

Singapore's Waste Challenges, Management and Waste Minimisation Strategies



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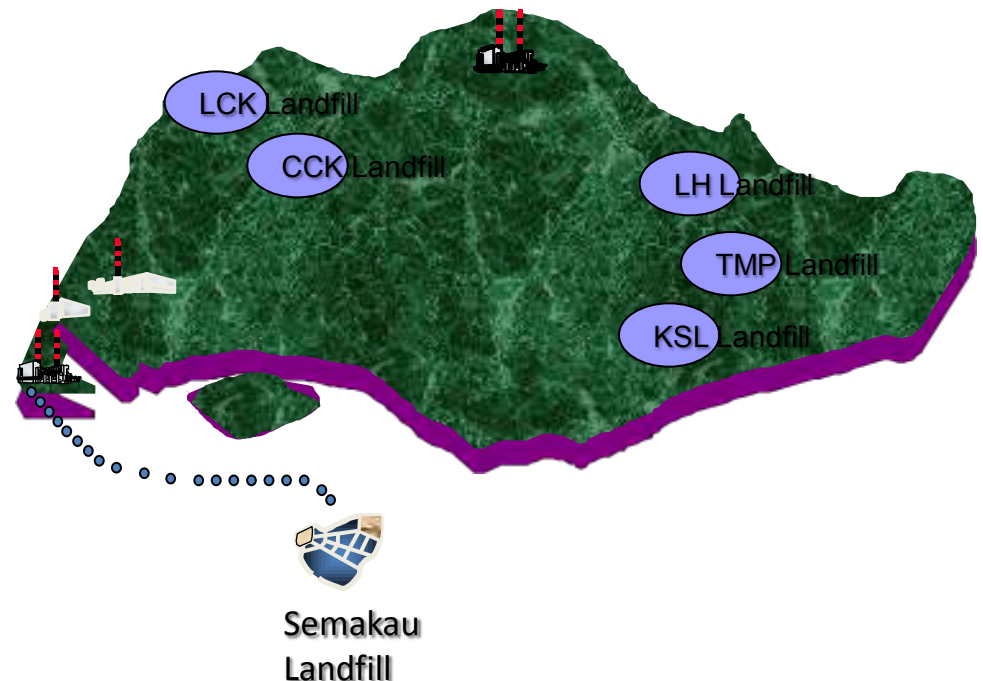
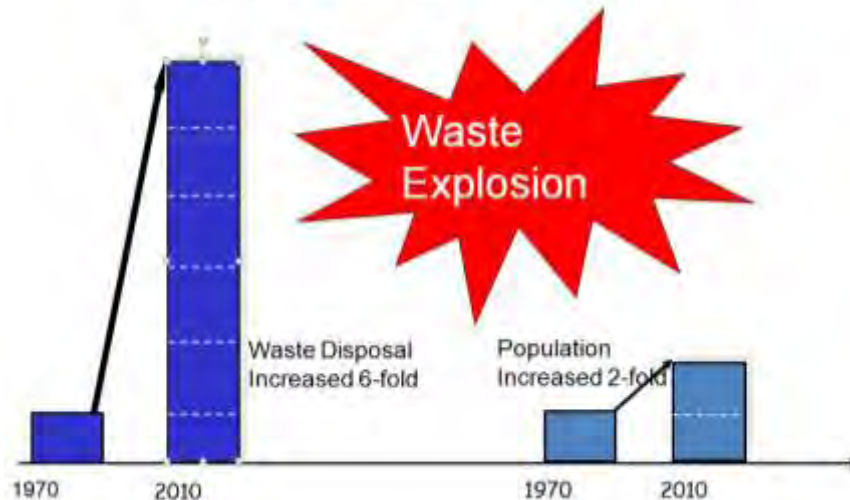


Our Environment - Sustain and Enjoy

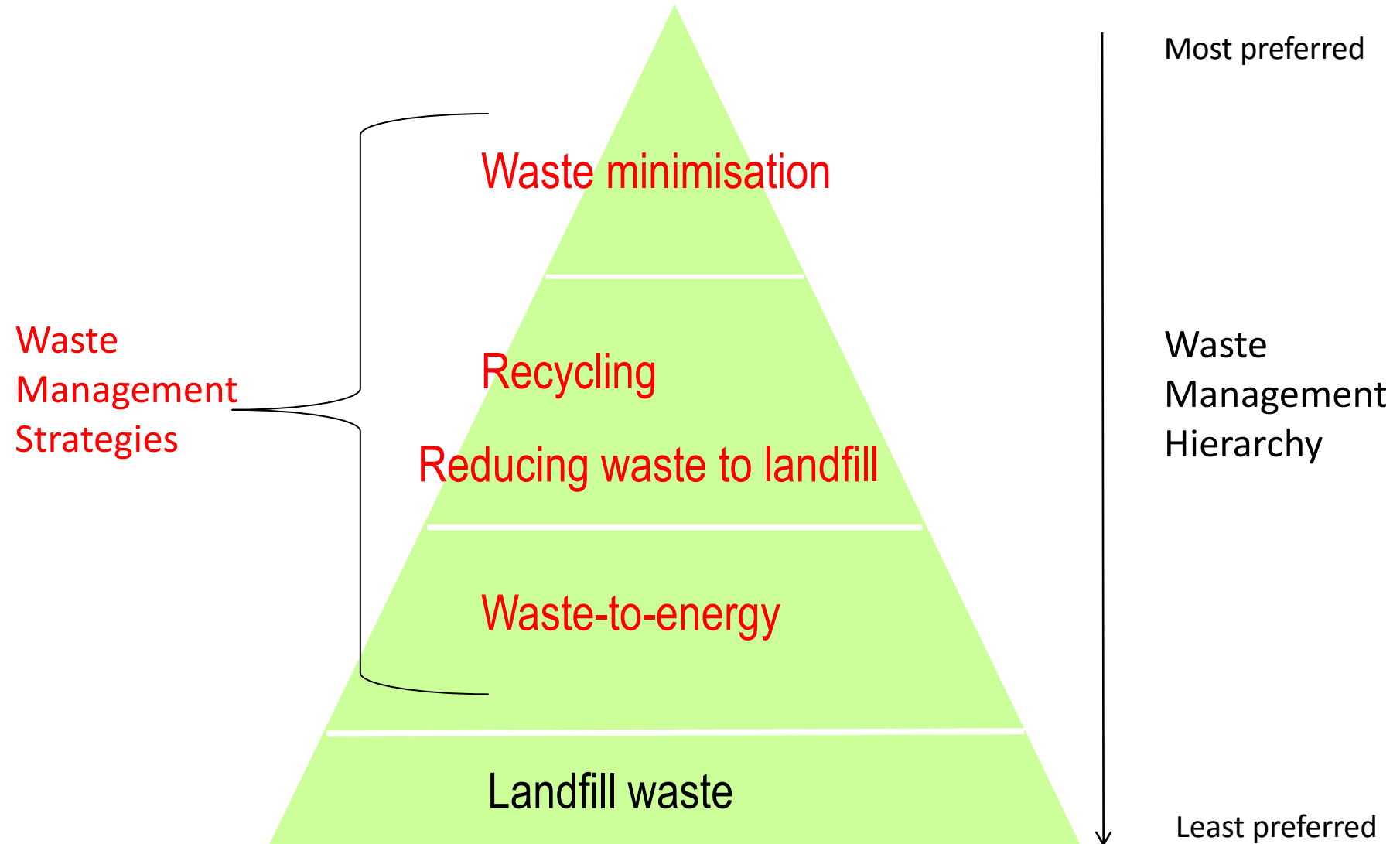
Waste Challenges & Management System

- Annual solid waste increased 6-fold between 1970 and 2010
- Before 1979, all waste was directly landfilled
- Since 1979, 90%+ waste => incineration with energy recovery
Less than 10% waste + incineration ashes => landfilling
- By 1999, all 5 landfills on mainland were full.
- Semakau landfill is the only one we have with life span of 35-40 years.

The Solid Waste Challenge



Strategies for Sustainable Waste Management



Waste Minimisation

Singapore Packaging Agreement



- Joint initiative by government, industry & NGOs to reduce packaging waste in Singapore
- Signed on 5 Jun 07; valid for 5 years
- Signatories
 - set targets voluntarily
 - formulate action plans to reduce and reuse packaging waste
- To date, 125 signatories

Bring Your Own Bag

- Encouraging public members to bring their own bags for shopping



Recycling

Recycling in Domestic Sector

- **National Recycling Programme (NRP)**
 - A recycling programme for households in HDB & landed estates since 2001
 - Residents given recycling bags/ recycling bins
 - Door-to-door collection every fortnight
 - Recyclables collected: paper, metal cans, glass bottles/jars, plastic bottles, old clothing
 - Participation rate = 63%
 - 1,600 centralised recycling depositories
- **Mandatory provision of recycling receptacles for all condominiums and apartments**



Recycling

Recycling in Industrial Estates

Styrofoam



Glass

Wooden Pallets



Recycling bins at bin centres, food centres & in common areas



Paper boxes



Recycling

Schools Recycling Corner Programme

- 100% schools
- Green Ambassadors
- Educational corners

Recycling in Commercial & Public Areas

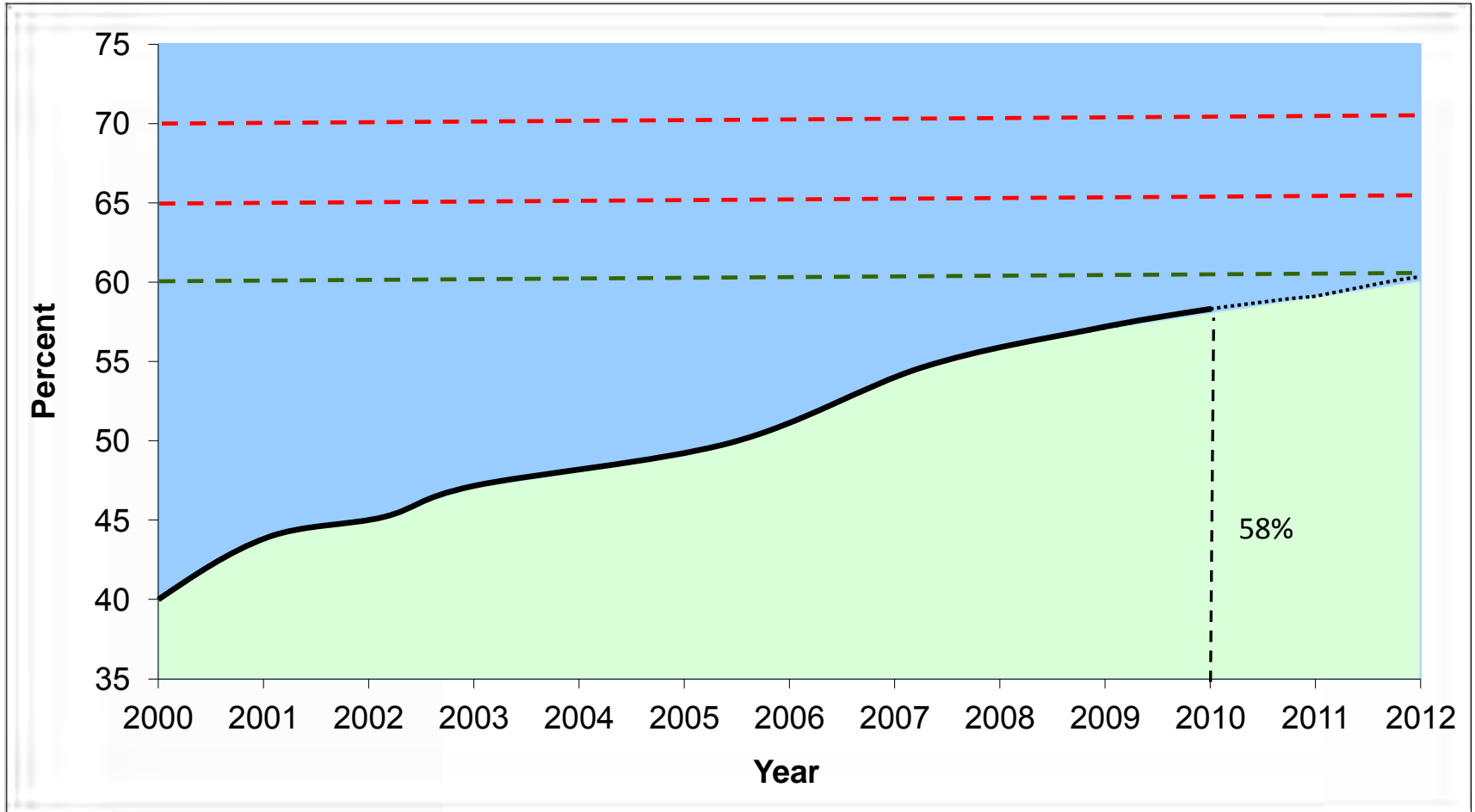
4,160 recycling bins:

- Outside MRT stations
- Shopping streets and malls



Recycling

Overall Recycling Rate in Singapore



Singapore Green Plan (SGP) 2012 target: 60% by 2012

Sustainable Singapore Blueprint targets: 65% in 2020, 70% in 2030

Summary of Strategies

Maximising recovery of resource and energy from waste

