

### PROJECT RECAP

This project aims to develop an agricultural plastics stewardship scheme for non-packaging plastic waste. The scheme will facilitate and incentivise a viable market to recycle agricultural plastics. It will involve solutions for on-farm retrieval, from farm collection logistics, processing technology and equipment and development of recycled plastic products and their markets.

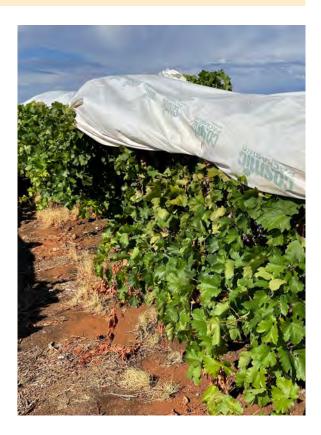
This project is one of 20 funded under the National Product Stewardship Investment Fund<sup>1</sup> and a key initiative of the National Waste Policy Action Plan<sup>2</sup>. It will be implemented from January 2021 to March 2023.

#### **OUR APPROACH**

The RMCG and Growcom project team approach includes whole supply chain engagement throughout the development of the scheme via a representative Project Reference Group and extensive consultation with industry stakeholders.

This engagement aims to harness current efforts, address barriers and facilitate practical solutions for implementation. The final recommendations for the scheme will include plastic material definitions, protocols for quality assurance, governance and operational structure, including levy and funding.

We have been consulting extensively with plastic and agriculture industry stakeholders to gather and analyse a range of information and data to determine the scale of the problem, explore the feasibility of potential recycling solutions, and undertake collection and logistics trials.



 $<sup>\</sup>underline{dcceew.gov.au/environment/protection/waste/product-stewardship/national-product-stewardship-investment-fund$ 

 $<sup>{\</sup>color{blue}2} \\ \underline{\text{dcceew.gov.au/environment/protection/waste/publications/national-waste-policy-action-plan}}$ 





### KEY ACHIEVEMENTS

Over the past 18 months we have:

- Quantified and spatially defined plastic use in agriculture, including material flow for all plastic types. Our analysis shows that Australian agriculture is estimated to use 110,000 tonnes of plastic per year on-farm in the production of food and fibre. This volume is 24 per cent higher than the previously available high-level estimate of 82,700 tonnes per year, equivalent to 2.3 per cent of national consumption (O'Farrell, 2020).
- Developed and tested preliminary scheme options through economic analysis and the development of a business case. This business case was developed with the intent to test different scenarios and options to help determine the scheme design. The preferred option is to focus the scheme on priority areas where there is more intense production of plastic waste.

This will ensure that the scheme is concentrated more on location rather than the industry sector that produces the plastic waste and/or the use of the plastic.

- Refined target plastic types to exclude existing and emerging plastic stewardship schemes, such as drumMUSTER and Big Bag Recovery. These significant plastics include protective plastic films and covers, irrigation pipes, tubes and tape, and plastic netting and shade cloth.
- Developed guidelines for standards and quality assurance protocols to inform the design and development of the stewardship scheme, including supply chain barriers and opportunities as well as standards for on-farm retrieval and collection.
- Analysed existing and potentially viable technology for on-farm retrieval, collection, processing and production of agricultural plastics to inform the broader scheme design including mechanical recycling and advanced recycled technologies.
- Continued to facilitate an industry-leading Project Reference Group comprised of agricultural specialists, plastic manufacturers and product stewardship experts.
- Engaged with over 420 stakeholders around the country including farmers, growers, product manufacturers, plastic recyclers and government.
- Collaborated closely with the dairy and nursery industries who are working on complementary stewardship projects.

In addition, we are currently undertaking two pilot schemes in Victoria and Queensland.



#### PILOT SCHEME: VICTORIA

The Victorian pilot is addressing the problem of protective film and piping, irrigation and drainage plastics in large waste producing areas usually associated with intensive horticulture and broadacre cropping. The Victorian pilot aims to:

- Improve coordination in collection and recycling table grape covers
- Improve on-farm retrieval, bundling and size reduction or irrigation drip tube and associated transport efficiency and recycling
- Improve on-farm retrieval and collection of grain silo bags.

The **Sunraysia and Loddon regions** have been selected to pilot an approach to improve the collection and recycling of selected plastics due to the intensity and diversity of agricultural production.

Farmers can drop-off their old table grape covers, irrigation tube and grain silo bags for free during a pilot program to improve the collection and recycling of agricultural plastics in Sunraysia and Loddon.

From May to October 2022, collection sites are open in Mildura, Swan Hill and Ouyen. Materials are free to drop-off at the collection sites, with a fee-for-service farm collection available for large amounts of agricultural plastic.

Drop-off sites and collection times include:

- Mildura Rural City Council landfill
   15 Scherger Dr, Mildura VIC 3500
   Tuesdays 8:15am-4:45pm, Wednesdays 8:15am-4:45pm and Thursdays 8:15am-4:45pm
- Swan Hill Rural City Council landfill
   6859 Sea Lake-Swan Hill Rd, Swan Hill VIC 3585
   Thursdays 8:30am-11:30am
- North West Ag Services
   101 Farrell St, Ouyen VIC 3490
   The first Wednesday of each month from 3:00pm 5:00pm with a BBQ and networking opportunity.

Grape covers, irrigation tube and grain bags need to be clean and rolled to be eligible for the pilot following these simple steps:

- 1. Separate plastic
- 2. Shake or brush off excess dirt and plant matter
- 3. Tightly roll or coil the plastic
- 4. Drop-off plastic at your local collection site.

Retrieval equipment is available to assist in the preparation of your irrigation tube and grain bags. Additional fee-for-service farm collection can be arranged for large amounts of agricultural plastic.

The team continues to work with our 22 industry partners to deliver the pilot. Further information and guidance can be found at <a href="mailto:rmcg.com.au/">rmcg.com.au/</a>



The Victorian pilot will target the problem plastics of grape covers, irrigation tube and grain bags across three collection sites in the Sunraysia and Loddon region





### PILOT SCHEME: QUEENSLAND

The Queensland pilot will address the issue of **plastic mulch and drip tape** on-farm retrieval and source separation across Southern, Central and North Queensland.

The pilot will target the regions of **Stanthorpe**, **Sunshine Coast (Wamuran)**, **Bundaberg and Bowen Burdekin**. These locations have been identified as being high producers of targeted plastic waste material primarily from vegetable and strawberry production.

Through delivery of the pilot, the project team seeks to gain an understanding of the types of retrieval and disposal methods and to document cost/time implications of current versus revised retrieval methods. This will help to stress test barriers to adoption in various cropping systems (strawberries, vegetables) and using different machinery types.

From this review, the project team seeks to develop a Standard Operating Practice (SOP) for the retrieval of drip tape and plastic mulch for the purposes of recycling. Due to the variability in equipment used for retrieval of drip tape and plastic mulch there will be differences in what is supplied at the collection point. The SOP will try to address this variance.

Workshops will be conducted to demonstrate the SOP and provide a networking opportunity for growers, suppliers, recyclers, processors and councils. Workshops will enable delivery of knowledge and practice improvements relating to recycling of on farm plastics and will be delivered as a roadshow:

- Stanthorpe June 2022
- Bundaberg July 2022
- Bowen August 2022
- Wamuran September 2022.

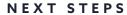
#### Key presentations at the workshops will include:

- Findings from on farm evaluations of retrieval methodologies and adaptations
- Economics of organic mulch versus conventional polyethylene
- · Collection programs
- Standard Operating Procedures and Standards and Quality Assurance Protocols.



Plastic mulch and irrigation tape retrieval and source separation are key issues for Queensland growers.





The development of the agricultural plastics stewardship scheme involves five sequential stages. Stages 1 to 3 are now complete.

1. Scheme business case and feasibility

2. Standards and quality assurance protocols

3. Technology and processing and processing analysis

4. Scheme design and implementation implementation

5. Pilot review and scheme development

We are currently undertaking Stage 4 through testing the business case scheme options through the Victorian and Queensland pilots. Once completed, the pilots will be reviewed using the collected monitoring data to inform the broader scheme development and implementation plan (Stage 5).

The project is scheduled to be finalised by March 2023.

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