

Reducing Packaging Waste in Singapore's Beauty & Personal Care E-commerce

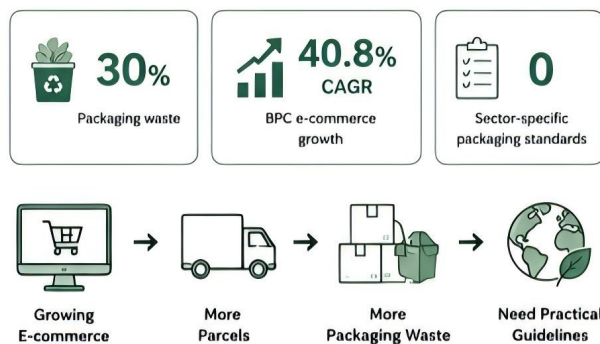
Developing Practical Eco-Packaging Guidelines for Platforms and Merchants

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1 BACKGROUND

Why does this matter?

- Packaging accounts for ~30% of Singapore's domestic waste
- Beauty & Personal Care (BPC) is the fastest-growing e-commerce sector
- Current packaging guidance is voluntary, with no sector-specific implementation
- E-commerce platforms have significant influence over merchants but currently lack clear responsibility for sustainable packaging implementation.



2 RESEARCH OBJECTIVE

Our Goal

Develop practical, SKU-level eco-packaging guidelines for Singapore's Beauty & Personal Care e-commerce sector while balancing



Product protection



Environmental sustainability



Financial feasibility



Operational implementation

3 RESEARCH METHODOLOGY



Survey Breakdown

- 66 Singapore consumers
- Online BPC shoppers
- Consumer behaviour analysis

Stakeholder Engagement

- National Environment Agency
- Shopee
- Lazada
- Amazon

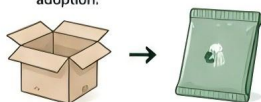
4 KEY FINDINGS

Finding 1 Consumers recognise over-packaging

86%

accepted simplified packaging if product safety is maintained.

- Consumers dislike excessive packaging
- Safety remains the primary concern
- Sustainable packaging must be trusted before adoption.



Finding 2 Recycling depends on convenience

31%

lower recycling probability when recycling bins are more than 0.5 km away

- Convenience matters more than demographics
- Shorter travel distance significantly improves recycling



Finding 3 Information changes behaviour

26.5%

51.5%

Preference for eco-packaging after sustainability information is provided.

- Transparency increases sustainable choices
- Facts are more persuasive than generic environmental messages



Finding 4 Attitude ≠ Behaviour



- Sustainability ranked lowest among purchasing factors
- Price and product efficacy remain the strongest drivers
- Consumers support sustainability but rarely pay a premium.

5 OUR ECO-PACKAGING GUIDELINES

Category	Recommendation
Plastic Tube Products	Lightweight PE bubble mailer
Pressed Powder	Boxless shipping with secure inner tray
Gift Sets	Structural dividers instead of fillers
Glass Bottles	Right-sized recycled carton + divider
Pump Bottles	Leak-proof sealing + recyclable packaging
Guiding Principles	
Right-sized packaging	Mono-materials
Recyclability	Product protection
Lower logistics emissions	

6 POLICY RECOMMENDATIONS



Platform Responsibility
Platforms become accountable for eco-packaging compliance.



Improve Data Collection
Sector-specific packaging reporting.



Lower Reporting Threshold
Include SMEs.



Progressive Penalties
Revenue-linked penalties.



Mandatory Recyclability Labels
Improve consumer awareness.

7 PROJECT IMPACT



Environmental

↓ Less packaging waste
↓ Lower carbon emissions



Business

↓ Lower logistics cost
↓ More efficient packaging



Policy

↓ Practical implementation pathway
↓ Support future EPR development

8 CONCLUSION

Take-home Message

Sustainable packaging is not only about using greener materials. By combining consumer insights, platform governance, and practical packaging standards, Singapore's BPC e-commerce sector can reduce packaging waste while maintaining product protection and business feasibility.

