

# LOCAL ACCEPTANCE OF RENEWABLE ENERGY – A CASE STUDY FROM SOUTHEAST GERMANY

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## SUMMARY

The European 20-20-20 goals as well as national targets for the next decade require a substantial increase in installed renewable capacity in Germany. While the public support for such measures is high on an abstract level, the situation in the local context is often very different. Here, the local impact of renewable energy might cause resistance. Empirical research shows that a community ownership model can have a positive effect on the local acceptance. Our study explores if such an effect can also be demonstrated in a community co-ownership model. The question is relevant since the imminent repowering process in the wind energy sector in Germany leads to larger projects which exceed the financial possibilities of most communities; leaving them with co-ownership as an option. The research design is based on a comparative case study, utilizing a questionnaire-based survey (n=200).

In a number of questions, the respondents were asked to give their opinion on a number of statements. Overall, the questionnaire contained 28 items divided in eight major questions. The questions aimed to elicit overall environmental attitudes, opinions on renewable energy in general, opinions on the local wind farms and their type of ownership as well as (self-perceived) knowledge about renewable energy and electricity generation in general. A statistical analysis has been performed utilizing the 'Kruskal Wallis one way analysis of variance' test to calculate the probability of similarity between the distributions of the two samples. With the exception of five items the analysis shows that all the other 23 items show a significant level of difference between the sample distributions (level of significance > 99%).

The results of the survey clearly show that a significant difference in the local acceptance exists between the two cases. The residents of Zschadraß, where a community co-ownership model exists, are

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consistently more positive towards local renewable energy as well as renewable energy in general than the residents of Nossen where a private supplier model is used. The attitudes of the participants in Zschadraß are clearly more positive towards an increased use of local wind energy as well as an increasing utilization of wind energy in Germany.

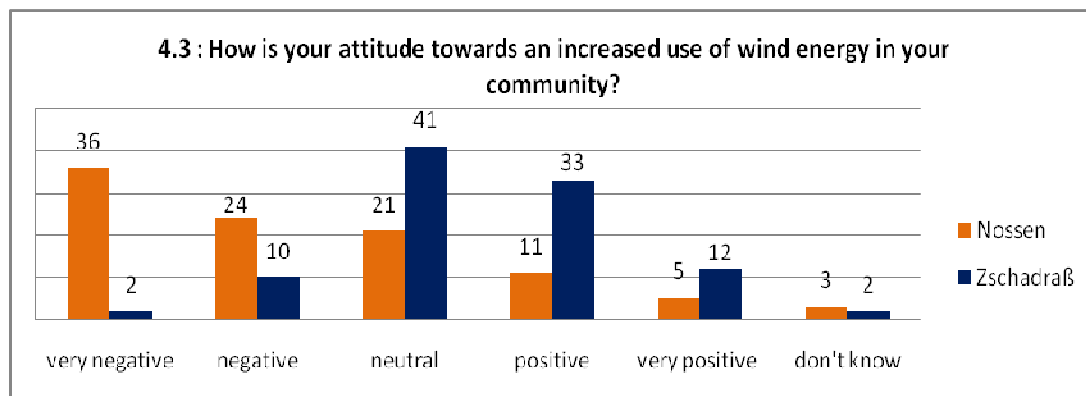


Figure 1: Item 4.3 from the questionnaire. Total number = %, n= 200.

The results provide evidence that the co-ownership model is a mean to reconcile local acceptance with an increased use of renewable energy in Germany. The main elements for the successful co-ownership model in Zschadraß are the establishment of local organizations, functioning as project carriers with the active involvement of locally trusted actors and the reinvestment of the profits to the benefit of the local population.

The shown effects are relevant in regard for the implementation of the ambitious renewable energy targets declared by the government. If the installed capacity of wind energy is about to be doubled in the next decade, it is essential to secure the acceptance of the local population towards such a development.<sup>1</sup>

Further information:

Musall, F.D, Kuik, O. (2011) Local acceptance of renewable energy- A case study from southeast Germany. *Energy Policy* 39 (6), 3252-3260.

The complete study can be downloaded at:

<http://www.sciencedirect.com/science/article/pii/S0301421511001972> .

<sup>1</sup> The study will be presented during the World Wind Energy Conference 2011 in Cairo.

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