Renewable Energy Use in Local Communities: For Our Future

Community Wind Power in Hokkaido

Community Wind Power

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Community Wind Power Initiatives

- What is community wind power?

- Wind power generation projects undertaken with the participation of the community through investment and so on
 - A major business structure in countries such as Denmark and Germany
 - Around 80% of wind turbines in Denmark are owned by individuals or associations

- Significance and effects

- Through citizens themselves taking part, awareness of environmental energy issues is raised. In addition, social interest in natural energies expands, which helps to promote introduction
- Through these projects, local residents make use of untapped natural resources in their own region for the betterment of that region, and contribute to the formation of a sustainable society.



Ishikari Community Wind Power Plant Service commended in January 2008

Rules in early wind power cooperatives in Denmark

- Residence clause: Only a person who lives within 3km from the wind power and belongs to same communal power system can invest and attain membership for the wind power cooperative
- Consumption standard: A member can purchase the membership up to the amount for household consumption, maximum 7,000kw
- Land use planning: Each district has to create a land use plan related to wind power

Source: Tetsunari lida "Energy Democracy in Northern Europe" (2000)

The Three Principles of Community Power

- 1. Regional stakeholders own all or a majority of the project
- 2. Project decisions are made by an organization based in the community
- 3. All or a majority of social and economic benefits are distributed throughout the region

*Projects that meet at least two out of these three standards are defined as "Community Power."

Source: World Wind Energy Association Community Power Working Group

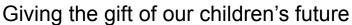
Track Record of Community Wind Power

- Cumulative total of 18 installations with facility capacity reaching 28,990kW (As of January 2015)
- Generating enough electric power to supply around 18,000 regular households (Forecast generating output of 67 million kWh / year)



Gathering Smiles with Community Wind Power









Isn't my wind turbine fantastic?







From all around the country, people are gathering under community wind turbines!

Community Investment Participation

With community investment, investments are sought from regular citizens who approve of a project, such as natural energy to prevent global warming, and natural energy facilities are introduced based on those investments.

This is a business structure that is able to link a philosophy with profit, and strikes a balance between the basic philosophy of a "sustainable society" with businesses in the economic market. To citizens, it represents the utilization of resources as "investments" rather than "donations," and to companies, it offers social significance and the ability to

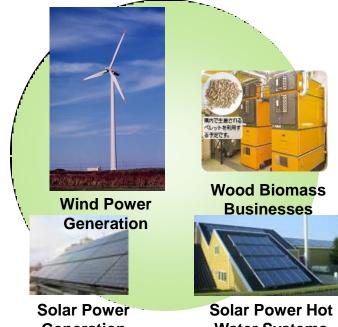
empathize with citizens.



Regular Citizens



Dividends



Generation

Water Systems

Various natural energy projects underway all over Japan

A mechanism whereby cash, profits and losses are distributed to investors based on business revenue from the facilities.

The Significance of Community Investment Participation

Community investment-type (natural) energy projects offer multi-faceted added value not present in projects financed by existing companies.

To Stakeholders

- A casual opportunity to contribute to the environment (Environment)
- "We can do XXX (power generation, participation in business, etc.) ourselves" (Awareness of Ownership)
- Instead of a donation, the investment has greater expected profits than bank deposits or postal savings (Economic Efficiency)
- Involvement of energy consumers in energy production (Higher Awareness of Selecting Energy for Oneself)

To Business Operators

- Direct financing method (risk money with low financing cost), etc.
- Easy to resolve social conflicts and issues specific to the region (local and noise problems, issues with various interests and rights)

To (Regional) Society

- Creation and development of a wide range of small-scale natural energy projects in which large companies cannot take part
- Creation of a community-based energy industry
- Environmental education and environmental dissemination and awareness-raising effects for the local community



Japan's first community investment-type wind power plant (Hamakaze-chan in Hamatonbetsu-cho, Hokkaido)

Achievement of Community Wind Power

- Established first civic fund for renewable energy projects in Japan (2001)
- Developed finance scheme with community/civil participation
- JPY 2.4 bil. (approx. USD 20mil.) raised from 4,000 people and realized "My wind power"
- Credibility from continuing 2-2.5% dividend
- Enhanced social sharing and receptivity of benefit
- Created 30 employment as a group organizations (also improving the quality of operation and maintenance by holding professional human resource)
- Becoming a support organization to maintain wind turbines of other community energy companies, etc
- Ohisama Energy Fund was established in 2005, by using same scheme to start civic fund for solar power (JPY 4 bil. from 6,000+ people as a whole civic funds)



Donation to Ishikari City "Environmental Community Development Fund"

