

APCO CASE STUDY: Compost Connect

Compost Connect

Closing the loop on compostable packaging

Introduction

As Australia continues to work towards the [2025 National Packaging Targets](#), many questions have been raised about the role compostable packaging plays in achieving the target of 100% of packaging to be reusable, recycling, or compostable. Last year, [Compost Connect](#) took away APCO's *Our Packaging Future Award for Improved Collection and Recycling Systems*, for addressing a key challenge of certified compostable packaging in Australia, as it works to close the loop of collection for this packaging type alongside associated organics waste. Whilst most of us are familiar with composting, compostable packaging is packaging made from materials that are designed to re-enter the resource stream as a nutrient-rich compost, which can improve our soil and sequester carbon from the atmosphere. For compostable packaging to deliver value, it is important to ensure that it is recoverable in Australia's existing food and garden organics (FOGO) recovery streams after use and converted into compost.

In 2017, [BioPak](#) launched its first Compost Service to make composting more accessible for its customers. This involved setting up bins at various venues and partnering with waste collection providers to collect and transport the waste to an industrial compost facility. Due to the success of the program, BioPak received a government grant in 2020 to open the service to all businesses that provide compostable packaging- giving birth to

'Compost Connect'. The Compost Connect website makes composting more accessible by provides users with a directory of companies that supply certified compostable packaging, alongside a map that lists businesses using compostable packaging. This makes it easy for foodservice outlets to sign up with a collection partner, if they are in an area that is serviced by a waste contractor able to collect organic waste and certified compostable packaging. Through the website, individuals can also find local councils that provide a FOGO collection service with detailed information on what is being accepted, to further help in diverting these materials from landfill.

To date, Compost Connect, has identified 73 local councils that accept certified compostable packaging that cover over 700 postcode locations and lists 28 industrial composters who can process certified compostable packaging along with food waste, making it accessible for individuals and businesses to dispose of their compostable packaging at end-of-life. 250 businesses are already participating in the initiative, which is collectively diverting an estimated 2,000 tonnes of food waste and packaging from landfill annually. This material is then transformed into 1,400 tonnes of compost, reducing potential landfill greenhouse gas emissions by 1,030 tonnes.

"This positive impact is cumulative and keeps growing as more and more businesses use the service, demonstrating that together, we really can make a difference" says BioPak Founder Richard Fine.

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Why is food waste problematic?

A staggering 1 million tonnes of organic waste, alongside 10 billion single-use foodservice packaging, are estimated to be generated by Australia's foodservice and hospitality industry annually, with most being destined for landfill.¹ Compost Connect describes that *"when organic waste ends up in landfill, it is starved of oxygen and emits the greenhouse gas methane as it breaks down. Methane is released from degrading organic matter and is considered to be a greenhouse gas 28 times more harmful for our atmosphere than carbon dioxide², and so it is an important component to consider, not only when looking to reduce our waste, but also in combating climate change."*

Every step in the value chain involves the use of natural resources and ultimately emissions. This accumulated waste from food at the consumer or foodservice level has a significant environmental impact.³ Packaging design and the selection of suitable materials plays a critical role in

ensuring that fresh and processed foods reach their destination without any damage or wastage.

These roles are acknowledged in the third principle of the [Sustainable Packaging Guidelines](#), which highlights the importance of designing packaging to reduce avoidable product waste. Avoidable food waste is often linked to the losses that occur due to human action during distribution, retail sale and final consumption that may be avoided through improved efficiency and planning.⁴



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¹ Encycle Consulting 2013, 'A study into commercial & industrial (C&I) waste and recycling in Australia by industry division' Report to the Department of Sustainability, Environment, Water, Population and Communities

² IPCC (2014), Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 151 pp.

³ Mason, L., T. Boyle, J. Fyfe, T. Smith, and D. Cordell, National food waste assessment: final report 2011, Prepared for the Department

of Sustainability, Environment, Water, Population and Communities, by the Institute for Sustainable Futures, University of Technology Sydney.

⁴ Mason, L., T. Boyle, J. Fyfe, T. Smith, and D. Cordell, National food waste assessment: final report 2011, Prepared for the Department of Sustainability, Environment, Water, Population and Communities, by the Institute for Sustainable Futures, University of Technology Sydney.

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Compostable packaging recovery & certification

When considering a recovery pathway, the aim is to achieve the highest potential environmental value by following the waste hierarchy. Avoidance or reduction generally achieves the highest value, followed by reuse, material recycling and composting. APCO's resource, [Consideration for Compostable Packaging](#), is a helpful tool for assessing the suitability of compostable packaging for a product. It highlights that *"one of the most commonly cited situations where certified compostable plastics could be particularly useful is for packaging that is likely to be so contaminated with food that it cannot be mechanically recycled and where it can facilitate the collection of food waste."* For best practice application of compostable packaging, it is recommended to refer to Australia's [National Compostable Packaging Strategy](#). This ensures it is recovered at end-of-life and has beneficial end uses, which are critical for adding value towards the 2025 Targets.

As a collection and recycling service of compostable packaging, Compost Connect provides a viable pathway for certified compostable packaging to become part of the solution. In addition to this, it eliminates the need for consumers to dispose of food and packaging in separate bins and reduces contamination of high value materials, which simultaneously lessens the environmental impacts of organic materials in landfill.

There are some barriers to composting. For example, implementing new bins and collection systems requires a significant operational and behaviour shift amongst staff and consumers, to ensure the organic waste and compostable packaging ends up in the

right bin. To address this, Compost Connect provides education and resources and only lists compostable packaging certified by the [Australasian Bioplastic Association](#) (ABA), which is the certification body for Australian home and industrial composting standards (AS 4736 and AS-5910). Certified compostable packaging bearing the seedling and home compost logos can then be applied to give consumers and composters confidence that these products will completely biodegrade within a defined timeframe, without any adverse impact on the final quality of the compost. Using Australian compostability certifications also ensures that packaging meets the requirements and capabilities of their compost partners and does not interfere with their normal operating processes.

Next steps

Compost Connect has made composting much more accessible for businesses and individuals alike. As councils across Australia continue to roll out FOGO collection services, composting is becoming a promising recovery pathway for the waste generated by the foodservice industry. The Compost Connect website contains valuable case studies under the resource section for the foodservice industry, composters and councils who are interested in compostable packaging.

For others looking to address a packaging issue, Compost Connect recommends referring to *"APCO's resource section designed to help businesses understand their packaging usage, material footprint and the end-of-life options available in Australia. In particular, the Sustainable Packaging Guidelines help designers increase the sustainability of their packaging."*

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More information

For more information on Compost Connect
www.compostconnect.org

For more information on how Compost Connect works [click here](#).

APCO resources:

- [Considerations for Compostable Plastic Packaging](#)
- [National Compostable Packaging Strategy](#)
- [Sustainable Packaging Guidelines](#)

Contact APCO

Have a story to tell?

Contact APCO to determine if your story may support other APCO Members on their packaging sustainability journey.

Email: apco@apco.org.au
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