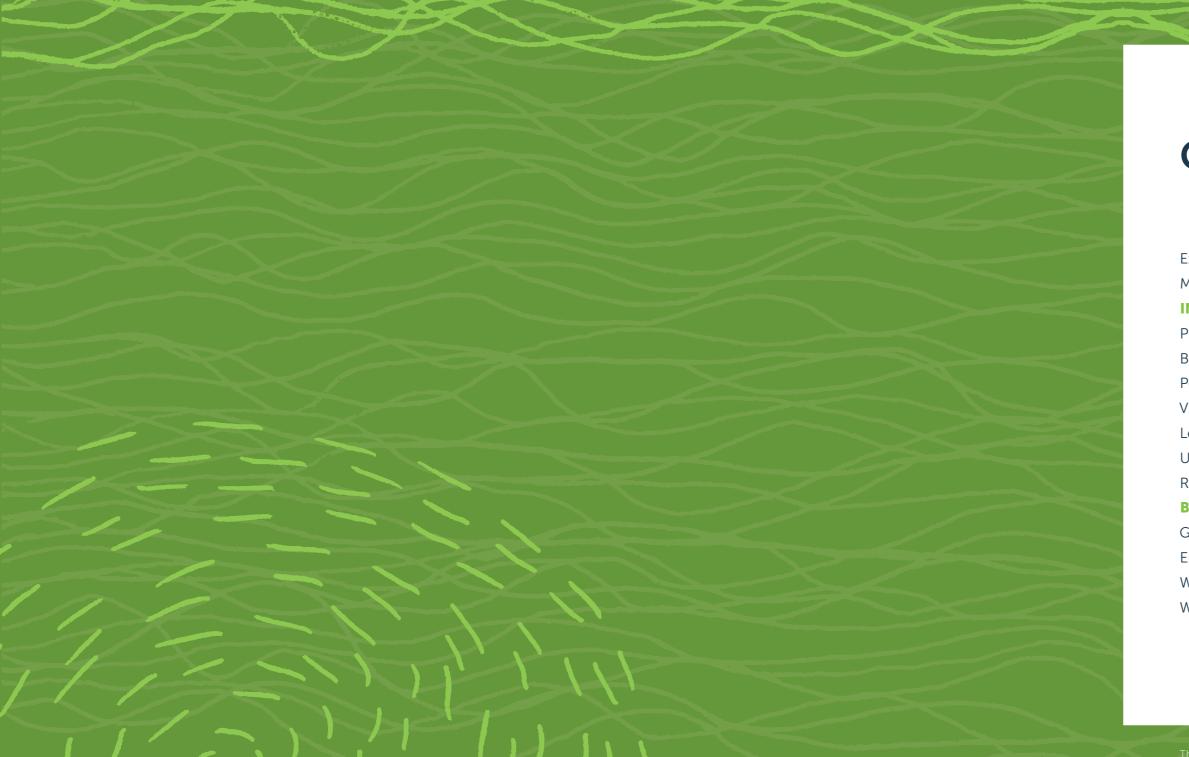


# Sustainability Plan 2023–25



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RCH SUSTAINABILITY PLAN 2023-25

# **Executive summary**

The Sustainability Plan outlines the environmental impacts of The Royal Children's Hospital (RCH) campus and the measures taken to reduce those impacts. It also highlights the RCH campus' environmental performance to date and our sustainability goals for the 2023-25 period.

There are eleven key action areas the RCH campus has identified as priorities—leadership engagement and reporting, energy and greenhouse gas emissions, water consumption and efficiency, waste reduction, resource use and procurement, staff and visitor travel impacts, food-nutrition, pharmaceuticals, chemicals, environment quality and connection, and climate adaption and resilience.

The plan sets out the goals and targets for each of the action areas and proposes how we intend to achieve those targets, as well as the indicators that will measure progress along the way.

The plan will be promoted to stakeholders across the campus, with progress on action areas reported back to staff and the RCH Board.



# Message from the Chief Executive Officer

At the RCH we are committed to building a more sustainable hospital and recognise that looking after the environment has a direct impact on children's health.

Sustainable healthcare at the RCH means managing our human, financial, environmental and physical resources responsibly so that our health system can survive and thrive. Our Sustainability Plan provides a framework for how the RCH plans to achieve a number of key environmental metrics over the next five years.

While there is much work to be done on this front, I'm pleased to say that we've taken significant and measurable steps over the past few years to reduce our impact on the environment through a range of initiatives.

In 2016, the RCH launched its Electronic Medical Record (EMR), becoming one of the first paediatric hospitals in Australia to replace paper-based records with a hospital wide EMR. We have since collaborated with our healthcare colleagues to establish a shared EMR that will benefit patients across the Parkville Precinct as well as reduce paper usage across the precinct.

We have successfully introduced several recycling programs such as waste segregation bins in public areas, PVC recycling across the hospital and collection stations for plastic coffee cups so they can be correctly recycled. Our major energy reduction initiatives include tailoring the building's heating, ventilation and lighting schedules in line with the hospital operations, so areas are supported only when staff are present in the spaces.

We have also recently entered the Global Green and Healthy Hospitals Network, a group of global health experts that have come together to help curate policy and technical advice in our region, as well as deepen the collaboration and information sharing between network members.

As a hospital, we recognise that the provision of health services involves a significant amount of energy consumption and waste generation. As the RCH continues to experience increased demand and growing complexity within our services, we recognise and welcome the need to do more to reduce our environmental footprint.

The delivery of our services can only occur in partnership with our patients, families, staff, campus partners, health providers and government bodies. So, it is only fitting that the RCH Sustainability Plan demonstrates our commitment to all stakeholders within the RCH community and across our campus to achieve our goal of sustainable healthcare that will benefit generations to come



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Bernadette McDonald, Chief Executive Officer

RCH SUSTAINABILITY PLAN 2023-25

### Introduction

### Purpose of the Plan

The Sustainability Plan provides a roadmap to achieving the RCH campus' goal of becoming a leader in sustainable paediatric healthcare and research.

The plan aims to ensure a uniform and consistent approach to monitoring and reporting on the campus' environmental performance and the progress of its initiatives, which will assist in managing resources and operations.

It also seeks to engage staff to understand the campus' environmental commitment and be empowered to contribute. The Sustainability Plan is available as a resource for other healthcare providers and we welcome the exchange of shared learning.



### Background

The RCH has been providing outstanding care for Victoria's children and their families for more than 150 years. We are the major specialist paediatric hospital in Victoria and our care extends to children from other states around Australia and overseas.

The RCH opened in 2011 adjacent to the old hospital site in Parkville, Victoria. The new RCH has been delivered as a Public Private Partnership (PPP) under the State Government's Partnerships Victoria model. The Spotless Group is our facilities manager and is responsible for providing ongoing maintenance to our hospital.

Our campus partners, the Murdoch Children's Research Institute (MCRI) and The University of Melbourne Department of Paediatrics, along with the RCH Foundation, are on site with the hospital in Parkville. Together, we are committed to improving the health outcomes for children today and in the future.

With a passionate, highly-skilled and committed staff of close to 4,000 campus wide, we provide a full range of clinical services, tertiary care and health promotion and prevention programs for children and young people across a 4.1-hectare site. Inspired by the quality of light, the textures and forms of its parkland setting, the RCH delivers a patient and family focused healing environment based on the latest evidence and research-based design principles.

The new RCH was designed with sustainability embedded into the building and produces 45 per cent less greenhouse gas emissions compared to a conventional hospital. This was achieved through a number of design elements, including rainwater collection from 75 per cent of the roof area, energy efficient lighting, heating and cooling systems, using natural light through the north orientation of the building, solar panels on available roof space to save electricity, and the ability to provide 100 per cent fresh air into clinical spaces to promote good air quality and infection control.

The RCH campus knows that typical of the health sector, the impact of our operations on the environment can be significant.

### RCH SUSTAINABILITY PLAN 2021–25

### In creating the Sustainability Plan, our first step was to uncover the breadth of our environment footprint.

We use considerable amounts of energy to keep our hospital and research facilities running to meet the demands of patients and families using essential medical equipment, heating and cooling of our buildings, lighting and ICT equipment. Similarly, our water consumption can be substantial, due to essential water intensive processes such as dialysis and sterilisation, and requirements like air conditioning, cleaning, catering services and infection control.

The RCH campus generates complex and high-volume waste streams, which require specialist handling to protect our people and the environment.

Travel by patients, staff and visitors is a crucial part of the way the hospital delivers its care—and as a consequence, our travel related carbon emissions can be significant.

However, there is ample access to public transport services including trams and trains, cycling paths and walking trails that provide sustainable transport alternatives for our staff and visitors.



### Some measures we have taken to address our environmental impact to date include:

- Installed energy efficient LED lighting in all our patient wards
- Begun a recycling trial on our wards to collect used soft plastics for recycling into useful products
- Installed water efficient showerheads, taps, toilets and urinals
- Undertaken a detailed program of building tuning and systems optimisation with our PPP partners to improve the energy efficiency and operational performance of the hospital
- Investigated clean sources of water for reuse has yielded a measurable reduction in the hospital's potable water requirement
- Increased the provision of telehealth to minimise unnecessary travel by families to our hospital













RCH SUSTAINABILITY PLAN 2023-25

### **Policy context**

The Victorian Government recently released its Climate Change Strategy with interim targets for 2030 along with several other initiatives, including:

- 28-33 per cent cut in emissions by 2025
- 45–50 per cent cut in greenhouse gas emissions by 2030
- Net zero by 2050
- 50 per cent renewables in the Victorian Electricity Grid by 2030
- All government operations including hospitals to be powered by 100 per cent renewable energy by 2025
- 50 per cent of all new vehicles to be electric vehicles by 2030
- Transition government vehicle fleet to electric vehicles

### **Victorian Department of** Health Sustainability in **Healthcare Strategy**

The Department of Health (DH) recognises that disadvantaged and vulnerable groups are more likely to be impacted by the negative effects of climate change and is committed to minimising the environmental impacts of its operations.

DH is committed to improving sustainability within health system infrastructure and performance. This commitment is documented in the department's Environmental Sustainability Strategy 2018–19 to 2022-23.

The plan includes three strategic directions:

- Provide leadership and engage with the sector
- Improve environmental performance of the health system
- Adapt to a changing climate

### Leadership, governance and reporting

The Department of Health's Environmental Sustainability Strategy 2018–19 to 2022–23 outlines three strategic priority areas to strengthen governance, reporting of actions, and overall progress toward improving environmental performance in health services.

The Victorian Health Building Authority has aligned its Environmental Sustainability Strategy against the Sustainable Development Goals (SDGs). The SDGs are a collection of global goals set by the United Nations General Assembly in 2015 for the year 2030.

The RCH has set key strategic goals aligned with these priority areas as part of our Sustainability Plan.



7 AFFORDABLE AND CLEAN ENERGY

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13 CLIMATE ACTION



8 DECENT WORK AND ECONOMIC GROWTH

14 LIFE BELOW WATER



10 REDUCED INEQUALITIES

**(=)** 

16 PEACE, JUSTICE AND STRONG







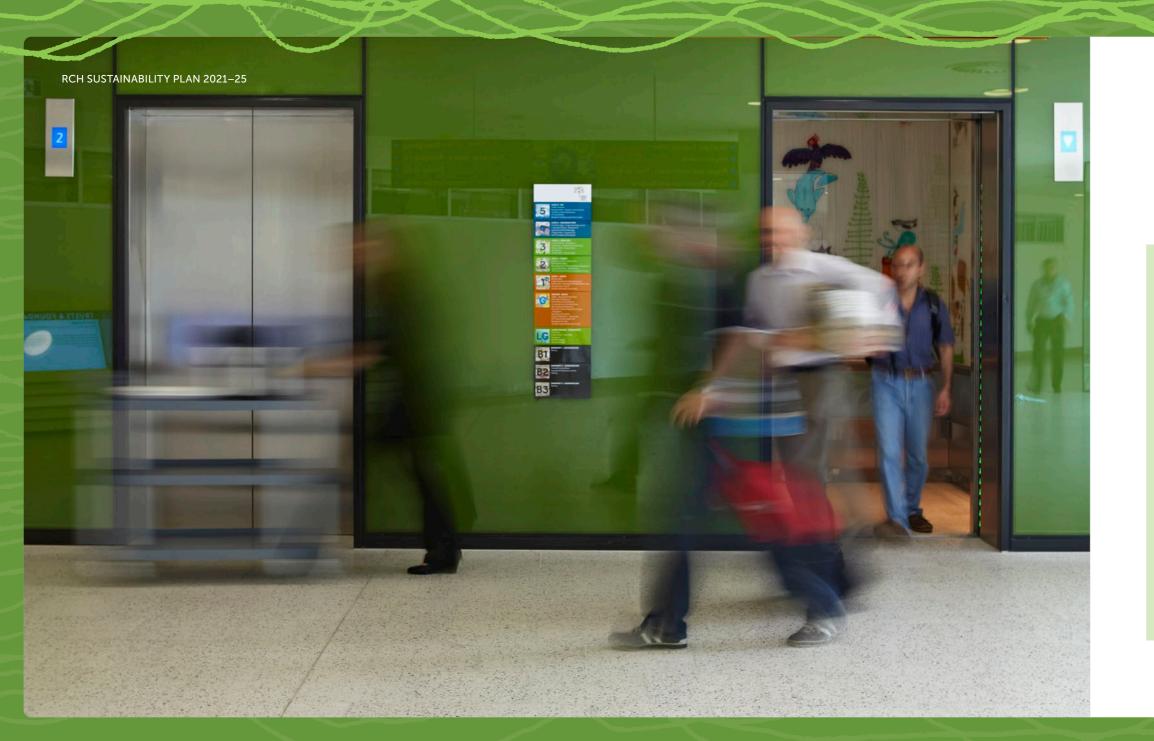








Source: United Nations' Sustainable Development Goals



### RCH sustainability governance structure

RCH Board

Campus Council

Campus Sustainability Committee
with representatives from The Royal Children's Hospital, Murdoch Children's Research Institute and University of Melbourne



# Baseline environmental performance

## Baseline environmental performance

As per the requirements for Victorian public health services, and in accordance with the Department of Health Policy and Funding Guidelines 2020–21, details are provided on the following environmental impacts:

- Greenhouse gas emissions (Scope 1 and 2)
- Energy use
- Water use
- Waste generation

The reporting boundary used for greenhouse, energy, water, and waste impacts in this report are for those operations and services where The Royal Children's Hospital pays energy and fuel bills (RCH campus). This includes The Royal Children's Hospital precinct base building services and extra utilities from services shared with our campus partners including Murdoch Children's Research Institute, The University of Melbourne and the RCH Foundation. This reporting boundary is in line with the RCH's National Greenhouse and Energy Reporting (NGER).

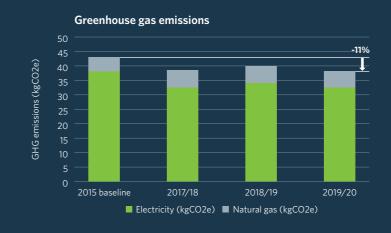
The baseline year for reporting for energy and water (2014–15) and for waste (2017–18) represents the baseline data from which ongoing performance targets of this plan will be evaluated.

Reported consumption of electricity and natural gas and the resulting greenhouse emissions will vary depending on the extent of trigeneration plant utilisation (use of building equipment that generates cooling, heating and electricity). Greenhouse emissions are anticipated to continue to fall as grid fossil fuel intensity reduces and energy efficiency measures are implemented.

Within this Sustainability Plan period, environmental reporting is expected to expand include different recycling waste streams, medical gases, refrigerants and increased reporting of the RCH vehicle fleet to include Scope 1 emissions.



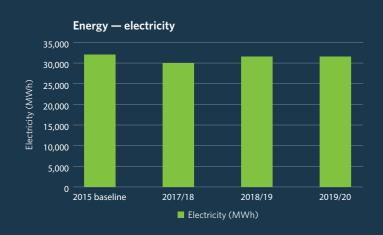
Greenhouse gas emissions	2015 baseline	2017/18	2018/19	2019/20	Baseline per cent
Electricity (kgCO2e)	38.08	32.46	33.73	32.26	84.7 per cent
Natural gas (kgCO2e)	5.48	6.26	6.42	6.27	114.4 per cent
Total (kgCO2e)	43.56	38.72	40.15	38.53	88.5 per cent

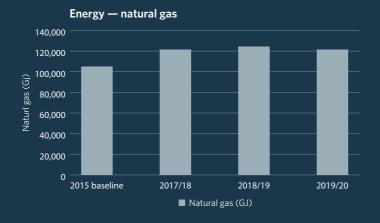


### RCH SUSTAINABILITY PLAN 2023-25



Energy	2015 baseline	2017/18	2018/19	2019/20	Baseline per cent
Electricity (MWh)	31,998.65	30,055.40	31,523.63	31,631.82	98.8 per cent
Natural gas (GJ)	106,962.00	121,488.30	124,530.77	121,766.06	113.8 per cent



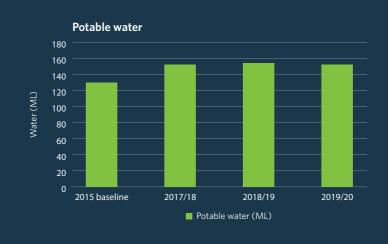


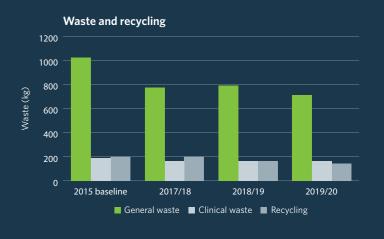


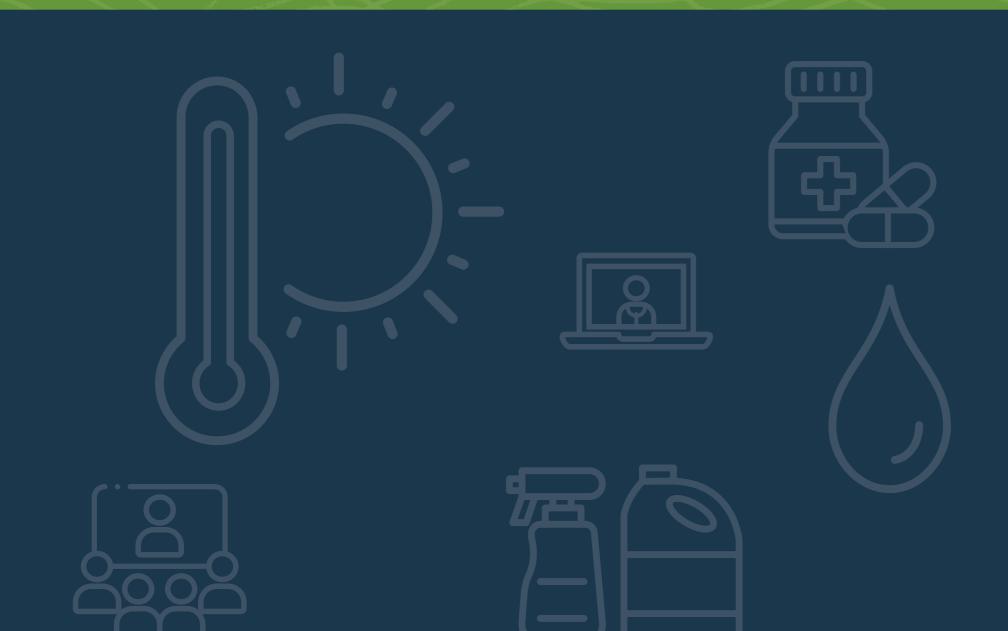
Potable water (ML) 131.72 152.20 152.97 149.21 113.2 per cer	Water consumption	2015 baseline	2017/18	2018/19	2019/20	Baseline per cent
2011 100 Police   100 Police	Potable water (ML)	131.72	152.20	152.97	149.21	113.2 per cent



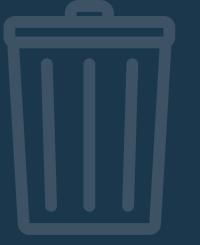
Waste and recycling	2016/17 baseline	2017/18	2018/19	2019/20	Baseline per cent
General waste	1,027.78	755.81	792.13	718.27	69.9 per cent
Clinical waste	192.91	160.27	167.68	175.65	91.1 per cent
Recycling	194.86	197.39	167.17	140.90	72.3 per cent
Recycling per cent	14 per cent	14 per cent	15 per cent	17 per cent	17 per cent











Action plan







# Leadership, communication, engagement and reporting



Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
Sustainability, leadership and reporting	Provide organisational and campus-wide sustainability leadership.	Sustainability Plan	2021-25	Sustainability Committee	Current
	Consider allocating a dedicated sustainability resource to ensure full reporting and data collection on initiatives and improvements.		2023-25	Facilities	
Sustainability, leadership and reporting  Staff and patient communication  Stakeholder communication	Publish and update a Sustainability Plan for the campus.	Sustainability Plan	2023-25	Sustainability Committee	Current
Sustainability, leadership and reporting  Staff and patient communication  Stakeholder	Quarterly sustainability sessions to provide staff with an update on initiatives, celebrate successes and encourage staff and families to participate in sustainability initiatives.		2021-25	Communications	
	Develop education materials for patients and visitors regarding campus sustainability initiatives.		2023-25	Communications	
	Include sustainability information in staff orientation.		2023-25	HR	
communication	Identify and nominate sustainability champions within each department.	Compare against departments	2023-25	Sustainability Committee	
	Provide a sustainability display in Main Street to communicate sustainability initiatives and metrics, e.g. energy and water consumption.		2024-25	Facilities and Spotless	
	Develop clear communication between sustainability committees across the precinct.	Campus meeting minutes	2022-25	Communications	
Sustainability, leadership and reporting  Staff and patient communication	Submit regular briefs to the Executive to gain support for and promotion of proposed initiatives at executive level.	Per cent approval rate	2022-25	Sustainability Committee	



# Energy use and greenhouse gas emissions



Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
Operational energy use	Re-implement the building tuning program to resolve and improve energy consumption identified to be above baseline expectations.	Tuning upgrades	Annually	Facilities and Spotless	
	Review and activate energy conservation/eco modes in computers, copiers and equipment to automatically shut down mode when not in use.	Metering	2021–25	Facilities and IT	
	Investigate grants and other sources of funding for energy efficiency upgrade projects.	N/A	Ongoing	Sustainability Committee	
	Complete migration of energy monitoring and performance management interfaces to upgraded system	N/A	2022-25	Facilities and Spotless	Ongoing
Greenhouse gas emissions	Reduce precinct greenhouse gas emissions from utility energy use by 85 per cent, from 2015 baseline data.	CO2e emissions	2025	Health Share Victoria	
	Reduce overall campus greenhouse gas emissions by 10 per cent, from 2016–17 baseline data.	Metering	Three years	Campus	
Renewable energy	Move to a 100 per cent renewable electricity supply (Victorian Government 100% Renewable energy pledge)	HPV Information	2025	Health Share Victoria	
Fossil fuel use	Reduce on site Scope 1 consumption of fossil fuels back equal to 2015 baseline.	Natural gas consumption	2025	Spotless	
	Prepare documented plan for a stepped phase out of the tri-gen plant on campus.	N/A	2024-25	Spotless	



# Water consumption and efficiency



Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
Non-potable water use	Review current rainwater capacity against all potential non-potable water demands.	Reconcile metering against consumption	2023-24	Spotless	
	Implement water conservation measures to return potable water consumption volume to 2015 baseline.	13 per cent reduction in comparison to 2019/20	2025	Spotless	
	Investigate the feasibility of additional water use to non-potable sources e.g. non-clinical toilets, irrigation review water treatment against infection control requirements for internal use.		2022–25	Sustainability Committee and Infection Prevention and Control team	
Water conservation	Conduct an audit of water use on campus and point uses and determine potential savings.	Annual audit tool	2021–25	Spotless	
	Review cleaning practices to identify opportunities to reduce water consumption and/or use of low chemical use cleaning systems, e.g. e-water.		2022–25	Facilities	
	Conduct a water balance to identify major uses of water and any leaks.	Water balance report	2021–25	Spotless	Ongoing
	Investigate replacement of once through cooling systems (e.g. CSSD sterilisers) with chilled water connection.		2022-25	Facilities and Spotless	



# Waste



Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
Increase recycling rate	Review recyclable waste streams and opportunities to increased recycling for individual waste streams including:  • batteries and e-waste • mattresses • metals • organics • packaging  • paper and cardboard • printer cartridges • polystyrene • medical consumables	Increase recycling rate by 5% per year	2022-25	Facilities	
	Ensure that recycling data is captured from all providers and consolidated into reports.	Waste reporting	Annually	Facilities	
	Conduct a waste audit of existing facilities with all providers to determine waste diversion, recycling streams and associated infrastructure and space requirements.	Reports	Annually	Facilities and Support Services	
	Undertake further staff training and provide communication to reduce amount of contamination entering waste streams.	Staff training	Bi-annually	Sustainability Committee	
	Introduce soft plastic recycling collection throughout the campus.	All waste collection locations	2022-25	Campus	
Waste minimisation	Schedule quarterly meetings with waste managers and waste contractors to monitor progress, provide feedback and generate solutions for continual improvement.	Reports	Quarterly	Facilities and Support Services	
	Investigate and utilise supplier take back programs that include packaging, medical supplies and ICT equipment.	Per cent collection	2022-25	Procurement	
	Review single use and disposable products and phase out where possible.	Procurement reports	2022-25	Sustainability Committee	
	Baby bottle recycling in NICU	Recycling rate more than 20 per cent of waste generated	2022-25	Procurement	



# Resource use and procurement



Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
Sustainable procurement	Review supplier agreements to determine potential for preferencing products with higher levels of recycled content, take back programs, environmental certifications and minimum star ratings.	Waste diversion	Ongoing	Procurement and Supply	
	Align Sustainable Procurement Policy related to Victoria's Social Procurement Framework (SPF) sustainable procurement objectives, including:  • adoption of sustainable business practices by suppliers  • use of recycled content in construction  • project-specific requirements to use sustainable resources and to manage waste and pollution  • project-specific requirements to minimise greenhouse gas emissions  • procurement of outputs that are resilient against the impacts of climate change	Sustainable Procurement Policy	2022-25	Procurement and Supply	
	Improve procurement and purchasing staff's awareness of green products available and develop cost benefit analysis metrics to identify when green products are a viable choice over standard products.	Training sessions	2022-25	Sustainability Committee	
HSV procurement team	RCH team members to increase engagement with the Health Share Victoria (HSV) Procurement Committee to influence sustainable purchasing decisions.	Committee membership	2022-25	Sustainability Committee	
Business cases	Add sustainability considerations to business case template to assist in more sustainable purchasing.	N/A	2022-25	Procurement and Supply	



# Staff, visitor and patient travel impacts



Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
Virtual working	Establish post-COVID working from home policies and communicate to staff.	Work from home policy	2023	HR	
	Encourage virtual conference attendance in lieu of flying.	Travel policy	2024	Finance	
	Promote and increase the use of videoconferencing and teleconferencing to a wider range of staff and patients.		2023	Communications	
	Investigate feasibility to increase bike rack numbers and end of trip facilities (showers, lockers, changerooms).		2024	Facilities	
	Improve quality and attractiveness to staff of end-of-trip facilities.		2027	Campus	
	Survey staff to set a baseline for current work commuting modes.	Baseline set from initial survey and compare each year	2024	Sustainability Committee	
	Develop a green travel plan for the campus.		2024	Sustainability Committee	
	Encourage staff to use public transport for work travel, including provision of MYKIs for work use.		2024	Sustainability Committee	
	Monitor feet fuel consumption and regularly report on vehicle efficiency in terms of CO2-e emissions per kilometre.	Baseline set from initial survey and compare each year	2024	Sustainability Committee	
	Convert fleet vehicles to Electric Vehicles (EV's) as they are upgraded (to align with Victorian Government commitments).	Per cent of vehicles	2021– 2027	Procurement	
	Apply for funding to assist with purchase of EV's and installation of charging facilities.		2021–24	Sustainability Committee	



# Food and nutrition



Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
General waste management	Reduce packaging or source products with more environmentally sustainable food packaging (recyclable and/or compostable):  • zero Waste, recycle cooking oil  • eco-lab chemicals in less packaging  • eliminate paper hand-outs for educate patients on menu ordering (move all online via QR code)  • reducing paper-based record keeping with introduction of digital checklist system (Testo)		2024	Nutrition/Food Services     HSV     Procurement	
	Reduce single-use utensils/plates on patient trays: disposable trays, crockery and cutlery reserved only for highly infectious patients			Victorian     Government     Initiative     Procurement     Nutrition/Food     Services	
	Sourcing more environmentally sustainable disposable options e.g. cutlery and crockery (in line with Victorian Government mandate)		2024	Facilities and Support Services	
Education	Fostering healthy eating habits and disease prevention amongst patients, families and staff: vending machines offer food and drink in accordance with Vic Gov Healthy Choices Policy Mandate Internal Catering Policy developed in accordance with Vic Gov. Healthy Choices Policy Mandate	Vending machines offer healthy choices in line with policy mandate. Internal catering policy established and approved	2024	DOH-Healthy Choices Policy Mandate     Vendy     Children's Health Partnership     RCH Retailers     Nutrition/Food Services	

# Food and nutrition (continued)

Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
Kitchen garden	Establish veggie pods with input from RCH gardening team to supply the main kitchen with fresh herbs and some fresh green leafy vegetables	Establish four vegetable pods	2024	<ul> <li>Maintenance and Gardening</li> <li>Nutrition/Food Services</li> <li>Foundation funding</li> </ul>	
Food sourcing and procurement	Increased use of local and seasonal food products on patient menus with a strong preference for seasonal and fresh fruit and veg on patient menus and Australian produced food products in recipes and on patient menus	≥50% of fresh fruit and veg served on patient menu is locally sourced	2022-24	DH     HSV     Nutrition/Food     Services	Partial
Food waste avoidance	Computerised menu ordering system used to full capacity. Reduced default orders through improved uptake of patients using mobile meal ordering: QR codes available in-patient rooms to facilitate meal ordering	QR codes available in all patient rooms	2024	Nutrition/Food     Services     Quality     Corporate Comms     Infection control	



Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
Food waste management	Establish organic waste processing/composting and develop a relationship with the Zoo to facilitate	Reduce organic waste to landfill by 80%	2025	<ul> <li>Facilities Management</li> <li>Nutrition/Food Services</li> <li>Communication &amp; Engagement</li> <li>Zoo</li> <li>Chair, Sustainability Committee</li> <li>Sustainability Officer</li> <li>Infection Control</li> </ul>	
	Donate shelf-stable packaged foods to OzHarvest (food rescue charity) through careful process management	All shelf-stable, non	2025		

### Food life cycle at hospitals

### Production/procurement

Where and how food is produced and the procurement practices of hospitals

### Distribution

Warehousing, wholesaling, transporting

### Preparation

Method of food preparation in kitchens and patient areas

### Consumptio

Systems and method that prepare and ser food to patients

Waste managemen<sup>.</sup> disposal

Management and disposal of waste produced in previous stages



# **Pharmaceuticals**



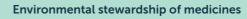
Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
Promote responsible prescribing	Work with clinicians to prescribe appropriately using evidence-based and Choosing Wisely principles, avoid duplication and over-prescribing		Ongoing	Pharmacy and prescribers	Ongoing
	Choosing medications with least environmental impact such as asthma dry powder inhalers over metered dose aerosols, choice of anaesthetic gas	Baseline measurements required	Project driven	Project	
Procurement	Consider environmental focus with contract negotiations for pharmaceutical buying - SHPA forecast includes section on sustainability		Project driven	Formulary pharmacist project	
Education	Patient education:  • patients encouraged to only order what they need  • patients educated to store their medications correctly as they are a precious resource  • patients educated to return unused medicines to pharmacies (not in the waste water)		Ongoing	Pharmacy/CNC education teams	
	Staff education: Appropriate recycling of pharmaceutical packaging, including bottles, blister packs, cardboard, etc.	Roll out pharmaceutical waste education, target 90% staff course completion	Annual	Campus	

# Pharmaceuticals (continued)

Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
management to avoid pharm to medications  Formulary and  Configuring dis	Balancing 'Just in time' logistics and other pharmacy automation systems to avoid pharmaceutical waste while ensuring continuity of access to medications	Baseline measurements required	Project driven	Formulary pharmacist project	
	Formulary and expiry date management	Monthly	Ongoing	Pharmacy	Ongoing
	Configuring dispensing system to minimise waste (e.g. cart fill)	Reports	Project driven	Pharmacy	
	Appropriate and safe disposal of unused medications across the hospital	Reports	Project driven	Pharmacy/ Facilities/Support services	
	Manufacturer take-back programs	Reports	Project driven	Formulary pharmacist project	
	Recycling of pharmaceutical packaging, including bottles, blister packs, cardboard, etc. and appropriate receptacles	Reports	Annual	Facilities/Support Services	



Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
Waste management (continued)	Sterile manufacturing waste management, separating pharmaceutical waste from packaging, glass ware, PVC etc.	Reports*	Bi- annual	Facilities/Support Services	
	Appropriate disposal of S8 medications hospital wide (Pharmacy and Theatres already achieving)	Reports*	Ongoing	Quality and Improvement/ Facilities	
Others	Telehealth/consultation with pharmacists over the phone to reduce travel				



The environmental impact of a medication can be seen at each step of its life cycle:



1. Synthesis from raw materials



2. Production of products



3. Transportation



4. Storage



5. Deliveries



7. Safe and responsible disposal



# Chemicals



Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
Use of safer alternatives	Practice green chemistry on RCH campus		Ongoing	Sustainability Committee	
	Reducing emissions from anaesthetic gases (where clinically possible)	10% reduction in emissions from anaesthetic gases	2022-25	Sustainability Committee	
Waste and spill management	Treat chemicals to render them less hazardous. Compliant management and disposal of chemical wastes		Ongoing	Facilities and Support Services	
	Mitigate leaks, spills and waterborne effluents to prevent releasing waterborne environmental, health and safety burdens to the site neighbors and surrounding community		Ongoing	Facilities and Support Services	
	Eliminate wherever possible, the drain disposal of chemicals, pharmaceuticals and toxic materials within the health care facility to safeguard the health of the local waterways and communities		Ongoing	Campus wide	
Reduce chemical cleaning	Significantly reduced the use of harsh chemical cleaners, and switched to the use of steam sterilisers instead		2022-25	Facilities	
products	Replace the laundry cleaning products on campus with environmentally friendly options		2022-25	Support Services	
Control and audits	Audits for chemical products (used in Support Services responsibility area) to identify potential alternatives		Bi-annually	Support Services	



# **Environment quality and connection**



Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
Improve air quality  Connection to outdoors	Conduct regular air quality monitoring and reporting.	Indoor Air Quality (IAQ) report	Annually	Spotless	
	Consider Indoor Environmental Quality (IEQ) upgrades such as heat recovery and increased ventilation in conjunction with COVID-19 measures.		2021-25	Facilities and Spotless	
	Investigate measure to improve indoor air quality without compromising energy performance (e.g. CO2 control)		2022–25	Spotless	
	Investigate upgrade lighting where required to improve colour rendition, lighting level control and circadian (24-hour) response.		2022–25	Facilities and Spotless	
	Select materials and finishes for all fit outs and upgrades with low Volatile Organic Compounds (VOC) emissions.		2021-25	Procurement	
	Identify spaces with potential for opening to the campus community to create green, healthy spaces such as community gardens, vertical gardens, child life and music therapy, meditation and healing spaces.		2021-25	Campus	
	Liaise with local Indigenous communities to develop educational material for children about the connection to land and nature.		2022-25	Campus	
	Improve wayfinding to promote better usage of landscaped areas and surrounding parkland, e.g. suggested walking trails or walking tours.		2022-25	Campus	
	Engage the campus community in activities, e.g. land planting and conservation initiatives.		2022-25	Campus	
	Promote 'walking meetings' in the surrounding parkland.		2022-25	Sustainability Committee	
Royal Park	Attendance/liaison with Friends of Royal Park and Royal Park Protection Society		2021-25	Facilities	



# Climate adaptation and resilience



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Initiative	Proposed strategies and programs	Targets and indicators	Timeline	Responsibility	Status
Climate adaptation	Review previous events to determine preparedness for future events, e.g. thermal plant performance in heat waves.		2022-25	Facilities and Spotless	
	Prepare a climate adaptation plan to identify risk areas and implement mitigation measures.	Climate adaptation plan	2022-25	Sustainability Committee	
	Review bushfire smoke impacts and preparedness, including application of carbon and other filters.		2022-25	Facilities, clinical staff and Spotless	
	Integrate climate change considerations into decisions on policies, programs, and processes.		2022-25	Executive	
Climate resilience	Improve RCH's preparedness for and mitigation of risks from climate change, including:  • drought and heatwaves  • storm impacts including wind, rain deluges, flooding and land erosion  • disruptions to supply of essential services (electricity, gas, fuel, water, food)  • heat related asset failure (e.g. HVAC systems)  • soil movement  • deterioration of buildings and other built surfaces  • heat-related stress and mortality (particularly among vulnerable populations).	Resilience report	2022-25	Sustainability Committee	

