Sustainability in the Toy Industry in Australia

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Why is Sustainability & Circular Economy Important?

- Global plastics use is projected to nearly triple from 2019 levels
- While recycled (secondary) plastics are projected to grow quicker than virgin (primary) plastics; projected to make up only 12% of total plastics by 2060
- Plastic waste is on course to triple
- Plastic leakage to the environment is projected to double to 44 million tonnes a year
- Greenhouse gas emissions from the plastics lifecyle are projected to more than double

OECD Policy Highlights Global Plastics Outlook: Policy Scenarios to 2060 © OECD 2022



This project was supported by the Circular Economy Business Innovation Centre (CEBIC) which is delivered by Sustainability Victoria



Circular Economy Business Innovation Centre

Sustainability Victoria / CEBIC - Business support Fund

Australian Toy Association

- \$2:\$1 Industry Funded
- > Upto 50% of industry contribution in-kind (ATA)
- > 12-month project
- > 5 milestones

CIRCULAR ECONOMY ACTION PLAN & ROADMAP FOR TOYS

Australian Toy Association

July\2022

PROJECT PURPOSE

- Understanding of the movement of toys and materials through the Victorian and Australian economy
- Identify, develop, and assess circular economy solutions
- Interventions including opportunities for improved end-oflife management and recovery pathways



DATA INSIGHTS



STAKEHOLDER ENGAGEMENT



NPD CONSUMER SURVEY

Toys from all categories can be resold, reused and recycled

> respondents from across Australia

750

47% look for durability

47% prefer to donate to charities 86% have donated at least once

purchased remain in home

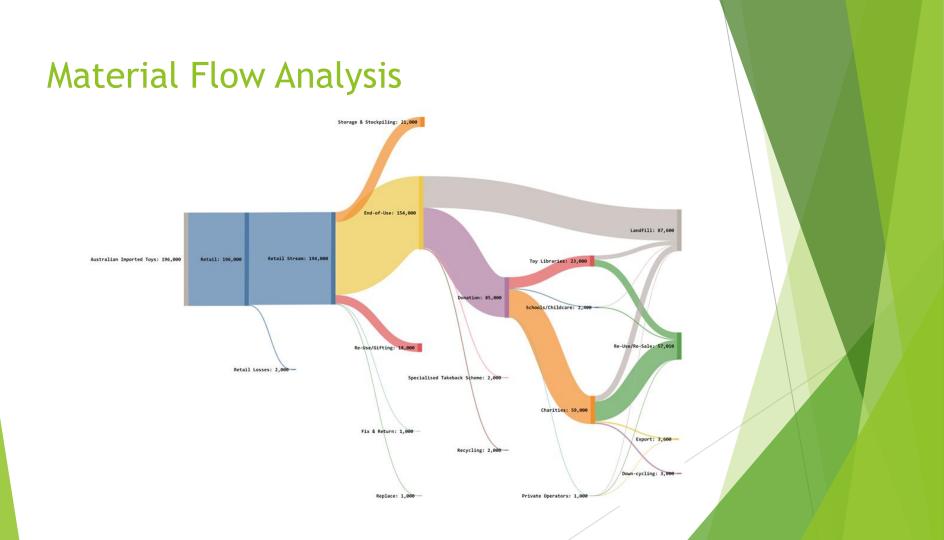
67% of toys

MATERIAL FLOW ANALYSIS

49%

likely to remain in-use by consumers 51% likely to become waste arising **59%**

of toys that remain in-use by consumers are captured by the donation stream

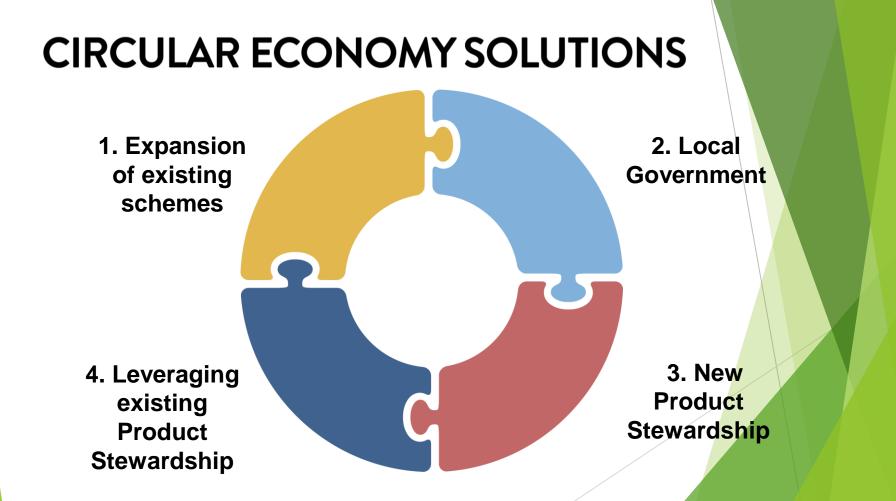


Prioritisation of Interventions

Product Category	Weight (import data)	Useful Life	Material Composition	Repair & Re-use	Recovery and Recycling	Alignment with existing programs	Score
Plush	2	3	3	3	3	3	17
Outdoor & Sport Toys	3	2	3	3	3	3	17
Explorative & Other Toys	3	2	2	3	3	3	16
Vehicles	1	2	2	2	3	3	13
Action Figures & Acc	1	2	3	2	2	2	12
Dolls	1	2	3	2	2	2	12
Building Sets	2	1	3	1	2	2	11
Infant/Toddler/Preschool Toys	3	1	2	1	2	2	11
Games/Puzzles	2	1	2	1	2	2	10
Youth Electronics	1	3	1	2	1	1	9

Categories & Material Compositions

Action Figures & Accessories - 99% Plastics / 1% Metals	Dolls - 92% Plastics / 8% Textiles	Plush - 5% Plastics / 95% Textiles	Outdoor & Sports Toys - 90% Plastics / 10% Textiles	
Infant/Toddler/Preschoo l Toys - 93% Plastics / 4% Batteries / 3% Other	Games/Puzzles - 94% Carboard & Paper / 6% Wood	Building Sets - 100% Plastics	Explorative & Other Toys - 91% Plastics / 1% Batteries / 1% Other / 7% Wood	
	Vehicles - 5% Metals / 95% Plastics	Youth Electronics - 82% Plastics / 5% Batteries / 13% Other		



SUSTAINABLE RETURN ON INVESTMENT

Intervention	Low	Moderate	High	
	Social Outcomes			
Expansion of	Economic Outcomes			
existing	Environmental Outcomes			
schemes	Legal and Regulatory Outcomes			
	Effort (time)			
	Social Outcomes			
Local	Economic Outcomes			
Government	Environmental Outcomes			
	Legal and Regulatory Outcomes			
	Effort (time)			
Product	Social Outcomes			
Stewardship	Economic Outcomes			
- all toys	Environmental Outcomes			
	Legal and Regulatory Outcomes			
	Effort (time)			
Product	Social Outcomes			
	Economic Outcomes			
Stewardship	Environmental Outcomes			
- targeted	Legal and Regulatory Outcomes			
	Effort (time)			
Product Stewardship - leveraging existing schemes	Social Outcomes			
	Economic Outcomes			
	Environmental Outcomes			
	Legal and Regulatory Outcomes			
	Effort (time)			

CHALLENGES

Multiple categories of toys

Complex and varied material compositions

Recycling infrastructure & availability

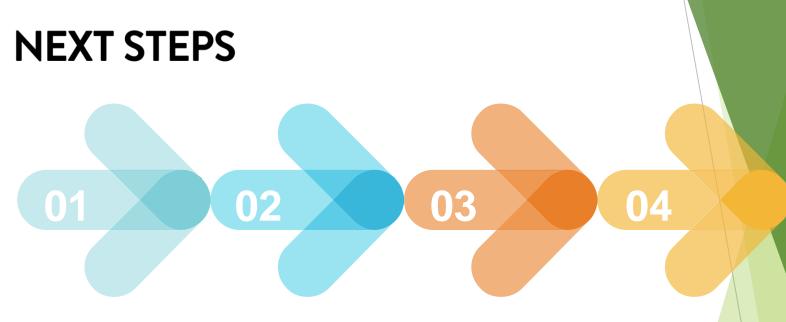
Data gaps

PROJECT SUCCESSES

First comprehensive national and Victorian assessment of all toy consumption, use and disposal

New knowledge and insights leading to several potential solutions





Increase the re-use and repair of toys Improve the recovery and recycling of toys Encourage design for the environment On-going market intelligence and addressig research gaps Thank-you!



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