



# Yarra Ranges Council Sustainability Report 2022 — 23 Financial Year



Yarra Ranges Council acknowledges the Wurundjeri and other Kulin Nations as the Traditional Owners and Custodians of these lands and waterways.

We pay our respects to all Elders, past, present, and emerging, who have been, and always will be, integral to the story of our region. We proudly share custodianship to care for Country together.

# Table of Contents

Executive Summary.....	4
Introduction .....	5
Emissions Tracking.....	6
Climate and Environmental Sustainable Design .....	10
Nature.....	16
Sustainable Living and Stewardship .....	24
Resource Recovery .....	31



## Executive Summary

In the 2022/23 Sustainability Report, our organisation reaffirms its commitment to environmental responsibility and sustainability. Over the past year, we have made significant strides across various programs aimed at addressing climate change, promoting environmentally sustainable design, preserving nature, conserving water, fostering sustainable living, and enhancing environmental stewardship and waste management.

Highlights from the year:

- We have reduced our greenhouse gas emissions by 48% from our baseline year of 2004/2005.
- Completed microgrid feasibility studies for key townships.
- Supplied over 70,000 plants to private properties through the Ribbons of Green Program, supporting local revegetation activities and planting of over 37,000 plants into Council bushland reserves.
- Championed the protection of our local environment by reducing vegetation loss through planning processes by assessing 197 environmental referrals from Statutory Planning.
- Supported over 60 environmental volunteer groups to achieve positive environmental outcomes.
- Assisted schools to save over \$600,000 through sustainability initiatives.
- Organised and delivered over 25 community education environmental engagement events.
- The Community Waste and Resource Recovery Plan 2023–2030 was adopted by Council.
- Reduced the volume of stormwater discharging to our local waterways by 54 megalitres and removing 530 kilograms of nitrogen and 24 tonnes of gross pollutants.
- Attracted 193 new participants to the Gardens for Wildlife Program.

Through these efforts, we strengthen our commitment to creating a positive impact on the planet and advancing a sustainable future for all.

# Introduction

## Liveable Climate Plan 2020—2030

In 2019 Council developed the 2020—2030 Liveable Climate Plan and Action Plan; it was formally adopted on 25th August 2020. The plan outlined the following guiding principles:

- Reduce emissions with as many co-benefits as possible using an evidence-based approach in line with international efforts to limit global warming to 1.5°C.
- Prepare for a changing climate by recognising the risks, planning and working with others to achieve more together.
- Demonstrate responsible climate leadership by doing our fair share, and inspiring others to play their own part to restore a safe climate.
- Integrate broader principles of sustainability, especially drawing on the knowledge of Indigenous Australians and their deep connection with country.

## Our Targets



**Reduce** greenhouse gas emissions by 60% on 2005 levels by 2025



**Transition** all council services and infrastructure to 100% renewable energy by 2030.



**Net zero** emissions by 2040

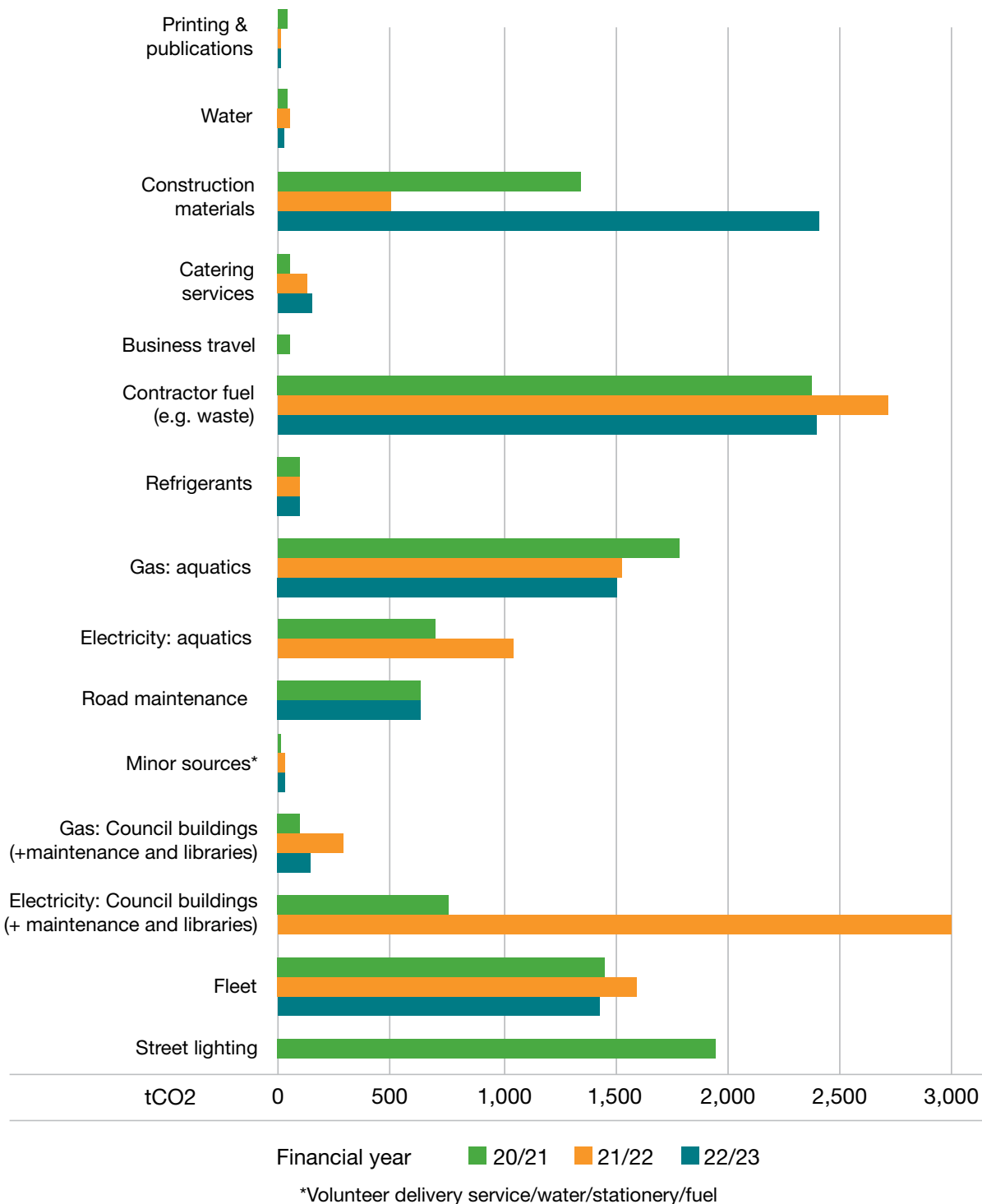


**Zero** operational energy expenditure by 2040

# Emissions Tracking

The graph below illustrates the evolution of Council's emission sources over the past three years. Notably, substantial reductions are evident in the street lighting and electricity categories, attributable to the Council's shift in electricity contracts to the Victorian Energy Collaboration (VECO). This transition ensures that Council's electricity is now sourced from 100% renewable energy, reflecting the commitment to reducing our environmental footprint and demonstrating sustainability leadership in emission reductions.

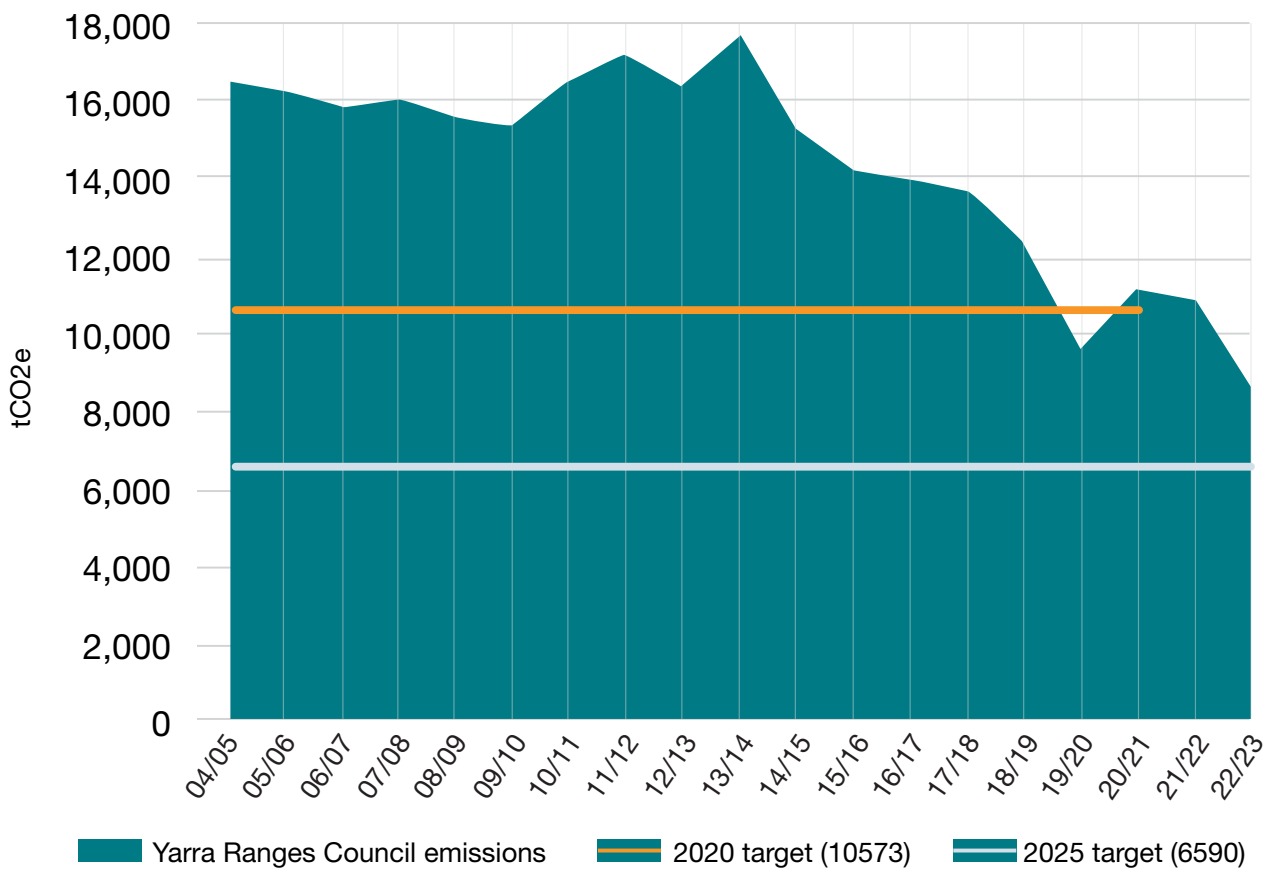
## Key emissions sources



In 2022/23 Council has achieved **zero emissions from electricity** due to transitioning to **100% renewable energy**.

## Annual emissions

The graph below shows Yarra Ranges Council's yearly emissions from the baseline year set in Council's Liveable Climate Plan. **There has been a 48% reduction in emissions when comparing the 2022/2023 financial year with the baseline of 2004/2005.** The target lines show that the 2020 target of 10,573tCO<sub>2</sub>e was reached in 2019/2020, and the descending line in 2022/2023 is on track to reach the 2025 target of 6,590tCO<sub>2</sub>e.







## Emissions by scope

The graphs below shows Yarra Ranges Council's financial year 2022/2023 emissions profile. The sources are defined based on operational control:

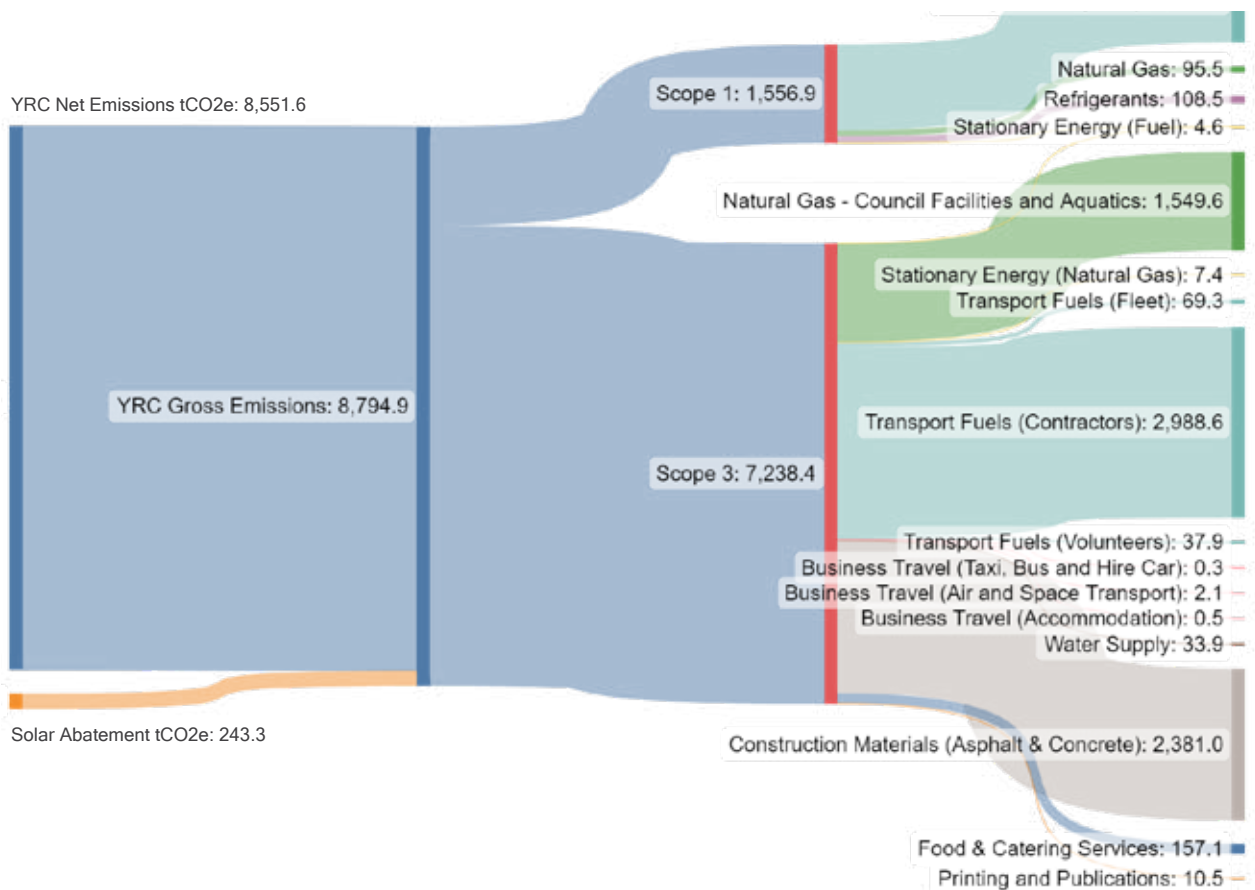
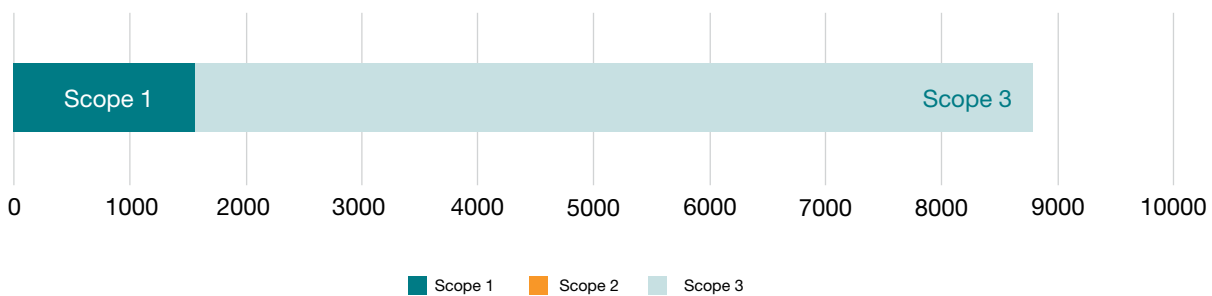
Scope 1 – direct emissions from Yarra Ranges Council operations

Scope 2 – indirect electricity emissions

Scope 3 – indirect emissions, such as through contracted services, leased facilities and supply chains

Scope 2 is not pictured below as Council sources 100% renewable energy, reducing its electricity emissions to zero.

The figures below highlight that 82% of Yarra Ranges Council's emissions are from Scope 3, indirect supply chain emissions.



2022/23 Yarra Ranges Council Emissions Inventory Sankey Diagram



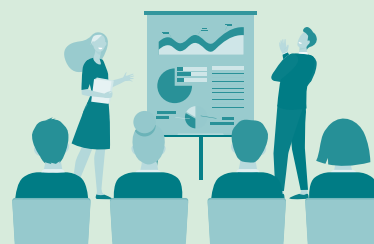
# Climate and Environmental Sustainable Design



4

community buildings equipped with solar systems totalling 36.5kWp

3 township microgrid sessions



42

environmental sustainable design referrals completed

An aerial photograph of a building with a grey corrugated metal roof. A large rectangular array of dark solar panels is mounted on a section of the roof. To the right, there is a wooden deck with several tables and chairs. The building is surrounded by greenery and a paved area.

## Solar and renewable energy

The following community buildings were equipped with solar systems:

- Yarra Junction Bowling Club — 9.6kW Solar PV system and 30kWh backup battery
- Warburton Waterwheel — 13.3kW Solar PV system
- CIRE Community School (Mount Evelyn) — 6.4kW Solar PV system
- Golden Wattle Club (Healesville) — 7.2kW Solar PV system.

## Microgrids — progress update

The Active Energy Precincts Project was finalised in May 2023, with feasibility reports and related collateral produced for the townships of Healesville and Yarra Junction.

The project resulted in the implementation of a 108 kWh battery at the Healesville Library, alongside community education on energy resilience via webinars, workshops, newsletters and presentations at relevant conferences.

A microgrid centred around the Healesville Library, The Memo and surrounding shopping centre was deemed feasible, whereas the Yarra Junction model needed further work.

The study is currently being replicated in Monbulk, with a microgrid model centred at the Monbulk Recreation Reserve. Similar community engagement is being conducted, and a pilot demonstration of connecting two buildings to share power is being implemented between the Monbulk Sporting Pavilion and the Monbulk Living & Learning Centre. This report and related works are due to be finalised in early 2024.



*108 kWh battery at the Healesville Library*



## Resilient buildings — works undertaken

Council has applied for, and received, funding through a number of different sources during the 2022/2023 period. The awarded funding was to be used to carry out sustainability related upgrades at select council facilities that range from Solar PV to building fabric improvements. These grants will make it possible to reduce emissions at 22 sites, slash running costs for council and community groups, and extend facility life and increase usability.

### Solar upgrade to community facilities —

The Local Roads and Community Infrastructure Programme (LRCI)

The Warburton Waterwheel was one of three sites upgraded using LRCI funds — a 13.3kW Solar PV system consisting of 34 panels was installed on the roof. The goal of the project was to reduce operating costs for tenants and community groups that operate out of the facility, while also cutting emissions. The solar generates savings of roughly \$2300 per annum and reduces the emissions by an estimated 19 tonnes CO<sub>2</sub> per year... goal achieved!

The Warburton Waterwheel Visitor Information Centre is a key cultural hub in the Warburton township with music, markets and art all being on offer. The site is yet to have a backup battery installed; however the inverters are ‘battery ready’ and a generator plug has also been installed as part of the project to allow for operation in an emergency should the site be activated as a ‘community hub’.

## Community backup generator plug-in points — Emergency Management Victoria (EMV)

Five facilities that were identified as potential community resilience sites received funding to have backup generator plug-in points installed, to be used if the facilities need to be activated as a 'community hub' in the future. This brings the total number of sites with back-up generator capability to 14, spread across the shire. The five sites upgraded in this project were the Coldstream Community Centre, Healesville MEMO, Mooroolbark Community Centre, Yarra Centre Pool and the Yarra Glen MEMO.

## Yarra Junction resilience upgrade — Sustainability Victoria (SV)

The Yarra Junction Bowling Club was awarded funding through SV to install a 9.6kW Solar PV system that is backed up by a 30kWh backup battery. The funding aim was to create a resilience site in Yarra Junction where community could access power for device charging and meal prep during outages or storms, this has been achieved and soon the Yarra Centre Pool (next door) will house a 200kWh battery to further bolster the areas energy storage capability and create more resilient community hub in the face of a changing climate.



## Environmental sustainable design referral

In December 2022 changes were made to the Yarra Ranges Planning Scheme via Amendment C148 to introduce an Environmental Sustainable Design (ESD) policy into the scheme.

In addition to this amendment, our membership with the Council Alliance for a Sustainable Built Environment (CASBE) underscores our ongoing commitment to promoting elevated ESD.

During 2022–23 Council received a steady stream of ESD referrals. Whilst applications have not strived for ESD excellence, the constructive feedback and conditions imposed have yielded satisfactory results for the community.

Future strengthening of ESD criteria will continue to increase the ESD outcomes of buildings in Yarra Ranges.

Continuous improvements to ESD commitments are critical to improving the quality of buildings for Yarra Ranges residents, whilst simultaneously driving down emissions and occupant operating expenses. During last financial year, 42 ESD referrals were completed.



## Zero emissions fleet

Council obtained grant funding from the Victorian Government's Electric Vehicle Charging for Council Fleet Program Council to install electric vehicle chargers at Lilydale Civic Centre, Monbulk Living and Learning Centre and Yarra Junction Community Link.

Investigations into charging options and power requirements at each site and suitable locations have been completed.

Upon completion, Council's electric vehicle drivers will have access to more charging options across the municipality which will support the expansion of Council's electric vehicle fleet. Installation is expected to be completed by mid 2024.

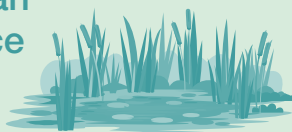


# Nature

Water sensitive urban design assets reduce

**54 ML/y**

of stormwater discharging to waterways and remove 24 tonnes of gross pollutants per year



**37,000**

natives planted on council-owned land



Facilitated biodiversity offset trades worth over \$366,000 within the Yarra Ranges

**24**



**12ha**

of land designated to biodiversity habitat restoration on private property





## Ribbons of Green

The Ribbons of Green program offers free native plants to private property owners whose land is over 1 hectare, schools and community groups. The program aims to encourage the use of indigenous plants to restore critical biodiversity cross the Yarra Ranges.

During the 2022/23 financial year the program:

- Helped 67 private properties with planting projects/habitat restoration.
- Supplied 72,000 indigenous plants for planting on private land.
- Participated in 38 planting projects in vulnerable (Bioregional Conservation Status) vegetation communities.
- Engaged with 12 schools supporting education of future environmental stewards.
- Was instrumental in approximately 12ha being designated to habitat restoration across the municipality.

In 2023 the Ribbons of Green program was awarded Best Sustainability Initiative in the LGPro Awards for Excellence.



## Bushlands revegetation program

A total of 37,000 indigenous plants were planted in the 2022-2023 planting season. Revegetation is done by contractors, staff, environmental volunteer groups, community members and schools.

Over the 12 months, 1% of Medium Conservation Value Zones (40-54 Conservation Value Score CVS) have been elevated into High/Very High Conservation Value Zone (55-100 CVS), a fantastic outcome for local biodiversity.



## Biodiversity offsets program

Yarra Ranges Biodiversity Offsets Program was established to provide local and strategic native vegetation offsets that achieve quality ecological outcomes. Native vegetation offset requirements are set by the State Government and are incorporated into all Victorian planning schemes.

The Yarra Ranges program protects and enhances native vegetation and fauna habitat on 70ha of private Council-owned land located within the Yarra Ranges. Works include ongoing weed and pest animal control as well as further enhancement through revegetation.

For the 2022/23 financial year, the Biodiversity Offsets Program successfully facilitated 24 offset trades worth over

\$366,000 within the Yarra Ranges. Nine of these trades were for offset requirements for internal Yarra Ranges projects and Council is successfully achieving all of its offsets requirements locally.

The program is achieving its cost recovery target where the sale of offset credits is covering the cost of the Programs conservation management actions. The Program's current offset bank is depleted and is expected to be exhausted within the next 12 months.

Investigations for the development of new offset sites is currently being undertaken.



## Water tank art project

The water tank art project aims to showcase Indigenous culture and connection to Country via painted artwork on nine water storage tanks located throughout the municipality.

Two murals were completed this year bringing the project total to three murals. Located at the Kalorama Memorial Reserve, Mandy Nicholson's mural 'Buln Buln Yinga' is a beautiful depiction of the local lyrebird.

Ky-ya Nicholson-Ward's mural titled 'Corroboree' honours William Barak's painting of the same name and is located at Spadonis Reserve, Yering.

Fiona Clarke's mural 'Black Cockatoos' was the first to be painted and is featured on the tank located near the Reefton Hotel in McMahons Creek.

## Planning referral environmental assessments

In December 2022 changes were made to the Yarra Ranges Planning Scheme via Amendment C148 to introduce new overlays into the planning scheme to identify areas of significant landscapes.

Council's Environment Assessment Team implement state biodiversity legislation and ensure correct interpretation and compliance of the local biodiversity protection laws within the Yarra Ranges Council Planning Scheme.

Planning applications are assessed according to the impact on existing biodiversity values and implementation of the three-step approach of avoiding and minimising native vegetation losses where possible. Permit conditions are provided to ensure appropriate offsets are purchased for permitted native vegetation loss, and the protection of retained biodiversity values.

In the 22/23 period the environment assessment officers completed 197 referral requests from the statutory planning department.

A total of 30 planning applications with proposed native vegetation removal were recommended for approval over the 22/23 financial period.





## Environmental assessments — Council projects

Council's Environment Assessment Team includes an aborist and Environmental Assessment Officers who provide technical advice to ensure that biodiversity values are adequately considered, minimised and captured and that any proposed Council project is in line with legislative requirements.

The team provides initial design advice, obtain required permits and approvals under the Planning Scheme, State Road Safety Agreements, the Flora and Fauna Guarantee Act and Council's own Code of Environmental Practice as well deliver Construction Environmental Management Plans, Tree Management Plans and onsite inductions and supervision during works.

In the 20/23 period the team completed:

- 92 project biodiversity investigations
- 85 tree impact assessments
- 20 tree management plans
- 35 construction environmental management plans.

## Water

As of 2022/23, Council is managing 140 water sensitive urban design (WSUD) assets including swales, raingardens and wetlands. Collectively, these treatment systems reduce the volume of stormwater discharging to waterways by 54 ML/y as well as removing 530 kg/y nitrogen and 24 tonnes of gross pollutants per year.

Stormwater harvesting systems at Morrisons Reserve, Mt Evelyn and Pinks Reserve, Kilsyth saved 4 ML/y of potable mains water that otherwise would have been used to irrigate the sports fields. Construction of a third stormwater harvesting system commenced at Monbulk Recreation Reserve. Once completed this will supply an additional 4ML/y treated stormwater for irrigation.

2022/23 marked the second year of a formal partnership with Melbourne Water to deliver a three-year program of stormwater investigations and on-ground projects that will contribute to Healthy Waterways Strategy targets in the Yarra River catchment. Investigations were completed in the upper and middle Yarra River catchment, Woori Yallock Creek catchment and the Olinda Creek catchment. A shortlist of stormwater harvesting and infiltration opportunities were identified for further feasibility assessment and design work.

*Bellbird Street Reserve, Belgrave*





## Smart water network/partnerships

Council employed a Smart Water Network Facilitator in February 2023 to oversee the Monbulk Creek Smart Water Network project — a collaboration between Melbourne Water, the Department of Energy, Environment and Climate Action, the University of Melbourne, South East Water, Yarra Ranges Council, and the Australian Research Council.

The project aims to safeguard the health of Monbulk Creek and consequently, the platypus that depend on it for survival, by installing rainwater tanks that can capture and release water in times of need.

The initial phase of the project included:

- Document development between stakeholders.
- Specialist plumbing panel tender developed.
- Installation of two tanks; Birdsland Reserve, Belgrave Heights and a private residence.
- Project named Tanks for Platypus (part of the Monbulk Creek Smart Water Network).

This project is partly grant funded.



## Sustainable Living and Stewardship

**40+**   
community events

Gardens for Wildlife  
property visits  
conducted by  
volunteers **75**



  
**60+** environmental  
volunteer groups

 **24**  
Yarra Ranges  
schools in the  
ResourceSmart  
Schools program

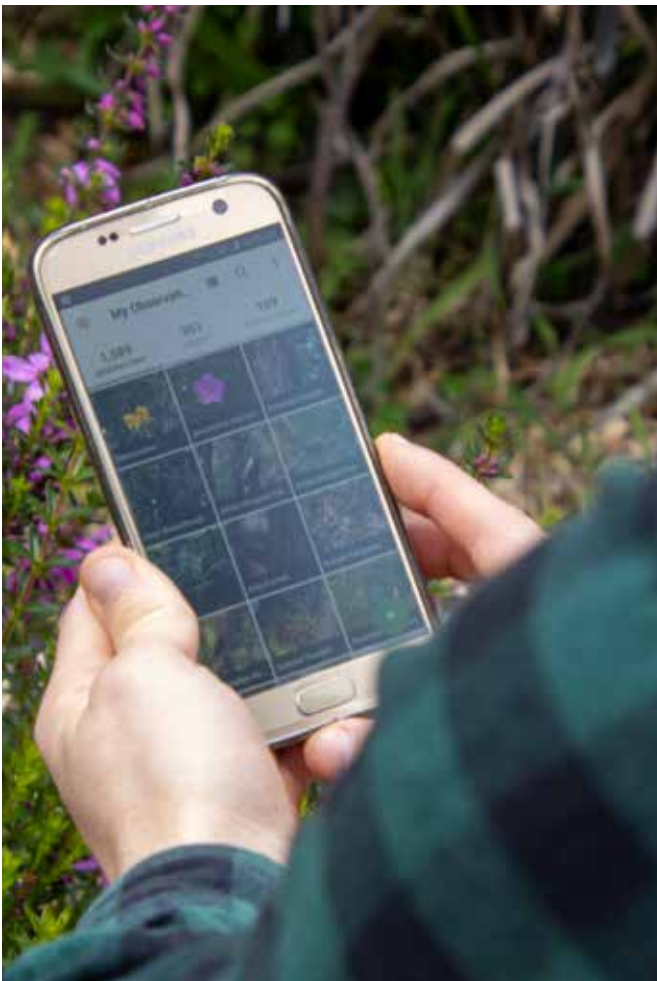


## My energy and water saver kits

In 2022/23, 10 additional kits containing information and tools to measure energy, water use, and waste output were added to the Your Library service to meet demand.

Approximately 120 people borrowed the kits with feedback from users highlighting the following:

- adding insulation where missing, including under floor insulation
- being more aware of standby power use
- knowing that the fridge was not at the right temperature
- more draught proofing
- better understanding of thermal losses.



## Community education and events

Environmental events included:

- MiniBeasts and Platypus festivals
- location walk and talks
- a multi-council biodiversity blitz
- fauna monitoring webinar
- gardens for harvest workshops/webinars
- hollows and nestbox program
- solar savers information sessions
- active energy precincts workshop
- weed blitz free tipping days
- sustainability fair
- learning for sustainability conference for educators.

## Food security

A Food Systems Officer oversees the Gardens for Harvest program, community gardens and works toward food security within the region.

### Community gardens

- Initiated Community Gardens Network who meet monthly to share ideas and resources.
- Building awareness of community gardens through Council communications.

### Gardens for Harvest program

- Delivered workshops and events.
- Deployed a monthly newsletter to participants.
- Hosted a community development internship who assessed the program and provided feedback for improvement.

### Food security focus

- Collaborated with groups including; Yarra Ranges Food Connections, Sustain Network, South East Food Movement.
- Developed a Food Security Strategic Plan.
- Presented on the topic of food security to the community and the Sustainable Environment Advisory Committee.
- Applied for a Growing Suburb Fund grant.
- Awarded a Vic Health Grant to fund ten events that will be delivered in collaboration with Council's Health and Wellbeing Team.
- Initiated the Sustainability and Urban Planning working group.





*Learning for Sustainability Conference 2023*

## Eastern Alliance for Sustainable Learning

The Eastern Alliance for Sustainable Learning (EASL) supports schools and early years to better incorporate sustainability into their curriculum, facilities and policies, with the wider goal of better incorporating sustainability into the community. EASL is also the delivery partner for the ResourceSmart Schools (RSS) program across eastern Melbourne.

EASL is made up of five councils: Knox, Manningham, Maroondah, Whitehorse and Yarra Ranges. At the end of the financial year, Boroondara and Monash City Councils expressed interest in joining EASL.

Major initiatives organised by EASL for the 2022/23 financial year include:

- Learning for Sustainability Conference with 190 attendees, keynote presentation by Dr Ann Jones and a performance by Junkyard Beats. It was a great networking and professional development (PD) session for educators and feedback from attendees was overwhelmingly positive.
- Three online PD/Networking sessions with attendance from 51 education providers.
- Hybrid early years focussed workshop with 32 in-person attendees and a further 7 joining remotely.

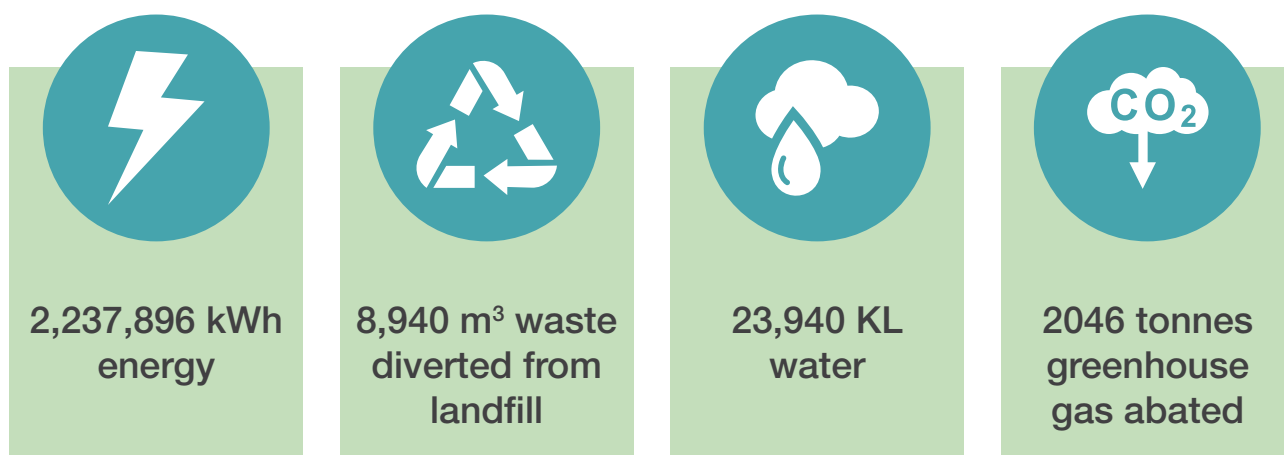
## ResourceSmart Schools Program

The free ResourceSmart Schools (RSS) program is funded by the State Government through Sustainability Victoria. RSS supports schools to embed sustainability into curriculum, campus and community and make measurable reductions in waste, energy and water as well as improvements to biodiversity.

Highlights from the 2022/23 financial year include:

- 103 active schools across the eastern region (24 from Yarra Ranges).
- 14 modules and associated stars certified.
- ResourceSmart School Awards: 12 schools entered, 6 were finalists and 4 were winners.
- RSS school of the Year — Eastwood Primary School and Deaf Facility (Maroondah).
- RSS Teacher of the Year (Primary) — Ms Danielle Lamport (Monbulk Primary School).
- Curriculum Leadership of the Year (Secondary) — Lilydale Heights College.
- Community Leadership of the Year — Eastwood Primary School and Deaf Facility (Maroondah).

**EASL's eastern region schools saved \$621,807 through energy efficiencies including:**



# Volunteering

Council works with 60 environmental volunteer groups that operate within the Yarra Ranges along with schools and local organisations.

Support for volunteers includes developing site work plans, providing assistance with planting, weed removal and other on-ground tasks, printing group communications collateral, first aid training, hosting an annual volunteer celebration and keeping them informed via a bi-monthly environmental newsletter.

The Climate Action Team continued to collaborate with Healesville CoRE, supporting their merger with YarraGlenergy and their application to Sustainability Victoria for a \$60,000 grant to support their ongoing programs.



## Gardens for Wildlife Program

The Yarra Ranges Gardens for Wildlife program assists residents to develop a garden (or an area within their garden) to support local wildlife. The program is run by council and a team of local volunteers who conduct property visits to offer suggestions on how the garden can better attract and support wildlife.

This year, 193 new participants joined the program, 75 garden visits were conducted and 18 new garden guides were inducted to facilitate more garden visits.



## Sustainable Environment Advisory Committee

The Sustainable Environment Advisory Committee (SEAC) is comprised of community representatives, Councillors, Yarra Ranges Council staff, and agency representatives.

Community volunteers, selected for their demonstrated interest or expertise in environmental matters serve for three years, advising Yarra Ranges Council on sustainability and environmental issues and initiatives within the municipality.

In 2022/2023, the committee engaged on the following topics:

- ageing septic systems
- biochar facility
- food security
- Integrated Transport Strategy
- Biodiversity Offsets Program
- Energy Transition Plan
- Nature Plan.



# Resource Recovery

Municipal waste

**30,180t**  
waste to landfill



**1,096 tCO<sub>2</sub>e**



**15,484t**  
recyclables  
diverted  
from landfill  
**657 tCO<sub>2</sub>e**



**16,004t**  
organics diverted  
from landfill  
**342 tCO<sub>2</sub>e**



*t = tonnes | tCO<sub>2</sub>e = emissions*

## Changing waste collections for a sustainable future

In 2020, the Victorian Government released its Circular Economy Plan 'Recycling Victoria – a new economy'. This plan outlined key actions to cut waste and boost recycling and reuse across the State, including the introduction of a standardised four-stream waste and recycling system across the State. With Councils responsible for the delivery of waste collection services to their communities, the plan requires each council to consider how they will adapt their waste services to align with new statewide requirements.

In May to June 2021, Council conducted a Community Waste Survey to ask the community for their feedback on waste services across Yarra Ranges. The survey was made available to all residents, with an invitation to complete the survey sent to all ratepayers. Information was also made available through Council's Community Links, libraries and social media. The survey asked residents about their current use of waste services, their preferences for future services, and how they would like to receive educational information. More than 7000 residents responded to the survey. A summary report can be found at [shaping.yarraranges.vic.gov.au/community-waste-survey](https://shaping.yarraranges.vic.gov.au/community-waste-survey)







*Landfill waste*



*Food and garden organics: starting October 2023*



*Glass: introduced 2025/26*



*Mixed recycling*

Following the completion of the survey, Council developed the Draft Community Waste and Resource Recovery Plan. The plan considered community feedback from the survey, together with industry research into best practice waste management, and the requirements of Councils under the Victorian Government's Circular Economy Plan and the Circular Economy (Waste Reduction and Recycling) Act 2021.

The plan details Council's implementation of the new four-streams of waste collection and outlines twenty-two actions to minimise waste, increase recycling, and reduce landfill and contamination

levels. After eight weeks of community consultation, the final Community Waste and Resource Recovery Plan 2023-2030 was formally endorsed by Council in June 2023.

The first key deliverable of the plan, the introduction of a universal food and garden organics collection to all Yarra Ranges households commenced in October 2023.

A final copy of the plan is available at [yarraranges.vic.gov.au/Environment/Waste/Waste-and-Recycling-Policy](https://yarraranges.vic.gov.au/Environment/Waste/Waste-and-Recycling-Policy)



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