR working on phased roll-out.</li> </ul>
Sustainability to be included in all new job descriptions.	<ul style="list-style-type: none"> <li>• All new job descriptions to include sustainability.</li> </ul>	<ul style="list-style-type: none"> <li>• ●</li> </ul>	<ul style="list-style-type: none"> <li>• To be implemented by end 2024.</li> </ul>
Engage with all members of staff, patients and visitors to secure Net-Zero and sustainability goals by embedding knowledge and understanding and implementing green policies and programmes.	<ul style="list-style-type: none"> <li>• Specialist company (Consideration) has been engaged to capture ideas from all staff.</li> </ul>	<ul style="list-style-type: none"> <li>• ●</li> </ul>	<ul style="list-style-type: none"> <li>• To be implemented by Q2 2024.</li> </ul>



# Supply Chain and Procurement

**Overarching Objective:** Embed sustainability as a core criteria in supply chain and procurement.

Areas of Focus	Measures	Assessment	Comment
A procurement culture and processes that shift consumption to sustainable products and services and considers broad criteria including: <ul style="list-style-type: none"> <li>i. Materials.</li> <li>ii. Buy locally where possible.</li> <li>iii. Workforce.</li> <li>iv. Manufacturing processes and transport.</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation of new procurement policy for all purchases.</li> <li>• Target set for % of food produced locally.</li> <li>• % of theatre kits reprocessed rather than disposed.</li> <li>• % materials compostable.</li> </ul>	●	<ul style="list-style-type: none"> <li>• Major focus for 2024.</li> </ul>
Develop robust internal procurement policy and procedures that support the sustainability agenda.	<ul style="list-style-type: none"> <li>• Policies in place.</li> <li>• New stock management system to be deployed.</li> </ul>	●	<ul style="list-style-type: none"> <li>• New stock management system to be fully deployed by Q3 2024.</li> </ul>
Include sustainability criteria in procurement, tender evaluations, framework design and selection, and product selection.	<ul style="list-style-type: none"> <li>• Complete.</li> </ul>	●	
Work innovatively with collaborators and suppliers on sustainable approaches.	<ul style="list-style-type: none"> <li>• Ongoing programmes in place on waste, PPE and surgical instruments</li> </ul>	●	<ul style="list-style-type: none"> <li>• Ongoing</li> </ul>
Promote a culture of reuse and refurbishment of items.	<ul style="list-style-type: none"> <li>• In early stages, with a focus on a small number of areas.</li> </ul>	●	<ul style="list-style-type: none"> <li>• Seek to expand in 2024.</li> </ul>
Regularly audit waste and follow up on issues identified.	<ul style="list-style-type: none"> <li>• In place.</li> </ul>	●	<ul style="list-style-type: none"> <li>• Ongoing</li> </ul>





# Digital Transformation

**Overarching Objective: Reduce the environmental impact of the buildings and site.**

Objectives	Measures	Assessment	Comment
Transition to a paper free environment for MediSight.	<ul style="list-style-type: none"> <li>100% of ophthalmology OPD clinics and ED using MediSight by end 2024.</li> <li>Seek alternative system for ENT.</li> </ul>	●	<ul style="list-style-type: none"> <li>Ongoing.</li> </ul>
Referrals to RVEEH (including ophthalmology community clinics) to be 80% electronic by 2023.	<ul style="list-style-type: none"> <li>In place</li> </ul>	●	<ul style="list-style-type: none"> <li>Ongoing</li> </ul>
Facilitate, virtual and telephone patients consultations in line with sustainable care pathways.	<ul style="list-style-type: none"> <li>Telehealth and e-referral systems in place.</li> <li>Community clinics undertaking pre-operative and post-operative assessment remotely from hospital.</li> </ul>	●	<ul style="list-style-type: none"> <li>Ongoing</li> </ul>
Reduce the use of paper records printing and postage.	<ul style="list-style-type: none"> <li>Target 20% reduction by end 2024.</li> </ul>	●	<ul style="list-style-type: none"> <li>Behind schedule.</li> </ul>



## Food, Nutrition and Waste

**Overarching Objective:** To reduce the CO2 emissions from food made, processed or served within the hospital.

Objectives	Measures	Assessment	Comment
<p>Use local suppliers.</p> <p>Procure food in line with our sustainable procurement objectives – where possible use local suppliers.</p>	<ul style="list-style-type: none"> <li>• Target set for % of food produced locally.</li> </ul>	●	<ul style="list-style-type: none"> <li>• Ongoing.</li> </ul>
<p>Provide and promote interesting and attractive plant based meals.</p>	<ul style="list-style-type: none"> <li>• New options developed in conjunction with catering team.</li> </ul>	●	<ul style="list-style-type: none"> <li>• Ongoing</li> </ul>
<p>Effective waste management: appropriate waste disposal routes available and a focus on moving waste up the waste hierarchy.</p>	<ul style="list-style-type: none"> <li>• Waste Management Committee in place.</li> <li>• Quarterly review of waste data.</li> <li>• Programme in place to reduce waste.</li> <li>• Baseline waste segregation audit completed.</li> </ul>	●	<ul style="list-style-type: none"> <li>• Ongoing</li> </ul>
<p>Deliver on the Food and Nutrition Policy and Food and Drink Programme.</p>	<ul style="list-style-type: none"> <li>• In place</li> </ul>	●	<ul style="list-style-type: none"> <li>• Ongoing</li> </ul>

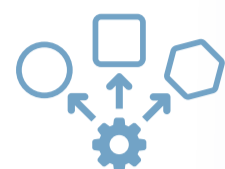




## Medicines

**Overarching Objective:** Reduce CO2 emissions associated with areas of high impact such as pharmaceuticals and anaesthetic gases.

Objectives	Measures	Assessment	Comment
<p>Identify carbon hotspots such as medical equipment and pharmaceuticals and ensure that action plans identify and mitigate environmental impacts.</p> <p>Introduce point of use recycling technology for anaesthetic gases.</p>	<ul style="list-style-type: none"> <li>• Programme not started.</li> </ul>	●	<ul style="list-style-type: none"> <li>• Initiation planned for 2<sup>nd</sup> half 2024.</li> </ul>
<p>Reduce medicine wastage and ensure best available technology is used for disposal, including recycling anaesthetic gases when the technology becomes available.</p>	<ul style="list-style-type: none"> <li>• 60% reduction in packaging waste for medicines by end 2025.</li> </ul>	●	<ul style="list-style-type: none"> <li>• Pilot programme being developed with pharmaceutical distributors.</li> </ul>
<p>Stop the use of Desflurane in surgery.</p>	<ul style="list-style-type: none"> <li>• Nitrous Oxide and Desflurane usage ceased.</li> </ul>	●	<ul style="list-style-type: none"> <li>• Ongoing</li> </ul>
<p>Consider lower carbon alternative medicines in particular anaesthetic gases.</p>	<ul style="list-style-type: none"> <li>• Anaesthetic reduction programme initiated.</li> </ul>	●	<ul style="list-style-type: none"> <li>• Ongoing</li> </ul>
<p>Educate staff and encourage lower impact alternatives.</p>	<ul style="list-style-type: none"> <li>• Education programme to be expanded in 2024.</li> </ul>	●	<ul style="list-style-type: none"> <li>• Ongoing</li> </ul>



# Adaptation

**Overarching Objective:** Ensure our infrastructure, services, procurement, and local community colleagues are prepared for the impacts of climate change.

Objectives	Measures	Assessment	Comment
Assess the impacts of climate change and adapt to mitigate the negative effects of past and future climate-altering actions.	<ul style="list-style-type: none"> <li>Climate impacts assessed and included in the corporate risk register and business continuity plan.</li> </ul>	●	<ul style="list-style-type: none"> <li>Ongoing.</li> </ul>
Create a RVEEH climate change adaptation risk assessment.	<ul style="list-style-type: none"> <li>Incorporated as part of business continuity plan.</li> </ul>	●	<ul style="list-style-type: none"> <li>Ongoing</li> </ul>
Collaborate with key internal and external stakeholders to develop a Climate Change Action Plan.	<ul style="list-style-type: none"> <li>Working with RCSI and HSE in developing plan.</li> </ul>	●	<ul style="list-style-type: none"> <li>Ongoing</li> </ul>





# Travel and Transport

**Overarching Objective:** Minimise the environmental and health impacts associated with the movement of goods and people through hospital activity.

Objectives	Measures	Assessment	Comment
Develop Green Travel plan that facilitates active and sustainable travel options for staff patients and visitors.	Measure incorporated in travel plan.	●	Facilitate green mobility options for staff, patients and visitors.
Incentivise staff to use electric transport, with increased access to these.	Implement a secure and recharging area for e-bikes and scooters.	●	Implement in 2024.
Maximising efficiencies in the transport of goods and services commissioned by the organisation, such as patient transport, courier services and deliveries.	% of products delivered using EV technology.	●	Pilot programme with drug distributors to commence in 2024.
Facilitate flexible working / working from home.	Policy in place.	●	Ongoing



## Sustainable Models of Care

**Overarching Objective:** Deliver the best quality of care while being mindful of its social, environmental and financial impact and take a whole systems approach to the way it is delivered.

Objectives	Measures	Assessment	Comment
Where outpatient attendances are clinically necessary, at least 40% of outpatient activity should be delivered in the community, resulting in direct and tangible carbon reductions.	% OPD visits occurring in community. % of macular injections occurring in the community.	●	Significant increase in community activity in evidence.
Improve the environmental sustainability of care pathways, and better integrate healthcare services to improve efficiency.	Programme not yet initiated.	●	Initiate before end 2024.
Work with partners and stakeholders to identify and deliver solutions that reduce the number of hospital visits, e.g. opticians, GPs.	Programme in need of significant expansion.	●	Review of current programme to be undertaken.



Statements contained in this report include statements and information about our expectations for the future. When we discuss our strategy, plans and future performance, or other things that have not yet taken place, we are making statements considered to be *forward-looking statements*.

Forward-looking statements are designed to help the reader understand the hospital's current views of our near and longer-term future, and it may not be appropriate for other purposes.



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