Installation of Solar Power System and Energy Storage System to Commercial Facility

Solar & Environment Business Section
ITOCHU Corporation

12th Jul 2017
Outline of the Project

Back Ground

- Big demand for the electricity with economic growth in Indonesia.
- Renewable energy demand based on COP21.
- Contribution to Indonesia by Installation of PV and Battery!!

Main System

Panasonic Module
- HIT 325w x 1560pcs = 507kWp

ABB Inverter
- 50kw x 10pcs = 500kWp

Younicos ESS
- 100kW / 111kW h

Aeon Mall Jakarta Garden City in Eastern Jakarta.
Address: AEONMALL Jakarta Garden City, Kel. Cakung Timur, Kec. Cakung, Kota, Administrasi Jakarta Timur
The electricity from solar power system is supplied to lighting equipment.

- In a daytime, surplus power is charged to storage battery, and it is used during the night.
- The project achieves GHG mitigation by reducing a purchase of the electricity from the electric company.
- Estimated GHG emission reduction is 549t CO$_2$ / year.
507 kWp Solar PV
(1560 of solar panels)
(Panasonic VBHN325SJ47)

Solar PV String Inverters
(ABB TRIO-50.0-TL-OUTD)
Daily solar PV energy generated by Solar PV String Inverters

Irradiance, wind and temperature sensor
(ABB VBN 800-14)

Solar PV Data Logger
(ABB VSN700-05)

Solar PV System and Energy Storage System Monitoring Panel
(Web access to respective remote monitoring system to obtain data)

Monitoring Place: Fire Command Control Room
Monitoring Points:
A. Daily Solar PV energy generated by Solar PV Inverters
B. Daily Energy Storage System charge energy by Converter of Energy Storage System
C. Daily Energy Storage System discharge energy by Converter of Energy Storage System
Monitoring Method:
- Solar Energy remote monitoring system and Energy storage remote monitoring system

Solar Energy Remote Monitoring System
Daily solar energy generated

Energy Storage Remote Monitoring System
Daily battery charge energy
Daily battery discharge energy

Energy Storage System
(Y.Cube 100kW/111kWh)
Energy storage system
Daily charge energy data
Daily discharge energy data by Converter

Internet Router
Internet

Internet
### Project Status

#### System Installation

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Location: Aeon Mall Jakarta Garden city

Points of Attention

- Cooperation with the contractor of the Mall
- Confirmation of Import regulation (Use of domestic material)

PV Installation Work

PV Installation Completion
ITOCHU Corporation has accumulated the know-how of Solar business in the world, and followings are main sections.

1. Solar material trading
2. Solar system trading
3. Solar IPP in Japan and Spain

For “the Global Good”, ITOCHU has continued to contribute to sustainable world, including Indonesia.
THANK YOU !!

On the roof top of ITOCHU Headquarter building (70kW)