Community Power Development: Experiences & lessons in Japan Invitation to an on-site workshop in Japan, organized by ADBI

Kazuo Matsushita

Professor Emeritus, Kyoto University (Environment and Sustainability Policy) Institute for Global Environmental Strategies (IGES) 2011.3.11

- The Great East Japan Earthquake
- Fukushima Daiichi (F1)
 nuclear power plant
 accident

2012.7.1

- Introduction of Feed-in Tariff (FIT)



福島第一原子力発電所1~4号機の被害状況 2011年3月19日



Current energy mix in Japan

Decrease of energy consumption, increase of coal, LNG and renewables



Power Generation in Japan(FY1990 - 2016)

Increase of renewables in Japan

FIT has worked well, particularly for PV

2011 Fukushima Daiichi nuclear accident. 2012 Introduction of FIT



Community power is important!

Three basic principles :

Community energy is any combination of at least two of the following elements:

- Local stakeholders own the majority or all of a renewable energy project.
- Voting control rests with a community-based organization.
- The majority of social and economic benefits are distributed locally.

source: Community Power Working Group of the World Wind Energy Association (WWEA, 2011), supported by the Community Energy Group of the Coalition for Action.

Invitation to an on-site workshop in Japan,

organized by ADBI in August 2018



80 Organization of Community Power, total 90 MW source: ISEP

Background of community power

- Existing power generation
 - centralized
 - monopoly or large company
 - large scale funding
 - national government
- economic efficiency, stockholders' interests

- Community power
 - distributed & renewable
 - SME, local organizations, NPOs, coops
 - community fund, crowd funding
 - local government
 - social & public benefits, local benefits

Niigata as a center of community financed renewable energy projects



Niigata Study Tour & Workshop in August 2018 organized by ADBI

8 th Wed.	Arrival in Niigata	
9 th Thus.	Morning Session	 Dean Naoyuki Yoshino (ADBI) Prof. Kazuo Matsushita (Kyoto University) Prof. Hiroshi Sasaki. (Niigata University of International and Information Studies) Mr. Tetsunari Iida. (Executive Director of ISEP) Niigata City Staff(TBD)
	Study Tour in Niigata City	 Kurosaki City Hall (Leasing of Public Roofs) Ground mounted Solar PV on private land Solar sharing project
10 th Fri.	Tour in Murakami City	Solar PV on top of a former pig farm Solar PV at the Sewage Treatment Plants (Public Facility) Small biogas plant by a fruits farmer
	Workshop	Lessons learned How to make use of it in your country
111 th Sat.	Return to Tokyo	

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市民エネルギー協議会

Sites of Niigata Community Power Study Tour in August, 2018

Niigata City







Site in Masuoka (57.6kW) Private Project



Solar Sharing (TBD) Private Project

Murakami City



PV on former pig farm (46kW)

-協議会



the Sewage Treatment Plants (80kW)



Small biogas plant in farm (option)





NIIGATA CITY

MURAKAMI CITY



Suggestions to promote community energy

- Pursue explicit recognition of community power and its benefits
- Encourage citizen participation through community energy
- Develop effective business models for community financed energy projects
- International organizations, could include community energy as a priority in their work programs.
- Learning among pioneers and new entrants is one of the keys for community energy's further development.

For more details: come to join us @Workshop on Opportunities and models for early-stage and community-based renewable energy project finance, PM of 8 June