

# THE DIRTY TRUTH ABOUT WASTE AND RECYCLING

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innovative waste solutions  
the power of "I" can change the world!

# What is Solid Waste?

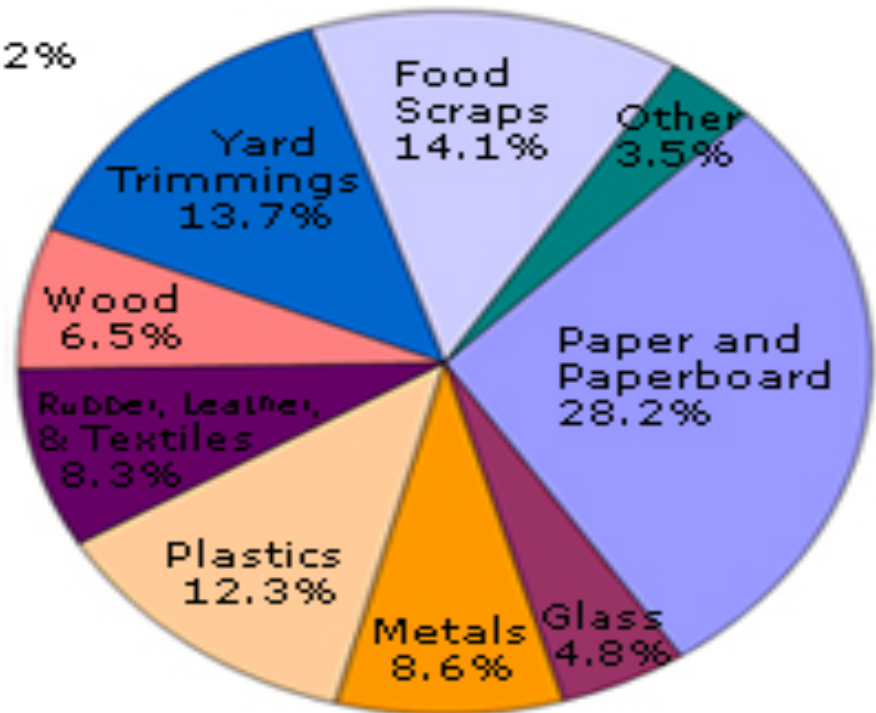
A good definition of municipal solid waste is that it includes durable goods, non-durable goods, containers, packaging, food wastes and yard trimmings, and miscellaneous inorganic wastes.

1. Waste does not occur in nature! It is a man made issue.
2. In 2009, Americans produced about 243 million tons of municipal solid waste or about 4.3 pounds of waste per person per day.
3. Positive financial impact to companies by reducing waste.
4. The waste problem is getting worse, more waste is being generated

# Understanding Waste - Municipal Solid Waste

## Total MSW Generation (by Material), 2009 243 Million Tons (Before Recycling)

Paper and Paperboard	28.2%
Food Scraps	14.1%
Yard Trimmings	13.7%
Plastics	12.3%
Metals	8.6%
Rubber, Leather, & Textiles	8.3%
Wood	6.5%
Glass	4.8%
Other	3.5%



Data is from EPA. <http://www.epa.gov/osw/nonhaz/municipal/>

# Plastics – 1 thru 7

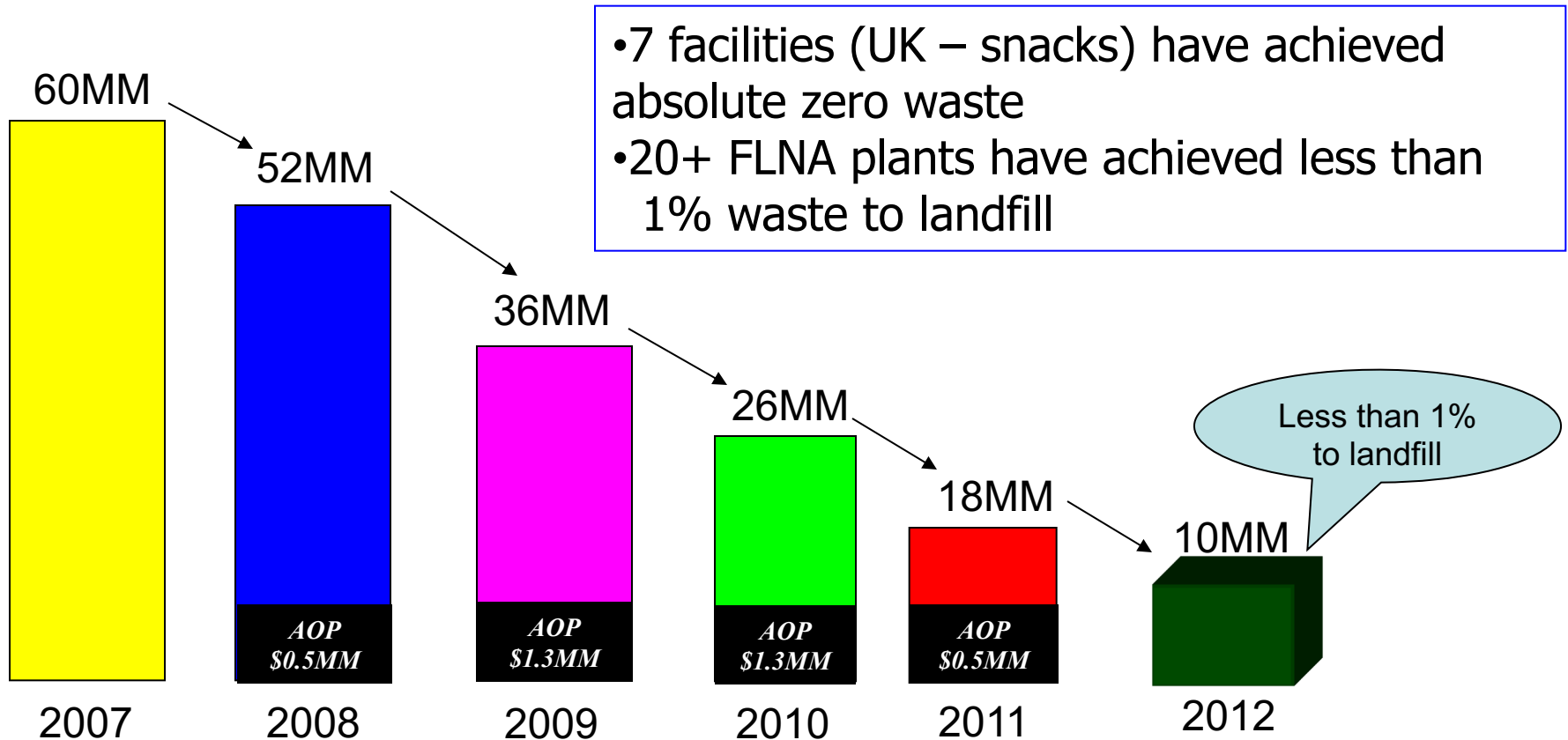
- 1 What is PET?
- 2 What is HDPE?
- 3 What is PVC?
- 4 What is LDPE?
- 5 What is PP?
- 6 What is PS?
- 7 What is Other Plastics?

Most manufacturing plants will have plastics #1, 2, & 4 These are valuable commodities and should be recycled

Keeping plastics separate and clean is the key for a successful recycling program

How are materials recycled? What is a MRF “Material Recovery Facility”

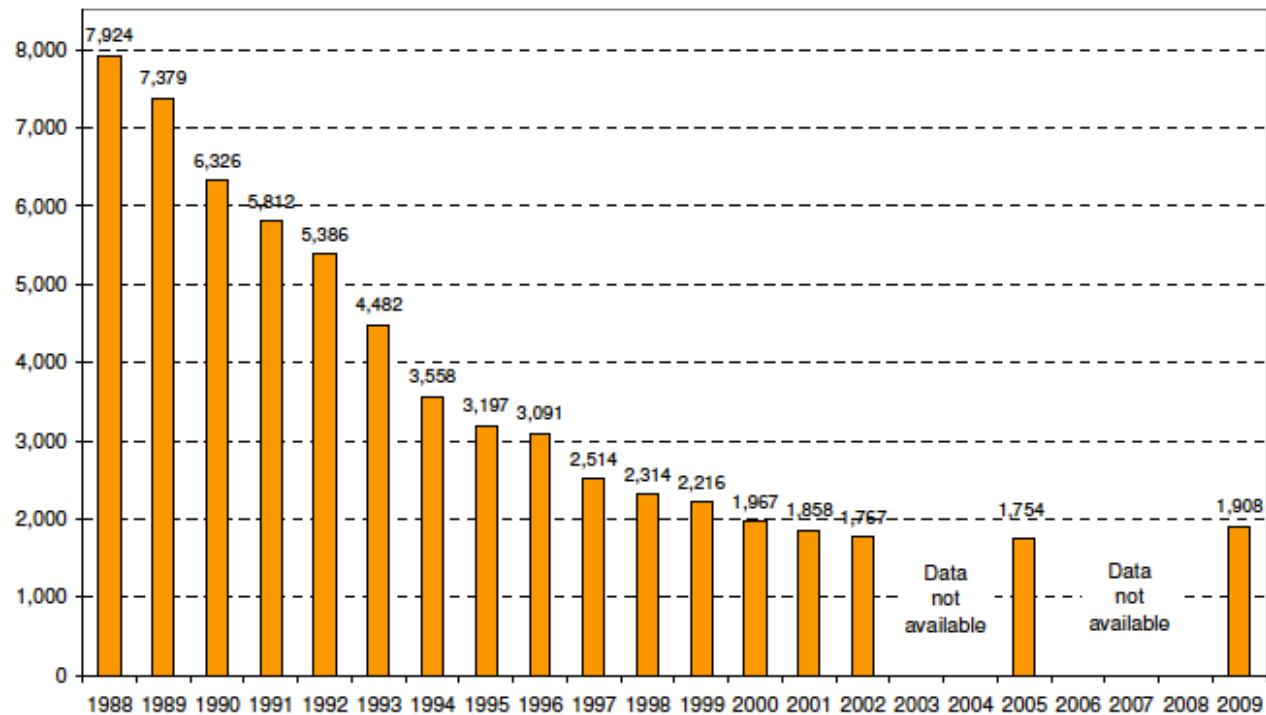
# Snacks Results



Key to the success was finding the right logistics. Making sure we did not transport materials a long way. For us as consumers we could say buy local.

# Number of Landfills are Declining

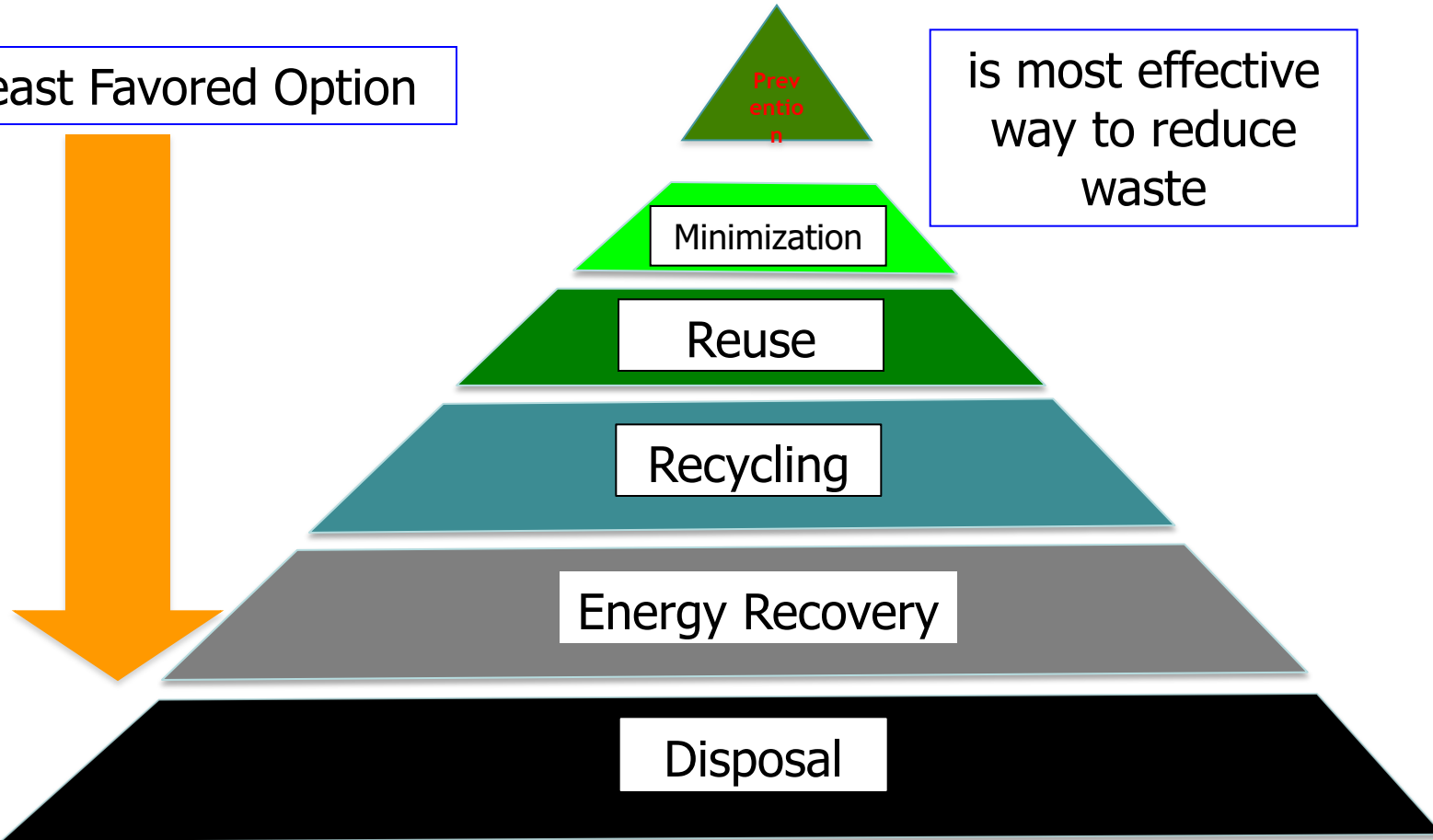
**Figure ES-5. Number of Landfills in the United States, 1988 - 2009**



The US has 2,000 landfills and that number is declining

# Waste Hierarchy Pyramid

Least Favored Option



is most effective way to reduce waste

Imagine not needing stretch film on pallets for transport. No need to dispose of the stretch film. This is possible today, yet most materials come on pallets wrapped with stretch film.

# Reuse/Recycling

## **Reusing Cartons**

For every ton of cartons we re-use 17 trees are not needed for carton production



**Recycling paper** It takes one tree to produce 17 reams of office paper. Typical business offices generate about 1.5 pounds of waste paper per employee each day!

**Recycling Aluminum** takes 95% less energy than new aluminum from bauxite ore. One **Can** saves enough energy to run a TV for three hours or the equivalent of a half a gallon of gasoline.

**Recycling bottles** Just 5 PET bottles yield enough fiber for 1 XL T-shirt, sq ft of carpet, or the fill of one ski jacket. Recycling a single pound of PET bottles saves about 12,000 BTU's of heat energy.







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