Research Project Results:

Financial participation as an opportunity to increase the overall acceptance of wind energy projects?

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Lisbon, March 25, 2019

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While environmental impact is the #1 concern of Swiss residents, local ownership and distributional justice are important drivers of social acceptance in renewable energy projects in Switzerland.

Source: Tabi & Wüstenhagen 2015 / 2017
Operationalization of Research Project

Our research project used an experimental survey setting where every participant got put into a situation where there is a wind farm planned within their community.

The wind farm presented is a prototype wind farm for Switzerland. Additional information was given on annual electricity production of the wind farm, the project partner, procedural justice issues and environmental issues.

Sample configuration:
- N=1200
- Total of 4 groups (1 control group, 3 groups with financial treatment)
- Overall sample as well as specific groups adjusted for age, gender, political party preference and income
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<tr>
<th>Wind share</th>
<th>Wind bond</th>
<th>Wind resource tax</th>
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<td><strong>Becoming a co-owner of the wind farm:</strong></td>
<td><strong>Participating financially without direct ownership:</strong></td>
<td><strong>Financial participation as a community:</strong></td>
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<td>At the price of CHF 500 per share you benefit from full profit sharing and must also bear the project risks. You will receive an average dividend of 5% per share.</td>
<td>At the price of CHF 500 you can purchase wind park bonds. As a lender you bear only low project risks and benefit from an annual fixed and guaranteed interest rate of 2%.</td>
<td>Participants are presented with the information that their municipality is introducing a wind resource tax. The income is transferred into an earmarked fund designated for climate change / leisure projects.</td>
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<td>The shares are issued by the local utility and can be sold back to the utility at any time for the amount of CHF 500. You can purchase a maximum of 20 shares. The project duration is 20 years.</td>
<td>The wind farm bond is callable at the end of each year. After the end of the project term (20 years) your bonds will be reimbursed to you at the initial purchase price of CHF 500.</td>
<td>Specifically, the project owners would pay a wind resource tax in the amount of CHF 10,000 per turbine and year. The project duration is 20 years.</td>
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Results I

Overall – Collective Participation More Popular Than Individual Participation

If financial participation is available, a collective participation scheme is better suited than individual schemes of financial participation (with regard to project acceptance)

Compared to the wind resource tax, wind bonds decrease the overall acceptance significantly

** | p < 0.05
Results II
Community attached people support collective schemes

Community attached people are ready to actively support their community, which is why it is important that they are not opponents.

Acceptance of community attached people decreases when individual financial participation is in place, which could lead to a countermovement.

Community attached people are most supportive if a wind resource tax is in place.
Results III
Risk averse people prefer collective participation

Risk averse people are another important target group with regard to acceptance, as they are rather reluctant to changes in their community.

Risk averse people have significantly more acceptance for the project when a wind resource tax is in place.

Risk taking people experience no meaningful increase in their acceptance when wind share schemes are available.

* $p < 0.10$
** $p < 0.05$
*** $p < 0.01$
Results IV
Mobilizing politically centered-progressive parties

Progressive center parties are another important target group for the acceptance of wind farms, as they are able to mobilize 10-15% percent of the community.

If no financial participation is available, center parties have the same level of acceptance as right-wing parties, but they experience a significant increase of acceptance if a wind resource tax is in place.

Introducing a wind resource tax could mobilize the center voters to become promoters of the wind project.