

RMCG

FAO Regional Exchange for Asia and the Pacific Region

5th March 2026

Sustainable management of plastics in agriculture – the Australian experience

DR ANNE-MAREE BOLAND



Agriculture plastics



>100,000 tonnes of plastic used annually, and increasing



Non-plastic contamination (organics – plant and soil, metal)



Approximately two-thirds in horticulture



Lack of market demand for products made of recycled plastics



Limited alternative products – essential to production systems



Limited plastic recycling infrastructure



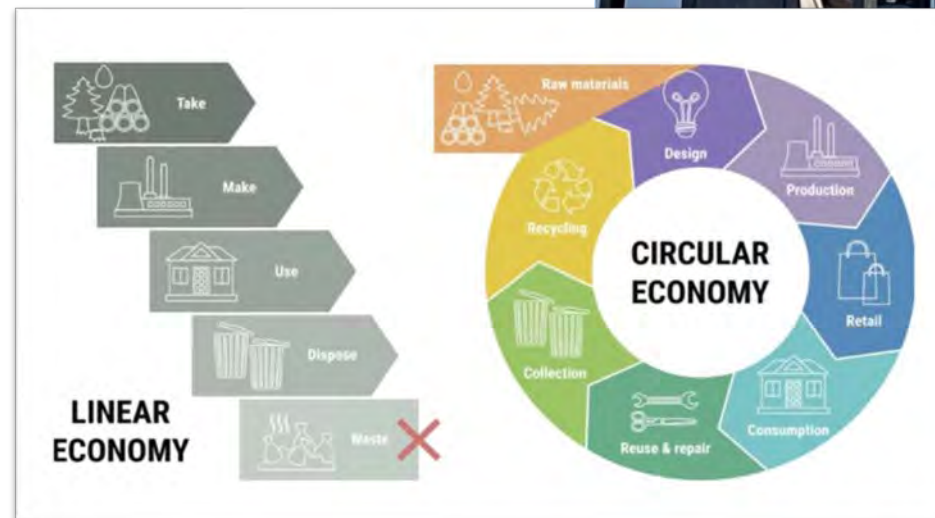
Logistics challenges – dispersed generation and long distances



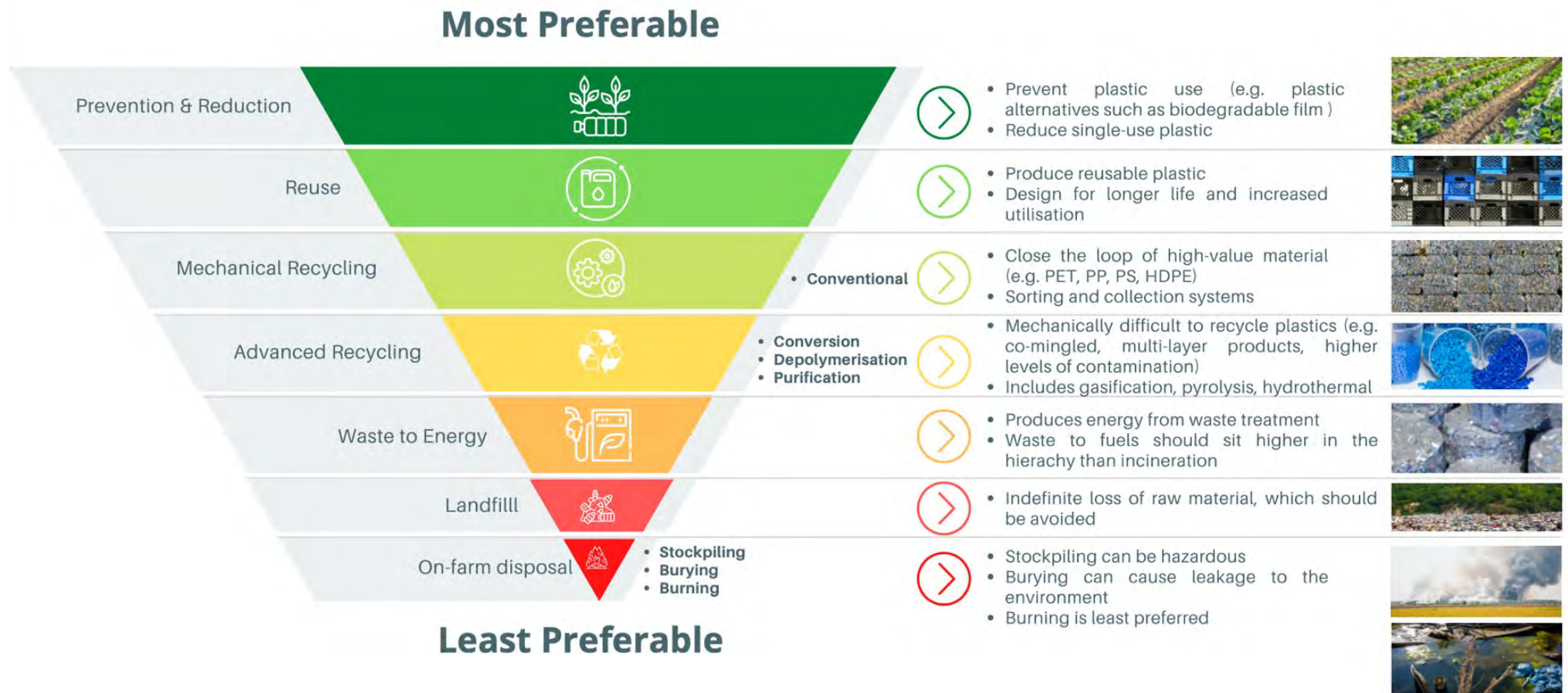
National stewardship scheme currently not supported

Drivers for Change

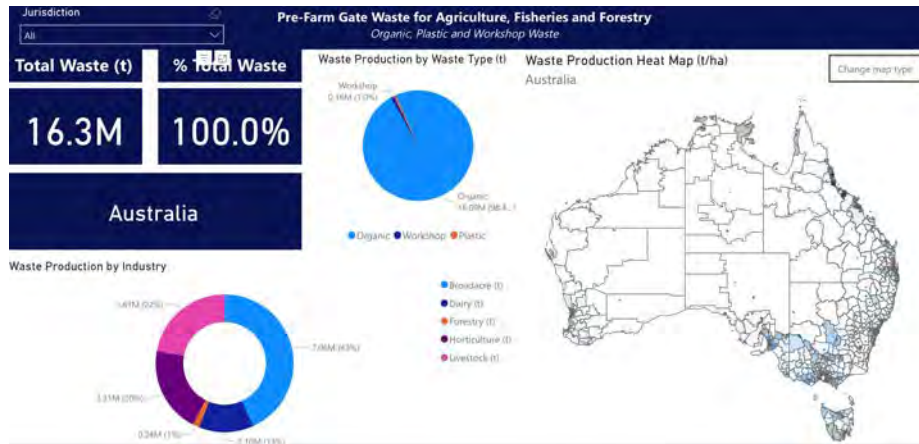
- ✓ Maximising resource efficiency and focus on Environmental, Social, and Governance (ESG)
- ✓ Linking with sustainability activities and industry frameworks – Australian Agricultural Sustainability Framework (AASF)
- ✓ Demonstrating that circularity makes business sense



Considering the waste hierarchy for plastics



Understanding the problem – Waste dashboard



Plastic Waste	Broadacre (t)	Dairy (t)	Forestry (t)	Horticulture (t)	Livestock (t)	Waste Total (t)
Bags, twine and ropes	225	218	0	2,105	503	3,050
Containers, pots and labels	1,885	630	970	23,324	3,309	30,119
Nets and mesh	0	125	0	14,799	2,201	17,125
Piping, irrigation and drainage	2,847	0	0	10,024	2,155	15,027
Protective films	4,352	6,824	2	12,410	8,677	32,265
Total	9,309	7,797	972	62,662	16,845	97,585

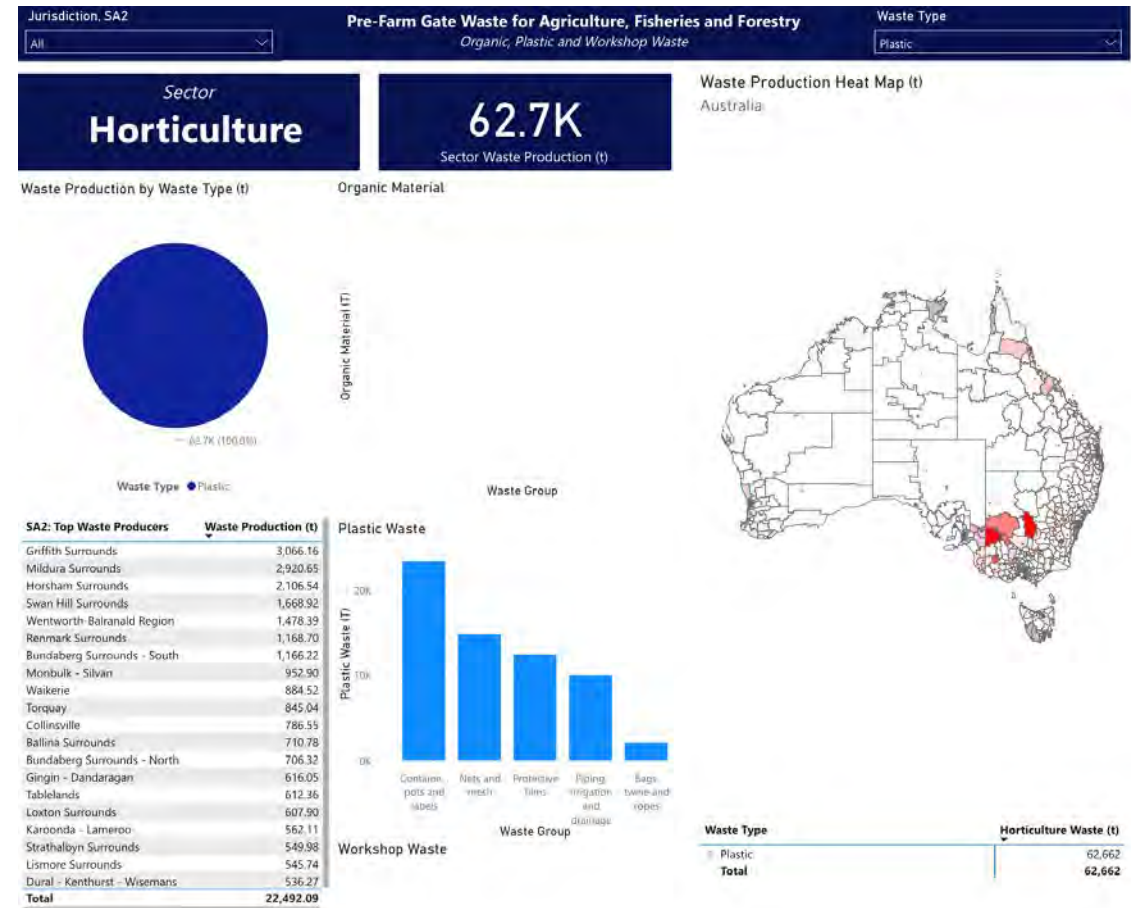
For more information visit: <https://agrifutures.com.au/pre-farm-gate-waste-program/>

Pre-farm gate waste management: Guidelines for waste data collection can be found here: <https://agrifutures.com.au/product/pre-farm-gate-waste-management-guidelines-for-waste-data-collection/>

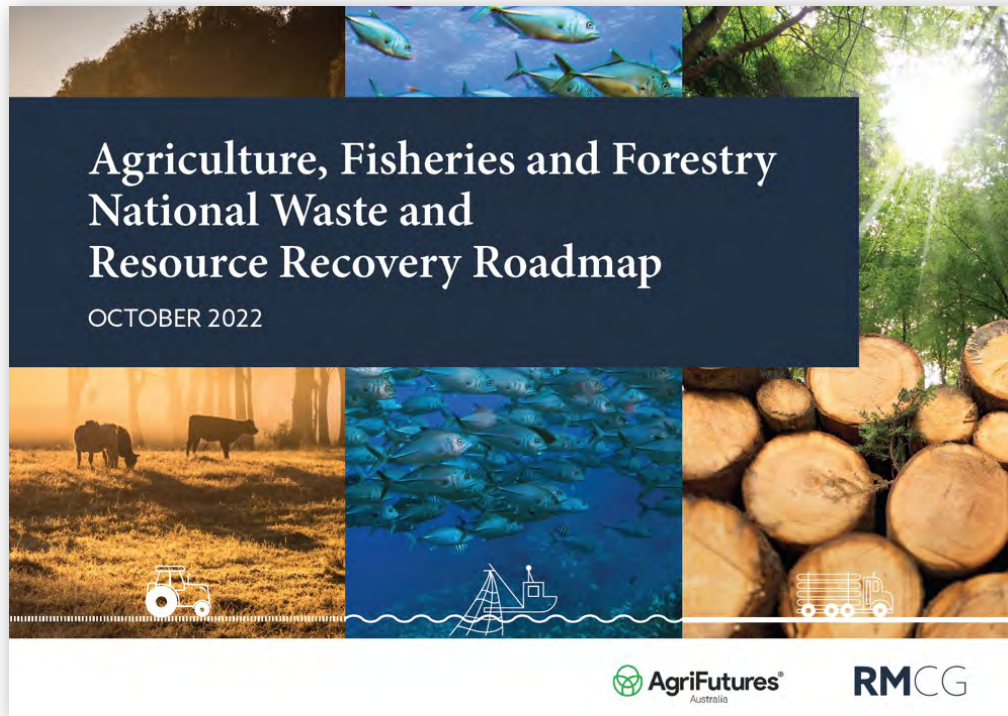
Pre-farm gate waste management: Baseline waste data for the agriculture, fisheries and forestry sector can be found here: <https://agrifutures.com.au/product/pre-farm-gate-waste-management-baseline-waste-data-for-the-agriculture-fisheries-and-forestry-sector/>



National Data



Roadmap goal - management of materials to move up the waste hierarchy



Australian Farm Waste Portal and Dashboard



 <https://farmwaste.com.au>



Solutions

Target plastic types

Protective films
Irrigation pipes/tubes/tape
Plastic netting & shade cloth



Complement existing & emerging stewardship schemes

drumMUSTER
Big Bag Recovery
Recoil



Regional focus (Southern Downs Regional Council)

Local collection points
Regional infrastructure
Bespoke on-farm machinery
Building grower awareness
and capability



Industry focus (NSW cut flower growers)

Building grower awareness
and capability



Acknowledgements

We would like to acknowledge the many organisations and individuals involved in the funding and delivery of this work including...



Australian Government

Department of Climate Change, Energy,
the Environment and Water

