

PRESS RELEASE

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Users to Benefit from Electricity Micro-Grid on Pulau Ubin

Residents and businesses at Pulau Ubin can now enjoy cheaper, cleaner and more reliable electricity supply from a micro-grid incorporating biodiesel and solar photovoltaic (PV) technology. This is part of an EMA test-bed to assess the impact of intermittent energy sources like solar on grid operations.

2. Unlike conventional power generators which can provide a steady supply of electricity, solar is intermittent in nature as the amount of energy produced is dependent on weather conditions. In other countries, the increasing use of intermittent energy sources like solar and wind has resulted in power disruptions. This challenge needs to be carefully managed to ensure reliability of supply to consumers, especially when solar forms an increasing part of Singapore's overall energy mix in future.

3. Witnessing the launch of the micro-grid on Pulau Ubin, Mr S Iswaran (Minister in the Prime Minister's Office and Second Minister for Home Affairs and Trade & Industry) said, "The learning points from the test-bed will help to enhance our ability to manage intermittent energy sources. It will enable Singapore to maximize the amount of solar and other forms of renewable energy we can deploy when those technologies become commercially viable. This in turn will contribute to our long term goal of diversifying our energy mix and moving towards a sustainable energy future for Singapore."

4. About 30 residents and businesses have signed up for electricity from the micro-grid, built by a local consortium comprising Daily Life Renewable Energy Pte Ltd (DLRE) and OKH Holdings Pte Ltd (OKH), a wholly-owned subsidiary of SGX mainboard-listed OKH Global Ltd. An illustration of the Pulau Ubin micro-grid Test-bed is in [Annex 1](#).

5. "Many Ubin residents and businesses I spoke to shared with me that they have been looking forward to this day. Instead of diesel generators, the island's residents and businesses can now enjoy access to cheaper, cleaner and more reliable electricity supply." said Dr Mohamad Maliki Osman, Minister of State for National Development and Defence, Mayor for South East District and Member of Parliament for East Coast GRC.

6. The test-bed also demonstrates emerging opportunities in the energy sector for Singapore companies. Mr Thomas Bon, Managing Director of OKH, added, “Both OKH and DLRE have worked closely together with government agencies, community leaders as well as the residents and businesses on Pulau Ubin, on all stages of this project. This micro-grid is a demonstration of our Singapore-based companies’ capabilities in smart grid Engineering-Procurement-Construction and will support our regionalisation plans to develop and promote Remote Area Power Utility Services as a sustainable business model.”

7. With the completion of the micro-grid, EMA is now exploring how other companies and research organisations could use it as a platform to develop and pilot energy-related technologies and solutions.

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About the Energy Market Authority

The Energy Market Authority (EMA) is a statutory board under the Ministry of Trade and Industry. Its main goals are to ensure a reliable and secure energy supply, promote effective competition in the energy market and develop a dynamic energy sector in Singapore. Through its work, the EMA seeks to forge a progressive energy landscape for sustained growth. Visit our website at www.ema.gov.sg for more information.

About OKH Global Ltd

With integrated design-and-built capabilities, OKH Global Ltd. is a fast-growing property developer with a track record in developing visually-appealing and functional industrial properties in Singapore. Leveraging on its focus and growth momentum in property development, OKH Global Ltd. aims to further strengthen its capabilities and business presence in Asia and beyond. For more information on OKH Global Ltd., please visit www.okh.com.sg.

About Daily Life Renewable Energy Pte Ltd

Established in 2006, DLRE is principally engaged in renewable energy business activities which include the design and implementation of renewable energy based power systems, advisory services, investment in renewable energy projects, utility services and e-mobility projects. Bringing together expertise from different disciplines, DLRE possesses the experience and expertise to develop sustainable renewable energy solutions to cater to growing energy demands.

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Illustration of the Pulau Ubin Micro-Grid Test-bed

The Pulau Ubin micro-Grid Test-Bed aims to assess the impact of intermittent energy sources like solar on grid operations.



Glossary:

Underground Transmission Lines – Underground electricity cables transmit and distribute electricity from the generators to all end-users of the micro-grid.

Solar Photovoltaic (PV) Panels – Depending on the ambient conditions, roof-mounted solar PV panels convert available sunlight into electricity for the micro-grid.

Biodiesel Generators – Biodiesel (derived from recycled cooking oil) is used to fuel the generators that supply electricity to the micro-grid.

Control Centre and Energy Storage – As the nerve centre that integrates and coordinates the various components of the micro-grid, the Control Centre ensures that the delicate balance between electricity supply and demand is maintained at all times. To enhance its control over intermittent solar energy generation, the Control Centre also houses an energy storage facility that stores solar energy which is channeled into the micro-grid when needed.

End-Users – Residents and business operators at the jetty area on Pulau Ubin who are participating in the test-bed are connected to the micro-grid to receive cheaper, cleaner and more reliable electricity.