Environmental Sustainability Strategy 2016-2026 2020/21 Update

Acknowledgement of Country

Monash Council acknowledges the Traditional Owners of this land, the Wurundjeri Woi Wurrung and Bunurong People, and recognises their continuing connection to the land and waterways. We pay our respects to their Elders past, present and emerging and extend this to all Aboriginal and Torres Strait Islander peoples.

Introduction

This is our annual report on how we are delivering on the seven key priorities set out in Monash Council's Environmental Sustainability Strategy 2016-2026. It sets Council's environmental goals for the future and proposes actions that will help us to reach them. Reaching these goals will promote the development of a sustainable and resilient community and will reduce Council's impact on the environment.

Our Vision

An innovative and environmentally sustainable garden city: resilient, diverse and thriving.

Our Mission

Making a difference through environmental sustainability, commitment, expertise and leadership.

Our seven key priorities:

Built Environment Urban Ecology Climate Change Waste and Resource Management Integrated Water Management Partnerships and Leadership Education, Engagement and Reporting Each year we highlight our key achievements and provide case studies for each priority.

Built Environment

Key achievements

4 ELECTRIC VEHICLES

within Council's fleet (two Kona and two Kangoo)

\$3.5M INVESTED

in footpath and cycleway renewal (\$5.6M in 2019/20)

104 BESS (BUILT ENVIRONMENT SCORE CARD) SUBMISSIONS (57 in 2019/20), mainly multi-dwelling

Electric vehicles at Monash:

- Monash has two Renault Kangoo and two Kona Electric vehicles as part of the Council's fleet.
- One of the Kangoos is used by the Monash Pride Crew helping to keep Monash precincts clean.
- The second Kangoo, known as Bevan, is our Sustainable Monash Education van supporting our community engagement events and recycling feedback activities.

Delivering on Environmentally Sustainable Development:

- In 2016, Council adopted an Environmentally Sustainable Design Policy, as part of the Monash Planning Scheme, for multi-unit developments across the municipality.
- Developers can use the Built Environment Score Card (BESS) to assess how their developments are meeting the policy.
- In 2020/21, there were 104 BESS submissions, which is higher than the 2019/20 result of 57.
- Most BESS sites were multi-unit residential dwellings (457 out of 778 individual dwellings).
- There was also 120,000 square metres of non-residential space out of a total of 177,000 square metres.
- A total of 0.88MW of solar was included at these sites and rain water capacity of 1.97ML (2019/20: 0.36MW solar and 0.74 ML water capacity).
- The top five Sustainability commitments in the submissions in 2020/21 were, in order Stormwater, Indoor Environment (Air) Quality, Water, Energy and Transport. While most were consistent with previous years, there was a stronger commitment to sustainable transport in 2020/21.

Urban Ecology

Key achievements

91,282 TREES, SHRUBS, AND GROUND COVERS

were planted in streets, bushland, and open spaces (126,315 in 2019/20)

VALLEY RESERVE AND DAMPER CREEK RESERVE **RECOGNISED FOR THEIR CONSERVATION VALUE**

CAT CURFEW INTRODUCED IN APRIL 2021

GARDENS FOR WILDLIFE GARDEN GUIDES **10 VOLUNTEERS**

Vegetation and trees:

- 91,282 trees, shrubs, and ground covers were planted in streets, bushland, and open spaces to increase amenity and ecological value in our reserves (19,657 shrubs, 63,165 ground covers and 8460 trees, including 1760 street trees).
- Council endorsed the Tree Management Policy, which provides a clear understanding and agreement with the community on how it will manage trees located on Council-managed land.
- In honour of National Tree Day, residents were invited to share a photo of and message about their favourite trees in Monash (80 trees).
- Biodiversity audits for Valley Conservation Reserve, Damper Conservation Reserve and Glen Waverley Golf Course found decreased weed cover, increased indigenous vegetation, protection of remnant vegetation and increases in the number of small bird species. The audits also found a dominance of larger birds, invasive predators like foxes and cats and a lack of nesting hollows. Ten different microbat species were found on the Glen Waverley Golf Course. Threatened species such as the Grey-headed Flying Fox, Powerful Owl and the Eastern Long-necked Turtle were identified in reserves.

Recognition of conservation importance in Monash:

- Signage was upgraded at Valley Reserve and Damper Creek Reserve in recognition of the important conservation status of both bushland reserves. This recognition was initiated by the Friends groups of Valley Reserve and Damper Creek, who maintain these sites in partnership with our Bushland team. The reserves have state and regional biodiversity significance, being home to rare wildlife and vegetation.
- Conservation Management Plans are being updated for both sites by the Horticulture team.

Cat curfew:

Council planned to introduce a cat curfew (sunset to sunrise) after consulting with the community in 2017 on the Domestic Animal Management Plan (2017-2021). In May 2020 additional consultation was undertaken with the community on the introduction of a night-time cat curfew, including with affected registered cat owners and local Friends groups.

• In April 2021, following consultation and community feedback, a cat curfew was introduced.

Gardens for Wildlife and Volunteer Guides:

- Council continued to conduct free workshops to help the community learn more about plant selection, weeds and maintaining their gardens. Four events were adapted into online webinars, due to COVID-19 restrictions, and attended by more than 450 people.
- Garden Guides continued visiting residents' gardens both in person and virtually during COVID-19 restrictions, writing comprehensive reports for residents with their recommendations for the garden. The program has been expanded to include schools, preschools and churches. Garden guides made 19 virtual or in-person visits in 2020/21.

Signage and bird hide refurbishment for Mulgrave Wetlands:

- We installed interpretative and wayfinding signage around the Mulgrave Wetlands to educate visitors about the importance of the wetlands and the wider Dandenong Creek environment for the local plant and wildlife that rely on the health of the wetlands.
- The bird hide was refurbished with recycled timber to improve the bird watching experience. We also installed bird identification signage in the hide.

Green Shoots:

- Residents of Glen Tower Drive planted 240 seedlings for the communal Glen Tower Drive Gardens for Wildlife, to transform a dry dusty reserve into a tussock grass and flower landscape. Due to COVID-19 restrictions, there were only five people planting at a time.
- The Green Shoots Facebook Group was launched during COVID-19 restrictions for residents interested in nature, enabling them to share what they are doing and seeing in the local Monash natural environment.
- Branches from trees were removed at the Oakleigh Recreation Centre redevelopment site and recycled as a new skink lounge along Scotchmans Creek (at the end of Raymond Court). Two hundred indigenous seedlings were planted around the lounge. This is the third new skink lounge in the Skink Link Project.
- During lockdown we initiated our community nest box building project. Monash received a federal government grant to create nest boxes, for installation in our bushland areas to create shelters for microbats and parrots. The Monash Men's Shed cut out all the pieces, which we made into kits that were delivered to 120 households to build.
- Council's Bush Kinder spaces began in early-2020 and continued into 2021 with a new bush kinder space created at Sherwood Road Reserve in Mount Waverley, with the help of a federal government grant, using tree logs and rocks from the Oakleigh Recreation Centre redevelopment.
- The 22 four-year-old students from Highvale Preschool helped to plant out Larpent Reserve with 260 plants and also planted indigenous plants in their school to increase biodiversity in the area and create habitat links with our Monash reserves for insects, birds and skinks.

Climate Change Key achievements

100% RENEWABLE SOURCED ELECTRICITY FOR COUNCIL BUILDINGS FROM JULY 2021

Council's response to climate change:

- A new Environmental Upgrade Agreement is in place, taking the total to six Monash businesses investing \$2.067 million in sustainability initiatives over the past three years, including 1.462kW in solar panels, reducing GHG emissions and overhead costs for businesses.
- 23-38% reduction in GHG emissions since 2018/19.
- The Zero Net Carbon Action Plan (Action Plan) was presented to Council at the September 2020 Council meeting. The Action Plan provides a pathway for achieving its carbon neutral commitment by 2025. In February 2020, Monash Council committed to achieving net zero emissions by 2025.
- Since 2018/19, GHG emissions have dropped from the baseline of 20,503 tCO2e to 12,689 tCO2e in 2020/21 this is a 38% reduction. While this is partly due to the reduced activity during COVD lockdowns, estimated emissions, if it was a non-COVID environment, were still calculated to be 15,797 tCO2e or a 23% reduction, which is on track to be carbon neutral by 2025.
- Through the Zero Net Carbon Action Plan, Council is committed to prioritising funding for key projects to reduce corporate emissions that also represent an attractive return on investment as part of the Long-Term Financial Plan to achieve the 2025 target.
- In addition to addressing corporate emissions, through the action plan, Council will support the reduction of
 municipal wide GHG emissions by partnering with community and business to reduce emissions through waste
 reduction and increased use of recycled materials in our infrastructure projects. We'll also investigate the
 opportunity to create an urban carbon forest to provide local storage of carbon, improve community amenity
 and benefit biodiversity.
- The State Government acknowledged Monash's voluntary Zero Net Carbon Pledge (Feb 2021) under the Climate Change Act 2017.
- Monash Council was one of 46 Victorian councils who signed up to the Victorian Energy Collaboration (VECO), the largest ever emissions reduction project by local government in Australia. VECO will provide 45 per cent of all Victorian councils' electricity requirements with 100 per cent renewables, reducing emissions by 260,000 tonnes of CO2-e every year – the same as taking 90,000 cars off the road. The project was launched in May 2021 and, from 1 July 2021, Monash will source 100% renewable electricity for its corporate buildings, streetlights and community buildings, reducing GHG emissions by up to 60%.

Waste and Resource Management Key achievements

TOP RECYCLER IN VICTORIA FOR MOBILE MUSTER AGAIN, DIVERTING 245 KG OF MOBILE PHONES

and accessories from landfill

Waste education, Litter and Waste management:

- More than 78,697 customers visited the Monash Waste and Recycling Centre (2019/20: 100,960).
- Top recycler in Australia for Paintback (fifth year in a row), diverting 346,053kg of paint from landfill.
- Top recycling in Victoria and second highest in Australia for Planet Ark Toner cartridge recycling, diverting 7,646 print cartridges from landfill (a 50% increase from 2019).
- 72,474.10 tonnes of waste material (garbage, recycling and green waste) was collected by Council, including 950 tonnes of cardboard and paper recycled through the Waste Transfer Station.
- 10,665 mattresses collected and recycled for free during the Annual Hard Waste collection period.
- Sustainable purchasing doubled to 8% of total spend due to major projects.
- Monash's current kerbside recycling diversion rate in 20/21 is 56.41%.
- Monash now has a dedicated Litter Prevention Champion.
- Recycle Right feedback program has been running since January 2021, with 3,400 recycling bins and 2,520 food and garden waste bins assessed (this includes follow-up checks). Around 58% of checked recycling bins and 85% of food and garden waste bins have been used correctly. Following feedback, positive recycling behaviour was observed as a decrease in contamination, or no contamination found.

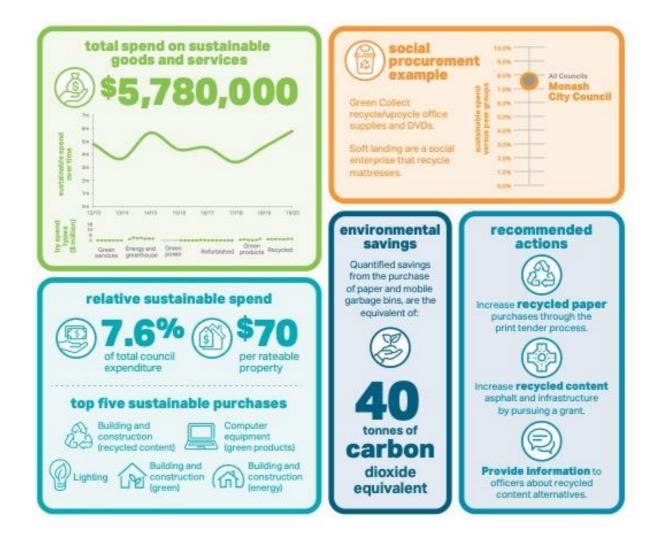
Clayton Litter Prevention Project:

- The Clayton Litter Prevention Project is a partnership with Monash University, employing students to provide peer-to-peer feedback to residents around Monash University Clayton campus. Targeted household feedback is provided on recycling and green waste bin contents, illegally dumped waste, overfilled bins, and bins left out after collection through bin tags, education flyers and door knocks.
- When COVID-19 restrictions put inspections on hold, real estate agents were engaged to share information with their tenants about improving waste management, recycling and reducing waste.
- The EPA's Regulating Litter and other Waste Toolkit featured this project in a case study.

Food Waste Recycling started in Monash:

• In July 2020, Council launched food waste recycling for households in Monash. All food scraps, including leftovers, meat, dairy, fruit and vegetables, can now go into household green waste bins. Collected material will be converted to quality compost for use by Victorian farmers. Throughout July, 100% recycled plastic kitchen caddies were delivered to residents with a green bin. Information booklets with tips about the new service accompanied the caddies.

Sustainable Purchasing Summary 2019/20 – Monash City Council



Integrated Water Management

Key achievements

\$1.1M INVESTED IN THE RENEWAL AND UPGRADE OF STORMWATER INFRASTRUCTURE, WSUD, AND WETLANDS (\$1.8M IN 2019/20)

Water Sensitive Urban Design:

 A Water Sensitive Urban Design (WSUD) Officer has joined the Sustainability Team, funded by a Melbourne Water Living Rivers Grant. WSUD is closely aligned with Integrated Water Management (IWM), and seeks to retain and treat rainwater and stormwater runoff to protect the health of our local waterways and bays. The new officer role will embed WSUD into projects and strategies, engage with the community and collaborate with other organisations to help deliver the IWM actions in the ESS.

- A best practice management project developed new tools, checklists and processes for more efficient management of Council's Water Sensitive Urban Design assets (funded by a Melbourne Water Living Rivers Grant). Outcomes will ensure our wetlands, ponds, raingardens, swales and passively irrigated street trees are functioning well to capture, treat and use stormwater runoff in our city.
- In an audit of the condition and performance of our 40 wetlands and ponds, and 200 raingardens and swales, it was identified that many systems will require work to improve performance.
- Internal Water workshops shared information on water-related projects, external engagement and new regulations or guidance. Input was provided into relevant Council Strategy updates, such as the Urban Boulevards Strategy, regarding integrated water management to promote urban cooling.
- We participated in the Integrated Water Management Forums for Dandenong Creek and the Yarra River. This involves collaboration with other Councils, Melbourne Water, Department of Environment, Land, Water and Planning, water retailers, and Traditional Owner Groups.
- We contributed to Yarra Valley Water's Integrated Water Management Plan for the Gardiners Creek subcatchment and provided feedback on the Suburban Rail Loop project, including mitigation of impacts on local waterways, and promoting urban cooling, greenery and amenity.
- Presentations and Sustainable Monash e-news articles highlighted local examples of WSUD and how it improves water quality, enhances waterway health and benefits the community.

Living Links – Final OCOC Transforming the Dandenong Creek Project video March 2021:

- Over the past four years, Monash Council has been working with Living Links partners to transform the Dandenong Creek corridor into a world-class urban living link. With funding of \$1M from the Victorian Government, 63 hectares of native plants were planted across 38 sites along the Dandenong Creek, more than 89 hectares of weed control was undertaken and more than 6,800 people were engaged in community events and activities.
- Monash received \$90,000 over three years (\$30,000 p.a.) to help improve habitat at the Mulgrave, Napier and Drummies Bridge reserves. The project leaves behind a lasting legacy of improved environmental condition along the Dandenong Creek corridor, as well as substantially increased community appreciation and engagement in its stewardship. Watch the project wrap up:

Transforming the Dandenong Creek corridor, Living Links.

Partnerships and Leadership Key achievements

RETURN ON INVESTMENT IN EAGA **7.9 TIMES**

7,472 OBSERVATIONS IN THE CITY NATURE CHALLENGE Eastern Councils were 30th in the world

Environmental Advisory Committee:

• The Environmental Advisory Committee actions over the past 12 months have included input and feedback into the Zero Net Carbon Action Plan, community gardens policy, procurement, and sustainable communications, improving vegetation, circular economy, WSUD and feedback on the Imagine 2040 plan.

Eastern Alliance for Greenhouse Action (EAGA):

- EAGA is a partnership between eight councils in Melbourne's east, collaborating on regional programs to reduce greenhouse gas emissions and facilitate regional adaptation.
- EAGA has provided a net benefit of 7.9 times the amount invested by its member councils through membership fees and project costs.
- Project highlights include the Victorian Energy Collaboration (VECO), initiated by EAGA and the Victorian Greenhouse Alliances, which led to 46 Victorian councils switching to 100% renewable energy: programs that saved \$3.1M in energy costs and 16,926 tonnes CO2e in the past 12 months; and joint advocacy on public lighting and electric vehicle charging, which will generate \$42M in benefits to all Victorian councils by 2046.

City Nature Challenge:

- Monash Council joined forces with seven other councils in Eastern Melbourne to compete in the global City Nature Challenge – a worldwide effort to observe, identify and bring awareness of plants and wildlife in cities. Along with the Cities of Boroondara, Maroondah, Manningham, Knox, Whitehorse, Stonnington and Greater Dandenong, Monash ran a series of walks and training events to teach participants to log wildlife observations using the iNaturalist app.
- The combined Eastern Melbourne Councils group registered 7472 observations, placing us in 30th position out of 300 cities in the world.
- Holmesglen Institute of TAFE land conservation students volunteered with Council on the three City Nature Challenge Walks at Valley Reserve and Mulgrave Wetlands.

Keep Victoria Beautiful (KVB) 2020 Sustainable Cities – Sustainable City of the Year Award:

- Monash Council was awarded Sustainable City of the Year in KVB's Sustainable Cities Award in November 2020, recognising the positive actions taken by communities in urban areas to protect and enhance their local environments.
- Monash also won an award in the Environment (Council) category for the native bees and seeds kits delivered to 650 interested households during the COVID-19 'stay at home' restrictions.
- Monash was also highly commended in the Litter and Waste categories for the Clayton Litter Prevention Project

 educating residents on litter prevention and how to recycle and dispose of waste correctly and the War on E-Waste free public event, held in August 2019, with ABC personality Craig Reucassel and a panel of experts.

Monash Net Zero Precinct Project successful in receiving ARC Linkage grant (Nov 2020):

- Council is a partner in the Monash University Net Zero Precinct project, which was successful in receiving \$1,023,008 in funding through the Australian Research Council Linkage grant program.
- Net Zero Precincts project is an interdisciplinary approach to help cities and urban regions reach net zero emissions by focussing on a precinct scale to optimise transition. The approach will be tested in an action-oriented case study in the Monash Technology Precinct through three Living Lab experiments across energy, mobility (transport) and buildings.
- This project aligns well with Council's commitment to becoming carbon neutral by 2025 and accelerating a carbon neutral future for the Monash community.
- Other partners include Engie Services Australia PL, CSIRO and City of Greater Dandenong.

Education, Engagement and Reporting Key achievements

\$491,000 IN GRANTS

(PLUS WSUD AND RECYCLING)

15 WORKSHOPS, ACTIVITIES AND EVENTS

INVOLVING 1000+ COMMUNITY MEMBERS

Sustainable Monash eNews is sent to **780 READERS EACH MONTH**

Community workshops and activities:

Sustainable Monash team was able to stay connected with the community, online and in person, to encourage residents to stay involved in a range of events, workshops, and activities including:

- Solar buddy lighting project, nest box building and painting activities
- Three City Nature Challenge walks and iNaturalist training
- Online webinars on sharing your garden with wildlife, attracting small birds, native bees and butterflies, recycling, Solar Savers and Sustainable House Day
- Monash Greenshoots Facebook now has 140 active members.

Grants \$491,000 to support programs:

- \$280,000 grant from Sustainability Victoria Small Business Energy Saver to be delivered in 2021/22.
- \$158,000 grant from Sustainability Victoria Sustainable Infrastructure Fund (SIF) to fund the use of recycled content asphalt and cycling infrastructure across three projects to be delivered in 2021/22.
- \$53,000 from Eastern Alliance for Greenhouse Action to lead a Business Resilience Program.

Highlight: Small business energy saver program (June 2021):

- Monash Council, on behalf of the Eastern Alliance for Greenhouse Action, has been selected as an intermediary for the Sustainability Victoria Small Business Energy Saver program until June 2022.
- Its goal is to help small businesses recover after COVID impacts, become more resilient in their operations, as well as save on their energy costs. At least 1500 small business (1-19FTE) will be engaged with the program to help them access energy efficiency rebates and bonuses that will help them save money and build their resilience and energy independence.
- The project will contribute to the delivery of community emission reduction commitments of the Zero Net Carbon Action Plan. We will also be engaging with other businesses on LED lighting retrofits and Environmental Upgrade agreements.