

# The potential of crowdfunding and emotional attachment to drive the energy transition in football

Benjamin Kircheler<sup>1</sup>, Andrea Kollmann<sup>1</sup>, Johannes Reichl<sup>1</sup>  
<sup>1</sup> Energy Institute at the Johannes Kepler University

## Aktive Endkunden-/Prosumerpartizipation & Gebäudesektor

### Motivation und zentrale Fragestellung

Renewable energy communities (REC) are an important factor to engage citizens in the energy transition. Although the number of REC increased in recent years, the growth rate of REC is too slow. Research has identified various obstacles that hinder an uptake (Brummer, 2018). Regulatory and political barriers as well as attitudes and resistance to renewables and financial barriers play a central role (Bauwens, Gotchev, & Holstenkamp, 2016; Nolden, 2013; Rogers, Simmons, Convery, & Weatherall, 2008; Weber, 1997). Transforming existing communities, such as sports clubs, into REC could be a solution to decrease barriers as people already have an emotional commitment. Football clubs have a large fan community and represent an ideal use case to study this hypothesis.

### Methodische Vorgangsweise

The online survey was distributed to approximately 1,000 participants from each European country (France, Ireland, Sweden) and 500 participants from Azerbaijan, which were delivered using the language and currency of each respective country. To ensure a representative sample, quotas were set regarding age, gender and income categories. Among typical sociodemographic variables, the survey also collects detailed information about respondents' environmental- and energy-related values and behaviours, interest in football and crowdfunding literacy, which are the main explanatory variables. To identify possible differences between socially framed and football-specific crowdfunding campaigns, we randomly divided the sample into two groups. All participants were asked to imagine that they were offered the possibility to participate in a crowdfunding campaign that will use the money collected to perform energy efficiency renovations. The only difference between the conditions was the described building, half of the participants saw a football campaign (treatment), while the others saw a school. Subsequently, all had to indicate the likelihood of participation using a 5-point Likert scale. By comparing the responses between treated fans and non-fans in an ordered logit model it is possible to determine whether people are more willing to participate in citizen financing options, that are located in their community of interest than in the default community of place.

### Ergebnisse und Schlussfolgerunge

We transformed the results from the ordered logit model into marginal effects (AME), which allows for a straightforward interpretation.

The results show that the general acceptance is higher in the socially framed group (School). Subjects framed with the football scenario (treated) are 9% (18%) points less likely to fall in the highest (second highest) category compared to the control group. Although both scenarios aim at ecological improvement, the acceptance of a supposedly socially oriented project seems to be higher. To test the main hypothesis, that people that are emotionally attached to football have a higher participation level, we regress LTP on an interaction effect between both dummy variable treatment and fan. In line with our hypothesis, we find that fans, who saw the football-specific renovation plan, are significantly more likely to participate in the campaign compared to non-fans or socially framed fans (figure 1). Treated Fans are 6.4% points more likely to fall in the highest category and 14% points more likely to fall in the likely response category. Importantly, fans from the control group are not more likely to participate, which shows that interest (in football) is only relevant in the football-specific context. The variable fan is not significantly associated with LTP, meaning that interest in football, without being treated, has no impact on the decision.

Moreover, we find that crowdfunding literacy and environmental concerns among some socio-economic variables (age, income, gender) predict participation in sustainable crowdfunding.

Figure 1: Marginal effect of Treated\*Fans

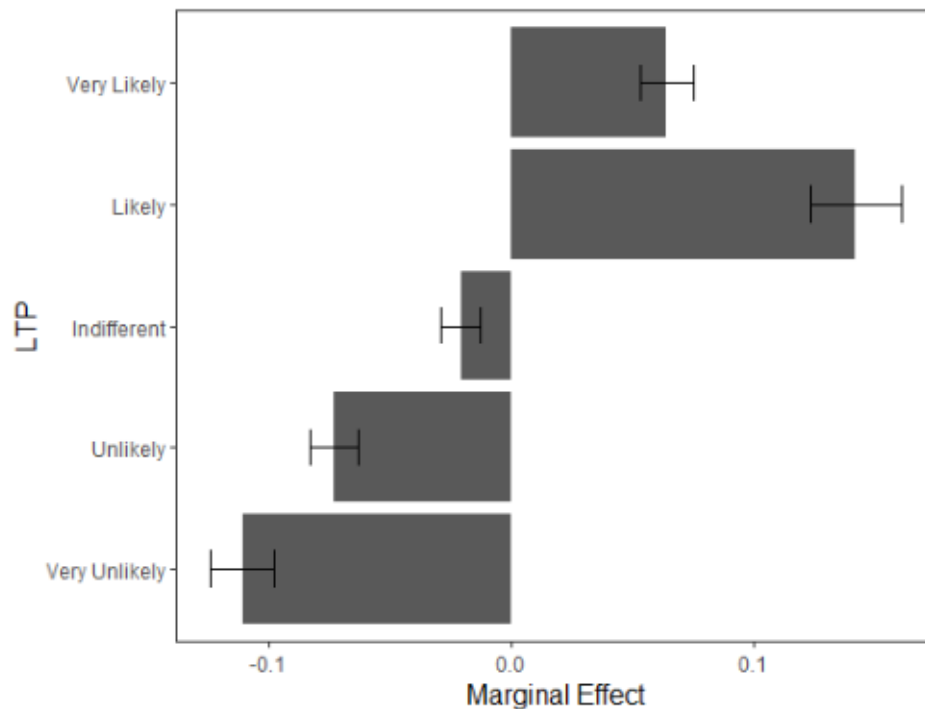


Abbildung 1: Average marginal effect of the Interaction Effect Treated\*Fans vs. non-fans

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