

# **Okinawa's efforts towards a Smart Energy Island**

Industrial Policy Division  
Department of Commerce, Industry and Labor  
Okinawa Prefectural Government

# Aspects of Okinawa



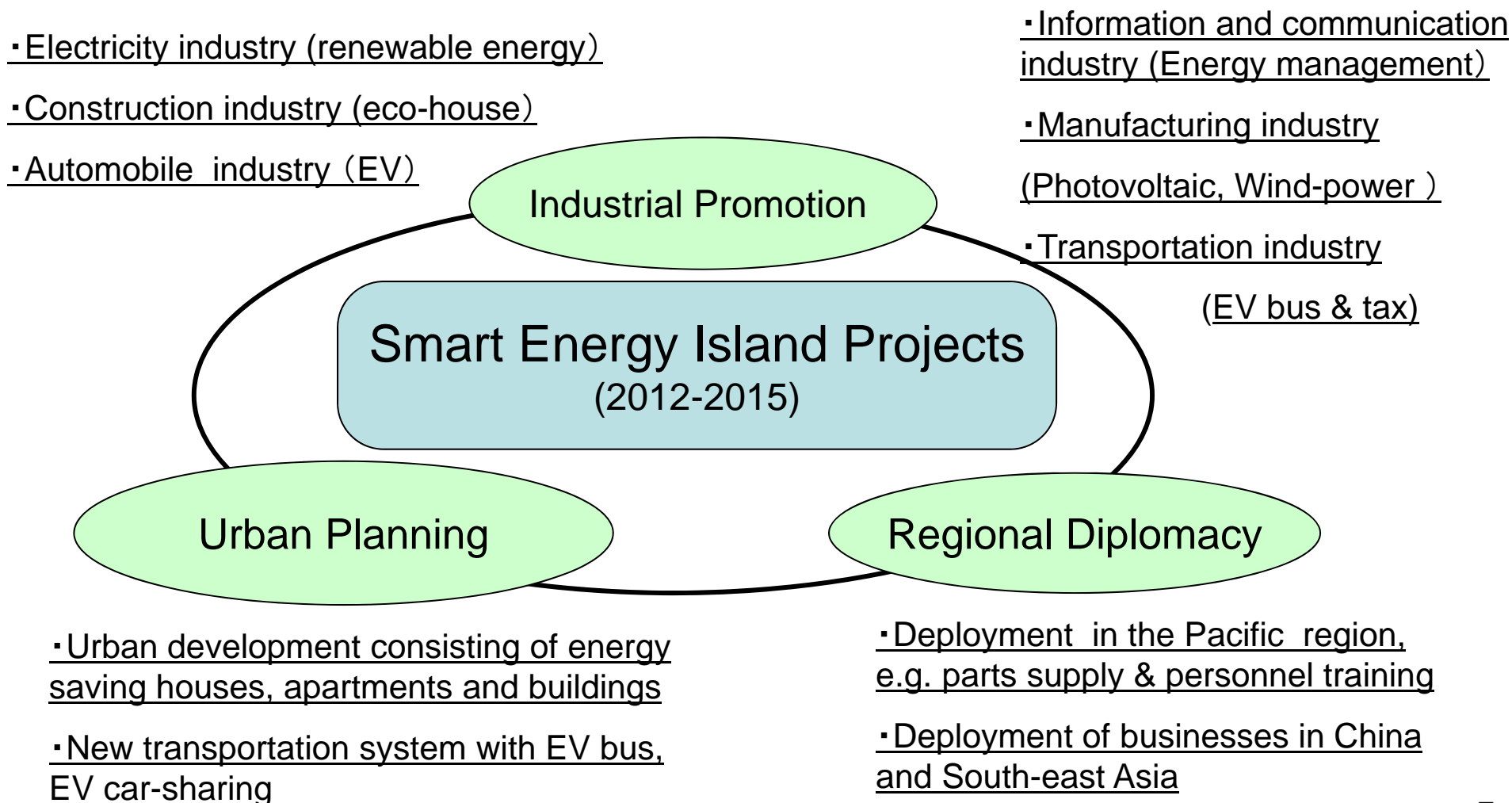
## The targets of Okinawa's energy policy

1. Decreasing dependency on fossil fuels
2. Diversifying sources of energy supply
3. Improving energy self-sufficiency rate

## Deployment of the strategic energy projects for achieving the aforementioned targets

- (1) Constructing large-scale mega-solar generation facilities on each island of Okinawa
- (2) Promoting micro-grids
- (3) Introducing natural energy suited to remote islands
- (4) Promoting electric vehicles
- (5) Promoting biofuels
- (6) Promoting the utilization of natural gas
- (7) Supporting research for the utilization of unused energy

# Overview of Okinawa Smart Energy Island Projects



## Demonstration of deploying photovoltaic and wind-power generation

In the northern part of the main island of Okinawa

1. Installing the 1MW photovoltaic plant and the 4MW wind-power plant
2. Testing the electric power stabilities of renewable energy in connection with power grids by using storage batteries
3. Establishing necessary technologies that enable to connect an expanded 25MW wind-power plant with power grids.



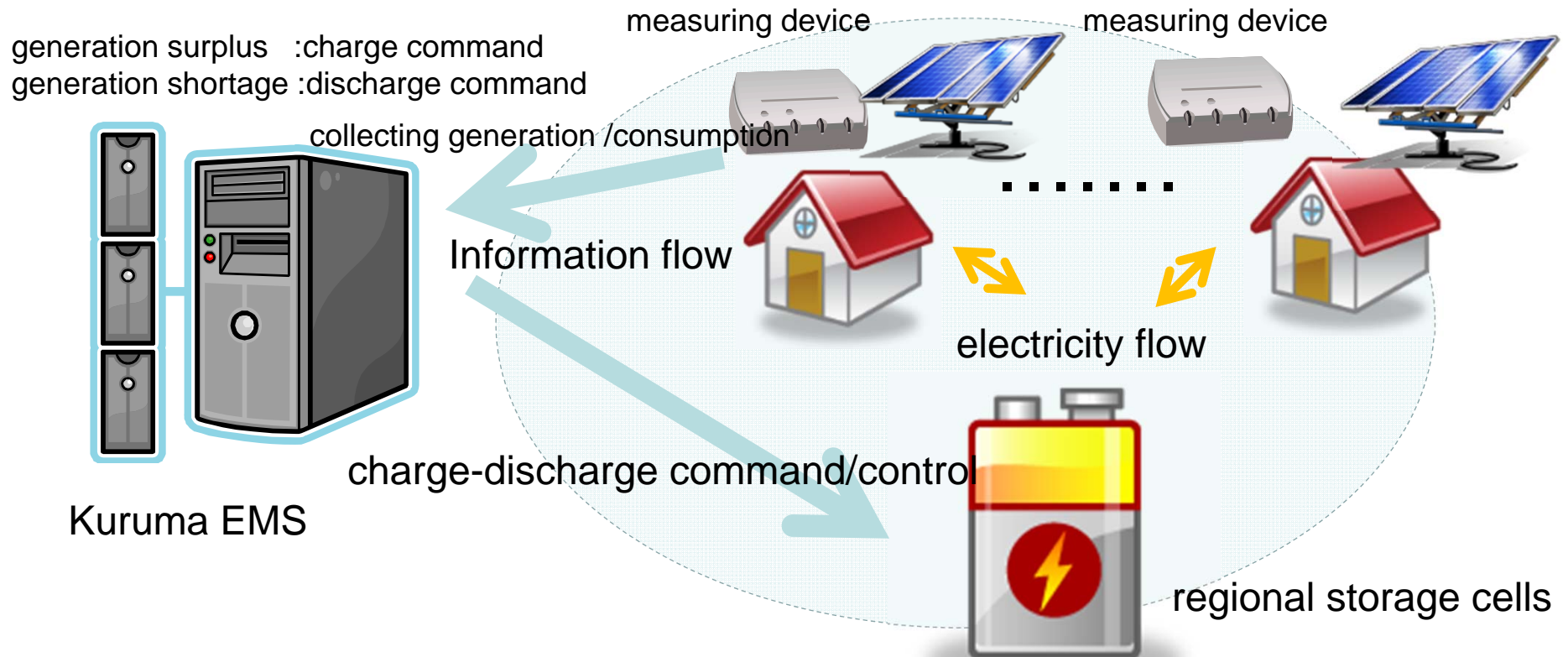
**1MW photovoltaic plant**



**4MW wind-power plant**

# Overview of the Micro grid system in Miyako island

Local production for local consumption: 100% self-sufficient

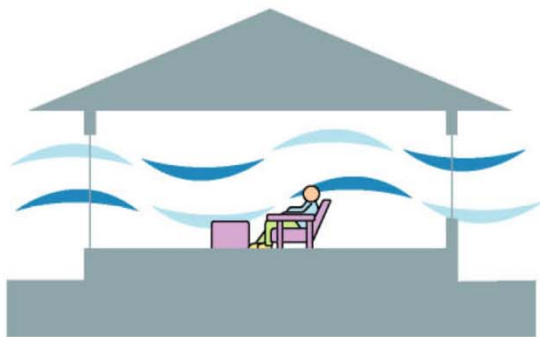


# Demonstration of energy-saving houses suited to a subtropical region

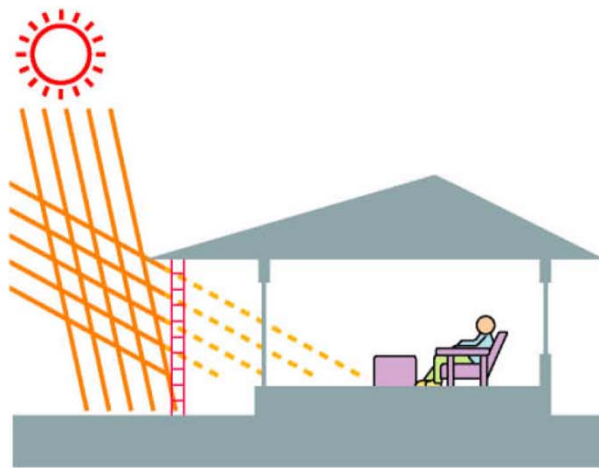
1. Review of the concepts and guidelines regarding energy-saving houses suited to a subtropical region

2. Demonstration test on energy-saving houses suited to a subtropical region

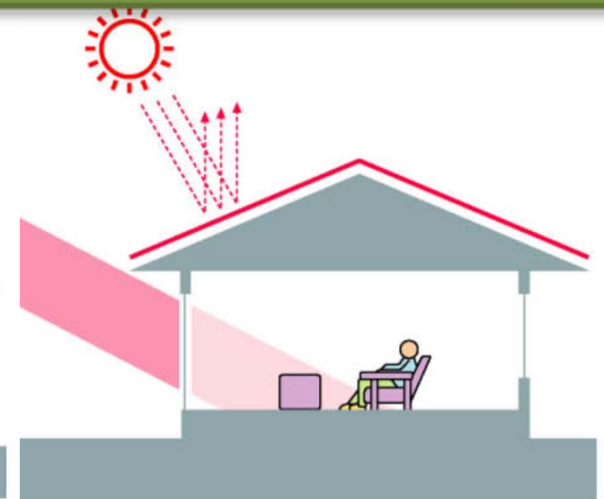
3. Promotion and personnel training regarding energy-saving houses suited to a subtropical region



Utilizing the natural wind



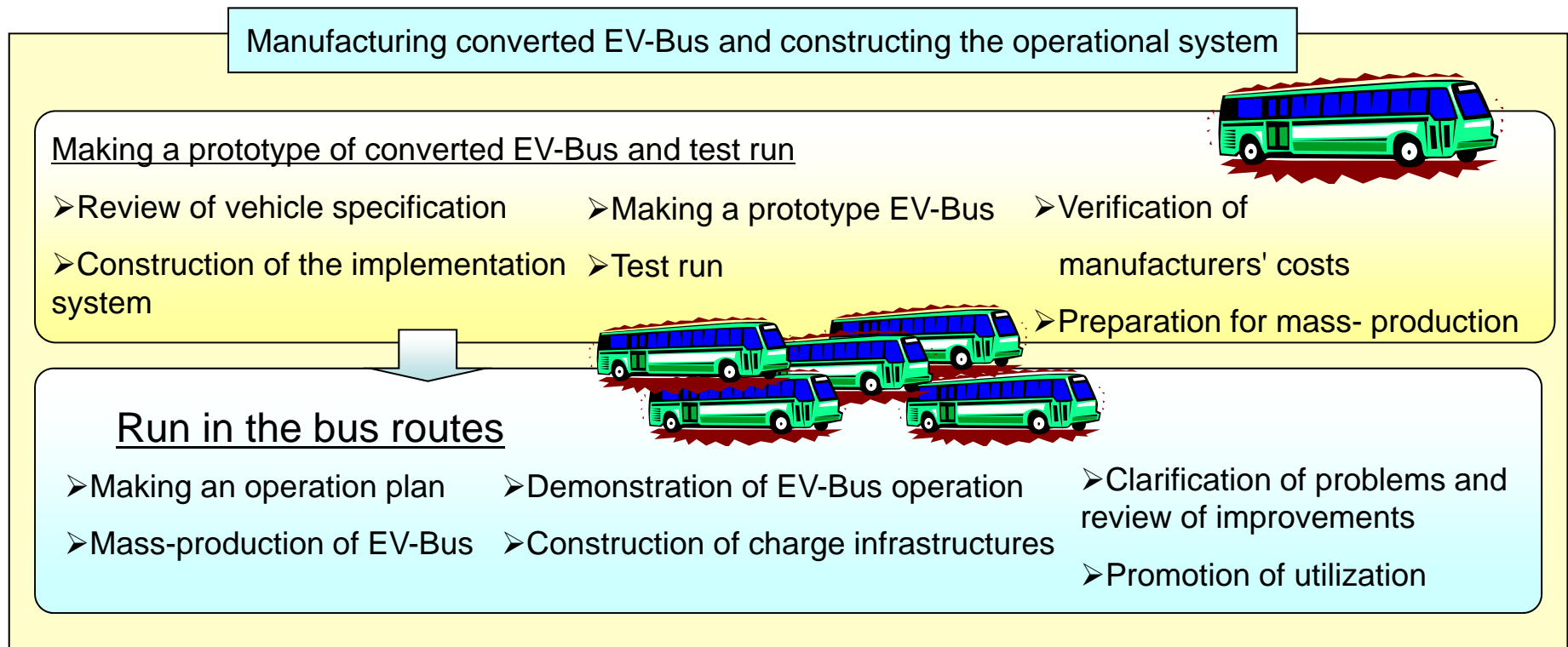
Blocking the sun's rays



Shielding the heat



# Demonstration projects of manufacturing converted EV-Bus and constructing the operational system



Expansion of EV-convert projects by local companies and access to the EV- market,  
Reduction of pollution in Bus-transportation and Increase in the number of EV users