

PRESS RELEASE



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Powering Pulau Ubin with Clean and Renewable Energy

Testbed project aims to make Singapore a launch pad for new energy technologies

SINGAPORE, 5 November 2008 – The Energy Market Authority (EMA) has embarked on a pioneering project which could potentially transform part of Pulau Ubin into a model “green” island powered entirely by clean and renewable energy. This would give a boost to Singapore’s ambition to be a global test-bedding site for new energy technologies.

To kick off this project, EMA has called a tender for a consultancy study to develop and implement clean and renewable energy solutions for a cluster of homes and businesses on the island. Depending on the outcome of the study, it could be followed by the development of infrastructure such as a microgrid system with energy sources like solar, wind, and biomass to supply electricity.

Currently, Pulau Ubin does not draw electricity supply from the main power grid. It is not economical to lay power transmission cables from mainland Singapore to Pulau Ubin due to its modest energy demand. There is also no centralised electricity supply system on the island. All inhabitants of the island, including small businesses, run their own diesel-powered generators to generate electricity.

There is therefore potential to test out a microgrid with distributed generation (i.e. small generating units sited at or near customer sites) using clean and renewable energy resources. This would help to provide additional sources of energy supply, and to displace the current dependence on diesel generators on the island.

Mr Khoo Chin Hean, Chief Executive of EMA said, “This project will create an oasis where clean and renewable energy technologies can be tested in an actual live environment. At the same time it can benefit the consumers in Pulau Ubin who currently rely on diesel generators by providing alternative sources of energy that are not only cleaner but are also cost competitive to diesel generators”.

The company awarded the tender for the consultancy study will help to recommend a plan to develop and implement the various clean and renewable energy options. The study will look into both the technical and commercial viability of the options proposed, while giving due consideration to economic, environmental and social costs and benefits.

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The potential technologies to be test-bedded include:

- Solar: photovoltaic (PV), thermal, concentrated solar power and concentrated solar PV
- Wind: on-shore and off-shore
- Marine: undercurrent, tidal and wave
- Biomass: solid waste, wood/cellulosic and algae
- Biofuel: biodiesel and bioethanol
- Hydrogen and fuel cells
- Microturbine
- Microgrid: energy management system
- Substations
- Aboveground and underground distribution and transmission cables

EMA will award the tender in November and the study is expected to be completed by May 2009.

About the Energy Market Authority

Energy Market Authority (EMA) was formed on 1 April 2001 as a statutory board under the Ministry of Trade and Industry to forge a secure, long-term electricity industry that thrives on healthy competition. New market structures have been created to promote competition in the electricity and piped gas industries. EMA will also continue to promote cost-competitive outcomes for consumers by ensuring a level playing field for competition within the electricity and piped gas industries.

