



Designing Circular Cities in Malaysia Final Stakeholder Consultation Webinar, 19th August 2020 hosted by IUC, EU-Asia

Circular Economy Solutions To Address Challenges of Petaling Jaya: Our Preferred Choice

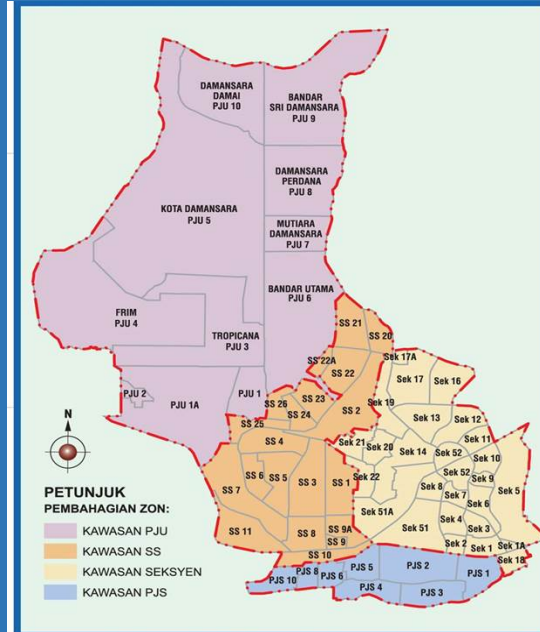


Lee Lih Shyan

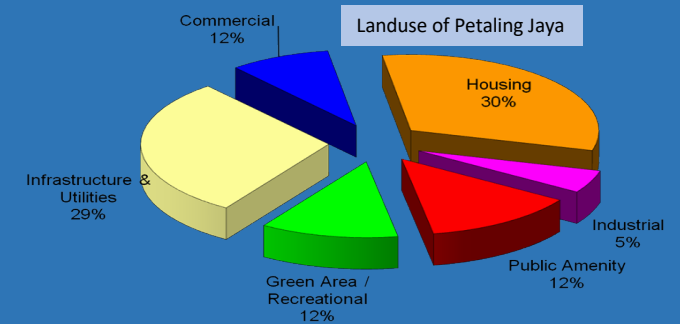
Director

Department of Solid Waste Management & Public Cleansing
Petaling Jaya City Council (MBPJ)

PETALING JAYA CITY PROFILE



**PJ as A Smart,
Sustainable &
Resilient City
by 2030**



Total area	97.2 kilometers
City centre	22 include 2 sub-regional centre
Administrative zone	4
Population	772,763 (2019)
Household income	<ul style="list-style-type: none"> Year 1996 (USD 740) Year 2000 (USD 1270) Year 2010 (USD 1900)
Total Properties	254,174
Neighbouring city	Kuala Lumpur (East), Shah Alam (West), Selayang (North), Subang Jaya (South)

Mission

- To provide quality facilities and services for the prosperity of Petaling Jaya

Vision

- Petaling Jaya leading towards a dynamic and sustainable City
- Target 30% of CER by 2030**

To recap Webinar held on 19th June, 2020

• MBPJ presented

- Profile of the City and our Vision in relation to SDG and Climate Actions

• 5 identified challenges and our existing initiatives :-

- Food Waste
- Plastics waste and packaging
- Construction Waste
- Household E-Waste
- Digital platform as an enabler for circularity

- Shared experiences of EU cities in various aspects of circularity and in particular the Digital Solutions

Household E-Waste

- ✓ Under the Environmental Quality Act (EQA)
- ✓ Generated from households and ICI

Other Scheduled Waste

Other Household Hazardous Waste

Construction Waste

- ✓ Under Act 672* as controlled solid waste / Local by-law
- ✓ Not in municipal solid waste stream

Plastic Packaging Waste

- ✓ Part of municipal solid waste
- ✓ Generated from both households and ICI

Municipal Solid Waste

- ✓ Under Act 672* / local by-law
- ✓ General solid waste from municipal services

Other Special waste

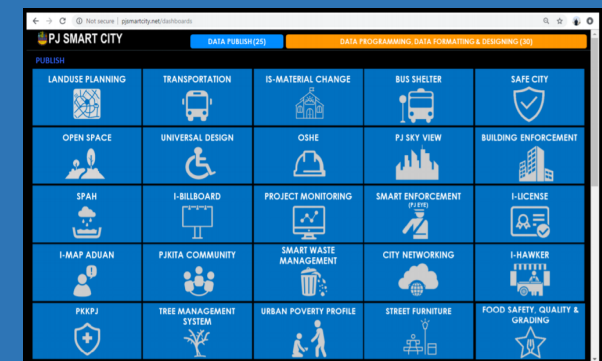
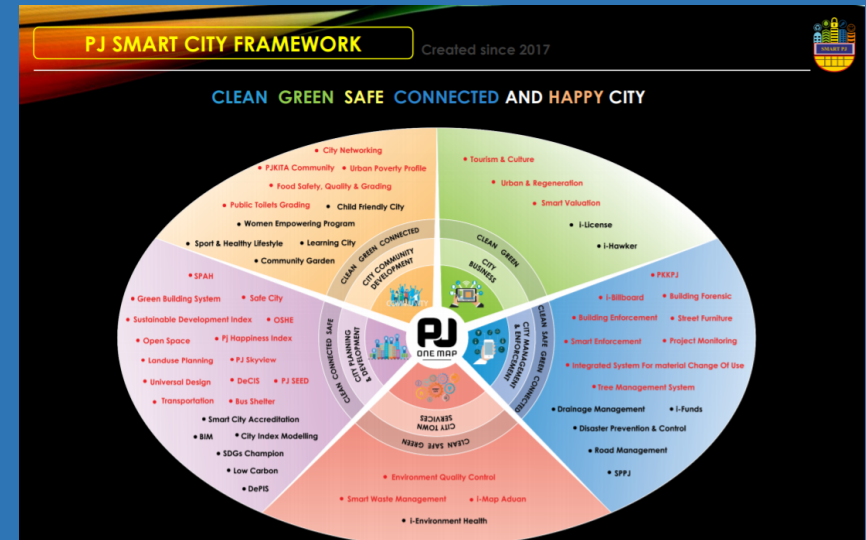
Manufacture Waste

Medical waste

Solid Waste

The Management of Petaling Jaya City Council has decided that

- **Challenge on “Digital platform as an enabler for circularity” to be given priority**
 - PJ Smart City framework is being developed currently
 - Data on waste is basic for action. To manage the data requires digitalization
 - Best Practices of EU Cities e.g. Smart & Circular City





Future Smart City of Petaling Jaya for circularity

~ With Innovative IoT Waste Management Solutions



~ To ensure continuous efforts on communication, education and public awareness (CEPA)

05
CEPA



~ To monitor waste recycling activities; ensure effective recovery and accurate recycling rate for the council

03
Waste Recycling / Recovery



~ To impose requirements on integration of all data into a single platform; registration of players; collection of data / information

01
Big Data / Database on All Waste Management Players / Generators

06
MBPJ's Initiatives

- ✓ To impose control on producers:
 - Product design (waste reduction)
 - EPR / Packaging law
 - Recycling Fees / Levy
 - Eco Park
- ✓ To implement other initiatives (national strategic plan, national roadmaps etc.)



04
Waste Disposal

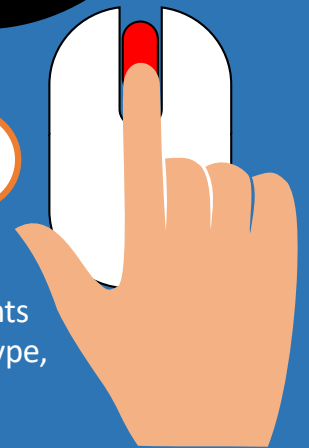


~ To ensure all wastes generated from the council areas are properly disposed only to dedicated destinations

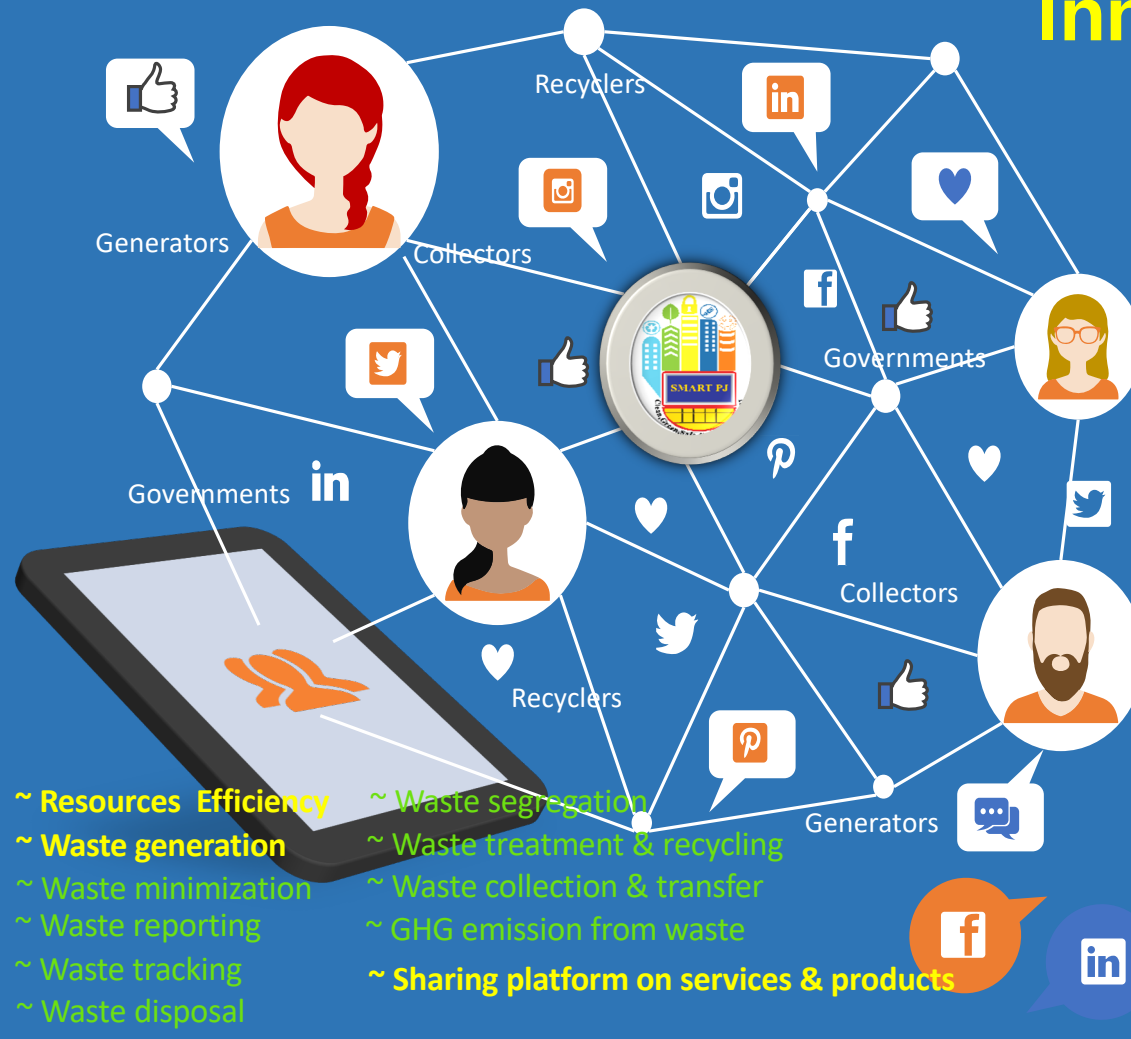
02
Waste Flow / Tracking (Reporting) Material Metabolism



~ To enforce reporting requirements on waste flow (how much, what type, who collects, where it goes)



Innovative Solutions for Circular Economy



- ~ Internet of Things (IoT)
- ~ Big Data
- ~ One Gateway

IoT-powered waste management solutions focus on improving the total efficiency of sustainable waste management and circular economy such as resources efficiency management and 3R through optimization.

- ~ Resources Efficiency
- ~ Waste generation
- ~ Waste minimization
- ~ Waste reporting
- ~ Waste tracking
- ~ Waste disposal
- ~ Waste segregation
- ~ Waste treatment & recycling
- ~ Waste collection & transfer
- ~ GHG emission from waste
- ~ Sharing platform on services & products

- ✓ Solution of the new era
- ✓ Borderless / defined boundary
- ✓ Wide range and flexibility of application for all sectors
- ✓ Connecting all players at one single platform
- ✓ Generating big data for effective future planning



THANK YOU



As an A List city we're leading by example to act on climate change