



Acknowledgment of Country:

Western Health acknowledges the Traditional Custodians of the land on which our sites stand. We pay our respects to Elders past, present and emerging.

CHIEF EXECUTIVE OFFICER'S MESSAGE







Mr. Russell Harrison Chief Executive Officer Western Health As a major healthcare provider to one of the fastest growing and most diverse regions of Australia, Western Health is committed to providing Best Care to communities across Melbourne's west. This includes acknowledging the current climate crisis and its impact on the health outcomes of our community. Just as COVID-19 forced us to quickly adapt and respond to an ever-changing landscape, climate change challenges us to improve our operations across existing assets and future developments.

Our approach is based on data analysis, research and innovation – we aim to maintain our leadership in the healthcare sector, efficiently using natural resources and removing unnecessary waste from the system. Our sustainability framework focusses on active engagement with our executives, clinicians, staff, health service partners, suppliers and government to implement best practices and achieve sustainability at all levels of the organisation. For Western Health, Sustainability is now business as usual.

EXECUTIVE SUMMARY





During the 2021-2022 financial year, Western Health continued growing with the acquisition of Djerriwarrh Health Services.

This expansion in the portfolio translated to an increase in energy consumption, water and related carbon emissions. There were also higher rates in medical activities and occupancy compared with the previous year. This impacted our operations and increased the generation of waste, particularly, clinical waste related to COVID-19 practices.

The organisation took major steps to improve our sustainability performance and reduce the environmental impact of our operations. A great example is the reusable gown trial program in Sunshine and Footscray intensive care units (ICUs). This project has proven that the replacement of disposable single-use items with reusable options can provide financial savings and environmental benefits without compromising infection prevention and control (IPC) standards. Thus far, this trial has diverted over 1.6 tonnes of waste from landfill. Western Health is aiming to implement this program across the whole portfolio.

As part of our Strategic Direction, Western Health has implemented sustainability principles in its core activities and positive outcomes have been achieved during 2021-2022, with key areas of importance being energy, greenhouse gas emissions, waste, water and innovation.

UPDATES IN OUR SUSTAINABILITY PLAN OBJECTIVES





The 2021/22 financial year represented an opportunity for Western Health to consolidate its Sustainability journey and the implementation of the Strategic Direction 2021-2023.

Progress against our objectives is described below:

OBJECTIVE 1: EMBED SUSTAINABILITY AS A CORE ASPECT OF OUR BUSINESS

Committed to differentiate ourselves in the health care sector, Western Health has integrated data analysis and engineering practices to achieve continual improvement in our daily operations. Sustainability engagement continues to grow, during 2021-2022, subscribers to the Eco-vision newsletter doubled.

OBJECTIVE 2: CREATE A CLEAR PATH TO ACHIEVE NET ZERO EMISSIONS BY 2050

To achieve this objective, our asset replacement strategy continues to have a strong focus on replacement of gasfired assets with electric or hybrid technology across our sites.

Likewise, in alignment with our Sustainability Plan, Western Health is moving away from gas for refurbishments and new buildings (Westside Lodge, Sunshine Mental Health Ward, Point Cook Community Hospital, and 100 per cent electric New Melton Hospital). This strategy will help us to minimise Scope 1 emissions and trace the path towards net zero emissions by 2050.

OBJECTIVE 3: INCORPORATE CLIMATE CHANGE ACTION AS A PART OF OUR CORPORATE RESPONSIBILITY

FY2021-22 represents the starting point for the implementation of the sustainability plan, with the adoption of several initiatives by all Directorates within our organisation. The Sustainability Team is working on implementing international best practice through the use of sustainability frameworks such as the UK's National Health Service and the United Nation's Sustainable Development Goals (SDGs).

OBJECTIVE 4: CONTINUOUS DISCOVERY AND INNOVATION

Western Health is known for its commitment in innovation, mentoring and research, during 2021-2022, in collaboration with the University of Melbourne, four sustainability interns enabled outcomes in multiple projects, from the development of training tools to innovative project management workspaces.

Key Achievements

- Moving away from gas in new capital works projects such as: Westside Lodge, Sunshine Mental Health Ward, Point Cook Community Hospital and 100 per cent electric New Melton Hospital.
- Sustainability-engineering standard under review, to ensure new buildings meet minimum requirements at design level.
- Recipient of funding from the Victorian Building Authority. Funds to enable Western Health to seize a once-in a generation opportunity to replace heating and domestic hot water systems (gas fired boilers and calorifiers) with a hybrid low carbon alternative at Sunshine Hospital. This project is expected to achieve major energy reductions and align our portfolio with our emissions strategy, as it is our largest site.
- Sustainability team has grown, resourced by a Sustainability Program Manager and a Sustainability Coordinator.
- Implemented innovative management and data analysis tools to track projects and optimise workflows utilising agile project management methodologies.

SUSTAINABILITY ANALYSIS



The following section presents a breakdown of the sustainability operation metrics during the second year of the COVID-19 pandemic.

A cap in medical procedures and elective surgeries remained, as well as restrictions to limit staff, patients and visitors on site. However, during FY2021/2022 essential care services and the delivery of services increased slightly as normalising factors indicate. Please refer to table 1 below.

NORMALISERS	BASELINE 2014/2015	2019/2020	2020/2021	2021/2022	% CHANGE FROM BASELINE	% CHANGE PREVIOUS YEAR
Area m²	115,356	139,356	139,356	152,167	32%	9%
OBD	333,738	346,241	349,649	384,011	15%	10%
Patients treated	576,428	624,357	629,124	674,388	17%	7%
Separations	115,337	130,726	126,181	147,310	28%	17%

Table 1. Comparison of normalisers

ENERGY USE

For the second year in a row, the portfolio expansion has had a major impact in the energy consumption which increased by 10 per cent from the previous FY 2020/2021, bringing the total increase from the baseline (FY 2014/2015) to 20 per cent.

This increment of operational activities is related to the acquisition of Djerriwarrh Health Services and the Community Production Kitchen facility. The portfolio's increase in energy consumption is not a true reflection of the performance, as the increase in activity and patients treated (as a consequence of the services merging), plays a major role on this outcome. Therefore, it is necessary to look at the normalised data for a better understanding of the organisation's performance. Refer to table 2 and figure 1 for more detail.

TOTAL STATIONARY ENERGY CONSUMPTION BY ENERGY TYPE (GJ)	BASELINE 2014/2015	2019/2020	2020/2021	2021/2022	% Change from Baseline	% CHANGE PREVIOUS YEAR
Electricity	110,113	118,360	122,219	139,372	27%	14%
Natural Gas	117,040	125,184	125,266	132,804	13%	6%
Total	227,153	243,544	247,485	272,176	20%	10%

Table 2. Total stationary energy consumption by energy type

During FY 2021/2022, energy intensity measured as energy consumption per separation and per OBD has reduced by 5.8 and 2.2 per cent respectively from last financial year. Energy consumption per unit of floor area has remained almost the same increasing by only by 0.1 per cent. This analysis provides a deeper understanding of the impact the portfolio expansion had in overall energy consumption. Table 3 below, presents a comparison with our baseline and previous years. Similarly, figure 1 shows an overall steady trend in energy consumed in relation to services delivered (separations) within the portfolio. An increment of the energy consumption during the last three financial years is registered. This can be attributed to the addition of 12,811m2 in operational area, the increase in medical services such as elective surgeries postponed during last year and the requirement to operate on return air as standard practice, as required by the Victorian Health Building Authority (VHBA).

NORMALISED STATIONARY ENERGY CONSUMPTION	BASELINE 2014/2015	2019/2020	2020/2021	2021/2022	% CHANGE FROM BASELINE	% CHANGE PREVIOUS YEAR
Energy per unit of floor space (GJ/m²)	1.97	1.76	1.79	1.96	-9.2%	0.1%
Energy per unit of Separations	1.97	1.84	1.96	1.85	-6.2%	-5.8%
Energy per unit of bed-day (LOS +Aged Care OBD) (GJ/OBD)	0.68	0.69	0.71	0.71	1.7%	-2.2%

Table 3. Energy consumption comparison with normalisers



Historical Energy Purchased by Type

Figure 1. Total energy purchased with energy normalisation measurements

GREENHOUSE GAS EMISSIONS

On greenhouse gas emissions, Western Health has focused efforts on asset renewals and upgrades, and phasing out plant and equipment reliant on fossil fuels. The objective is to align the portfolio with a strategy that largely relies on renewable energy by 2025.

Additionally, the organisation has embraced, and is working towards, delivering the target of Zero Net Emissions (NZE) by 2050 as proposed by the Victorian Government.

In order to achieve this, Western Health is working on developing decision-making frameworks that enable a realistic approach that considers service planning, expected portfolio expansion, asset management plans, capital expenditure and the resource allocation required to achieve the NZE target. Total emissions increased by 6.4 per cent when compared to previous financial year. Scope 1 emissions increased by 8.9 per cent whilst scope 2 emissions increased by 5.9 per cent. When assessing normalised emissions per floor area, separations and OBDs a 3.2 per cent, 8.9 per cent and 5.4 per cent decrease can be respectively observed. Scope 2 emissions and emissions with normalised factors remained below baseline during this FY. Table 4 below presents a summary of emissions performance.

TOTAL GREENHOUSE GAS EMISSIONS (TONNES CO ₂ E)	BASELINE 2014/2015	2019/2020	2020/2021	2021/2022	% CHANGE FROM BASELINE	% CHANGE PREVIOUS YEAR
Scope 1	6,008	6,625	6,570	7,158	19.2%	8.9%
Scope 2	36,093	33,535	33,270	35,230	-2.4%	5.9%
Total	42,100	40,160	39,842	42,388	0.7%	6.4%

NORMALISED GREENHOUSE GAS EMISSIONS	2014/2015	2019/2020	2020/2021	2021/2022	% CHANGE FROM BASELINE	% CHANGE PREVIOUS YEAR
Emissions per unit of floor space (kgCO ₂ e/m ²)	364.96	290.21	287.64	278.57	-23.7%	-3.2%
Emissions per unit of Separations (kgCO ₂ e/ Separations)	365.02	302.82	315.75	287.75	-21.2%	-8.9%
Emissions per unit of bed-day (LOS+Aged Care OBD) (kgCO ₂ e/ OBD)	126.15	114.33	113.95	107.81	-14.5%	-5.4%

Table 4. Greenhouse Gas Emissions comparison



Total Greenhouse Gas Emissions (Tonnes CO₂)

Figure 2. Total organisational GHG emissions (Tonnes CO₂)

It is important to note that while Scope 2 emissions (electricity) have decreased by 2.4 per cent, Scope 1 emissions (gas and fleet fuel) have increased by 19.2 per cent, when compared to the baseline year. The overall increase in the organisation's carbon footprint is associated with the recent acquisition of the Community Production Kitchen and Djerriwarrh Health Services, facilities operated mostly on natural gas. Additionally, the requirement to operate on pandemic mode (100 per cent outside air) during winter months has had an influence in the Scope 1 emissions increase. As mentioned above, Scope 1 emissions mitigation has become our main priority despite technology and retrofitting limitations of existing and recently acquired assets. WATER

Water usage has significantly increased this year due to higher patient occupancy (OBD), increase in medical services and staff that are returning to the workplace after working from home.

Water usage has increased by 13.2 per cent with respect to the previous year. However, water consumption remained below the baseline. It is relevant to mention that due to issues with metering system recycled and reclaimed water could not be reported. Thus, it is a priority to Western Health to improve the metering system of existing and recently acquired assets.

TOTAL WATER CONSUMPTION (KL)	BASELINE 2014/2015	2019/2020	2020/2021	2021/2022	% CHANGE FROM BASELINE	% CHANGE PREVIOUS YEAR
Total Potable Water	229,160	227,634	201,369	227,992	-0.5%	13.2%
NORMALISED WATER CONSUMPTION (POTABLE + CLASS A)	2014/2015	2019/2020	2020/2021	2021/2022	% CHANGE FROM BASELINE	% CHANGE PREVIOUS YEAR
Water per unit of floor space (kL/m2)	1.99	1.99	1.45	1.45	-24.6%	1.9%
Water per unit of Separations (kL/Separations)	1.99	1.61	1.65	1.60	-22.1%	2.4%
Water per unit of bed-day (LOS +Aged Care OBD) (kL/OBD)	0.69	0.62	0.64	0.58	-15.5%	0.3%

Table 5. Water consumption Comparison

When assessing water usage per square metre against 2020/2021, a 1.9 per cent increase is observed. Water usage per separations and per ODB also have increased this financial year, with water usage per separation 2.4 per cent and only 0.3 per cent per OBD above last financial year. As mentioned, this data is the reflection of higher occupancy rates and expansion of the portfolio. Please refer to figure 3.



Figure 3. Total Water consumption with normalisers



Financial year 2021-2022 also presented challenges with waste minimisation.

Western Health generated 574 tonnes of clinical waste from the response to the COVID-19 pandemic in the form of syringes, needles and personal protective equipment (PPE). This represents 32 per cent more clinical waste than last year and 80 per cent more than the base line. Please see table 6 and figure 4.

ТҮРЕ	BASELINE 2014/2015	2019/2020	2020/2021	2021/2022	% CHANGE FROM BASELINE	% CHANGE PREVIOUS YEAR
Clinical waste (tonnes)	317	330	434	574	80.9%	32.1%
CW Bagged (tonnes)	290	301	405	539	85.8%	33.1%
CW Sharps (tonnes)	27	29	30	35	28.5%	17.6%
Landfill (tonnes)	1,444	1,384	1,326	1,044	-27.7%	-21.3%
*Recycling (tonnes)	546	698	492	480	-12.1%	-2.4%
Total waste to landfill (clinical waste+ general waste)	1,761	1,687	1,760	1,617	-8.2%	-8.1%
Total waste generation (clinical waste+ landfill + recycling)	2,307	2,411	2,252	2,097	-9.1%	-6.9%

NORMALISED WASTE DATA	2014/2015	2019/2020	2020/2021	2021/2022	% CHANGE FROM BASELINE	% CHANGE PREVIOUS YEAR
Waste / OBD (kg)	6.91	6.82	6.44	5.43	-21.4%	-15.6%
Waste / patient treated (kg)	3.99	3.77	3.58	3.10	-22.3%	-13.4%
Total waste to landfill per patient treated	3.04	2.64	2.80	2.39	-21.4%	-14.5%
Rate of diversion from landfill %	27.44%	33.53%	27.05%	31.49%	14.8%	16.4%

Table 6. Waste streams comparison

Figure 4 below presents the compilation of the waste management performance of the organisation. The figure highlights the increase in clinical waste (dark green) and the decrease trend in waste per patient treated.



Figure 4. Waste generation with normalisers

In the urgency to minimise the environmental impacts, Western Heath recognised an opportunity to strengthen its waste management system at all levels. As a response, the following key initiatives have been implemented:

- Reusable Gowns Project
- Food donation program OzHarvest
- PVC recycling
- Batteries recycling

REUSABLE GOWNS

In April 2022 a pilot Reusable Gowns Project commenced in Footscray and Sunshine ICUs. Successfully, the trial has avoided the use of over 40,000 disposable gowns and diverted 1,600kg of waste from landfill, generating savings from disposal-associated costs. The infection prevention and control (IPC) team have approved the gowns for clinical use. It is now proven that they are as safe as single-use gowns as well as being more cost effective, better for the environment and are in alignment

to Western Health's Sustainability Plan 2020-2025. Following the success of the trial, Western Health is looking to expand this program to the entire organisation.



FOOD DONATION PROGRAM

Food waste is a major contributor to climate change. In partnership with OzHarvest, the biggest Australian advocate driving action against food waste, Western Health has committed to donate food that is not been consumed by our patients. This agreement is a starting point to optimise our processes and reduce organic and general waste loads to landfill while reducing the GHG emissions associated.

The successful implementation of the program has seen it expand to Footscray, Williamstown and Sunshine Hospitals during the last two financial years. During FY 2021-2022, this program avoided 9.4 tonnes of food from going to landfill and continues contributing to the community in need. Please see table 8 below.

SITE	FY 2020-2021 (KG)	FY 2021-2022 (KG)
Sunshine	1,544	2,823
Footscray	1,623	2,383
Williamstown	557	225
Total	3,724	5,431

Table 8. Kilograms of food donated per site

PVC RECYCLING

Since its establishment in 2016, this program continues collecting high grade, clear PVC hospital items such as used facemasks, oxygen tubing and irrigation bags for intravenous fluids, to be recycled into agricultural hosing and gumboots. During FY2021-2022, Western Health recycled 1.7 tonnes of this material.

BATTERY RECYCLING

Reusing and recycling valuable materials from batteries creates new economic opportunities for recyclers and reduces the virgin extraction of natural resources from mining. At the same time, it ensures that batteries do not end up in landfill where they can leak toxic chemicals. This helps preventing contamination of waterways and soils.

During this financial year, Western Health strengthened the battery-recycling program, implementing separation practices in three hospitals. As a result, more than one tonne of batteries were diverted from landfill. During FY2021-2022 Sunshine, Footscray and Williamtown Hospitals collected around 43,400 batteries, thanks to this program the aim is to expand to other sites in the near future.

CLIMATE ACTION AND CHANGE FROM WITHIN

This year is a turning point for Western Health and its governance. Starting the journey at executive level for the implementation of the Sustainability Plan.

One of the first steps taken is an increase in the resourcing of the Sustainability Team who appointed a Sustainability Program Manager and a Sustainability Coordinator, led by the Chief Sustainability Officer. The resourcing aims to improve Sustainability leadership within the organisation and to develop and implement strategies with internal and external stakeholders to achieve NZE 2050. Moreover, our Sustainability Plan is based on the creation of sustainability roadmaps for all directorates within our organisation. By incorporating diverse international frameworks, such as the UK's National Health Service Sustainability framework; we are aiming to implement specific initiatives tailored for the health sector. The roadmaps will also align our strategy with the United Nation's Sustainable Development Goals (SDGs).

TOGETHER, CARING FOR THE WEST

westernhealth.org.au

Footscray Hospital

Gordon Street Footscray VIC 3011 Locked Bag 2 Footscray VIC 3011 03 8345 6666

Sunshine Hospital

Furlong Road St Albans VIC 3021 PO Box 294 St Albans VIC 3021 03 8345 1333

Sunshine Hospital Radiation Therapy Centre

176 Furlong Road St Albans VIC 3021 03 8395 9999

Western Centre for Health Research and Education

Sunshine Hospital Furlong Road St Albans VIC 3021 03 8345 1333

Sunbury Day Hospital

7 Macedon Road Sunbury VIC 3429 03 9732 8600

Williamstown Hospital

Railway Crescent Williamstown VIC 3016 03 9393 0100

Drug Health Services

3-7 Eleanor Street Footscray VIC 3011 03 8345 6682

Hazeldean Transition Care

211-215 Osborne Street Williamstown VIC 3016 03 9397 3167

