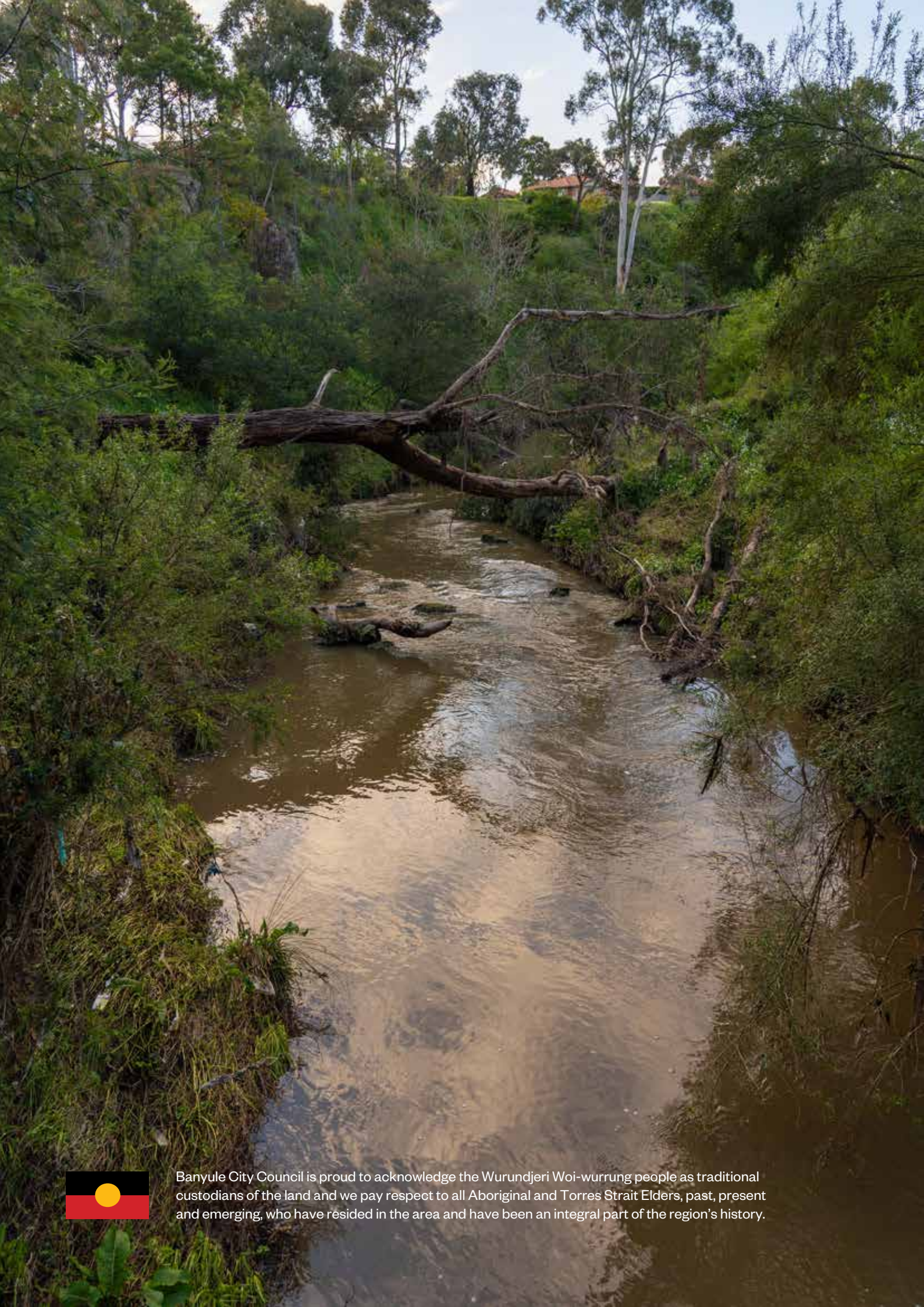




# Banyule State of the Environment Report

2020-2021





Banyule City Council is proud to acknowledge the Wurundjeri Woi-wurrung people as traditional custodians of the land and we pay respect to all Aboriginal and Torres Strait Elders, past, present and emerging, who have resided in the area and have been an integral part of the region's history.

# Introduction

The State of the Environment report is an annual glimpse into the work Banyule City Council delivers to ensure our natural environment is healthy, green and actively cared for.

This work has been carried out by a range of departments across the organisation over Financial Year (FY) 2020/21 and delivers on the strategic objectives in Banyule's Council Plan 2017 – 2021.

In 2020/21 Banyule began work to develop the new 20-year vision and Council Plan. As part of the community engagement undertaken to inform this work, we heard clearly that our residents highly value Banyule's open spaces and its natural environment. This report provides a transparent overview of Council's progress in this space.



# Biodiversity



A strong and diverse ecosystem is one of the most important attributes of a resilient community. Banyule is lucky to have many conservation reserves, wildlife corridors, parks and open spaces that help support our local flora and fauna. Our green open spaces work together to form connections for wildlife and ensure our local plant and animal populations have refuge in the urban environment.



**746**

## Friends of volunteer hours in bushland reserves

Due to the ongoing restrictions relating to COVID 19, Friends of volunteer hours were down in FY 2020/21.



**11,500**

## Indigenous species planted in bushland reserves

This included grasses, groundcovers, herbs and semi-aquatic species. As a result of the cancellation of many Friends of volunteer events, planting numbers are down in FY 2020/21.

CASE STUDY

## Backyard Bird Count

In October 2020, Banyule Council and its residents took part in the annual Backyard Bird Count, a citizen science program that captures bird observations in backyards and local parks.

The count this year showed a common trend in urban environmental bird numbers with the 30 most recorded birds being larger, more resilient species that have adapted to urban impacts. It is, however, encouraging that only five of these species were introduced, with the vast majority being native species.

Importantly, there were still significant recordings of species considered more sensitive, indicating that Banyule still provides areas of suitable habitat for smaller birds.

Bird Count snap shot:

- 781 observers participated
- 33,689 birds recorded
- 104 different bird species recorded

### Top five overall recordings

Bird Species	Count
1 Rainbow Lorikeet	7,692
2 Noisy Miner	6,041
3 Australian Magpie	2,960
4 Little Raven	1,902
5 Red Wattlebird	1,832

### Top five small bird recordings

Bird Species	Count
1 Brown Thornbill	95
2 Red-browed Finch	89
3 Grey Fantail	75
4 Superb Fairy-wren	70
5 Willie Wagtail	50

CASE STUDY

## Eltham Copper Butterfly discovered in Montmorency

In January 2021, the discovery of a new colony of Eltham Copper Butterfly (ECB) was made by a local naturalist in a small reserve in Montmorency. This discovery is significant, not only because of the butterflies endangered status under the Environmental Protection and Biodiversity Conservation (EPBC) Act 1999 and threatened status under the Flora and Fauna Guarantee (FFG) Act 1988. It is also the first new colony discovered in the last decade in Victoria. Historic records indicate sightings of the ECB in Montmorency in 1950 and again in 1978, but never at its current location.

Targeted surveys conducted at the Montmorency site in February 2021, over four survey nights, saw a total of 167 ECB Larvae counted. This was above the 170 ECB larvae counted in the Greensborough population area.

The ECB is an indicator species of well-structured and intact site of natural vegetation. It has a specialised relationship with a species of ant (*Notoncus* spp.) and the Sweet Bursaria (*Bursaria spinosa*) plant, which both require surrounding indigenous vegetation to support them. This highlights the importance of retaining current conservation areas to help protect and enhance our existing populations of flora and fauna.



# Water

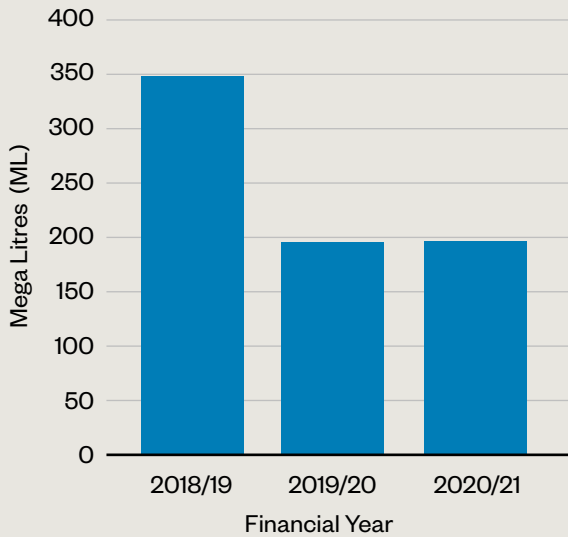


Climate change is affecting the way water flows through our municipality, with more intense storms leading to erosion and higher levels of pollution from storm water entering the waterways. These flows are also putting pressure on our built assets. The way we manage water now and into the future will ensure our municipality is resilient to the changes we will experience as the atmosphere warms due to climate change.

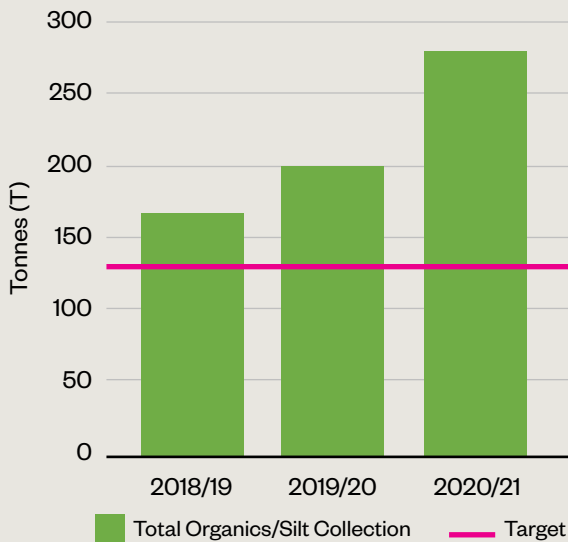
In 2020, annual rainfall was well above average for greater Melbourne. This continued the trend of lower irrigation requirements across our parks, street trees and sporting ovals helping Council to achieve its water conservation target.

The pollution removal targets were achieved as Council dedicated significant resources to the desilting of some of the stormwater harvesting assets and ensured litter traps were regularly serviced.

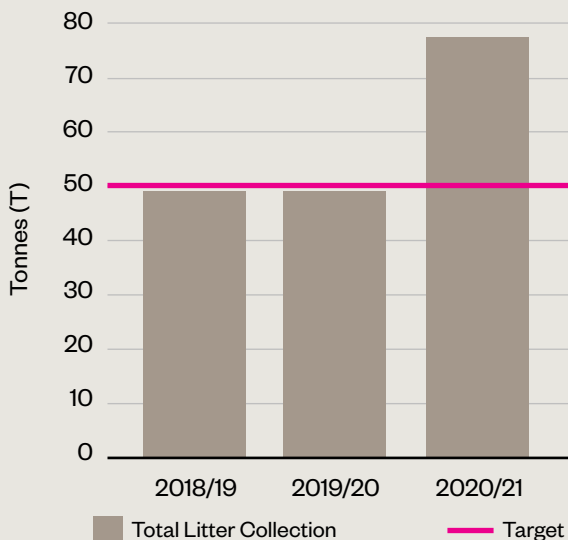
### Council's water use



### Total organics / silt collection



### Total litter collection



### CASE STUDY

## Desilting Kalparrin Gardens Lake

One of Council's award-winning stormwater harvesting projects is located at Kalparrin Gardens, providing up to 43 million litres per annum of treated alternative water supply to several ovals along the Plenty River in Greensborough. Litter and organic matter, such as leaves and polluted sediment from the surrounding catchment is collected at the site's wetland, which is designed to protect water quality and biodiversity in the Plenty River.

To keep the system working effectively, every few years the sediment needs to be removed and taken to appropriate landfill or re-purposing facilities. This year Banyule removed 200 tonnes of sediment from the site and, with the help of Victoria Police, two stolen vehicles!



# Corporate Emissions



Council has continued its focus on energy efficiency across our buildings, with the aim of reducing the energy we use (enabling both emissions reductions and financial savings) and improving the thermal comfort levels for occupants. In the last two years alone, 56 sites have benefited from the introduction of a range of energy saving measures including LED lighting, electric heating / cooling systems, solar hot water systems, insulation upgrades and energy efficient appliances.

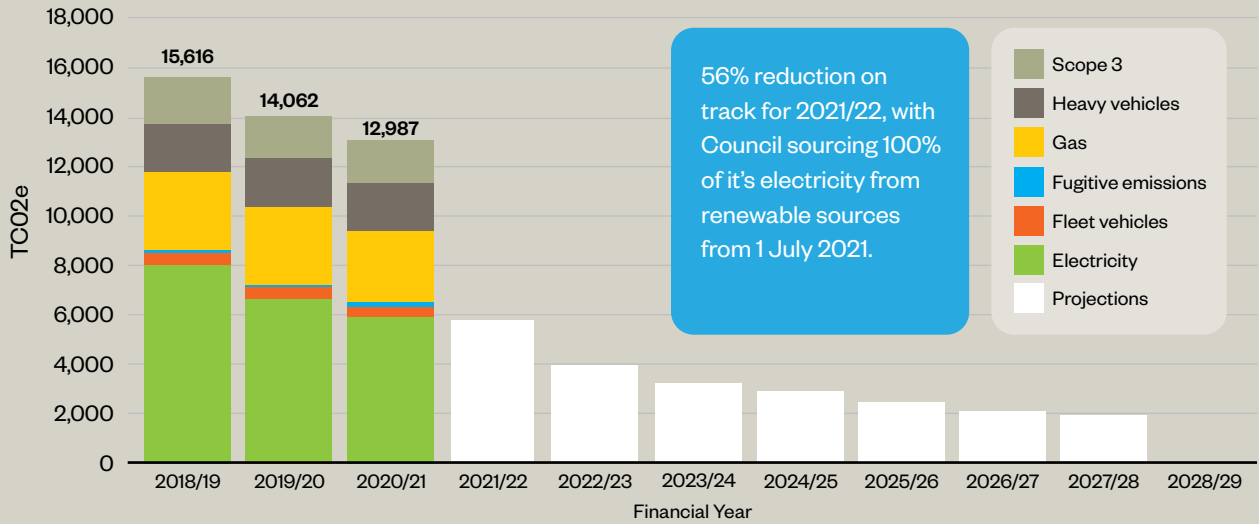
As outlined within our Corporate Emissions Reduction Plan (CERP), a key organisational priority is embedding climate action across the organisation. Thanks to a successful change management program, this means that many energy efficiency actions will occur via business-as-usual maintenance and asset planning programs. We can now adopt a stronger focus on shifting our buildings off gas, which requires a holistic look at each building's energy use. Key actions here include upgrading of electrical infrastructure, replacement of heating and cooling appliances with electric alternatives and introduction of heat pumps in replacement of old gas boilers.

Banyule expects to see significant reductions in electricity-based emissions with the commencement of our Power Purchasing Agreement (PPA), which means that as of July 2021 100% of Council's electricity is being sourced from renewable generation.

Banyule is on track to meet its ambitious target of a carbon neutral organisation by 2028, with projects from around the organisation set to continue to drive emissions down in the coming Financial Year.



## Banyule City Council's organisational emissions scope 1, 2 and 3 and projections to 2028



**Total Renewable Energy Capacity on Banyule Council buildings:**  
Banyule Council has 1.3MW of active solar PV, comprising 48 buildings.

### CASE STUDY

## Sustainable Building Guidelines

As you have read, buildings are a significant contributor to Council's overall emissions, due to heating, cooling and lighting demands. The way we design new builds and use energy in existing buildings is therefore an important consideration if we are to achieve our goal of a zero net emissions organisation by 2028.

Banyule has now developed Sustainable Building Guidelines to ensure all building works, whether new build or maintenance work, is consistent with best practice energy efficiency and renewable energy requirements. The Guidelines contain technical specifications relating to building design as well as operational requirements for ongoing building use.

By having these Guidelines and implementing them at project inception, Council will ensure that building standards are consistent across projects and carried from the design phase to the construction stage.

### CASE STUDY

## Watermarc Energy Efficiency

In November 2020, Banyule Council completed an investigation into the energy performance of one of our largest energy using sites, Watermarc. Making this building as energy efficient as possible, whilst investigating opportunities to shift away from gas, is an important short-term priority for Banyule.

The investigation identified a road map of actions to be delivered over the next four years, covering actions from pipe insulation upgrades, introduction of pool blankets and upgrading systems that manage energy use (Building Management System).





# Community Emissions

Banyule City Council has a goal to be a carbon neutral community by 2040. When developing the plan to reach this goal, a carbon emissions inventory was undertaken to better understand where emissions were coming from.

This inventory showed that the three biggest emissions sources are transportation and building energy use for both residents and commercial sectors.

Recognising this, several programs have now been established in order to support households to reduce their emissions and create healthy, resilient and thermally comfortable homes:

## **Community Energy Advice**

Banyule City Council has a dedicated phone line and email address where community members can get tailored energy efficiency upgrade advice. This ensures they are provided with independent information based on their particular circumstances.

## **Bill Assist Program**

Banyule residents and business owners can access the Bill Assist Program to better understand their energy charges and negotiate the most affordable energy plans available.

## **Solar Savers**

Residents can sign up to the Solar Savers program to simplify the process of installing solar, ensuring they can access accredited suppliers and support through the process.

## **Better Score Program**

Households can access the Better Score Program to support them when undertaking energy efficiency upgrades. Households first undertake an Energy Audit in which a qualified assessor will provide them with an energy rating for their home, along with recommendations on how to improve that rating. They can then access up to \$1,500 reimbursement for undertaking energy efficiency upgrades.



### CASE STUDY

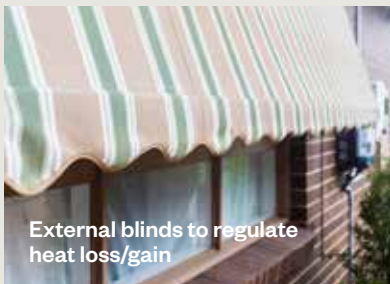
## Better Score Energy Efficiency Project

The pilot Better Score Program was a huge success in 2020/21 with 42 residents accessing subsidies for energy efficiency upgrades, covering everything from external blinds and insulation upgrades to introduction of solar and double-glazed windows.

A notable stand out was from an Ivanhoe resident, who significantly improved their Home Energy Score from 2 to 9.1 stars. The home can now meet 100% of its fixed appliance energy costs via renewable energy, saving hundreds of dollars on energy bills.

Another resident from Greensborough used the program to increase the insulation in their walls, improving their energy rating above the state average and increasing the cold weather comfort rating by 20 per cent.

This program is ensuring households across Banyule are supported to increase the energy efficiency and thermal comfort of their homes, while also reducing emissions, contributing to the achievement of Banyule's goal to be a carbon neutral municipality by 2040.



External blinds to regulate heat loss/gain



Solar PV



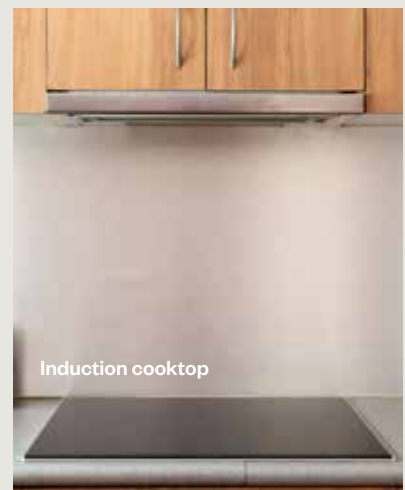
Induction cooktop and electric oven



Electric heat pump hot water system



Reverse cycle heating/cooling



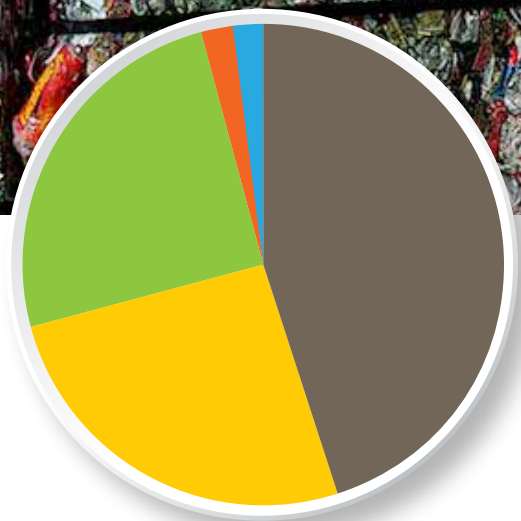
Induction cooktop

# Waste



Banyule City Council has a goal for a community motivated to achieve zero waste to landfill by 2030 and has implemented many programs which support the community to achieve this goal. In 2020/21 Council sold just under 400 green cones to Banyule residents so they could begin diverting food waste at home, this has the potential to divert 2kg of food per household per week which equates to 39 tonnes per annum.

Banyule also offers residents the opportunity to attend workshops, both virtually and in person, where they can learn valuable skills to support them in the journey to zero waste. Topics in 2020/21 have included composting, cloth nappy use and de-cluttering. This year also saw the Rethink Centre's educational resources move online, making them more accessible for the whole community.



## Residential waste profile



Garbage - 45%



Recyclables - 26%



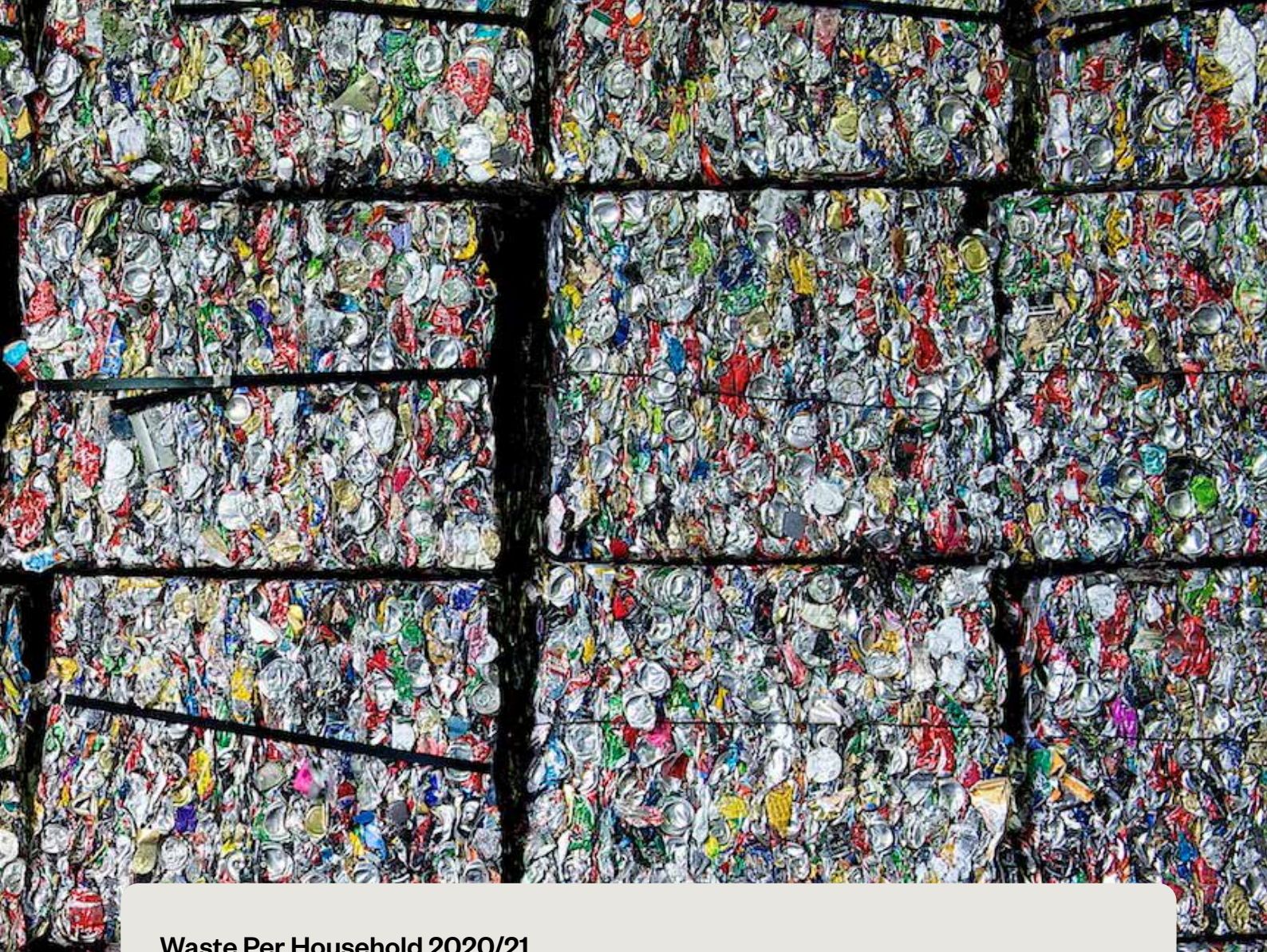
Green Waste - 25%



Inert Hard Waste - 2%

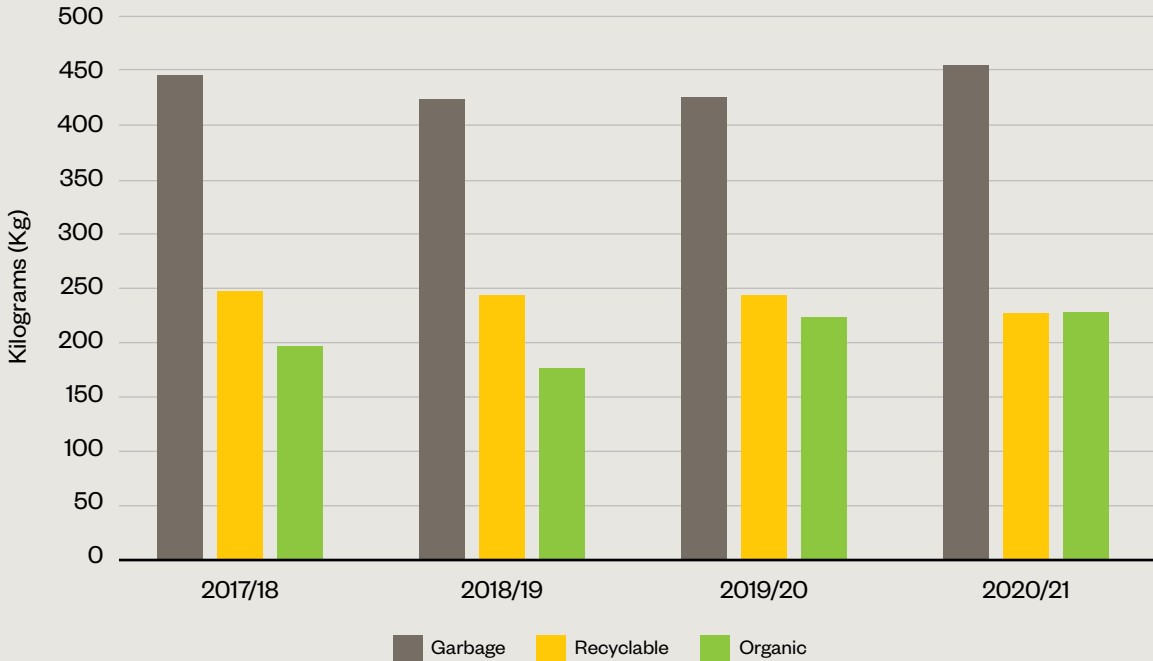


Recyclable Hard Waste - 2%



### Waste Per Household 2020/21

Kerbside waste collection increased significantly in 2020/21 with more people staying at home due to the COVID 19 restrictions. Winter green waste collection also rose sharply indicating that more residents are spending time during winter enjoying their gardens.

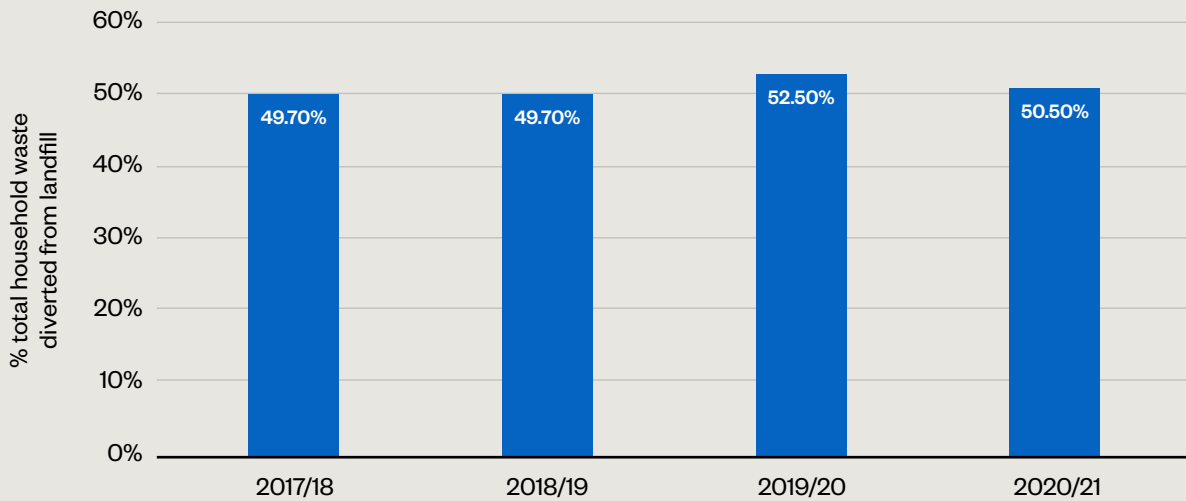


# Waste



## Waste Diversion 2020/21

Diversion rates are expected to increase with changes to the waste service in FY 2022/23.





CASE STUDY

## FOGO is Coming

In 2018, we surveyed more than 2000 households to find out the community’s view on waste management services as part of our Towards Zero Waste Management Plan. Residents told us they wanted to reduce waste and stop food going to landfill. In 2020/21 we’ve been working on making this happen and gearing up to introduce a food organics and garden organics (FOGO) waste service in 2022 to drive us towards a zero-waste future in Banyule.

Garbage bins in Banyule currently contain around 43 per cent food waste and up to 14 per cent garden waste. By providing a bin for food and garden organics, over half of Banyule’s waste currently sent to landfill will be used for composting instead. By diverting food and garden waste via the FOGO service, we can reduce our landfill waste by up to 12,000 tonnes and save over 550 Olympic sized swimming pools of methane a year!

Collected materials will be composted and the products used as a range of soil conditioners and composts for use on farms, parks and gardens across Victoria.



Waste



TOWARDS  
**ZERO**  
WASTE



CASE STUDY

## The Rethink Centre 2020/21

The Rethink Centre is a waste education initiative that helps the community understand where the waste they produce ends up. The Centre offers educational programs for all ages, using live performance, video and song. It also offers a backstage pass to the Materials Recovery Facility where the public can see their waste being sorted.



As a result of the COVID 19 restrictions and pending building works, no center-based sessions were able to be delivered throughout 2020/21. However, the Centre pivoted quickly to delivering its education sessions online. Program content included a virtual material recovery tour and video adaptations of the presenter led Recycle it Right Show for primary schools. Where restrictions allowed a Litter Sisters Do Lunch live incursion for preschool was developed.

This meant that even with restrictions these popular education programs were able to continue for 902 participants

CASE STUDY

## Waste goes electric

Banyule City Council has recently added an electric waste truck to its fleet. After trialling the truck in December 2020, drivers commented on how smooth, powerful and best of all, quiet the low emissions truck was. The truck has now arrived and is being prepared for use, residents will see it in service on the road soon.

The transition to a zero emissions fleet is well underway and will contribute to Banyule's target of a carbon neutral organisation by 2028.



CASE STUDY

## Reusable nappies pass the test

As part of the Towards Zero Waste Management Plan a trial was run in 2020/21 aimed at reducing the reliance on disposable nappies used at Banyule's childcare centres. A service was engaged at St Hellier Street Children's Centre which delivers modern cloth nappies and cloth wipes to the Centre and collects dirty cloth nappies for cleaning.

The service has seen a dramatic reduction in the use of disposable nappies with around 300 less going to landfill a week.

In 2021/22 Banyule plans to introduce this service to other Childcare Centres to contribute to the work towards Council's Zero Waste Management Plan.

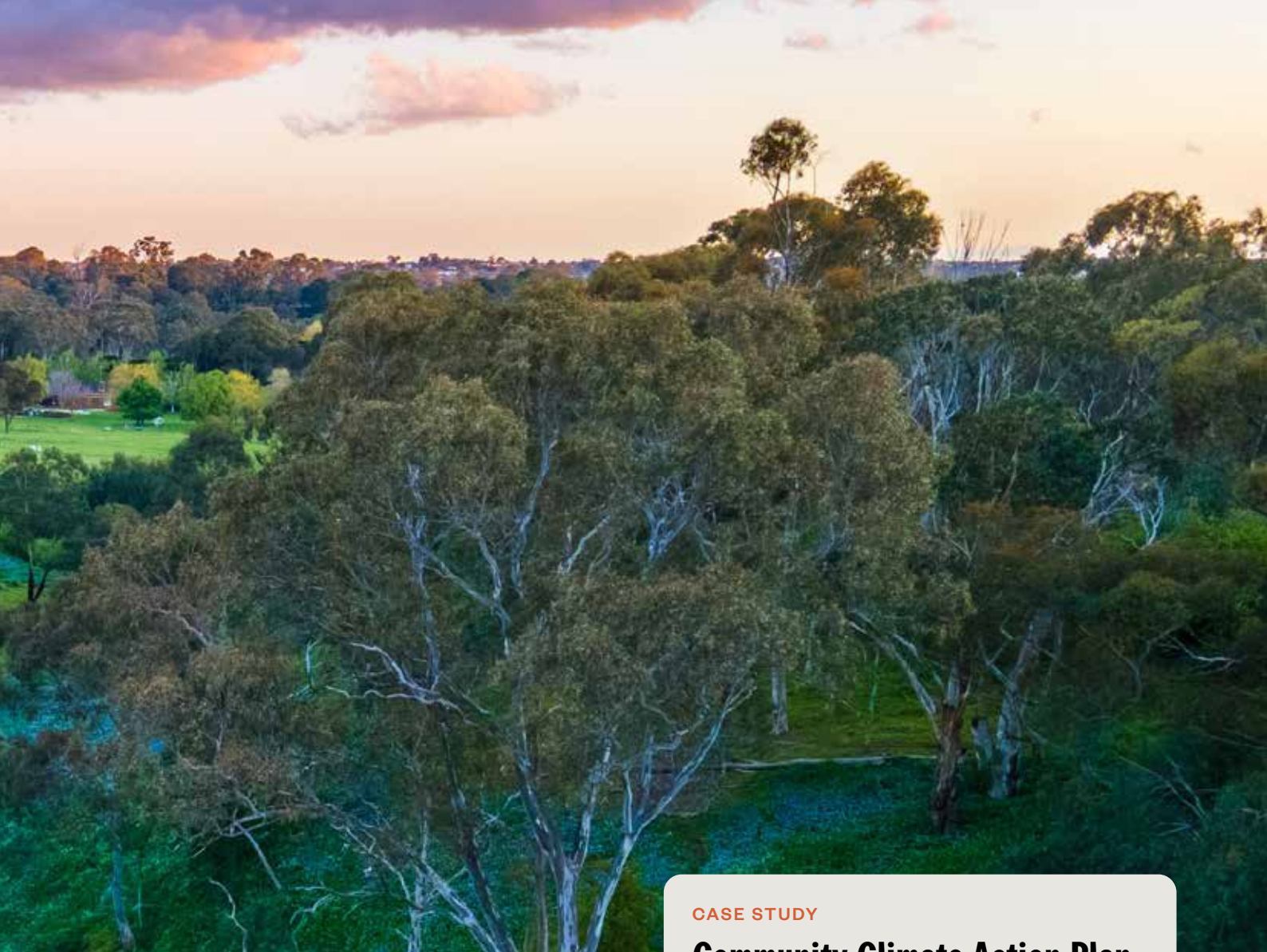
# Stewardship



Stewardship describes our relationship to place and our responsibility to ensure future generations will enjoy rich and healthy ecosystems.

The COVID 19 restrictions have kept the community close to their homes in the past year and built an appreciation for the bountiful natural environment we are lucky to have in Banyule. It has also reinforced the importance of the local park, street trees, bushlands and home veggie gardens.





**CASE STUDY**

## **Community Climate Action Plan (CCAP) - Festival of Ideas**

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To launch Banyule's exciting new Strategic Plan, Council ran an online Festival of Ideas with the community. The series of events focused on discussing the exciting technologies, projects and programs which will form part of the community response to climate change. Notable partners included RENEW, Banyule Clean Energy Group, Hepburn Wind, Renewable Newstead, e-stralian e-bikes and Darebin City Council.

Over 200 community members attended to explore ways they could contribute to reducing municipal emissions.



# Stewardship



## CASE STUDY

### Seed Libraries

Home Harvest events have always been about a community, the satisfaction of growing your own produce and the pure pleasure of sharing and eating it with others.

With the uncertainty around public gatherings, Banyule City Council and Home Harvest partners Nillumbik Shire Council decided that instead of the annual picnic celebration, the resources should be used to provide the community with ongoing support for home growing and local food. This aim led to the design and development of eight seed libraries.

The program supported local artist Ravi Sommerhalder to design and build the libraries which take the shape of a Kurrjong seed and are made with recycled materials.

The Home Harvest Seed Libraries form a network across Nillumbik and Banyule. The libraries operate under the concept of fair share and giving back. Community members can take the seeds that they need and leave



some for others. They then collect seeds from the harvest, dry them, and return them to the seed library network for someone else to grow.

The libraries aim to ensure home grown produce is accessible to all, and that the seeds we share are adapted to our specific growing conditions.

## CASE STUDY

### Wurundjeri walk

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On a drizzly Saturday in May, 50 Banyule residents came along to the Banyule Flats to join a walking tour led by Wurundjeri Woi wurrung elder Uncle Bill Nicholson.

The tour took in the Banyule Billabong, wetlands and the Main Yarra Trail as Uncle Bill described the traditional Wurundjeri Woi wurrung cultural practices and history on the land.

The tour aimed to help educate Banyule residents, especially those who currently work on country through their involvement in local friends of groups, on the cultural history of the area. The tours were booked out in less than an hour, proving that there is a large appetite in Banyule for cultural awareness, a great basis for our reconciliation goals.

## CASE STUDY

### Creative Nature Play

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In 2020/21 Banyule continued to be creative in order to encourage young people to get outside and experience nature. These programs aim to develop an intrinsic value for our natural world as well as a sense of stewardship, meaning that our community is motivated to look after their local environment.

Council's 2020/21 offering included:

- Nature treasure hunt: Beautifully illustrated treasure maps of local trails in Banyule supported residents to discover the hidden treasures and natural wonders of Banyule Flats and Plenty Yarra Trail.
- Solve a nature mystery: Self-guided audio tour through the beautiful Rosanna Parklands uses a coded map to guide participants to discover hidden clues, examine bush evidence and take advice from the local creatures to help solve the mystery.
- Nature Photography: Participants learnt from a professional photographer how to observe and use local natural spaces, fauna and flora and light to capture great images on all types of cameras.
- Banyule Bushland Possum Prowl: Banyule's bushland crew shared their knowledge of the local habitat and introduced the fauna and flora of the Banyule Flats.



# Indicators at a glance

Indicator	2018/19	2019/20	2020/21
<b>Corporate Emissions</b>			
Total annual corporate GHG emissions (Scope 1, 2 and 3)	15,616	14,062	12,987
<b>Biodiversity</b>			
Friends of volunteer hours in bushland reserves	1,884	1,334	746
Indigenous Species planted in bushland reserves	15,130	22,362	11,500
B1G1 redeemed	179	243	117
Council tree plantings in streets	1,949	1,850	2,900
Council tree plantings in parks	293	242	250
Net gain of trees per year (public land)	1,581	1,460	1,350
<b>Water</b>			
Banyule Council Water use (ML)	348	196	197
Litter collection (Tonne)	49	49	77.5
Silt collection (Tonne)	168	200	280
<b>Waste</b>			
Landfill waste per household (kg)	423	424	456
Recyclables per household (kg)	243	245	233
Organic waste per household (kg)	174	224	232
Diverted from landfill – total (%)	49.7	36.5	50.5
Diverted from landfill – consumer (%)	52.5	36.5	33.8
Students at the rethink centre	2,292	1,892	902
<b>Stewardship</b>			
Grant applications	19	36	37
Home Energy Audits	30	34	71



Page	Photography credit
Cover - Cockatoos	Tom Crawshaw
Inside cover - Plenty River	Masterworks Media Productions
1 Sunset at Banyule Flats	Masterworks Media Productions
2 Biodiversity title image	Masterworks Media Productions
2 Volunteers	Masterworks Media Productions
3 Eltham Copper Butterfly	Tom Crawshaw
4 Water title image	Masterworks Media Productions
5 Empty Kalparrin Lake	John Milkins
6 Corporate emissions title image	Masterworks Media Productions
7 Watermark slide	Masterworks Media Productions
7 Nets Stadium	Masterworks Media Productions
8 Community emissions title image	Masterworks Media Productions
10 Waste title image	Janusz Molinski
12 Material girls	Masterworks Media Productions
14 Stewardship title image	Masterworks Media Productions
14 Young planter	Masterworks Media Productions
16 Large image of Billabong	Masterworks Media Productions
16 Seed Libraries	Shahiman Said
17 Nature Play	Masterworks Media Productions
19 Sunset	Masterworks Media Productions

## How to contact your Council

For all enquiries or information about any Council services:

Telephone: **9490 4222**

Email: [enquiries@banyule.vic.gov.au](mailto:enquiries@banyule.vic.gov.au)

Website: [www.banyule.vic.gov.au](http://www.banyule.vic.gov.au)

Fax: **9499 9475**

If your hearing or speech is impaired, you can call us through the National Relay Service on **133 677** (TTY) or **1300 555 727** (ordinary handset) and ask for 9490 4222.

### Postal Address:

PO Box 94, Greensborough 3088

### Council Service Centres:

Greensborough: Level 3, 1 Flintoff Street

Ivanhoe: 275 Upper Heidelberg Road

### Office Hours of Opening:

Greensborough: Monday – Friday 8.30am – 5pm

Ivanhoe: Monday - Friday 9am - 5pm

### Interpreter service:

If you need an interpreter, please contact TIS National on 131 450 and ask to be connected to Banyule Council on 9490 4222.

إذا كنتم بحاجة إلى مترجم، الرجاء الاتصال بالخط القومي لخدمة الترجمة الهاتفية TIS على الرقم 131 450. واطلبوا إيصالكم ببلدية بانويل على الرقم 9490 4222.

若你需要口譯員，請致電131 450聯絡TIS National，要求他們為你致電9490 4222接通Banyule市政廳。

Ako vam je potreban tumač, molimo vas, nazovite TIS National na broj 131 450 i zatražite da vas se spoji sa Vijećem općine Banyule na broj 9490 4222.

Αν χρειάζεστε διερμηνέα τηλεφωνήστε στην Εθνική Υπηρεσία Διερμηνέων Μεταφραστών στον αριθμό 131 450 και ζητήστε να σας συνδέσουν με τη Δημαρχία Banyule στο 9490 4222.

Se hai bisogno di un interprete chiama TIS National al numero 131 450 e chiedi di essere messo in comunicazione con il Comune di Banyule al numero 9490 4222.

Ако ви треба преведувач ве молиме јавете се на TIS National на 131 450 и замовете да ве поврзат со Banyule Council на 9490 4222.

如果你需要一名翻译，请打电话到国家电话翻译服务处 (TIS National) 131 450，再转接到Banyule市政府9490 4222

Haddii aad u baahan tahay mutarjum wac khadka qaranka oo ah TIS 131 450 weydiina in lagugu xiro Degmada Banyule tel: 9490 4222.

Nếu cần thông dịch, xin gọi cho TIS Toàn Quốc qua số 131 450 rồi nhờ họ gọi cho Hội Đồng Thành Phố Banyule theo số 9490 4222 giúp quý vị.