

COUNTRY BREAKOUT 4

SINGAPORE

5 March 2019 | 9th Regional 3R Forum in Asia and the Pacific

Presented by:

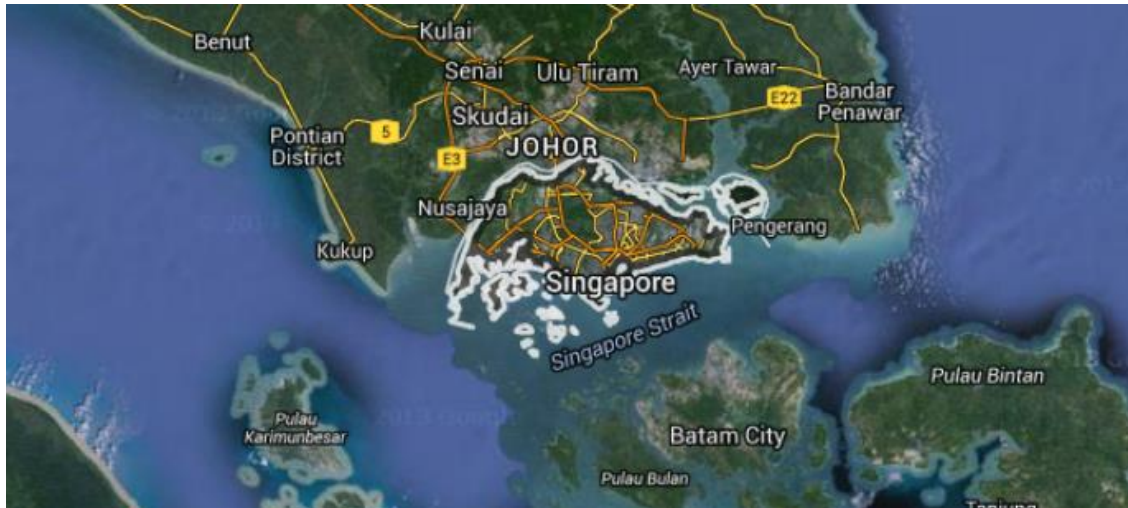
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Singapore



**Country and a
City-State**

Small Land Area
722.5 km²

**Dense Urban
Setting**

5.64 mil population
→7,800 people/km²

**Limited Natural
Resources**



Waste Management Strategies

To enhance the sustainability of our system as solutions to the waste growth challenge are being developed

Minimisation / Prevention

- Promote efficient use of resources in production processes
- Promote 3Rs & waste segregation at source in homes & businesses



Recycling

- Maximise resource recovery from waste
- Adopt better recycling methods to sustain clean environment



Waste-to-Energy / Volume Reduction

- Adopt innovative technology to maximise energy recovery, minimise ash & land use



Landfill

- Minimise waste to landfill



National Recycling Programme (NRP)

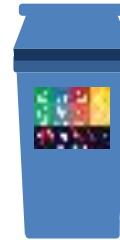


National Recycling Programme (NRP)

660L recycling bin per HDB block



120L recycling bin per landed unit



100% of Primary & Secondary Schools have recycling programmes



Condominiums/Private Apartments

- Mandatory to have recycling receptacles
- Required to have 1 recycling bin per block from April 2018

Centralised Recycling Chutes

- Recycling chutes are now available in new HDB flats
- New private apartments taller than 4 storeys will also have recycling chutes.



Trial of Side Loader Collection Trucks

- More efficient collection
- Improved productivity



3R Initiatives for E-waste Management

Electrical & Electronic Waste (E-Waste) Recycling

- National voluntary partnership to build public awareness on e-waste recycling
- Examples of e-waste recycling bins for various e-waste



Examples of recycling bins for small e-waste



Examples of recycling bins for toner cartridges

E-waste Management Framework

- An e-waste management system will be implemented based on Extended Producer Responsibility (EPR) by 2021
- Producers of ICT equipment, solar panels, batteries, lamps and large appliances will be responsible for collecting and treating e-waste.

3R Initiatives for Packaging Waste

Singapore Packaging Agreement



Joint initiative by government, industry, and NGOs to reduce packaging waste

236
signatories



46,000 tonnes
reduced (cumulative)



S\$100 million
in savings



Logo for Products with Reduced Packaging

- Launched in June 2017
- Enable consumers to identify such products and recognise companies that have made the effort to minimise packaging waste.



An initiative of the SPA
www.nea.gov.sg/SPA

Plans for Mandatory Requirements

- Introduce mandatory reporting of packaging data (types & amounts placed on the market) and submission of 3R plans for packaging waste in 2020
- Study the feasibility of extending EPR framework to cover packaging waste

3R Initiatives for Food Waste Management

Food Waste Reduction

- Food Wastage Reduction Outreach materials targeted at consumers



- Food waste minimisation guidebooks targeted at food manufacturing, food retail establishments and supermarkets

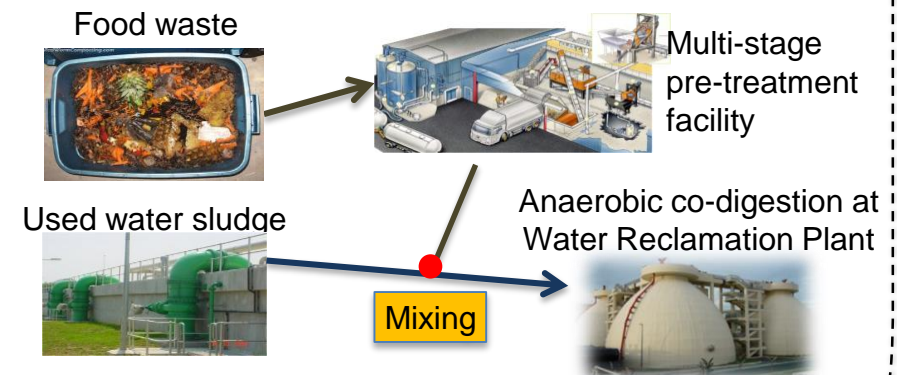


Food Waste Treatment

- On-site treatment of food waste

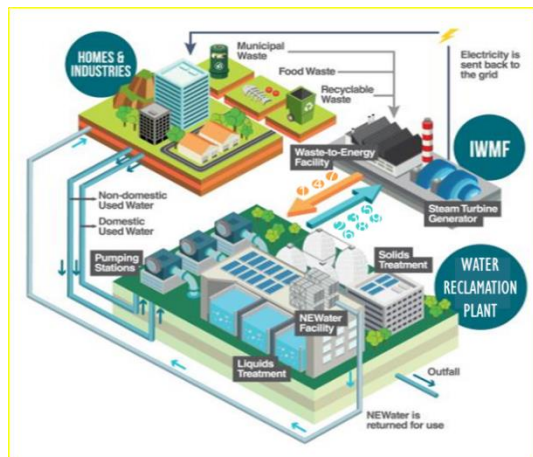


- Off-site treatment of food waste (co-digested with used water sludge)



Waste Management Infrastructure

Tuas Nexus



- An Integrated Waste Management Facility (IWMF) will be developed by 2027
- IWMF will synergise with the Tuas Water Reclamation Plant (TWRP) to maximise energy and resource recovery and optimise land use.

Metal Recovery Facility



- Started operations in July 2015
- Recovers metals from the incineration bottom ash
- Prolong lifespan of landfill

2019 - Year Towards Zero Waste



2019 is designated as the Year Towards Zero Waste

#RecycleRight Movement

- Engage partners to help educate public on:
 - the items that can be deposited into the blue recycling bin
 - ensuring that the items are clean (no food/liquid waste)

Zero Waste Masterplan

- Details key policies and strategies to be implemented in the next few years
- To be launched in the second half of 2019

Towards Zero Waste Grant

- Support ground-up initiatives focusing on waste reduction and recycling in any of the 3 key waste streams or encourage households to recycle more / recycle right
- Launched on 1 Feb 2019

Our Environment

Safeguard • Nurture • Cherish