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Beyond “Us and Them”, There “We” Are:  
The Importance of Shared Identity  
for Enhancing the Attractiveness  
of Community Energy Initiatives

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## Abstract

Community energy initiatives are on the rise in Europe as a type of collective action towards the sustainable energy transition. Yet only a margin of the European population is involved in these initiatives, thus making them a practice of the minority. Only by attracting more members, will these initiatives be able to make tangible impact. The present research aims to apply psychological theories of group processes, and particularly, social identity, to the understanding of how community energy initiatives can attract more members. Those who are less motivated towards the environment might disidentify with the initiative, especially when it displays a strong pro-environmental motivation. However, communal motives might also play a key role in involvement. A survey study was conducted on an Italian sample, presenting participants with a scenario framing an energy cooperative, and observing any effects on the identification with, evaluation of, and willingness to join the initiative. Specifically, the initiative was framed as either strongly, and solely motivated towards the environment, or motivated by mixed reasons, and to either benefit its members exclusively, or to share its benefits with the wider community. Results revealed that, contrary to expectations, a strong, sole pro-environmental motivation does not have a negative effect on the attractiveness of an initiative to new members, independently on their pre-existing pro-environmental identity. Moreover, in line with expectations, sharing benefits with the wider community, as opposed to exclusively benefitting its members, has a positive effect on the evaluation of the initiative, yet not on the willingness to join. This study provides preliminary evidence for the key role that sharing benefits with the wider community, as a means of increasing a sense of shared identity, might play in a community energy initiative's ability to attract more members.

*Keywords:* community energy, environmentalism, pro-environmental behaviour, social identity, collective action, sustainable energy transition.

## Beyond “Us and Them”, There “We” Are:

### The Importance of Shared Identity for Enhancing the Attractiveness of Community Energy Initiatives

Environmental crises, such as the one posed by global climate change (Rockstrom et al., 2009), create an urgent need to transition, as a society, to more sustainable practices. Climate change is a global crisis and one of a collective nature, as it is the result of collective behaviour; as such, it can only be addressed effectively on a collective level (Fritsche et al., 2018). The energy system is, globally, the largest source of carbon dioxide emissions, making the sustainable energy transition essential to limiting global climate change (Intergovernmental Panel on Climate Change, 2023). Environmental community initiatives are on the rise as citizen-led, collective approaches to address a variety of environmental problems (Sloot et al., 2017). The present thesis focuses specifically on energy communities as a type of environmental initiative established and led by members of a community, with the specific goal of advancing sustainable energy practices (Walker & Devine-Wright, 2008).

Community energy initiatives aim to build low-carbon communities by increasing people’s awareness of the environmental impact of energy systems, disseminating information on sustainable energy, and enabling collective, citizen-driven energy actions, such as engaging in sustainable energy production and consumption (Middlemiss & Parrish, 2010). Policy makers increasingly recognise the potential of community energy as an effective way of actively involving citizens as active players in the sustainable energy transition (Hamann et al., 2023). However, research on the impact of community energy is still scarce, and relies mostly on qualitative studies, leaving knowledge gaps to address, particularly with regards to what makes these initiatives more or less impactful, and how impact is defined (Jans et al., 2024; also see Creamer et al., 2019). Despite their potential for impact, only a margin of the European population is involved in such initiatives, thus making them still a *niche* activity that provides a limited contribution to the pursuit of the sustainable energy transition (Schwanitz et al., 2023)

Strategies that are successful in attracting individuals with pre-existing environmental motivations to community energy initiatives, might not be as effective for attracting those who are not (yet) motivated for

the environment, and it is precisely attracting the unmotivated that carries the largest potential for impact. Psychological theories on group processes can inform a better understanding of how community energy initiatives can increase their reach and, thus, be more impactful (Jans et al., 2024). The present research aims to specifically address how community energy initiatives can attract a diversity of members, thus increasing their potential for advancing sustainable energy practices and, more broadly, sustainable societal transformation. The importance of shared identity will be addressed, especially with regards to attracting those who are less motivated for sustainable behaviour. Whereas an initiative that displays a strong pro-environmental motivation, might be perceived as an exclusive group by those who are not already motivated (Kurz et al., 2019), communal motives, besides environmental ones, might also be of key importance to attracting new members, particularly when they induce a sense of shared identity with the overarching community (Sloot et al., 2019; Goedkoop et al., 2022).

### Changing Behaviour From the Bottom-Up: The Potential of Community Energy Initiatives

Community energy initiatives<sup>1</sup> are characterised by three fundamental features which define them as a particular type of collective action that has scarcely been investigated in psychological research (Sloot et al., 2017), compared to social protest (e.g., Van Zomeren et al., 2008). First, they are collective approaches in that individuals form or join a group in order to pursue the common goal of advancing sustainable energy practices. Second, such initiatives are bottom-up approaches, as their members aim to promote behaviour change together within their community, as opposed to top-down approaches that aim to promote behaviour change through policy. Last but not least, they are different from other forms of collective action in that, rather than by urging other groups (e.g., policy-makers) to implement change, these initiatives promote behaviour change from the bottom-up, by changing the behaviour of their members and that of the communities they are embedded in (Sloot et al., 2017).

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<sup>1</sup> In their perspective, Sloot et al. (2017) address environmental community initiatives in broad terms (i.e., not energy-specific). Given the present focus on energy, for the sake of consistency from here on I will speak only of community energy initiatives, although some of the literature I will refer to might address environmental community initiatives broadly.

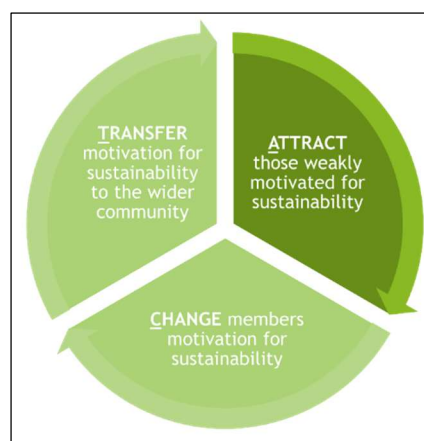
A number of motivating factors have been identified as drivers of sustainable energy behaviour (Steg et al., 2015). Of particular relevance, environmental self-identity indicates the degree to which an individual identifies as someone who values the environment and is motivated to act accordingly (Van der Werff et al., 2013a, 2013b). Indeed, environmental self-identity has been found to be related to a number of sustainable energy behaviours, including engagement in community energy initiatives (Van der Werff & Steg, 2016). However, despite the importance of personal identity processes as drivers of sustainable energy behaviour and engagement, a sole focus on values and identity at the level of the individual, or “I”, would not do justice to the collective nature of community energy initiatives (Sloot et al., 2017). Psychological theories on group-level identity processes can inform a better understanding of the way community energy initiatives can motivate sustainable energy behaviour and, more broadly, contribute to the sustainable energy transition (Jans et al., 2024).

Besides personal identity, social identity is also a key driver of pro-environmental behaviour. According to the social identity approach, which incorporates social identity theory (Tajfel & Turner, 1979) and social categorization theory (Turner et al., 1987), individuals derive part of their identity (i.e., “social identity”) from a wider social context: the groups they belong to and identify with, and intergroup comparisons. The more an individual identifies with a group (group identification; Postmes et al., 2013), the more they tend to behave according to internalised group values and motives (Masson & Fritsche, 2014; cf. disidentification; Becker & Tausch, 2014). A strong identification with a pro-environmental group can thus result in the pro-environmental behaviour of its members (Bouman et al., 2020). As such, applying a social identity lens, we can members of a community energy initiative as depersonalised, thinking and acting in collective terms as “we”. The more a member identifies with the initiative, the more they are motivated to act according to the initiative’s collective values and motives (e.g., “we value the environment and find it important to protect it”). It follows that an initiative that is strongly motivated to protect the environment, should transfer this pro-environmental motivation to its members (i.e., bottom-up behaviour change); yet, it is usually those individuals who are already strongly motivated, whom are attracted to such initiatives in the first place (Sloot et al., 2018). If an initiative that aims for sustainable transformation, only attracts those

who are already motivated to act sustainably, then this questions its overall potential for societal impact (Jans et al., 2024).

### *Attracting the Less Motivated for the Environment as the First Dimension of Impact*

Jans et al. (2024) introduced a novel theoretical framework, which applies psychological theories on group processes and, particularly, the social identity approach, to the understanding of how community energy initiatives can act as a catalyst for sustainable social change. According to ACT (see Figure 1), community energy initiatives can have impact by: (A) *attracting* those who are less motivated to engage in sustainable behaviour; (C) *changing* their members' motivation for sustainable behaviour, and (T) *transferring* these motivations to non-members in the overarching community. This perspective brings optimism to the role of community energy initiatives in the sustainable energy transition, emphasising the importance of applying a social lens to the further understanding of how to increase their impact. Notably, Jans et al. (2024) stress how the overall effectiveness of these initiatives hinges on creating a sense of shared social identity with the communities they are embedded in. Although the current master's thesis research, rooted in this theoretical framework, places its main focus on the first dimension of ACT (i.e., attract), it does so whilst considering its role within the framework, and that influencing one impact dimension does not necessarily guarantee impact in another. Understanding how environmental community initiatives can also attract those members of society who are less motivated for sustainability, is crucial to increasing the potential they carry for sustainable transformation (Jans et al., 2024).



**Figure 1** Attract as the first impact dimension in the ACT framework (adapted from Jans et al., 2024).

## Could Environmentalism Be “Bad for the Planet” (Sometimes)?

Social identity is not only defined by the group one belongs to, but also by intergroup comparisons (Turner et al., 1987), and this is of key relevance for sustainable behaviour. The kinds of daily pro-environmental behaviours that lead to sustainable transformation (e.g., following a plant-based diet, commuting by bike, or producing little to no waste) are usually only practiced by a minority of the population, especially in rich, industrialised countries. Kurz et al. (2019) define such behaviours as *minority practices*, as defined by the particular behaviour that is practiced on a daily basis, forming the basis of distinct social identities (e.g., “vegans”, “cyclists”, “zero-wasters”), and is in opposition to the behaviour of the majority (eating animal products, driving motorised vehicles, producing waste). The practices such identities form around have high potential to be construed in moral terms, yet this construal is based on how such practices are seen by others, rather than by the practitioners themselves (Kurz et al., 2019). In fact, in a society where pro-environmental behaviour is increasingly endorsed as a desirable social norm, it is almost unavoidable for the non-practicing majority to feel morally judged for their lack of pro-environmental behaviour, even when there is no evidence of a moral motive behind the minority practice, let alone an explicit moral judgement (Kurz et al., 2019). The perception of a moral judgement might enable an “us” versus “them” dynamic, whereby the non-practicing majority reacts defensively by persevering in their unsustainable behaviour (Kurz et al., 2019; also see Bolderdijk et al., 2018). Given the low level of participation in such initiatives overall (Schwanitz et al., 2023), being part of an energy community initiative can be considered a minority practice. Thus, could the “contentious suggestion”, advanced by Kurz et al. (2019, p.86), that strong identification with pro-environmental minority practice groups may hinder, rather than enable, a societal shift towards sustainability, also apply to community energy initiatives?

### *Community Energy as a Minority Practice: The Importance of Maintaining Permeable Group Boundaries*

Following the above reasoning (Kurz et al., 2019), if a community energy initiative presents itself as a group of people who are solely motivated by pro-environmental values (“us”, the environmentalists) in their pursuit of a sustainable energy transition, this might be sending the non-members a strong signal that, unless one also identifies as an environmentalist, then the initiative is probably not for “them”. Thus, those



who are not members of the initiative (the “out-group”, or non-practicing majority) might come to define themselves in opposition to the initiative members, perceived as an exclusive group (“in-group”, or practicing minority); moreover, the out-group might feel morally judged due to their lack of engagement in sustainable energy practices, and react by persevering in their behaviour. In fact, the unsustainable behaviour become a defining feature of the out-group’s sense of collective identity as the immoral others – the ones who do not care about the environment and, thus, keep consuming the dirty energy produced via the burning of fossil fuels. In this way, an initiative’s attempt to transfer its motivation for sustainability to the wider community might backfire, resulting in even less sustainable (energy) behaviour outside of the boundary of the group (Kurz et al., 2019).

As previously seen, attracting those who are less motivated for pro-environmental behaviour is crucial for enhancing the potential for impact of community energy initiatives (Jans et al., 2024). Yet, when a group displays strong pro-environmental motives, this might be perceived as unattractive by those who do not identify as environmentalists (Kurz et al., 2019). Thus, it might be important that a community energy initiative does not define itself in contrast to the wider community, and that it maintains a permeable group boundary by presenting itself as inclusive of individuals with a diverse range of values and motives, so to avoid any barriers to involvement that may be caused by expressing environmentalism as the only (moral) motive for involvement.

### **Not Just Environmentalism: The Key Role of Communal Motives in Initiative Involvement**

In addition to environmental motives, communal motives have been found to play a key role in attracting involvement to community energy initiatives, especially due to the collective nature of these initiatives, as previously discussed (Sloot et al., 2017). In a survey study (Sloot et al., 2019), when asked regarding motives behind their involvement in a community energy initiative, respondents rated financial (e.g., saving money) and environmental (e.g., protecting the environment) motives as more important than communal motives (e.g., getting to know neighbours); yet, only environmental and communal motives were found to be uniquely related to initiative involvement, suggesting that communal motives are of underrated

importance. Involvement in a community energy initiative can offer additional benefits, beyond the (joint) pursuit of pro-environmental goals, in that it fosters social cohesion among its members (Sloot et al., 2019). Community involvement, as measured by identification with the community, and interpersonal contact with other community members, has been found to uniquely predict involvement in a community energy initiative, when individual pro-environmental motivations are accounted for (Goedkoop et al., 2022). These findings stress that communal motives are of key importance for attracting new members to community energy initiatives, besides environmental motives. As such, it might be crucial that the initiative displays a strong connection to the overarching community, by stressing its communal motives.

### *Benefitting the Community as a Way of Inducing a Sense of Shared Social Identity*

Besides increasing social cohesion, there are other, more tangible benefits that an energy initiative can bring to the wider community it is embedded in: for instance, increasing energy efficiency, reducing the costs of energy consumption, and providing economic returns to be reinvested in community projects (Koukoulakis et al., 2023). Moreover, from a technical standpoint, community energy can also provide a safer, more reliable energy system that operates on a decentralised, local network which is not dependent on vast networks of transmission lines, which can sometimes fail due to overload, or extreme weather events (Gonçalves et al., 2024). There is also evidence that the acceptability of energy projects not owned by the community can be increased if community benefits are included, for instance, in the form of community funds (Devine-Wright & Sherry-Brennan, 2019). As such, communal benefits might act as an additional motive to join a community energy initiative, besides the communal motives that can derive from one's own engagement with other community members through participation in the energy initiative (Goedkoop et al., 2022). By providing tangible benefits to the wider community, as opposed to exclusively benefitting its members, an initiative might thus induce a sense of shared social identity ("we"), instead of a sense of distinctiveness between groups ("us and them") whereby both the initiative and the local community feel connected as part of the same overarching group. This, in turn, might have a positive effect on the perceptions of the initiative, especially for those who display high levels of community involvement, as they

might evaluate an initiative that benefits the whole community (and, by extension, themselves) more positively, compared to an initiative that exclusively benefits its members.

### *Bridging Divides: Beyond “Us and Them”?*

As discussed, enhancing the societal impact of a community energy initiative requires not only attracting new members, and especially those who are not motivated towards the environment, but also changing the motivations of its members, and transferring those motivations to the wider community it is embedded in (Jans et al., 2024). If, on the one hand, a strong collective pro-environmental motivation might carry more potential to promote pro-environmental behaviour, on the other hand, a pro-environmental motivation which is expressed as the unique motive for action might decrease the attractiveness of the initiative to those who are not (yet) strongly motivated for sustainability. This would, in turn, limit its potential for sustainable impact in the wider community.

With the present thesis, I propose that, in order to increase its potential for impact, a community energy initiative might present itself in a way that is attractive to a diversity of individuals in the community, whilst maintaining the pro-environmental stance that is essential for promoting sustainable (energy) behaviour. Given the key role played by communal motives in the involvement of individuals who are otherwise not motivated for the environment, an initiative might stress its connection to the wider community. Specifically, I suggest that, by sharing its benefits with the wider community, rather than only with its members, an initiative might induce a sense of shared social identity encompassing both the initiative members and those who are not (yet) actively involved. In turn, this might have a positive effect on the perception of the initiative, and thus attract more membership. Furthermore, the sense of shared social identity might act as a “buffer” for any divisive effects of a sole pro-environmental motive. In other words, any group divides which may arise between the initiative’s members (“us”), and the non-members (“them”), induced by differences in (pro-environmental) motives, might be counterbalanced by the perception of a shared social identity (“we”), encompassing members and non-members alike, as defined by the shared (communal) motive of benefitting everyone in the overarching community.

## The Present Thesis

The present thesis aims to systematically investigate how a community energy initiative can present itself in ways that enhance its attractiveness to new members. For this purpose, an experimental design is applied, which aims to manipulate the initiative's motivation, and its benefits, via a fictitious scenario, presented as part of an online panel survey (see: Method). The experiment aims to address the following questions. Firstly, if an initiative presents itself as a group of people who are motivated towards sustainable (energy) behaviour solely by pro-environmental motives, versus a diversity of motives, can this negatively effect on the initiative's attractiveness to new members, and especially those who do *not* identify as environmentalists<sup>2</sup>? Secondly, if an initiative presents itself as providing benefits to the wider community, versus exclusively benefitting its members, does this further increase its attractiveness to new members? And thirdly, does sharing benefits with the wider community act as a moderator for any (potentially) divisive effects of a sole environmental motivation?

### *Research Question*

What are the effects of a community energy initiative's motivation (H1), of its benefits (H2), and their interaction (H3), on non-members' identification with the initiative, and its attractiveness, measured as evaluation of, and willingness to join, the initiative?

**Hypothesis 1.** When perceiving the initiative's members as being solely motivated by pro-environmental (vs. diverse) motives, inhabitants of the locality will...

- a) Identify less with the initiative
- b) Evaluate the initiative less positively
- c) Be less willing to become involved in, and join, the initiative

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<sup>2</sup> A measure of environmental self-identity (Van der Werff et al., 2013a) was included in the present study as an exploratory moderator; however, it is not part of the hypotheses as pre-registered ([https://aspredicted.org/CH4\\_HB9](https://aspredicted.org/CH4_HB9)). As such, any analyses including this variable will be reported as exploratory.

**Hypothesis 2.** When perceiving the initiative as benefitting the local community (vs. its members), inhabitants of the locality will...

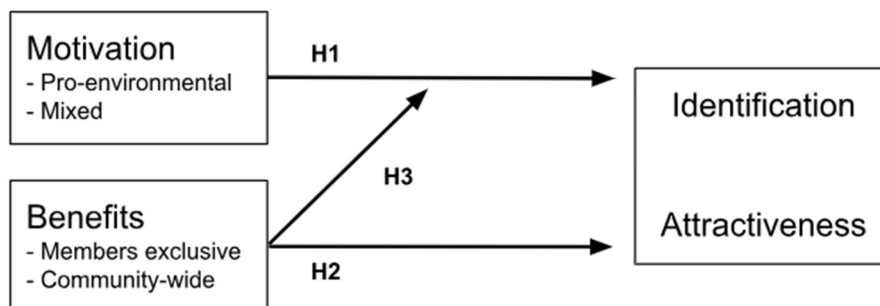
- a) Identify more with the initiative
- b) Evaluate the initiative more positively
- c) Be more willing to become involved in, and join, the initiative

**Hypothesis 3:** The effects of the initiative's motivation are moderated by its benefits.

An initiative which is solely pro-environmental will not be perceived as less attractive than a diverse initiative, but only when it also benefits the local community (vs. its members exclusively).

**Figure 2**

*Visual Representation of the Theoretical Model*



## Method

### Sample and Design

The study was conducted online via the survey software Qualtrics, and it received ethical approval by the Ethical Committee of the Faculty of Behavioural and Social Sciences, University of Groningen (research code: PSY-2223-S-0198). The study design and planned analyses were pre-registered with AsPredicted<sup>3</sup>. Participants were recruited among an Italian-speaking sample using the panel Prolific ([www.prolific.com](http://www.prolific.com)), and were paid at an hourly rate of £9.00<sup>4</sup> – resulting in a payment of £1.50 per participant, based on an estimated median completion time of 10 minutes. The sample size was calculated based on a 2 (motivation: pro-environmental vs. mixed) by 2 (benefits: members-exclusive vs. community-wide) factorial design, resulting in four experimental conditions: (1a) pro-environmental motivation, members-exclusive benefits; (1b) pro-environmental motivation, community-wide benefits; (2a) mixed motivation, members-exclusive benefits; (2b) mixed motivation, community-wide benefits. A power analysis assuming an effect size of  $f = .1$  as found previously (Sloot et al., 2018) and a power of .80, yielded a required sample size of 786. Given that in previous studies a large number of participants failed the manipulation check, a larger sample was recruited, with a total of  $N = 1169$ . As pre-registered, participants who did not provide informed consent ( $n=18$ ), those who completed less than 80% of the survey ( $n=43$ ), and those who failed both attention checks ( $n=4$ ) were removed, resulting in a dataset of  $N = 1104$ . The sample was relatively young in age ( $M=31.26$ ,  $SD=9.37$ ) and gender-balanced, with 549 (49,7%) reporting as “male”, 531 (48,1%) as “female”, 12 (1,1%) as “other”, and 12 (1,1%) as “would rather not say”.

### Procedure and Manipulation

After providing informed consent to participate, participants answered questions about their environmental self-identity, and their level of identification with the local community. Each participant was then randomly assigned to one of four experimental conditions, based on the 2x2 factorial design, and

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<sup>3</sup> Pre-registration available at: [https://aspredicted.org/CH4\\_HB9](https://aspredicted.org/CH4_HB9)

<sup>4</sup> The study was funded as part of: *EC<sup>2</sup>: Energy Citizenship and Energy Communities for a Clean-Energy Transition* a project funded by the European Union’s research and innovation programme (grant agreement No. 101022565).

presented with a scenario describing a fictional energy cooperative<sup>5</sup> set up by a group of local inhabitants. Participants were prompted to imagine that this initiative actually exists in their locality, and to read the scenario carefully, as they would then be asked comprehension questions. The scenarios aimed to differentiate the energy cooperative based on the two experimental factors: the motivation of its members was framed as either solely pro-environmental, or environmental and financial (mixed), and its benefits were framed as either exclusively for its members, or for the wider community. The scenarios maintained the same overall structure but differed in wording depending on the assigned experimental condition (the full scenario texts are provided in the Appendix ).

In the members-exclusive benefit condition, the opening sentence stated in bold: “Join our energy cooperative and get exclusive member benefits”, whereas in the community-wide benefit condition, it stated: “Join our energy cooperative and create benefits for our entire local community”. The name of the cooperative also changed depending on the condition. In the pro-environmental motivation condition, the text then read: “GreenCoop was set up [by a group of local inhabitants who aim to support the sustainable energy transition] for one shared reason: to protect the environment”, further adding the members statement: “We all value the environment and want to do our best to protect it”. Conversely, in the mixed motivation condition, the text read: “EnerCoop was set up [...] for various reasons: from protecting the environment, to profiting from investing in renewable energy”, with the members statement: “Some of us want to protect the environment, others want to save money”. The text then went on to describe the activities of the initiative in more detail. Lastly, an ending statement was aimed at further strengthening the manipulation (e.g.; “By joining and investing in GreenCoop, you will protect the environment and create benefits for the local community”).

Immediately after reading the scenario, participants were asked two forced-choice comprehension questions. First, “Why have local citizens decided to set up the energy cooperative?”, to which they could respond with either: “for one shared reason: to protect the environment” (pro-environmental motives) or:

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<sup>5</sup> The definition of energy community for most countries adheres closely to existing cooperative legal structures (Schwanitz et al., 2023); as such, the choice to define the initiative as a cooperative in the scenario.

“for various reasons” (mixed motives). Second, “Who benefits from the energy cooperative?”, to which they could respond either: “only members can enjoy exclusive benefits” (members-exclusive benefits) or: “everyone in the local community can benefit” (community-wide benefits).

After the comprehension check, participants filled in the rest of the survey, including all remaining process and outcome variables, the manipulation checks and, finally, socio-demographic questions<sup>6</sup>. Upon completion, participants were debriefed and thanked for their participation.

## Measures

All items were answered on a 7-point Likert scale (1 = *strongly disagree* to 7 = *strongly agree*), unless otherwise specified. All measures used in the analysis are reported below<sup>7</sup> (see Table 1 for statistics).

### *Key Outcome Variables*

**Identification.** Social identification with the energy community initiative was measured adapting the single-item social identification (SISI) scale devised by Postmes et al. (2013): “I identify with the energy cooperative”.

**Evaluation.** Evaluation of the energy community initiative was measured with a scale of three items, adapted from Liu et al. (2020), on a 7-point bipolar scale ranging from -3 to 3. The statement: “I think that an energy cooperative in my locality such as the one described would be...” was followed by three sets of adjectives: *unacceptable* to *acceptable*, *negative* to *positive*, *bad* to *good*. Prior to analysis, the scale was converted to range from 1 (*most negative*) to 7 (*most positive*), with 4 as the neutral point.

**Willingness to Join.** Willingness to join the initiative was measured using four items adapted from Sloot et al. (2018); “I would like to receive more information on the energy cooperative”, “I would like to

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<sup>6</sup> Besides descriptives for age and gender, socio-demographic variables are not part of the present analysis, considered the evidence that they hardly relate to environmental values (Sargisson, De Groot & Steg, 2020). Other studies have investigated how socio-demographic variables impact on involvement in energy initiatives, yet this goes beyond the scope of the present research.

<sup>7</sup> Other measures were also included in the survey, also as pertaining to the EU-funded project it was part of: pro-environmental group identity, pro-environmental intentions, local identification, collective efficacy, identity leadership and disidentification (inclusion-exclusion of the group from the self). These measures are not used for the present analysis as they go beyond the scope of this master’s thesis. A full report of the results of this and other experimental lab studies on energy communities can be found in the reference list (Goedkoop & Jans, 2023).



attend a meeting of the energy cooperative”, “I am interested in getting involved with the energy cooperative” and “I would like to become a member of the energy cooperative”.

### *Exploratory Moderator*

**Pro-environmental identity.** At baseline, pro-environmental identity at the individual level was measured with the environmental self-identity scale (ESI; van der Werff et al., 2013a), comprising the three items: “Acting environmentally-friendly is an important part of who I am”, “I am the type of person who acts environmentally-friendly” and “I see myself as an environmentally-friendly person”.

### *Manipulation Check*

At the end of the questionnaire, before the socio-demographic questions, participants were asked to indicate their level of agreement with the four following statements:

1. “Some members of the initiative are motivated to support the energy transition by profiting from investing in renewable energy” (mixed motives);
2. “All members of the initiative are motivated to support the energy transition by wanting to protect the environment” (pro-environmental motive);
3. “The local community can benefit from the initiative” (community-wide benefits);
4. “Members of the initiative exclusively benefit from the initiative” (members-exclusive benefits).

These measures were included as a de-facto check of the effectiveness of the manipulation, investigating the perceived motivation (1 and 2) and benefits (3 and 4) of the initiative. These items were not intended to be used as a scale; rather, as a series of lone-standing items<sup>8</sup>.

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<sup>8</sup> Correlations between the four items were investigated; however, inter-items correlations were low ( $r < .3$ ). When attempting to combine items into two sub-scales, reliability coefficients were also low (motivation:  $r_{SB} = .22$ , benefits:  $r_{SB} = .19$ ).

**Table 1***Descriptive Statistics, Reliability and Correlations for all Scales*

Scale	<i>M</i>	<i>SD</i>	<i>Reliability</i>	1.	2.	3.	4.
1. Identification <sup>a</sup>	5.04	1.17	-	1	.419**	.446**	.633**
2. Environmental Self-Identity	5.88	0.82	$\alpha = .90$	.419**	1	.199**	.388**
3. Evaluation	6.09	1.06	$\alpha = .88$	.446**	.199**	1	.440**
4. Willingness to join	5.16	1.29	$\alpha = .93$	.633**	.388**	.440**	1

*Note.* *N* = 1057; after participant exclusion (see Results: Manipulation check). All scales range from 1 to 7.

\*\* $p < .001$

<sup>a</sup>single-item scale (Postmes et al., 2013)

## Results

The analysis of the data was carried out using IBM SPSS Statistics Version 28.0.

### Manipulation

#### *Comprehension Check*

As a first way of assessing the effectiveness of the manipulation, comprehension checks were investigated by looking at response frequencies (see: Table 2). Overall, participants responded with higher accuracy<sup>9</sup> to the comprehension check on the motivation of the initiative, than to the one on benefits. When asked about the motivation of the initiative, 92.9% participants in the pro-environmental motivation condition accurately identified the main reason as to protect the environment, and 80.4% of participants in the mixed reasons condition accurately identified the reasons as mixed. When asked about the benefits of the initiative, participants had the highest accuracy rate when the benefits were framed as community-wide (96,2%). Conversely, participants in the members-exclusive condition had the lowest accuracy overall (60,6%): despite framing the initiative as exclusively benefitting its members, approximately 2/5 participants indicated that everyone in the local community can benefit.

A few participants failed both comprehension checks ( $n = 47$ ), thus were removed from further analyses on the basis that they did not pay enough attention for the manipulation to be effective<sup>10</sup>. As such, results of the analyses reported below are based on a sub-sample of  $n = 1057$ , comprising of: 266 (25,2%) participants in the pro-environmental motivation and members-exclusive benefits condition, 269 (25,4%) in the pro-environmental motivation and community-wide benefits condition, 245 (23,2%) in the mixed

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<sup>9</sup> Here I intend as “accuracy” a match between the experimental condition assigned, and the response to the comprehension check (e.g., a participant assigned to the members-exclusive condition, responding that only members of the initiative can enjoy exclusive benefits).

<sup>10</sup> As the number of participants who answered both manipulation checks correctly ( $n=764$ ) was lower, by a small margin, than the required sample for analysis ( $n=786$ ), the decision was made to include all participants who answered at least one check correctly, in order to retain statistical power.

motivation and members-exclusive benefits condition, and 277 (26,2%) in the mixed motivation and community-wide benefits condition.

**Table 2**

*Response Frequencies for Each Comprehension Check by Experimental Condition*

Comprehension check response	Condition 1: Pro-environmental		Condition 2: Mixed		Total (across conditions)	
	N	%	N	%	N	%
Motivation check <sup>a</sup>						
Pro-environmental reasons	509	92.9%	109	19.6%	618	56.0%
Mixed reasons	39	7.1%	447	80.4%	486	44.0%
Total	548	100.0%	556	100.0%	1104	100.0%

Benefits check <sup>b</sup>	Condition 1: Members-exclusive		Condition 2: Community-wide		Total (across conditions)	
	N	%	N	%	N	%
Members-exclusive benefits	335	60.6%	21	3.8%	356	32.2%
Community-wide benefits	218	39.4%	530	96.2%	748	67.8%
Total	553	100.0%	551	100.0%	1104	100.0%

Note. N = 1104.

<sup>a</sup>Why have local citizens decided to set up the energy cooperative?

- “for one shared reason: to protect the environment” (*pro-environmental reasons*)

- “for various reasons” (*mixed reasons*)

<sup>b</sup>Who benefits from the energy cooperative?

- “only members can enjoy exclusive benefits” (*members-exclusive benefits*)

- “everyone in the local community can benefit” (*community-wide benefits*)

### **Manipulation check**

Given the above-mentioned results suggesting the manipulation was not fully effective, further analyses were carried out on the four items included at the end of the survey as a de-facto check of the effectiveness of the manipulation (see Methods: Manipulation Check ). A two-way MANOVA with the two manipulation conditions as independent variables was performed on the four manipulation check items. Means and standard deviations are reported in Table 3 and univariate results are reported in Table 4.

**Table 3***Means and Standard Deviations of the Motivation Check Items by Experimental Condition*

Motivation Check Item		Pro-environmental motivation (1)				Mixed motivation (2)			
		Members-exclusive benefits (a)		Community-wide benefits (b)		Members-exclusive benefits (a)		Community-wide Benefits (b)	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Motives	Mixed	5.50	1.06	5.20	1.15	5.83	0.95	5.71	0.92
	Environmental	5.20	0.25	5.25	1.17	4.20	1.67	4.34	1.65
Benefits	Community	5.92	0.99	6.16	0.85	5.85	1.01	6.21	0.82
	Members	5.80	1.16	4.16	1.52	5.64	1.36	4.20	1.68

**Table 4***Univariate Results for the Analysis of Variance on the Manipulation Check Items*

Factor	Manipulation check		<i>F</i> (1,1053)	<i>p</i>	$\eta_p^2$
Motivation	Motivation	mixed	44.210	<.001**	.040
		pro-environmental	114.579	<.001**	.098
	Benefits	community-wide	0.017	.896	.000
		members-exclusive	0.460	.498	.000
Benefits	Motivation	mixed	10.890	<.001**	.010
		pro-environmental	1.073	.301	.001
	Benefits	community-wide	28.789	<.001**	.027
		members-exclusive	299.285	<.001**	.221
Motivation*Benefits	Motivation	mixed	1.912	.167	.002
		pro-environmental	0.229	.632	.000
	Benefits	community-wide	1.012	.315	.001
		members-exclusive	1.146	.285	.001

Note. *N* = 1057\*\**p* < .001

Results revealed a main effect of motivation framing on the two motivation check items, and a main effect of benefits framing on the two benefits check items, both in the direction expected. Unexpectedly, there was also a main effect of benefits framing on the mixed motivation check item, although this effect was small. Notably, there were no significant interaction effects observed.

#### Analysis of Main Effects of Motivation and Benefits and Their Interaction on Key Outcome Variables

For testing the main hypotheses, a two-way MANOVA with the two experimental conditions as factors, was performed on the following key outcome variables: identification with the initiative, evaluation, and willingness to join. Means and standard deviations are reported in Table 5 and univariate results are reported in Table 6.

No significant main effect of motivation framing was found on any of the outcome variables. On the contrary, there was a significant main effect of benefits framing. Those in the community-wide condition identified more with the initiative, and evaluated it more positively, compared to those in the members-exclusive condition, although there were no significant differences on willingness to join the initiative. No interaction effect was found between motivation and benefits, on any of the outcome variables<sup>11</sup>.

**Table 5**

*Means and Standard Deviations of the Outcome Variables by Experimental Condition*

Variable	Pro-environmental motivation (1)				Mixed motivation (2)			
	Members-exclusive benefits (a)		Community-wide benefits (b)		Members-exclusive benefits (a)		Community-wide benefits (b)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Identification	4.96	1.23	5.19	1.12	4.84	1.13	5.14	1.18
Evaluation	5.98	1.05	6.26	0.97	5.93	1.12	6.17	1.08
Willingness to join	5.15	1.27	5.17	1.27	5.11	1.32	5.19	1.32

Note. N = 1057

<sup>11</sup> The MANOVA was repeated on a sub-sample (n = 764) of participants who answered both comprehension checks correctly (see Manipulation); the results of this analysis did not differ in significance, although the effect sizes were found to be slightly larger.

**Table 6***Results of the Univariate Analysis of Variance on the Outcome Variables*

Factor	Identification			Evaluation			Willingness to join		
	<i>F</i>	<i>p</i>	$\eta_p^2$	<i>F</i>	<i>p</i>	$\eta_p^2$	<i>F</i>	<i>p</i>	$\eta_p^2$
Motivation	1.410	.235	.001	1.056	.304	.001	0.026	.872	.000
Benefits	13.459	<.001**	.013	15.444	<.001**	.014	0.394	.530	.000
Motivation*Benefits	0.314	.575	.000	0.074	.785	.000	0.173	.677	.000

*Note.* N = 1057.\*\**p* < .001

### Exploratory Analyses of Process Variables

In addition to the main analysis, the following exploratory analyses were conducted using PROCESS (Hayes, 2022).

#### *Does Environmental Self-Identity Moderate the Relationship Between Motivation and Identification?*

A simple moderation analysis was conducted using PROCESS model 1, to investigate whether environmental self-identity (ESI), measured at baseline, moderated the relationship between the motivation of the initiative and identification with the initiative. The interaction between motivation and environmental self-identity was found not to be significant,  $b = -.102$ ;  $t = -1.136$ ,  $p = .256$ , indicating that the relationship between motivation and identification with the initiative was not moderated by environmental self-identity.

#### *Does Identification Mediate the Relationship Between Benefits and Evaluation of the Initiative?*

Additionally, a mediation analysis was conducted using PROCESS model 4, exploring whether identification with the initiative mediates the relationship between benefits and the evaluation of the initiative. Results showed a significant total effect of benefits framing on evaluation,  $b = .253$ ,  $t = 3.901$ ,  $p < .001$ , consistent with the MANOVA results. Identification was found to mediate the effect of benefits on evaluation,  $b = .103$ , 95% CI [.048, .165]. The effect of benefits framing on identification (a-path),  $b = .261$ ,  $t = 3.627$ ,  $p < .001$ , and the effect of identification on evaluation (b-path),  $b = .396$ ,  $t = 12.624$ ,  $p < .001$ , were

both significant. Finally, the direct effect of benefits framing on evaluation (c-path),  $b = .150$ ,  $t = 2.520$ ,  $p = .012$ , was also significant, thus indicating a partial mediation.



## Discussion

### Summary of Main Findings and Theoretical Implications

This master's thesis aimed to systematically examine how the way that a community energy initiative is presented can impact on its attractiveness to potential new members, through a panel survey study. Specifically, the experiment examined the effects of the perceived strength of the initiative's environmental motivation, and whether its benefits are exclusive to its members or are shared with the wider local community, on its attractiveness to potential members, assessed via the respondents' identification with, evaluation of, and willingness to join the initiative.

Results indicated that a sole pro-environmental motivation does not make an initiative less attractive, when compared to a mixed motivation (no support for H1). Moreover, framing the initiative as benefitting the wider community, as opposed to exclusively its members, had a positive effect on the initiative's evaluation, partly mediated by identification, but no effect on willingness to join (partial support for H2). Additionally, motivation and benefits were not found to interact on any of the studied outcomes (no support for H3). In the following sections, I discuss each of these findings in more detail, and make suggestions for further research.

#### *A Strong, Sole Pro-Environmental Motivation Does Not Make an Initiative Less Attractive*

Contrary to the proposition that, if an initiative's members present themselves as strongly, and solely, driven by environmental motives, as opposed to mixed motives, this might be perceived as unattractive, no effect of the motivation framing was found on any of the outcome variables, that is, the participants' identification with, evaluation of and willingness to join the initiative (no support of H1). When pre-existing environmental motivations were taken into account, as part of an exploratory analysis, this revealed that participants' environmental self-identity was not found to moderate the relationship between the motivation of the initiative, and the level of identification with the initiative.

Given that a diversity of motivations was operationalised by adding financial motives to environmental ones (i.e., “some of us want to protect the environment, others want to save money”), this might have resulted in a weaker manipulation, compared to, for instance, including communal motives as well (e.g., “some of us want to get to know the neighbours”). In fact, previous research has found that financial motives are not consistently related to initiative involvement (Sloot et al., 2018), in line with previous findings that placing an emphasis on financial motives (e.g., monetary savings) might be actively detrimental to participation in sustainable energy behaviour (Schwartz et al., 2015). As such, including financial motives in an attempt to diversify the initiative might actually be ineffective, if not detrimental to its attractiveness. On the contrary, communal motives<sup>12</sup> have been suggested to be an additional motivating factor for involvement in community energy initiatives, besides environmental ones (Goedkoop et al., 2022).

Another potential explanation for the observed lack of an effect of a strong pro-environmental motivation is that, given the observed overall high score for environmental self-identity, participants might not have perceived the initiative’s strong environmental motive as a barrier to engagement, given that they are, already, strongly motivated for the environment themselves. It is important to note that the experiment was carried out via an online research panel and that, although such panels do aim to provide a sample that is representative of the population, participants can choose which studies to take part in. A pre-existing identification with environmental motives might have driven an interest in the subject of the survey, thus potentially resulting in self-selection bias, whereby survey respondents would score higher on pro-environmentalism than the population they are supposed to be representing<sup>13</sup>. However, there is evidence of a strong motivational basis for pro-environmental behaviour across the European population, with self-reports of strong environmental self-identity and high endorsement of biospheric values (Bouman et al.,

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<sup>12</sup> An intentional choice was made in excluding any explicit mention of communal motives in the mixed motivation framing, as an attempt not to confound the concept of communal motives with that of benefits (discussed in the following section).

<sup>13</sup> Statistically speaking, this might have resulted in a ceiling effect, whereby above a certain threshold of environmental self-identity, it is no longer possible to detect variance in the population.

2021); as such, the high level of environmental self-identity found in this sample might actually be reflective of what is found in the population (i.e., not a result of self-selection bias).

A lack of perceived moral judgement towards unsustainable energy behaviour might also explain why the motivation framing had no evident effect on the evaluation of the initiative. A strong identification of the initiative members' with pro-environmental motives might induce a perceived moral judgement of the non-practicing majority, that is, the wider community, enabling the "us" versus "them" dynamic as previously described (Kurz et al., 2019). In a similar study on eco-villages (Goedkoop & Jans, 2023) perceiving morality as the main driving motive of the eco-villagers (i.e., framing protecting the environment as a "moral duty" and unsustainable practices as "morally wrong") negatively influenced perceptions of the eco-villagers, and willingness to participate in the activities of the eco-village, in addition to decreasing a sense of shared identity. In contrast, in the present study no moral motives were explicitly mentioned, thus potentially explaining the null finding observed. However, as previously discussed, given that behaving sustainably is increasingly construed as a desirable social norm, it is almost unavoidable to perceive engagement in unsustainable practices (e.g., eating meat) as immoral, even without an explicit moral judgement (Kurz et al., 2019). Yet, it is unclear what specific sustainable behaviours define the desirable social norm in the context of energy practices, let alone what behaviour could be thought of as "immoral" in this context (although some would argue that, in recent years, the discourse around Russia's war against Ukraine has created a new "moral imperative" for turning one's thermostat down by 1°; Wiertz, Kuhn & Mattissek, 2023). Future research could further investigate perceptions of morality with regards to energy behaviour, and explore how these perceptions might impact on engagement in more sustainable energy practices.

#### *An Initiative Is Evaluated More Positively When It Benefits the Wider Community*

Presenting the initiative as benefitting the wider community, as opposed to only its members, had a slight positive effect on the level of identification with the initiative, and on its evaluation, yet not on the willingness to join the initiative (partial support for H2). However, the lack of interaction found between

motivation and benefits, suggests that the benefits framing did not moderate the overall effect of motivation on attractiveness (no support for H3).

The finding of a positive effect of benefits on evaluation provides preliminary evidence of the importance of placing an emphasis on the benefits that an initiative brings to the entire community, adding to previous findings that communal motives might, indeed, play a key role in motivating engagement with community energy initiatives (Sloot et al., 2018). Framing an initiative as benefitting the wider community, as opposed to only its members, has a positive effect on its evaluation, although it has to be noted that evaluation scores were quite high across conditions, showing a positive perception overall. The lack of a similar effect of benefits on willingness to join, might be explained by participants not seeing any additional benefit in joining the initiative, if it is already providing benefits to the wider community (thus, including any prospective members). The fictional nature of the community energy initiative might also explain the lack of an effect of benefits on willingness to join. Whereas reading a scenario might be sufficient for participants to express their perceptions regarding such (imaginary) initiative, in terms of how much they (would) identify with it, and how they (would) evaluate it, considering their willingness to join might require too far of a stretch of the imagination.

Interestingly, a large proportion of participants indicated that the wider community *could* benefit from the initiative, even when the initiative was framed as benefitting only its members (see: Manipulation ). It is possible that the comprehension check, given the lack of specificity (i.e., “everyone in the local community can benefit [from the initiative]”), might have in fact measured a kind of perceived ‘benefit’ different from the one intended in the manipulation; for instance, this could be a benefit in the form of increased social cohesion amongst community members, an aspect which was not explicitly addressed. The benefits described in the scenarios were, in fact, mainly of financial nature (e.g., access to energy-saving workshops, discounts for energy-saving measures, and revenues from local renewable energy projects; see: Appendix ). When assessing who benefits from the initiative, participants might have inferred that the local community *can*, indeed, benefit from the initiative, albeit in ways less tangible than the ones described. Notably, when reading a scenario framing the initiative as benefitting its members exclusively, participants had a significant

(overall) tendency to indicate that some members are motivated by “profiting from investing in renewables”, even when assigned to the pro-environmental motives condition (although the opposite was not true; see: Manipulation check). As such, framing the initiative as exclusively benefitting its members (financially) might have also resulted in the perception of the members’ motivations as more egoistical (i.e., saving money), independently of the motivation framing. Nevertheless, the analysis of data revealed the expected main effects of the motivation and the benefit framings on the perceptions of the initiative, without an interaction, thus indicating the effectiveness of the manipulation overall.

### *The Importance of Shared Identity: Beyond “Us and Them”... There “We” Are!*

An additional, exploratory analysis revealed that the positive effect of framing an initiative as providing benefits to the wider community on its evaluation, was found to be partly mediated by the level of identification with the initiative. This finding provides preliminary evidence towards the importance of a shared social identity in enhancing the potential for impact of community energy initiatives (Jans et al., 2024): stressing that an initiative provides benefits for everyone in the community, might induce a sense of shared social identity (“we”), encompassing both the initiative members and the local inhabitants, instead of emphasising distinctiveness between different groups (“us” and “them”). This is an interesting, and novel, finding, which adds on to previous findings that indicators of community involvement, such as identification with the overarching community, can uniquely predict participation (Goedkoop et al., 2022). Future research could further investigate how the level of identification with the community may moderate the effect of benefits framing on identification with the initiative. Moreover, future research might attempt to directly test whether a perception of shared social identity (cf. disidentification<sup>14</sup>; Becker & Tausch, 2014) is, indeed, the process that is driving the effect observed.

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<sup>14</sup> The “inclusion-exclusion of ingroup from the self” measure designed by Becker and Tausch (2014) was also included as a measure in the survey which this experimental study was part of; yet, this measure was designed specifically for measuring disidentification from the “in-group”, that is, a group that one already belongs to. For the purpose of this thesis, I chose to use the single-item social identification by Postmes et al. (2013).

## Limitations and Future Directions

### *A Caring Thought Is Not a Caring Action: Targeting the Demotivated via Pro-Environmental Intentions*

The present study found no evidence that presenting a community energy initiative as strongly, and solely, motivated for the environment, might decrease its attractiveness to potential members, possibly due to their disidentification from the initiative (Becker & Tausch, 2014). As previously discussed, high levels of environmental self-identity were found in the sample surveyed, thus limiting the conclusions that can be drawn with regards to what might be perceived as (un)attractive by those who are not strongly motivated for the environment. Indeed, to increase their potential for impact and transformation, it is essential that community energy initiatives attract those who are not otherwise motivated for pro-environmental action (Jans et al., 2024).

Yet, environmental self-identity might not be the most appropriate measure to identify those who are less motivated for sustainable behaviour and, therefore, might be an interesting subject of investigations aiming to study the impact of community energy initiatives (Jans et al., 2024). As previously mentioned, self-report studies find high levels of environmentalism in the population; however, individuals seem to hold the belief that others care considerably less about the environment than they do themselves (Bouman et al., 2021). Underestimating how much others care for the environment might, in turn, demotivate individuals from taking pro-environmental action themselves, due to a perceived lack of self-efficacy (Bouman & Steg, 2019). As such, solely thinking of oneself as caring for the environment, does not necessarily lead to environmental action. A more specific measure of pro-environmental intentions<sup>15</sup> (e.g., personal importance of sustainable energy behaviour; see Sloot et al., 2018) might serve as a better way to identify those who are not motivated to act pro-environmentally, instead of environmental self-identity. Future research might thus aim to target specifically those who display a lack of intention, rather than a lack of care, for environmental

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<sup>15</sup> Pro-environmental intentions were included in the present survey as an outcome measure, thus making it unsuitable for use as a moderator.

action, to investigate further ways of attracting the less motivated to engage in collective sustainable (energy) action.

### *The Lack of a Well-Defined Social Identity: Making the Case for Energy “Prosumerism”*

In the present study, I attempted to frame the members of the fictitious community energy initiative as environmentalists, as expressed via strong environmental motives, for the lack of a better social identity which they might be associated with (as compared to “vegans”, “cyclists” or “zero-wasters”). Yet, an important theoretical distinction needs to be drawn between practice-based identities, and social identities forming around opinion-based groups (Kurz et al., 2019). In fact, “environmentalism” can be seen as a type of the latter, as it is defined by a principle (i.e., caring for the environment), rather than a specific behaviour (e.g., eating a plant-based diet, commuting by bike, or producing zero waste). As Kurz et al. (2019) put it:

While [environmentalists] may tend towards favoring active or public transport over driving, refraining from consuming meat, and avoiding various forms of material consumerism, their participation in any one of these practices is not a strict requirement of their social or psychological inclusion in the group. In contrast, practice-based groups are defined by *specific behaviors* [emphasis added] that all members of the group perform: engaging with or refraining from this behavior places one within or outside the group boundary. For example, someone cannot identify as a “a cyclist” if they never cycle, or as “a vegetarian” while regularly consuming meat. (p.90)

Although the present research has a strong base in social identity theory, particularly with regards to the risk of shaping exclusive social identities (Kurz et al., 2019; cf. Bolderdijk & Jans, 2021), I argue that there is no social identity that is strongly associated to sustainable energy practices in the public discourse in the same way that, for example, “vegetarians” are associated with sustainable food practices. As such, Kurz et al.’s (2019) argumentation that minorities that identify with sustainable practices could hinder social transformations, might not directly apply to the kind of minority practice seen in community energy

initiatives, as the behaviour displayed by the members of such initiatives is not specific enough to define an associated social identity and, by exclusion, a moralised out-group (cf. “meat-eaters”).

Perhaps, the term that comes closest to defining such a social identity is energy “prosumerism”, although it is used mainly in the academic discourse, and not (yet) part of common language (e.g., Campos & Marin-Gonzalez, 2020). Energy prosumerism is characterised by a *range* of energy-related behaviours, encompassing the effective consumption, production, sell, trade and storage of energy (Leal Filho et al., 2024). The lack of a well-defined social identity as energy prosumers might explain the observed absence of evidence for an “us” versus “them” dynamic as initially hypothesised. In and of itself, there is a reason for optimism to be found in this null finding, as it suggests that community energy initiatives, as a minority practice, may not incur the same potential risk of being “bad for the planet” as, for instance, vegans do because of the way they are perceived to moralise the meat-eating majority (Kurz et al., 2019). In fact, more optimistic views on the impact of minorities have been expressed in the literature (e.g., Bolderdijk & Jans, 2021). Future research could investigate whether identifying members of a community energy initiative with the stronger social identity of “prosumers”, as defined by a specific set of behaviours (i.e., producing and consuming, or “prosuming”, renewable energy), may indeed induce a perceived distinctiveness of the in-group from the out-group (i.e., “them”, the consumers of non-renewable energy). Moreover, future research could explore whether this distinctiveness might result in the negative evaluation of the initiative by those who are part of the majority, and whether this might be dependent on a perceived moral judgement towards their unsustainable energy behaviour. However, given the lack of use of the term “prosumers” in common language, such distinctiveness may result overly fabricated.

## Conclusion and Practical Implications

In conclusion, the findings of this thesis provide novel evidence that emphasising ways that an initiative benefits the wider community might be beneficial to its evaluation, although it is possible that the initiative was perceived to benefit the wider community in ways other than the ones explicitly addressed in the experimental scenario. Future research might attempt to further investigate this aspect, by better



differentiating between any tangible benefits provided by the initiative (e.g., financial benefits), and other benefits that are related to social cohesion amongst community members (e.g., strengthening involvement within the neighbourhood; see also: Sloot et al., 2019). It might be particularly interesting to test whether sharing tangible benefits with the wider community can uniquely increase the attractiveness of an initiative, when other communal factors are taken into account. To the author's knowledge, no previous research on the topic of community energy has previously attempted to experimentally induce a sense of shared social identity by framing the initiative as benefitting the wider community. On the whole, the findings of this thesis provide further reasons for optimism (Bolderdijk & Jans, 2021): community energy initiatives are evaluated positively, regardless of their motivation, and even more so if they clearly provide tangible benefits to the wider communities which they are embedded in. As such, by placing an emphasis on their connection to the community, such initiatives might attract more members, thus enhancing their potential for impact on the sustainable energy transition and, more broadly, their contribution to the shift to a more sustainable society.

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## Appendix

### Scenarios by Experimental Condition

#### Scenario 1(a): Pro-Environmental Motivation & Members-Exclusive Benefits

**GreenCoop: Join our pro-environmental energy cooperative and get exclusive member benefits.**

GreenCoop was set up by a group of local inhabitants who aim to support the sustainable energy transition for one shared reason: to protect the environment.

Members of the initiative say: *“We all value the environment and want to do our best to protect it.”*

GreenCoop promotes sustainable energy practices amongst its members. Additionally, members can enjoy exclusive benefits. For instance, as a cooperative we offer our members access to our energy-saving workshops and other interesting events, alongside exclusive discounts to a variety of energy-saving measures, such as isolation. Moreover, we develop renewable energy projects in our locality, from which all members profit. This involves installing collectively purchased solar cells on community buildings and land. Any revenues made from such locally produced renewable energy go to benefit our members directly.

We can only achieve our ambitions with your support. By joining and investing in GreenCoop, you will protect the environment and receive exclusive member benefits.

#### Scenario 1(b): Pro-Environmental Motivation & Community-Wide Benefits

**GreenCoop: Join our pro-environmental energy cooperative and create benefits for our entire local community.**

GreenCoop was set up by a group of local inhabitants who aim to support the sustainable energy transition for one shared reason: to protect the environment.

Members of the initiative say: *“We all value the environment and want to do our best to protect it.”*

GreenCoop promotes sustainable energy practices amongst local inhabitants. Additionally, the entire local community can benefit from its activities. For instance, as a cooperative we offer energy-saving workshops and other interesting events for all local inhabitants, alongside discounts to a variety of energy-saving measures, such as isolation. Moreover, we develop renewable energy projects in our locality, from which the entire local community profits. This involves installing collectively purchased solar cells on community buildings and land. Any revenues made from such locally produced renewable energy are reinvested in the local community via a community benefit fund.

We can only achieve our ambitions with your support. By joining and investing in GreenCoop, you will protect the environment and create benefits for the local community.

## Scenario 2(a): Mixed Motivation & Members-Exclusive Benefits

### **EnerCoop: Join our energy cooperative and get exclusive member benefits.**

EnerCoop was set up by a group of local inhabitants who aim to support the sustainable energy transition for various reasons: from protecting the environment, to profiting from investing in renewable energy.

Members of the initiative say: *“Some of us want to protect the environment, others want to save money”*.

EnerCoop promotes sustainable energy practices amongst its members. Additionally, members can enjoy exclusive benefits. For instance, as a cooperative we offer our members access to our energy-saving workshops and other interesting events, alongside exclusive discounts to a variety of energy-saving measures, such as isolation. Moreover, we develop renewable energy projects in our locality, from which all members profit. This involves installing collectively purchased solar cells on community buildings and land. Any revenues made from such locally produced renewable energy go to benefit our members directly.

We can only achieve our ambitions with your support. By joining and investing in EnerCoop, you will protect the environment, save money and receive exclusive member benefits.

## Scenario 2(b): Mixed Motivation & Community-Wide Benefits

### **EnerCoop: Join our energy cooperative and create benefits for our entire local community.**

EnerCoop was set up by a group of local inhabitants who aim to support the sustainable energy transition for various reasons: from protecting the environment, to profiting from investing in renewable energy.

Members of the initiative say: *“Some of us want to protect the environment, others want to save money”*.

EnerCoop promotes sustainable energy practices amongst local inhabitants. Additionally, the entire local community can benefit from its activities. For instance, as a cooperative we offer energy-saving workshops and other interesting events for all local inhabitants, alongside discounts to a variety of energy-saving measures, such as isolation. Moreover, we develop renewable energy projects in our locality, from which the entire local community profits. This involves installing collectively purchased solar cells on community buildings and land. Any revenues made from such locally produced renewable energy are reinvested in the local community via a community benefit fund.

We can only achieve our ambitions with your support. By joining and investing in EnerCoop, you will protect the environment, save money, and create benefits for the local community.