

Energy Solutions Inc.



<http://www.energy-itsol.com/e/index.html>

- ❑ Address: Chiyoda-ku, Tokyo
- ❑ Employees: 37
- ❑ Established in 2010
- ❑ Business: Renewable Energy Solutions, Energy Management Solutions, System Development

Outline of the demonstration project

- Demonstration of smart security (Drones & AI) to achieve carbon neutrality

Cooperation with local companies/governments

- Local partners:
Selangor Human Resource Development Centre (SHRDC),
The Malaysian Photovoltaic Industry Association (MPiA),
and TK International Sdn. Bhd.
- Details of cooperation and collaboration:
(1) Demonstration of solar module infrared inspection by drone (2) Opening of on-site training program (3) Establishment of drone eye partner system



Targeted economic/social issues

- The Malaysian government has declared its goal to achieve carbon neutrality by 2050 and is promoting the construction of large-scale solar (LSS) power generation facilities, but if defects in the solar panels are left unchecked, the planned amount of electricity generation will not be achieved. Maintenance and inspections associated with the LSS expansion plan are an urgent issue.

Details of demonstration

- Develop and deploy “Drone Eye”, a drone & AI solar module infrared inspection service, in Malaysia, and verify solar O&M cost reduction at the same level as in Japan.
- Also, training for Malaysian solar O&M operators is conducted to deploy Drone Eye Partner System.

Expected outcome of beneficiary effects

- The system can complete an infrared inspection of a 2 MW solar farm in about 10 minutes, instead of the 2 days required for a ground-based inspection, reducing the inspection time to about 1/100.
- The planned amount of electricity can be secured through the appropriate long-term generation of electricity from solar power generation facilities and the introduction of smart security.