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Public participation for infrastructure planning in the context of the German "Energiewende"

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ABSTRACT

The German Energiewende (Energy Transition) poses major challenges to all parties involved. Public participation can contribute to the understanding of these challenges and their positive resolution. It is not suitable, however, to expect public acceptance for predetermined solutions. Participation presupposes openness about options. If this does not exist, one can resort to methods of communication that attempt to convince affected citizens of the necessity of adopting a planned measure. Yet if there is room for choosing among options, participation may create a foundation for broad acceptance of a jointly determined solution to pressing problems. Participative procedures that follow the model of analytic-deliberative discourse, by integrating scientific expertise with ethical and moral consideration, are particularly promising. A forward-looking model is drawn from the use of both online and traditional face-to-face methods of interaction, combining the advantages of both methods. An inclusive planning culture based on cooperation and integration is a promising way to achieve fair and effective implementation of the Energiewende.

1. Introduction

The German Energy Transition requires an inclusive planning culture based on cooperation and integration. The Energiewende has six main objectives:

1. phase out of nuclear energy
2. decarbonization of energy supply
3. reduction of dependency on international oil and gas imports
4. dominance of renewable energy sources
5. increase of energy efficiency
6. spark energy transitions all over Europe and the world.[1]

The German pursues these aims with a legally set target in the Renewable Energy Sources Act (EEG).[2] Sec. 1 para 2 of the law implies that the share of renewable energies in electricity is to be raised until 2020 at least 35%, until 2030 at least 50%, until 2040 at least 65% and until 2050 at least 80%.

Disenchantment with politics, NIMBYism (Not in my back yard!), protest and outrage, status quo preferences, and an entitlement mentality: these catchwords characterize perceptions of citizen engagement in today's society. The mere fact that a policy decision is the outcome of a democratic process is not sufficient for many to accept it. This phenomenon has been demonstrated in Germany by protests against large construction projects, notably in the case of the planned renewal of the Stuttgart train station ("Stuttgart 21").

This policy note gives a short overview of the German Energiewende and the challenges it poses to governance and planning of infrastructures. Special attention will be paid to the potential of public engagement to facilitate the Energiewende. The note identifies major determinants of public response to new infrastructure. Furthermore, it investigates the prospects of participation and offers the concept of analytic-deliberative discourse as a guiding model for implementation.

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[1] http://www.bmwi.de/EN/Topics/Energy/energy-reforms.html (Access 07/07/14).

[2] http://www.bmu.de/service/publikationen/downloads/details/artikel/renewable-energy-sources-act-eeg-2012.

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2. Determinants of public response to new infrastructure

Almost all of the protest movements against infrastructure planning or projects in recent years have exhibited three typical characteristics.[3]

First, citizens are expected to forego personal conveniences and at least temporarily accept some deterioration in lifestyle in favor of an alleged benefit to the community at large. With regard to biogas plants, for example, this pertains to the noise, pollution, and traffic that accompany a large construction site, as well as the noise and odor anticipated from the operation of such plants.

Second, the purported benefit to the community is a matter of controversy. In a globalized and individualized society, it is becoming increasingly difficult for governmental and private project planners to convincingly portray the community benefit in a manner that everyone accepts. A frequently expressed opinion is that this is simply a problem of communication. But the failure to persuade the public to support public welfare-oriented projects is also symptomatic of societies characterized by a high plurality of values and diversity of preferences. Whether we actually need wind farms in idyllic landscapes or electrical networks stretching from the North Sea to Bavaria in order to integrate renewable energy as part of the transition is hotly disputed. The use of the most sophisticated communication strategies by any of the parties in this case would not be sufficient to win over the other party.

Third, citizens directly affected by projects often perceive the decision-making process as being intransparent, inscrutable, or even corrupt. The impression of intransparency and deception is in turn associated with the complexity and plurality of political planning processes. An essential feature of the relationship between citizens and the state pertains to the growing gap between legality and perceived legitimacy. Even if plans to construct transmission lines, wind farms, and pumped water storage go through all the necessary approval processes, the complexity of these processes may overwhelm affected citizens, leading them to feel alienated as well as skeptical of the claimed benefit to the public.

3. Four crucial factors for facilitating a more positive response to project proposals

How can these problems be overcome to create a constructive atmosphere for infrastructure planning and decision-making? The empirical analysis of the peoples' attitudes toward change in their environment, in particular with regard to new technologies, has shown that addressing four cognitive factors is crucial for facilitating a more positive response to project proposals[4]:

First, *why do we need change?* People need to understand and accept that a project will lead to a beneficial change in services and that the societal institutions mandated to deal with these risks will do so adequately.

Second, *what is in it for me?* People need to be convinced that the proposed changes will be of direct benefit either for themselves or for others for whom they care. If the common good is invoked, it needs to be articulated in the form of concrete advantages to those who will utilize the services. Abstract promises such as “it will improve the competitiveness of the country” are insufficient to serve this objective.

Third, *does this limit my options?* People tend to reject change if they believe that their personal range of options or their personal freedom is negatively affected. A loss of sovereignty and the perception of domination by others are powerful threats to self-efficacy and autonomy. Innovations such as smart grids or district heating systems are good examples of where this feeling of lost control may easily evolve.

Fourth, *do I feel personally engaged?* Change always means interventions in one's way of life. If change is seen as something alien in a neighborhood, it is likely to be rejected. If a wind park is owned by a distant company, for example, people may feel that it does not fit into the landscape in which they live. If members of the community own the park themselves, they may feel that the generators are part of their heritage.

In the event that planners want to try to exert influence and achieve greater acceptance of a proposed project, all four factors must be addressed in information and public relations campaigns. However, the effectiveness of communication strategies in influencing public acceptance is extremely limited. This is especially true when the projects are associated with encumbrances for local residents or when different social groups challenge claims that the project will serve the public good. In these cases, it is almost impossible for communications alone to bring about a change in the level of acceptance. Public participation is thus the most promising way forward. Scholars in the field of public participation state that public engagement yield better results in decision making.[5]

4. The limits of communication and the prospects of participation

Due to the lack of effectiveness in communication strategies, there is the eminent danger that forcing projects through might lead to overwhelming disenchantment with politics. It is therefore appropriate for authorities to grant increased opportunities for participation so that affected individuals can decide for themselves whether or to what extent the four key factors of concern are addressed.

Public involvement fundamentally changes the planning process. Communication is an *ex-post* strategy designed to make those affected agree with what the planners had envisioned. The hope is that the public will approve the planned changes or at least tolerate them. In contrast, citizen involvement in open and inclusive planning processes makes it incumbent upon the involved citizens to create and evaluate planning options based on their own ideas, values, and preferences within statutory and policy limits. The

[3] See a similar listing in Brettschneider, Frank 2013: Major projects between protest and acceptance. In: Brettschneider, Frank/Schuster, Wolfgang (eds.): Stuttgart 21. A major project between protest and acceptance. Wiesbaden: Springer, 319–328, in this case 320f. See also Walter, Franz 2013: Civility protest and distrust in the society. In: Marg, Stine/Geiges, Lars/Butzlaff, Felix/Walter, Franz (eds.): The new power of the citizen. What motivates the protest movements? Reinbek by Hamburg: Rowohlt, 301–343, in this case 323.

[4] The list is originally from: Renn, O. (2013): Citizen participation in public projects – State of research and conclusions for practice (in German). UVP- Report, 27 (1/2), pp. 38–44, here 40. A similar list of influential factors can be found in; Fiske, S. F. 2010: Social beings. Core motives in social psychology. 2nd edition. New York: John Wiley, pp. 89 ff. Susan Fiske explores three aspects: Understanding, Controlling and Self-Enhancing. Personal utility is not on her list. This aspect is highlighted in: van Zomeren, M.; Postmes, T. and Spears, R. (2008): Toward an integrative social identity model of collective action: A quantitative research synthesis of three socio-psychological perspectives. In: Psychological Bulletin 134 (4), pp. 504–535.

[5] see Rowe, Gene/Frewer, Lynn 2004: Evaluating Public-Participation Exercises: A Research Agenda. In Science Technology Human Values 2004 29:4. 512–556; Rowe, Gene/Frewer, Lynn 2005: A Typology of Public Engagement Mechanisms. In Science Technology and Human Values 2005 30 251–290; IRGC (International Risk Governance Council) 2006: Risk Governance. Towards an Integrative Approach. White paper. (Authors: Renn, Ortwin/Graham, Peter). http://www.irgc.org/IMG/pdf/IRGC_WP_No_1_ Risk_Governance __reprinted_version_.pdf. (Access: 17.05.09); for an overview see Renn, Ortwin 2008: Risk Governance. Coping with Uncertainty in a Complex World. London: Earthscan.

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