Making Community Power Happen:
The progress report and findings on Japanese Community Power

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概要

1. Overview of Community Power in Japan
2. Lessons Learned by Pioneers’ Experience
3. Emerging Community Power Initiatives
4. The Case of Odawara Renewable Energy Council
5. Concluding Remark
1. Overview of Community Power in Japan

Brief History of Community Power in Japan

- 2001: 1st Community Wind
- 2003: 1st Community PV & Efficiency
- 2005: 1st Community Wind
- 2006: 1st Community Biomass & Efficiency
- 2008: 1st Community Hydro
- 2010: 1st Community Hydro
1. Overview of Community Power in Japan

- Over 6,000 investors, 3.8 billion yen
- 100,000〜500,000 yen/lot
1. Overview of Community Power in Japan

Citizen financing community power project model

- Investor (Citizen)
  - Invest
  - Principal Dividend

- Funding company
  - Financing
  - Repayment Interest

- Local Energy Enterprise
  - Support Policy
  - Electricity
  - Electricity Fee

- Electric Utility

- Government Municipality
2. Lessons Learned by Pioneers’ Experience

From the case of pioneer community wind
- Amateur NPO staffs learned the wind power project development by cooperation with experts, especially “language of finance” (project finance, non-recourse loan or anonymous association etc.)

From the case of pioneer community PV
- Long-term roof top use permission at public facilities: Importance of continuous and dialogical approach between the public sector and private sector

Each case has local contexts
- There is no single perfect solution
- Which part of knowledge can we transfer?
3. Emerging Community Power Initiatives

Support program by Ministry of Environment

Objective

• Setting up local base for renewable energy
  • Organizing local renewable energy council
  • Appointing local coordinators
  • Making concrete business plan
  • Exploring fund-raising options
  • Building social consensus
  • Realizing the business project
3. Emerging Community Power Initiatives

7 places of community power candidates

- Hokkaido (Ishikari City and Niseko Town)
- Odawara City
- Nagano Prefecture
- Shizuoka City
- Tokushima Prefecture
- Kochi Prefecture
- Obama Town
4. The Case of Odawara Renewable Energy Council
4. The Case of Odawara Renewable Energy Council

Odawara City

- West part of Kanagawa
- Population of 197,000
- Warm climate
- Surrounded with Hakone mountain, Sakawa river and Sagami bay
- Historical castle town
- Major commercial center
- Bedroom community for Yokohama and Tokyo
4. The Case of Odawara Renewable Energy Council

- Mayor’s initiative for local renewable energy after 3.11
- Odawara City applied for the support program of Ministry of Environment, and adopted as model city in 2011 fall
- Organized “Odawara Renewable Energy Council” as a local space for planning and consensus building
  - Two coordinators from the council members
  - Distributed PV project planning team
  - Secretariat: Odawara City environmental policy unit
4. The Case of Odawara Renewable Energy Council

Planning of Distributed Solar PV Project

- Council
- Information to Citizen
- Cooperation to Odawara City
- Set up support to Local Energy Company
- Policy support to Solar Energy SPC
- Ownership to Local Banks
- Return to Fund
- Investment to Citizen
- Finance to Local Energy Company
- Return to Solar Energy SPC

- Public Facilities
- Total 198kW (Tentative)
- PV installation & Service fee

- Local Banks
- Return to Council
- Return to Fund
- Return to Local Energy Company
- Return to Solar Energy SPC
4. The Case of Odawara Renewable Energy Council

Public Communication – Survey Research

Household
- Renewables are needed for the energy supply diversity: 04.3%
- Renewables are needed for the climate security: 11.4%
- Renewables are needed for the safe energy security: 33.8%
- Renewables are needed for the making of new industry: 19.6%
- No need for the promotion of renewables: 00.5%
- Don’t know about renewables: 00.0%
- No answer: 00.0%

(n = 542)

Office
- Renewables are needed for the energy supply diversity: 13.5%
- Renewables are needed for the climate security: 19.3%
- Renewables are needed for the safe energy security: 29.8%
- Renewables are needed for the making of new industry: 26.3%
- No need for the promotion of renewables: 10.5%
- Don’t know about renewables: 08.8%
- No answer: 00.0%

(n = 57)
4. The Case of Odawara Renewable Energy Council

Public Communication – Survey Research

Household

- Considering PV installation: 36.6%
- Don’t have plan to install PV: 38.1%
- Don’t know: 18.4%
- No answer: 3.9%
- Already installed: 0%

Office

- Considering PV installation: 40.3%
- Don’t have plan to install PV: 35.0%
- Don’t know: 21.1%
- No answer: 11.9%
- Already installed: 0%
4. The Case of Odawara Renewable Energy Council

Public Communication – Group Interview

**Unique Trait in Odawara**
- People in Odawara think a great deal with what they have, but put up guards to the new comers. So when you engage in new activities, you have to be careful, otherwise will be rejected.

**Image of Solar PV**
- It costs a lot.
- It does not generate electricity at night.
- I understand the importance, but it sounds “leap” at this moment.

**Citizen Investment**
- I’m interested in citizen investment, but ¥100,000 make me draw back.
- It sounds nice as practice.

**Worry**
- If I decided to install PV, I don’t know how to do it.
- I’m worry about durability and deterioration.
- Some media says PV is good, and other media says bad. I need right information.

**Public Communication**
- I need more plain entry-level information to understand the importance of renewable energy.
- It will be fun if you hold hands on events to be familar with renewable energy.
5. Concluding Remark

- After 3.11, dozens of community power initiative have emerged and 7 places started the formal planning process with the support of Ministry of Environment.

- As shown in Odawara case, the planning process of community power is learning process from pioneer leaders.

- Basic ideas or concepts of the pioneer cases would be transferable to the emerging cases, such as business model or finance model, however it is important to be careful about unique local contexts.

- So as to communicate better with local citizen, supporting institutions need to make careful effort to identify unique local contexts.

- Global network of community power supporting institutions might play significant role for the further development of community power.
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http://goo.gl/khrZK
Networking of Energy Academies (Tentative)