## Study of Intelligent Power Systems with Renewable Energy

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## Objective

- Constructing disaster-resilient communication networks and power systems with renewable energy such as solar or wind powers for realizing safety and comfortable society.
- Diffusing the use of Independent power systems with batteries, and building second power-line networks by connecting the independent power systems with low-voltage DC power transmission
- Diffusing the use of a DC power feeding system which is suitable for the use of LED lighting systems or intelligent home appliances with batteries



Sun tracking solar panel (test model)

## **R&D** Items

- 1. Sun tracking solar panel
- 2. Intelligent power systems for controlling communication network
- 3. DC power supply systems for operating LED lighting systems or intelligent home appliances by batteries
- 4. Battery operable electrical equipments or a DC/AC Inverter operated under large striking current
- 5. Networking technologies of independent DC power sources
- 6. Study of mutual connection between the independent power systems and existence power networks



Intelligent power system for controlling network (Supported by MIC program)