NSW Cut Flowers

Webinar 3: Plastic sleeves – challenges and opportunities

27 November 2025

Acknowledgement of country

We acknowledge the Traditional Owners of the Country that we work on throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past and present, and we acknowledge emerging leaders. Moreover, we express gratitude for the knowledge and insight that Traditional Owners and other Aboriginal and Torres Strait Islander people contribute to our shared work in Australia.

We pay respects to all Aboriginal and Torres Strait Islander communities. We recognise that Australia was founded on the genocide and dispossession of First Nations people and acknowledge that sovereignty was not ceded in this country. We embrace the spirit of reconciliation, working towards self-determination, equity of outcomes, and an equal voice for Australia's First People.

Speakers

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RMCG

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Sustainable Floristry Network

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Circular Plastics NZ

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RMCG

Reduction in single use plastics and chemicals in the NSW cut flower industry

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This project has been funded by AgriFutures and the NSW Government under the NSW Storm and Flood Industry Recovery Program (SFIRP).

AgriFutures Australia

NSW GOVERNMENT

WHAT AND WHY

Collaborative project working with the FGGNSW, WFA, SFN and PCA.

Developed to:

- Support a more sustainable and resilient flower industry
- Protect the environment
- Create a safer product for florists and consumers

Two key focus areas:

Chemicals	Plastics

Australian Government

NSW GOVERNMENT

AgriFutures Australia

This Storm and Flood Industry Recovery project is jointly funded by the Australian and NSW governments under Disaster Recovery Funding Arrangements

PLASTICS

Pollution of waterways and soil

Reduce reliance on plastics

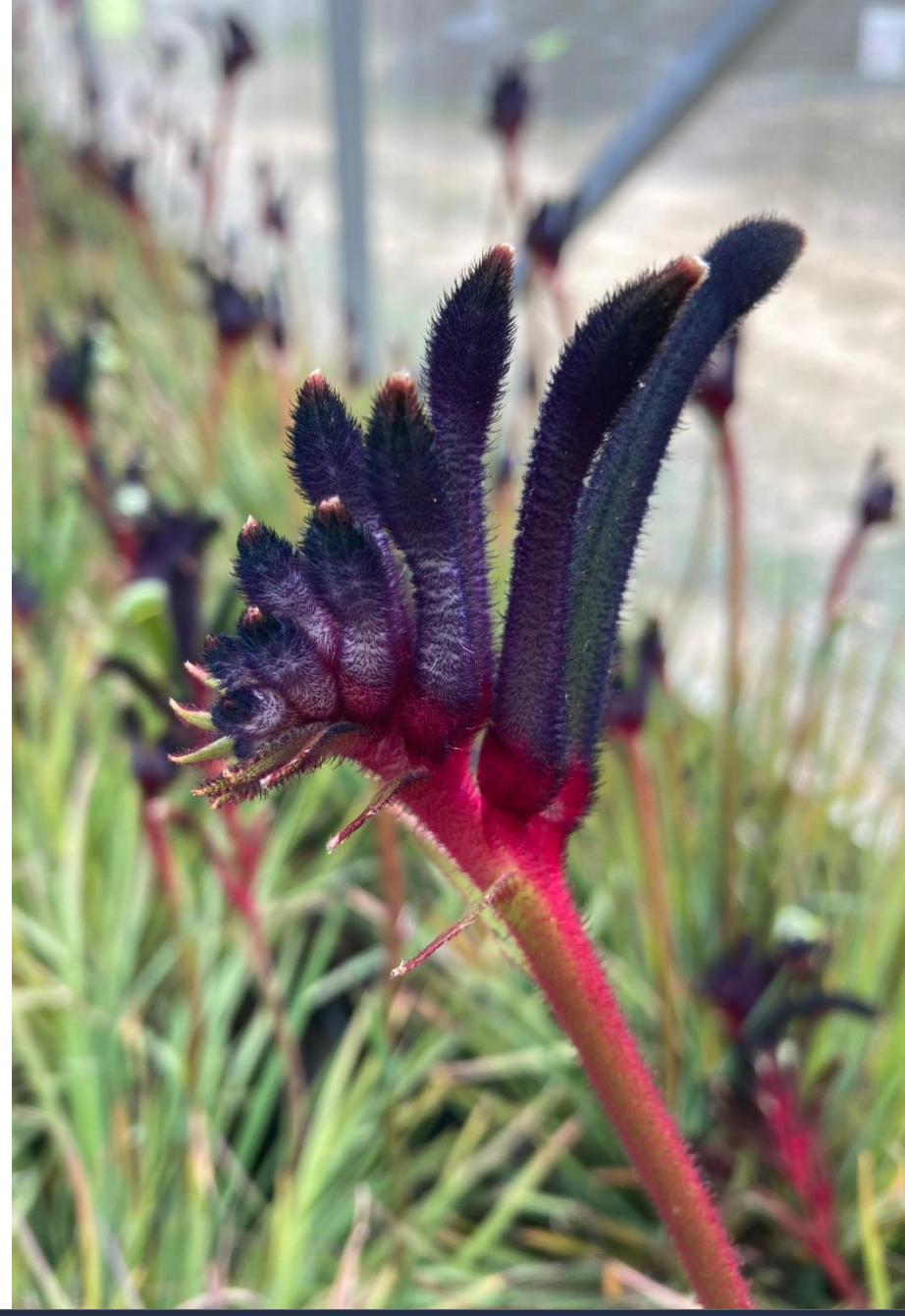
End-of-life solutions – reuse & recycling

RESOURCES

- Fact sheets
- Three-part webinar series
  - Recycling solutions for on-farm plastics (Part 1)
    - Chemical containers and pots
  - Recycling solutions for on-farm plastics (Part 2)
    - Seed/fertiliser bags and greenhouse skins
  - Rethinking plastic sleeves: challenges and opportunities (Part 3)

WASTE HIERARCHY

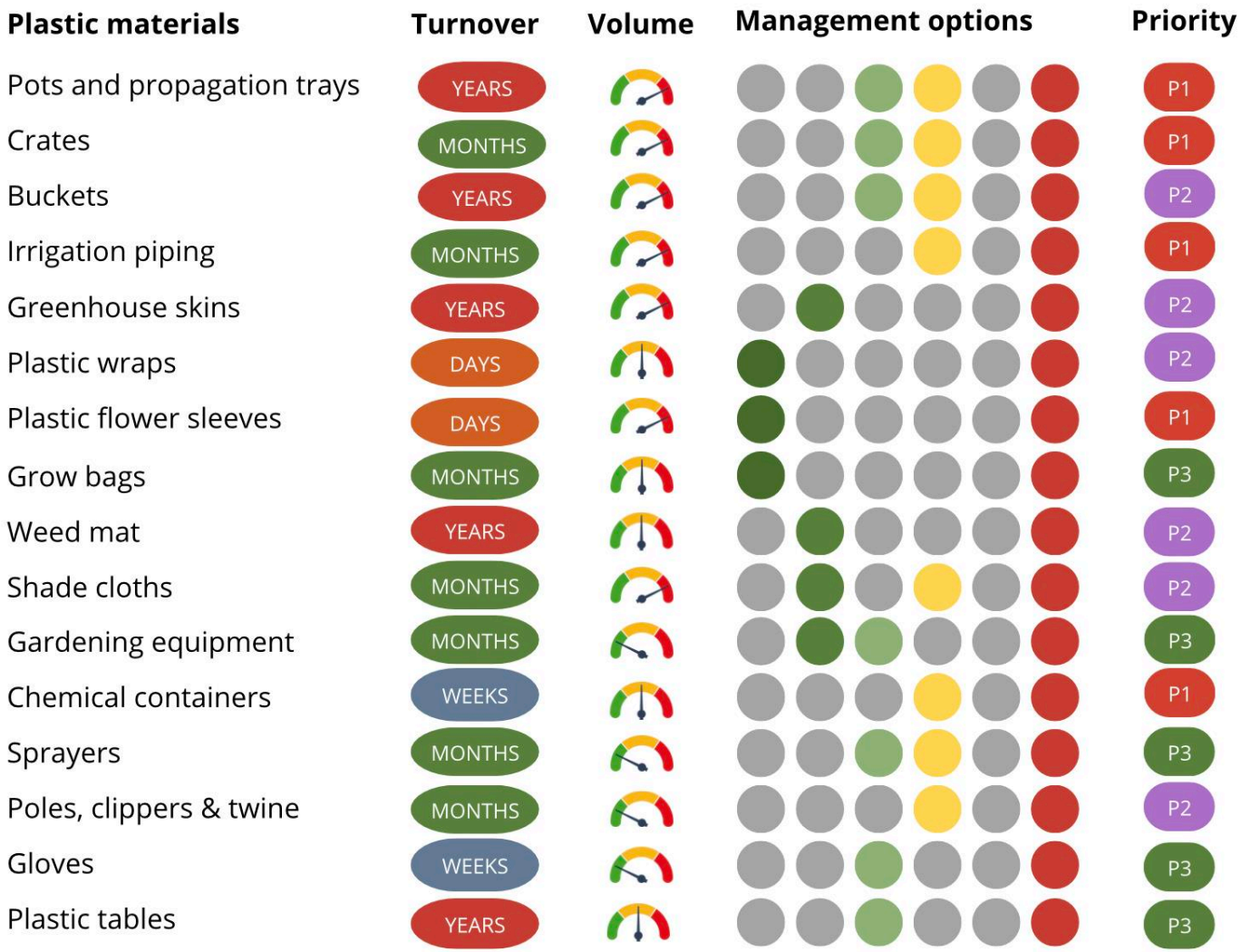
HIERARCHY LEVEL	EXAMPLES
AVOID	• Design alternative production systems that require less plastic • Avoid using plastic wrapping • Avoid using plastic sleeves
REDUCE	• Use good quality equipment with a long life span • Maintain equipment to reduce the need for change over
REUSE	• Reuse crates internally as tables for seedling growing • Reuse buckets to transport flowers • Utilise platforms such as ASPIRE and Recycle Mate for reuse
RECYCLE	• Use drumMUSTER to recycle chemical containers • Recycle plastic pots and propagation trays through the Plastic Smart Program • Engage with industry-led recycling schemes, such as Netafim for irrigation piping and Big Bag Recovery for bulk bags and sacks
RECOVER	• Convert waste to energy through large-scale facilities
DISPOSE	• Dispose of plastic waste to landfill • Stockpile plastic waste onsite



IMPACT ASSESSMENT

TOP PRIORITY PLASTICS

- Pots and propagation trays
- Crates
- Irrigation piping
- Plastic flower sleeves
- Chemical containers



	POTS, BUCKETS AND CRATES	IRRIGATION PIPING	FILMS	NETS & MESH	EQUIPMENT & OTHER
MATERIALS	• Pots and propagation trays • Crates • Buckets	• Irrigation piping	• Greenhouse skins • Plastic wraps • Plastic flower sleeves	• Grow bags • Weed mats • Shade cloths	• Gardening equipment - shovels, rakes, shears, etc. • Chemical containers • Clippers • Plastic twine • Gloves • Sprayers
POLYMERS	5 PP, 2 HDPE, 3 PVC	1 PET, 4 LDPE, 3 PVC, 7 O	4 LDPE, 5 PP	2 HDPE, 5 PP, 1 PET, 7 O, 4 LDPE	7 O, 2 HDPE, 5 PP

RESOURCES

On our website are a range of resources:

- Fact sheets
- Webinars
- Podcasts
- Videos.


FACT SHEET

NSW Cut Flower Industry

Recycling Plastic Pots and Trays

Background

Plastic plays a significant role in the cut flower industry. While the volume and type of plastic used can vary across different production systems, materials such as plastic pots, propagation trays, and buckets are commonly used throughout the supply chain.

Plastic pots and propagation trays are designed for durability and are often reused multiple times throughout the production cycle (as shown in Figure 1). However, when these items reach the end of their usable life, less than 8% of polypropylene (PP5) plastic – the main type used for these items – is being recovered and recycled.

Improving recycling rates is essential to advancing a circular economy, supporting sustainable practices and reducing plastic waste sent to landfill. Responsible management of plastic waste also helps protect the environment and minimise risks such as pollution, contamination of waterways, and harm to wildlife – particularly during extreme weather events such as flooding.

The Waste Hierarchy

The waste hierarchy is a simple guide for using resources efficiently. It 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*.

The different levels of plastic use and waste management are shown on the following page, with examples relevant to the cut flower industry (Figure 2). Pots and propagation trays are generally long lasting and can be reused extensively. While durable and reuseable, they eventually reach end of life and should be responsibly recycled to minimise environmental impact.

Key Messages

- **MOST RECYCLABLE PLASTICS AREN'T BEING RECOVERED**
  Despite PP5 plastic being 100% recyclable, most is not currently being recovered or recycled
- **REUSE BEFORE RECYCLING**
  Pots and trays are designed for long-term use and should be reused as many times as possible before recycling
- **UTILISE RECYCLING SCHEMES**
  The Plastic Smart Program helps growers recycle PP5 pots and PS6 trays through an Australia-wide network of over 700 collection sites
- **EASY PARTICIPATION STEPS**
  To participate, sort pots and trays into PP5 and PS6 categories, tap out excess media, stack pots neatly, and drop them off at your nearest collection site

Figure 1 (below). Pots and propagation trays on-farm

Images: RMCG

Plastic flower sleeves

Problems
Solutions
Opportunities

SFN Sustainable Floristry Network

In the beginning, there were no sleeves...

Today, sleeves play a big role in industry.

What changed?

Types of flowers

Investment in infrastructure

Expanded supply chains

Supermarkets

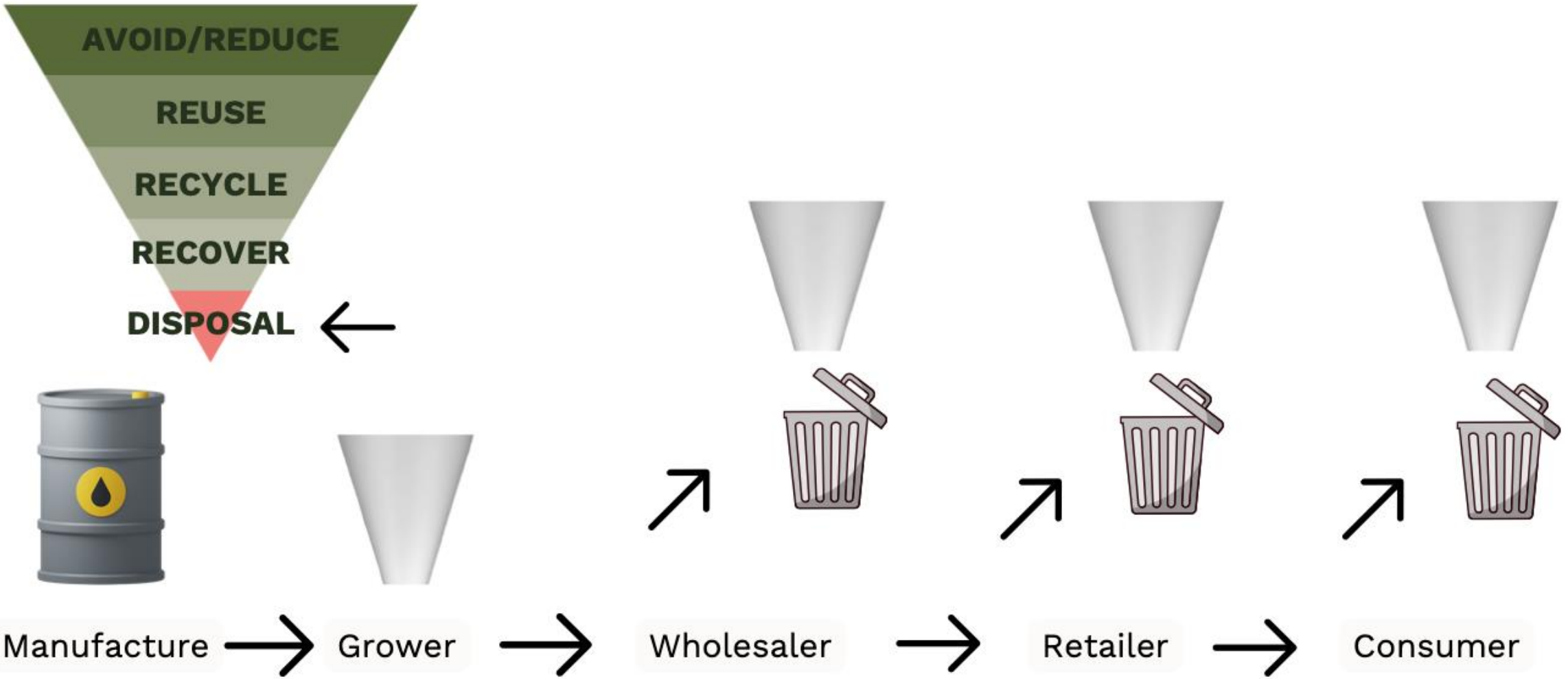
The role of sleeves

Protect product along supply chain
Farm — wholesaler — retailer — consumer
Prevent breakage & waste

The role of sleeves

Protection retail environments
Branding surface/opportunity

Useful, play an important role in industry
BUT single-use plastic, “linear”



So what are the options?

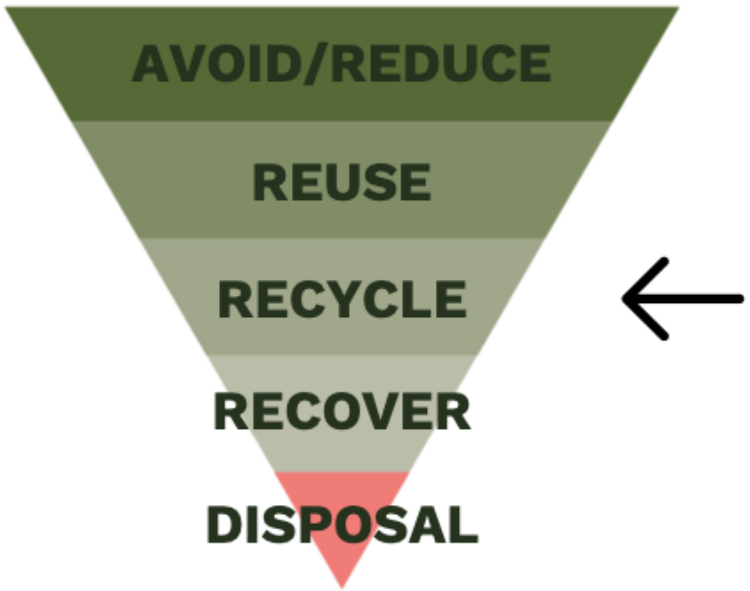
Alternative materials

Alternative materials

Renewable materials

Not designed for reuse

Sleeves —
Case for recycling



Characteristics:

Play a role - fit for purpose

Polypropylene - clear, ‘slippery’, strong

Highly recyclable, monomer, soft plastic

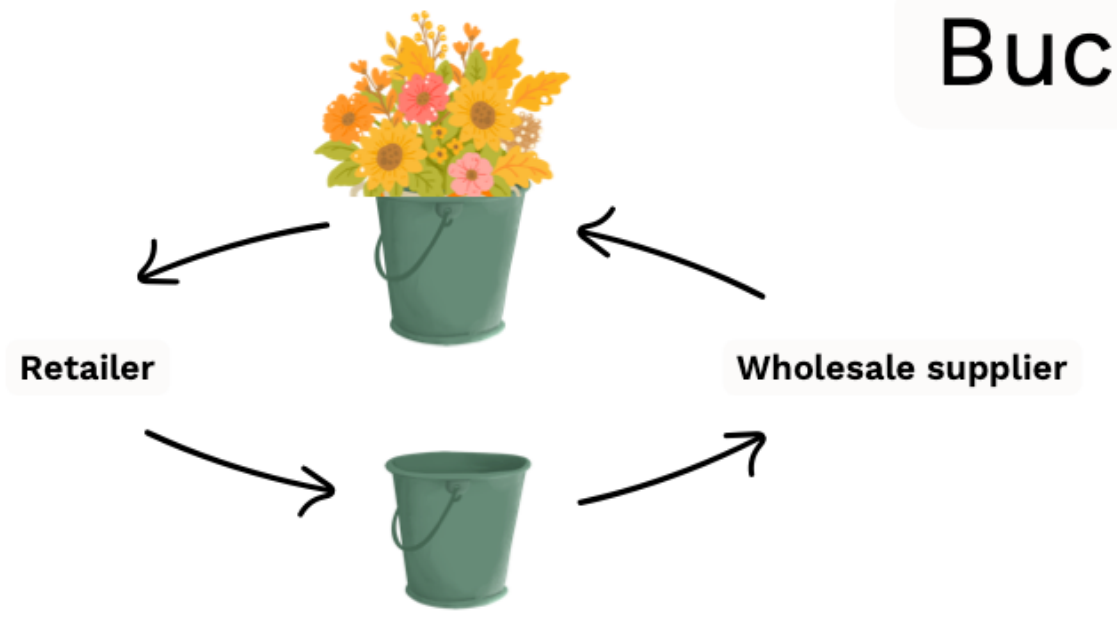
Value in material for recyclers - clarity

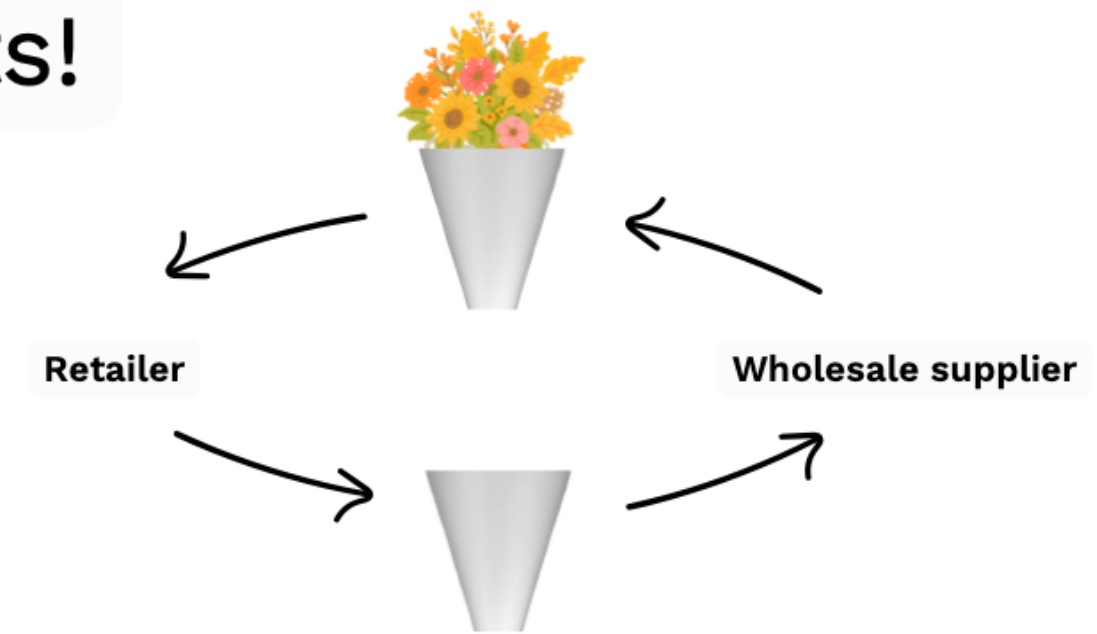
Volume - estimated 500 tonnes per year in Australia

How can we capture?

Industry already has a highly efficient circular system in action:

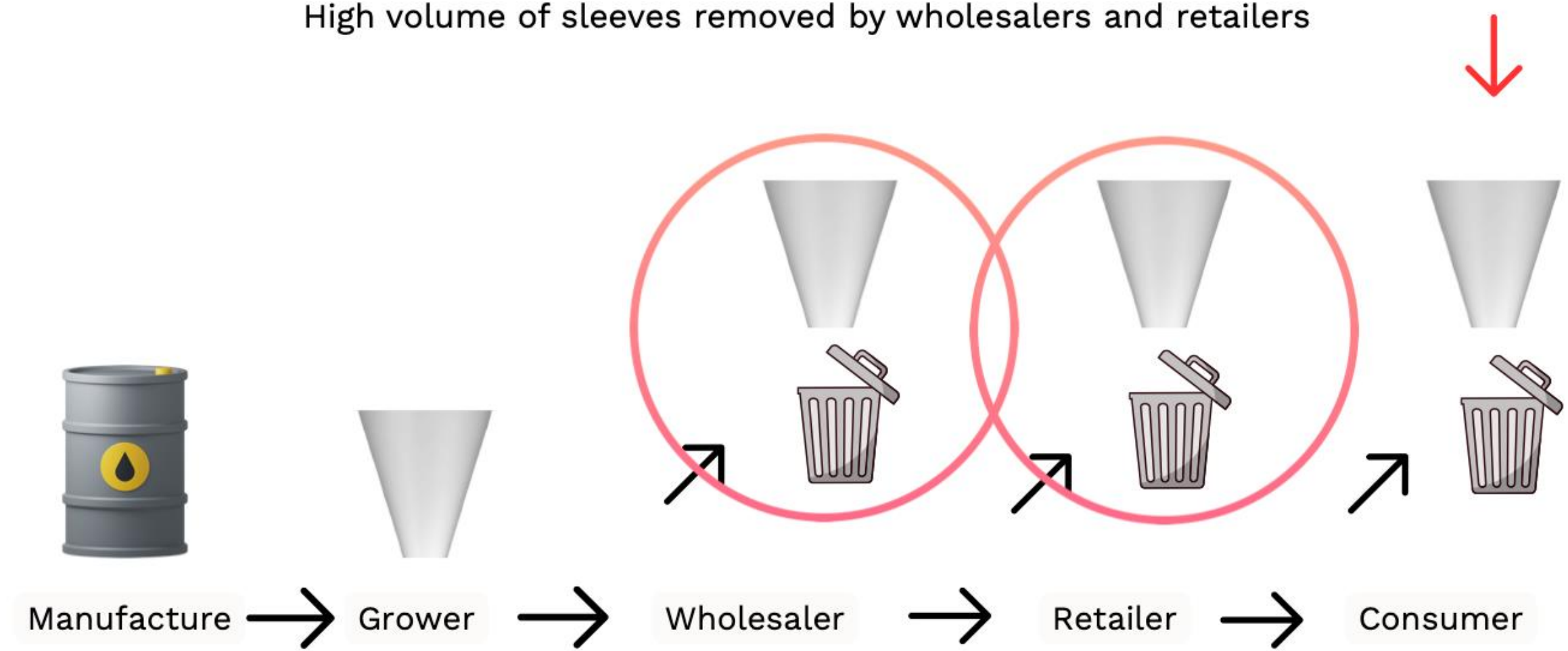
Buckets!



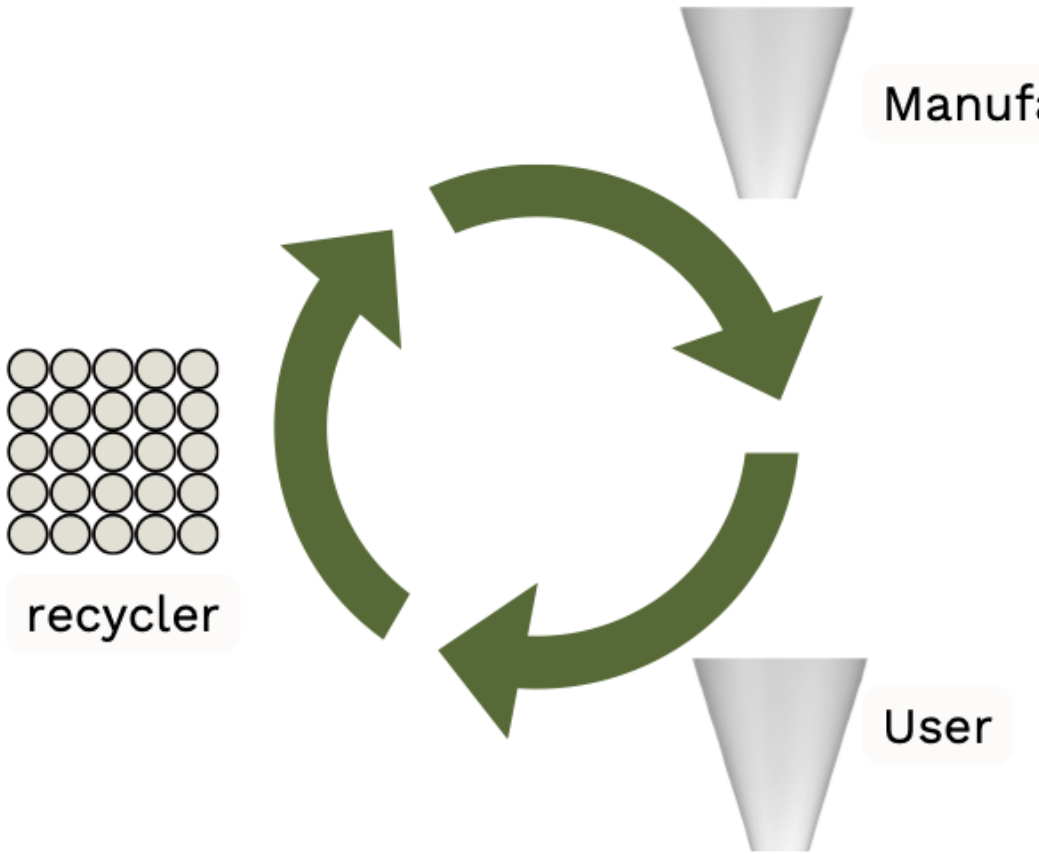


How could we capture?

High volume of sleeves removed by wholesalers and retailers



Gold standard = closed loop - circular



- Recycler
- User
- Manufacturer

Recycler to Pilot 2020 - 2021

Found a recycler with national collection system - buckets!

Engaged florists and wholesalers, including Melbourne Market

Contamination tests passed

Trialled a series of bins

Set up website

Produced communication material

Ran a pilot 10 shops, 1 wholesaler

Managed communication

Project operations

Change of project manager recycler mid 2021, third party brought in to roll the program out nationally

Pilot at Melbourne Market end 2022 failed — contamination.

“Project parked” February 2023 - great potential, logistics

Project re-launched in 2023 at
Melbourne wholesaler without our involvement.

Conclusions

Industry hugely supportive - florists, wholesalers, growers

Plastic needs compacting for transport

Volume is there

Good communication and signage - contamination

Imported sleeves laminated -
contamination issue for some recyclers

Collaboration is key to solving systems problems. Recyclers, manufacturers, users.

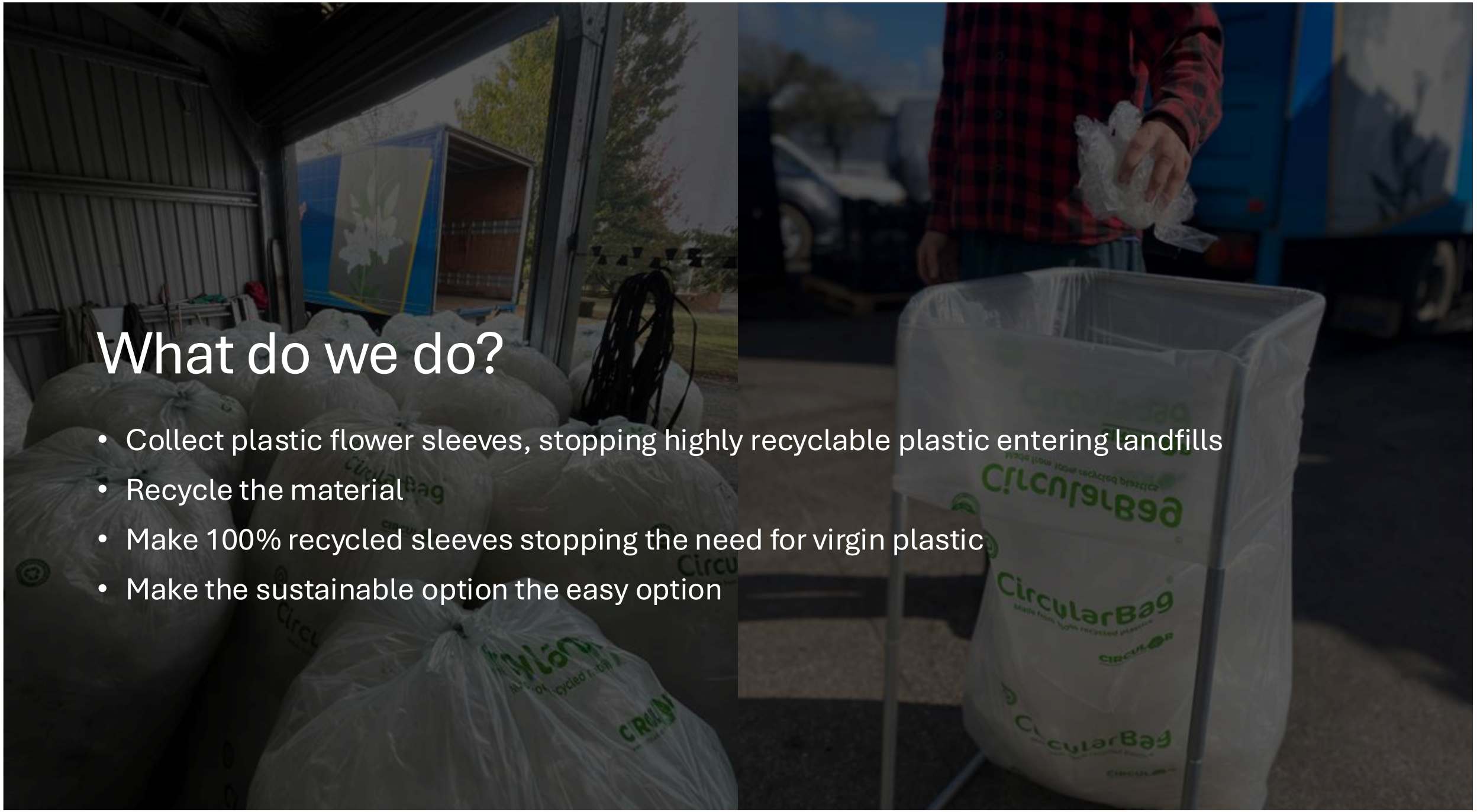
Project needs problem solvers. Cannot be profit-driven initially.

Packaging reform, changing regulations, reporting coming - opportunity industry to get ahead.
Delay = cost

Opportunity for collaboration with a different recycler - now have opportunity for closing the loop with 100% recycled sleeves

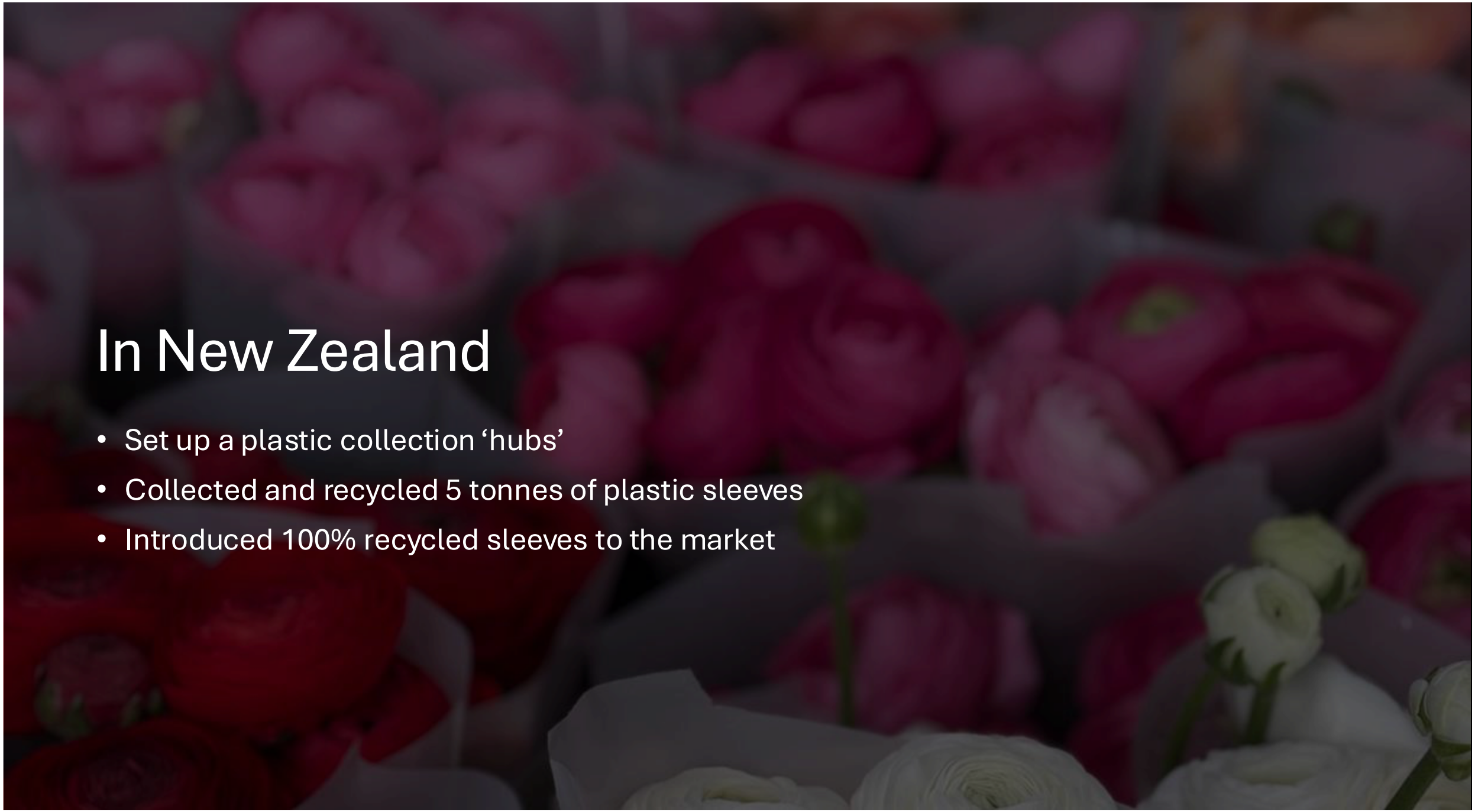
Thank you for listening.

Let’s Close the Loop on Flower Plastic



What do we do?

- Collect plastic flower sleeves, stopping highly recyclable plastic entering landfills
- Recycle the material
- Make 100% recycled sleeves stopping the need for virgin plastic
- Make the sustainable option the easy option



In New Zealand

- Set up a plastic collection ‘hubs’
- Collected and recycled 5 tonnes of plastic sleeves
- Introduced 100% recycled sleeves to the market

Florist Feedback

I would buy the flower BECAUSE they are in a recycled sleeve. Well done, this is awesome for our industry

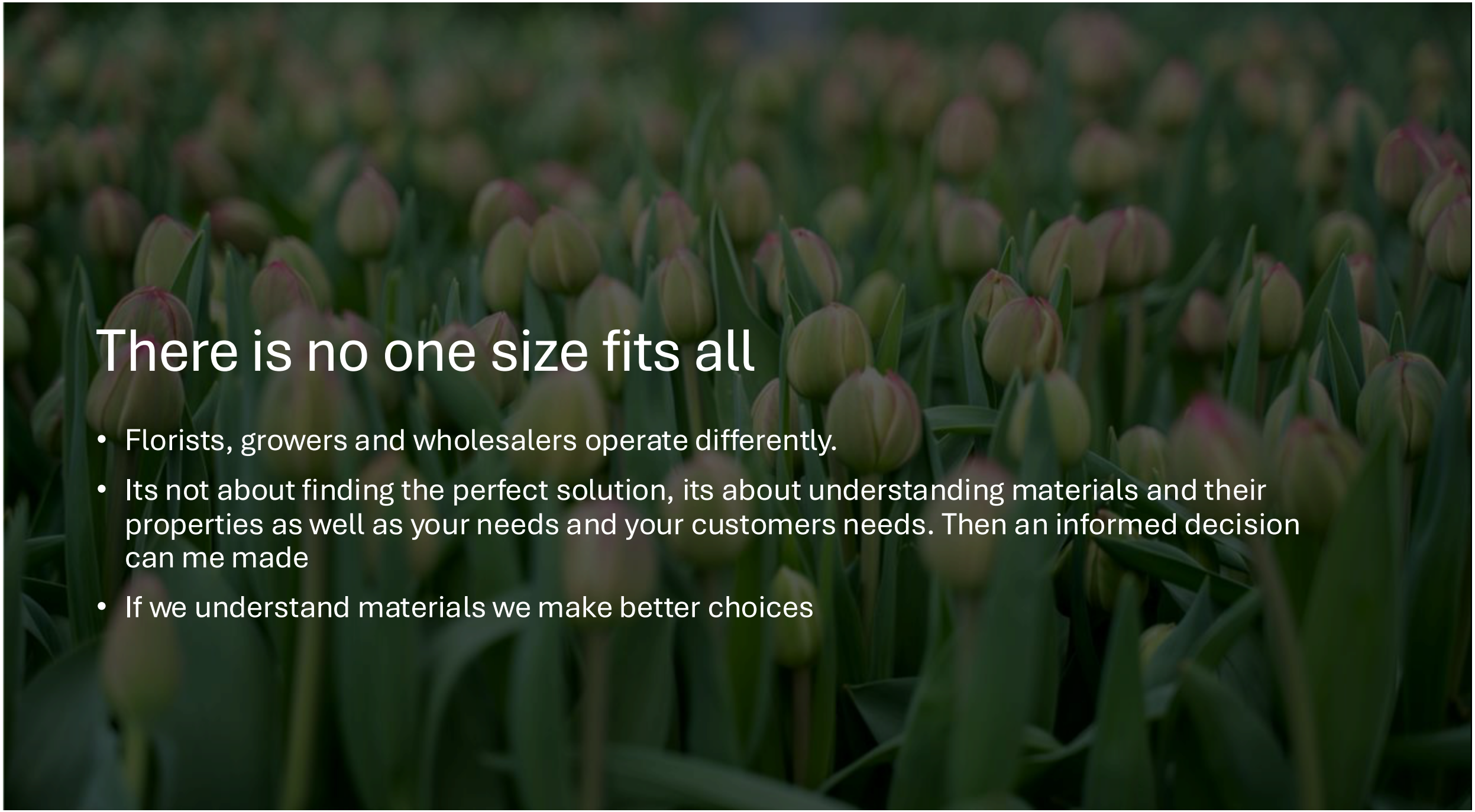
These are my fav from norana- so easy to remove and feels like a small but mighty contribution- thank you!!!

I have been a florist for a long time and this has been my biggest frustration I am so glad you have this happening!!

We need to reduce the amount of plastic used in floristry... love recycled sleeves or paper

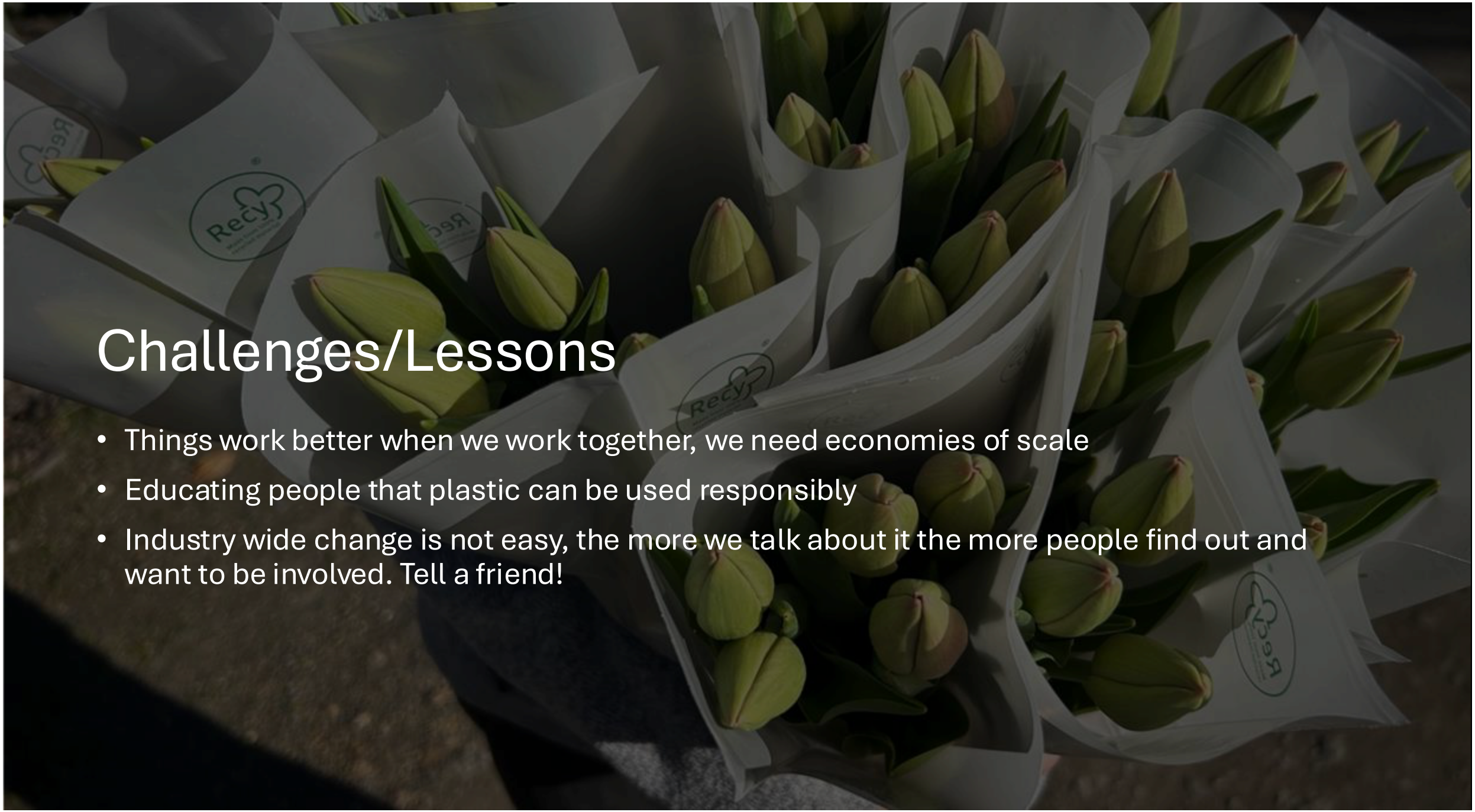
Product quality not presentation

I Definitely choose a more sustainable option where possible



There is no one size fits all

- Florists, growers and wholesalers operate differently.
- Its not about finding the perfect solution, its about understanding materials and their properties as well as your needs and your customers needs. Then an informed decision can me made
- If we understand materials we make better choices



Challenges/Lessons

- Things work better when we work together, we need economies of scale
- Educating people that plastic can be used responsibly
- Industry wide change is not easy, the more we talk about it the more people find out and want to be involved. Tell a friend!

CULTIVATING FLORAL ARTISTRY

EST 2006

JONIMA

FLOWERS

Panel Q&A Session