

NSW Cut Flower Industry

Managing plastic in the cut flower industry

Introduction

Plastics are widely used in the cut flower industry due to their durability, versatility, and cost-effectiveness. From propagation trays and pots to irrigation systems, plastic products play a key role in maintaining efficient and productive growing systems.

However, the same qualities that make plastics useful also make them challenging to manage at end-of-life. As global attention increases around climate change, greenhouse gas emissions, environmental pollution and biodiversity loss, the environmental impact of plastic use is becoming more apparent and should be factored into everyday production decisions.

Plastic waste can also become a major issue during extreme weather events, such as floods. Lightweight materials can easily be displaced, entering waterways and causing long-term environmental damage. Proactive waste management is essential to prevent plastic loss during storms and floods, helping to protect both natural ecosystems and farm infrastructure.

Benefits of responsible plastic use

The floriculture industry is already taking steps to manage plastic waste more effectively. Many growers reuse plastic products across production cycles, and more are adopting recycling and waste-reduction strategies.

Benefits of responsible plastic use include:

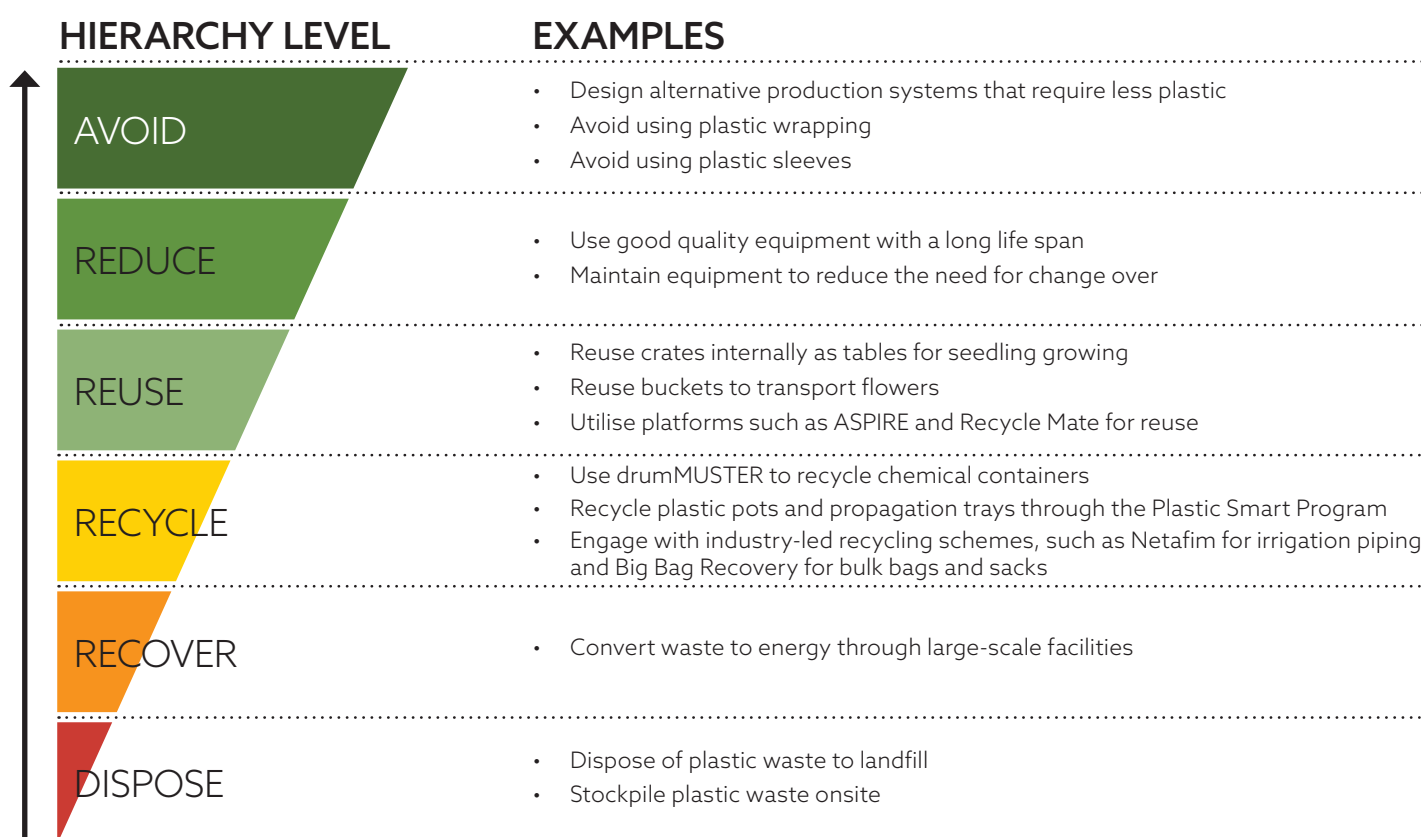
- Minimising plastic waste sent to landfill
- Supporting sustainable production practices
- Reducing environmental pollution
- Contributing to a circular economy

Making conscious decision about plastic use on-farm is key to reducing the environmental footprint of the cut flower industry and supporting its transition to more sustainable practices.

The waste hierarchy

To ensure long-term sustainability, the industry must take steps to reduce plastic waste through better design, increased reuse and effective end-of-life management. This includes developing systems that minimise plastic use, extend product life and divert waste from landfill.

Figure 1. The waste hierarchy



The waste hierarchy is a simple guide for using resources efficiently, the different levels of plastic use and waste management are shown in [Figure 1](#) (on the previous page), with examples relevant to the cut flower industry. The waste hierarchy suggests that we should first try to avoid waste, then reuse or recycle materials and only dispose of materials as a last resort. This approach is in line with the NSW Government's *Waste Avoidance and Resource Recovery Act 2001*.

Types of plastics

Plastic identification codes indicate the type of plastic used and help determine how it can be recycled. These codes support recycling facilities in sorting and processing plastics correctly.

They are usually shown as a number inside a triangle made of chasing arrows. Common plastic types and their corresponding codes are shown in [Figure 2](#).

Figure 2. Materials and types of plastics commonly used in the cut flower industry

	POTS, BUCKETS AND CRATES	IRRIGATION PIPING	FILMS	NETS & MESH	EQUIPMENT & OTHER
MATERIALS	<ul style="list-style-type: none">• Pots and propagation trays• Crates• Buckets	<ul style="list-style-type: none">• Irrigation piping	<ul style="list-style-type: none">• Greenhouse skins• Plastic wraps• Plastic flower sleeves	<ul style="list-style-type: none">• Grow bags• Weed mats• Shade cloths	<ul style="list-style-type: none">• Gardening equipment - shovels, rakes, shears, etc.• Chemical containers• Clippers• Plastic twine• Gloves• Sprayers
POLYMERS	<div><div>5 PP</div><div>2 HDPE</div><div>3 PVC</div></div>	<div><div>1 PET</div><div>4 LDPE</div><div>3 PVC</div><div>7 O</div></div>	<div><div>4 LDPE</div><div>5 PP</div></div>	<div><div>2 HDPE</div><div>5 PP</div><div>1 PET</div><div>7 O</div><div>4 LDPE</div></div>	<div><div>7 O</div><div>2 HDPE</div><div>5 PP</div></div>



Managing on-farm plastics

A variety of plastic materials are used throughout the growing, harvesting, and packing stages of flower production. Key strategies for effective plastic management include:

- Identifying suitable alternative materials
- Choosing high-quality plastics for durability
- Reusing materials extensively on-farm
- Recycling plastics appropriately at end-of-life







Several organisations and programs support plastic waste recovery and recycling (Table 1). These can be accessed by cut flower growers to improve on-farm waste management practices.

Further resources

This resource is part of a suite of factsheets developed to support growers in reducing plastic and chemical use in the cut flower industry.

This includes materials focused on chemical use, pest and disease management, and plastic use, along with further guidance on some of the programs outlined in this document.

Table 1. Programs supporting plastic waste management

Material	Scheme	Description	More information
Pots and propagation trays		Recycling of pots (PP5) and propagation trays (PS6)	gardencityplastics.com/services/closed-loop-packaging
Chemical containers		Empty, clean AgVet chemical containers	drummuster.org.au
Plastic sacks and bulka bags		Recycling of large plastic sacks and bulka bags	bigbagrecovery.com.au
Crates		Digital platform that connects business to exchange waste	aspireme.com
		An app that provides accurate and localised recycling information	recyclemate.com.au
Irrigation tape (Netafim)		End-of-life recycling for Netafim irrigation lines	netafim.com.au/irrigation-products/Recoil/Recycling

This fact sheet has been developed by RMCG as part of a Storm and Flood Industry Recovery project to reduce chemical use in the NSW cut flower industry



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