

Case study: Food organics and garden organics collection in Kiama



Photo: Kiama Council Waste Management Officer Josephine St John and Mayor Mark Honey with free bags of OK (Organics Kiama) compost like those given to Kiama residents in May 2017. (Kiama Municipal Council)

‘The success of OK Organics Kiama is due to the excellent planning and implementation by our waste management staff, as well as their tireless efforts every day to make it a success.’

Mayor Mark Honey,
Kiama Municipal
Council

Award-winning green plan converts waste into compost

Excellent planning has encouraged Kiama residents to embrace an organics recycling program that turns food and garden waste into a range of soil, compost and mulch products.

Bin collection change drives organic recycling

The successful introduction of a food organics and garden organics (FOGO) collection service has won a trio of awards for Kiama Municipal Council.

The program was rolled out in the popular tourist destination over five stages to help residents adapt to the new waste service.

Before the organics service began, 6,241 tonnes of garden organics were collected in the Kiama municipality. Following its introduction across all 10 urban waste zones in 2016–17, 9,263 tonnes were collected, a 48% increase.

Kiama Municipal Council services 22,000 people and supports a range of environmental activities and services, such as waste reuse and recycling programs, and cycleways and walkways.

This is an increase of approximately 3.35 kilograms per household per week. In landfill, that volume of organics waste would have generated approximately 4,533 tonnes of greenhouse gas emissions.

Grant funding and rollout

The municipality was divided into 10 urban waste collection zones. The service was rolled out in stages:

- zone 1 in 2012
- zone 2 in 2014
- zones 3 and 4 in 2015
- zones 5 to 10 in 2016.

Gainsborough, an urban zone, was chosen as a champion for the rollout as it has a stable non holiday-based population, shops suitable for pop-up kiosks and a community centre ideal for information events.

The council also used its own facilities to trial the production of compost before the expansion of the SoilCo licensed facility at Kembala Grange in 2016 .

The Environment Protection Authority's Organics Collection Grant funding totalled \$211,230. It was used to:

- employ one of the four Project Officers in the OK Organics Kiama team
- develop resources for an information kit
- purchase 7-litre kitchen caddies, compostable liners for multi-unit dwellings and bin stickers
- conduct pre-FOGO bin and post-FOGO bin composition surveys.

The Kiama Council Waste Management Officer, Josephine St John, said the success of the new service was due to a strong emphasis on community engagement, staff commitment, the shop front information kiosks and well-planned information sessions and resources.

The rollout was delivered over five stages of education:

1. A Mayoral letter was delivered to each household explaining the new waste service, reasons for the change and the start date.
2. Residents were invited to community information sessions where they were given an information kit, a 7 litre kitchen caddy, an information brochure, a recycling calendar and details of information kiosks.
3. OK Organics Kiama team members delivered kits door-to-door to residents who did not attend the community information sessions.
4. Pop-up information kiosks were open the week before service and during the first week of service.
5. The 240 litre green-lid bins were updated with two stickers to show food waste could now go in the bin with garden waste.

Following community feedback, changes were made for specific user groups. Those with special medical needs were given a weekly (not the usual fortnightly) red-lid bin service. Residents of multi-unit dwellings were given an introductory one-year supply of compostable liners.

An audit of individual red-lid bins 12 months after implementation showed the weight of FOGO waste in these bins had decreased by 73.6%. Weekly household FOGO waste in the red-lid bin fell from an average 3.97 kg to 1.01 kg.

Outcomes

With the implementation of the OK Organics Kiama program, which includes a weekly FOGO (green-lid) bin and fortnightly landfill (red-lid) bin, the Kiama municipality is achieving a resource recovery rate of 75%; a consistent 40% reduction in waste sent to landfill compared with pre-OK Organics Kiama.



Photo: Contamination monitoring by the council's OK Organics Kiama team

Contamination in the green-lid FOGO bin is less than 1%. Regular monitoring for contamination is held via the Bin Recognition program. Bins with correct contents have a yellow tag and go into a draw to win a prize. Contaminated bins receive a grey tag along with a list of the items that could not be composted. Contamination on a third occasion will see the bin not serviced that week.

The waste from nearly 9,000 households is transported to local commercial composter SoilCo. After the material is screened and shredded into smaller pieces, it is processed onsite for three to four months, during which time it is tested to ensure it meets Australian Standards (AS 4454-2012). Finally, a range of soil, compost and mulch products is produced.

Extremely nutritious compost is made from food scraps, which have a high nitrogen content. The compost also increases the water-holding capacity of the soil and promotes good soil structure.

Fewer than 10% of residents had queries about odour, vermin or nappies. Any concerns of this nature are now addressed on social media sites, such as the Kiama Community Page.

The Environment Protection Authority's Organics Collections Grants provide up to \$1.3 million to councils and business to introduce new food only or food and garden collection services. They are administered by the Environmental Trust and open for applications over several funding rounds.

Honoured for innovation

Kiama Municipal Council was highly commended for leadership in recycled organics by the Australian Organics Recycling Association in 2013 for its trial of FOGO and composting and won the Organics Recovery Award at the Local Government NSW Excellence in the Environment Awards in 2012–13.

The program was also the Division A winner of the Community Waste Services Award at the Local Government NSW Excellence in the Environment Awards in 2016–17.

'We're really proud of the OK Organics Kiama service and are thrilled with how the community has taken it up. This award shows how innovative smaller councils like Kiama can be,' said Josephine St John. 'Residents should take a great deal of credit for being so willing to adapt to a new way of managing their waste.'

Looking ahead

During International Compost Awareness Week in May 2017, Kiama Council gave away 40 tonnes of compost to thank the community. This will become an annual event.

Council also runs quarterly workshops on home composting, worm farming or Bokashi composting.

A database of holiday rentals has been generated along with a special information sheet for tenants.

Future considerations include the viability of introducing a user-pays weekly red-lid bin service for residents who find the fortnightly red-lid bin service insufficient and giving elderly, multi-unit dwelling or dual-occupancy residents the option to downsize their council-issued 240 litre green-lid FOGO bin to an 80 litre or 140 litre FOGO bin.

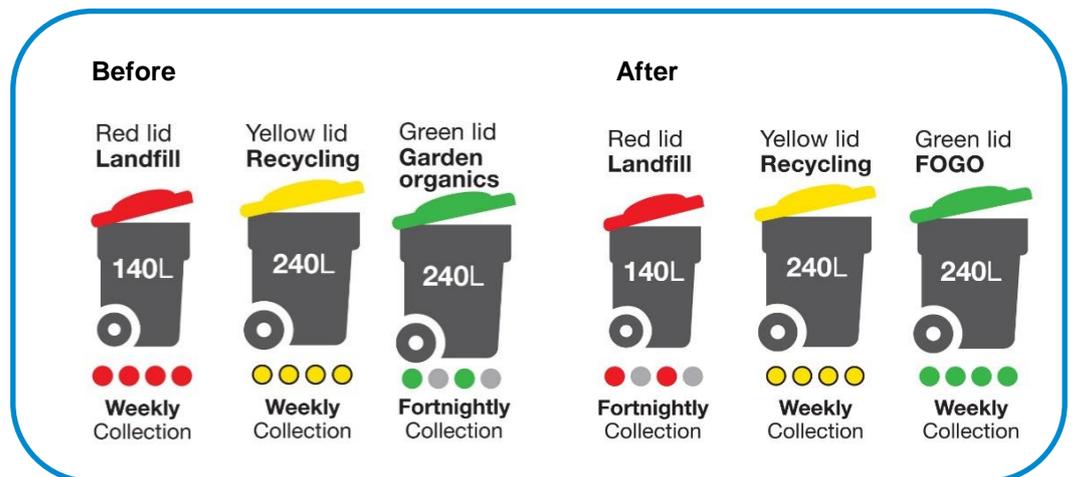


Figure: Changes to Kiama Council's kerbside bin collection service.

NSW Environment Protection Authority
 Email: info@epa.nsw.gov.au
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