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LETTER

Own trade-off and synergy beliefs, not others' beliefs, drive public acceptance of energy technologies

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Keywords: energy technology, emissions, landscape, biodiversity, trade-offs, belief updating

Abstract

The decarbonisation of energy systems can create both synergies and trade-offs with societal goals such as biodiversity conservation and landscape protection. Although existing research has focused on objectively measurable trade-offs, political processes around energy projects like Alpine photovoltaics (PV), wind energy, and nuclear energy are not least shaped by how trade-offs are politicized, and perceived by the people (first-order beliefs about trade-offs), including how individuals believe others in society view them (second-order beliefs about trade-offs). However, these remain insufficiently understood. We address this research gap with a population-representative survey experiment among Swiss residents (N = 1,899). We find most participants perceive biodiversity protection and landscape protection as synergies rather than trade-offs and understimate others' preferences for emission reductions over landscape protection. Rural residents — who typically report lower trust in science— are more likely to (wrongly) expect that others favour landscape protection over emission reductions. Yet, our belief-updating experiment showing respondents information about the true societal preferences shows that people are reluctant to revise their own preferences (social influence) or their acceptance of energy projects, like Alpine PV, wind, sustained nuclear, and new nuclear. Non-experimental results show that people's own beliefs and a perception of synergies with landscape protection and biodiversity conservation are more important to understand energy technology acceptance than second-order beliefs. This suggests that political debates may overemphasise trade-offs to advance particular agendas, and that in well-informed societies like Switzerland, preferences remain relatively stable in the face of socially inconform beliefs.

1 Introduction

To achieve net-zero greenhouse gas emissions (GHG) and mitigate climate change, energy systems need to transform rapidly away from emission-intensive technologies. Two promising complementary approaches are Alpine PV and wind energy. Alpine PV installations benefit from high-altitude conditions—such as increased solar radiation above fog layers, colder ambient temperatures, and snow reflection—that can yield more electricity in winter compared to lowland PV systems (1; 2) where conventional rooftop PV produces less energy. At the same time, wind power typically produces more energy during winter months and on cloudy or rainy days when rooftop solar output is limited, thereby helping to stabilize supply and demand across seasons(3).

Yet, the acceptance for such renewable energy technologies is typically lower than for rooftop PV(4; 5), particularly due to trade-offs around landscape protection(6) and biodiversity conservation. Trade-offs and synergies around renewable energy technologies (7) can influence whether alpine PV and wind renewable energy projects are accepted and realized in the municipalities where they are planned (8; 9). As an alternative option with limited land use, nuclear energy has returned to policy discussions in several countries, including the US and

Switzerland, as a low-carbon option for stable electricity, an interest reinforced by recent geopolitical crises like the war in Ukraine. The US Nuclear Energy Institute argues that nuclear power generates more electricity with less land – 31 times less than solar facilities and 173 times less than wind farms(10). In Switzerland, recent geopolitical tensions due to the Ukraine war have led the Swiss government to announce plans to lift the ban on building new nuclear power stations, aiming to bolster energy security amid these uncertainties(11).

While prior studies have largely focused on objectively measurable trade-offs(12; 13; 14; 15), public debates and support for climate actions are often shaped by beliefs and perceptions(16; 17). These may involve perceived trade-offs(8; 18), and beliefs about what others believe, so-called second-order beliefs(19; 8). These beliefs may not only be relevant in shaping acceptance for energy projects, but could also lead to social influence and changes in one's own beliefs. Such second-order beliefs can complement first-order belief studies by revealing the social dynamics that drive behavior, such as peer influence and conformity(20). For example, individuals may not simply rely on their own judgments about an energy project; rather, their expressed support or opposition may depend on how they believe their peers or the broader public perceive the issue(8). In fact, research suggests that second-order beliefs are often stronger predictors of behavior than individuals' self-reported views because they capture social pressures and norms(20). Despite the significance of both trade-offs and second-order beliefs, research on public opinion of renewable energy technologies has not sufficiently analysed the two, particularly not in combination. Hence, here we seek to answer the following research questions: what are people's first-order beliefs regarding trade-offs, and to what extent do people correctly estimate others' beliefs about renewable energy trade-offs? Does belief-updating through correct information about what others believe lead to social influence, meaning changes in people's own evaluations of these trade-offs, and changes in renewable energy technology acceptance?

To answer the research questions and address these research gaps, we conducted a population-representative survey experiment in Switzerland. Using a survey-experiment, including specifically established methods to analyse belief-updating(21), we examine how individuals perceive and update beliefs about trade-offs on CO2-emissions, landscape protection, or biodiversity conservation, in the context of renewable energy technologies, and consequently, how they evaluate renewable energy deployment and nuclear power. By capturing prior beliefs and responses to experimental treatments, the study sheds light on how perceptions of trade-offs—and beliefs about others' perceptions—shape societal acceptance of diverse low-carbon energy technologies.

2 Methods

2.1 Case selection: Switzerland

We focus on Switzerland, as it is located in the European Alps, where Alpine PV and wind energy could play a central role in addressing seasonal electricity shortages(1). Switzerland exemplifies the tensions between energy security, environmental protection, and public acceptance (18): the country has relatively ambitious climate goals, high reliance on hydropower, and a nuclear phase-out policy that is currently rediscussed in the political discourse(22; 23), particularly around landscape and biodiversity concerns. These issues intersect with broader narratives around nuclear energy, particularly as proponents frame nuclear as a land-efficient alternative. Thus, trade-offs about energy technologies are a critical aspect of political debates (8; 9; 24). This makes Switzerland a suitable case to study how individuals perceive trade-offs across competing technologies and how social influence shapes acceptance.

Switzerland is also a particularly hard case for examining second-order beliefs. Given the country's strong reliance on direct democracy, voters in Switzerland are used to forming their own opinions on many different issues. To do so, they rely on different types of issue and party information (25). Local referenda and direct democracy are central to energy policy decisions, meaning that citizens are often better-informed than in other countries and participate more actively in policy processes (25). Hence, opinions are often relatively well-established, which makes the population less susceptible to peer pressures concerning what "others think".

2.2 Analysis of belief-updating and energy technology acceptance

Belief updating offers a useful framework for examining how individuals revise their views when exposed to new information (26) and to understand how this could influence energy technology acceptance. Building on the belief-updating framework, we develop an experiment that presents survey respondents with tailored information, allowing us to understand the psychological factors that contribute to changes in beliefs. They also allow isolating the causal effect of this belief

updating on preferences (21), such as energy technology acceptance. This approach has been widely applied to understand the cognitive processes that lead to changes in beliefs (19; 27; 28; 29; 30; 31).

Our belief-updating experiment was embedded in an online survey, programmed using the survey implementation software Qualtrics. It was fielded on 12.05.2025 with a median response time of 42 minutes. To ensure population representativeness, we used quotas for gender, income, and age. The survey included the following main blocks: i) introduction and general environmental attitudes and energy policy attitudes, ii) a conjoint survey experiment measuring public support to promote building improvements for residential buildings (not the focus of this study), iii) the modul on perceptions of trade-offs (the focus of this study here), iv) a module on technlogy specific polaritation, and v) norm- an behaviour-based drivers of PV adoption, and vi) socio-demographcs. The experiment was carried out in three steps.

Step 1: Measurement of prior beliefs We measured (i) the individual trade-off evaluations of the respondents ('first-order prior beliefs') and (ii) the perceptions of the majority of the respondents in Switzerland ('second-order prior beliefs'). For first-order beliefs, respondents were asked: "Would you regard lower CO2 emissions as more or less important than higher biodiversity and lower land use?" Two bipolar slider items (see Supplementary Materials Figure 1 for an example) recorded responses for (a) emissions vs biodiversity and (b) emissions vs landscape protection (phrased as "a beautiful, calm, and non-industrialized landscape"). The sliders ranged from -4 ("emissions are much less important") to 4 ("emissions are much more important"), with 0 = "equally important"; respondents could select any integer value on this scale. For second-order beliefs, we asked respondents to "guess, even if you may not know exactly, what the majority of Swiss residents would respond" using the same slider format. After each second-order item, we asked respondents to rate their confidence in their guess on a five-point Likert scale.

Step 2: Experimental treatment and control conditions. Respondents were randomly assigned to treatment or control groups. Treated respondents received personalized feedback on the accuracy of their second-order beliefs derived from an independent survey conducted in 2024 in Switzerland (32). Using the Analytical Hierarchical Process (AHP) (33) method, involving repeated pairwise comparisons of relevant energy transition dimensions, including biodiversity, emissions, and land-use, this data provides us with population estimates of perceived trade-offs between these three dimensions of interest. Combining this information with the respondents' slider values [-4...4] on second-order beliefs, we computed the empirical distribution: the share of the population that rated emissions as more important, equally important, or less important than respondents expected. The treatment thus displayed the true population distribution for emissions vs biodiversity and emissions vs landscape protection (Figure 1).

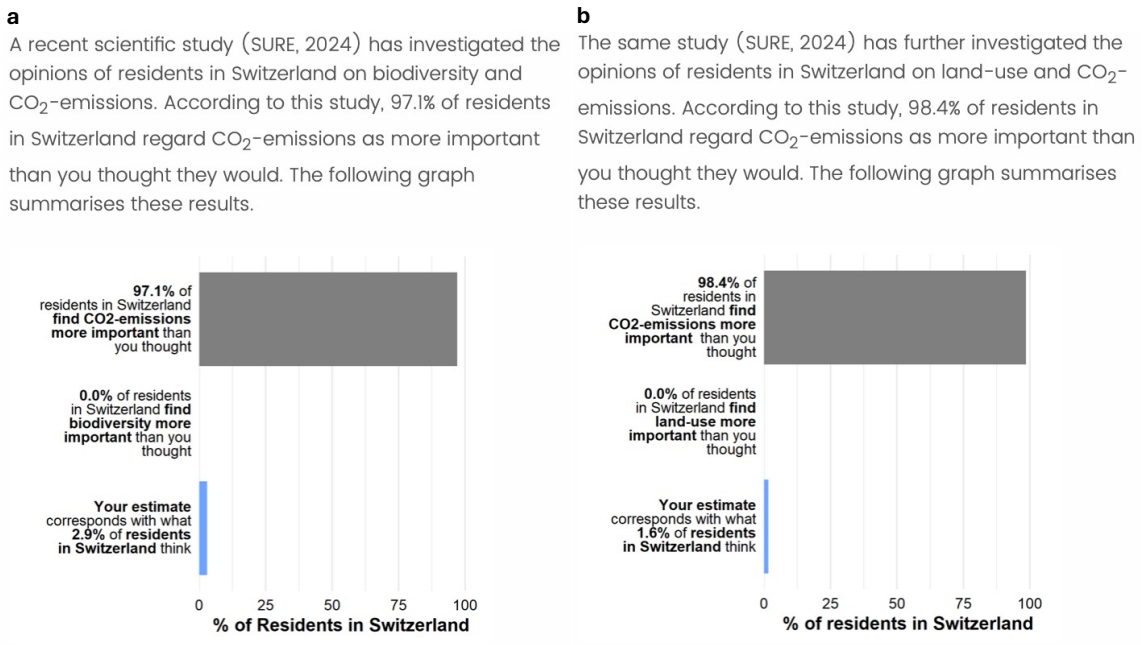

Figure 1. Experimental treatment about true population distribution, i.e., what share of the population indicated a higher, equal, or lower emission reduction preference compared to biodiversity (in a) and landscape protection in (b).

Step 3 — Post-treatment first-order beliefs and energy technology acceptance.

Treated respondents were asked again about their own first-order beliefs. Comparing first-order responses before and after treatment identifies whether correcting misperceptions about others' beliefs led to changes in respondents' own trade-off evaluations (social influence). Next, to understand whether the information about others' beliefs influences technology acceptance, we then asked all respondents to indicate their acceptance of four energy options. We used the same 9-point slider adapted from the SURE survey (32) as in the previous questions to ensure comparability. The question reads: "To what extent do you personally support or oppose the expansion of the following types of electricity installations in Switzerland?" Responses ranged from -4 ("strongly oppose") to 4 ("strongly support") for: (i) alpine photovoltaic installations, (ii) wind parks, (iii) prolongation of existing nuclear power plants, and (iv) the construction of new nuclear power plants.

Finally, we contextualised the findings of our experimental analysis with correlational evidence on drivers of the technology acceptance of the four energy technologies. These rather exploratory steps seek to qualify our null findings from the experiment and help inform future research.

2.3 Inferential methods

Descriptive baseline. We first report descriptive statistics on prior second-order beliefs, namely the share of respondents who expected others to prefer biodiversity over emission reductions, or landscape protection over emission reductions (Figure 2). This provides a baseline for understanding misperceptions relative to the true population distribution.

Explaining prior beliefs. We then examine the determinants of respondents' prior beliefs using Ordinary Least Squares (OLS) regressions. Two dependent variables capture (i) first-order beliefs (own trade-off evaluations) and (ii) second-order beliefs (expectations about the majority view). Explanatory variables include left–right ideology, trust in science, urban–rural residence, salience of climate change, gender, income, and confidence in prior beliefs. This allows us to assess how different social groups weigh emission reductions, biodiversity conservation, and landscape protection, and the extent to which they misperceive others' views (Figure 3).

Estimating posterior beliefs and energy technology acceptance. Next, we analyze the causal impact of information about others' actual beliefs. We compare treated respondents, who received information about the true population distribution, with control respondents, who did not. Analyses focus on two outcomes: (i) social influence, measured as changes in respondents' first-order beliefs before and after treatment, and (ii) energy technology acceptance, measured post-treatment.

Because the treatment is inherently directional—respondents may receive "good news" or "bad news" depending on whether they over- or underestimated public support for emissions reductions—we examine heterogeneous effects by prior misperception. For each trade-off dimension, respondents are classified as underestimators (believing others prioritize biodiversity/land more strongly than the population actually does), overestimators (the converse), or mixed (underestimating on one dimension and overestimating on the other). This cross-classification enables us to test whether correcting misperceptions increases respondents' own valuation of emissions mitigation and whether it shifts acceptance of specific technologies (Figures 4–6).

We report results as marginal means, which represent regression-adjusted group averages and are invariant to the choice of reference category (34). Confidence intervals capture the uncertainty around these predictions. Marginal means significantly different from zero indicate systematic directional beliefs relative to neutrality.

3 Results

3.1 People underestimate others' preference for emission reductions compared to landscape protection and mostly think these synergies rather than trade-offs

Figure 2 compares the prior expectations of the respondents about the trade-off perceptions of others (second-order beliefs) with the measured distribution of the population(32).

First, for the biodiversity–emissions trade-off, respondents were relatively accurate in judging societal views. Expectations were closely aligned with actual population preferences. Around 40% of respondents expected others to prioritise emission reductions, 29% expected equal importance, and 31% expected biodiversity protection. These figures match the true distribution almost exactly (40%, 26%, and 34%, respectively).

For the landscape–emissions trade-off, however, we observe pronounced misperceptions. People overestimate others' preferences for landscape protection and underestimate emission reduction preferences. While 37% of respondents expected others to prefer emission reductions, nearly double

– 62% of the population actually prioritise emission reductions. Moreover, 37% expected others to prioritise landscape protection, compared to only 22.5% in the population.

These findings indicate that misperceptions are not uniform across trade-offs. Whereas biodiversity is perceived accurately, landscape protection is systematically overestimated. Because energy technologies such as alpine PV and wind projects are highly visible in the landscape, this bias may reinforce local resistance: if rural residents believe that "everyone else" also prioritises landscape protection (Fig. 2), they may feel socially validated in opposing such projects.

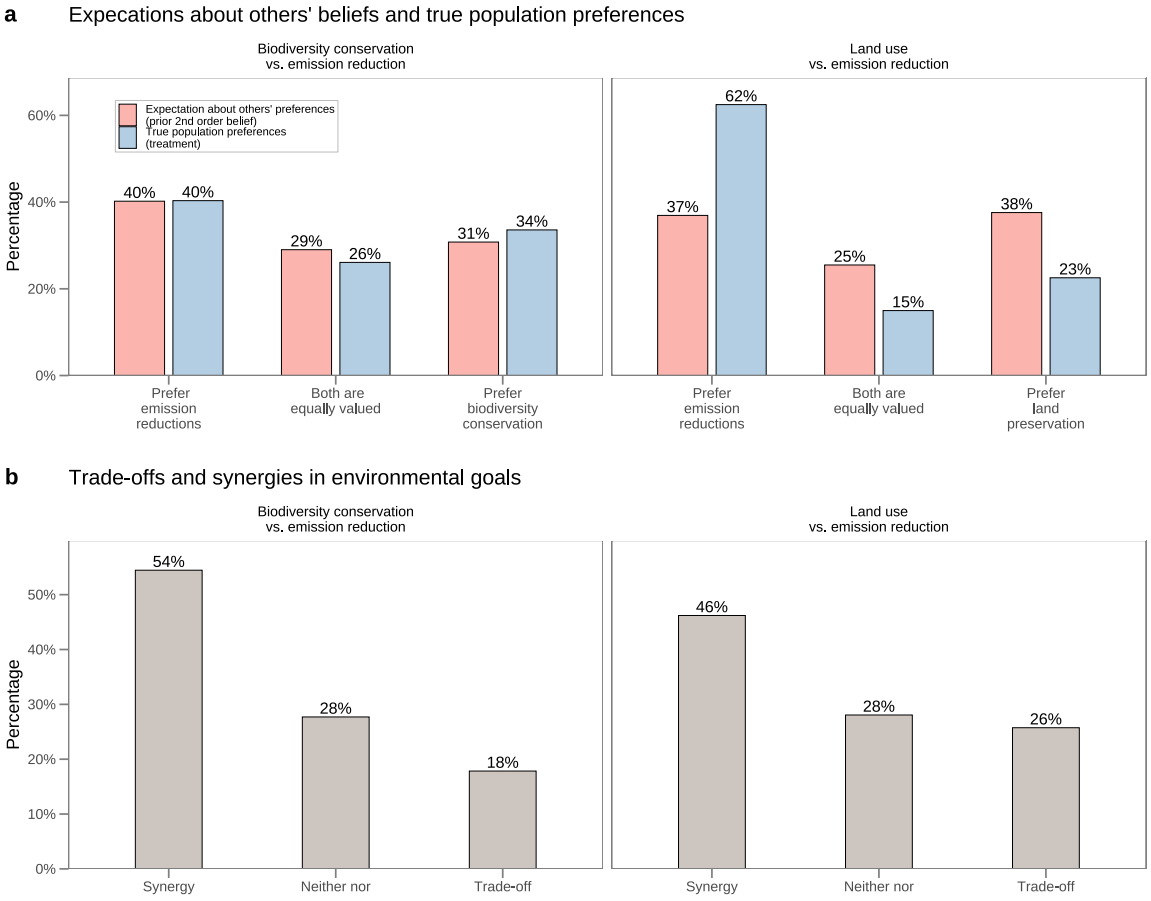

Figure 2. Expectations about others' preferences and the true population preferences for the trade-offs between biodiversity conservation vs. emission reduction and landscape protection vs. emission reduction (in a). Expectations (in red) are compared to the true population preference (in blue) from the SURE survey (32). Slider responses were collapsed into three categories: preference for emission reductions (values 1 to 4), equal importance (0), and preference for biodiversity/landscape protection (-4 to -1). Trade-offs and synergies between biodiversity conservation vs. emissions reductions and landscape protection vs. emission reduction (in b). Slider responses were collapsed into three categories: Synergy (values 1 to 4), neither nor (0), and trade-off (-4 to -1) (for full results, see Supplementary Materials, Table 2).

3.2 Ideology, climate salience, and income drive own trade-off beliefs and belief confidence, trust, and rural residence shape expectations about others' beliefs

Figure 3 summarizes the results from four regressions, two of which each explain respondents' own preferences (first-order beliefs) and two of them explain their expectations about others' preferences (second-order beliefs). We find that these two sets of beliefs are shaped by different factors. Ideology and income primarily influence respondents' own trade-offs between emission reductions, biodiversity conservation, and landscape protection. Specifically, right-leaning respondents tend to prioritise societal goals other than emission reductions. Higher climate salience, by contrast, is consistently related to preferences for emission reductions, though often at the expense of biodiversity or land protection. Income also matters: wealthier respondents show lower acceptance for emission reductions relative to landscape protection, and they similarly downweight the likelihood that others prefer emissions reductions over landscape protection.

We find that a higher confidence with the expectations about what others believe about the renewable trade-offs on emissions reduction, biodiversity, and landscape protection, respectively, is

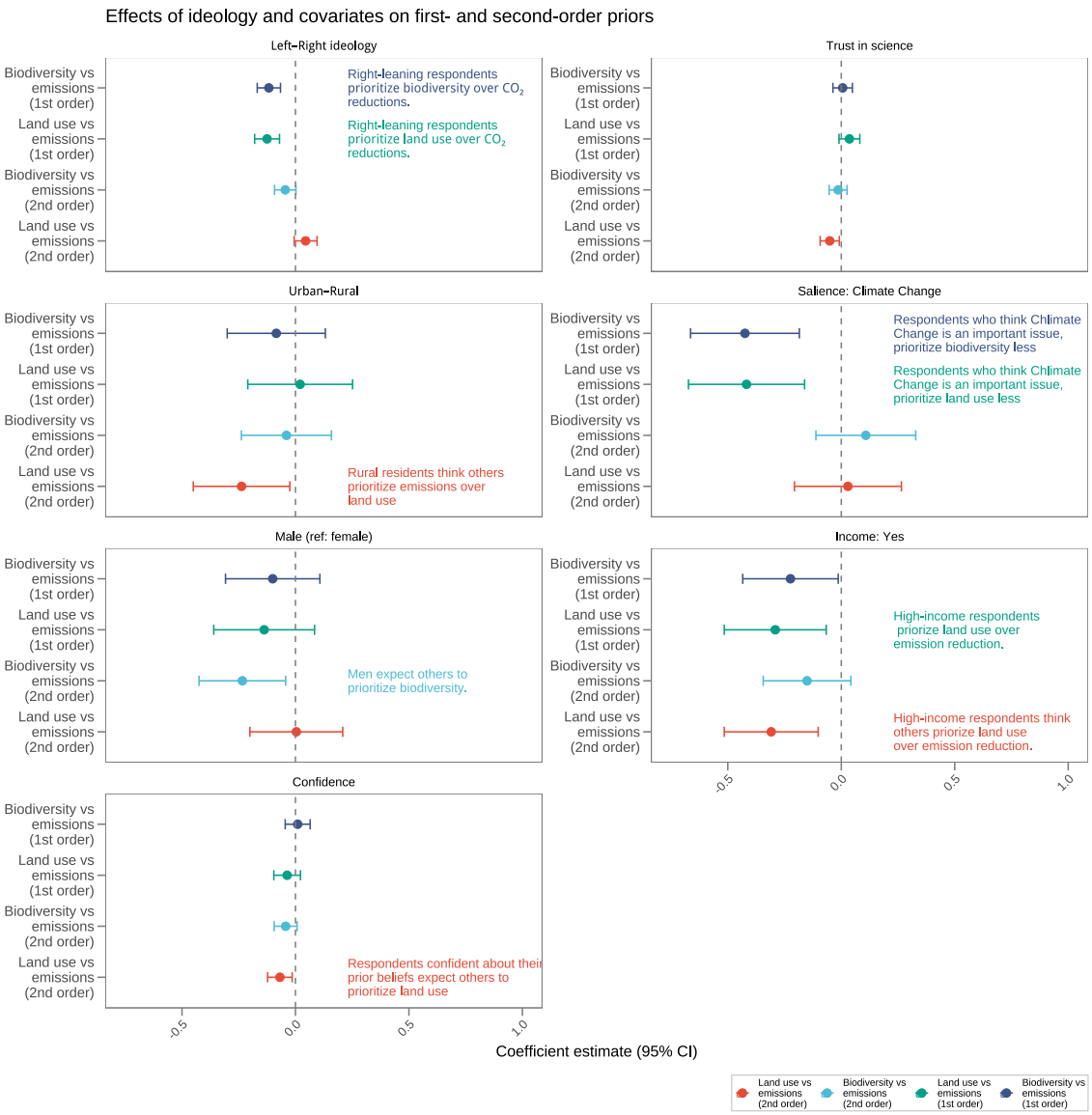

Figure 3. For the trade-offs between (a) biodiversity conservation vs. emission reduction and (b) landscape protection vs. emission reduction, the figure shows the share of respondents who expected others to (red) prefer emission reductions, value both aspects equally, or prefer biodiversity/landscape protection. These expectations are compared to the true population distribution from the SURE survey (32). Slider responses were collapsed into three categories: preference for emission reductions (values 1 to 4), equal importance (0), and preference for biodiversity/landscape protection (-4 to -1).

associated with a lower preference for emission reductions vis-à-vis landscape protection. As people systematically underestimate others' emission reduction preferences vis-à-vis landscape protection (Figure 2a), this mismatch suggests that confidence reinforces systematic misperceptions about societal preferences, which may in turn amplify perceived opposition to renewable energy projects.

Finally, gender, urban-rural, and trust in science are more strongly associated with expectations about what others value. Rural residents—who are typically more exposed to the visible landscape impacts of energy infrastructure such as alpine PV or wind projects—are more likely to believe that others prioritise landscape protection over emission reductions, like themselves. This contrasts with actual aggregate preferences, which are more balanced. Such misperceptions could contribute to local resistance to renewable energy projects by reinforcing the perception that opposition is socially widespread. Relatedly, respondents with higher trust in science (which is slightly more common in urban areas, see Supplementary Materials, Figure 3) are more likely to expect that others favour landscape protection over emission reductions.

3.3 Information about others' trade-offs does not lead to social influence on people's own beliefs

Overall, the results show little evidence that information about others' trade-off preferences shifts respondents' own beliefs: preferences appear highly stable and resistant to social influence.

Figure 4a compares the treatment and control groups to test whether exposure to information about societal preferences affects respondents' first-order or second-order beliefs. The observed differences are small and statistically insignificant, even for landscape protection vs. emission reductions, where people's expectations of the true population preferences are systematically biased.

Figure 4b further shows that the direction of the information treatment — whether others were described as prioritising emissions reductions or not — had no systematic effect on respondents' own trade-offs. Interestingly, respondents who underestimated societal support for emissions reductions expressed higher baseline support for emissions themselves. Individuals most committed to climate mitigation systematically assume that others are less supportive, even though this is not the case. Such underestimation may help these respondents maintain a view of themselves as more ambitious than society at large. Yet, even when presented with corrective information, respondents did not revise their own evaluations.

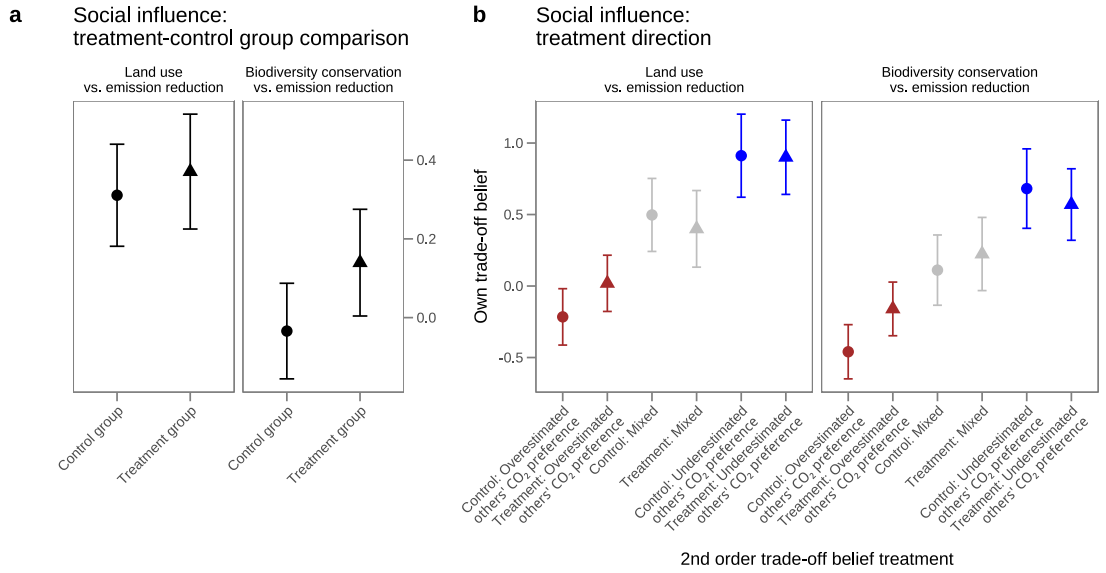

Figure 4. Marginal mean estimates regressing the treatment groups on respondents' own beliefs after the experiment. Points indicate estimated coefficients, and whiskers show 95% confidence intervals. The vertical axis lists four outcomes: (i) own beliefs about the trade-off between biodiversity and emissions (1st-order), (ii) own beliefs about the trade-off between land use and emissions, (iii) expectations about how others prioritize biodiversity vs. emissions (2nd-order), and (iv) expectations about how others prioritize land use vs. emissions. The horizontal axis represents the extent to which each predictor shifts prioritization toward emission reductions (relative to the reference category), holding all other covariates constant (for full results, see Supplementary Materials, Tables 3-5; robustness checks in Tables 6-7).

3.4 Stable energy technology acceptance in the face of information about others' preferences' on renewable energy trade-offs

Figure 6a presents technology acceptance by control and treatment groups, showing that overall acceptance of energy technologies is broad and robust to information interventions. The treatment, which provided respondents with information about population preferences regarding renewable energy trade-offs, did not affect technology acceptance—potentially because people were already relatively accurate in estimating others' beliefs (Figure 2b). Figure 6b compares baseline acceptance across groups defined by misperceptions of others' trade-off preferences, corroborating the null effect of the information treatment.

Beyond the null treatment effect, baseline acceptance varies clearly across technologies. Alpine PV enjoys the highest acceptance, on par with wind, while new nuclear elicits only modest support, and prolonging existing plants is viewed negatively (Figure 6a). Beyond the null treatment effect, baseline acceptance varies clearly across technologies. Alpine PV enjoys the highest acceptance, on par with wind, while new nuclear elicits only modest support and prolonging existing plants is viewed negatively (Figure 6b).

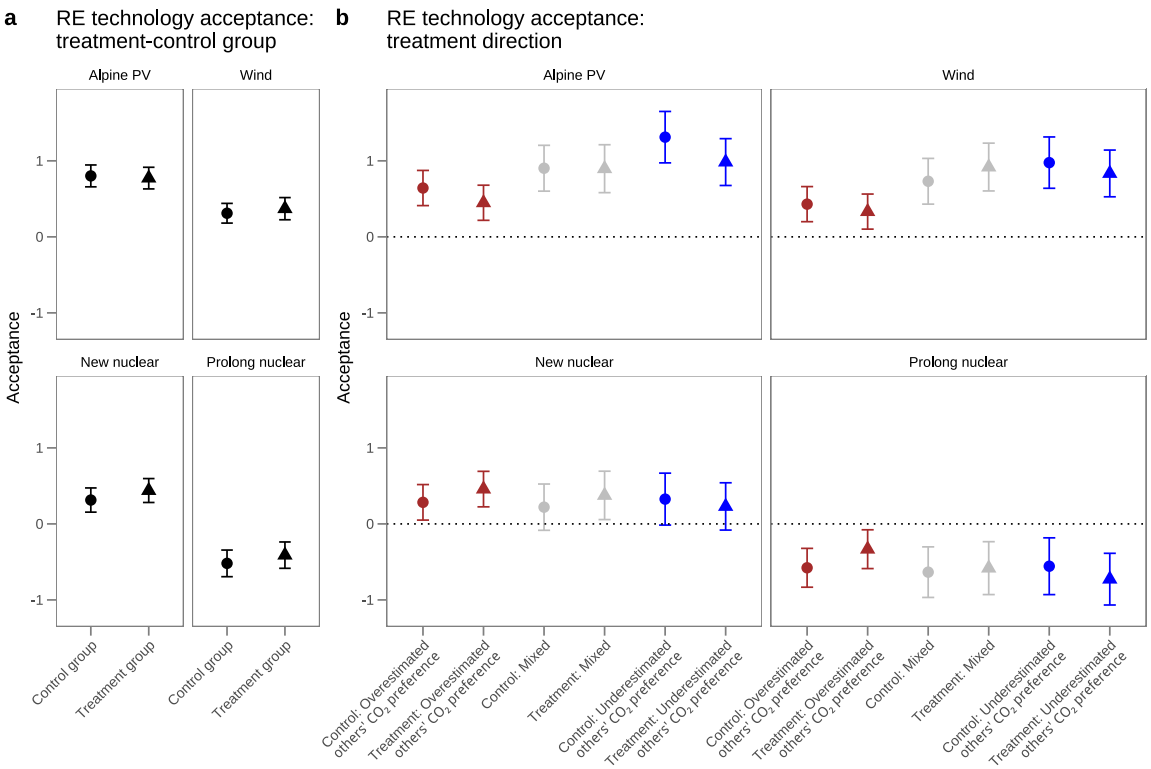

Figure 5. Marginal mean estimates regressing the treatment groups on respondents' technology acceptance. The circle and triangle represent the control and treatment groups, respectively. The treatment group saw information about how others optimize the trade-offs between biodiversity and emission reductions, and land use and emission reductions. We compare the control and the treatment groups (in a) and the treatment based on the directionality: i) an overestimation of others' CO2 reduction preference, ii) an underestimation of others' CO2 reduction preference, and iii) mixed (under and overestimation of one of the two) between control and treatment groups (in b). In the latter, we control for left-right, trust in science, urban-rural, climate salience, gender, income, and the confidence in how people estimated others' optimization of trade-offs before the experiment (for full results, see Supplementary Materials, Tables 8-12; robustness checks for speeding in the survey, attention check verifying that the treatment was correctly understood, and heterogeneous treatment effects in Tables 13-26).

3.5 People's own trade-offs and perception of synergies matter more than what they expect to perceive as trade-offs

Across all four technologies, respondents' *own* perceptions of trade-offs and synergies were more strongly related to acceptance than their second-order expectations about others' views (Figure 6). Acceptance of renewables (Alpine PV and wind) increased when respondents prioritized emission reductions over biodiversity or landscape protection and when they perceived biodiversity protection and emission goals as complementary. Second-order beliefs are not consistently associated with acceptance across any of the technologies, with only a modest effect of land-use trade-offs for Alpine PV.

For nuclear technologies, the pattern was reversed: stronger perceptions of biodiversity–emissions trade-offs reduced acceptance of prolonging nuclear plants, while seeing biodiversity and emissions as complementary was negatively associated with acceptance of both prolonging and new nuclear plants. Land-use-related beliefs were weak, and second-order beliefs were consistently unrelated to acceptance.

4 Discussion

Using a population-representative survey experiment in Switzerland (N=1,899), we analysed trade-offs between emission reductions, biodiversity conservation, and landscape protection. Beyond people's own (first-order) beliefs, we examined expectations about others' views (second-order beliefs), combining analysis of their drivers and biases with a belief-updating experiment to test whether accurate information shifts perceptions of trade-offs and technology acceptance.

Our findings have several important implications for the socio-political processes surrounding decarbonisation. First, we show that people are fairly good at estimating what others think regarding the trade-off between biodiversity and emissions, but much less accurate when landscape

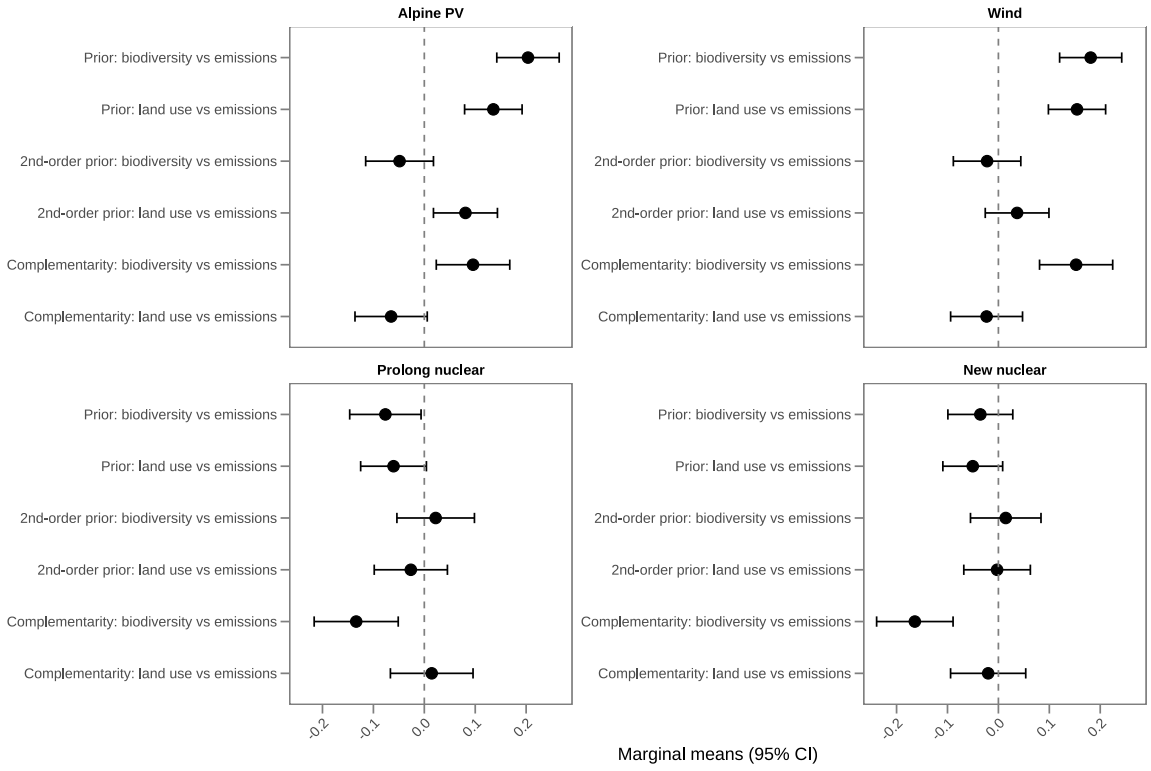

Figure 6. Marginal mean estimates regressing prior first and second-order beliefs on the two trade-offs and synergies on technology acceptance. Points indicate estimated coefficients, and whiskers show 95% confidence intervals. The vertical axis lists the explanatory variables, and the horizontal axis represents marginal means, holding constant the control variables left-right, left-right, trust in science, climate Salience, urban-rural residence, gender, whether the respondents are coping on their current income, and their confidence in the prior beliefs (for full results, see Supplementary Materials, Tables 27-30).

protection is involved. Many respondents assumed that landscape protection was more popular than it really is, which suggests that misperceptions are domain-specific rather than general. This reflects that many debates about concrete alpine PV and wind projects in Switzerland revolved around landscape issues. More specifically, most opposing organizations and political parties use these issues to politicize against renewable energy projects, and the Swiss political system provides them with many (legal) possibilities to do so and to gain visibility(24; 9; 8). At the same time, in 2024, more than 60% of Swiss voters accepted a new Electricity Act aimed at facilitating the construction of renewable energy infrastructure. Hence, our findings are well in line with the interpretation that while a clear majority in Switzerland prioritizes emission reduction over landscape protection (see Figure 2a), the relatively small but powerful opposition against the renewable energy project creates the societal perception that landscape protection is valued more than emission reduction. This dynamic may reinforce local resistance to renewable projects, as people feel socially validated in opposing developments if they believe that "everyone else" shares their priorities.

Second, respondents tended to see biodiversity and landscape protection as synergies rather than trade-offs. This contrasts with dominant political narratives, which use cross-cutting issues to advance their agendas (35). Our findings resonate with recent work on issue framing, which shows that public opinion may become less polarised when policy challenges are presented as mutually reinforcing synergies rather than zero-sum trade-offs(e.g., 36; 18).

Third, our results reveal a striking stability in perceived trade-offs and technology acceptance. Even when respondents with biased expectations were presented with accurate information about societal views, they rarely revised their own evaluations or their acceptance of specific technologies. This suggests that the close social environment may matter more for belief updating than broad societal views (37). While prior research often finds strong effects of second-order beliefs on policy support and behavior (e.g., 20; 19), we observe only weak or inconsistent associations. One explanation lies in the Swiss context, where citizens are generally well informed about the energy transition and where extensive public debate and frequent voting may reduce the scope for peer

pressure. Another reason may be the substantive issue itself: trade-offs between emission reductions and biodiversity or land use are concrete, politicized, and tied to visible local impacts, where entrenched *own* beliefs appear more decisive than second-order expectations.

Fourth, our results on the stability of energy technology acceptance, also indicate that discursive reframing is a limited tool for shifting attitudes in political debates (38; 39), especially when focused on what others perceive as trade-offs. Resistance to renewables seems less a matter of persuasion than of entrenched concerns tied to place, identity, and material stakes (40; 41). For policy, this highlights the need to move beyond communication strategies ro combine them with participatory processes (39; 8), procedural fairness, trusted intermediaries, compensation mechanisms (8), and benefit-sharing schemes (6) that directly address the substantive drivers of opposition.

5 Conclusion

Our results indicate that perceptions of what others think do influence acceptance of renewable energy, particularly for respondents who underestimate societal support for emission reductions—they tend to assign a lower value to emission reduction relative to biodiversity or landscape protection. At the same time, these perceptions are systematically biased, especially on issues with visible environmental impacts, such as alpine PV and wind infrastructure, suggesting that politicization of the topic amplifies misperceptions. Correcting these misperceptions experimentally had only a limited influence on individual preferences, highlighting the resilience of entrenched views and the difficulty of shifting established beliefs. Future research should investigate more closely perceived synergies and whether more interactive or deliberative settings, peer discussions, or trust-building initiatives with institutions can promote greater openness to belief updating and more accurate perceptions of societal preferences.

Acknowledgments

We are grateful to the anonymous reviewers for their constructive feedback and to the EPFL HERUS and UNIBE teams for valuable exchanges. We also thank members of the EDGE and ENGAGE consortia for their feedback and discussions. Finally, we extend our sincere gratitude to all survey participants, without whose engagement this work would not have been possible.

Funding

This research was supported by the Swiss Federal Office of Energy within the SWEET consortium EDGE (Grant DB n°202481). Additional co-funding was provided by the ETH Board through the Joint Initiative (JI) – ENGAGE: Evidence-Based Dialogue on Trade-Offs in Wicked Societal Problems within the “Engagement and Dialogue with Society” strategic area (Grant DB n°23880). The authors alone are responsible for the study’s results and conclusions.

Author contributions

S.M. and J.S. designed the research with contributions from all other authors. J.S. implemented the survey items in the survey software Qualtrics. S.M. and J.S. analyzed the data. S.M. made the visualisations. S.M. wrote the manuscript with contributions from I.S. and all other authors. I.S. and C.B. supervised the research.

Data availability

All replication data and files can be found under
https://github.com/SimonMontfort/2nd_trade-offs

Supplementary data

The document entitled: ”Supplementary Materials: Own trade-off and synergy beliefs, not others’ beliefs, drive public acceptance of energy technologies” contains additional analyses supporting the analysis presented in the main text.

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Supplementary Materials:

Own trade-off and synergy beliefs, not others' beliefs, drive public acceptance of energy technologies

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Slider question example

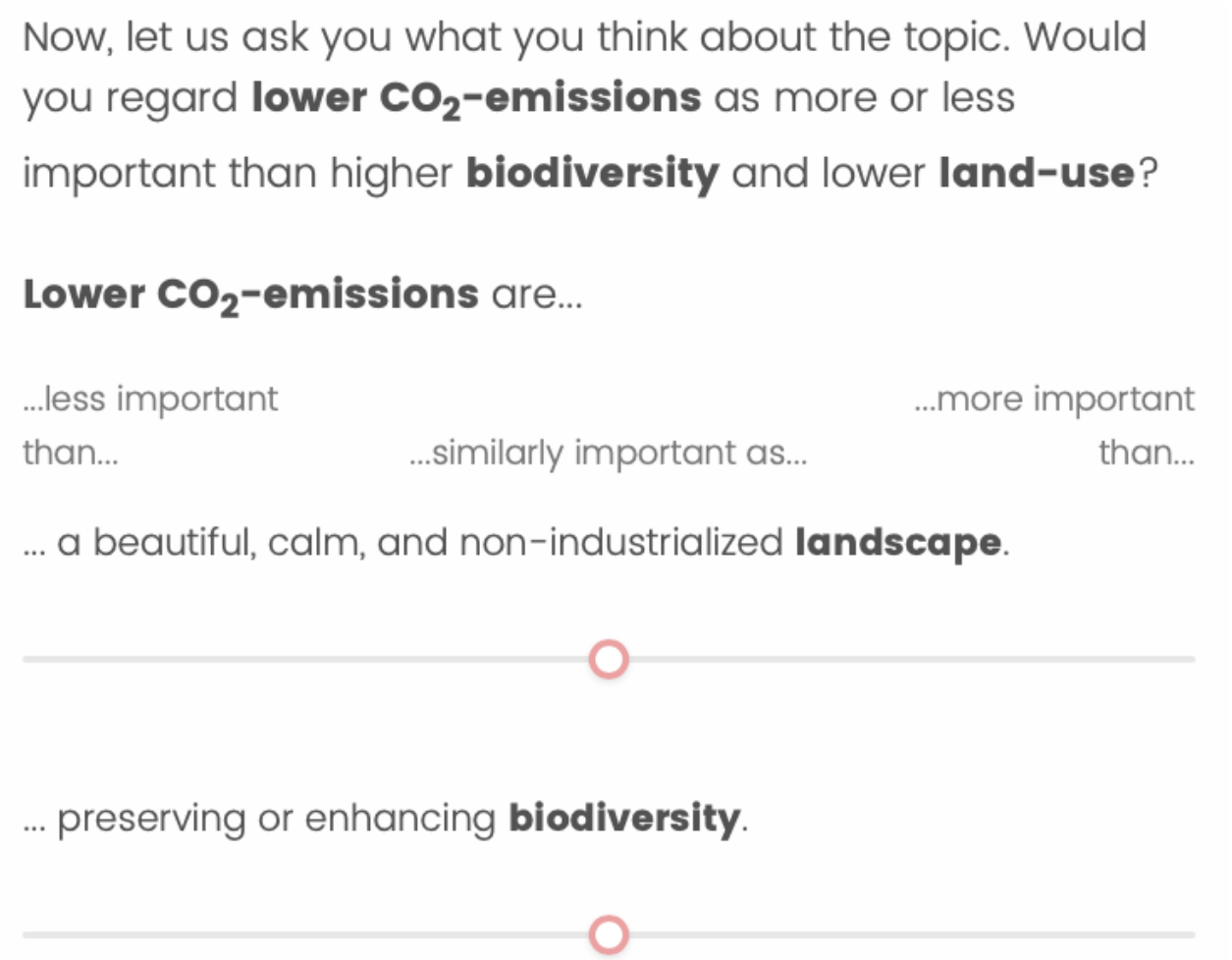

Fig. 1 – Example of a slider question used for the evaluation of different trade-offs and synergies between different societal goals, here showing the survey item for first-order trade-offs prior to the experiment.

Descriptives

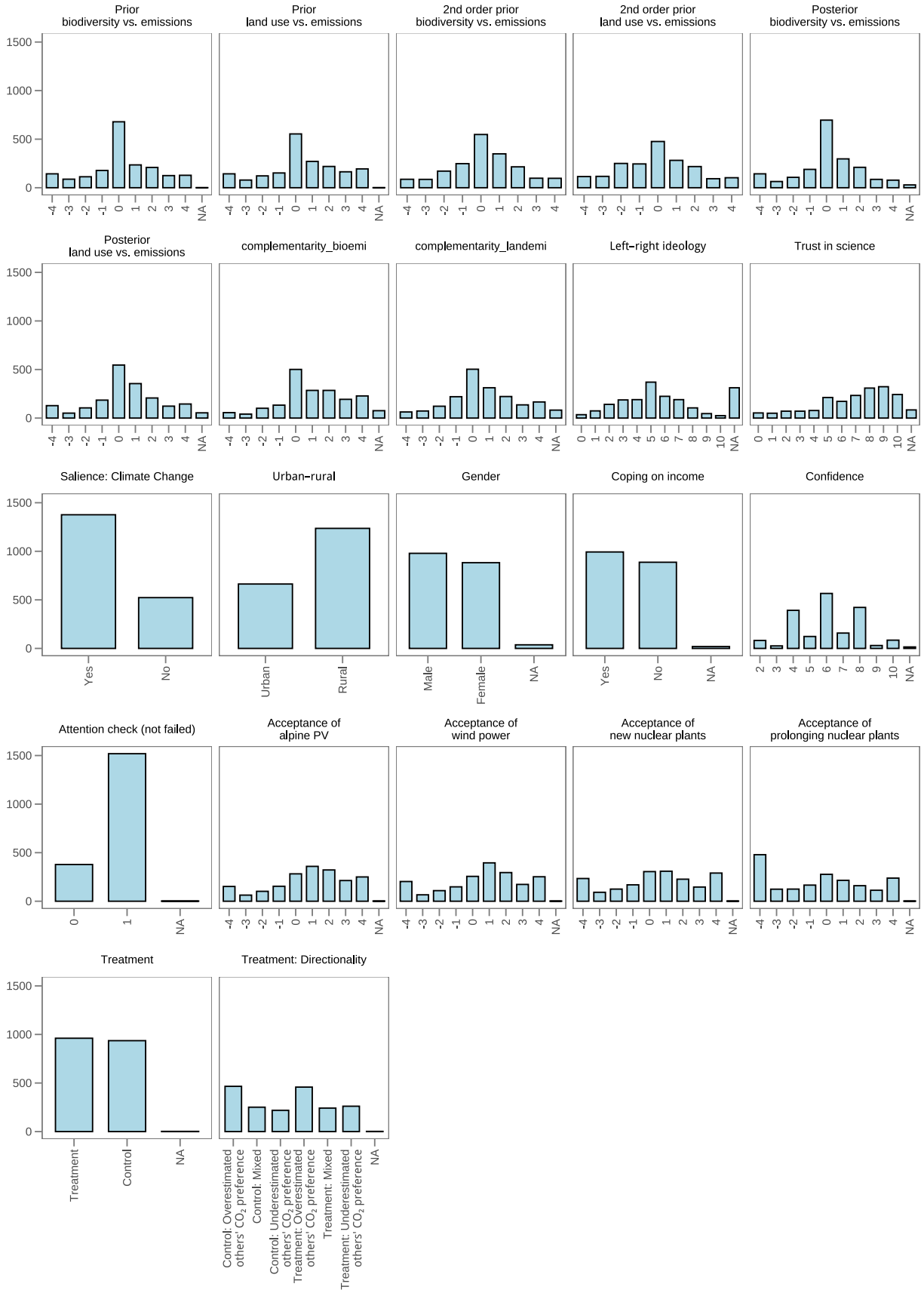

Fig. 2 – Count of the variables used in the analysis.

Table 1 – Summary statistics

Statistic	N	Mean	St. Dev.	Min	Max
Prior biodiversity vs. emissions	1,898	0.158	2.042	−4	4
Prior land use vs. emissions	1,898	0.407	2.184	−4	4
2nd order prior biodiversity vs. emissions	1,899	0.140	1.879	−4	4
2nd order prior land use vs. emissions	1,899	−0.077	2.023	−4	4
Posterior biodiversity vs. emissions	1,870	0.064	1.884	−4	4
Posterior land use vs. emissions	1,845	0.357	2.015	−4	4
Complementarity biodiversity conservation + emission reductions	1,823	0.913	1.973	−4	4
Complementarity landscape conservation + emission reductions	1,817	0.491	1.965	−4	4
Left–right ideology	1,587	4.855	2.178	0	10
Trust in science	1,815	6.749	2.646	0	10
Salience: Climate Change	1,899	0.725	0.447	0	1
Urban–rural	1,899	0.651	0.477	0	1
Gender (male yes)	1,862	1.526	0.499	1	2
Coping on income (yes)	1,880	0.528	0.499	0	1
Confidence	1,884	6.063	1.887	2	10
Attention check (not failed)	1,897	0.801	0.400	0	1
Acceptance of alpine PV	1,897	0.784	2.292	−4	4
Acceptance of wind power	1,897	0.599	2.399	−4	4
Acceptance of new nuclear plants	1,897	0.385	2.529	−4	4
Acceptance of prolonging nuclear plants	1,897	−0.463	2.786	−4	4
Treatment	1,897	1.507	0.500	1	2
Treatment directionality: Overestimated others' emission reduction preference	1,899	0.487	0.500	0	1
Treatment directionality: Mixed	1,899	0.260	0.439	0	1
Treatment directionality: Underestimated others' emission reduction preference	1,899	0.253	0.435	0	1

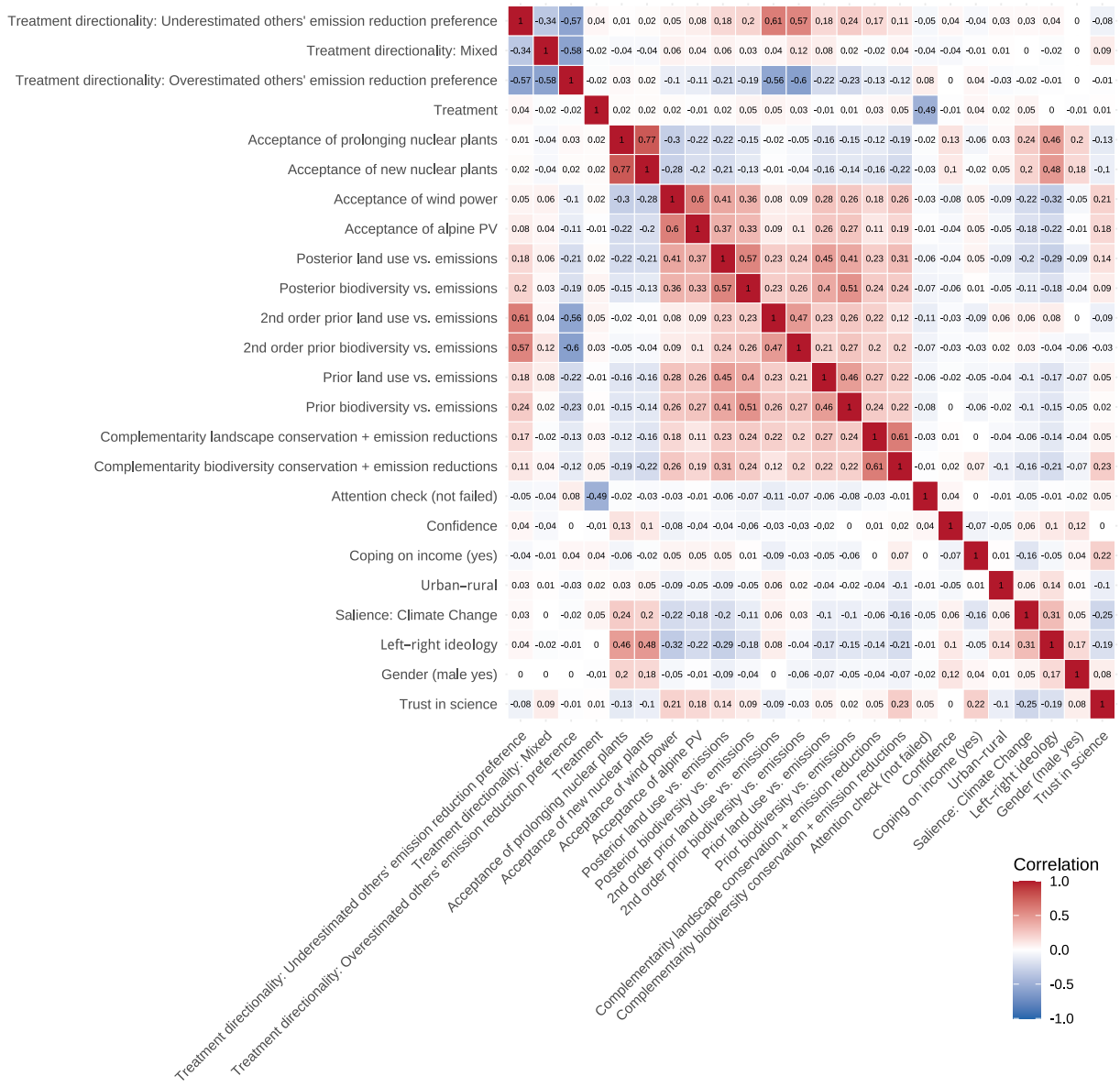

Fig. 3 – Correlation heatmap of the variables. Categorical variables were transformed into numeric variables and missing values were excluded.

Explaining prior beliefs

	Prior biodiversity vs. emissions	Prior land use vs. emissions	2nd order prior biodiversity vs. emissions	2nd order prior land use vs. emissions
Intercept	1.11***	1.48***	0.84**	0.61*
	(0.28)	(0.30)	(0.26)	(0.28)
Left–right ideology	−0.12***	−0.13***	−0.04	0.05
	(0.03)	(0.03)	(0.02)	(0.03)
Trust in science	0.01	0.04	−0.02	−0.05*
	(0.02)	(0.02)	(0.02)	(0.02)
climate_salienceYes	−0.42***	−0.41**	0.10	0.02
	(0.12)	(0.13)	(0.11)	(0.12)
urban_rural_binaryurban	−0.09	0.02	−0.05	−0.25*
	(0.11)	(0.12)	(0.10)	(0.11)
Gender (male yes)	−0.09	−0.13	−0.24*	−0.00
	(0.11)	(0.11)	(0.10)	(0.10)
Coping on income (yes)	−0.22*	−0.29*	−0.15	−0.31**
	(0.11)	(0.11)	(0.10)	(0.11)
Confidence	0.01	−0.04	−0.04	−0.06*
	(0.03)	(0.03)	(0.03)	(0.03)
R^2	0.03	0.04	0.01	0.02
Adj. R^2	0.03	0.04	0.01	0.02
Num. obs.	1536	1536	1536	1536

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 2 – Determinants of prior beliefs: ideology, trust in science, and covariates

Social influence

	Posterior biodiversity vs. emissions	Posterior land use vs. emissions
Intercept	−0.03	0.31***
	(0.06)	(0.07)
Treatment (yes)	0.13	0.05
	(0.09)	(0.10)
R^2	0.00	0.00
Adj. R^2	0.00	−0.00
Num. obs.	1642	1627

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 3 – Social influence: biodiversity and land-use beliefs, treatment-control comparison

	Posterior biodiversity vs. emissions	Posterior biodiversity vs. emissions	Posterior biodiversity vs. emissions	Posterior biodiversity vs. emissions	Posterior biodiversity vs. emissions	Posterior biodiversity vs. emissions	Posterior biodiversity vs. emissions	Posterior biodiversity vs. emissions
Intercept	-0.45^{***}	-0.95^{***}	-0.87^{***}	-0.24	0.14	0.31	0.30	0.71^{*}
	(0.09)	(0.14)	(0.15)	(0.21)	(0.25)	(0.29)	(0.29)	(0.33)
Control: mixed	0.51^{***}	0.50^{***}	0.50^{***}	0.56^{***}	0.56^{***}	0.57^{***}	0.58^{***}	0.57^{***}
	(0.15)	(0.15)	(0.15)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
Control: others support emission reductions more than expected	1.25^{***}	1.26^{***}	1.27^{***}	1.16^{***}	1.12^{***}	1.13^{***}	1.13^{***}	1.14^{***}
	(0.15)	(0.16)	(0.16)	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)
Treatment: others support emission reductions more than expected	0.29^{*}	0.30^{*}	0.30^{*}	0.30^{*}	0.29^{*}	0.30^{*}	0.30^{*}	0.30^{*}
	(0.12)	(0.12)	(0.13)	(0.13)	(0.14)	(0.14)	(0.14)	(0.14)
Treatment: mixed	0.69^{***}	0.64^{***}	0.63^{***}	0.68^{***}	0.68^{***}	0.68^{***}	0.68^{***}	0.68^{***}
	(0.15)	(0.15)	(0.15)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
Treatment: others support emission reductions less than expected	1.08^{***}	1.07^{***}	1.09^{***}	1.05^{***}	1.02^{***}	1.02^{***}	1.02^{***}	1.02^{***}
	(0.14)	(0.15)	(0.15)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
Trust in science		0.07^{***}	0.08^{***}	0.07^{***}	0.09^{***}	0.09^{***}	0.09^{***}	0.08^{***}
		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Gender (male yes)			-0.21^{*}	-0.11	-0.12	-0.12	-0.12	-0.11
			(0.09)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Left–right ideology				-0.14^{***}	-0.14^{***}	-0.14^{***}	-0.14^{***}	-0.13^{***}
				(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Education (numeric)					-0.16^{**}	-0.17^{**}	-0.18^{**}	-0.17^{**}
					(0.05)	(0.05)	(0.06)	(0.06)
Urban–rural scale						-0.05	-0.05	-0.06
						(0.05)	(0.05)	(0.05)
Coping on income (yes)							0.08	0.05
							(0.10)	(0.10)
Confidence								-0.07^{**}
								(0.03)
R^2	0.05	0.06	0.06	0.09	0.09	0.09	0.09	0.10
Adj. R^2	0.05	0.06	0.06	0.08	0.09	0.09	0.09	0.09
Num. obs.	1870	1795	1780	1528	1488	1485	1485	1481

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 4 – Social influence: biodiversity beliefs, treatment direction

	Posterior land use vs. emissions	Posterior land use vs. emissions	Posterior land use vs. emissions	Posterior land use vs. emissions	Posterior land use vs. emissions	Posterior land use vs. emissions	Posterior land use vs. emissions	Posterior land use vs. emissions
Intercept	−0.19*	−0.99***	−0.84***	0.44*	0.40	0.64*	0.62*	0.74*
	(0.09)	(0.15)	(0.16)	(0.22)	(0.26)	(0.30)	(0.30)	(0.34)
Control: mixed	0.78***	0.76***	0.75***	0.68***	0.69***	0.70***	0.71***	0.71***
	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
Control: others support emission reductions more than expected	1.25***	1.29***	1.30***	1.14***	1.10***	1.11***	1.14***	1.14***
	(0.16)	(0.17)	(0.17)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
Treatment: others support emission reductions more than expected	0.23	0.25	0.25	0.22	0.24	0.24	0.23	0.23
	(0.13)	(0.13)	(0.13)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
Treatment: mixed	0.69***	0.68***	0.67***	0.62***	0.60***	0.61***	0.61***	0.61***
	(0.16)	(0.16)	(0.16)	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)
Treatment: others support emission reductions less than expected	1.11***	1.11***	1.13***	1.09***	1.10***	1.12***	1.12***	1.12***
	(0.15)	(0.15)	(0.15)	(0.16)	(0.17)	(0.17)	(0.17)	(0.17)
Trust in science		0.12***	0.12***	0.10***	0.09***	0.09***	0.09***	0.09***
		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Gender (male yes)			−0.40***	−0.18	−0.19	−0.20	−0.20*	−0.19
			(0.09)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Left–right ideology				−0.25***	−0.26***	−0.25***	−0.25***	−0.25***
				(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Education (numeric)					0.05	0.03	0.00	0.01
					(0.06)	(0.06)	(0.06)	(0.06)
Urban–rural scale						−0.08	−0.09	−0.09
						(0.05)	(0.05)	(0.05)
Coping on income (yes)							0.27**	0.26*
							(0.10)	(0.10)
Confidence								−0.02
								(0.03)
R^2	0.05	0.07	0.08	0.15	0.15	0.15	0.15	0.15
Adj. R^2	0.05	0.07	0.08	0.14	0.14	0.14	0.15	0.15
Num. obs.	1845	1776	1761	1515	1476	1473	1473	1469

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 5 – Social influence: land-use beliefs, treatment direction

Social influence: robustness checks, gap to true value

	Posterior biodiversity vs. emissions	Posterior biodiversity vs. emissions	Posterior biodiversity vs. emissions	Posterior biodiversity vs. emissions	Posterior biodiversity vs. emissions	Posterior biodiversity vs. emissions	Posterior biodiversity vs. emissions	Posterior biodiversity vs. emissions
Intercept	0.14	−0.40**	−0.34*	0.37	0.61*	0.73*	0.73*	1.13**
	(0.07)	(0.14)	(0.15)	(0.22)	(0.26)	(0.31)	(0.31)	(0.35)
Gap to true value: Biodiversity vs. emissions	0.22***	0.22***	0.22***	0.18***	0.18***	0.18***	0.18***	0.18***
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Treatment (yes)	−0.04	−0.07	−0.07	0.02	0.04	0.05	0.05	0.05
	(0.12)	(0.12)	(0.12)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Gap to true value: Landscape vs. emissions	0.15***	0.16***	0.16***	0.16***	0.15***	0.15***	0.15***	0.15***
	(0.03)	(0.03)	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Gap to true value: Biodiversity vs. emissions ×Treatment (yes)	−0.04	−0.05	−0.05	−0.07	−0.07	−0.07	−0.07	−0.07
	(0.06)	(0.06)	(0.06)	(0.06)	(0.07)	(0.07)	(0.07)	(0.07)
Gap to true value: Landscape vs. emissions ×Treatment (yes)	−0.09	−0.11	−0.11*	−0.04	−0.03	−0.03	−0.03	−0.03
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Trust in science		0.08***	0.08***	0.08***	0.09***	0.09***	0.09***	0.08***
		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Gender (male yes)			−0.14	−0.06	−0.06	−0.06	−0.06	−0.04
			(0.10)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
Left–right ideology				−0.15***	−0.15***	−0.15***	−0.15***	−0.14***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					−0.11	−0.11	−0.12	−0.11
					(0.06)	(0.06)	(0.06)	(0.06)
Urban–rural scale						−0.04	−0.04	−0.05
						(0.05)	(0.05)	(0.05)
Coping on income (yes)							0.02	−0.01
							(0.11)	(0.11)
Confidence								−0.06*
								(0.03)
R^2	0.08	0.09	0.09	0.11	0.11	0.11	0.11	0.12
Adj. R^2	0.08	0.09	0.09	0.10	0.10	0.10	0.10	0.11
Num. obs.	1492	1445	1433	1234	1202	1201	1201	1197

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 6 – Robustness checks for social influence: biodiversity beliefs, gap to true value (true value - own prior belief)

	Posterior land use vs. emissions	Posterior land use vs. emissions	Posterior land use vs. emissions	Posterior land use vs. emissions	Posterior land use vs. emissions	Posterior land use vs. emissions	Posterior land use vs. emissions	Posterior land use vs. emissions
Intercept	0.52***	−0.31*	−0.16	1.15***	0.91***	1.04***	1.03**	1.08**
	(0.08)	(0.15)	(0.16)	(0.23)	(0.27)	(0.32)	(0.32)	(0.36)
Gap to true value: Biodiversity vs. emissions	0.21***	0.20***	0.20***	0.16***	0.16***	0.16***	0.16***	0.16***
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Treatment (yes)	−0.14	−0.17	−0.18	−0.12	−0.09	−0.09	−0.11	−0.10
	(0.13)	(0.13)	(0.13)	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
Gap to true value: Landscape vs. emissions	0.19***	0.21***	0.21***	0.20***	0.20***	0.20***	0.20***	0.20***
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Gap to true value: Biodiversity vs. emissions ×Treatment (yes)	−0.04	−0.05	−0.05	−0.07	−0.08	−0.08	−0.08	−0.08
	(0.06)	(0.06)	(0.06)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Gap to true value: Landscape vs. emissions ×Treatment (yes)	−0.09	−0.10	−0.10	−0.04	−0.03	−0.03	−0.04	−0.04
	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)	(0.06)
Trust in science		0.12***	0.13***	0.11***	0.10***	0.09***	0.09***	0.09***
		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Gender (male yes)			−0.39***	−0.16	−0.17	−0.18	−0.18	−0.18
			(0.10)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
Left–right ideology				−0.27***	−0.27***	−0.27***	−0.27***	−0.27***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					0.12	0.11	0.08	0.08
					(0.06)	(0.06)	(0.06)	(0.06)
Urban–rural scale						−0.04	−0.05	−0.05
						(0.05)	(0.05)	(0.05)
Coping on income (yes)							0.31**	0.30**
							(0.11)	(0.11)
Confidence								−0.01
								(0.03)
R^2	0.08	0.11	0.12	0.18	0.18	0.18	0.19	0.19
Adj. R^2	0.08	0.10	0.11	0.17	0.18	0.18	0.18	0.18
Num. obs.	1481	1433	1421	1225	1194	1193	1193	1189

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 7 – Robustness checks for social influence: land-use beliefs, gap to true value (true value - own prior belief)

Causal effect of information treatment on renewable energy technology acceptance

	Acceptance of alpine PV	Acceptance of wind power	Acceptance of new nuclear plants	Acceptance of prolonging nuclear plants
Intercept	0.80^{***}	0.56^{***}	0.32^{***}	-0.51^{***}
	(0.07)	(0.08)	(0.08)	(0.09)
Treatment (yes)	−0.04	0.08	0.12	0.10
	(0.11)	(0.11)	(0.12)	(0.13)
R^2	0.00	0.00	0.00	0.00
Adj. R^2	−0.00	−0.00	0.00	−0.00
Num. obs.	1897	1897	1897	1897

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 8 – Acceptance of renewable energy technologies: treatment-control comparison

	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV
Intercept	0.55***	−0.52**	−0.47**	0.55*	0.62*	0.92**	0.91*	1.10**
	(0.11)	(0.17)	(0.18)	(0.26)	(0.31)	(0.35)	(0.35)	(0.40)
Control: mixed	0.36*	0.28	0.31	0.28	0.28	0.29	0.30	0.27
	(0.18)	(0.18)	(0.18)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
Control: others support emission reductions more than expected	0.68***	0.78***	0.77***	0.70***	0.70***	0.71***	0.72***	0.70***
	(0.19)	(0.19)	(0.19)	(0.20)	(0.21)	(0.21)	(0.21)	(0.21)
Treatment: others support emission reductions more than expected	−0.04	−0.05	−0.05	−0.14	−0.14	−0.15	−0.15	−0.18
	(0.15)	(0.15)	(0.15)	(0.16)	(0.17)	(0.17)	(0.17)	(0.17)
Treatment: mixed	0.43*	0.35	0.34	0.27	0.28	0.29	0.29	0.27
	(0.18)	(0.18)	(0.18)	(0.19)	(0.20)	(0.20)	(0.20)	(0.20)
Treatment: others support emission reductions less than expected	0.46**	0.46**	0.48**	0.39*	0.35	0.37	0.37	0.35
	(0.18)	(0.18)	(0.18)	(0.19)	(0.20)	(0.20)	(0.20)	(0.20)
Trust in science		0.16***	0.16***	0.15***	0.15***	0.15***	0.15***	0.15***
		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)
Gender (male yes)			−0.08	0.02	0.03	0.03	0.02	0.03
			(0.11)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
Left–right ideology				−0.20***	−0.20***	−0.20***	−0.20***	−0.19***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					−0.03	−0.05	−0.06	−0.07
					(0.07)	(0.07)	(0.07)	(0.07)
Urban–rural scale						−0.10	−0.10	−0.10
						(0.06)	(0.06)	(0.06)
Coping on income (yes)							0.15	0.14
							(0.12)	(0.12)
Confidence								−0.03
								(0.03)
R^2	0.01	0.05	0.05	0.08	0.08	0.09	0.09	0.09
Adj. R^2	0.01	0.04	0.04	0.08	0.08	0.08	0.08	0.08
Num. obs.	1897	1815	1799	1543	1502	1499	1499	1493

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 9 – Acceptance of alpine PV energy technology: treatment direction

	Acceptance of alpine PV	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power
Intercept	0.55***	−1.01***	−0.90***	0.69**	0.78*	1.07**	1.07**	1.55***
	(0.11)	(0.18)	(0.19)	(0.26)	(0.31)	(0.35)	(0.35)	(0.40)
Control: mixed	0.36*	0.38*	0.40*	0.33	0.33	0.34	0.35	0.31
	(0.18)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
Control: others support emission reductions more than expected	0.68***	0.65***	0.66***	0.58**	0.58**	0.59**	0.59**	0.58**
	(0.19)	(0.20)	(0.20)	(0.20)	(0.21)	(0.21)	(0.21)	(0.21)
Treatment: others support emission reductions more than expected	−0.04	0.10	0.12	−0.02	−0.05	−0.04	−0.05	−0.08
	(0.15)	(0.16)	(0.16)	(0.16)	(0.17)	(0.17)	(0.17)	(0.17)
Treatment: mixed	0.43*	0.52**	0.51**	0.48*	0.52**	0.53**	0.53**	0.50*
	(0.18)	(0.19)	(0.19)	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)
Treatment: others support emission reductions less than expected	0.46**	0.55**	0.57**	0.45*	0.45*	0.46*	0.46*	0.43*
	(0.18)	(0.18)	(0.19)	(0.19)	(0.20)	(0.20)	(0.20)	(0.20)
Trust in science		0.19***	0.20***	0.18***	0.18***	0.18***	0.18***	0.18***
		(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)
Gender (male yes)			−0.29**	−0.13	−0.13	−0.13	−0.13	−0.10
			(0.11)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
Left–right ideology				−0.30***	−0.31***	−0.30***	−0.30***	−0.30***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					−0.02	−0.04	−0.04	−0.05
					(0.07)	(0.07)	(0.07)	(0.07)
Urban–rural scale						−0.09	−0.09	−0.09
						(0.06)	(0.06)	(0.06)
Coping on income (yes)							0.06	0.05
							(0.12)	(0.12)
Confidence								−0.08*
								(0.03)
R^2	0.01	0.06	0.06	0.14	0.14	0.15	0.15	0.15
Adj. R^2	0.01	0.05	0.05	0.14	0.14	0.14	0.14	0.14
Num. obs.	1897	1815	1799	1543	1502	1499	1499	1493

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 10 – Acceptance of wind energy technology: treatment direction

	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants
Intercept	0.42***	1.07***	0.64**	−2.32***	−2.28***	−2.26***	−2.26***	−2.79***
	(0.12)	(0.19)	(0.20)	(0.26)	(0.31)	(0.36)	(0.36)	(0.40)
Control: mixed	−0.28	−0.24	−0.28	−0.12	−0.11	−0.11	−0.11	−0.08
	(0.20)	(0.20)	(0.20)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
Control: others support emission reductions more than expected	−0.09	−0.13	−0.14	0.02	0.02	0.01	0.02	0.03
	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)
Treatment: others support emission reductions more than expected	0.02	−0.02	−0.03	0.15	0.15	0.16	0.16	0.17
	(0.17)	(0.17)	(0.17)	(0.16)	(0.17)	(0.17)	(0.17)	(0.17)
Treatment: mixed	−0.09	−0.05	−0.03	0.09	0.05	0.05	0.05	0.07
	(0.20)	(0.21)	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)
Treatment: others support emission reductions less than expected	0.14	0.10	0.08	−0.01	−0.09	−0.10	−0.10	−0.08
	(0.20)	(0.20)	(0.20)	(0.19)	(0.20)	(0.20)	(0.20)	(0.20)
Trust in science		−0.09***	−0.11***	−0.04	−0.03	−0.03	−0.04	−0.03
		(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)			1.00***	0.57***	0.56***	0.57***	0.57***	0.55***
			(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
Left–right ideology				0.54***	0.55***	0.55***	0.55***	0.54***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					−0.05	−0.05	−0.06	−0.05
					(0.07)	(0.07)	(0.07)	(0.07)
Urban–rural scale						−0.00	−0.00	0.01
						(0.06)	(0.06)	(0.06)
Coping on income (yes)							0.06	0.09
							(0.12)	(0.12)
Confidence								0.08**
								(0.03)
R^2	0.00	0.01	0.05	0.25	0.25	0.25	0.25	0.25
Adj. R^2	−0.00	0.01	0.05	0.24	0.24	0.24	0.24	0.25
Num. obs.	1897	1815	1799	1543	1502	1499	1499	1493

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 11 – Acceptance of new nuclear energy technology: treatment direction

	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants
Intercept	−0.41**	0.52*	0.01	−3.03***	−3.19***	−2.90***	−2.88***	−3.64***
	(0.13)	(0.21)	(0.22)	(0.29)	(0.34)	(0.39)	(0.39)	(0.44)
Control: mixed	−0.28	−0.27	−0.33	−0.12	−0.11	−0.11	−0.12	−0.07
	(0.22)	(0.22)	(0.22)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)
Control: others support emission reductions more than expected	−0.10	−0.15	−0.16	−0.01	0.00	0.01	−0.01	0.01
	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)
Treatment: others support emission reductions more than expected	0.08	0.02	0.01	0.18	0.20	0.21	0.22	0.24
	(0.18)	(0.19)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
Treatment: mixed	−0.23	−0.14	−0.12	−0.04	−0.07	−0.06	−0.06	−0.02
	(0.22)	(0.23)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)
Treatment: others support emission reductions less than expected	0.08	0.01	−0.01	−0.17	−0.22	−0.22	−0.22	−0.18
	(0.22)	(0.22)	(0.21)	(0.21)	(0.22)	(0.22)	(0.22)	(0.22)
Trust in science		−0.14***	−0.15***	−0.09***	−0.09**	−0.09**	−0.09**	−0.08**
		(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)			1.21***	0.78***	0.76***	0.77***	0.77***	0.74***
			(0.13)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Left–right ideology				0.56***	0.57***	0.57***	0.57***	0.56***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					0.03	0.01	0.04	0.04
					(0.07)	(0.07)	(0.08)	(0.08)
Urban–rural scale						−0.09	−0.08	−0.07
						(0.06)	(0.06)	(0.06)
Coping on income (yes)							−0.22	−0.18
							(0.13)	(0.13)
Confidence								0.11***
								(0.03)
R^2	0.00	0.02	0.06	0.24	0.24	0.25	0.25	0.25
Adj. R^2	−0.00	0.02	0.06	0.24	0.24	0.24	0.24	0.25
Num. obs.	1897	1815	1799	1543	1502	1499	1499	1493

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 12 – Acceptance of prolonging nuclear energy technology: treatment direction

Causal effect of information treatment on renewable energy technology acceptance: robustness checks, speeders excluded

	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV
Intercept	0.55***	−0.61***	−0.55**	0.60*	0.66*	0.94**	0.93*	1.10**
	(0.11)	(0.18)	(0.19)	(0.27)	(0.32)	(0.36)	(0.37)	(0.41)
Control: mixed	0.36*	0.28	0.31	0.28	0.28	0.29	0.29	0.27
	(0.18)	(0.18)	(0.18)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
Control: others support emission reductions more than expected	0.68***	0.78***	0.78***	0.70***	0.69***	0.70***	0.72***	0.70***
	(0.19)	(0.19)	(0.19)	(0.20)	(0.21)	(0.21)	(0.21)	(0.21)
Treatment: others support emission reductions more than expected	0.00	−0.05	−0.04	−0.12	−0.12	−0.12	−0.13	−0.14
	(0.16)	(0.16)	(0.16)	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)
Treatment: mixed	0.51**	0.38*	0.37	0.34	0.35	0.36	0.36	0.34
	(0.19)	(0.19)	(0.19)	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)
Treatment: others support emission reductions less than expected	0.40*	0.38*	0.40*	0.33	0.31	0.34	0.34	0.32
	(0.19)	(0.19)	(0.19)	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)
Trust in science		0.17***	0.17***	0.15***	0.15***	0.15***	0.14***	0.14***
		(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)			−0.10	0.01	0.04	0.03	0.03	0.03
			(0.11)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
Left–right ideology				−0.21***	−0.21***	−0.20***	−0.20***	−0.20***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					−0.02	−0.03	−0.05	−0.05
					(0.07)	(0.07)	(0.07)	(0.07)
Urban–rural scale						−0.09	−0.10	−0.10
						(0.06)	(0.06)	(0.06)
Coping on income (yes)							0.14	0.12
							(0.12)	(0.12)
Confidence								−0.02
								(0.03)
R^2	0.01	0.05	0.05	0.09	0.09	0.09	0.09	0.09
Adj. R^2	0.01	0.05	0.04	0.08	0.08	0.08	0.08	0.08
Num. obs.	1756	1696	1680	1468	1434	1432	1432	1427

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 13 – Robustness checks for acceptance of alpine PV: treatment direction, speeders excluded

	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power
Intercept	0.32**	−1.14***	−1.04***	0.67*	0.73*	0.98**	0.97**	1.43***
	(0.11)	(0.19)	(0.19)	(0.27)	(0.32)	(0.36)	(0.37)	(0.41)
Control: mixed	0.41*	0.38*	0.39*	0.33	0.33	0.34	0.34	0.31
	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
Control: others support emission reductions more than expected	0.54**	0.66***	0.67***	0.58**	0.59**	0.59**	0.60**	0.58**
	(0.20)	(0.20)	(0.20)	(0.20)	(0.21)	(0.21)	(0.21)	(0.21)
Treatment: others support emission reductions more than expected	0.13	0.09	0.12	0.00	−0.02	−0.01	−0.02	−0.04
	(0.17)	(0.16)	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)
Treatment: mixed	0.64**	0.51*	0.50*	0.53**	0.56**	0.57**	0.58**	0.55**
	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)
Treatment: others support emission reductions less than expected	0.39*	0.40*	0.43*	0.37	0.37	0.39	0.39	0.36
	(0.20)	(0.19)	(0.19)	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)
Trust in science		0.21***	0.22***	0.18***	0.18***	0.18***	0.17***	0.17***
		(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)			−0.28*	−0.13	−0.12	−0.13	−0.13	−0.11
			(0.11)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
Left–right ideology				−0.30***	−0.31***	−0.30***	−0.30***	−0.30***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					−0.00	−0.02	−0.02	−0.03
					(0.07)	(0.07)	(0.07)	(0.07)
Urban–rural scale						−0.08	−0.08	−0.09
						(0.06)	(0.06)	(0.06)
Coping on income (yes)							0.08	0.06
							(0.12)	(0.12)
Confidence								−0.07*
								(0.03)
R^2	0.01	0.06	0.06	0.15	0.15	0.15	0.15	0.15
Adj. R^2	0.01	0.06	0.06	0.14	0.14	0.14	0.14	0.14
Num. obs.	1756	1696	1680	1468	1434	1432	1432	1427

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 14 – Robustness checks for acceptance of wind: treatment direction, speeders excluded

	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants
Intercept	0.42***	1.10***	0.67**	−2.59***	−2.53***	−2.41***	−2.41***	−2.92***
	(0.12)	(0.20)	(0.21)	(0.27)	(0.32)	(0.37)	(0.37)	(0.42)
Control: mixed	−0.28	−0.24	−0.28	−0.12	−0.11	−0.11	−0.10	−0.08
	(0.20)	(0.20)	(0.20)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
Control: others support emission reductions more than expected	−0.09	−0.14	−0.14	0.04	0.03	0.03	0.04	0.05
	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)
Treatment: others support emission reductions more than expected	0.01	0.00	−0.00	0.14	0.14	0.15	0.15	0.16
	(0.18)	(0.18)	(0.18)	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)
Treatment: mixed	−0.14	−0.09	−0.08	0.03	0.02	0.02	0.03	0.05
	(0.21)	(0.22)	(0.21)	(0.20)	(0.20)	(0.20)	(0.20)	(0.21)
Treatment: others support emission reductions less than expected	0.10	0.09	0.08	−0.05	−0.12	−0.11	−0.11	−0.09
	(0.21)	(0.21)	(0.21)	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)
Trust in science		−0.10***	−0.11***	−0.02	−0.02	−0.02	−0.02	−0.02
		(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)			1.01***	0.58***	0.57***	0.58***	0.58***	0.55***
			(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
Left–right ideology				0.57***	0.57***	0.58***	0.58***	0.57***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					−0.05	−0.05	−0.06	−0.06
					(0.07)	(0.07)	(0.07)	(0.07)
Urban–rural scale						−0.03	−0.03	−0.03
						(0.06)	(0.06)	(0.06)
Coping on income (yes)							0.08	0.10
							(0.13)	(0.13)
Confidence								0.08*
								(0.03)
R^2	0.00	0.01	0.05	0.26	0.26	0.26	0.26	0.26
Adj. R^2	−0.00	0.01	0.05	0.25	0.25	0.25	0.25	0.26
Num. obs.	1756	1696	1680	1468	1434	1432	1432	1427

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 15 – Robustness checks for acceptance of new nuclear: treatment direction, speeders excluded

	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants
Intercept	−0.41**	0.54*	0.01	−3.33***	−3.45***	−3.08***	−3.06***	−3.80***
	(0.13)	(0.22)	(0.23)	(0.30)	(0.35)	(0.40)	(0.40)	(0.45)
Control: mixed	−0.28	−0.27	−0.33	−0.12	−0.12	−0.11	−0.12	−0.07
	(0.22)	(0.22)	(0.22)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)
Control: others support emission reductions more than expected	−0.10	−0.15	−0.16	0.01	0.02	0.02	0.01	0.03
	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)
Treatment: others support emission reductions more than expected	0.00	0.00	−0.00	0.13	0.15	0.17	0.18	0.20
	(0.19)	(0.20)	(0.19)	(0.18)	(0.19)	(0.19)	(0.19)	(0.19)
Treatment: mixed	−0.38	−0.28	−0.27	−0.17	−0.16	−0.15	−0.15	−0.11
	(0.23)	(0.24)	(0.23)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)
Treatment: others support emission reductions less than expected	−0.05	−0.05	−0.06	−0.25	−0.29	−0.27	−0.27	−0.22
	(0.23)	(0.23)	(0.23)	(0.22)	(0.22)	(0.22)	(0.22)	(0.22)
Trust in science		−0.14***	−0.16***	−0.06*	−0.07*	−0.07*	−0.07*	−0.07*
		(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)			1.26***	0.79***	0.79***	0.79***	0.79***	0.76***
			(0.13)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Left–right ideology				0.59***	0.59***	0.60***	0.60***	0.59***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					0.03	0.01	0.03	0.04
					(0.07)	(0.07)	(0.08)	(0.08)
Urban–rural scale						−0.11	−0.11	−0.10
						(0.06)	(0.06)	(0.06)
Coping on income (yes)							−0.19	−0.16
							(0.14)	(0.14)
Confidence								0.11**
								(0.03)
R^2	0.00	0.02	0.07	0.25	0.26	0.26	0.26	0.26
Adj. R^2	−0.00	0.02	0.06	0.25	0.25	0.25	0.25	0.26
Num. obs.	1756	1696	1680	1468	1434	1432	1432	1427

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 16 – Robustness checks for acceptance of prolonging nuclear: treatment direction, speeders excluded

Causal effect of information treatment on renewable energy technology acceptance: robustness checks, only respondents who passed the attention checks

	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV
Intercept	0.55***	−0.50**	−0.45*	0.57*	0.65	0.83*	0.82*	1.18**
	(0.11)	(0.18)	(0.19)	(0.28)	(0.33)	(0.38)	(0.38)	(0.44)
Control: mixed	0.36*	0.28	0.31	0.28	0.28	0.29	0.29	0.27
	(0.18)	(0.18)	(0.18)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
Control: others support emission reductions more than expected	0.68***	0.77***	0.77***	0.70***	0.69***	0.70***	0.71***	0.70***
	(0.19)	(0.19)	(0.19)	(0.20)	(0.21)	(0.21)	(0.21)	(0.21)
Treatment: others support emission reductions more than expected	−0.04	−0.04	−0.06	−0.12	−0.11	−0.11	−0.11	−0.14
	(0.17)	(0.17)	(0.17)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
Treatment: mixed	0.42	0.25	0.24	0.04	0.02	0.03	0.04	0.01
	(0.22)	(0.22)	(0.23)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)
Treatment: others support emission reductions less than expected	0.37	0.34	0.33	0.20	0.18	0.20	0.20	0.18
	(0.21)	(0.21)	(0.21)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)
Trust in science		0.15***	0.16***	0.15***	0.15***	0.14***	0.14***	0.14***
		(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)			−0.10	−0.01	0.03	0.03	0.03	0.06
			(0.12)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Left–right ideology				−0.20***	−0.20***	−0.20***	−0.20***	−0.19***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					−0.02	−0.03	−0.05	−0.05
					(0.07)	(0.07)	(0.08)	(0.08)
Urban–rural scale						−0.06	−0.06	−0.06
						(0.06)	(0.06)	(0.06)
Coping on income (yes)							0.13	0.10
							(0.13)	(0.14)
Confidence								−0.06
								(0.03)
R^2	0.01	0.04	0.04	0.08	0.08	0.08	0.08	0.08
Adj. R^2	0.01	0.04	0.04	0.08	0.07	0.07	0.07	0.08
Num. obs.	1519	1465	1452	1249	1216	1215	1215	1209

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 17 – Robustness checks for acceptance of alpine PV: treatment direction, only respondents who passed the attention check included

	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power
Intercept	0.32**	−1.08***	−0.95***	0.76**	1.00**	1.34***	1.33***	1.99***
	(0.11)	(0.19)	(0.20)	(0.28)	(0.33)	(0.38)	(0.38)	(0.44)
Control: mixed	0.41*	0.38*	0.40*	0.33	0.33	0.34	0.35	0.31
	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
Control: others support emission reductions more than expected	0.54**	0.66***	0.66***	0.58**	0.57**	0.58**	0.59**	0.57**
	(0.20)	(0.20)	(0.20)	(0.20)	(0.21)	(0.21)	(0.21)	(0.21)
Treatment: others support emission reductions more than expected	−0.02	0.02	0.03	−0.10	−0.13	−0.13	−0.13	−0.16
	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
Treatment: mixed	0.58*	0.38	0.35	0.18	0.20	0.21	0.22	0.18
	(0.24)	(0.23)	(0.23)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)
Treatment: others support emission reductions less than expected	0.55*	0.55*	0.53*	0.43	0.48*	0.52*	0.52*	0.49*
	(0.22)	(0.22)	(0.22)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)
Trust in science		0.20***	0.22***	0.19***	0.19***	0.19***	0.18***	0.18***
		(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)			−0.41***	−0.26*	−0.23	−0.23	−0.23	−0.18
			(0.12)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Left–right ideology				−0.32***	−0.33***	−0.32***	−0.32***	−0.31***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					−0.07	−0.08	−0.10	−0.10
					(0.07)	(0.07)	(0.07)	(0.07)
Urban–rural scale						−0.11	−0.11	−0.11
						(0.06)	(0.06)	(0.06)
Coping on income (yes)							0.10	0.07
							(0.13)	(0.13)
Confidence								−0.10**
								(0.03)
R^2	0.01	0.06	0.07	0.16	0.16	0.16	0.16	0.17
Adj. R^2	0.01	0.06	0.06	0.15	0.15	0.15	0.15	0.16
Num. obs.	1519	1465	1452	1249	1216	1215	1215	1209

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 18 – Robustness checks for acceptance of wind: treatment direction, only respondents who passed the attention check included

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Intercept	0.42***	0.92***	0.53*	−2.53***	−2.51***	−2.39***	−2.40***	−2.97***
	(0.12)	(0.21)	(0.21)	(0.28)	(0.33)	(0.39)	(0.39)	(0.44)
Control: mixed	−0.28	−0.24	−0.28	−0.12	−0.11	−0.11	−0.10	−0.08
	(0.20)	(0.20)	(0.20)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
Control: others support emission reductions more than expected	−0.09	−0.12	−0.13	0.04	0.03	0.03	0.04	0.05
	(0.21)	(0.21)	(0.21)	(0.20)	(0.21)	(0.21)	(0.21)	(0.21)
Treatment: others support emission reductions more than expected	0.15	0.09	0.07	0.23	0.24	0.24	0.23	0.22
	(0.19)	(0.19)	(0.19)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
Treatment: mixed	−0.27	−0.20	−0.15	0.14	0.16	0.16	0.16	0.19
	(0.25)	(0.25)	(0.25)	(0.24)	(0.25)	(0.25)	(0.25)	(0.25)
Treatment: others support emission reductions less than expected	−0.15	−0.18	−0.12	−0.19	−0.26	−0.25	−0.25	−0.24
	(0.24)	(0.24)	(0.24)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)
Trust in science		−0.07**	−0.09***	−0.03	−0.02	−0.02	−0.02	−0.02
		(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)			1.01***	0.57***	0.56***	0.56***	0.56***	0.53***
			(0.13)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Left–right ideology				0.56***	0.57***	0.57***	0.57***	0.57***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					−0.03	−0.04	−0.05	−0.05
					(0.07)	(0.07)	(0.08)	(0.08)
Urban–rural scale						−0.04	−0.04	−0.02
						(0.06)	(0.06)	(0.06)
Coping on income (yes)							0.09	0.13
							(0.13)	(0.14)
Confidence								0.09*
								(0.03)
R^2	0.00	0.01	0.05	0.26	0.26	0.26	0.26	0.27
Adj. R^2	0.00	0.00	0.04	0.26	0.26	0.26	0.26	0.26
Num. obs.	1519	1465	1452	1249	1216	1215	1215	1209

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 19 – Robustness checks for acceptance of new nuclear: treatment direction, only respondents who passed the attention check included

	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants
Intercept	−0.41**	0.37	−0.07	−3.16***	−3.28***	−2.98***	−2.96***	−3.60***
	(0.13)	(0.23)	(0.24)	(0.31)	(0.37)	(0.43)	(0.43)	(0.49)
Control: mixed	−0.28	−0.28	−0.33	−0.12	−0.11	−0.10	−0.12	−0.07
	(0.22)	(0.22)	(0.22)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)
Control: others support emission reductions more than expected	−0.10	−0.14	−0.16	−0.00	0.01	0.01	−0.01	0.02
	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)
Treatment: others support emission reductions more than expected	0.26	0.17	0.16	0.27	0.30	0.31	0.31	0.31
	(0.21)	(0.21)	(0.21)	(0.20)	(0.20)	(0.20)	(0.20)	(0.21)
Treatment: mixed	−0.46	−0.33	−0.28	0.04	0.06	0.07	0.07	0.10
	(0.28)	(0.28)	(0.27)	(0.27)	(0.27)	(0.27)	(0.27)	(0.27)
Treatment: others support emission reductions less than expected	−0.24	−0.25	−0.18	−0.31	−0.34	−0.31	−0.31	−0.29
	(0.26)	(0.26)	(0.26)	(0.26)	(0.26)	(0.26)	(0.26)	(0.26)
Trust in science		−0.11***	−0.14***	−0.08**	−0.08*	−0.08**	−0.08*	−0.07*
		(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)			1.17***	0.69***	0.68***	0.68***	0.68***	0.65***
			(0.14)	(0.14)	(0.15)	(0.15)	(0.15)	(0.15)
Left–right ideology				0.58***	0.59***	0.60***	0.60***	0.59***
				(0.03)	(0.03)	(0.04)	(0.04)	(0.04)
Education (numeric)					0.02	0.01	0.03	0.04
					(0.08)	(0.08)	(0.08)	(0.08)
Urban–rural scale						−0.10	−0.09	−0.08
						(0.07)	(0.07)	(0.07)
Coping on income (yes)							−0.23	−0.19
							(0.15)	(0.15)
Confidence								0.09*
								(0.04)
R^2	0.01	0.02	0.06	0.25	0.25	0.25	0.25	0.26
Adj. R^2	0.00	0.01	0.06	0.24	0.24	0.24	0.25	0.25
Num. obs.	1519	1465	1452	1249	1216	1215	1215	1209

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 20 – Robustness checks for acceptance of prolonging nuclear: treatment direction, only respondents who passed the attention check included

Causal effect of information treatment on renewable energy technology acceptance: robustness checks, gap to true value

	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV
Intercept	0.87***	−0.17	−0.12	0.99***	1.01**	1.22**	1.22**	1.50***
	(0.09)	(0.17)	(0.18)	(0.26)	(0.32)	(0.37)	(0.37)	(0.43)
Gap to true value: Biodiversity vs. emissions	0.10*	0.10*	0.10*	0.05	0.06	0.06	0.06	0.06
	(0.04)	(0.04)	(0.04)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Treatment (yes)	−0.06	−0.16	−0.19	−0.27	−0.28	−0.27	−0.28	−0.29
	(0.15)	(0.15)	(0.15)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
Gap to true value: Landscape vs. emissions	0.06	0.10*	0.11**	0.16***	0.15***	0.15***	0.16***	0.15***
	(0.04)	(0.04)	(0.04)	(0.04)	(0.05)	(0.05)	(0.05)	(0.05)
Gap to true value: Biodiversity vs. emissions ×Treatment (yes)	−0.05	−0.07	−0.07	−0.09	−0.10	−0.10	−0.10	−0.10
	(0.07)	(0.07)	(0.07)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Gap to true value: Landscape vs. emissions ×Treatment (yes)	0.01	−0.03	−0.03	−0.03	−0.03	−0.03	−0.03	−0.03
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Trust in science		0.16***	0.16***	0.15***	0.15***	0.15***	0.15***	0.15***
		(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)			−0.08	−0.00	0.04	0.04	0.04	0.05
			(0.12)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Left–right ideology				−0.20***	−0.21***	−0.20***	−0.20***	−0.20***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					−0.01	−0.02	−0.03	−0.04
					(0.07)	(0.07)	(0.07)	(0.08)
Urban–rural scale						−0.06	−0.07	−0.07
						(0.06)	(0.06)	(0.06)
Coping on income (yes)							0.14	0.12
							(0.13)	(0.13)
Confidence								−0.05
								(0.03)
R^2	0.01	0.05	0.05	0.09	0.09	0.09	0.09	0.09
Adj. R^2	0.01	0.04	0.04	0.08	0.08	0.08	0.08	0.08
Num. obs.	1519	1465	1452	1249	1216	1215	1215	1209

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 21 – Robustness checks for acceptance of alpine PV energy technology: gap to the treatment (true value - prior belief)

	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power
Intercept	0.58***	−0.80***	−0.66***	1.08***	1.26***	1.61***	1.60***	2.19***
	(0.09)	(0.18)	(0.19)	(0.26)	(0.32)	(0.37)	(0.37)	(0.42)
Gap to true value: Biodiversity vs. emissions	0.14**	0.15**	0.14**	0.09	0.10*	0.10*	0.10*	0.10*
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Treatment (yes)	0.08	0.00	−0.01	−0.08	−0.05	−0.04	−0.05	−0.05
	(0.15)	(0.15)	(0.15)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
Gap to true value: Landscape vs. emissions	0.03	0.06	0.07	0.10*	0.09*	0.09*	0.10*	0.09
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Gap to true value: Biodiversity vs. emissions ×Treatment (yes)	−0.02	−0.07	−0.06	−0.06	−0.07	−0.07	−0.07	−0.07
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Gap to true value: Landscape vs. emissions ×Treatment (yes)	0.05	0.01	0.01	0.03	0.05	0.05	0.05	0.06
	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Trust in science		0.21***	0.22***	0.19***	0.19***	0.19***	0.19***	0.19***
		(0.02)	(0.02)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)			−0.38**	−0.24	−0.22	−0.22	−0.22	−0.17
			(0.12)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Left–right ideology				−0.32***	−0.33***	−0.32***	−0.32***	−0.31***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					−0.05	−0.07	−0.08	−0.09
					(0.07)	(0.07)	(0.07)	(0.07)
Urban–rural scale						−0.11	−0.11	−0.11
						(0.06)	(0.06)	(0.06)
Coping on income (yes)							0.11	0.09
							(0.13)	(0.13)
Confidence								−0.10**
								(0.03)
R^2	0.02	0.07	0.07	0.17	0.17	0.17	0.17	0.17
Adj. R^2	0.01	0.06	0.07	0.16	0.16	0.16	0.16	0.17
Num. obs.	1519	1465	1452	1249	1216	1215	1215	1209

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 22 – Robustness checks for acceptance of wind energy technology: gap to the treatment (true value - prior belief)

	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants
Intercept	0.39***	0.91***	0.49*	−2.55***	−2.49***	−2.38***	−2.38***	−2.92***
	(0.10)	(0.19)	(0.20)	(0.27)	(0.32)	(0.37)	(0.38)	(0.43)
Gap to true value:								
Biodiversity vs. emissions	−0.12*	−0.13**	−0.11*	−0.06	−0.06	−0.06	−0.06	−0.06
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Treatment (yes)	−0.08	−0.12	−0.09	−0.04	−0.07	−0.06	−0.07	−0.09
	(0.16)	(0.17)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)	(0.16)
Gap to true value:								
Landscape vs. emissions	0.05	0.05	0.04	−0.02	−0.01	−0.01	−0.01	−0.00
	(0.05)	(0.05)	(0.05)	(0.04)	(0.05)	(0.05)	(0.05)	(0.05)
Gap to true value:								
Biodiversity vs. emissions								
×Treatment (yes)	0.06	0.09	0.10	0.07	0.07	0.07	0.07	0.07
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Gap to true value:								
Landscape vs. emissions								
×Treatment (yes)	−0.12	−0.13	−0.13	−0.12	−0.14	−0.14	−0.14	−0.15
	(0.08)	(0.08)	(0.08)	(0.07)	(0.07)	(0.07)	(0.07)	(0.07)
Trust in science		−0.07**	−0.09***	−0.03	−0.02	−0.02	−0.02	−0.02
		(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)			0.99***	0.56***	0.55***	0.55***	0.55***	0.52***
			(0.13)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
Left–right ideology				0.56***	0.57***	0.57***	0.57***	0.57***
				(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)					−0.05	−0.05	−0.06	−0.06
					(0.07)	(0.07)	(0.08)	(0.08)
Urban–rural scale						−0.04	−0.04	−0.02
						(0.06)	(0.06)	(0.06)
Coping on income (yes)							0.08	0.12
							(0.13)	(0.14)
Confidence								0.08*
								(0.03)
R^2	0.01	0.01	0.05	0.26	0.27	0.27	0.27	0.27
Adj. R^2	0.00	0.01	0.05	0.26	0.26	0.26	0.26	0.26
Num. obs.	1519	1465	1452	1249	1216	1215	1215	1209

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 23 – Robustness checks for acceptance of nuclear energy technology: gap to the treatment (true value - prior belief)

	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants
Intercept	−0.43***	0.34	−0.13	−3.22***	−3.30***	−3.00***	−2.99***	−3.59***
	(0.11)	(0.21)	(0.22)	(0.30)	(0.35)	(0.42)	(0.42)	(0.48)
Gap to true value:								
Biodiversity vs. emissions	−0.13*	−0.13*	−0.10	−0.02	−0.02	−0.02	−0.02	−0.02
	(0.05)	(0.06)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Treatment (yes)	−0.10	−0.10	−0.06	−0.09	−0.09	−0.08	−0.07	−0.09
	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
Gap to true value:								
Landscape vs. emissions	0.07	0.05	0.03	−0.03	−0.02	−0.02	−0.03	−0.02
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Gap to true value:								
Biodiversity vs. emissions								
×Treatment (yes)	−0.01	0.01	0.01	−0.01	−0.01	−0.01	−0.01	−0.01
	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)
Gap to true value:								
Landscape vs. emissions								
×Treatment (yes)	−0.15	−0.13	−0.12	−0.15	−0.16	−0.16	−0.16	−0.17*
	(0.08)	(0.09)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)
Trust in science		−0.12***	−0.14***	−0.08**	−0.08**	−0.08**	−0.08*	−0.07*
		(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)			1.15***	0.68***	0.68***	0.68***	0.68***	0.66***
			(0.14)	(0.14)	(0.15)	(0.15)	(0.15)	(0.15)
Left–right ideology				0.59***	0.59***	0.60***	0.60***	0.59***
				(0.03)	(0.03)	(0.04)	(0.04)	(0.04)
Education (numeric)					0.01	−0.01	0.02	0.03
					(0.08)	(0.08)	(0.08)	(0.08)
Urban–rural scale						−0.10	−0.09	−0.08
						(0.07)	(0.07)	(0.07)
Coping on income (yes)							−0.24	−0.20
							(0.15)	(0.15)
Confidence								0.09*
								(0.04)
R^2	0.01	0.02	0.06	0.25	0.25	0.26	0.26	0.26
Adj. R^2	0.01	0.02	0.06	0.25	0.25	0.25	0.25	0.25
Num. obs.	1519	1465	1452	1249	1216	1215	1215	1209

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 24 – Robustness checks for acceptance of prolonging nuclear energy technology: gap to true value (true value - own prior belief)

Causal effect of information treatment on renewable energy technology acceptance: heterogeneous subgroup effects

	Acceptance of alpine PV	Acceptance of wind power	Acceptance of new nuclear plants	Acceptance of prolonging nuclear plants
Intercept	1.29**	1.81***	−3.18***	−3.86***
	(0.47)	(0.46)	(0.47)	(0.51)
Control: mixed	−0.33	0.19	0.21	−0.29
	(0.48)	(0.47)	(0.48)	(0.53)
Control: others support emission reductions more than expected	−0.17	−0.77	0.61	0.50
	(0.55)	(0.55)	(0.55)	(0.60)
Treatment: others support emission reductions more than expected	−0.30	−0.16	0.69	0.48
	(0.41)	(0.41)	(0.41)	(0.45)
Treatment: mixed	0.14	−0.17	0.48	0.50
	(0.49)	(0.49)	(0.49)	(0.54)
Treatment: others support emission reductions less than expected	0.60	0.08	0.68	0.58
	(0.52)	(0.52)	(0.53)	(0.58)
Left–right ideology	−0.23***	−0.36***	0.62***	0.61***
	(0.06)	(0.06)	(0.06)	(0.06)
Trust in science	0.15***	0.17***	−0.03	−0.08**
	(0.03)	(0.03)	(0.03)	(0.03)
Gender (male yes)	0.03	−0.10	0.54***	0.74***
	(0.12)	(0.12)	(0.12)	(0.13)
Education (numeric)	−0.07	−0.05	−0.06	0.04
	(0.07)	(0.07)	(0.07)	(0.08)
Urban–rural scale	−0.10	−0.08	0.00	−0.08
	(0.06)	(0.06)	(0.06)	(0.06)
Coping on income (yes)	0.15	0.04	0.10	−0.17
	(0.12)	(0.12)	(0.12)	(0.13)
Confidence	−0.03	−0.07*	0.08**	0.11***
	(0.03)	(0.03)	(0.03)	(0.03)
Control: mixed×Left–right ideology	0.12	0.02	−0.06	0.05
	(0.09)	(0.09)	(0.09)	(0.10)
Control: others support emission reductions more than expected ×Left–right ideology	0.18	0.28**	−0.12	−0.10
	(0.10)	(0.10)	(0.10)	(0.11)
Treatment: others support emission reductions more than expected ×Left–right ideology	0.02	0.01	−0.11	−0.05
	(0.08)	(0.08)	(0.08)	(0.08)
Treatment: mixed×Left–right ideology	0.03	0.14	−0.08	−0.11
	(0.09)	(0.09)	(0.09)	(0.10)
Treatment: others support emission reductions less than expected ×Left–right ideology	−0.05	0.07	−0.15	−0.15
	(0.09)	(0.09)	(0.10)	(0.10)
R^2	0.09	0.16	0.25	0.26
Adj. R^2	0.08	0.15	0.25	0.25
Num. obs.	1493	1493	1493	1493

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 25 – Acceptance of renewable energy technologies with treatment interactions (left-right ideology)

Explaining energy technology acceptance

	Acceptance of alpine PV	Acceptance of wind power	Acceptance of new nuclear plants	Acceptance of prolonging nuclear plants
Intercept	1.15*	1.27**	−2.41***	−3.09***
	(0.49)	(0.49)	(0.50)	(0.54)
Control: mixed	0.22	0.59	−1.23*	−0.89
	(0.60)	(0.60)	(0.60)	(0.66)
Control: others support emission reductions more than expected	0.91	0.78	−0.01	−0.72
	(0.57)	(0.57)	(0.57)	(0.63)
Treatment: others support emission reductions more than expected	−0.46	0.15	−0.40	−0.23
	(0.51)	(0.51)	(0.51)	(0.56)
Treatment: mixed	0.34	1.85**	−0.10	−0.77
	(0.65)	(0.64)	(0.65)	(0.71)
Treatment: others support emission reductions less than expected	0.22	0.73	−0.68	−1.14
	(0.57)	(0.57)	(0.58)	(0.63)
Trust in science	0.14**	0.22***	−0.09	−0.16**
	(0.05)	(0.05)	(0.05)	(0.05)
Gender (male yes)	0.03	−0.10	0.54***	0.74***
	(0.12)	(0.12)	(0.12)	(0.13)
Left–right ideology	−0.19***	−0.30***	0.54***	0.56***
	(0.03)	(0.03)	(0.03)	(0.03)
Education (numeric)	−0.07	−0.05	−0.05	0.05
	(0.07)	(0.07)	(0.07)	(0.08)
Urban–rural scale	−0.10	−0.10	0.01	−0.07
	(0.06)	(0.06)	(0.06)	(0.06)
Coping on income (yes)	0.14	0.04	0.08	−0.18
	(0.12)	(0.12)	(0.12)	(0.13)
Confidence	−0.03	−0.08*	0.08*	0.11***
	(0.03)	(0.03)	(0.03)	(0.03)
Control: mixed×Trust in science	0.01	−0.04	0.16*	0.11
	(0.08)	(0.08)	(0.08)	(0.09)
Control: others support emission reductions more than expected ×Trust in science	−0.03	−0.03	0.00	0.11
	(0.08)	(0.08)	(0.08)	(0.09)
Treatment: others support emission reductions more than expected ×Trust in science	0.04	−0.03	0.08	0.07
	(0.07)	(0.07)	(0.07)	(0.08)
Treatment: mixed×Trust in science	−0.01	−0.18*	0.03	0.11
	(0.08)	(0.08)	(0.08)	(0.09)
Treatment: others support emission reductions less than expected ×Trust in science	0.02	−0.04	0.09	0.14
	(0.08)	(0.08)	(0.08)	(0.09)
R^2	0.09	0.15	0.26	0.26
Adj. R^2	0.08	0.14	0.25	0.25
Num. obs.	1493	1493	1493	1493

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 26 – Acceptance of renewable energy technologies with treatment interactions (trust)

	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV	Acceptance of alpine PV
Intercept	0.59***	1.50***	0.51*	0.77**	0.72**	0.75**	0.68**	0.78*
	(0.06)	(0.15)	(0.23)	(0.25)	(0.25)	(0.25)	(0.26)	(0.31)
prior_bioemi	0.21***	0.20***	0.21***	0.20***	0.20***	0.20***	0.20***	0.20***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
prior_landemi	0.16***	0.14***	0.14***	0.13***	0.13***	0.14***	0.14***	0.14***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
prior_bioemi_2nd	−0.02	−0.06	−0.05	−0.05	−0.05	−0.05	−0.05	−0.05
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
prior_landemi_2nd	0.01	0.06	0.07*	0.07*	0.08*	0.08*	0.08**	0.08*
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
complementarity_bioemi	0.18***	0.15***	0.11**	0.10**	0.10**	0.09*	0.09*	0.10**
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
complementarity_landemi	−0.09*	−0.08*	−0.07	−0.06	−0.06	−0.06	−0.06	−0.07
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Left–right ideology		−0.17***	−0.14***	−0.12***	−0.12***	−0.12***	−0.13***	−0.12***
		(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Trust in science			0.12***	0.11***	0.11***	0.10***	0.10***	0.10***
			(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
climate_salienceYes				−0.38**	−0.38**	−0.37**	−0.35**	−0.35**
				(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
urban_rural_binaryurban					0.17	0.16	0.17	0.18
					(0.12)	(0.12)	(0.12)	(0.12)
Gender (male yes)						0.08	0.08	0.09
						(0.11)	(0.11)	(0.11)
Coping on income (yes)							0.16	0.15
							(0.11)	(0.11)
Confidence								−0.02
								(0.03)
R^2	0.11	0.14	0.15	0.16	0.16	0.16	0.16	0.16
Adj. R^2	0.11	0.13	0.15	0.15	0.15	0.16	0.16	0.16
Num. obs.	1801	1523	1490	1490	1490	1482	1481	1479

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 27 – Explaining acceptance: Alpine PV

	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power	Acceptance of wind power
Intercept	0.29***	1.66***	0.49*	0.81**	0.75**	0.78**	0.73**	1.11***
	(0.06)	(0.15)	(0.23)	(0.25)	(0.25)	(0.25)	(0.26)	(0.30)
prior_bioemi	0.19***	0.18***	0.18***	0.18***	0.18***	0.18***	0.18***	0.18***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
prior_landemi	0.20***	0.17***	0.16***	0.15***	0.15***	0.16***	0.16***	0.15***
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
prior_bioemi_2nd	−0.02	−0.04	−0.02	−0.01	−0.01	−0.02	−0.02	−0.02
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
prior_landemi_2nd	−0.03	0.01	0.03	0.03	0.04	0.04	0.04	0.04
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
complementarity_bioemi	0.25***	0.22***	0.16***	0.16***	0.15***	0.15***	0.15***	0.15***
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
complementarity_landemi	−0.03	−0.04	−0.02	−0.02	−0.02	−0.02	−0.02	−0.02
	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Left–right ideology		−0.27***	−0.23***	−0.20***	−0.20***	−0.20***	−0.20***	−0.20***
		(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Trust in science			0.15***	0.13***	0.13***	0.13***	0.13***	0.13***
			(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
climate_salienceYes				−0.47***	−0.47***	−0.47***	−0.46***	−0.44***
				(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
urban_rural_binaryurban					0.18	0.19	0.19	0.22
					(0.12)	(0.12)	(0.12)	(0.12)
Gender (male yes)						−0.09	−0.09	−0.06
						(0.11)	(0.11)	(0.11)
Coping on income (yes)							0.12	0.10
							(0.11)	(0.11)
Confidence								−0.07*
								(0.03)
R^2	0.14	0.21	0.22	0.23	0.23	0.24	0.24	0.24
Adj. R^2	0.14	0.20	0.22	0.23	0.23	0.23	0.23	0.23
Num. obs.	1801	1523	1490	1490	1490	1482	1481	1479

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 28 – Explaining acceptance: wind

	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants	Acceptance of new nuclear plants
Intercept	0.65***	−1.91***	−1.92***	−2.18***	−2.19***	−2.35***	−2.37***	−2.82***
	(0.06)	(0.15)	(0.24)	(0.26)	(0.26)	(0.26)	(0.27)	(0.32)
prior_bioemi	−0.09**	−0.03	−0.04	−0.03	−0.03	−0.03	−0.03	−0.04
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
prior_landemi	−0.10***	−0.06*	−0.06*	−0.06	−0.06	−0.05	−0.05	−0.05
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
prior_bioemi_2nd	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01
	(0.04)	(0.03)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
prior_landemi_2nd	0.07*	−0.00	0.00	−0.00	−0.00	−0.01	−0.01	−0.00
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
complementarity_bioemi	−0.23***	−0.17***	−0.17***	−0.17***	−0.17***	−0.16***	−0.16***	−0.16***
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
complementarity_landemi	−0.03	−0.02	−0.01	−0.02	−0.02	−0.02	−0.02	−0.02
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Left–right ideology		0.51***	0.52***	0.50***	0.50***	0.48***	0.48***	0.47***
		(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Trust in science			−0.01	0.01	0.01	−0.00	−0.00	−0.00
			(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)
climate_salienceYes				0.38**	0.38**	0.37**	0.38**	0.36**
				(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
urban_rural_binaryurban					0.03	0.03	0.04	0.02
					(0.12)	(0.12)	(0.12)	(0.12)
Gender (male yes)						0.52***	0.52***	0.49***
						(0.12)	(0.12)	(0.12)
Coping on income (yes)							0.05	0.08
							(0.12)	(0.12)
Confidence								0.08**
								(0.03)
R^2	0.07	0.26	0.26	0.26	0.26	0.27	0.27	0.28
Adj. R^2	0.06	0.25	0.26	0.26	0.26	0.27	0.27	0.27
Num. obs.	1801	1523	1490	1490	1490	1482	1481	1479

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 29 – Explaining acceptance: new nuclear

	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants	Acceptance of prolonging nuclear plants
Intercept	-0.22^{**}	-2.97^{***}	-2.63^{***}	-3.09^{***}	-3.14^{***}	-3.32^{***}	-3.24^{***}	-3.80^{***}
	(0.07)	(0.17)	(0.27)	(0.28)	(0.29)	(0.29)	(0.29)	(0.35)
prior_bioemi	-0.12^{***}	-0.08^{*}	-0.08^{*}	-0.07	-0.07	-0.07^{*}	-0.07^{*}	-0.08^{*}
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
prior_landemi	-0.12^{***}	-0.07^{*}	-0.07^{*}	-0.06	-0.06	-0.06	-0.07^{*}	-0.06
	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
prior_bioemi_2nd	-0.01	0.02	0.01	0.00	0.00	0.02	0.02	0.02
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
prior_landemi_2nd	0.08^{*}	-0.02	-0.02	-0.02	-0.02	-0.03	-0.03	-0.03
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
complementarity_bioemi	-0.23^{***}	-0.17^{***}	-0.15^{***}	-0.14^{***}	-0.14^{***}	-0.13^{**}	-0.12^{**}	-0.13^{**}
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
complementarity_landemi	0.02	0.03	0.02	0.02	0.02	0.01	0.01	0.01
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Left–right ideology		0.54^{***}	0.54^{***}	0.50^{***}	0.51^{***}	0.48^{***}	0.48^{***}	0.47^{***}
		(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
Trust in science			-0.05	-0.03	-0.03	-0.05	-0.04	-0.04
			(0.03)	(0.03)	(0.03)	(0.03)	(0.03)	(0.03)
climate_salienceYes				0.68^{***}	0.68^{***}	0.66^{***}	0.64^{***}	0.61^{***}
				(0.15)	(0.15)	(0.15)	(0.15)	(0.15)
urban_rural_binaryurban					0.17	0.17	0.17	0.14
					(0.14)	(0.13)	(0.13)	(0.13)
Gender (male yes)						0.76^{***}	0.77^{***}	0.73^{***}
						(0.13)	(0.13)	(0.13)
Coping on income (yes)							-0.19	-0.15
							(0.13)	(0.13)
Confidence								0.10^{**}
								(0.03)
R^2	0.06	0.24	0.24	0.25	0.25	0.27	0.27	0.28
Adj. R^2	0.06	0.23	0.24	0.25	0.25	0.26	0.26	0.27
Num. obs.	1801	1523	1490	1490	1490	1482	1481	1479

Standard errors in parentheses. $^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 30 – Explaining acceptance: prolonged nuclear