用心服務 同心共創
Caring Serving Co-creating

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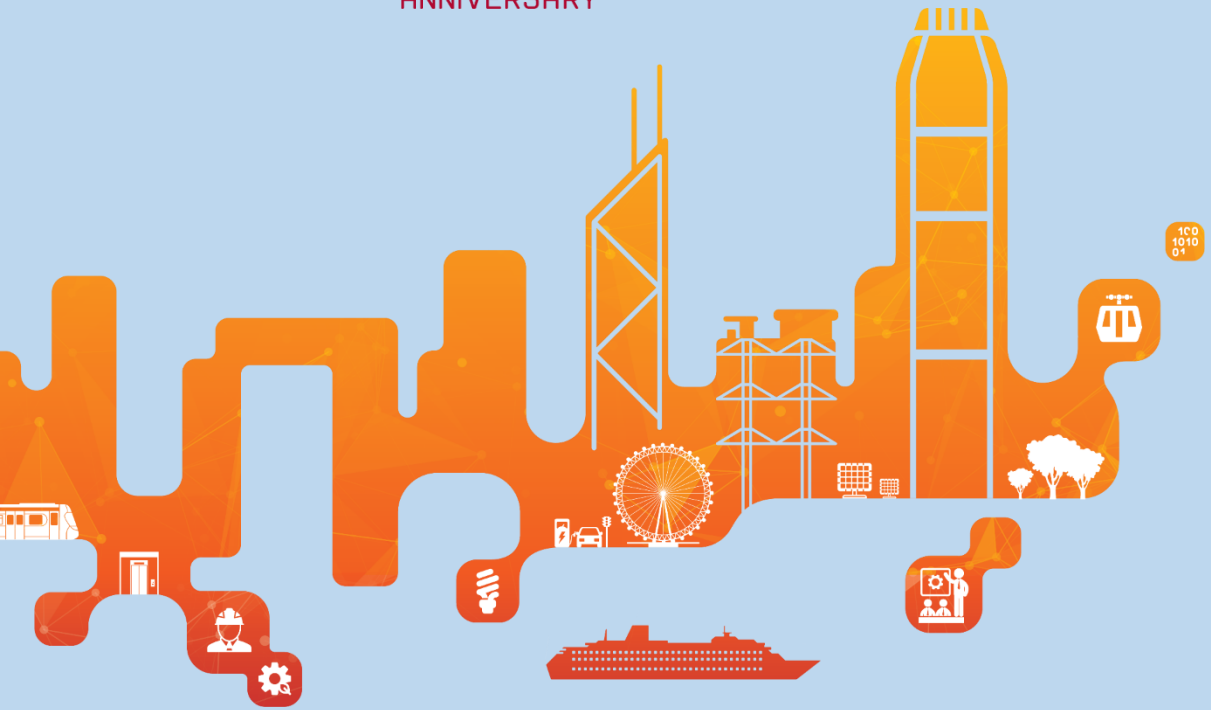

The 51st APEC EGNRET Meeting

Hong Kong, China

11-13 September 2018

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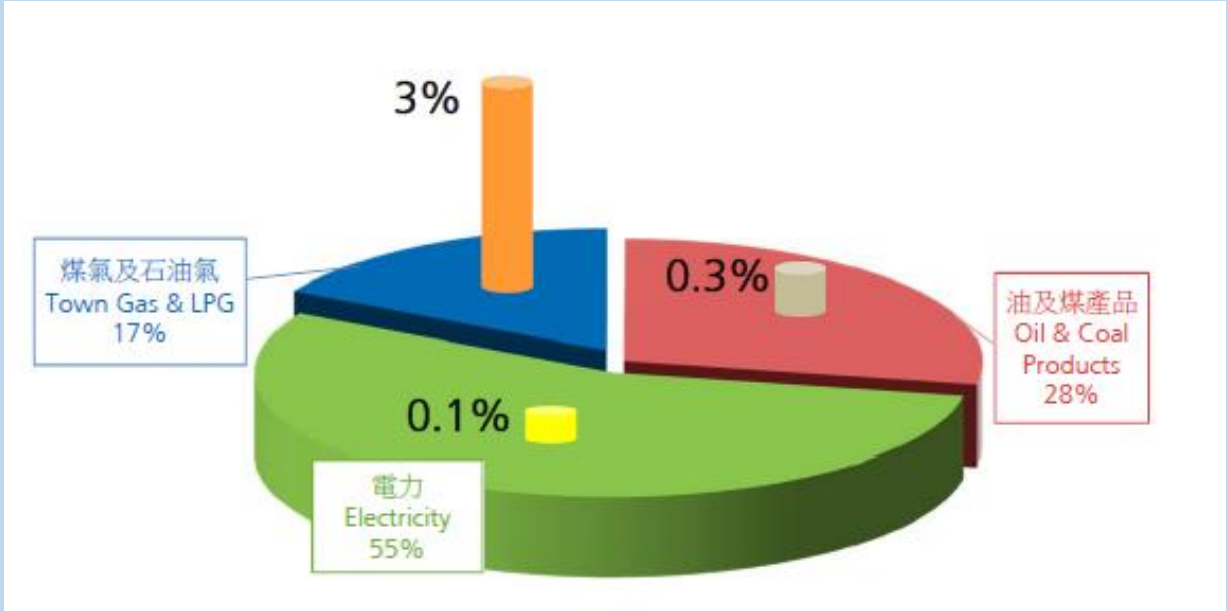
Contents

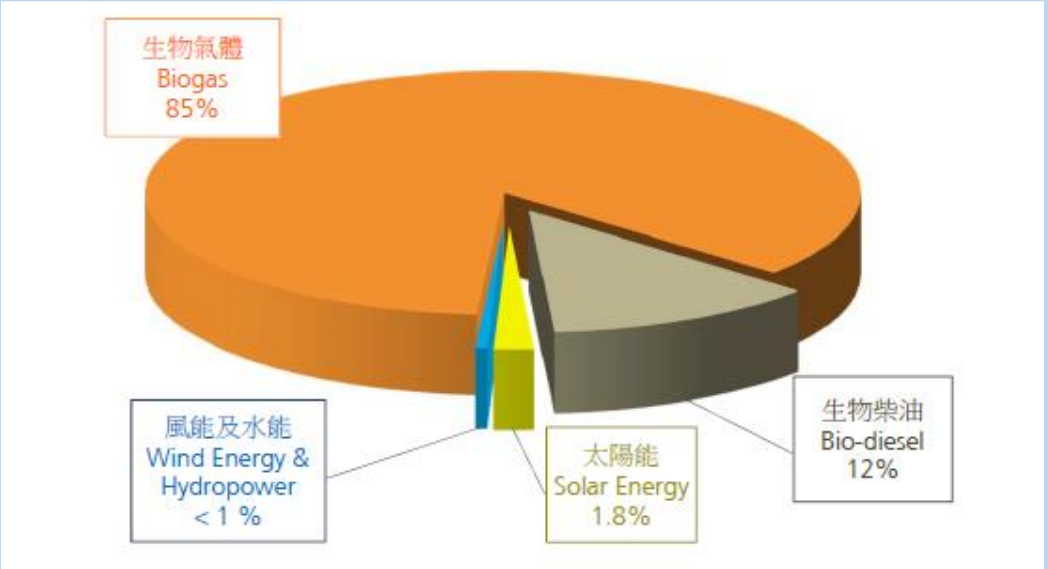
Energy End-use of RE in Hong Kong, China

- In 2015, the energy finally consumed was 287,986 TJ.
- Gaseous RE – about 3% of the "Town Gas & LPG".
- Oil type RE – about 0.3% of the "Oil & Coal Products.
- Renewable electricity – about 0.1% of the "Electricity Consumption"



Energy End-use of RE in Hong Kong, China

- In 2015, around 1,899 TJ of RE of various types were produced and consumed by end uses.
- Renewable Energy accounts for about 0.66% of Energy End-use

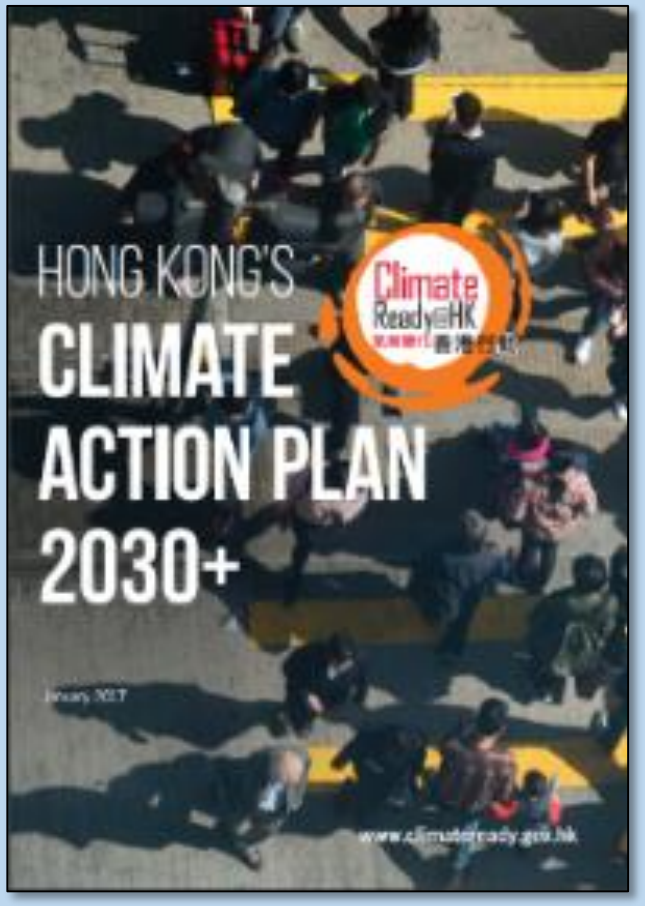


Policy for Promoting RE

ENERGY INTENSITY

-40%

Year 2025



CARBON INTENSITY

65-70%

Year 2030

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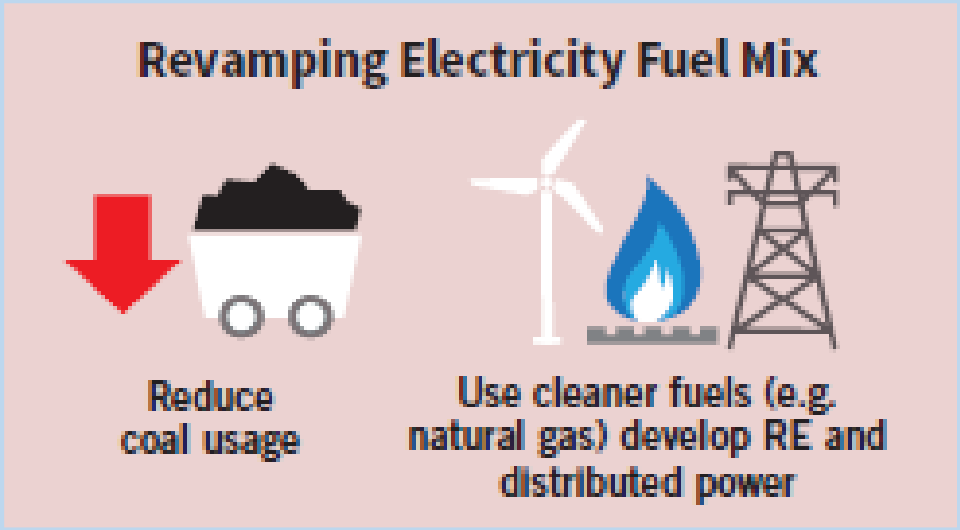
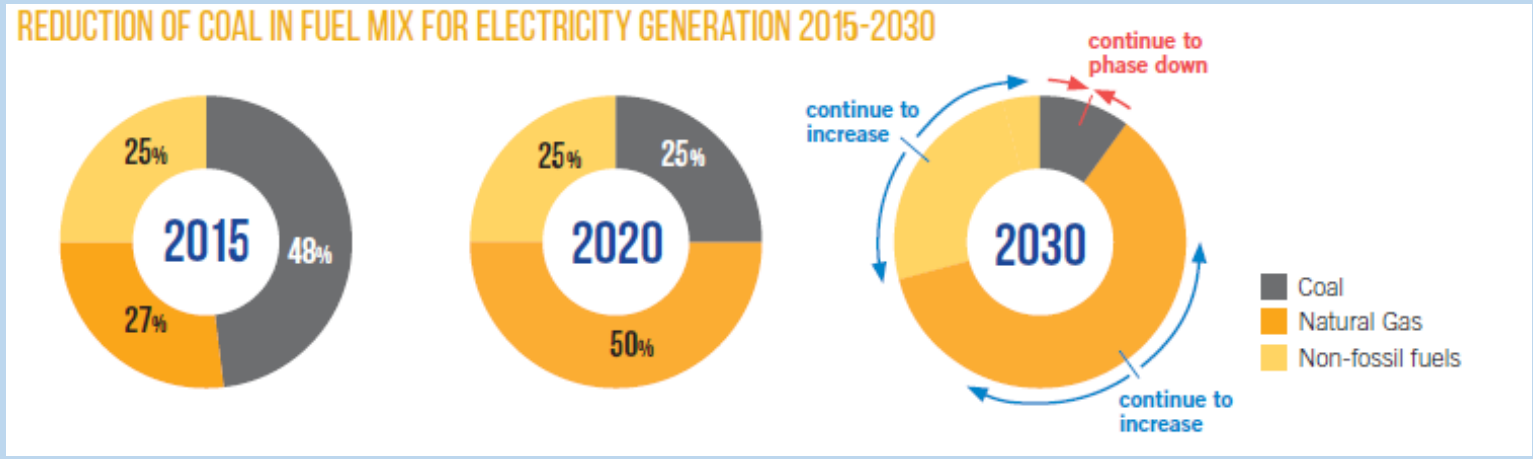
Energy Mix of Hong Kong, China



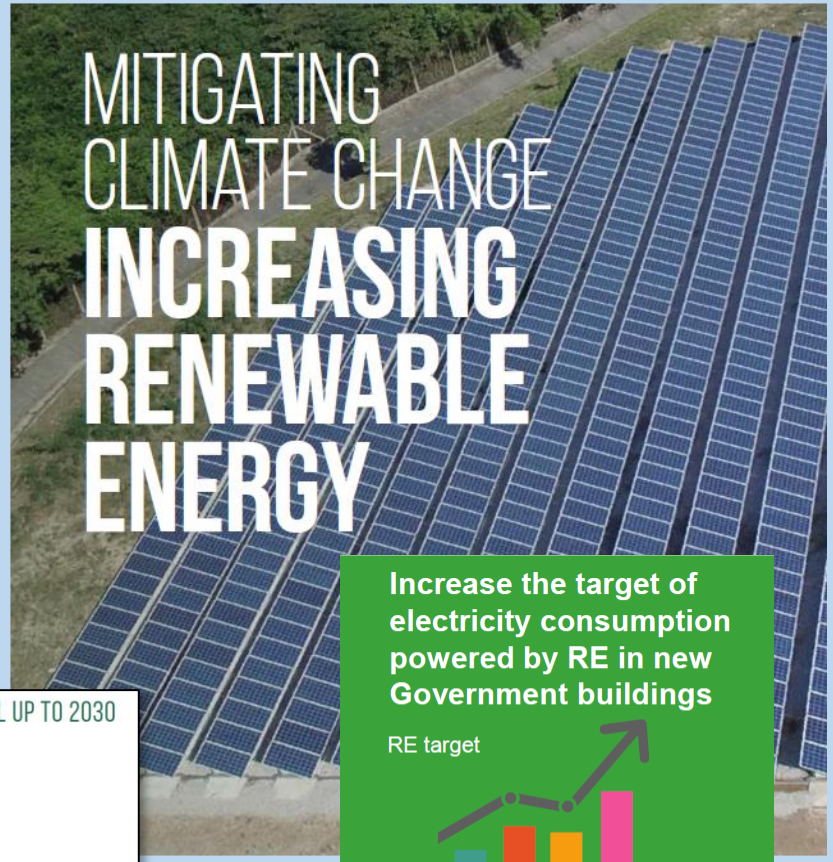


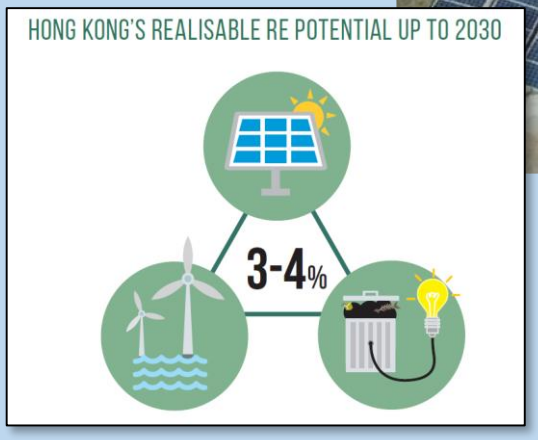
Fuel Switch for Electricity Generation

Policy for Promoting RE

For Public Sector

- Strengthened guidelines for Government premises to adopt RE;
  - 1.5% RE for electricity consumption in new schools and educational building;
  - 25% RE for lighting in public park;
  - 10% available roof space for RE
- Government premises and infrastructure – invest $1 billion in RE starting from 2017.





Policy for Promoting RE

For Private Sector

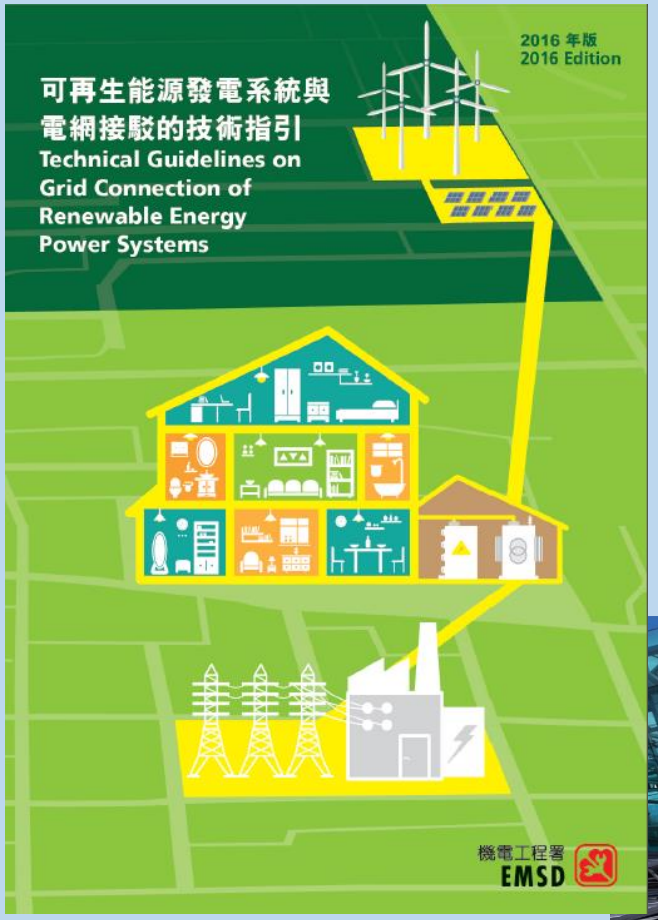
Feed-in Tariff

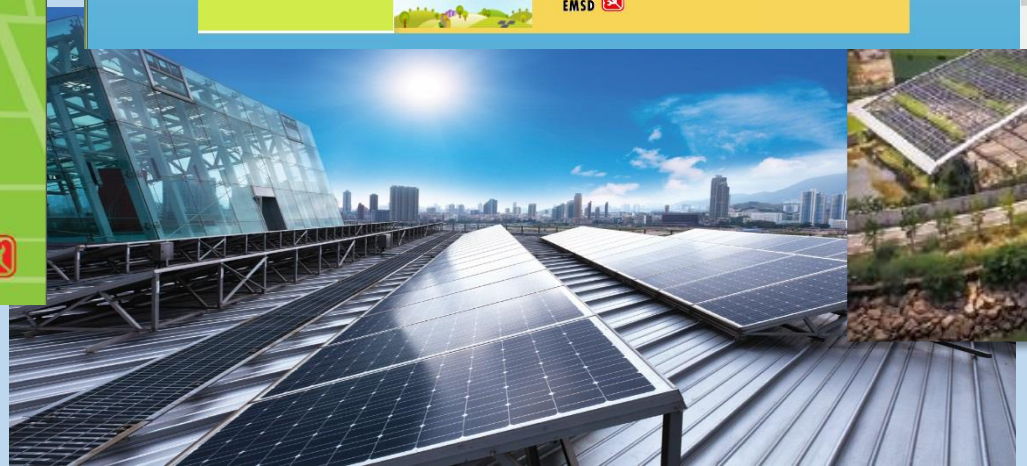
- Feed-in Tariff is about 3-5 times of normal tariff depending on the scale of RE system including wind and PV

RE Certificates

- Community can show its support for RE through purchasing RE Certificates

Policy for Promoting RE

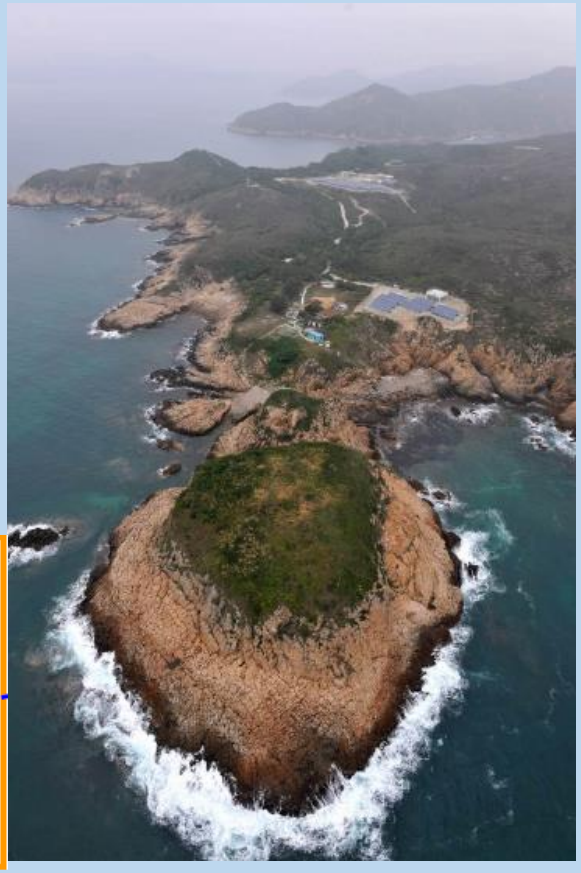




Microgrid System – Town Island RE Supply Project

- Projects completed in late 2012.

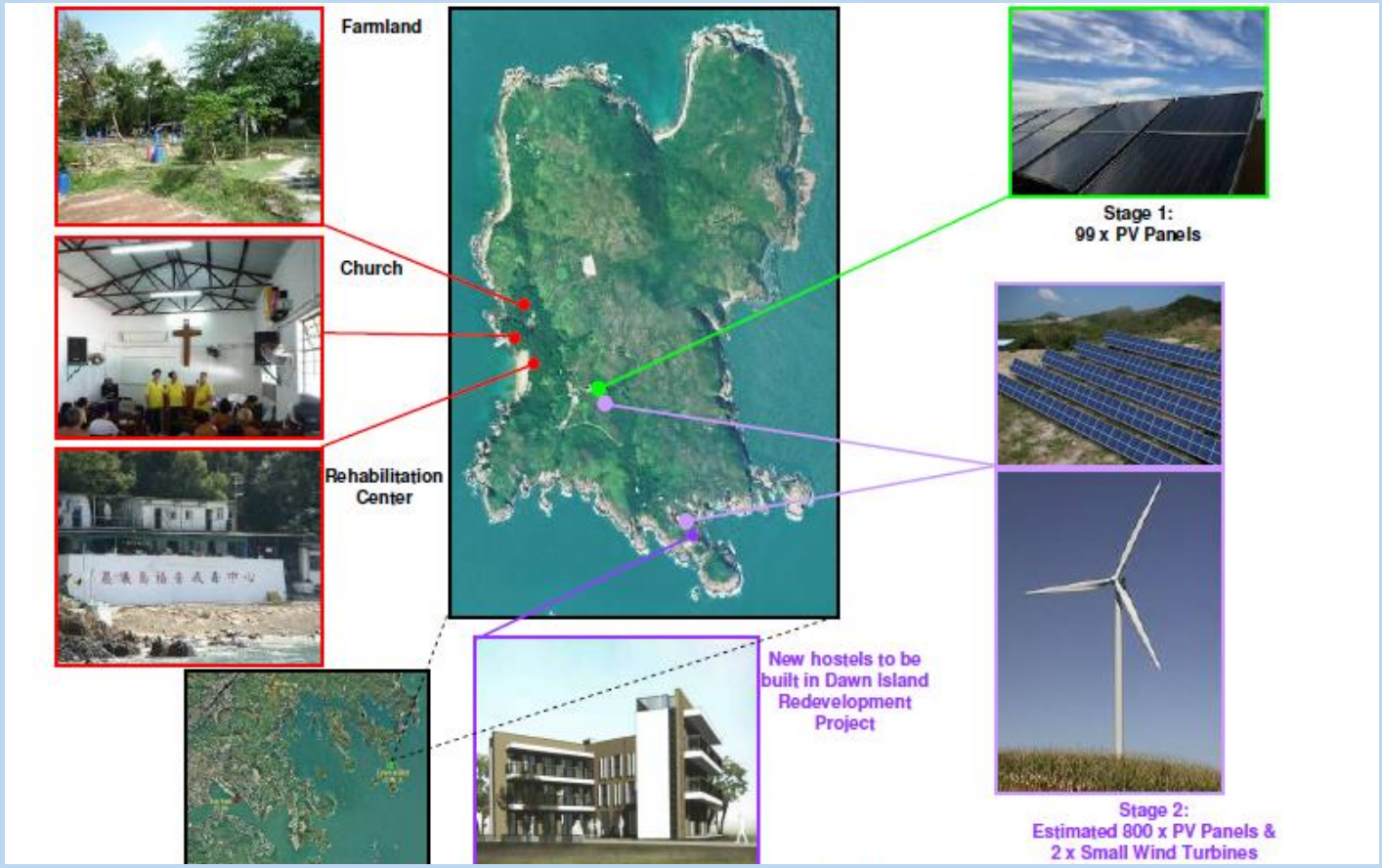
- Powers a non-profit drug rehabilitation centre, is Hong Kong's first commercial-scale standalone RE supply.



(Source: www.clp.com.hk)

Microgrid System – Town Island RE Supply Project

- Submarine Cable Option
  - Impact on undersea corals
- Overhead Line Option
  - Visual Intrusion
  - Marine navigation safety
- Bio-diesel Generator Option
  - Diesel transportation & storage
  - Monthly maintenance
  - Noise & Air pollution



(Source: www.clp.com.hk)

Microgrid System – Town Island RE Supply Project

- It comprises 672 solar panels, two wind turbines and 576 batteries, with a generating capacity of up to 200 kW.

- Batteries capable of storing over 1,000 kWh of electricity to provide a power supply lasting for around 30 hours.

(Source: www.clp.com.hk)

Microgrid System – Town Island RE Supply Project

- Why Solar and Wind Energy?
  - No obstruction to sunlight
  - Hybrid sources of solar and wind energies could enhance the effectiveness of the system and meeting the ultimate electricity demand of the island
  - More Cost effective than submarine cable

(Source: www.clp.com.hk)

First Organic Resources Recovery Centre – O · Park 1

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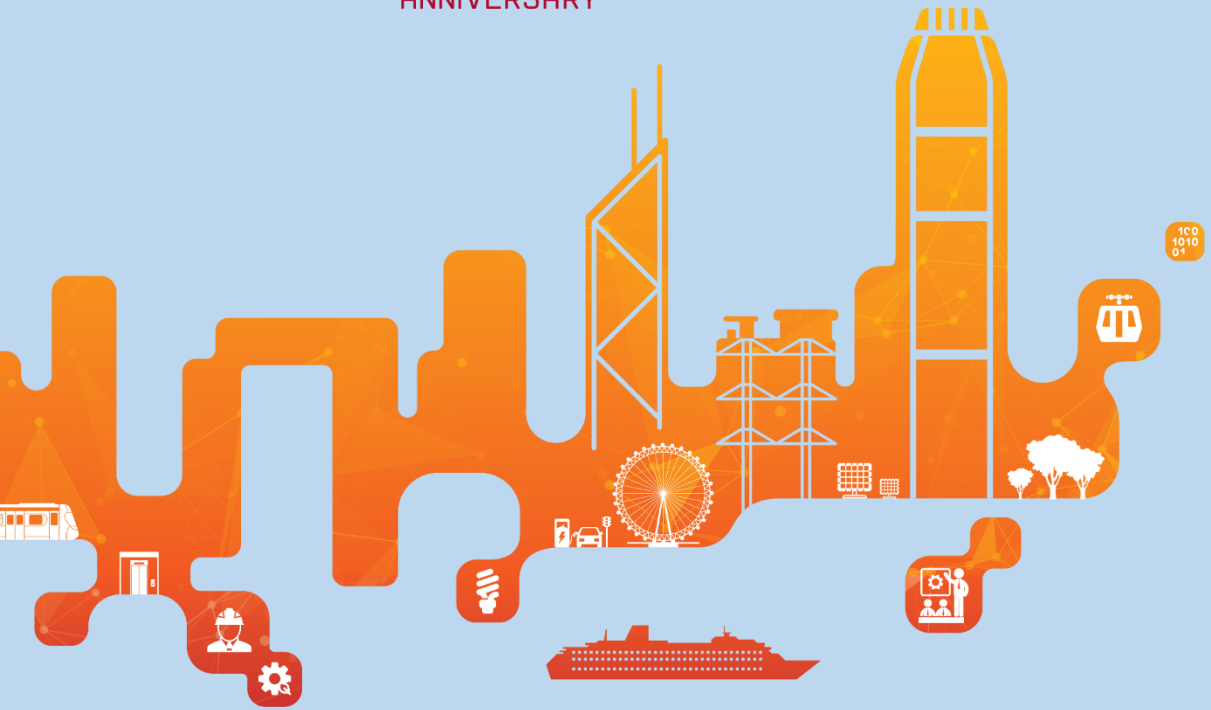

Thank you

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