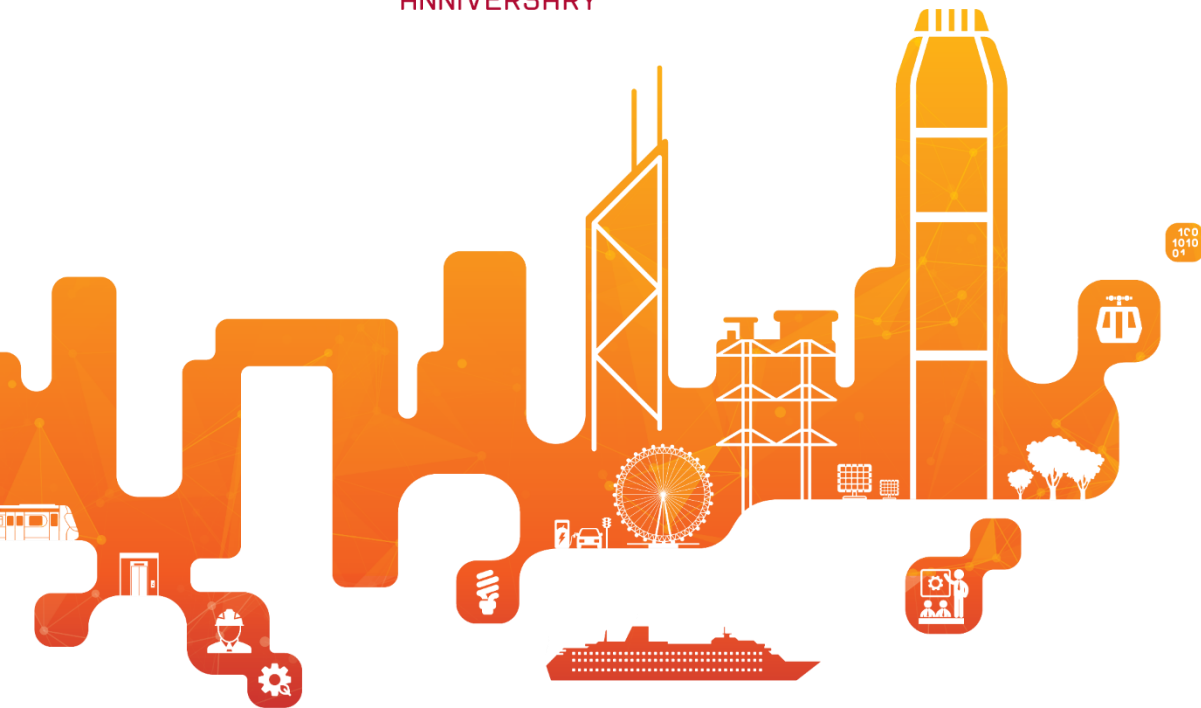




The 51st APEC EGNRET Meeting

Hong Kong, China

11-13 September 2018



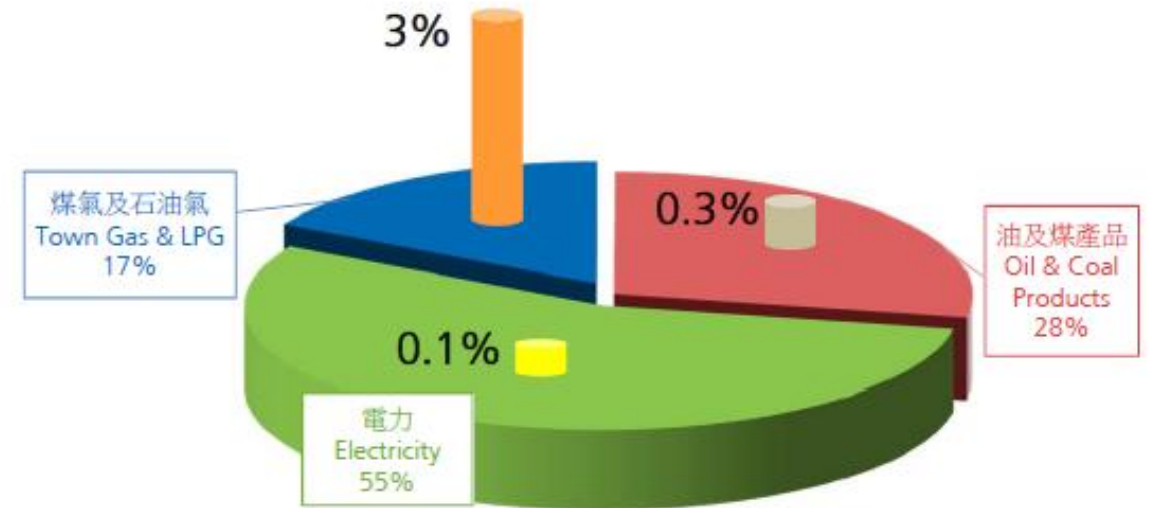


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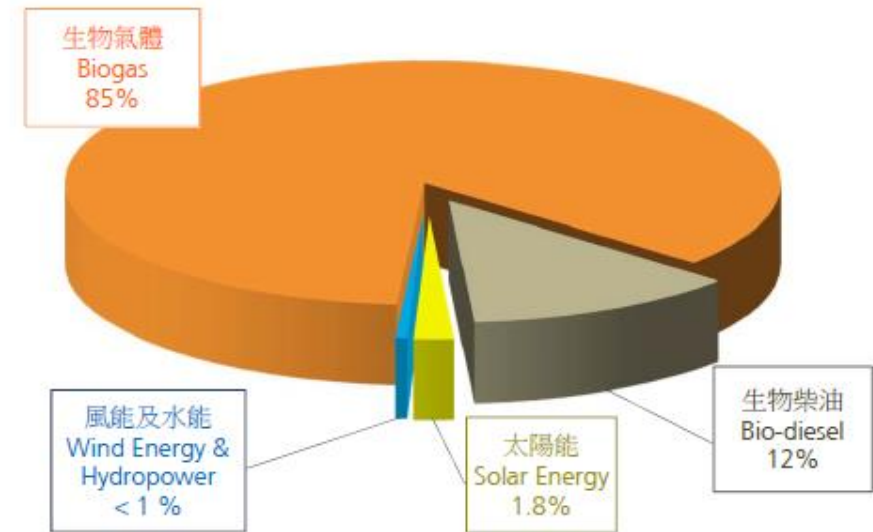
Energy End-use of RE in Hong Kong, China

- 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”

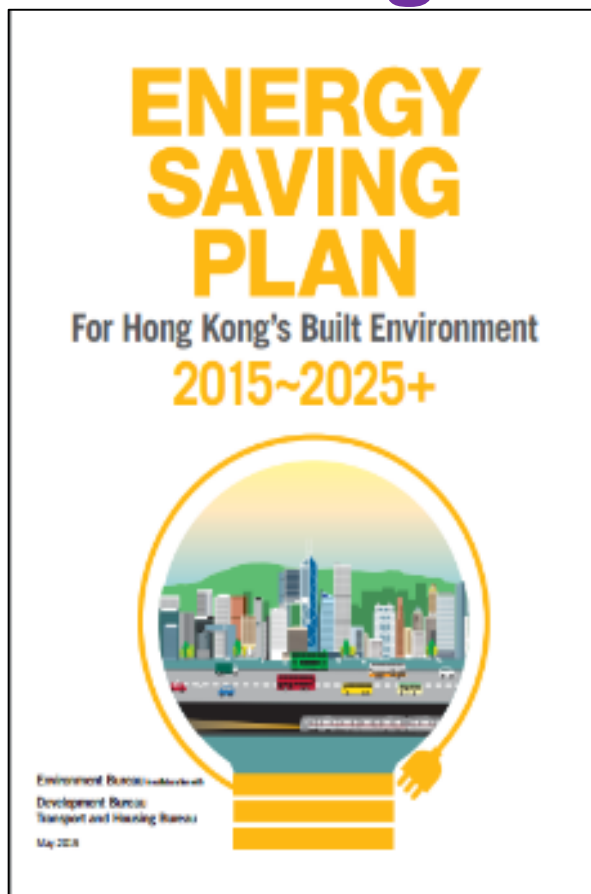


Energy End-use of RE in Hong Kong, China

- 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

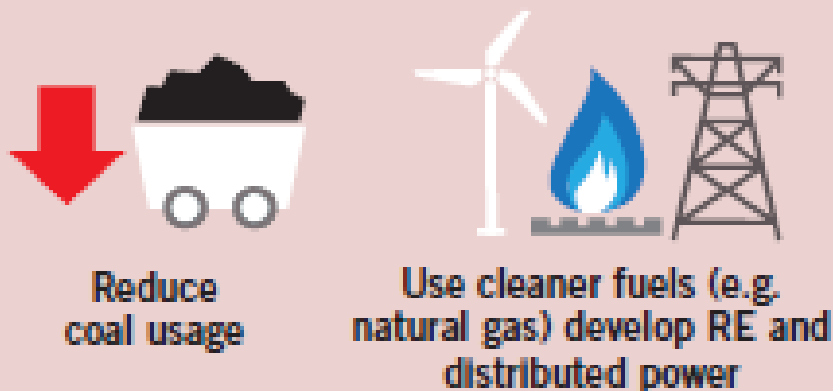


Policy for Promoting RE

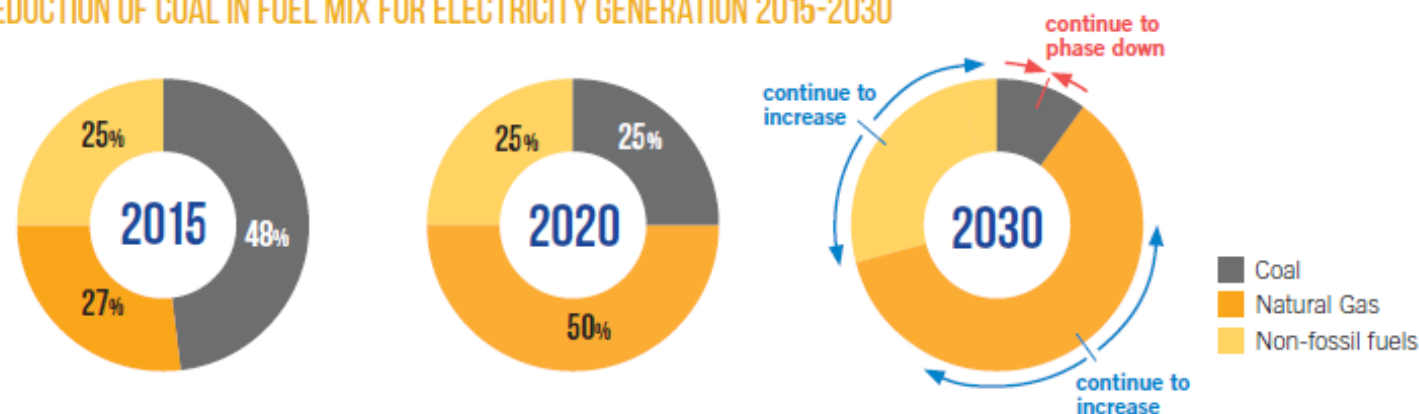


Energy Mix of Hong Kong, China

Revamping Electricity Fuel Mix



REDUCTION OF COAL IN FUEL MIX FOR ELECTRICITY GENERATION 2015-2030



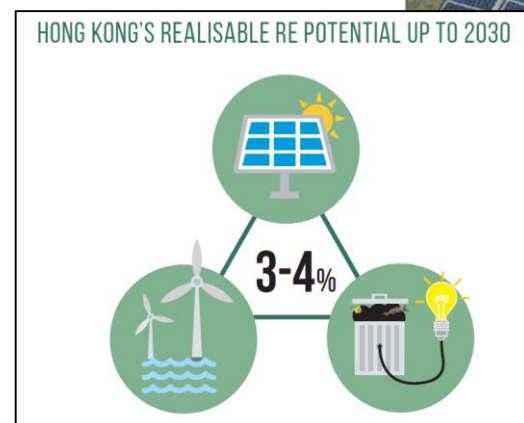
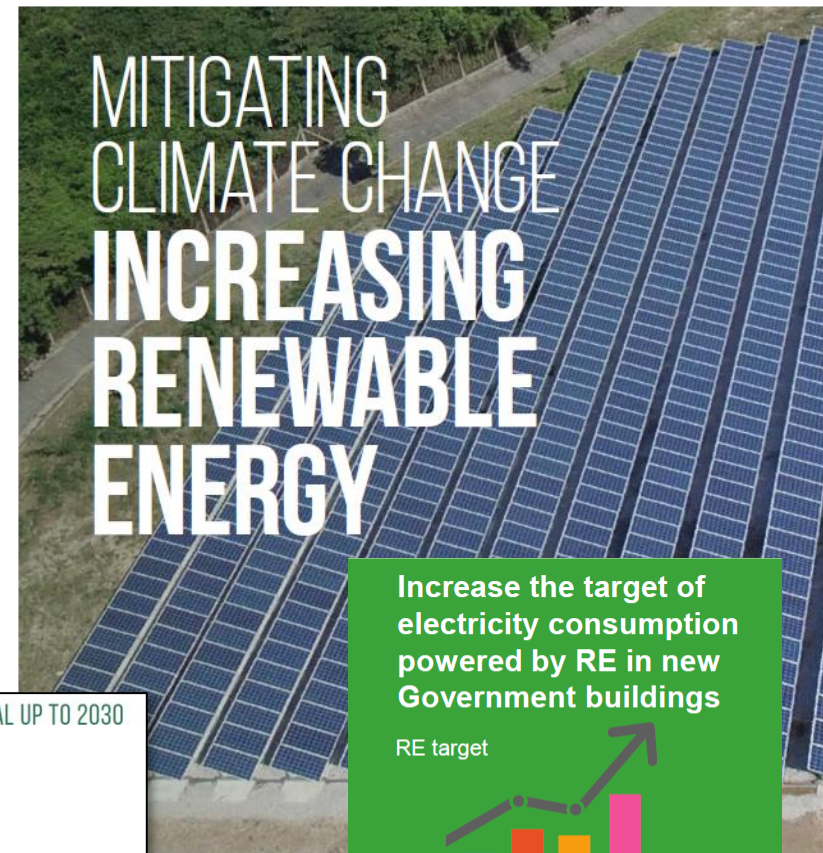
Fuel Switch for Electricity Generation



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



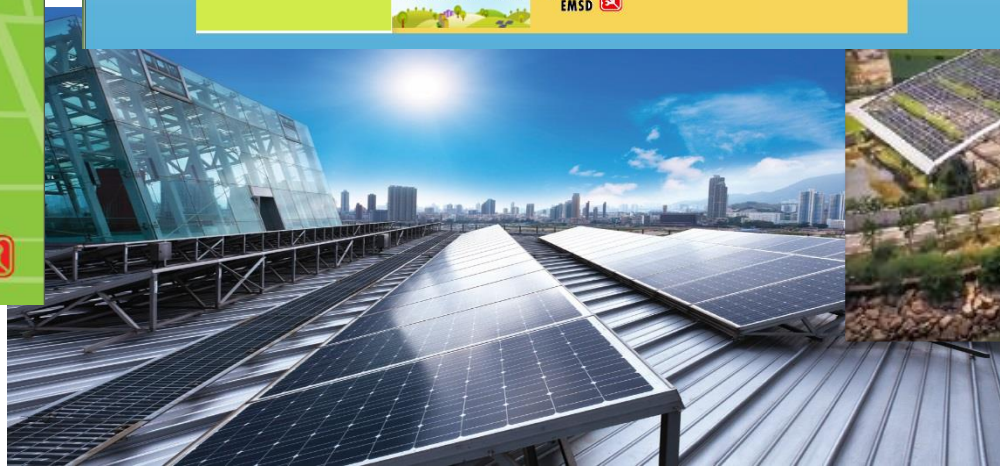
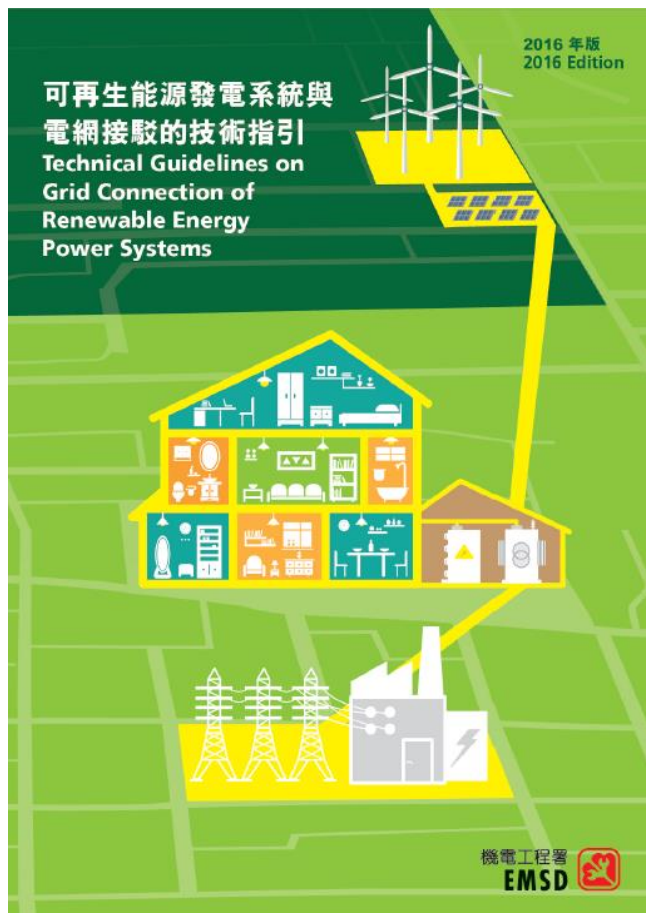
RE Certificates



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



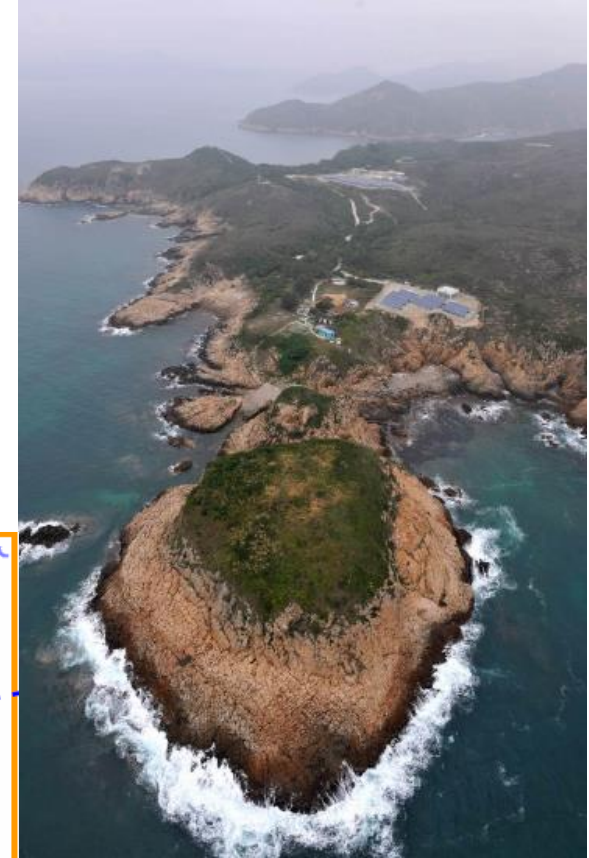
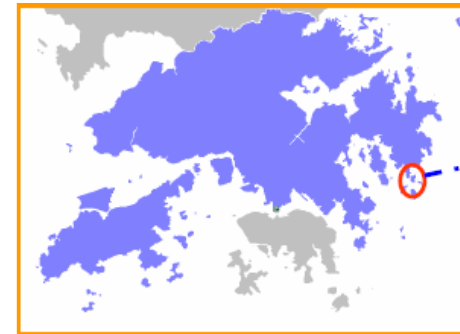
Policy for Promoting RE





Microgrid System – Town Island RE Supply Project

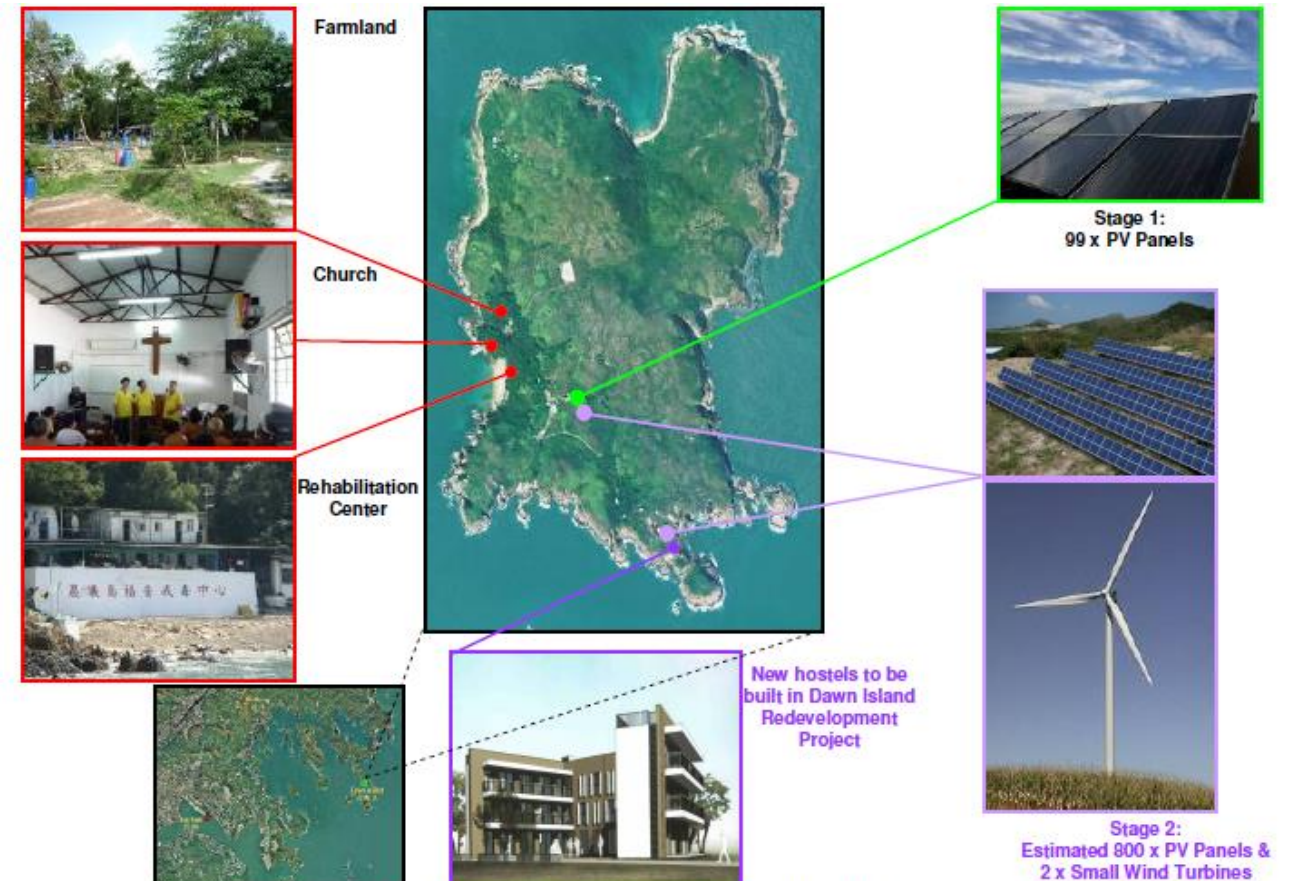
- Projects completed in late 2012.
- Powers a non-profit drug rehabilitation centre, is Hong Kong's first commercial-scale standalone RE supply.
- It comprises 672 solar panels, two wind turbines and 576 batteries, with a generating capacity of up to 200 kW.
- Batteries capable of storing over 1,000 kWh of electricity to provide a power supply lasting for around 30 hours.





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





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



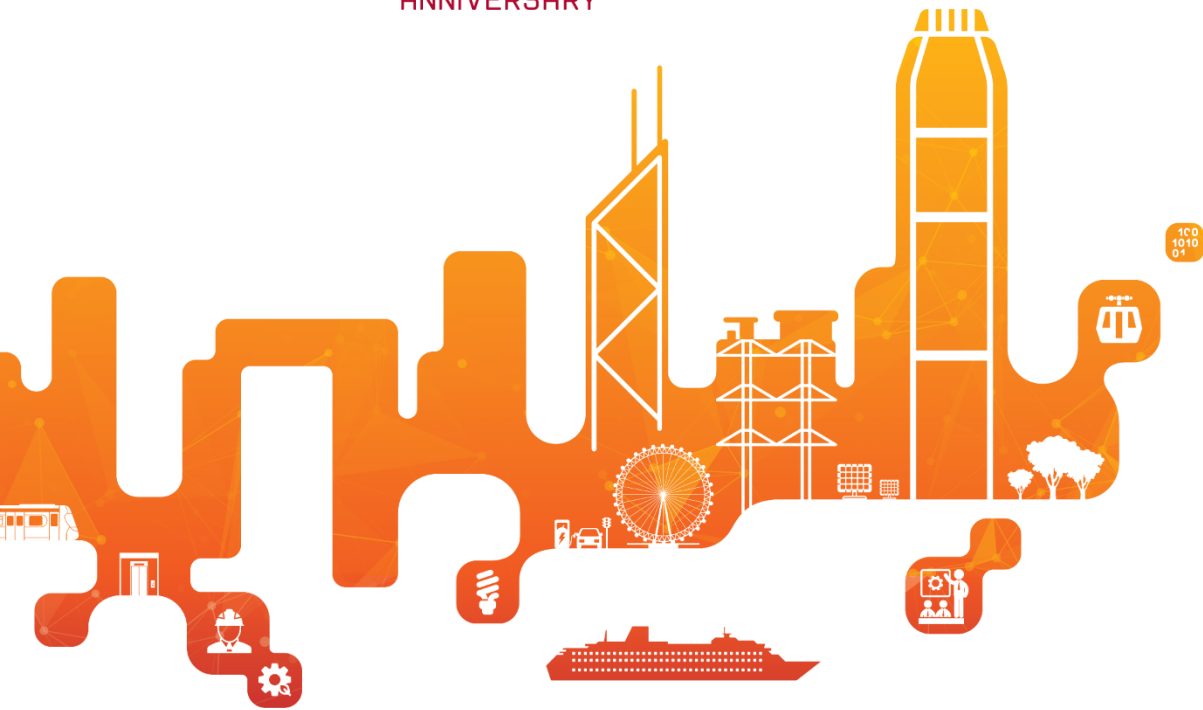


First Organic Resources Recovery Centre – O · Park 1



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Caring Serving Co-creating

70th
周年紀念
ANNIVERSARY



Thank you

機電工程署  EMSD