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Local preferences for distributional and procedural justice in wind energy projects: Insights from a Choice Experiment

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Abstract:

While the general acceptance of wind energy generation is very high in Germany, there is considerable disapproval among people faced with local wind energy projects. The German Energy transition will inevitably lead to a significant increase in wind energy projects in rural areas thus affecting an increasing number of local residents. Current planning- and decision procedures often lead to undesirable opposition, thus delaying the implementation of the energy transition. In order to raise acceptance, there is need to reform the design of the current wind energy policy, which involves very restricted participatory elements and influence of local residents (procedural injustice) and a disproportional amount of costs faced by the communities (distributional injustice). The German Government is currently desperately searching for ways to improve local acceptance. We conducted focus groups

and a survey-based choice experiment with the local general public to identify the importance and local preferences for policy features. About 400 rural residents participated in the survey via the internet. We just finished data collection and have started with the analysis. Preliminary results show that procedural aspects are highly desired by the local public and that distributional justice, i.e. purchase options for shares, is regarded as the least important attribute. Data analysis will be continued throughout the summer and results will be presented at the conference.

Does economic participation in wind power plants increase acceptance? Remarks regarding a law providing citizens and communities financial participation in the development of wind energy

Jana Bovet

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Abstract:

The German population's acceptance of renewable energy is very high: 92% think that an increasing development of renewable energies is "important" or "extremely important". The acceptance of wind energy is also high. At the same time it can be seen that there is often opposition to these projects: when implementing wind power plants locally, frequently there are local groups or citizens' initiatives that are against wind power.

Besides the general attempts to improve the quality of participation by enriching the planning process for wind energy, economic participation in wind power plants is discussed as a particularly important aspect in order to increase local acceptance. Existing legal instruments assuring economic participation focus on compensation to property owners whose land is used for wind power plants or business tax revenue of municipalities. Direct economic participation for citizens exists only in so-called Bürgerwindparks. These are community wind energy projects that are managed only by citizens. But since the existing planning law has no instruments to enforce this operator model there is no possibility to ensure their implementation.

In Mecklenburg-Vorpommern ? a German Bundesland (federal state) in the north with a lot of wind ?, in April 2016 a law passed the legislative process which foresees the obligatory financial participation of citizens and communities to onshore wind turbines. In developing such a law Mecklenburg-Vorpommern builds new policies, as there is presently no comparable regulatory requirement for such participation in Germany. In Denmark however, the idea of legally imposed economic participation has already been implemented and practiced since 2009 (Lov om fremme af vedvarende energi).

In my talk I will present and analyse the law in Mecklenburg-Vorpommern by giving a legal comparison with the Danish regulation. I will comment on its legitimacy and discuss the opportunities and risks of this regulation. The presentation will be enriched with selected results from an empirical study that i.a. analysed the population's attitude to such a legal regulation.

Ordinance for Local Governance of Wind Energy Projects: Case Study in Japan

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Introduction:

The aim of this research is to review the change of social acceptance of wind energy after Fukushima disaster in Japan and to show a practice governance model of municipalities to raise social acceptance in local society.

Based on case study and media analyses, we will point out structural problem which has affected to reduce social acceptance and therefore requires social innovation to solve problems of social justice such as distribution and procedure.

Result:

Social acceptance of wind energy after Fukushima disaster as the number of wind farms increase, protest movements against them have also been increasing, regardless of rising social acceptance in national level. Stakeholders such as naturalist and/or neighbors worry about environmental destruction including avian collision, landscape, and noise. Even in the cases in which obvious explicit objection cannot be observed, the "silence" do not always proof acceptance or agreement. Case studies show that this situation does not change very much even after Fukushima disaster, and that there is no simple answer such as environmental impact assessment nor risk communication. Therefore, regardless of higher public acceptance in general, there is a possible divide between pro- and contra- wind energy. Fukushima disaster also activated local initiative to diffuse renewable energy projects including wind energy. Various "community power" projects have started, which try to modify distributional issue by introducing local ownership and/or financial participation model. One case try to realize external economic effect in local society by changing investors of projects living in large cities into supporter of local agricultural products. Local authorities have formulated ordinance to encourage local project. Some cases pay attention for developer to pay more attention to distribution and procedural issue. Their methods are rather soft and focus more on communication and consensus. This new governance is in contrast with regulations and commands which were often observed before the earthquake. They define desirable project and help developers.

Discussion:

In conclusion, we will show a theoretical model of social justice in wind energy projects and possible scenarios to reduce social conflict.

Added value of offshore wind farms: Ideas of elementary school students

Memi Motosu

Nagoya University

Abstract:

This paper addresses issues underlying local opinions regarding an offshore wind project in Japan based on a survey of elementary school students near the proposed project site. It is often discussed whether or not to introduce offshore wind energy projects from the aspects from impacts on fishery and ocean, benefits on local economy, job creation and contribution to energy problems. In particular, previous research focuses on cooperative projects between fishermen and wind developers through an offshore wind project to ensure a sustainable growth of fisheries and offshore wind developments. Some studies show concrete methods which contain the concept of distributive benefits on fishermen, such as offering simultaneous hydrographic condition by setting a monitoring device on or around an offshore wind farm, establishing artificial fish reefs / aqua culture facilities / leisure facilities around an offshore wind farm, power supply to fishing activities and fishermen's participation in a project (RIOE 2015). However, considering increase of acceptance from fishing villages, we need to extend stakeholders in addition to fishermen. In this research, elementary school students are focused in order to find new cooperative methods. Primary reasons to target them are that their opinions have not adequately been researched and they could have imagination without being constrained by conventional fixed ideas. 154 students from three elementary schools near the proposed project site participated in a workshop where they had a short lecture concerning offshore wind energy and discussed favorable offshore wind farms. Ideas of favorable wind farms are classified according to Firestone and Kempton (2007). However, overwhelming majority of the ideas does not fit the classification, therefore, the ideas are classified using KJ method. As results of the workshop, fresh ideas oriented to added value of wind farms are presented. Some students suggested the idea of tours inside of an offshore wind tower, a function of disaster prevention such as informing tsunami by installing a camera on a wind farm, and projection mapping. Most of suggested ideas are some forms of activity to enable us to use wind towers. While leisure facilities are also suggested in this survey, different types of those are proposed comparing to previous research. In conclusion of this paper, the possibility and required technology to realize the ideas are discussed.

References:

- Firestone, J. and Kempton, W., 2007. Public opinion about large offshore wind power: Underlying factors. *Energy Policy*, 35, 1584-1598.
- RIOE, 2015. Suggestions to cooperative wind development with fisheries (Japanese: 洋上風力発電等の漁業協調の在り方に関する提言). URL: <<http://www.rioe.or.jp/2015teigen.pdf> 2016> (accessed 12.04.2016).

Risk Communication Process for Japanese Offshore Wind Projects

Ayano Takeuchi

Toho University

Abstract:

The Japanese government enacted the Renewable Energy Law in 2012 and started the Feed-in-Tariff Scheme, which promotes the development of renewable energy. Because of the Japanese archipelago's distinct geographical features, offshore wind energy is expected to be one of the main energy resources in the future. However, uncertainty exists with regard to offshore wind energy projects and risk communication with local stakeholders in particular.

Nagoya University supports risk communication process for an offshore wind project in the city of Murakami (Niigata prefecture) from an academic point of view. The involvement of the university is seen as favorable, due to cases in Japan in the past, where offshore projects were negatively affected (and even stopped) by campaigns. The project in Murakami is currently under planning and environmental impact assessment will start soon without any major opposition. One concern is the effect on salmons, because salmon is a special product of this district and also vital for tourism in the region. Therefore, the developer of the offshore wind energy project has started an investigation of the impact on salmons, serving as a good example of risk communication for offshore wind energy projects in Japan.

The purpose of this research is to clarify the status of risk communication for offshore wind projects in Japan. Firstly, the development process of offshore wind projects in Murakami will be explained. Secondly, the risk communication process will be presented. The investigation will be performed via literature review as well as a series of qualitative interviews.