

**METI**

*Ministry of Economy, Trade and Industry*

# **Japan-U.S. Economic Cooperation on Clean Energy and Others**

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JAPAN

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# **I. Japan-U.S. Clean Energy Technology Cooperation**

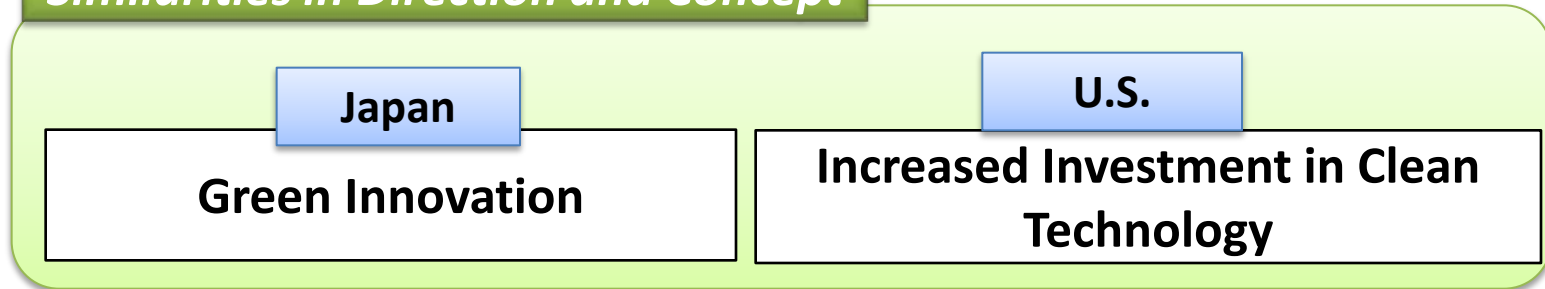
- ✓ Agreement on Clean Energy Technologies at Japan-U.S. Leaders' Meeting (Nov.2009)
- ✓ Hawaii-Okinawa Clean Energy Cooperation
- ✓ The new initiatives at Japan-U.S. Leaders' Meeting (Nov.2010)

# **II. APEC 2010/2011**

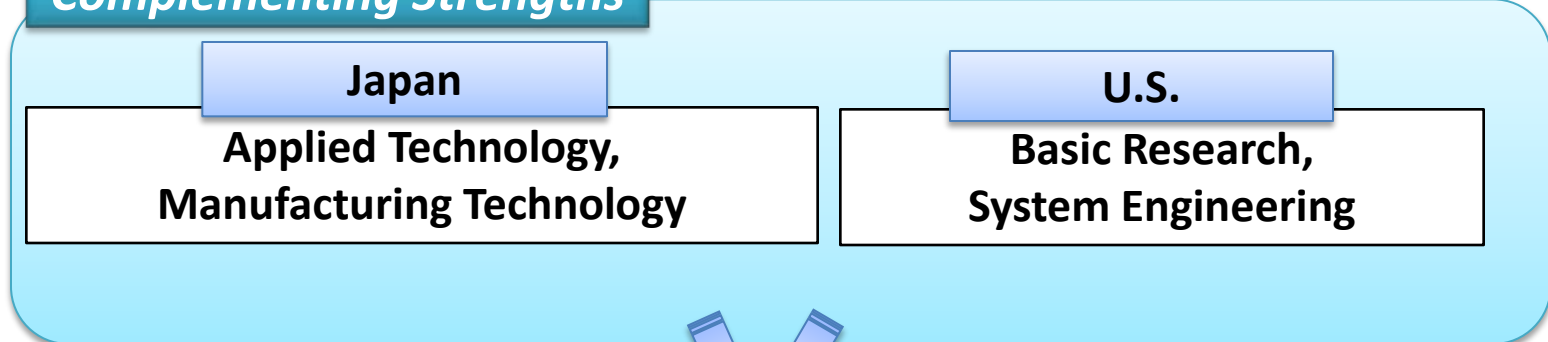
# **III. U.S.-Japan Cooperation to Promote Innovation, Entrepreneurship and Job Creation**

- ✓ Cooperation between Japan-U.S. private Sector

## *Similarities in Direction and Concept*



## *Complementing Strengths*



*Japan and the U.S. can lead the world by combining strengths of both countries*



- ① An integrated solution to Energy Security and Climate Change Challenges
- ② A new core of Japan-U.S. Partnership

- **Prime Minister Hatoyama and President Obama met in November 2009**
- **The two leaders agreed to clean energy technologies cooperation and issued the Fact Sheet**

METI and DOE identified the initial areas for the joint activities concluded as "**Clean Energy Technologies Action Plan**".



## Themes for Partnership

- ◆ Cooperation between National Labs
- ◆ CCS (Carbon Capture and Storage)
- ◆ Energy Efficiency
- ◆ Okinawa- Hawaii Cooperation
- ◆ Smart Grid
- ◆ Electric Vehicles
- ◆ Nuclear Energy

## Fact Sheet (extract)

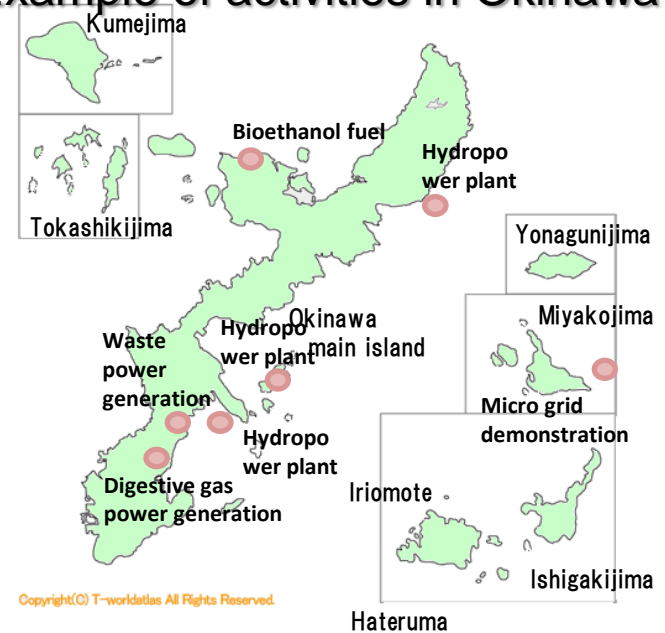
**Establishment of a task force that will evaluate the achievements of existing clean energy projects in Okinawa and Hawaii to enable the islands to be energy independent, including micro-grid projects, and develop activities to help the two islands share experiences and knowledge with each other**

## Significance of cooperation

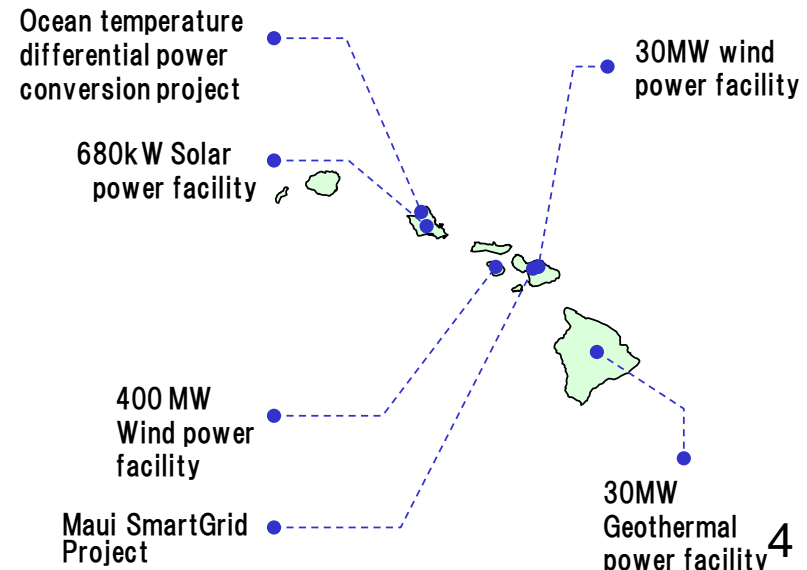
Okinawa and Hawaii shares many similarities including;

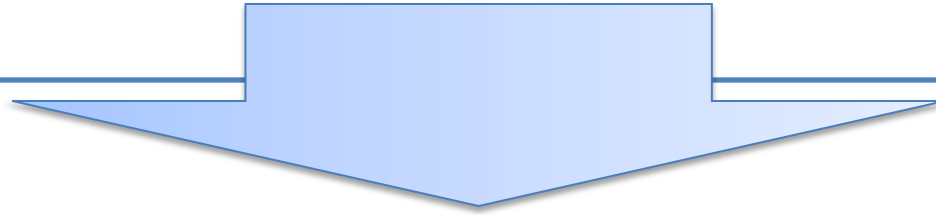
- geographical conditions (island)
- climate condition (subtropical to tropical)
- energy structure (highly dependent to fossil fuel)
- proactive approach to renewable energy

## Example of activities in Okinawa



## Example of activities in Hawaii





- Maximum synergy is expected by sharing best practices of two environmentally similar areas.
- By installing renewable energy and promoting energy efficiency, as a model for remote islands, this cooperation could become a show case for the world.
- **Okinawa –Hawaii cooperation as a tangible Japan-U.S. cooperation**

**MOC for Hawaii-Okinawa Cooperation was signed by Economy, Trade and Industry Minister Naoshima, U.S. Ambassador to Japan John V. Roos (on behalf of the U.S. Department of Energy), Governor of Okinawa Nakaima and Governor of Hawaii Lingle, on June 17, 2010 at METI**





## Scope

- ✓ Renewable energy
- ✓ Energy efficiency
- ✓ Energy policy
- ✓ Smart Grid and/or Smart City

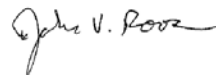
MEMORANDUM OF COOPERATION  
AMONG  
THE UNITED STATES DEPARTMENT OF ENERGY  
AND  
THE MINISTRY OF ECONOMY, TRADE AND INDUSTRY OF JAPAN  
AND  
THE STATE OF HAWAII  
AND  
THE PREFECTURE OF OKINAWA  
CREATING  
THE HAWAII-OKINAWA PARTNERSHIP ON CLEAN AND EFFICIENT ENERGY  
DEVELOPMENT AND DEPLOYMENT

United States President Obama and Japanese Prime Minister Hatoyama November 2009 discussed the advantages of the United States of America and Japan, the two largest funders of science and technology research, joining forces to work toward development and deployment of the transformative technologies needed to solve global energy security and climate change challenges. The two leaders affirmed their intent to expand already strong cooperative activities in technology research and development to provide these solutions as mentioned in the Fact Sheet: Japan-U.S. Cooperation on Clean Energy Technologies November 2009. Working together, the United States and Japan have the potential to increase the likelihood that commercially viable technologies will be developed and their deployment accelerated.

The expansion of activities is reflected in the U.S.-Japan Clean Energy Action Plan developed by the U.S. Department of Energy and the Japanese Ministry of Economy, Trade and Industry. As part of the Action Plan, both sides are initiating

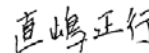
Signed at Tokyo, in quadruplicate, this 17 day of June, 2010.

FOR THE UNITED STATES DEPARTMENT OF ENERGY:



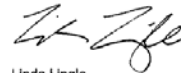
John V. Roos  
Ambassador Extraordinary and Plenipotentiary of the United States of America  
to Japan

FOR THE MINISTRY OF ECONOMY, TRADE AND INDUSTRY OF JAPAN:



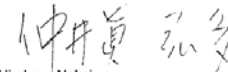
Masayuki Naoshima  
Minister

FOR THE STATE OF HAWAII:



Linda Lingle  
Governor

FOR THE PREFECTURE OF OKINAWA:



Hirokazu Nakaima  
Governor

## Forms of Cooperative Activities

- ✓ Exchanges of information on lessons learned in policy development and implementation
- ✓ Investigation into the potential for joint research into technology issues
- ✓ Demonstration projects focused on proving the technical and economic viability of technologies relevant to both island economies
- ✓ Exchanges of information on legislative best practices
- ✓ Academic exchanges

**To identify areas of cooperation and joint projects, an expert mission was send to Hawaii and Okinawa in August 2010.**



Courtesy call to Deputy Governor Uehara in Naha



PV panels in Miyako-island



Visit to Forest City houses in Honolulu

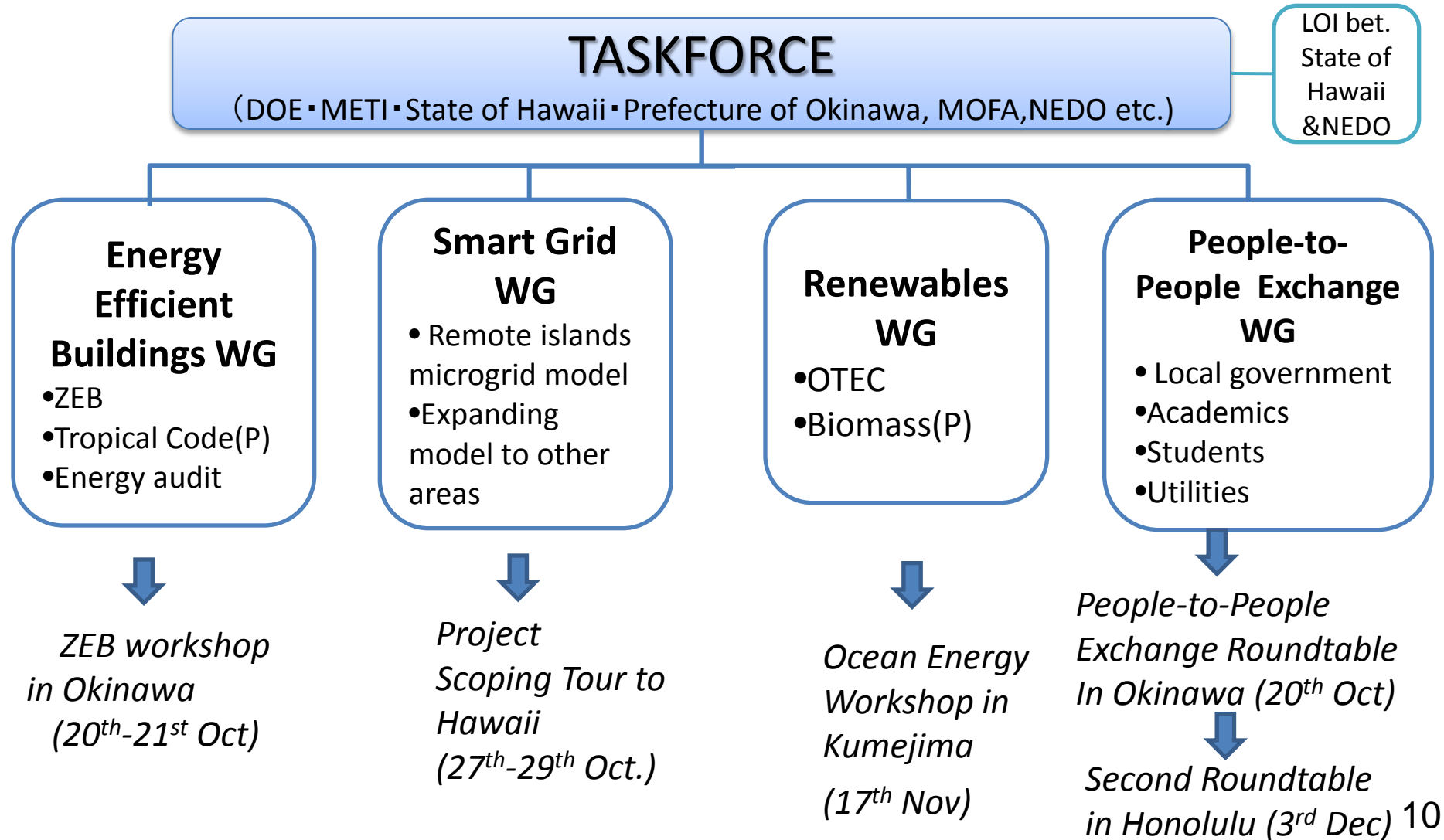


Visit to NELHA(Natural Energy Laboratory of Hawaii Authority) in Hawaii Island



Second Taskforce Meeting in Honolulu

**Second Task Force Meeting was held in Honolulu on September 3<sup>rd</sup> to identify tangible cooperative activities in different areas.**



# Hawaii-Okinawa Clean Energy Cooperation and Innovation

(Examples of exiting activities)

Smart Grid in Miyako Island



Itoman City Hall(Energy efficiency Building)



CSP in NELHA



Kaheawa I Wind Plant



New cooperative projects under Okinawa-Hawaii Cooperation

Showcase of the new energy model for isolated islands  
and remote areas

**Innovation for world Global**  
**Environmental Energy Technology**



**On the occasion of Yokohama APEC Economic Leaders Meeting, Prime Minister Kan and President Obama met and launched new initiatives related to Clean Energy on the basis of the ongoing cooperation on the clean energy technology.**

- 1. Energy-Smart Communities Initiatives (ESCI)**
- 2. U.S.-Japan Clean Energy Dialogue**



**New initiatives became more concrete at the bilateral meeting between METI Minister Ohata and DOE Secretary Chu on 18<sup>th</sup> November in Tokyo.**



## Energy-Smart Communities Initiatives (ESCI)

Initiative led by Japan and US establishes comprehensive package of project which will be open to other APEC economies.

### 【Smart Power Grids】

- ✓ Evaluating the clean energy potential of smart grid technologies
- ✓ Setting forth a technology road map

### 【Smart Transport】

- ✓ Documenting and disseminating practical approaches for energy-efficient Low Carbon Model Towns
- ✓ Sharing best practices for fuel efficient freight transport and promoting EVs.

### 【Smart Buildings】

- ✓ Documenting and demonstrating the Cost effectiveness and energy savings of cool roofs technologies
- ✓ Sharing best practices for new and retrofitted low-energy buildings.

### 【Smart Jobs & Consumers】

- ✓ Developing clean energy education programs and sister school projects



**U.S.–Japan Clean Energy Dialogue**

**Transformative  
Clean Energy  
Technologies**

**EV and Plug-in  
Hybrid Vehicles**

**Rare earth  
mining and  
alternative to  
rare earth  
elements**

**Okinawa–  
Hawaii  
Cooperation**

**Global  
Nuclear  
Energy  
Cooperation**

## 1. Leaders' Declaration: "THE YOKOHAMA VISION – BOGOR AND BEYOND"

APEC's Road Thus Far



Current Opportunities and Challenges



The Way Forward for APEC

1. APEC community  
'Economically-integrated community',  
'Robust community', 'Secure community'

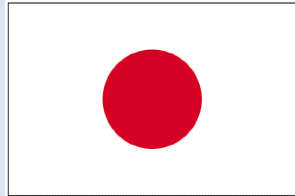
2. Paths toward our vision of an APEC community

2. Statement on 2010 Bogor Goals Assessment

3. APEC Leaders' Growth Strategy

4. Pathways to FTAAP  
(Free Trade Area of the Asia-Pacific)





**2010 APEC  
(YOKOHAMA, JAPAN)**

Theme: Change and Action



## APEC's New Vision for Action

### I. Regional Economic Integration

### II. Growth Strategy

1. Balanced Growth
2. Inclusive Growth
3. Sustainable Growth  
(Green Growth)
4. Innovative Growth
5. Secure Growth

### Shift to green economy

- Promoting energy efficiency and low-carbon energy
- Improving access for environmental goods and services (EGS)
- Promoting energy conservation activities through green ICT

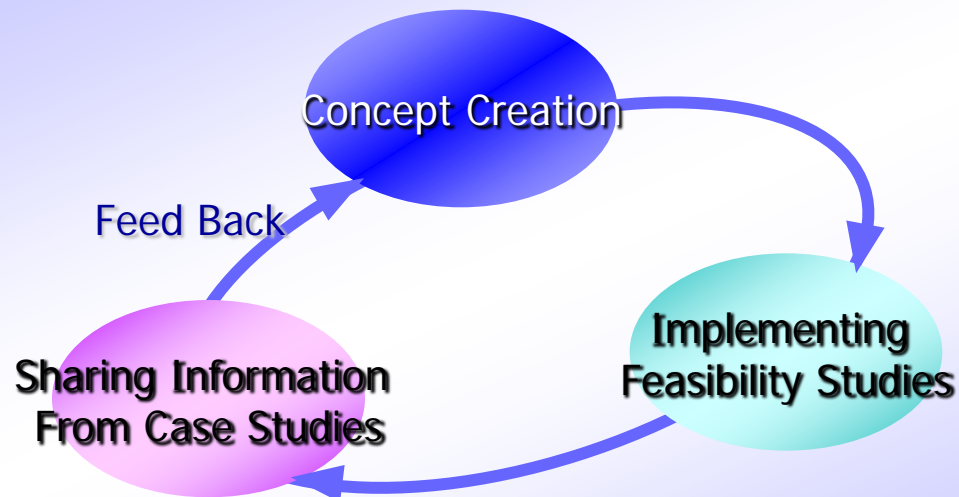
APEC Low-Carbon  
Model Town Project



**2011 APEC  
(HAWAII, U.S.)**



- Former METI Minister Naoshima proposed the Low-Carbon Model Town Project at APEC Energy Ministers' Meeting (EMM9) held in Fukui, Japan and was agreed by APEC Energy Ministers (Japan will contribute 1 billion yen in three years).
- It was agreed to implement Tianjin City Project proposed by China at the EMM9 as the first case of the Project.



- **METI and DOS(Department of State) established a dialogue which aims to support innovation, entrepreneurship, investment and to create new job through partnership between US and Japan. The first meeting was held on May 27<sup>th</sup>.**
- **Clean energy is considered to be a high potential area of cooperation. As such, both sides are planning the second meeting and a symposium focusing on Clean Tech to be held in February 2011 in Silicon Valley.**



**Thank you very much  
for your attention!!**