

# Snapshot on renewable energy test-beds



## Floating solar photovoltaic (PV) systems at Tengeh Reservoir

- S\$11 million project to test economic and technological feasibility of large scale PV systems
- Led by EDB and PUB, with Solar Energy Research Institute of Singapore (Seris) as project manager
- **First phase:** 10 different PV systems (100 kilowatt-peak each), started in May 2016
- **Second phase:** Two different PV systems (1 megawatt-peak each), to start in 2017
- Involves companies such as SolarGy, Phoenix Solar, Sunseap, REC, Sharp Solar and Enel Green Power
- **Why it matters for Singapore:** Can help overcome land constraints and turn Singapore into a leader for urban solar capabilities



## Renewable Energy Integration Demonstrator Singapore (Reids) at Semakau Landfill

- Initial investment of S\$10 million for infrastructure
- Expected to draw S\$20 million in investments over next five years to test integration of multiple renewable energy sources
- Led by Energy Research Institute @ NTU (Erion), supported by EDB and NEA
- **First phase:** Installation of a micro-grid facility with over 3,000 sq m of PV panels and a large-scale energy storage system already completed
- **Second phase:** Building three more micro-grids, which can be either operated separately or integrated as a single facility, over 64,000 sq m (size of eight soccer fields) by end-2018
- Four micro-grids to have a total system size of 1 megawatt-peak, which will produce power for fish hatcheries and nurseries located in Semakau
- Involves 13 companies such as Accenture, Engie, LSIS, Sembcorp Industries, Trina Solar and Vestas
- **Why it matters for Singapore:** Can tap Singapore's strength in systems engineering to build new capabilities in advanced power engineering and energy management technologies