Environmental Sustainability Strategy 2016–2026 2019/20 Update

Acknowledgement of Country

Monash Council acknowledges and recognises the Kulin Nation as the traditional owners of the land now known as Monash. On behalf of the residents of the municipality, Council pays respect to indigenous elders, past and present and values the lessons of indigenous experience.

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 to reach these goals, which 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 & Resource Management

Integrated Water Management

Partnerships & Leadership

Education, Engagement & Reporting

Each year we highlight our key achievements and provide case studies for each priority.

Built Environment

Key achievements

12 PRIMARY SCHOOLS

participated in the Walk to School Program

4 ELECTRIC VEHICLES

within Council's fleet

\$5.6M INVESTED

in footpath and cycleways renewal

Implementing the Environment Sustainability Design in Monash

The Sustainable Building and Infrastructure Policy for Council-owned buildings and infrastructure was developed in partnership with the Eastern Alliance for Greenhouse Action (EAGA). This complements the Environment Sustainability Design Policy for developments and has been a part of the Monash Planning Scheme since 2016.

Case study

General Residential Zone to protect 'garden city' character

Part 2 of the C125 Planning Amendment was approved by the Minister for Planning. This final part of C125 introduces the General Residential Zone – Schedule 3 to Monash. The General Residential Zone applies to the broader suburban areas of Monash where there is emphasis on garden character in new development and applying higher standards to new developments, including single dwellings.

New developments should provide or retain:

- At least one canopy tree (for each dwelling), plus at least one canopy tree per 5 metres of site width
- A mixture of vegetation including indigenous species
- Vegetation in the front, side and rear setbacks
- Vegetation on both sides of access ways
- A canopy tree should reach a mature height at least equal to the maximum building height of the new development.

The amendment also introduces updates to local policy and new neighbourhood character objectives, application requirements and decision guidelines that place greater and clearer emphasis on garden character.

Urban Ecology

Key achievements

\$96,500 GRANT AND SPONSORSHIP FUNDING

OVER 8,000 NATIVE SEEDLINGS

were planted by the community

126,315 TREES, SHRUBS AND GROUND COVERS

were planted in streets, bushland, and open spaces

Grants received

- National Australia Bank provided \$4,500 in sponsorship and 15 volunteers to create the Brandon Park bush kinder.
- Three grants were received through the Federal Environmental Community Fund for the creation of nest boxes (\$5,000), Mt Waverley bush kinder (\$5,000) and renewal of Bird Hide at Mulgrave reserve (\$20,000).
- Delivering the \$62,000 Caring for Our Local Environment grant for the Green Shoots program to deliver tree protection education, Schools for Wildlife, Gardens for Wildlife and Mulgrave Friends group.

Trees

- 126,315 trees, shrubs, and ground covers were planted in streets, bushland, and open spaces (26,526 shrubs, 88,886 ground covers and 10,903 trees including 2,494 street trees).
- Customer Tree Enquiry process streamlined.

Conserving our bushland reserves at Valley Reserve and Damper Creek Reserve

Valley Reserve and Damper Creek Reserve have been designated conservation reserves by Monash Council in recognition of their unique standing as highly valued remnant vegetation areas. Council has updated the signage and will prepare a statement of purpose and long-term vision for each reserve, and a management plan identifying the conservation of native flora and fauna as a primary purpose of the plan.

Community engagement

- Four new bush kinder spaces were created at Brentwood, Brandon Park, Fregon and Sherwood Road.
- Valley and Damper Creek Reserves now designated as conservation reserves to protect flora and fauna.
- Over 100 residents have joined Gardens for Wildlife and attended workshops to learn how to use indigenous plants in their gardens to create habitats for local wildlife.

Case study: Green Shoots Program

The Green Shoots Program enables residents to connect with nature, improve and increase awareness of biodiversity and appreciate the value of trees. The program delivers many of the actions from the Monash Urban Biodiversity Strategy. Green Shoots provides the opportunity for Council's Sustainable Monash and Horticulture teams to collaborate on community engagement and bushland protection activities with schools, the community and early learning centres under the Gardens for Wildlife program, Skink Link Project, and our work with Friends groups. The Green Shoots program has been popular, with residents eager to help protect, improve, and experience the rich bushland and leafy environment of Monash.

Gardens for Wildlife and Volunteer Guides

Participants attended workshops run by our Bushland team, received free indigenous seedlings for their gardens and became part of a network of people providing homes to local native wildlife in their own gardens. These gardens create vital corridors for wildlife as they travel between our bushland and parks. Our new volunteer Garden Guides have been trained to visit participants' gardens to provide individual advice on how to create a habitat garden.

Council also collaborated with the residents of Glen Tower Drive to create a Garden for Wildlife in the shared public road reserve for both people and wildlife to enjoy, with 50 residents pitching in to create the garden with 1,000 indigenous plant seedlings. Schools have also joined to increase the vegetation on their grounds.

Linking up the Skink habitat

Since 2018, the Skink Link Project has been in place to rehabilitate habitat along Scotchmans Creek from Warrigal Road to Huntingdale Road, to provide habitat for the Southern Water Skinks and other wildlife.

The Friends of Skink Link Project Group work with the Bushland Crew and Sustainable Monash team on planting days, weeding, the creation of branding, organising community events and creating an iNaturalist page to track skink sightings. www.inaturalist.org/projects/skink-link

Five new Skink Link interpretive signs have been installed, including one large Skink Link Hub sign at the Drummond Street playground, to let passers-by know about the local native animals that rely on the habitat of Scotchmans Creek, why the indigenous vegetation is important and how they can get involved in improving the local environment for our wildlife. Signs are mounted on recycled plastic bollards, made by local industries who collect and reprocess plastic bags from supermarkets into long-lasting infrastructure.

Corporate Gardens for Wildlife – Nellie Melba Retirement Village, Wheelers Hill

Our first corporate Gardens for Wildlife Garden was created with the Nellie Melba Retirement Village in Wheelers Hill. The garden includes mulch, granitic pathways, rocks, recycled logs, seating, nest boxes and thousands of indigenous plants. This is a great example showing how corporates can contribute to biodiversity within the built environment, while enhancing wellbeing benefits for residents.

Bush Kinder Spaces Program

The Brandon Park, Kanooka, and Monash Vale children's centres, and the Mt Waverley Preschool run Bush Kinder programs in Brandon Park, Fregon Reserve, and Sherwood Road reserves. Council has installed rocks and repurposed tree trunks to create spaces for the children to engage in nature play. These unique and creative opportunities provide physical, social, and emotional benefits to the childcare students and any others who play in the reserve.

Climate Change

Key achievements

1.462mW SOLAR PANELS

reducing GHG emissions and overhead costs for businesses

\$93,000 ONGOING ANNUAL SAVINGS

100% RENEWABLE SOURCED ELECTRICITY

for Council buildings from July 2021

- Five Environmental Upgrade Agreements are in place with Monash businesses and have invested in nearly \$2.65 million in sustainability initiatives over the last two years, including 1.462mW in solar panels, reducing GHG emissions and overhead costs for businesses.
- Monash is one of 47 Victorian councils signed up to the Local Government Power Purchasing Agreement tender which will provide 100% renewable sourced electricity for Council buildings from July 2021.
- Since the installation of a utility tracking system in October 2018, data verification has identified \$162,000 worth of savings at June 2020, including up to \$93,000 ongoing annual savings. The new system has been helpful to quantify Council's total greenhouse gas emissions from buildings, fleet, and operations, improve our efficiency and reduce costs.

Case study: Carbon Zero by 2025

Monash Council has committed to achieving net zero emissions by 2025. Council made this commitment at its February 2020 meeting. Council will prioritise funding for key projects to reduce corporate emissions that also represent an attractive return on investment to achieve the 2025 target.

The baseline that is used is the total 2018-19 corporate net emissions including all Scope 1, 2 and 3 emissions which Council has influence over: **20,503 tCO₂e**

SCOPE 1

GHG emissions are generated as a direct result of activities in Council owned facilities and assets – includes Gas, Fuel for Fleet and refrigerants.

4,427 tCO₂e (21.6%)

SCOPE 2

GHG emissions – indirect emissions generated via consumption of energy in Council-owned facilities and assets (mainly Electricity).

7,872 tCO2e (38.4%)

SCOPE 3

GHG emissions are indirect emissions generated both up and down the supply chain of an organisation – including public lighting, transmission losses, leased assets, waste, paper use, asphalt, concrete and travel.

8,204 tCO₂e (40%) An inventory will be completed each year to track success.

Waste & Resource Management

Key achievements

Top recycler in Victoria for Mobile Muster, diverting 323 KG OF MOBILE PHONES & accessories from landfill

MORE THAN 100,960 CUSTOMERS VISITED

the Monash Waste Transfer Station

Top recycler in Australia for PaintBack for the fourth year in a row, diverting 346,053 KG OF PAINT

from landfill

- More than 100,960 customers visited the Monash Waste Transfer Station which is an increase from previous years assisted by traffic management improvements, reducing drop off times.
- A new kerbside collection contract with Solo Resource recovery started in April 2020, including the introduction of the food waste recycling service for households from July 2020.
- Council secured the recycling contract with Visy Recycling for the next three years.
- Monash was the top recycler in:
 - Victoria for Mobile Muster, diverting 323kg of mobile phones and accessories from landfill.
 - Australia for PaintBack for the fourth year in a row, diverting 346,053kg of paint from landfill.
 - Victoria and second highest in Australia for Planet Ark Toner cartridge recycling, diverting 7,646 print cartridges from landfill (a 50% increase from 2019).
- Monash's current kerbside recycling rate is 52.33%.
- 32 Clean Up Australia Day events were held including the Council-run event along Scotchmans Creek at the Skink Link, attended by 70 people, including Stephen Dimopoulos MP and Cr Brian Little.
- 210t of RECONOPHALT used at Mulgrave Community Centre car park, 7% total asphalt use by council.
- 740 residents purchased compost and worm farms at a 70% discount (and free delivery), double the previous year. Over 93% are still using the equipment and 99% would recommend the service to others.

Clean Up or Pay Up – Clayton

The Clean Up or Pay Up education campaign was rolled out in March 2020 to give residents a chance to change incorrect waste and littering behaviors prior to receiving a Notice to Comply and infringement. The campaign included flyers, street boards and calling cards, provided to households generating litter, dumped waste or contaminated bins. This project receives funding from Monash University to employ university students to evaluate the issues and the data collected, to inform the education program.

Case studies

War on E-waste event with Craig Reucassell

Monash Council ran a War on E-waste event with Sustainability Victoria and Monash University in August 2019. The session was hosted by Danielle Storey, CEO Eastern innovation and Craig Reucassell from ABC's War on Waste, who explained what e-waste is, why it was being banned from landfill (July 2019), and how it can be recycled. Over 1150 Monash residents, university staff and students registered to attend. Two cubic metres of e-waste was recycled on the day, and stalls promoting Sustainable Monash, Monash University, Precious Plastics and Monash University waste research projects were also available. A Q&A session was held by Mayor Shane McCluskey, with Craig Reucassel, Paul Barton (Director Business Support, Environmental Sustainability, Monash University) and Danielle Prentice (Coordinator Waste Operations, Monash Council) on the panel addressing waste questions. The event trended on Twitter with the hashtag #monashwaronewaste. Attendees included the Minister for Energy, Environment and Climate Change Lily D'Ambrosio, Mount Waverley MP Matt Fregon, Oakleigh MP Steve Dimopoulos, Councillors Stuart James and Lynnette Saloumi, Professor Rebekah Brown (Monash University) and Katie Pahlow (Sustainability Victoria).

Food Waste Recycling starts in Monash

Over 60,000 households received a kitchen caddy (made from recycled plastic) and welcome pack, including a 16-page comprehensive guide to help them recycle their food scraps in their green bin from July 2020. To assist the introduction of the service, a Zero Waste Champion was appointed to create a community behaviour change on the use of all three bins, reducing waste to landfill by 40% and avoiding GHG emissions.

Integrated Water Management

Key achievements

\$1.8 M INVESTED

in the renewal and upgrade of Council's stormwater infrastructure

SUCCESSFUL MELBOURNE WATER

Living Rivers grant to fund a Water Urban Design Officer

Waterway and wetland management

Engineering recently completed Stage 1 of a project to identify gaps associated with Water Sensitive Urban Design (WSUD) and understand how wetlands are best managed.

\$1.8 million was invested in the renewal and upgrade of Council's stormwater infrastructure (including local drainage, wetlands and water sensitive urban design assets).

Case studies

Water Efficiency Feasibility study

A Water Feasibility Study completed into water use by the City of Monash found the city is efficient. However, a drying climate and population growth will likely trigger the need for more water in the future. The study set a target of 1,500kl water per resident, which would ensure water is used effectively to maintain the quality of open space, while meeting the needs of the community. Harvesting water from stormwater can also help to meet water needs across Monash.

Melbourne Water Living Rivers Grant

Council was successful in obtaining a Melbourne Water Living Rivers grant to fund a Water Sensitive Urban Design (WSUD) Officer for two years. The position will embed WSUD into Council projects, build WSUD capacity internally and with developers, support community education, ensure better water use to support our trees, green spaces and urban cooling, and implement some of the recommendations of the Water Feasibility Study.

Water Watch update

Through Melbourne Water's Watch Program, members of the community and Friends groups volunteered their time to measure water quality of local waterways to give us a better understanding of our waterways' long-term health. In 2019/20, Monash community members made 207 observations of water quality parameters such as pH, turbidity and dissolved oxygen during 28 visits at five sites within Monash. Some sites also included bank erosion and wildlife observations. To view the data collected, visit: www.vic.waterwatch.org.au

Partnerships & Leadership

Key achievements

250-420 COMMUNITY MEMBERS

visited Monash Open Gardens Day

\$2.25 FOR EVERY DOLLAR INVESTED IN EAGA

240 VOLUNTEER HOURS

were spent along the 2km waterway connected to these sites

Environmental Advisory Committee

The Environmental Advisory Committee actions over the past 12 months have included input and feedback into the Carbon Neutral modelling brief and Zero Net Carbon Action Plan, community gardens policy development, weed management, review and feedback on food organics in the green bin roll out, the Green Shoots program and Litter Action Plan activities.

Eastern Alliance for Greenhouse Action (EAGA)

EAGA is a partnership between eight Councils in Melbourne's east, working together on regional programs to reduce greenhouse gas emissions and facilitate regional adaptation. The Alliance provides an economy of scale, allowing Monash to deliver projects we could not do on our own, opportunity to share knowledge and access to specialist expertise. EAGA's project work is complemented by advocacy, capacity building and regional partnerships. For every dollar contributed as membership fees, approximately \$2.25 is returned to EAGA councils and communities.

Living Links

In the final year of the Our Corridors Our Community grant funding with Living Links, community engagement, revegetation and weed management continued at Mulgrave, Napier and Drummies Bridge Reserves to improve the quality of Monash's bushland.

Monash University Partnerships

Council has now partnered with Monash University on the Zero Net Precincts project which received federal funding to collaborate on GHG emission reduction across the municipality. Council also hosted eight Monash University interns to support our sustainability programs.

Case study

2019 Monash Open Gardens a success!

The Waverley Gardening Club hosted the second Monash Open Gardens Day in November 2019, with the continuing support of Council. Eight Monash households opened their gardens and shared their expansive gardening knowledge with the 250-420 community members visiting each garden. The gardens were beautifully diverse, featuring native species and innovative designs. This day helped to inspire the community to get into their own gardens and expand the greenery of Monash, encouraging greater biodiversity by forming more green corridors throughout the municipality.

Education, Engagement & Reporting

Key achievements

21 WORKSHOPS AND EVENTS

involving 1,246 children and 369 adults

Sustainable Monash eNews is sent to 800 READERS EACH MONTH

16 RESOURCESMART SUSTAINABLE SCHOOLS

in the Monash Council area

Community workshops and festivals

- Sustainable building tour of the Mackie Road Neighbourhood House
- Worm farm workshops and story time
- Gardens for Wildlife workshops for residents
- 'War on waste' tour of the Waste Transfer Station
- Bird Walks to celebrate National Bird Watching Week
- Screening of 2040 movie by Damon Gameau, with Libraries and Monash Youth Services, about life in 2040 if we used today's sustainability technology. Now available for loan.
- Promoting food waste recycling, Solar Savers, and recycling right at Clayton Festival.

2020 ResourceSmart School of the Year: Mount Waverley Primary School

Congratulations to Mount Waverley Primary School for becoming 2020 ResourceSmart School of the Year. The school mentors other Monash schools in sustainability via its Kids Teaching Kids conference every year.

Case studies

Mackie Road Neighbourhood House Sustainability Hub

The Sustainability Hub at Mackie Rd Neighbourhood House has been a hive of activity:

- a Gardens for Wildlife demonstration gardens has a granitic sand path bordered by a diversity of native plantings, a small swale (dry creek bed) and frog bog and a rainwater irrigation system.
- Three community planting days were undertaken, one with volunteers from Mitsubishi.
- The new garden will attract native wildlife over time, especially after the placement of habitat boxes and bee hotels.

Bees Hotel and Seeds Kits delivery program

As part of our Green Shoots and community engagement program, 630 seed kits were delivered to resident homes so they could grow native plants and build bee hotels to attract our native bees and insects. Through the kits and guidance on Council's website, the Monash Bulletin, email newsletters and social media, the Sustainable Monash team was able to stay connected with the community and encourage residents to still be involved in habitat when community planting and family nature events were put on hold in 2020.