Abstract

The main task is to setup an ambitious randomized controlled trial (RCT). Its objective to assessing the potential of social tipping in the field, with a focus on the adoption of renewable energy tariffs. This requires quantifying spatial diffusion, i.e., the role of STI in instigating change among the untreated. To this end, I build on a collaboration with Good Energy[1], a renewable energy utility in the UK, with a planned N=10k (3k/ treatment, plus piloting) to be randomly assigned to either the control or the two most effective treatments (and suitable to the target individual). In all three, customers will be asked if they are willing to refer up to 5 contacts. In the treatments they will be provided with additional information, as before. For instance, in one the treatment may be the individual responsibility appeal or emphasis on agency, while in the other a dynamic norm about expected trends. Hence the first outcome variable is the effectiveness of the targeted interventions in inducing early adopters (those that already have renewable energy) to recruit others. But the same message, e.g., emphasis on agency if the consenting customer is in that treatment, will also be conveyed to the referred contact. This is the second outcome variable, i.e., which treatment induces more social contagion (highest rate of switching to renewable energy). Importantly, the different roles of early adopters and followers is disentangled, thanks to the innovative design represented below.

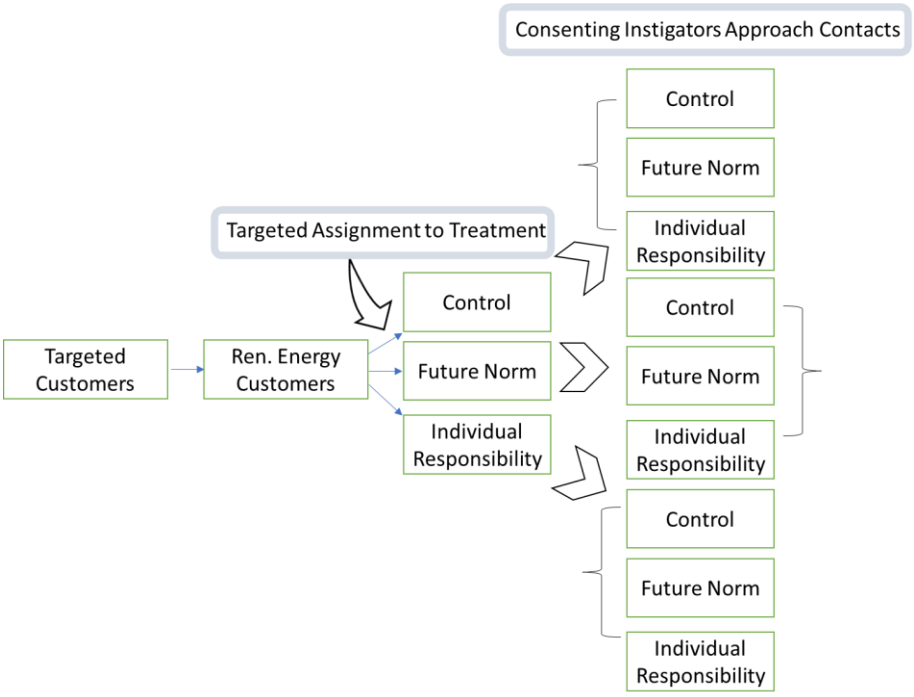


**Figure 1.** The sequential design of the project. In stage 1, existing renewable energy customers are assigned to one of 3 treatments (in the example either a dynamic norm about expected trends based on Module 2, or an individual responsibility appeal, or the control) and asked for email consent to partake in a diffusion initiative. Agreeing customers commit to send a pre-compiled online form to up to 5 contacts, triggering stage 2, where contacts (potential followers) receive the same information and are then asked if they want to switch to renewable energy as well. Hence this step assesses diffusion and tests hp v, and the role played by different interventions. To check and improve in the future the ML-based targeted approach (shed light on the classification of actors and ensuing treatment assignment), an incentivized ex-post debrief survey is

[1] In proof-of-concept work, we advance a novel approach that makes household renewable energy use visible to peers through yard signs and window clings, thus creating social rewards for early adopters (Gosnell, Carattini, Tavoni, 2021).

sent to both stage 1 customers and stage 2 new adopters. This qualitative information is a crucial complement to the main task.

## Tentative timeline for the activities

First 3 months: mapping of the literature and refinement of design

Months 4-6: Piloting

Months 7-9: stage 1 deployment

Months 10-12: stage 2 deployment