

Agriculture, Fisheries and Forestry National Waste Roadmap Summary

INTRODUCTION

The management of waste from primary industries is an emerging and significant issue which requires urgent attention. Agriculture, fisheries and forestry produce a large amount and diversity of waste with the disposal of waste often involving environmentally harmful practices, landfill and the unproductive use of 'end of first use' resources. Primary producers want to improve waste management on their farms and in their industries, however there are often barriers to changing practices including logistics and geographical isolation.

Waste that is produced in the agriculture, fisheries and forestry industries includes:

- **Plastics (hard/soft)** - used in field production, greenhouses and storing produce (silage)
- **Organic matter** - such as manure, animal mortalities and product loss
- **Workshop waste** - including machinery, fencing materials, oils, tyres and batteries.

The **Agriculture, Fisheries and Forestry National Waste Roadmap** outlines the opportunity for how the sector can be part of the solution through addressing waste issues and the establishment of novel methods for reducing waste.

GOAL: TO MOVE UP THE WASTE HIERARCHY

HIERARCHY LEVEL	EXAMPLES OF MOVING UP THE HIERARCHY
AVOID	<ul style="list-style-type: none"> • Design alternative production systems that require less plastics • Consider alternatives to plastic mulch such as compostable organic material • Ensure that the whole crop is harvested
REDUCE	<ul style="list-style-type: none"> • Develop plastic products that have a longer lifespan • Enable organic material to be shared across sectors for beneficial use
REUSE	<ul style="list-style-type: none"> • Continue to use timber posts and wire for on-farm construction purposes • Apply farm tyres as weights for management of silage
RECYCLE	<ul style="list-style-type: none"> • Collect and process plastic irrigation tube to be used back in irrigation tube • Compost organic material to be re-applied to land
RECOVER	<ul style="list-style-type: none"> • Process plastic mulch to recover energy • Process organic matter to recover energy
DISPOSE	<ul style="list-style-type: none"> • Dispose of plastic, organic and workshop waste to landfill

PRIORITY THEMES To enable the agriculture, fisheries and forestry sectors to achieve the roadmap goal of moving up the waste hierarchy, the following four key themes have been identified:

1. BEHAVIOUR CHANGE

- Education
- Awareness
- Promotion



2. KNOWLEDGE

- Monitoring and data
- Standard indicators
- Information sharing



3. PARTNERSHIPS

- Current activities
- Policy and legislation
- Product stewardship



4. RESEARCH AND DEVELOPMENT

- Designing out waste
- Waste solutions
- Markets for waste



ROADMAP THEMES FOR PRE-FARM GATE WASTE >>

The interest in appropriately managing our waste has increased rapidly in recent years. There are many innovative solutions, however a key barrier to change is awareness of what is possible. If management options were more widely understood including the costs and benefits (financial, social and environmental) there would be increased uptake and change in behaviour. Education and skilling up producers is key to this theme.

EXAMPLES INCLUDE:

- Information and education material as to benefits of moving up the waste hierarchy
- Ensure awareness of existing stewardship programs that can be accessed
- Demonstrate cost effectiveness of practices and technologies

In order to manage our waste we need to be able to measure the scale and distribution of various waste streams. This also requires the establishment of standard indicators and approaches for life cycle assessments. Sharing this information across primary sectors, with other industries and across government will ensure we have the best knowledge to tackle the biggest issues and that our efforts are well targeted.

EXAMPLES INCLUDE:

- Develop uniform metrics for quantifying generation of waste and measuring progress
- Provide whole of industry target setting and data reporting
- Improve data collection

There are many groups working on addressing waste issues across Australia. In a rapidly changing policy environment it is essential that we learn from what each other is doing and develop productive partnerships across sectors, industries and governments. It is also important that the practical implementation of policy is tested and fed back to government to ensure we are achieving intended outcomes. Understanding existing activities and programs is an important first step in developing these partnerships.

EXAMPLES INCLUDE:

- Collaborate with government and supply chain partners to address key on-farm waste challenges
- Identify alternative input supply products that minimise waste and/or improve resource recovery options
- Encourage cross-industry collaboration

There are many opportunities for innovations to achieve our goal of moving up the waste hierarchy. This includes making sure that our production systems minimise the amount of waste produced and/or that we develop waste solutions that have less environmental impact. We need to consider the practices and technologies appropriate for different production systems and geographic locations. Importantly, the development of markets for the waste product are critical.

EXAMPLES INCLUDE:

- Undertake research into alternative products to assist movement up the waste hierarchy through:
 - » Designing waste out
 - » Reducing the amount of product used
 - » Reusing or repurposing products