

17 ENVIRONMENT QUARTERLY REPORT

FILE REFERENCE INT189549

RESPONSIBLE GENERAL MANAGER Michael Ellis

AUTHOR Desiree Lovell

RECOMMENDATION

That the report be noted.

Attachments

Nil.

EXECUTIVE SUMMARY

This report provides a summary of some key environmental sustainability projects currently being undertaken by Council. Projects have been categorised according to the Sustainable Environment Strategy themes:

- Climate change and energy conservation
- Development and built environment
- Water conservation
- Waste minimisation and sustainable procurement
- Natural systems

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 environmental actions taking place throughout the organisation. While many of these occur within or are led by the Environment Unit, 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 2017–18 under the key performance area of Environment 'we will continue to plan and manage the natural and built environment for present and future generations'.

Climate change and energy conservation

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

1 *Emerald Library solar event*

The installation of a 22.8kW solar photovoltaic system on the Emerald Library aligns itself with Council's Aspiration energy transition plan (AETP) and supports the transition towards carbon neutrality. The system consists of 76, 300-watt high efficiency solar panels. The system will produce approximately 30,000 kWh of electricity per annum and will reduce emissions by approximately 33 tonnes of CO₂e per annum.

The system includes the 1000th solar panel installed on a Cardinia Shire Council owned building. The system was launched at a small public event in October.

Chris Buckingham, CEO of Casey Cardinia Library Corporation attended the launch event, where the energy savings and emission reduction benefits of the system were presented. Mr Buckingham has contacted Council officers with interest to become the first library organisation in Australia to pledge to the Take 2 climate action initiative.

2 *Sustainable community workshops*

The sustainable community workshops, at the Hewitt Eco House in Koo Wee Rup will start in February 2018. Sessions are scheduled once a month for four months and topics of the workshops will include:

- waste and water management
- sustainable gardening
- climate change adaptation and resilience
- energy efficiency and emergency planning

The workshops will provide the community with valuable information and recommendations towards developing sustainable practices and resilient communities. Last year the workshops focused on sustainable homes and drew in community members from all over the Shire.

3 *High performance zero emissions home project*

The Cooperative Research Centre for Low Carbon Living (CRCLCL) will be building a 'high performance zero energy house' in the Shire. The project is a collaboration between Council, Parklea, SJD homes, Low Carbon Living, SECCCA, Curtin University and Josh Byrne and Associates.

The high performance display home in Officer will provide the community with access to a functioning zero energy dwelling, where SECCCA officers will be onsite to provide advice and information on residential energy efficiency and building design to support high performance homes. The project presents the opportunity to raise the profile of Council in the emerging zero energy homes market and engage builders, towards improving energy efficiency and reducing community emissions, as growth and residential development in the Shire continues.

Development and built environment

4 *Sustainable environment strategy update*

The Sustainable environment strategy (SES) is an overarching document encompassing the areas of climate change, biodiversity, waste, water, and Council leadership in this space. The aim is to ensure a consistent direction towards protecting and enhancing Cardinia Shire's natural environment and ensuring that our Shire is a productive and healthy place to live, now and in the future. Internal consultation is complete, along with sourcing all the required data for the SES. The plan will be presented to Council for consideration and adoption mid this year.

5 *Pakenham Library, Hall and U3A solar energy system*

Modelling is complete to determine the appropriate solar electricity system size for the Pakenham Library, Hall and U3A. A project specification for an 83.5 kWp system has been developed and issued for quotations. Indicative modelling has indicated the system will save approximately \$16,500 per annum, and have a payback period of approximately 6 years. Installation of this system is planned for later this financial year.

6 *Civic Centre energy efficiency*

Various initiatives have been implemented to reduce the energy consumption of the civic centre in recent months. These include:

- adjustments to the building's natural ventilation mode to enable the windows to open more often. When the windows open, the majority of the building's fans and air conditioning turns off, leading to energy savings.

- moving to a booking system for air conditioning for the Council chambers, gallery and dining room and upgrading the controls for these rooms. Air conditioning now only operates for these rooms when the rooms are in use.
- installing sensors and controls for selected exhaust fan operation, so they only operate as required.

Water conservation

Council Plan action – Plan to manage water in an integrated manner, including the reduction of potable water consumption by Council and households.

7 Healthy waterways strategy

Council officers have been involved in the consultation phase of Melbourne Water's Healthy Waterway Strategy for the Westernport catchment. The catchment extends from the Mornington Peninsula to Drouin, north to Bunyip State Park and south to the bay.

The Healthy Waterway Strategy will guide investment planning through these areas for the next 10 years. Representation and input at this stage is vital as it determines Melbourne Water's priorities, including threats, opportunities or ongoing projects that require support. Melbourne Water consultation workshops were attended by a range of stakeholders including community groups, farming groups, the Westernport biosphere and Councils. The social value of waterways, effects of urbanisation through the growth corridor and environmental conditions were broad themes of the discussion. A final workshop is scheduled for mid this year.

Waste minimisation and sustainable procurement

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

8 Green waste drop off trial

Council, in partnership with Cleanaway opened two local transfer stations to offer free green waste drop off to residents of Cardinia Shire over a nine-day period in November. This free service aimed to assist residents in reducing the fuel load on residential properties to reduce the fire risk in the municipality, but also to minimise the risk of illegal dumping of material and to reduce the amount of organic material ending up in landfill. This trial was in line with Waste and resource recovery strategy action to "implement a suite of options that provide alternatives to burning off. A total of 603 drop offs resulting in 107.33 tonnes of green waste collected and sent for recycling.

Cleanaway Pakenham recorded 396 vehicles and together they dropped off 69.65 tonnes of green waste material. Cleanaway Lysterfield recorded 207 vehicles and together they dropped off 37.68 tonnes of green waste material.

The data is being reviewed, along with feedback from the community, contractors, and other stakeholders to consider the future of this service.

9 Hard waste service sorting

The Biannual green and hard waste collection service continued its innovation with a sorting trial occurring at the landfill during November's collection. This recent collection saw 50 per cent of collected loads diverted from landfill to a manual sorting process to extract further materials for recycling. Initial data identified opportunities to extract cardboard and metal via this method. The complete data will be analysed to assess how this may be incorporated into future collections.

10 Recycling concrete on Council projects

Recycled concrete has been used instead of newly quarried aggregate on Council projects such as Deep Creek reserve car park and footpath, and the Eastern Dandenong Ranges multi use trail. The concrete originated from Council's operations. Using recycled concrete instead of virgin materials

saves on resources involved in making/quarrying virgin material, as well as water, and reduces waste sent to landfill.

Natural systems

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.

11 Gardens for wildlife program update

The Gardens for Wildlife program is a partnership between Council and community volunteers, to provide advice to residents on creating wildlife habitat in their gardens. Council's website has the online registration form along with, 16 fact sheets, links to our online indigenous plant guide and other useful resources. Nineteen volunteers from eight local conservation groups have volunteered to carry out garden assessments within their local townships. Volunteer assessors were trained in occupational health and safety, community liaison, and tips for carrying out garden assessments.

The program was launched in Spring 2017, 55 households have since registered for the program. Following their garden visit, the assessor sends the homeowner a follow up report based on their discussion that details weeds and control methods, suitable indigenous plants, and other habitat features discussed during the assessment.

In response to a number of questions from volunteer garden assessor, Council officers organised an example garden assessment carried out by an experienced Gardens for Wildlife assessor from the Knox Environment Society. This additional information was well received, with assessors feeling comfortable in their understanding of their role, and also using the opportunity to discuss ideas and concerns with their peers.

12 Roadside Weeds and Pests Program (RWPP) 2017-19

The Department of Environment, Land, Water and Planning (DELWP) recently advised that Council has been awarded \$52,172 under the Roadside Weeds and Pests Program (RWPP) for 2017-19. As a requirement to receive this funding, Council has completed a Roadside Weeds and Pests Control Plan for 2017-19, which was submitted to DELWP in December 2017. We expect this plan to be approved and the grant received early in the new year.

This year, activities under this program will include treating regionally prohibited and regionally controlled weeds, including Blackberry, four different Broom species, Ragwort and Spear Thistle on municipal roadsides in five localities - Cardinia, Officer, Pakenham, Lang Lang and Heath Hill.

These activities aim to follow-up treatment works for projects funded in Council's previous weed control plans, and support other investment for integrated landscape protection projects or address particular community concerns.

In addition to the on ground works, GIS data capture on weed species will be collected on roadsides across Dalmore, Kooweerup, Monomeith, Bayles and Caldermeade, to inform the 2018-19 roadside weed control program.

13 Emerald Lake Park Vegetation Management Project update

Council has received a grant of \$29,710 for the Friends of Emerald Lake Park through the Port Phillip and Westernport Catchment Community Grants, for 2017-18 works towards the ELP vegetation management project.

This grant adds to the Council budget of \$50,000, and will be used to build on past works, including continued removal of exotic invasive trees in the park, and revisit previously treated sites, addressing new weed and emerging infestations.

Council is the project manager and is responsible for delivering the projects objectives and satisfying the grant milestones, with close liaison with the Project Steering Committee, in particular the Friends of Emerald Lake Park.

14 Weed control grant

This program has been overwhelmingly popular this year, with the entire budget of \$21,000 fully allocated prior to December. As a result, the 2017-18 grant is now closed to applications, and will reopen again in July 2018, in line with the start of the new financial year.

15 Environmental volunteer network meeting

On 23 November, officers hosted the annual volunteer network meeting with 51 participants. The event provides an opportunity to update community groups on the latest environmental news, legislation and safety information that they need to be aware of and provides Council staff an opportunity to thank the community for their volunteer work throughout the year. The community members were appreciative of the acknowledgment and valued the opportunity to network with other volunteer members.

POLICY IMPLICATIONS

Nil.

RELEVANCE TO COUNCIL PLAN

Nil.

CONSULTATION/COMMUNICATION

Where internal and external consultation has taken place it is captured in the background information above.

FINANCIAL AND RESOURCE IMPLICATIONS

NI.

CONCLUSION

Council continues to be a leader in the environmental field with their partnerships and innovation to deliver great programs for the community. This is evident in the interest Council has received in the gardens for wildlife program, 1000th solar panel installation event and volunteer participation across the shire.