ASEAN-Japan Co-creation for Realizing the Maximum Use of Renewable Energy

Kawasaki Heavy Industries,.LTD
Jimmi Ozawa

Kawasaki
Powering your potential
Electric facilities
Edison Electric integrated (Philippines)

Inverter with iVSG
Kawasaki heavy industries (Japan), IKS (Japan)

Fly wheel battery
Amber kinetics (Philippines, US)
Our System

Hydrogen • Gas turbine / CHP

Features
(1) Grid forming
(2) Droop control
(3) Simulated inertia

Power Grid

Benefits
(a) Minimal use of engine
(b) Autonomous load sharing
(c) Improving grid stability
A wide range of decarbonatization technologies has been accumulated by Japanese companies but Energy and Environmental restrictions in ASEAN vary from country to country.

Exporting Japanese solution does not work. ASEAN-Japan Co-creation is essential to modify such solutions to meet global requirements.

Source: IEA report 2021
Asia’s characteristics

### ASIA
- Renewable energy resources: Uneven
- Population and Power demand: Increasing
- Fossil based power plant: Under depreciation
- Natural environment: Low grid coverage

### EUROPE
- Renewable energy resources: Rich
- Population and Power demand: Stable
- Fossil based power plant: depreciated
- Natural environment: High grid coverage

<Key massage>
- There are big differences between Asia and Europe regarding decarbonatization environment. The advanced example does not always fit to Asia.
- Asia is in the process of economic growth. We need to find the way to energy transition while achieving economic growth for our continuous development.
- ASEAN-Japan Co-creation can be a pathway to create a new decarbonization market in Asia.
Our ASEAN Japan Co-creation activity

MOU ceremony in Tokyo, Japan (Feb-2023)
Philippine President Ferdinand R. Marcos Jr (Center)
Mr Sabin Aboitiz, Mr Edgar Chua and Mr Watanabe president of Kawasaki

Decarbonatization tech workshop in Kobe, Japan (Jan-2024)
Dr Nishimura, President of Kawasaki
Guests from Indonesia (PLN), Philippines (DOE), Vietnam (EVN)

<Key massage>

・Kawasaki are good at manufacturing turbines, engines, motorcycles and trains but in reference to CN, different types of approaches are required to enter a new decarbonization market in Asia. This is not something limited to Kawasaki.

・In order to put our accumulated technology into practice, We need to learn actual circumstances from co-creation partners.