Packaging stewardship – global and local lessons



Product Stewardship Centre of Excellence

Webinar, 18th April 2024

www.stewardshipexcellence.com.au



Product Stewardship Centre of Excellence



Acknowledgement of Country

We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, water and community. We pay respects to elders past and emerging and recognise elders as holders of knowledge and stewards for country.

Today's speakers



Dr Helen Lewis Helen Lewis Research



Associate Professor Nick Florin UTS Institute for Sustainable Futures



Kapil Kulkarni Director and NSW Lead - Economics RPS, Australia Asia Pacific

Centre Strategic Partners









Current effectiveness of packaging stewardship in Australia

18th April 2024 Nick Florin (Nick.Florin@uts.edu.au)

Large waste volumes, limited recyclability & low rates of recovery



Source APCO (2023) Australian packaging consumption and recovery data 2020-21 and UTS ISF modelling Note data is for 2020-21

Recovery rates by material show major gap towards voluntary target (data for 2020-21)

Material	Total PoM	Total recovered [tonnes]	Recovery rate [%]	
Glass	1,283,000	805,000	63	
Metal	254,000	147,000	58	Voluntary target for
Paper	3,387,000	2,370,000	70	plastic packaging (2025)
Plastic - all	1,176,000	207,000	18	vs 70%
Plastic – rigid	639,000	167,000	26	
Plastic – flexible	537,000	40,000	7	
Wood	638,000	260,000	41	
Total	6,740,000	3,788,000	56	

Source: APCO (2023) Australian packaging consumption and recovery data 2020-21 and UTS ISF modelling

Performance of container deposit schemes

(data for 2020-21)

Material	Average redemption rates by material [%]	
Aluminium	69	
Steel	33	
Glass	77	
PET	59	
HDPE	38	
РСРВ	26	
Total	73	

Scheme characteristics impacting performance

- **High-levels** of participation and **investment** by producers
- Strong **governance**, roles, responsibilities targets
- Effective marketing ensuring **good public** awareness
- Convenient and easy to use
- Financial incentives driving behaviour change

Current packaging product stewardship

https://gateway.stewardship excellence.com.au/

Initiative	Packaging scope	Reg. model	Lifecycle focus	Status
National Environmental Protection Measure NEPM 2011, APCO	consumer packaging (including business and households)	Co-reg	Design, Consumption e.g. 2025 National Packaging targets (slow progress), packaging design tool, Australasian recycling label	Operational (est. 1999)
Paintback	paint packaging	Voluntary	End of life	Operational (est. 2016)
drumMuster, Agsafe	farm chemical containers	Voluntary	End of life	Operational (est. 1999)
Big Bag Recovery, Industry Waste Recovery	bulk bags	Voluntary	End of life	Operational (est. 2015)
Podcycle, Planet Ark Environmental Foundation	coffee pods	Voluntary	End of life	Emerging, 2024
Cosmetic Product Stewardship Scheme, Close the Loop	cosmetic packaging	Voluntary	End of life	Emerging, 2024
National Plastics Recycling Scheme, Australian Food and Grocery Council	household soft plastic packaging	Voluntary	<i>End of life</i> : kerbside collections; developing chemical recycling and end-markets	Emerging, 2024
Soft Plastic Taskforce Coles, Woolworths, ALDI initiative (ACCC approved)	household soft plastic packaging	Voluntary	<i>End of life</i> : addressing stockpiles, reinstating in-store collections, creating end markets	Emerging, 2024

Characteristics of product stewardship schemes

Helen Lewis

The global scan

Europe	North America	Australia	New Zealand
EU Directive /	British Columbia	Australian Packaging	Plastics Packaging
Regulation	Alberta	Covenant / NEPM	PS Scheme
France	California	Australian CDS	
Belgium	Colorado	schemes (7)	
Ireland	Oregon		
Netherlands			

United Kingdom



Essential characteristics for effective scheme design

- 1. High levels of industry or business investment and participation ensuring fair sharing of costs by industry.
- 2. Clearly defined objectives
- 3. Good governance including defined roles and responsibilities
- 4. Use of financial incentives/penalties to drive behaviour change
- 5. Effective marketing

1. Problem definition

- Not always clearly defined
- Emerging schemes are shifting from a focus on waste and litter towards a broader, lifecycle approach

European Union PPPW Regulation

- Increasing consumption of packaging / virgin materials
- Low levels of reuse & recycling a barrier to achieving a low-carbon circular economy
- Over-exploitation of natural resources, pollution of land and sea

2. Scope: product class

Packaging scope varies from narrow (plastic household packaging) to all packaging

All packaging	EU Packaging Directive / Regulation The Netherlands
Household packaging and paper	France Alberta
Household packaging	Norway Ontario Colorado
Household packaging and onsite waste	Ireland
Household plastic packaging	California Oregon New Zealand

Broader scope



3. Objectives and targets

- Increasing focus on reduction, reuse, and recycled content in line with circular economy policies
- Addition of social and economic objectives

France (CITEO)

- 20% reduction in single use plastic by 2025
- 10% of household packaging **reusable** by 2027
- 5% of CITEO's contributions invested in reuse projects
- 70% of household packaging **recycled** by 2030

4. Outcomes

- Most reported outcome is recycling rates
- Different scope as well as measurement at different points in the recovery chain make comparisons difficult





5. Financing

- All schemes funded by producers
- In some cases, costs of collection are shared with local government
- Increasing use of eco-modulated fees (now mandatory in EU)

Options	Description	Examples
Producers (brand owners)	100% funded by producers	 British Columbia New UK scheme from 2024 New Zealand (in development 2024)
Supply chain	Costs are shared across the packaging supply chain	• UK (prior to 2024):



6. Governance (regulatory models)

- More product stewardship regulations being introduced (e.g. US, NZ)
- Strengthening of existing laws (e.g. EU, UK, British Columbia)
- Widespread regulation of CDS for beverage containers
- Increased focus on a circular economy by reducing and reusing packaging

EU PPPW Directive to be replaced with a Regulation from late 2024

- additional targets for reduction and recycled content
- mandatory design for recycling standards

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- mandatory DRSs (CDSs) for beverage containers
- minimum, harmonised standards for schemes



7. Governance structures (implementation)

- Models vary between jurisdictions, from complete outsourcing of responsibilities to PSOs to implementation managed by government (e.g. California)
- Roles and responsibilities for collection and recycling also vary

Options	Examples
A single Network Operator manages collection and recycling	British Columbia – Recycle BC NSW CDS
The PSO reimburses municipalities for collection	France – producers pay 75% of net costs of municipal schemes (total costs determined by the government).



FUNDING OF PACKAGING SCHEMES 18TH APRIL 2024

RPS Presentation at Product Stewardship Centre of Excellence Webinar Kapil Kulkarni (Director, RPS Strategy & Investment)



rpsgroup.com

Funding packaging regulation schemes

- 1. Why it matters
- 2. What it means in practice
- 3. Implications for Australia

Why funding matters

- Funding is more than just about cost recovery
- Funding is crucial for supporting the delivery of scheme objectives
 - Polluter pays
 - Cost reflectivity
 - "Economic efficiency" (Optimal outcomes from a whole-of-society perspective)
 - Simplicity
 - Reduction, reuse, recycling, recycled content

What that means in practice

- Usually producers (have the most direct impact on what gets put on market)
 - Usually a \$ per kg rate on producers
 - But can be on the supply chain (UK)
- Increasing use of eco-modulation but there are many approaches
 - Driving change in terms of what packaging is made from and how much is put on market
 - Reduction, Recyclability (generally correlated with net cost), Reuse, Recycled content
- Not as easy as it sounds
 - Not all expenditures are linked to cost of recycling
 - Scale of the differential matters (to drive behaviour change or otherwise, e.g. France)
 - Balance sophistication with simplicity

Selected examples

Table 8: Examples of eco-modulated fees

OPTIONS	EXAMPLES
Fees adjusted for recyclability	 France – 'bonus-malus' system penalises fibre packaging for elements disruptive to recycling e.g., inks, glues etc. UK – eco-modulated fees to be introduced from 2025-26 based on recyclability of material categories British Columbia charges differential fees for flexible plastics: Plastic film 1.13 c/kg (AUD\$1.21) Plastic laminates 1.40 c/kg (AUD\$1.50)
Fees adjusted for recycled content	France – Flexible polyethyelene (PE) plastics receive a 30% credit for 50% recycled content, and a 50% credit if the share from household plastics is at least 20%.
Other adjustments	France – Flexible PE plastics receive a 5% credit if they have the recycling logo (Triman) and 8% if they also provide full sorting guidelines

Implications for Australia

- Each scheme is different and tailored to the specific market
- Opportunity to draw on the lessons learnt

Opportunities to improve packaging stewardship effectiveness

Future state: defined by regulatory reform, new mandatory requirements, whole of lifecycle focus....and uncertainty

Policy, regulation,	targets	Lifecycle focus
National Environmental Protection Measure (Used packaging materials) (2011)	 Environment Ministers have agreed to new mandatory requirements for packaging Make industry responsible for packaging PoM Mandate design standards Require recycled content Eliminate hazardous chemicals 	Design & manufacturing
Recycling and Waste Reduction Act (2020)	Regulatory framework for reducing the impact of products, packaging and waste; Objects promote circular economy principles; Foundation for product stewardship; Regulation of waste exports	Design, foonsumption & End of life
National Plastics Plan (2021)	Plans to phase out problematic single use plastic; 2025 National Packaging Targets; Investment in new recycling infrastructure (Recycling Modernisation Fund)	Design, End of life
State & territory legislation	WA leading on single use plastic bans, other jurisdictions will fall in-line	Design & manufacturing

Opportunities for Australia



Problem definition– Broad and clear definition of the environmental and human health impacts of packaging across the entire lifecycle



Scope (products)– Include of all packaging placed on the market (with explicit reference to exemptions e.g. eligible containers covered by CDS)



Scope (lifecycle) – Focus across the whole lifecycle, considering: avoidance, reusability, recyclability, compostability, consumer labelling, hazards elimination



Objectives and targets– Link directly to the environmental and human health impacts seeking to be addressed with measurable performance indicators



Financing– Producers should be financially responsible for the reformed scheme, including net costs for collection and recycling; fees should be based on quantity with eco-modulation to drive design change



Governance– Liable parties should be clearly defined incl. financial and operational obligations; and the regulation should also outline the responsibilities of the PSO(s)



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Questions & Answers



Got a Question? Please post in the Q&A

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info@stewardshipexcellence.com.au

Creating Sustainable Futures

Transforming the product value chain

An opportunity to partner with the Product Stewardship Centre of Excellence.







