

# **Packaging – the end-of-life perspective**

## **Packaging Innovation @ Pro2Pac**

### **18<sup>th</sup> March 2009**

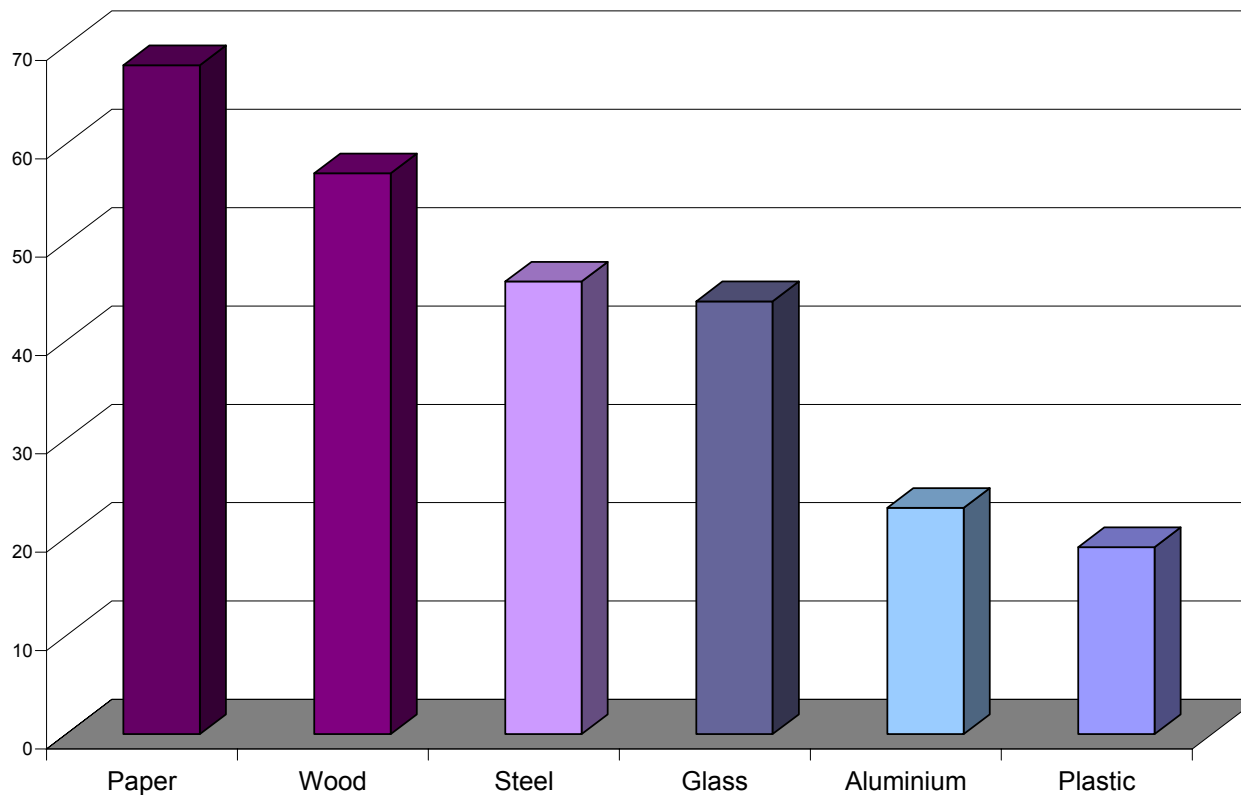
Claudia Kuss-Tenzer  
Senior Consultant (Research & Policy)

# Waste Watch

- Environmental charity working to promote sustainable resource use and waste management
- Working with businesses, local authorities, national government, schools and public bodies
- Research & Policy;  
Education & Training;  
Communication



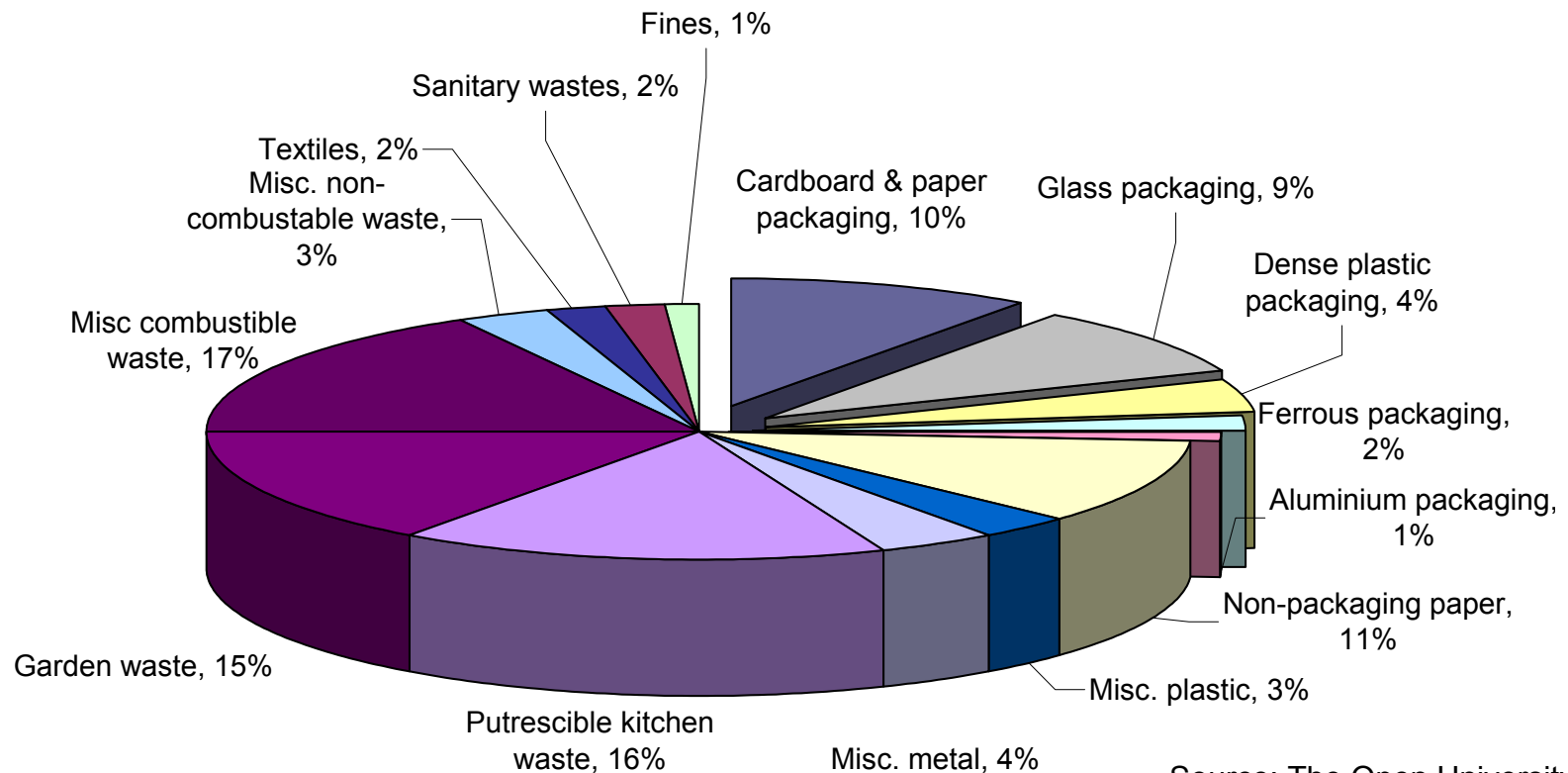
# Packaging recycling and recovery



Source: Defra (2005)



## Packaging waste in the household bin



Source: The Open University






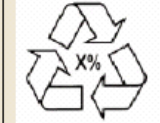









Packaging makes up 26% of the average UK household's bin (by weight)

## But what about margarine tubs?

- In 2007, about 35% of plastic bottles purchased in the UK were recycled.  
Source: WRAP
- Only 23% of local authorities collect plastics other than plastic bottles.  
Expected to have risen to 50% in 2008.  
Source: WRAP
- Consumers: Why can't I recycle all packaging?



# But the symbol says it's recyclable...

	PET	<b>Metals</b>		
	HDPE	<b>Cardboard</b>		
	PVC	<b>Plastics</b>		
	L/LLDPE	<b>Glass</b>		<b>General</b>
	LDPE			
	PP			
	PS			
	OTHER			

## What about aerosol cans?

- Aerosol cans valuable secondary raw material – 99.7% purity; recycled alu requires 95% less energy than new alu
- 75% of local authorities collect aerosols for recycling BUT 62% of households forget to recycle aerosol cans – less than 20% captured

Sources: BAMA/ WRAP/ Waste Watch

- Recyclers' H&S concerns over pressurised containers
- Research showed cases where aerosols are collected for recycling by local authorities but rejected as contamination by recyclers

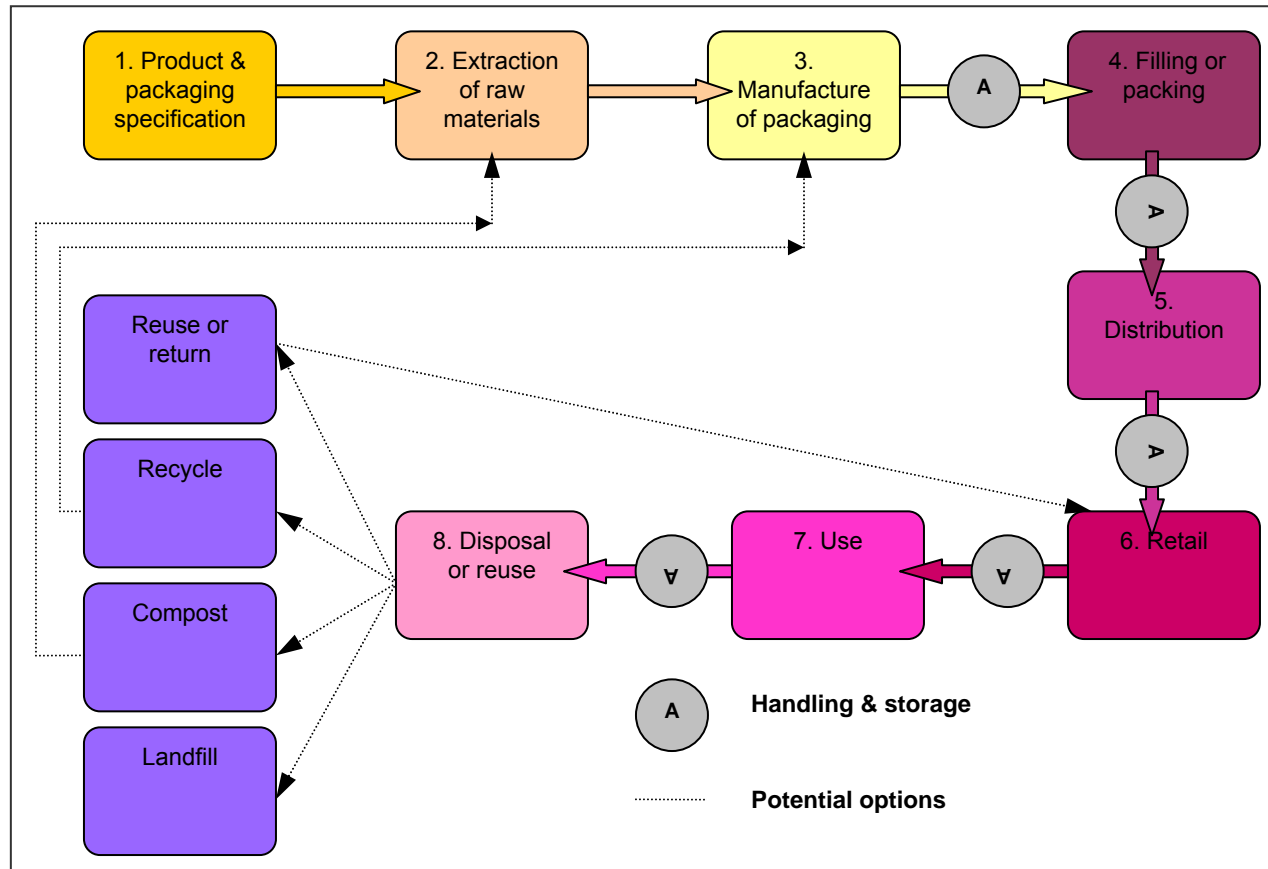


## What about paper vending cups?

- Similar issues encountered with paper vending cups
- Paper cups being collected for recycling, but not necessarily recycled by paper reprocessors
- Loss of customer/ consumer trust?
- Need for chain of custody or Product Stewardship approach



# The packaging lifecycle



## What is sustainable packaging? (1)

- Be beneficial, safe & healthy for individuals and communities throughout its life-cycle
- Meet market criteria for performance and cost
- Be sourced, manufactured, transported, and recycled using renewable energy
- Maximize the use of renewable or recycled source materials



Source: Sustainable Packaging Coalition

## What is sustainable packaging? (2)

- Be manufactured using clean production technologies and best practices
- Be made from materials healthy in all probable end-of-life scenarios
- Be physically designed to optimize materials and energy
- Be effectively recovered and utilized in biological and/or industrial cradle-to-cradle cycles

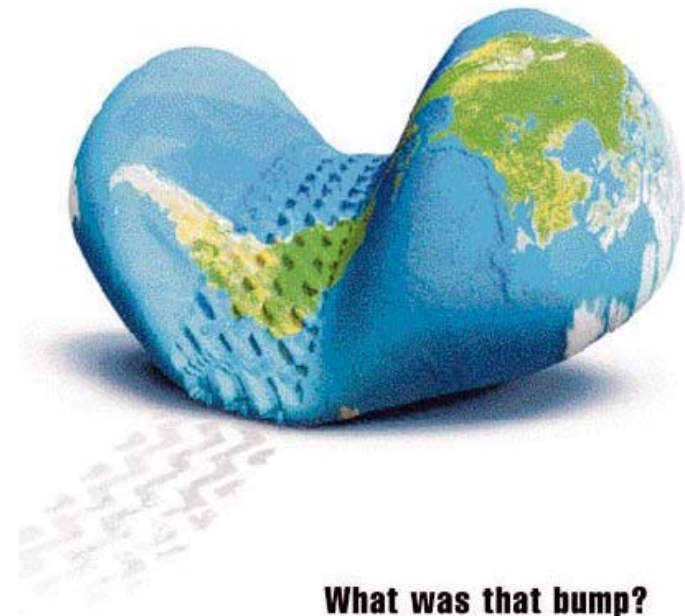


Source: Sustainable Packaging Coalition



## The challenge for the packaging industry

- Dialogue between product designers and recycling industry: *'We need to adapt our products to the recycling infrastructure'*  
Sustainability Manager of a major UK hot drinks vending manufacturer
- Adopt a lifecycle approach to design
- Design out 'waste' by developing packaging that can be reused as a 'secondary raw material' –
- Simplify number of material and material compositions used
- Adopt Product Stewardship approach and enhance chain of custody
- Packaging – a role for deposit systems?



**What was that bump?**

## Get in touch

**Claudia Kuss-Tenzer**

Senior Consultant (Research & Policy)

**Waste Watch**

56 – 64 Leonard Street  
London EC2A 4LT

Tel: 0207 549 0311

Email: [claudia.kuss-tenzer@waste.watch.org.uk](mailto:claudia.kuss-tenzer@waste.watch.org.uk)