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Renewable Energy Projects: Acceptance Risks and Their Management

Marion Hitzeroth *, Andreas Megerle

Institute of Regional Science, Karlsruhe Institute of Technology, Kaiserstr. 12, 76131 Karlsruhe, Germany

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ABSTRACT

Current renewable energy projects are increasingly afflicted with the challenge of an apparently alternating acceptance by concerned parties. Attitude parameters adopted by parts of these social groups which especially at the outset of such planning processes seemingly tend towards “acceptance” such as “incertitude” or “conditional acceptance” represent above-average pronounced risk factors in view of the project proponent's planning and cost certainty. This is even more true if either the expected conditions or the corresponding compensation measures for these social groups are not or cannot be implemented in a perceptible manner, bringing the latter to change to negative attitudes towards the project in a way which often surprises the project proponent. Based on the experiences gathered during the analysis of a case example (on a renewable energy infrastructure project in Germany), the present work introduces possible instruments allowing to identify these particularly high-risk social groups and discusses assets and drawbacks of different management strategies to handle various types of acceptance risks. It thereby also becomes clear that the outcomes always need to be interpreted beyond the background of the specific local and regional context respectively.

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1. Introduction

Current renewable energy projects, especially those dealing with the use or the storage of wind, solar or water energy, are increasingly afflicted with the challenge of an apparently alternating acceptance by the parties concerned. In this context, the time

* Corresponding author. Tel.: +49 721 608 46317; fax: +49 721 608 42888.
E-mail address: marion.hitzeroth@kit.edu (M. Hitzeroth).

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horizons of the persons concerned do not seem to run parallel to those steering the planning implementation schedule of the project proponent and of the approval authorities respectively: in the course of the mostly long lasting planning period of large-scale projects, there is hardly any evidence of public resistance and non-acceptance, even in the framework of formal procedures of civic participation. It is not until shortly before the beginning of the implementation measures (for instance construction works) that often a volte-face of the supposed "acceptance" or "undetermined assessment" towards a "non-acceptance" or even an active opposition to the project is perceived, even if general environmental and social benefits of the projects are widely expected.[1] As the majority of formal procedures of civic participation have already been closed at this point of time, the project's opponents, often organised by then, fall back on high-publicity events such as demonstrations, site occupations etc. At this stage, a confrontation between the two factions of "opponents" and "supporters" mostly cannot be prevented any more, entailing a range of acute, but also lasting negative effects for both sides (loss of trust, loss of planning security for the project proponent, financial losses for numerous actors, demotivation of the actors, partly even violent conflicts with damage to persons and property, etc.). An infamous current example of such a development is the large-scale public transport infrastructure project "Stuttgart 21" in Southwest Germany (cf. inter alia [4,5]).

Hence, it is of vital importance for the project responsibles to recognise and adequately react to a "turnaround" of the parties concerned from a supposed attitude of "acceptance" to an "active opposition" in order to assure the general feasibility of large-scale projects in the future. In this respect Batel et al. [6] call for a more differentiated view on different notions of what is often called "acceptance": support, resistance, apathy, uncertainty. Especially the attitude of "conditional acceptance" connected with conditions [7], but also the indecisiveness of the persons concerned seem to play a key role here, holding a particularly high risk of inducing a "turnaround of acceptance". To assess the attitudes and their influencing factors of different social groups among the concerned population regarding a particular project in order to obtain a basis for the prognostic estimation of their possible action orientation, an early appraisal seems to be a precondition. The following reflections therefore focus on the possible ways of managing the threat that a position of acceptance or indecisiveness as to a project turns into an attitude of non-acceptance, a planning risk which is especially high for the project responsible. By means of an analysis of a case example, the present work therefore aims at developing components allowing to diagnose and to manage the peril of a "turnaround of acceptance", i.e. of a reversal of attitudes in the course of planning procedures for such projects.

2. Analysis of existing approaches and problems

2.1. Acceptance and attitude

Whether the notion of "acceptance" describes an attitude or a behaviour has been subject of an ongoing discussion which will probably never be definitely closed (cf. [6] and compilation in [8]), as these terms refer to different perspectives which need to be adopted depending on the context. Hence, also the spectrum of influencing factors is similar in both fields (cf. Fig. 1); however, both notions are involved in a different way and extent. Therefore, in this context, the present work clearly distinguishes between "attitude" and "behaviour". Accordingly, "acceptance" refers to a range of positive attitude parameters adopted by subjects of acceptance (parties concerned by planning) as to an object of acceptance (planning project). The choice of a certain attitude parameter results from socio-culturally influenced perceptions and experiences as well as from expectations emerging within a certain context based on an individual assessment process [9]: "Acceptance is motivated by different goals or end-states towards which people strive" [8]. In this context, goals perceived as economically profitable are especially relevant ("individuals…will choose options with the highest gain" [8]). The attitude developed this way can be considered as "disposition of relative temporal consistency to react on a certain object in a specific way" (Meinefeld 1977, p.27, quoted after [9], p. 10f). Depending on the intensity of social interaction, social groups may develop inter-subjectively shared attitudes [9,10]. For this reason it is essential to consider the "socio-cultural frame of reference" ([9] p. 12) of the parties concerned by planning similarly as their framework of individual psychological drivers ([8]; see Fig. 1). Above, it becomes clear that while identifying social groups with a homogeneous attitude positioned in the sphere of a certain risk to change this attitude towards a certain planning project, all possible attitudes need to be analysed rather than merely focussing on those located in the acceptance sphere ([6] p. 5). An important reason for this approach is that attitude parameters are temporary categories with a low selectivity, directly attached to spheres of acceptance or rather of dissent. At the same time, the manifestation of risk of the respective attitude parameters located within the sphere of the "attitude change risks" strongly diverges. For example, due to their comparatively high resilience to external influences, "tolerance" or "indifference", have a clearly lower "attitude change risk" than the especially risk-prone attitude parameters of "conditional acceptance": The latter may, if the parties concerned by planning perceive a non-observance or even observance of the respective conditions (mostly economic compensation) suddenly change into other attitudes.

2.2. Approaches to understanding acceptance

In the German-speaking area, acceptance tests have so far primarily been made in the framework of conservation area planning procedures [9–11] as well as in connection with wind energy projects [2,12–14].

The according test results revealed that especially in case of larger interventions, the parties concerned by planning perceive in general relatively high location risks, for instance in view of the environment or physical health. The perceptions and valuations of this kind of risks on the side of concerned social groups may be different from those of the experts, for instance due to a different feeling of "trust", for instance concerning the project proponents (Siegrist, Earle and Gutscher 2007 cited in [15] p. 210). But these perceptions may also change. One example is that project risks can be suddenly tolerated or even accepted by certain social groups if a perceived use of the project is considered to have "more importance" than the perceived risks [16]. This is not the case if the "official" use is mostly anonymous (example: "general environmental benefits of renewable energy projects") as this kind of use does not necessarily inure to the location's benefit [p. 201]. Sauer et al. [7] note that roughly one fourth of the interviewees only gave their consent to establish conservation areas of natural habitats and of wild fauna and flora on condition that notably economic compensation measures were implemented. Also Rentsch [9] and Hall et al. [18] found out that the population's concernment with regard to their material, i.e. economic interests, vitally influences their perception of a planning project. In this respect Musall and Kuik [2] figured out that community co-ownership of large wind energy projects enhances its social acceptance. Finally Zoellner et al. [19] identified economic

[1] The so called "NIMBY"-effect ("not in my backyard") mainly correlates the grade of acceptance of a project with the spatial distance of the concerned parties. Actually, this explication does not seem to be sufficient ([1–3]).