

Polypropylene Plant Packaging Recycling Program

THE POPPR PROGRAM

OVERVIEW

Australia's greenlife industry is valued at approximately \$2.6 billion and employs almost 25,000 people. The industry makes a substantial contribution to the nation's economic, environmental and social wellbeing.

Polypropylene (PP), a highly recyclable plastic polymer, is used in plant packaging such as pots, stakes, labels, tags and trays. While recycled PP is used in the production of some plant packaging, this has been sourced from non-horticultural sources.

Horticultural PP accounted for approximately 10% of all Australia's PP packaging in 2018/19.

Industry peak body, Greenlife Industry Australia (GIA) has partnered with the ANZPAC Plastics Pact, led by the Australian Packaging Covenant Organisation (APCO), to deliver a two year project to design a national product stewardship scheme for PP plant packaging (PoPPr Program).

The PoPPr Program is an industry-led initiative to pilot and evaluate a circular economy for plant packaging in Australia through the design of a scheme which is self-sustaining and underpins the efficient collection, recovery and recycling of used plant packaging for remanufacture into new plant packaging.

Scheme development has been made possible by the Australian Government through the Department of Agriculture, Water and Environment's **National Product Stewardship Investment Fund**.



THE PROJECT

The PoPPr Program outcomes align with domestic, global and Australian greenlife industry sustainability initiatives including:

- The ANZPAC Plastics Pact
- Australia's 2025 National Packaging Targets
- Greenlife Industry Australia Strategic Plan
- National Waste Policy Action Plan
- National Plastics Plan 2021
- UN Sustainable Development Goals 12 & 13.

The project will be delivered in three stages across two years between January 2021- January 2023. Once established, the program aims to achieve:

- Industry-based material circularity for PP plant packaging diverting over 4,000 tonnes of PP from landfill annually.
- 100% recyclability for all PP plant packaging.
- a higher than 70% recycling rate for PP plant packaging.
- a recycled content rate for PP plant packaging greater than 50%.
- an alternative pathway for recovery of problematic black PP currently lost through existing systems.



THE OPPORTUNITY

CURRENT SITUATION

Much of Australia's used PP plant packaging sits in garden sheds, goes directly to landfill, or if recycled, is downgraded with other low-value plastics into suboptimal uses.

Home gardeners and commercial operators have stockpiles of used (and sometimes unused) pots, labels, tags, stakes and trays and no clear path to recycle them.

Limitations in Australia's recovery and recycling systems mean a large proportion of PP plant packaging is not currently recovered through kerbside waste collection services.

Further, the prevalence of carbon-black pigments used in plant packaging make many plant pots undetectable in automated waste sorting facilities.

MARKET SIZE

Australian plant producers grow ornamental plants for home gardeners and stock for landscaping and revegetation. They also supply starter plants for the primary production of fruit and vegetables and the forestry industry. Australian production nurseries grew more than 2.2 billion plants in 2019/20.

It is estimated that 15,600 tonnes of PP plant packaging is sold in the Australian market annually. This equates to almost 10% of all PP packaging. Current recycling of PP plant packaging is estimated to be below 1,000 tonnes.

BENEFITS

- The average net saving of CO₂ from recycling plastics is estimated to be between 1-1.5 tonnes CO₂ equivalent per tonne of plastic.
- A national recovery and recycling program will enable easy recovery of used PP plant packaging from a diverse range of plant consumers, including domestic gardeners, landscapers, retailers and production nurseries.
- An industry closed loop will create a clean supply of PP for processing to new plant packaging, retaining the material at its highest value in the market, addressing challenges particular to the packaging format and building a quantifiable end-market for recycled PP.
- A national scheme will divert problematic PP from landfill or suboptimal uses.
- The program may also offer a potential recovery pathway for other PP packaging for the Australian market struggling to meet demand for recycled PP.
- The scheme will enable a PP pathway solution for the greenlife and plant production sector enhancing the industry's sustainability credentials.

TIMELINE

STAGE 1- Business Case Jan 21- Jun 21

Establish a clear business case in support of a targeted national recovery and recycling program.

STAGE 2- Scheme Design Jun 21 - Jun 22

Develop a comprehensive scheme design and implementation plan for a self sustaining national product stewardship scheme.

STAGE 3- Implementation Jun 22 - Ongoing

A staged approach to assessing operational systems to support scheme implementation for the capture of plant packaging beyond the funded period.

