

14 QUARTERLY ENVIRONMENT REPORT

FILE REFERENCE INT1987127

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RECOMMENDATION

That Council receive and note the Q1 Quarterly Environment report.

Attachments

Nil.

EXECUTIVE SUMMARY

This report provides a summary of some key projects, services and actions delivering environmental benefits across the work of Council. Projects have been categorised according to the Sustainable Environment Policy (SEP) 2018–28 themes of:

- Biodiversity
- Climate change
- Water
- Waste and resource recovery

The SEP is the roadmap for the future direction of Council's environmental and sustainability strategies, plans and activities.

A similar report will be presented each quarter highlighting new programs or projects that have achieved significant milestones.

BACKGROUND

There are a broad range of projects, services and actions delivering environmental benefits throughout the organisation. While many of these occur within or are led by the Assets and Services Division, the vast majority of the organisation is involved in environmental sustainability to some degree. Below is a highlight of some of the key projects currently being undertaken.

All actions fall within the Council Plan 2019-20 under the key performance area of Environment 'we will continue to plan and manage the natural and built environment for present and future generations'.

Biodiversity

Council Plan action – Protect and improve biodiversity by increasing the area of natural ecosystems across the Shire.

Council Plan action – Preserve and improve our bushland and natural environment by implementing weed management strategy and programs and continuing activities on high conservation bushland reserves and roadsides..



Westernport Biosphere update

| Description | Over winter-spring 2019 the Western Port Biosphere implemented the Western Port Biosphere Ramsar Awareness Project. This is aimed at engaging with recreational watercraft users across the Ramsar site to raise awareness of the vitally important wetlands and how to limit impacts to them. |
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| Funding | Council is a member of the Westernport Biosphere |
| Update | The project included installing signage at selected boat ramps and organising a Western Port Boat User Engagement workshop with the intention of developing a stakeholder group and identifying least impact actions such as; • Avoid disturbing roosting and feeding shore birds • Monitor for and notify authorities if suspected marine pests are identified • Check, clean and dry between waterways to prevent the spread of pests • Be mindful of where we anchor and other vessel impacts on flats and sea grass • Follow catch limits |

Roadside weeds and pest project funding

| Description | Council receives a non-competitive allocation of funds from the Victorian Government Department of Agriculture to deliver a roadside weeds and pest animal control program, through the Roadside Weeds and Pests Program. |
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| Funding | This project is funded by the Victorian Government's Roadside Weeds and Pests Program (2019-20 allocation \$29,483) |
| Update | Roadsides targeted for weed control works for 2019-20 have been identified as those in the township "cluster" of Catani, Iona, Vervale and Bayles. In addition to these, fire effected roadsides in the Bunyip North, Tonimbuk and Tynong North areas will also be part of this year's program. GPS mapping occurred last year for the presence of Blackberry, Broom, Thistle, Ragwort, Gorse and Ragwort on these roadsides. Only weeds declared as noxious are funded under this program. Further weed mapping will occur this year on priority roadsides to inform next year's program. |

Trees for weeds swap

| Description | An annual community event held outside Emerald Library, organised by Council in partnership with the Friends of Emerald Lake Park. Residents are encouraged to bring along samples of weeds found on their property for advice on identification and management. In return for their efforts and to encourage planting after weeding, participants were able to select from a selection of free indigenous trees and shrubs to take home. |
|-------------|---|
| Funding | This initiative is funded by Council |

GENERAL COUNCIL MEETING - 18 NOVEMBER 2019



| Update | This highly successful event was held on Saturday 7 September, with a total of 70 families visiting the stall and 35 different weed species brought in over the day. Over 300 indigenous plants were given away. A weed workshop was also offered at the Emerald Library the week prior to this event, which worked well as an opportunity to promote the day. |
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Climate change

Council Plan action - Adapt to the impacts of climate change by working in partnership with the South East Councils Climate Change Alliance (SECCCA) and both Victorian and Australian Governments

Council Plan action - Reduce Council's energy consumption and help the community to do likewise.

My Place solar

| Description | Installation of a 31kW solar electricity system on My Place |
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| Funding | This project is fully funded by Council |
| Update | The 31kW system is now installed and operational. The system will save approximately \$6,000 per annum, and pay for itself in six years. It will reduce emissions by 38 tonnes of CO2e – the same annual emissions as nine average cars. To maximise generation, the four different orientations of the roof were used for panel installation. The system is comprised of 96 solar panels. |

Zero energy home staff tour

| Description | A tour of the Zero Energy Home located in Timbertop by Council staff |
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| Funding | No cost |
| Update | Following an internal energy information session held at the Civic Centre, interested staff participated in a tour of the Zero Energy Home in Timbertop estate. The carbon neutral home is one of two high performance homes built in Timbertop. Five more carbon neutral zero energy homes have recently been completed at Kaduna Park. Council staff learnt about the functional performance of a zero energy household and the design features that support energy efficiency, a high quality internal environment and water conservation. |

Energy information sessions for residents and businesses

| Description | Information session for residential energy efficiency and Environmental Upgrade Financing. |
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| Funding | The Community information sessions are funded by Council. The Environmental Upgrade Agreement (EUA) information session were provided by Sustainable Australia. |
| Update | Residential information sessions Energy information session have been held for residents at various |



locations around the Shire including Arena and Henry Children's centres as well as the Pakenham and Emerald libraries. These sessions are facilitated by South East Councils Climate Change Alliance (SECCCA) to improve the community understanding of household energy expenses and provide residents with information on how to reduce their household energy cost. These information sessions are open to the public and promotion has been targeted to encourage young and newly migrated families as well as the shire's ageing residents to attend.

Environmental upgrade agreement information sessions
The Sustainable Australia Fund provides Environmental Upgrade
Financing for business wishing to invest and install high efficiency
energy, water and waste technology. An information session for
businesses and environmental upgrade installers was held at the
Emerald library to promote the uptake of Environmental Upgrade
Financing Agreements in the shire. The workshop provided interested
business owners and locally operating installers with information on the
Environmental Upgrade Financing opportunities. These environmental
upgrades will improve the operational efficiency and reduce the
environmental footprint of the business in the shire.

Facilities lighting upgrades

| Description | LED lighting upgrades at the Pakenham depot and Cardinia Life |
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| Funding | These projects are fully funded by Council |
| Update | Old inefficient lights were replaced at the Pakenham depot and Cardinia Life with energy efficient LED lights. The pool hall lights at Cardinia Life were replaced, saving approximately \$7,500 per annum in electricity costs providing a payback period of less than 12 months. The upgrade is also saving 51 tonnes of greenhouse gas emissions per year, the same annual emissions as 13 average cars. The savings are so significant due to the long hours of operation of the pool hall lighting. |
| | At the depot the lights in the workshop and external floodlights were replaced. This has significantly improved the lighting levels. The new lights in the workshop include a daylight harvesting system to turn the lights off on sunny days to further improve savings. The depot lighting upgrade is saving approximately \$2,700 per annum, providing a payback period of 4 years. It is also reducing greenhouse gas emissions by 13 tonnes of CO2e per annum. |
| | The lighting upgrades are also providing additional maintenance cost savings. |

Water

Council Plan action – Manage water in an integrated way, including the reduction of potable water consumption by Council and households.



Council plan action - Promote water catchment management practices that improve the quality of our waterways

Stormwater reuse in growth areas

| Description | Council is working in partnership with City of Casey, Melbourne Water and the Victorian Government (Department of Environment, Land, Water and Planning) to find ways of reducing the amount of water flowing into our water ways, specifically Pakenham East in Cardinia Shire. As growth areas develop and more stormwater drains are installed, large quantities of water are draining into waterways. |
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| | The excess water generated from this increased development, transports sediments and pollutants directly into Westernport Bay, which is having adverse impacts on sea grass and other biodiversity elements. The excess water needs to harvested for use, reducing excess flow to waterways, increasing use of stormwater and reducing reliance on potable water. This project will explore and identify the best options to achieve this. |
| Funding | This project is jointly funded by Victorian Government, City of Casey, Melbourne Water and Council |
| Update | The project was initiated through the Western Port Integrated Water Management forum, which Council is a member. Both Cardinia Shire and City of Casey noted this project as very high priority for the region. A tender to engage a consultant to undertake the analysis is currently being advertised. |
| image | |

Waste and resource recovery

Council Plan action – promote practices that result in the reduction per household of the amount of waste going to landfill, particularly food waste.

School's rubbish free lunch competition

| Description | The schools rubbish free lunch competition is an initiative to help school children reduce the packaging in their lunch boxes by raising awareness about, and encouraging, rubbish free lunch box alternatives |
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| Funding | This initiative was fully funded by Council |
| Update | In Term 2, 80 classes from seven primary schools in Cardinia Shire participated in a rubbish free lunch challenge. Classes first participated in a pop-up lunch box inspection to assess the amount of disposable packaging in lunchboxes on a 'normal day'. Council's waste education contractor, EnviroCom, provided the classes with resource kits and lesson plans, and a second lunch box inspection |
| | was conducted to reveal how much waste had reduced by. |
| | The top class, year level and school were identified and were able to |

GENERAL COUNCIL MEETING - 18 NOVEMBER 2019



| choose from a list of prizes to help them further along their waste |
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| reduction journey. |

Food and green waste bin - stage 1

| Description | Expanding the green waste bin service to include food waste is planned to begin in late 2020. Residents will be provided with a food caddie and compostable bags to encourage disposal of all food waste into green bins for composting. The green bin will also be promoted to increase uptake, with a move towards a compulsory green bin in the coming years. |
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| Funding | The initiative is funded through the garbage green bin charges |
| Update | Stage one of the project is underway with raising awareness about the issue of food waste going to landfill. |

Electric waste truck trial run

| Description | Council's current residential waste and recycling collection contractor, Cleanaway, has been trialling a 100 per cent electric powered collection truck across its contracts and in August was able to test drive it on a run in Pakenham. |
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| Funding | This trail is funded by Cleanaway |
| Update | As the Waste Team looks towards the future, ways to reduce the environmental impact of waste collection and disposal are being considered. We are very excited about this trial being undertaken by one of our main collection contractors. |
| | Waste Team members have visited the company responsible for electrifying the truck, SEA Electric, to learn more about the future of electric trucks in the waste industry. |
| | In addition, Council currently has a tender out for all three of our Waste Collection Services in which we have encouraged tenderers to include sustainability initiatives as part of their response. |