



ENVIRONMENTAL SUSTAINABILITY REPORT 2021



Welcome

It is with great pleasure that we present East Grampians Health Service (EGHS) Environmental Sustainability Report 2021, showcasing the improvements and initiatives that have made a sustainable difference to our environment over the past year.

EGHS recognizes the importance of and are committed to sustainable environmental management by reducing landfill waste, reducing energy usage and promotion of energy efficient behaviors.

Our Environmental Sustainability Committee oversees the implementation of sustainable strategies and endeavors to engage, educate and empower staff to create an environmentally sustainable workplace. The Committee includes representatives from Executive and key departments. As a leading public health service in the region, it is imperative we demonstrate leadership in reducing our environmental footprint.

Major projects this year have included the installation of a large-scale carpark shelter solar system, lift upgrade and ongoing LED replacement program. Other upgrades across the site to improve energy efficiencies have been completed by our Environmental Sustainability Committee.

The report reinforces our commitment to transparency surrounding our environmental impact, acknowledging the challenges we face during the COVID-19 pandemic and celebrating the successes towards creating an environmentally sustainable health service. East Grampians Health Service is committed to improving the environmental sustainability of the healthcare it delivers, and by doing so, reducing the potential impact of climate change on future population health.

Traditional Owners

East Grampians Health Service proudly acknowledges the traditional custodians of the lands and pays respect to all Elders past, present and future of Aboriginal and/or Torres Strait Islander communities, across this nation.



Acknowledgements

Many thanks to the Environmental Sustainability Committee, supporting staff and our Supply Department that contributed to this report and have sourced products to minimise our impact on the environment.

Report Boundaries

Data presented in this report was provided by suppliers, contractors, utility invoices, sub-metering and the Victorian Department of Health and Human Services.

About East Grampians Health Service

East Grampians Health Service is based in Ararat and Willaura and takes its name from the magnificent mountain range that provides a backdrop to both townships.

East Grampians Health Service is committed to providing quality care and services that meet the needs of the community, whilst continuously striving for improvement and aiming to lead the way in provision of health related services.



OUR VISION

To be leaders in rural health care.

OUR MISSION

East Grampians Health Service will improve our community's health and quality of life through strong partnerships and by responding to changing needs.

OUR VALUE STATEMENTS



Integrity

We value integrity, honesty and respect in all relationships.



Excellence

We value excellence as the appropriate standard for all services and practices.



Community Focus

We respect the dignity and rights of our community and acknowledge their beliefs, regardless of their cultural, spiritual or socioeconomic background.



Working together

We value equally all people who make a contribution to EGHS to achieve shared goals.



Learning Culture

We strive to continually learn and develop through education, training, mentoring and by teaching others

Our Commitment to Sustainability

East Grampians Health Service's commitment to sustainability is long standing. We recognise the link between human health and the environment, including climate change. Extreme weather events that occur as a result of our changing climate, such as heatwaves, see our patient admission rates rise, placing increased pressure on the services that East Grampian Health Service delivers. As a large consumer of electricity and natural gas, and a considerable generator of waste, East Grampians Health Service has a key role to play in helping to reduce our impact on the environment by using resources efficiently, reducing the amount of waste generated, maximising recycling opportunities and minimising the amount of waste going to landfill.

Environmental Sustainability Quality Improvement Plan

The Environmental Sustainability Committee develop yearly quality improvement plans for the key priority areas. These plans are developed in consultation with key areas and progress will be reviewed at regular intervals. The Quality Improvement Plan aim to deliver tangible outcomes and respond to changing priorities and drivers over the life of the Strategy.



INITIATIVES AND IMPROVEMENTS

Significant environmental benefits of key projects and strategies have helped to reduce negative environmental impacts and also operational costs. The following initiatives and improvements document the journey and the significant start we have made in the process of embedding sustainability into all areas of East Grampians Health Service.

Carpark Shelter Solar Panels

The Carpark Shelter Solar Panel project commenced in the front visitor carpark in November 2021 and is scheduled to finish Mid-March 2022. Pending further funding EGHS hopes to be able to extend the installation to the staff and fleet carparks.

The project will provide the following benefits:

- Protection for visitor cars from extreme weather (shade, rain and hail)
- Generation potential of 201kW green electricity to all be utilised on site.
- Significant reduction in electricity costs.
- Economic stimulus provided to the region through design, fabrication, installation and project supervision.



LED Lighting

We are constantly reviewing our processes and looking for ways to operate in a more cost-efficient and environmentally-friendly manner. One ongoing area of focus is the type of lighting systems used at our sites.

During 2021 East Grampians Health Service undertook a major retrofit in our older buildings and installed 900-1000 LED lights. This will continue across the whole site during 2022.

LED lighting is one of the newest technologies to reduce the energy consumed by lights. LED lights also last substantially longer than traditional fluorescent tubes, which help reduce waste and servicing.

The results of the retrofit have been outstanding, with the visibility and general amenity of the hospital improving markedly, while also delivering significant energy savings over the previous lighting systems

This will ensure further cost savings, as well as keeping our buildings up to date and offsetting the ever-increasing energy footprint of providing the latest specialist technical equipment.



Drinking Water Fountains

The Environmental Sustainability Committee identified bottled water was a popular purchase in Café Pyrenees which contributed a significant amount of plastic waste. EGHS installed two additional drinking water fountains during 2021, increasing the total on site to 12 units and promoted the units through our ECHO newsletter. Staff are encouraged to refill personal water bottles from these units to reduce plastic waste.



GWM Water also generously donated some reusable water bottles and these were offered to staff who purchased bottled water in Café Pyrenees to promote the water fountains.

Hybrid Fleet Cars

Hybrid vehicles seamlessly combine the power of petrol engines with the efficiency of electric motors. In a Hybrid, the battery is recharged while you drive so it's always ready to go without ever needing to be plugged in.

The Toyota hybrid vehicle battery is recyclable, in excess of 98% of the battery materials are diverted from landfill, and all toxic elements are removed. Therefore aim to promote and reinforce effective recycling to limit our impact on global resources and landfill.

We have ordered 5 hybrid cars for our fleet and they should be in the fleet late in 2022.

Recycled Toilet Paper

As toilet rolls are one of our biggest usages at EGHS we decided to trial recycled toilet paper. The product is called Merino Earthwise Toilet Tissue roll that are soft, gentle, strong and are made from 100% recycled clean office waste paper. The paper is 2 ply the same as we are currently using and it is not re-bleached and no fragrance is added to the manufacturing process. They are biodegradable, safe for all systems and rapidly breaks down once in contact with water.



Recycled A4 Photocopy Paper

Of the thousands of reams of paper East Grampians Health Service used in the past 12 months, most were carbon neutral paper and only a small amount non-carbon neutral paper. The committee decided to trial 100% carbon neutral recycled paper which comes in various styles. With all reams trialled there is added sustainability incentives that go with the purchases.

Recycled Paper Hand Towels

Another big consumer across the EGHS site is paper towel. The committee has looked at Caprice Green ultra slim hand towel made from 100% recycled paper to replace the current paper towels. The Caprice Green slim fold interleaved towel is an ideal alternative for sustainable and dependable paper towel options.

This towel offers superior absorbency and is manufactured from 100% recycled material, while the slim fold portion-controlling design reduces waste.



Cotton Tip Applicator (cotton buds)

The Livingstone cotton tip applicator is used to apply medicine to wounds or to probe around narrow areas that may be difficult to reach using fingers. It replaces the plastic stems and gives us an ideal alternative sustainable option.

- Biodegradable
- Ideal for applying medicine to wounds
- Double tipped
- 100% natural cotton



Small Recycle Bins

In offices across the site we found staff were separating recyclable items from their general waste into cardboard boxes, bags and sometimes just piled under desks. In 2021 we trialled using smaller recycle bins in some offices for staff to use instead and make it easier for environmental service staff to identify recycling waste and place it in the correct waste cycle area. These recycle bins will be rolled out across the site during 2022.



Generator Fuel Tank

The old fuel tank was a standard unit which needed updating. We purchased a new tank that features a triple skin liner to prevent spillage and rupture to the tank that could be devastating to the environment.



New Buildings / Renovations

Recycling or repurposing materials to make the same or different products keeps materials in the productive economy and provides beneficial environmental outcomes through reducing the need for virgin materials and waste disposal such as landfill. Recycling includes re-processing where items are processed and used to produce new items of the same material and processes where items are used to create new products. Not all recyclable materials are able to be reprocessed. During redevelopment projects, it is part of our process to recycle materials wherever possible. The following information indicates where EGHS have been able to recycle materials during those projects.

During these projects, we have been able to re-utilise and recycle many items, which has not only assisted with large cost saving to the health service but has also assisted in less wastage which minimises the impact on the environment.

Vegetable Gardens / Compost Bins

We have increased the amount of vegetable patches across the site for residents and clients to look after them as an activity. Some of the produce is for jams and sauces that are sold our day centre fates and Willaura market day. We further looked at our sustainability and decided to purchase compost bins. Starting with one per area and maybe expanding as the demand increases. Waste is generated from the kitchens waste such as vegetable and salad cut offs. The areas are monitored by our EGHS gardeners.





Lift Upgrade

Modernisation works are being carried out on our lifts. These works applied the latest energy efficiency technologies, including:

- Replacing direct current hoisting machines and generator sets with permanent magnet alternating current type
- Replacing lift control system with variable frequency AC inverter units with regenerative technology
- New group control supervisory panel
- Installing power consumption monitoring devices



Outdoor Areas

The COVID-19 pandemic brings the interface between the impact of the built environment and people's wellbeing into focus. The urgency to support the most vulnerable and embrace deep sustainability is greater than ever.

We erected new outdoor areas for staff through 2021. They feature sun screen and protection from the weather conditions.

We built this area to create a sense of community, supporting domestic economy and increasing worker productivity.



Coffee Beans Utilised in Gardens

Coffee Grounds Composting is a great way to make use of something that would otherwise end up taking up space in a landfill. Composting coffee grounds helps to add nitrogen to your compost pile and gardens.

The benefit of using coffee grounds as a fertilizer is that it adds organic material to the soil, which improves drainage, water retention, and aeration in the soil. The used coffee grounds will also help microorganisms beneficial to plant growth thrive as well as attract earthworms.

We are now using the cafe coffee grounds as a fertilizer in our gardens. A bucket is filled by the café Pyrenees staff and is picked up and used by the Garden staff.





Battery waste

Batteries are a risk to human health and the environment if disposed of inappropriately. They also contain valuable metals such as cadmium, zinc, manganese, cobalt and rare earth metals that may be recovered through recycling. After collection, batteries are sent to Cleanaway Daniels and they send them to the respective recyclers in Australia and overseas.

All departments located on campus can safely dispose small alkaline battery waste such as AAA, AA, C, D, 9V from their office using Daniels battery buckets. For larger batteries staff can contact maintenance to arrange disposal.

With reducing waste being a high priority, we encourage the purchase and use of rechargeable batteries particularly in the maintenance area's that can be recharged hundreds of times.



Weeds

Weeds can compete with native plants, block water supplies, smother garden beds and cause health problems including allergies, skin rashes and hay fever, and disrupt the balance of natural ecosystems.

EGHS undertakes a concerted weed control effort in order to protect our environment's natural ecosystems and reduce the threat weeds pose.

Weeds are controlled by our garden staff and we are always looking at eco-friendly poison's to be used on the site.



Waste Audit

East Grampians Health service is committed to maintaining a waste management system that provides a safe environment, is efficient, cost effective and considers environmental issues. Our key to effective management is segregation of our waste at the point of generation. Waste streams are set up across the site that include recycle, general waste, confidential, battery, printer cartridges, florescent tubes, E waste, PVC and clinical waste. To ensure our waste segregation is adequate a general waste audit was undertaken by Environmental Service staff in May 2021 to identify the opportunities to reduce waste and to provide accurate and consistent data for the Environmental Sustainability Committee.



The goals of the audit were to:

- Benchmark our current procedures and environmental impact
- To identify and understand the opportunities for improvement
- Trend monitoring and develop new initiatives
- To reduce, reuse and recycle more waste to achieve less landfill disposal

Preliminary discussions were held with our champion staff to confirm sample collection timing and other logistical issues pertaining to the successful conduct of the audit. The discussions were also used to confirm material classifications for the streams being audited.

They were also informed of the objectives of the audit, data collection procedure and that the data collection tool was to be collected for the Environmental Sustainability Committee for evaluation and actions for improvements.

Samples from the designated areas were collected in bins so as to clearly distinguish their place of generation. A sheet was filled out for each bin audit.

The purpose of the audit was to analyze the contents of our general waste bins and to identify which waste streams have been discarded into the incorrect bins. Collection times were varied for each area.

Areas that the audit was conducted were IPU, GVC, 70 Lowe St, Main Kitchen, and Café Pyrenees.

From the results there is still need for improvement to waste management for the benefit of staff, patients, residents and the wider community. This can be achieved through education, auditing, continually reviewing the system and the committee and staff following the recommendations from the audit.



Environmental Impacts

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

The reporting boundary used for greenhouse, energy, water and waste impacts in this report are for those operations and services where East Grampians Health Service pays energy and fuel bills (all sites). This includes all EGHS services and extra utilities from services shared with other healthcare networks including sharing the delivery of mental health services, pathology and Ararat Rural City onsite).

Energy and water performance report

2020-21

East Grampians Health Service

Expenditure

	2019-20 (\$ thousand)	2020-21 (\$ thousand)	Change from previous year
Electricity	\$445	\$345	-22.4%
Liquefied Petroleum Gas	\$33	\$19	-42.2%
Natural Gas	\$148	\$117	-20.6%
Potable Water	\$38	\$28	-26.6%
TOTAL	\$664	\$509	-23.3%

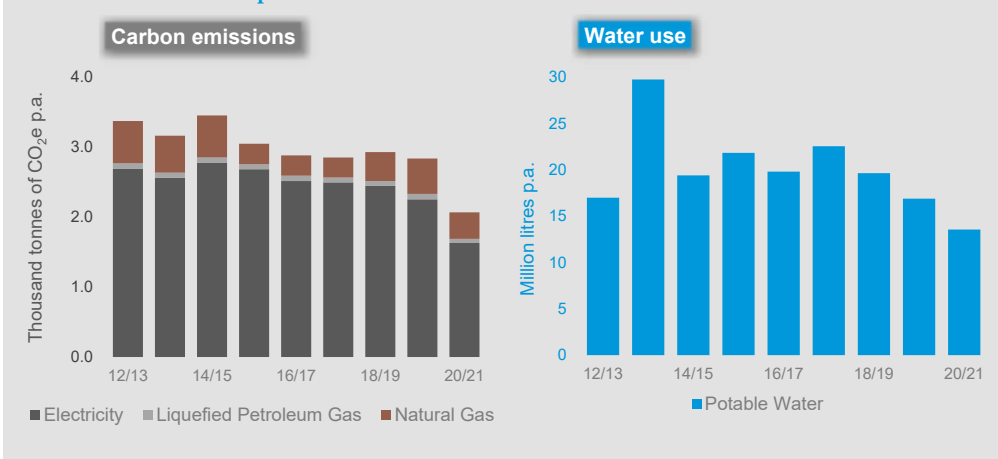
Questions?

For assistance with the interpretation of this report please contact the Department at sustainability@dhhs.vic.gov.au.

GST

All values are GST exclusive.

Environmental impacts



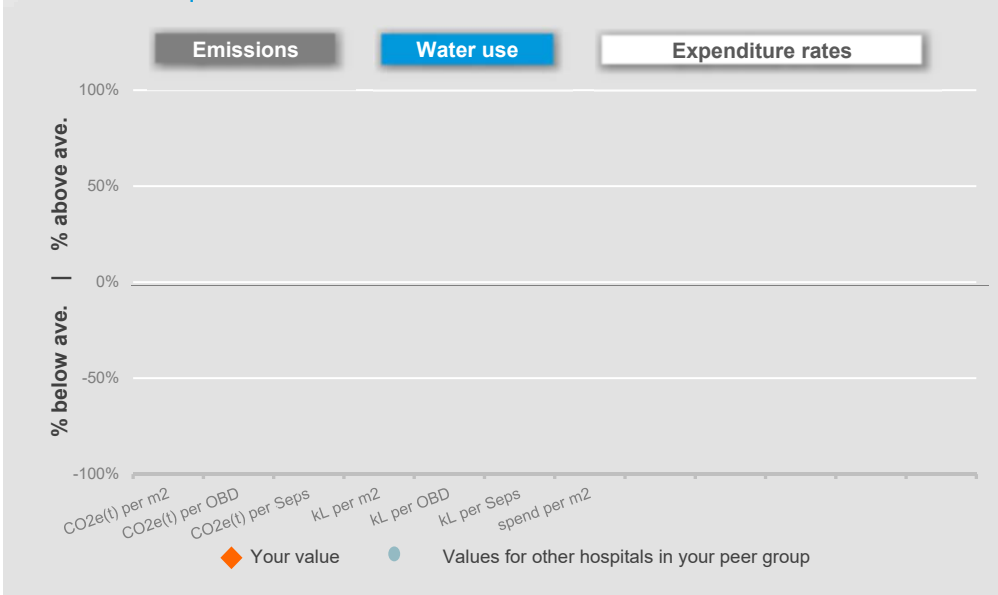
Carbon emissions

Carbon emission values represent total Scope 1 and 2 carbon emission from stationary energy (energy used in buildings).

Floor area

Floor area trend is plotted on the charts as floor area is typically the main factor influencing significant year on year changes in environmental impacts. Carpark floor area is excluded. Floor area is the average value for each year.

Benchmarks | 2020-21



Peer group

Your peer group is ". Members of this group are:

OBD

OBD = Occupied Bed Days, Seps = Separations

Expenditure rates

Expenditure rates are calculated by dividing total expenditure with total consumption (usage).

If your value is not shown, it is more than 100% above or below the peer group average. Your value is provided in the table on page 2.

Energy and water performance report

2020-21

East Grampians Health Service

Environmental impacts & energy use

	2018-19	2019-20	2020-21
Energy use			
Electricity (MWh)	2,287	2,211	1,664
Liquefied Petroleum Gas (kL)	45	50	37
Natural Gas (gigajoules)	8,028	9,812	7,359
Carbon emissions (thousand tonnes of CO₂e)			
Electricity	2.45	2.26	1.63
Liquefied Petroleum Gas	0.07	0.08	0.06
Natural Gas	0.41	0.51	0.38
Total emissions	2.93	2.84	2.07
Water use (millions litres)			
Potable Water	19.65	16.90	13.56

Factors influencing environmental impacts

	2018-19	2019-20	2020-21
Floor area (m ²)	15,524	15,524	15,524
Separations	5,639	5,043	5,055
In-Patient Bed Days	11,083	11,173	9,986
Aged Care Bed Nights	28,473	28,423	26,920

Benchmarks | 2020-21

	Average for peer group	Your value	% above/below ave.
Carbon emissions			
CO ₂ e(t) per m ²	-	-	N/A
CO ₂ e(t) per OBD	-	-	N/A
CO ₂ e(t) per Seps	-	-	N/A
Water use			
kL per m ²	-	-	N/A
kL per OBD	-	-	N/A
kL per Seps	-	-	N/A
Expenditure rates			
Total utility spend (\$/m ²)	-	-	N/A
<i>Additional measures (not included in benchmarking chart)</i>			
Total utility spend (\$/Separations)		100.75	
Total utility spend (\$/In-Patient Bed Days)		51.00	
Total utility spend (\$/Aged Care Bed Nights)		18.92	

Expenditure rates

Expenditure rates are calculated by dividing total expenditure with total consumption (usage). Rates exclude GST.

General notes

1 Information in this report is sourced from data provided by retailers and in some cases data manually uploaded by health services into Eden Suite. Data has not been externally validated. All annual values represent a year ending 30 June.

2 Emissions are calculated using the carbon factors for the year in which the emissions were generated. For health services provided with energy (electricity and steam) under the co-generation ESA (energy services agreement) carbon factors provided by the energy retailer are used.

3 Electricity consumption values exclude line losses; some energy retailers include losses in reported values.

4 Occupied bed days (OBD) include both inpatient and aged care data, unless stated otherwise.

Waste Management Performance Report

2020-21

East Grampians Health Service

Waste costs (collection & disposal)

	2019-20	2020-21	Change from previous year
Clinical waste	\$27,891	\$45,888	64.5%
General waste	\$28,323	\$29,395	3.8%
Recycling	\$23,400	\$25,913	10.7%
TOTAL	\$79,614	\$101,196	27.1%

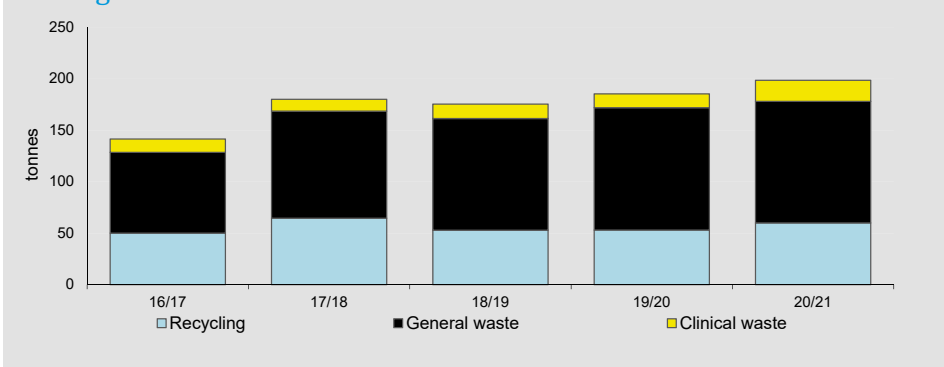
Questions?

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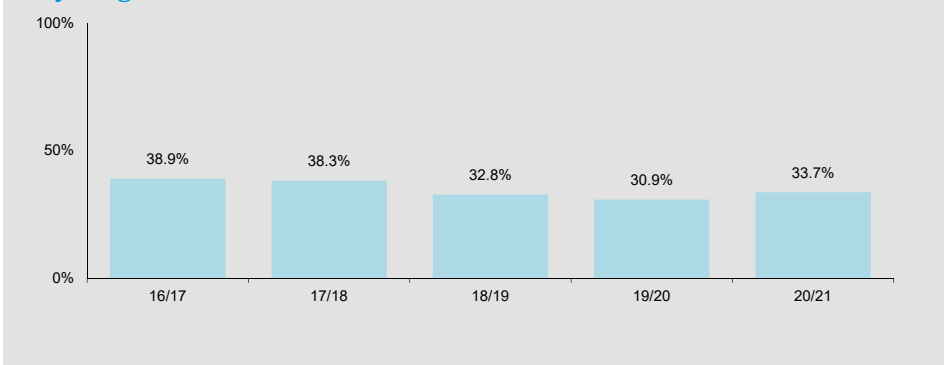
GST

All values are GST exclusive.

Waste generation



Recycling rate



Waste per patient treated



Recycling	kg
Batteries	✓ 19
Cardboard	✓ 17,160
Commingled	✓ 22,900
E-waste	✓ 14
Fluorescent tubes	✓ 12
Grease traps	✓ 925
Mattresses	✗ -
Metals	✗ -
Mobile phones	✗ -
Organics (food)	✗ -
Organics (garden)	✓ 15,995
Other recycling	✗ -
PVC	✓ 36
Packaging plastics/films	✗ -
Paper (confidential)	✓ 2,889
Paper (recycling)	✗ -
Polystyrene foam	✗ -
Sterilization wraps	✗ -
Toner & print cartridges	✗ -
Wood	✗ -
TOTAL	59,951

Recycling

The list of recycling types includes those potentially available to public hospitals. It is noted that some waste providers in rural and regional Victoria may not deliver these services. The kilograms of recycling reported is for the reported year only.

Recycling rate

The recycling rate is calculated by dividing the kilograms of recycled materials by the kilograms of recycled materials plus kilograms of general waste. It excludes clinical waste.

Per patient treated

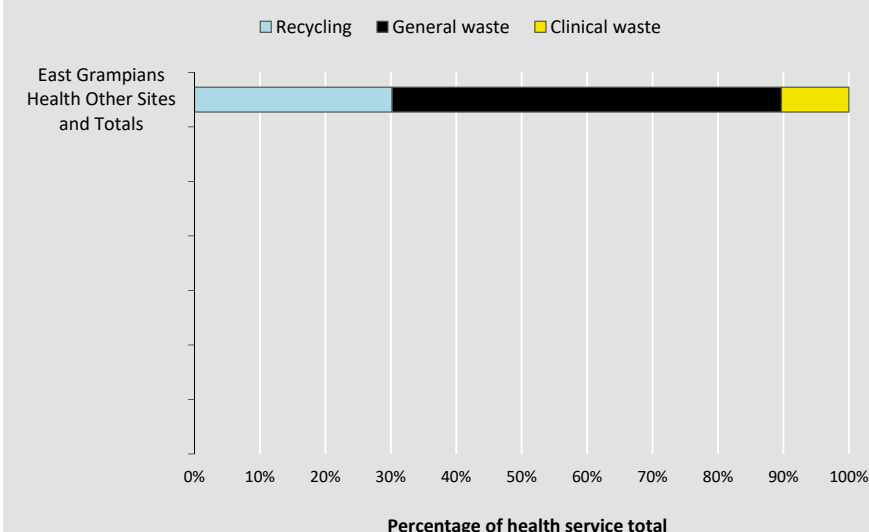
Per patient treated is an aggregation of occupied bed-days (inpatient and aged care), ED departures and separations.

Waste Management Performance Report

2020-21

East Grampians Health Service

Site contribution | 2020-21



Site contribution chart

The site contribution chart works best where health services collect waste data at the facility level. Where waste data is collected at the health service level only one bar is shown. For further information on collecting waste at the facility level please contact the Department at edms@dhhs.vic.gov.au.

Waste generation

	2018-19	2019-20	2020-21
Clinical waste			
Clinical waste - incinerated (kg)	1,494	1,237	1,206
Clinical waste - sharps (kg)	237	590	645
Clinical waste - treated (kg)	12,283	11,574	18,598
TOTAL	14,015	13,401	20,449
General waste			
General waste - bins (kg)			
General waste - compactors (kg)			
General waste - skips (kg)	108,441	118,834	118,057
TOTAL	108,441	118,834	118,057

Waste costs

	2018-19	2019-20	2020-21
Clinical waste (\$/PPT)	0.57	0.62	1.09
General waste (\$/PPT)	0.41	0.63	0.70
Recycling (\$/PPT)	0.30	0.52	0.62

Carbon emissions (Scope 3)

	2018-19	2019-20	2020-21
Carbon (tonnes CO2-e)	146	158	180

Factors influencing waste

	2018-19	2019-20	2020-21
Aged Care OBD	28,473	28,423	26,920
ED Departures			
LOS	11,083	11,173	9,986
Separations	5,639	5,043	5,055
Per patient treated	45,195	44,639	41,961

Carbon emissions

Carbon generated from waste is Scope 3. Scope 3 carbon emissions are indirect and do not need to be publicly reported. It is provided for information only.