

Appendix 1: The survey questions used in this study

Female: What is your gender?

- Female; Male; Other; Prefer not to answer

Age: What year were you born?

- 1940 ... 2002, after 2003, Prefer not to answer

Tertiary education: Have you completed tertiary education? (short-cycle tertiary, Degree, Masters or Doctorate)

- Yes; No; Prefer not to answer

Number of children: How many people in your household are less than 18 years old?

- 0; 1; 2; 3; 4; 5; more than 5; Prefer not to answer

Number of adults: Including yourself, how many people in your household are aged 18 years and over?

- 1; 2; 3; 4; 5; more than 5; Prefer not to answer

Location: How would you describe the location of your home?

- Urban; Suburban; Rural; prefer not to answer

Tenure status: Which of the following best describe your property ownership status?

- Owner with a mortgage; Owner without a mortgage; Renter; Other, please specify: ____; Prefer not to answer

Heating type: What is the main source of fuel you use to heat your home?

- Electricity; Gas; Oil; Wood; Coal; Prefer not to answer; I don't know

Electricity spend In general (approximately), how much do you spend on electricity per month?

- €0 - €25; €25 - €50; €50 - €75; €75 - €100; €100 - €125; €125 - €150; €150 - €175; €175 - €200; More than €200; Prefer not to answer; I don't know

Upgraded heating system: Have you upgraded your heating system in the past ten years?

- Yes; No; Prefer not to answer; I don't know

Air conditioning: Do you have an air conditioning system in your home?

- No; Yes; Prefer not to answer

Heating requirement: Approximately, what temperature do you heat your home to during winter?

- 16C (60.8 °F) - 25 °C (77 °F) or above; Prefer not to answer

Can afford to adequately heat: Can your household afford to keep your property adequately warm?

- No; Yes; Prefer not to answer

Comfortable with income: How would you describe your household income level?

- Finding it very difficult to live on current income; Finding it difficult to live on current income; Coping on current income; Coping on current income; Living comfortably on current income; Living very comfortably on current income; Prefer not to answer

Previous energy organization Have you ever been involved in an energy organization (such as an energy cooperative, an energy peer-to-peer platform or a crowd-funded energy project)?

- No; Yes

Previous general investment experience: Have you invested in any of the following investment products at any stage in the past (excluding pension-related investment)? Pick whatever are relevant to you. **[multiple choices allowed]**

- Shares listed on a stock market; Bonds listed on a stock market; Investment fund listed on a stock market; National government bonds; Local/Municipality government bonds; Green, social or ethical investment product; An energy cooperative; Crowdfunding or peer-to-peer; None of the above (*exclusive*); Prefer not to answer (*exclusive*).

Risk aversion: Imagine that you have €1000 euros to invest. You have two options: Option A - a definite annual return (payment) of €50; Option B - a 50:50 chance of getting *either* €90 or €30. Which option would choose?

- Option A; Option B

Trust in energy organizations In general, to what extent would you trust the carbon-saving claims of organizations like this?

- Please use the scale; 1 means "I don't trust"; 5 means "fully trust"

EU's responsibility to empower: To what extent do you agree or disagree with the statement "It should be the EU's responsibility to empower cities and local communities to move towards clean energy."

- Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree; Prefer not to answer

Climate change seriousness How serious a problem do you think climate change is at the moment? Please use a scale from 1 to 5, with '1' meaning it is "not at all a serious problem" and '5' meaning it is "an extremely serious problem"

- 1 ... 5; Prefer not to answer

Demand-side management: Would you be interested in the following products or services?

Three products/services are surveyed: (a) a phone app that shows your household's real-time electricity consumption; (b) installing an energy management device which automatically switches on/off your main electricity appliances (such as heating, water or large appliances, for example) to reduce your household's environmental impact; (c) would you be comfortable sharing your electricity consumption data with energy-related businesses? Answers are measured using a 3-point Likert scale (no, yes slightly and yes considerably). Respondents are allowed to skip the question by choosing the "prefer not to answer" option.

Does your electricity price rate ("tariff") change throughout the day? For example, different day and night rates?

- No; yes slightly; yes considerably; prefer not to answer.

Post-experimental questions

(Post 1) Did you choose the "I would NOT choose either" option in any of the choices you just made?

- Yes; Maybe; No

[If either "Yes" or "Maybe" is selected in Post-ex1]

(Post-ex1.1) Why did you choose the "I would NOT choose either" option ?

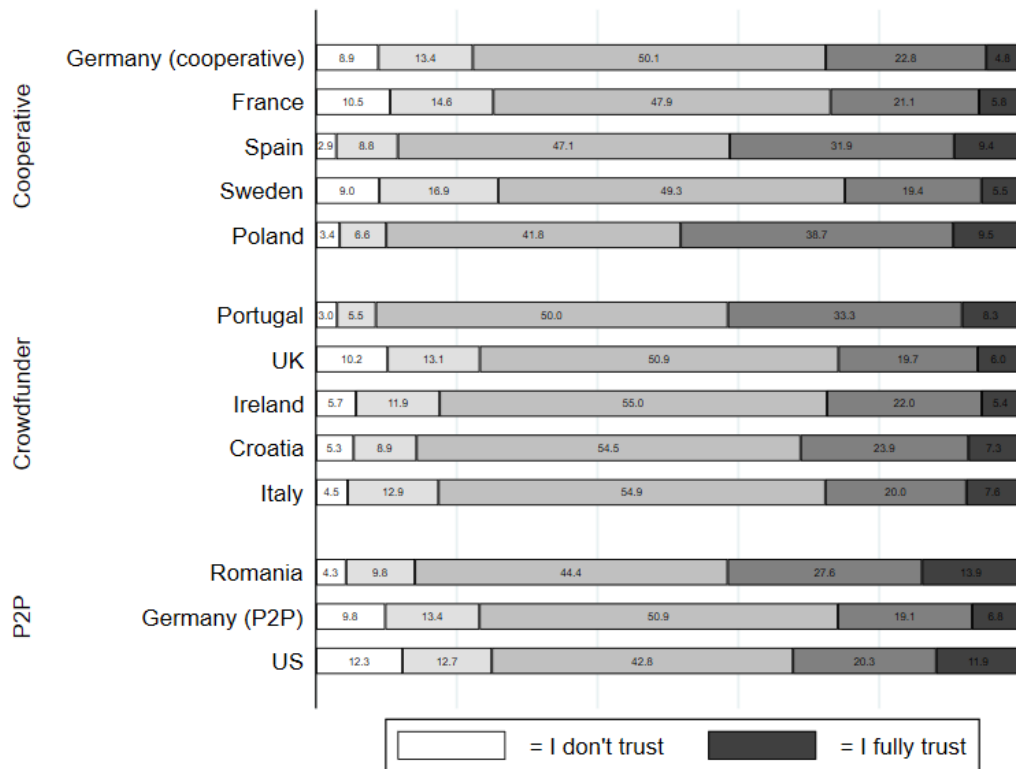
- I cannot afford to invest in these projects;
- I think there is enough solar and wind energy in the EU already;
- I don't think the project will be effective enough to reduce carbon emission;
- I don't think it is the public's responsibility to reduce emission;
- I think the description of the project is not realistic/convincing;
- I don't have time to go through those details;
- Other reasons, please specify: ____

Table A 1 Quantitative studies on different types of energy initiatives by country

	Cooperatives	Crowdfunding
Germany	Kalkbrenner & Roosen (2016) – 954 ^a ; Sagebiel et al. (2014) – 275 ; Salm et al. (2016) - 1,041 ; Knoefel et al. (2018) – 1,858; Langer et al. (2017) – 1,363; Kalkbrenner et al. (2017) – 953	
France		Bourcet & Bovari (2020) – 2,968
UK	Walker et al. (2010) – 208	
Ireland	Curtin et al. (2019) - 953	
Multiple countries	De Brauwer & Cohen (2020) - 16,235 across EU-28 countries	Bergmann et al. (2016) – 376 across 29 different countries

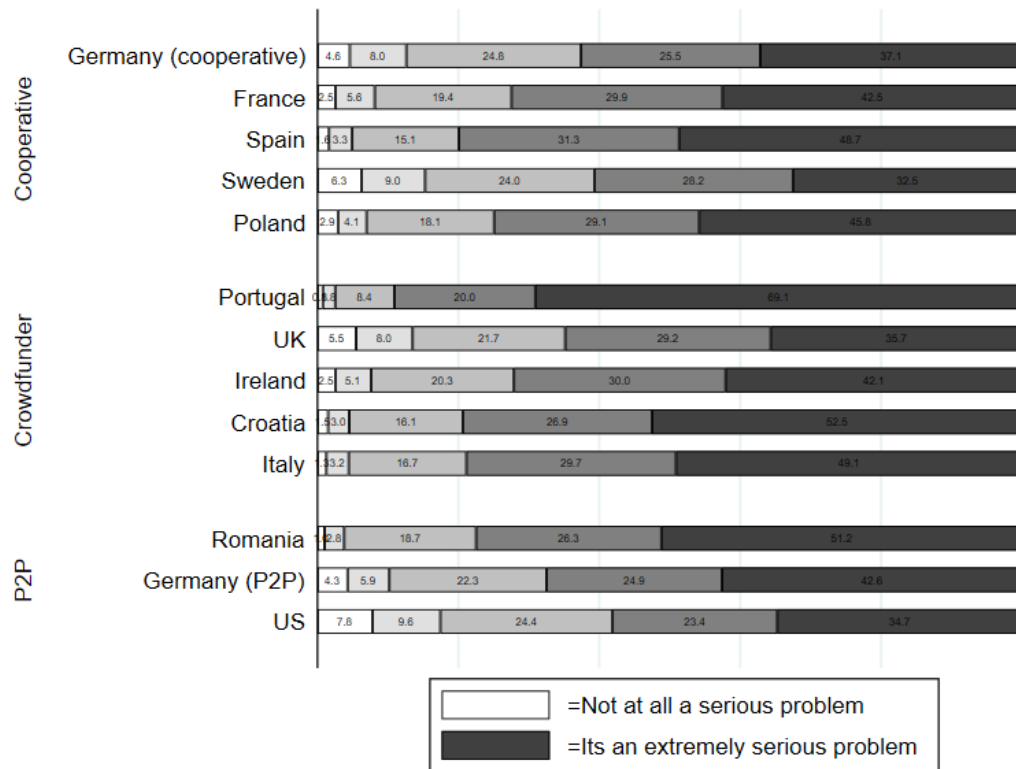
Note: (a) sample size of the quantitative study

Figure A 1: Trust in carbon-saving claims by organizations



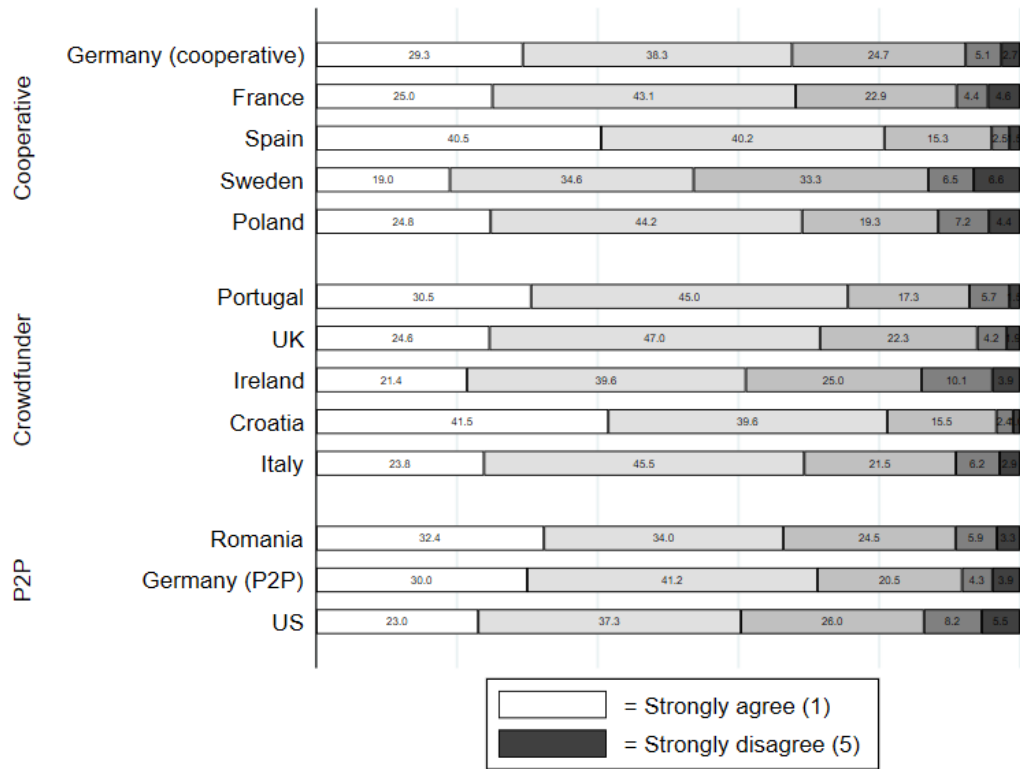
Note: responses to the question "In general, to what extent would you trust the carbon-saving claims of organizations like this?"

Figure A 2: Climate change seriousness



Responses to the question "How serious a problem do you think climate change is at the moment?"

Figure A 3: EU's responsibility to empower citizens



Note: responses to the question "To what extent do you agree or disagree with this statement: "It should be the EU's responsibility to empower cities and local communities to move towards clean energy?"

Table A 2: Attributes and levels for the discrete choice experiments

Table A.2a Cooperative Model

Attributes	Levels				
Annual return	0%	2.5%	5%	7.5%	
Type of the project	Solar energy	Wind energy			
Carbon emissions reduction and the corresponding size of the project	150 tonnes (a quarter football pitch)	600 tonnes (1 football pitch)	3,000 tonnes (5 football pitches)	6,000 tonnes (10 football pitches)	12,000 tonnes (20 football pitches)
Location of the project	Within your local area	Within your region	Within your country	Outside your country	
Minimum amount of investment	€50	€100	€500	€1,000	€5,000
Minimum duration of investment	No minimum duration	1 year	2 years	5 years	
Participation	None	Quarterly meetings	Annual meetings		

Table A.2b Crowdfunder Model

Attributes	Levels				
Annual return	0%	2.5%	5%	7.5%	
Type of the project	Solar energy	Wind energy			
Carbon emissions reduction and the corresponding size of the project	150 tonnes (a quarter football pitch)	600 tonnes (1 football pitch)	3,000 tonnes (5 football pitches)	6,000 tonnes (10 football pitches)	12,000 tonnes (20 football pitches)
Location of the project	Within your local area	Within your region	Within your country	Outside your country	
Minimum amount of investment	€10	€50	€100	€500	€1,000
Investment duration	1 year	5 year	10 years	20 years	25 years
Type of issuer	Local councils	Community organisations	Private companies		

Table A.2c P2P Trading Platform (Germany as an example)

Attributes	Levels			
Energy saved	€0	€6	€12	€18
Carbon reduction	100kg reduced	200kg reduced	300kg reduced	
Type of green electricity	Mostly solar	Mostly wind		
Green notification	None	Daily	Weekly	
Platform goal	Reduce CO2	Reduce bill	Reduce both	
Investment duration	3 months	6 months	9 months	12 months

Table A 3: Results of sample representativeness

Variables	Germany (coop)		France		Spain		Sweden		Poland	
	Sample	Pop ^a	Sample	Pop ^a	Sample	Pop ^a	Sample	Pop ^a	Sample	Pop ^a
Age										
18-24 years (%)	11	12	12	12	12	12	15	14	14	14
25-34 years (%)	18	18	18	20	24	24	21	20	24	24
35-44 years (%)	25	25	23	22	24	24	22	23	21	21
45-54 years (%)	20	20	22	21	19	19	21	21	20	20
>55 years (%)	26	25	26	25	21	21	23	22	21	21
Gender (male %)	49	50	48	50	49	49	51	51	50	50
Region representativeness^b	Yes		Yes		Yes		Yes		Yes	
Tertiary education (%)^d	49	26	62	34	74	35	64	37	57	28
Annual net income (mean)^d	40,746	26,105	35,029	26,210	32,255	17,287	31,643	26,356	19,123	8,022
Variables	Portugal		UK		Ireland		Croatia		Italy	
	Sample	Pop ^a	Sample	Pop ^a	Sample	Pop ^a	Sample	Pop ^a	Sample	Pop ^a
Age										
18-24 years (%)	12	12	12	12	13	11	14	16	11	11
25-34 years (%)	23	23	16	17	15	17	25	26	18	18
35-44 years (%)	23	23	18	18	20	21	28	26	24	24
45-54 years (%)	21	21	18	18	16	18	31	32	22	22
>55 years (%)	21	21	36	35	36	33	3	/	25	25
Gender (male %)	51	51	48	49	46	49	50	50	50	50
Region representativeness^b	Yes		Yes		Yes		Yes		Yes	
Completing tertiary education (%)^d	58	24	52	41	54	41	58	22	46	17
Annual net income (mean)^d	23,187	11,786	£38,360	£22,686	38,552	29,684	18,053	8,089	33,134	19,528
Variables	Romania		US		Germany (P2P)					
	Sample	Pop ^a	Sample	Pop ^a	Sample	Pop ^a				
Age										
18-24 years (%)	14	14	13	13	7	12				
25-34 years (%)	22	22	17	18	18	18				
35-44 years (%)	25	25	18	18	29	25				
45-54 years (%)	17	18	19	19	20	20				
>55 years (%)	21	21	33	32	26	25				
Gender (male %)	50	50	49	50	49	50				
Region representativeness^b	Yes		Yes		Yes					
Completing tertiary education (%)^d	70	16	46	49	51	26				
Annual net income (mean)^d	22,497	4,419	\$73,298	\$55,419	43,547	26,105				

Note:

(a) Quotas were set to reflect the population demographics in each country by the panel provider company for the survey. Statistics of the target population are drawn from Federal Statistical office (Germany), INSEE (France), Instituto nacional de Statistica (Spain), SCB (Sweden) and Główny Urząd Statystyczny (Poland), Instituto Nacional de Estatística (Portugal), ONS (UK), Central Statistics Office (Ireland), Croatian Bureau of Statistics (Croatia), ISTAT (Italy), National Institute of Statistics (Romania) and US Census Bureau (US). Given that this is an online study, quotas regarding age were adjusted slightly to reflect internet access/use.

(b) As the names of the regions are different across countries, we do not present all regions in order to limit table size.

(c) Data is missing for the year of 2019, and therefore we use the statistic from the year of 2018.

(d) Statistics for the general population are obtained from Eurostat (Year 2019); To be consistent with our surveyed sample, the statistics for annual net income is for 18 years old or over. The US tertiary education data is from oecd.org, and the income data is from the World Bank.

Representativeness regarding age, gender and regions are tested using Chi-squared tests, and the results suggest that the null of the same distribution between the sample and general population cannot be rejected at a 10% level.

Table A 4: AME previous organization experience by country

	(1) Full sample	(2) Germany (cooperative)	(3) France	(4) Spain	(5) Sweden	(6) Poland	(7) Portugal	(8) UK	(9) Ireland	(10) Croatia	(11) Italy	(12) Romania	(13) Germany (P2P)	(14) US
Female (dummy)	-0.015 ^{***} (0.007)	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
18-29	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
30-39	-0.058 ^{***} (0.013)	0.035 (0.048)	-0.063 (0.048)	-0.021 (0.037)	-0.058 (0.037)	-0.056 (0.033)	-0.027 (0.032)	-0.102 ^{**} (0.032)	-0.081 ^{**} (0.032)	0.010 (0.026)	-0.096 ^{**} (0.039)	-0.044 (0.037)	-0.010 (0.041)	-0.036 (0.040)
40-49	-0.089 ^{***} (0.013)	0.026 (0.048)	-0.090 (0.058)	-0.036 (0.039)	-0.119 ^{***} (0.039)	-0.047 (0.042)	-0.103 ^{**} (0.039)	-0.125 ^{***} (0.041)	-0.150 ^{***} (0.038)	-0.023 (0.037)	-0.139 ^{***} (0.041)	-0.029 (0.041)	-0.077 (0.041)	-0.030 (0.044)
50-59	-0.122 ^{***} (0.014)	-0.036 (0.077)	-0.086 (0.058)	-0.175 ^{***} (0.072)	-0.090 (0.048)	-0.175 ^{***} (0.056)	-0.078 (0.042)	-0.101 ^{**} (0.041)	-0.252 ^{***} (0.060)	-0.133 ^{***} (0.047)	-0.040 (0.035)	-0.139 ^{**} (0.043)	-0.123 ^{**} (0.055)	-0.099 (0.054)
60-69	-0.152 ^{***} (0.014)	-0.072 (0.077)	-0.262 ^{***} (0.072)	-0.094 (0.072)	-0.166 ^{***} (0.059)	-0.166 ^{***} (0.055)	-0.050 (0.054)	-0.154 ^{**} (0.055)	-0.197 ^{***} (0.051)	-0.183 ^{***} (0.053)	-0.040 (0.044)	-0.232 ^{***} (0.080)	-0.142 (0.064)	-0.116 (0.074)
70+	-0.147 ^{***} (0.018)	-0.002 (0.088)	-0.230 ^{**} (0.088)	0.001 (0.094)	-0.119 (0.078)	-0.101 (0.071)	-0.031 (0.073)	-0.200 ^{**} (0.077)	0.000 (0.077)	0.000 (0.077)	0.000 (0.077)	-0.176 ^{**} (0.083)	-0.024 (0.072)	-0.210 [*] (0.088)
Tertiary education (dummy)	0.067 ^{***} (0.009)	0.082 ^{**} (0.033)	0.001 (0.035)	0.124 ^{**} (0.048)	0.075 [*] (0.036)	0.058 [*] (0.028)	0.033 (0.028)	0.083 ^{**} (0.031)	0.083 ^{**} (0.031)	0.055 [*] (0.026)	0.069 [*] (0.030)	0.077 ^{**} (0.038)	0.116 ^{**} (0.036)	0.077 ^{**} (0.031)
Number of children (number)	0.011 ^{***} (0.003)	-0.008 (0.014)	0.040 ^{**} (0.015)	-0.001 (0.012)	-0.003 (0.013)	0.020 (0.020)	0.003 (0.012)	0.016 (0.013)	0.016 (0.014)	0.021 [*] (0.009)	0.012 (0.007)	-0.005 (0.011)	0.021 [*] (0.010)	0.010 (0.012)
Number of adults (number)	0.009 [*] (0.004)	0.016 (0.017)	-0.026 (0.020)	0.008 (0.017)	-0.005 (0.017)	0.044 ^{**} (0.013)	0.002 (0.013)	0.010 (0.014)	0.010 (0.014)	-0.016 (0.013)	0.012 (0.009)	-0.001 (0.013)	0.018 (0.012)	-0.009 (0.021)
Urban (dummy)	0.009 (0.010)	0.012 (0.011)	0.042 (0.045)	0.019 (0.049)	0.042 (0.049)	0.018 (0.057)	0.066 (0.057)	0.114 [*] (0.059)	0.054 (0.059)	0.022 (0.037)	0.034 (0.039)	-0.001 (0.039)	0.001 (0.044)	0.001 (0.046)
Suburban (dummy)	0.008 (0.011)	-0.010 (0.045)	-0.004 (0.049)	0.015 (0.049)	0.015 (0.049)	0.072 ^{**} (0.036)	0.157 ^{**} (0.059)	0.157 ^{**} (0.059)	0.157 ^{**} (0.059)	-0.029 (0.038)	0.094 [*] (0.039)	-0.018 (0.039)	-0.002 (0.046)	-0.026 (0.061)
Rural (dummy)	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Owner with a mortgage (dummy)	-0.001 (0.009)	0.068 (0.043)	-0.067 (0.043)	0.044 (0.044)	0.027 (0.033)	-0.071 (0.037)	0.039 (0.030)	-0.044 (0.028)	0.038 (0.035)	-0.021 (0.034)	0.010 (0.023)	0.011 (0.033)	0.028 (0.033)	-0.051 (0.042)
Renter (dummy)	-0.003 (0.011)	-0.017 (0.045)	-0.020 (0.045)	-0.021 (0.045)	-0.063 (0.039)	0.011 (0.038)	-0.028 (0.035)	0.047 (0.039)	0.047 (0.039)	-0.045 (0.034)	0.000 (0.030)	0.092 [*] (0.041)	-0.010 (0.054)	0.025 (0.039)
Other (dummy)	-0.051 (0.027)	0.083 (0.125)	-0.139 (0.183)	0.017 (0.086)	0.000 (0.132)	0.000 (0.132)	0.000 (0.132)	0.000 (0.132)	0.000 (0.132)	-0.040 (0.076)	-0.030 (0.076)	0.044 (0.101)	0.076 (0.160)	0.000 (0.155)
Owner without a mortgage (dummy)	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Electricity (dummy)	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Gas (dummy)	-0.007 (0.009)	-0.017 (0.042)	0.027 (0.040)	0.020 (0.030)	0.098 (0.056)	0.005 (0.029)	-0.018 (0.038)	0.040 (0.030)	0.040 (0.030)	-0.028 (0.028)	0.030 (0.027)	-0.026 (0.032)	-0.024 (0.038)	-0.001 (0.036)
Oil (dummy)	0.000 (0.015)	-0.005 (0.049)	0.080 (0.060)	0.028 (0.060)	0.070 (0.055)	0.009 (0.062)	0.000 (0.062)	0.000 (0.062)	-0.168 (0.120)	-0.043 (0.036)	-0.020 (0.044)	0.022 (0.089)	0.195 (0.076)	0.004 (0.051)
Wood (dummy)	-0.007 (0.015)	0.009 (0.072)	0.092 (0.064)	0.012 (0.072)	-0.031 (0.075)	-0.036 (0.075)	0.012 (0.072)	0.012 (0.072)	0.086 (0.083)	-0.077 (0.051)	0.022 (0.027)	0.012 (0.072)	-0.049 (0.042)	-0.046 (0.070)
Coal (dummy)	0.027 (0.029)	0.151 (0.121)	0.000 (0.121)	0.000 (0.121)	0.000 (0.121)	0.000 (0.121)	0.000 (0.121)	0.000 (0.121)	0.000 (0.121)	-0.144 (0.074)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
I don't know (dummy)	-0.023 (0.023)	-0.041 (0.090)	0.340 [*] (0.148)	0.000 (0.148)	0.276 ^{**} (0.131)	0.000 (0.131)	0.000 (0.131)	0.000 (0.131)	0.000 (0.131)	0.000 (0.131)	0.000 (0.131)	0.000 (0.131)	0.000 (0.131)	0.000 (0.131)
Elec €0 - €25 (dummy)	-0.023 (0.015)	-0.062 (0.105)	0.026 (0.066)	0.120 (0.091)	-0.028 (0.056)	0.014 (0.035)	0.013 (0.082)	-0.060 (0.054)	-0.137 ^{**} (0.063)	-0.044 (0.056)	-0.060 (0.095)	-0.026 (0.095)	-0.046 (0.046)	-0.128 (0.127)
Elec €25 - €50 (dummy)	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Elec €50 - €75 (dummy)	-0.009 (0.010)	-0.051 (0.041)	0.014 (0.044)	0.046 (0.040)	0.020 (0.047)	-0.009 (0.033)	0.061 [*] (0.029)	-0.036 (0.033)	-0.129 ^{***} (0.042)	-0.038 (0.038)	-0.012 (0.026)	-0.016 (0.039)	0.019 (0.036)	-0.033 (0.041)
Elec €75 - €100 (dummy)	0.008 (0.012)	-0.073 (0.047)	0.093 (0.048)	0.092 [*] (0.044)	0.090 (0.051)	0.046 (0.031)	0.018 (0.034)	0.015 (0.043)	-0.060 (0.042)	0.043 (0.030)	-0.011 (0.040)	-0.032 (0.043)	-0.038 (0.043)	-0.017 (0.053)
Elec €100 - €125 (dummy)	0.013 (0.015)	-0.101 (0.059)	0.071 (0.067)	0.027 (0.054)	-0.011 (0.067)	0.124 ^{**} (0.045)	-0.011 (0.056)	0.011 (0.040)	-0.046 (0.041)	0.017 (0.052)	-0.011 (0.047)	0.079 (0.056)	-0.018 (0.061)	0.036 (0.052)
Elec €125 - €150 (dummy)	0.007 (0.015)	-0.017 (0.072)	0.059 (0.081)	0.049 (0.061)	0.022 (0.065)	0.068 (0.085)	0.068 (0.085)	-0.023 (0.057)	-0.095 (0.050)	0.067 (0.038)	0.047 (0.065)	0.039 (0.052)	-0.036 (0.064)	-0.051 (0.053)
Elec €150 - €175 (dummy)	0.028 (0.022)	0.033 (0.080)	0.019 (0.097)	0.150 [*] (0.067)	0.182 ^{***} (0.054)	0.000 (0.054)	0.000 (0.054)	0.124 (0.065)	0.034 (0.085)	0.029 (0.051)	0.000 (0.040)	0.000 (0.040)	-0.003 (0.079)	-0.058 (0.105)
Elec €175 - €200 (dummy)	0.052 [*] (0.026)	-0.288 ^{***} (0.105)	-0.016 (0.103)	0.269 ^{***} (0.079)	0.121 (0.075)	0.000 (0.075)	0.000 (0.075)	0.000 (0.075)	0.044 (0.061)	0.000 (0.040)	0.000 (0.040)	-0.038 (0.092)	0.086 (0.060)	-0.104 (0.073)
Elec > €200 (dummy)	-0.034 (0.022)	-0.268 ^{***} (0.098)	0.000 (0.103)	0.278 ^{***} (0.095)	0.133 [*] (0.055)	0.000 (0.055)	0.000 (0.055)	0.000 (0.055)	0.000 (0.055)	0.000 (0.055)	0.000 (0.055)	-0.051 (0.114)	0.071 (0.095)	-0.182 ^{**} (0.078)
Elec I don't know (dummy)	-0.020 (0.026)	0.000 (0.097)	0.023 (0.097)	0.000 (0.097)	0.000 (0.097)	0.000 (0.097)	0.000 (0.097)	0.000 (0.097)	-0.024 (0.088)	-0.063 (0.094)	0.035 (0.051)	0.000 (0.051)	0.212 (0.117)	-0.021 (0.084)
Upgraded heating system (dummy)	0.048 ^{**} (0.008)	0.105 ^{***} (0.031)	-0.006 (0.034)	0.077 ^{**} (0.030)	0.015 (0.033)	0.049 (0.029)	0.060 [*] (0.029)	-0.022 (0.028)	0.028 [*] (0.027)	0.047 ^{**} (0.022)	0.069 ^{**} (0.025)	0.037 (0.031)	0.040 (0.038)	0.074 [*] (0.034)
Air conditioning (dummy)	0.052 ^{***} (0.008)	0.103 ^{**} (0.037)	0.066 (0.034)	0.018 (0.030)	0.052 (0.031)	0.064 [*] (0.027)	0.019 (0.033)	0.038 (0.031)	-0.037 (0.038)	-0.004 (0.024)	0.034 (0.032)	0.087 ^{**} (0.032)	0.160 ^{***} (0.032)	0.032 (0.040)
Heating temperature (scale 1-10)	-0.004 [*] (0.010)	0.011 (0.009)	-0.009 (0.010)	-0.026 ^{**} (0.007)	0.002 (0.007)	0.006 (0.008)	-0.002 (0.008)	0.006 (0.008)	-0.011 (0.006)	0.010 (0.006)	0.008 (0.007)	0.008 (0.007)	-0.010 (0.008)	0.004 (0.009)
Can afford to adequately heat (dummy)	0.023 [*] (0.012)	0.015 (0.053)	0.013 (0.037)	0.081 (0.045)	-0.025 (0.055)	0.032 (0.051)	0.002 (0.031)	-0.011 (0.034)	-0.002 (0.036)	-0.052 [*] (0.025)	0.057 (0.044)	0.061 (0.052)	0.004 (0.057)	0.159 ^{**} (0.054)
Comfort with income (scale 1-5)	-0.011 ^{**} (0.004)	-0.034 [*] (0.013)	-0.000 (0.034)	0.019 (0.038)	-0.006 (0.034)	0.014 (0.031)	0.011 (0.026)	-0.024 (0.031)	-0.013 (0.011)	0.015 (0.014)	0.007 (0.011)	0.001 (0.011)	-0.017 (0.014)	-0.006 (0.014)
Previous investment experience (dummy)	0.053 ^{***} (0.008)	0.135 ^{***} (0.034)	0.003 (0.038)	0.019 (0.029)	0.021 (0.033)	0.011 (0.026)	0.070 ^{**} (0.024)	0.005 (0.031)	0.060 [*] (0.024)	-0.010 (0.024)	0.071 ^{**} (0.028)	0.055 (0.029)	0.070 ^{**} (0.029)	0.023 (0.032)
Risk averse (dummy)	0.010 (0.008)	0.048 (0.038)	0.040 (0.034)	0.042 (0.030)	0.099 (0.031)	-0.009 (0.024)	0.019 (0.026)	-0.053 (0.028)	0.009 (0.028)	-0.005 (0.021)	-0.010 (0.029)	-0.038 (0.028)	-0.015 (0.034)	0.039 (0.033)
Trust in energy saving claims (scale 1-5)	0.015 ^{***} (0.004)	0.046 [*] (0.020)	-0.002 (0.017)	0.007 (0.016)	0.039 [*] (0.018)	0.033 (0.017)	0.040 [*] (0.016)	-0.008 (0.012)	0.029 [*] (0.014)	-0.011 (0.011)	0.011 (0.011)	0.058 ^{**} (0.017)	0.019 (0.016)	0.008 (0.017)
EU/state responsibility to empower (scale 1-5)	-0.004 (0.004)	0.015 (0.019)	-0.002 (0.017)	0.010 (0.016)	-0.011 (0.013)	-0.010 (0.013)	-0.026 (0.013)	-0.011 (0.013)	-0.001 (0.012)	-0.007 (0.017)	0.004 (0.015)	0.004 (0.012)	-0.002 (0.012)	-0.023 (0.017)
Climate change seriousness	0.022 (0.018)	-0.114 (0.061)	-0.042 (0.097)	0.028 (0.100)	0.083 (0.067)	-0.006 (0.101)	0.166 (0.087)	0.065 (0.050)	0.000 (0.040)	0.000 (0.042)	0.102 (0.087)	-0.074 (0.085)	0.209 ^{**} (0.079)	-0.043 (0.067)
Not at all a serious problem (1)	-0.018 (0.018)	-0.116 (0.061)	-0.097 (0.073)	0.009 (0.066)	0.083 (0.050)	0.034 (0.055)	0.002 (0.106)	0.007 (0.048)	0.059 (0.042)</					

Table A 5: Full sample opt-out count model comparison

Dependent variable: count of opt-outs	OLS		ZIP		ZINB	
Female	0.205***	(0.041)	0.097***	(0.028)	0.116**	(0.042)
Age						
18-29	<i>ref.</i>		<i>ref.</i>		<i>ref.</i>	
30-39	0.162**	(0.050)	0.267***	(0.058)	0.299***	(0.081)
40-49	0.307***	(0.054)	0.332***	(0.056)	0.359***	(0.079)
50-59	0.527***	(0.064)	0.511***	(0.056)	0.556***	(0.080)
60-69	0.687***	(0.079)	0.528***	(0.058)	0.585***	(0.083)
70+	0.959***	(0.130)	0.549***	(0.068)	0.637***	(0.100)
Tertiary education	-0.086	(0.045)	-0.085**	(0.028)	-0.116**	(0.043)
Number of children	-0.024	(0.018)	0.003	(0.014)	0.010	(0.020)
Number of adults	-0.042*	(0.021)	-0.021	(0.017)	-0.028	(0.025)
Location						
Urban	-0.026	(0.056)	0.055	(0.038)	0.077	(0.056)
Suburban	-0.020	(0.061)	-0.010	(0.038)	-0.001	(0.057)
Rural	<i>ref.</i>		<i>ref.</i>		<i>ref.</i>	
Tenure status						
Owner with a mortgage	-0.030	(0.048)	-0.075*	(0.036)	-0.059	(0.053)
Renter	-0.050	(0.057)	-0.003	(0.039)	0.007	(0.059)
Other dummy	-0.100	(0.107)	-0.043	(0.092)	-0.082	(0.133)
Owner without a mortgage	<i>ref.</i>		<i>ref.</i>		<i>ref.</i>	
Type of heating						
Electricity	<i>ref.</i>		<i>ref.</i>		<i>ref.</i>	
Gas	-0.005	(0.048)	0.013	(0.037)	0.054	(0.055)
Oil	-0.058	(0.081)	-0.012	(0.057)	0.021	(0.085)
Wood	0.048	(0.075)	0.076	(0.060)	0.125	(0.089)
Coal	-0.102	(0.108)	-0.165	(0.119)	-0.145	(0.168)
I don't know	0.246	(0.141)	0.172**	(0.061)	0.237*	(0.095)
Upgraded heating system	-0.146***	(0.042)	-0.159***	(0.031)	-0.188***	(0.045)
Air conditioning	0.014	(0.046)	0.063	(0.036)	0.069	(0.054)
Electricity spend						
€0 - €25	0.133	(0.087)	0.145**	(0.049)	0.172*	(0.076)
€25 - €50	<i>ref.</i>		<i>ref.</i>		<i>ref.</i>	
€50 - €75	0.048	(0.054)	-0.030	(0.038)	-0.037	(0.057)
€75 - €100	-0.065	(0.059)	-0.091	(0.047)	-0.119	(0.069)
€100 - €125	0.080	(0.082)	0.081	(0.056)	0.094	(0.085)
€125 - €150	0.175	(0.105)	0.126	(0.067)	0.145	(0.101)
€150 - €175	-0.056	(0.111)	-0.183	(0.111)	-0.233	(0.156)
€175 - €200	-0.076	(0.122)	-0.043	(0.123)	-0.004	(0.180)
> €200	0.659***	(0.196)	0.372***	(0.086)	0.437**	(0.142)
I don't know	0.557**	(0.181)	0.096	(0.067)	0.107	(0.105)
Heating temperature	0.007	(0.010)	0.005	(0.007)	0.003	(0.011)
Can afford to adequately heat	-0.003	(0.059)	-0.001	(0.040)	0.007	(0.061)
Comfort with income	0.029	(0.022)	0.001	(0.015)	0.011	(0.023)
Previous energy organization	0.005	(0.053)	0.018	(0.050)	0.000	(0.072)
Previous investment experience	-0.173***	(0.044)	-0.185***	(0.032)	-0.213***	(0.048)
Risk averse	0.044	(0.041)	0.087**	(0.029)	0.099*	(0.043)
Trust in energy saving claims	-0.354***	(0.028)	-0.193***	(0.015)	-0.204***	(0.022)
EU/state responsibility to empower	0.080***	(0.023)	0.035**	(0.013)	0.048*	(0.020)
Climate change seriousness						
1 Not at all a serious problem	0.596**	(0.190)	0.163**	(0.058)	0.200*	(0.094)
2	0.114	(0.117)	0.031	(0.055)	0.039	(0.086)
3	<i>reference</i>		<i>reference</i>		<i>reference</i>	
4	-0.022	(0.062)	0.030	(0.039)	0.029	(0.059)
5 Its an extremely serious problem	-0.053	(0.059)	-0.005	(0.038)	0.006	(0.058)
Considerable interest phone app	-0.127***	(0.038)	-0.154***	(0.038)	-0.157**	(0.054)
Considerable interest DSM device	-0.173***	(0.038)	-0.135***	(0.038)	-0.128*	(0.055)
Considerable comfort data sharing	-0.154***	(0.039)	-0.147***	(0.038)	-0.174**	(0.054)
Considerably varying electricity tariff	-0.072	(0.041)	-0.130**	(0.040)	-0.141*	(0.058)
Country fixed effects	yes		yes		yes	
N	8,014		8,014		8,014	

Standard errors in parentheses. *** p<0.01; ** p<0.05 * p<0.1

Table A 6: Full sample inflation model comparison

Dependent variables: opt-out/zero count	ZIP inflation model		ZINB inflation model	
Female	-0.232***	(0.058)	-0.236***	(0.068)
Age				
18-29	<i>ref.</i>		<i>ref.</i>	
30-39	0.028	(0.101)	0.084	(0.120)
40-49	-0.108	(0.100)	-0.058	(0.120)
50-59	-0.185	(0.103)	-0.104	(0.123)
60-69	-0.347**	(0.112)	-0.275*	(0.133)
70+	-0.639***	(0.148)	-0.575**	(0.177)
Tertiary education	-0.027	(0.061)	-0.064	(0.071)
Number of children (number)	0.077**	(0.028)	0.091**	(0.032)
Number of adults (number)	0.060	(0.033)	0.059	(0.039)
Location				
Urban	0.145	(0.080)	0.180	(0.094)
Suburban	-0.062	(0.083)	-0.062	(0.098)
Rural	<i>ref.</i>		<i>ref.</i>	
Tenure status				
Owner with a mortgage	-0.082	(0.074)	-0.084	(0.087)
Renter	0.083	(0.081)	0.101	(0.095)
Other	0.044	(0.175)	0.016	(0.205)
Owner without a mortgage	<i>ref.</i>		<i>ref.</i>	
Heating type				
Electricity	<i>ref.</i>		<i>ref.</i>	
Gas	0.019	(0.074)	0.052	(0.088)
Oil	0.046	(0.118)	0.080	(0.140)
Wood	-0.031	(0.119)	0.018	(0.138)
Coal	-0.074	(0.213)	-0.091	(0.261)
I don't know	-0.086	(0.145)	-0.029	(0.166)
Electricity spend				
€0 - €25	0.039	(0.110)	0.071	(0.124)
€25 - €50	<i>ref.</i>		<i>ref.</i>	
€50 - €75	-0.126	(0.079)	-0.150	(0.093)
€75 - €100	-0.031	(0.093)	-0.062	(0.109)
€100 - €125	-0.057	(0.117)	-0.045	(0.135)
€125 - €150	-0.180	(0.144)	-0.176	(0.168)
€150 - €175	-0.190	(0.207)	-0.289	(0.262)
€175 - €200	0.217	(0.232)	0.253	(0.267)
> €200	-0.156	(0.216)	-0.095	(0.243)
I don't know	-0.605***	(0.179)	-0.686**	(0.226)
Upgraded heating system	0.002	(0.062)	-0.041	(0.074)
Air conditioning	0.165*	(0.072)	0.192*	(0.084)
Heating temperature (scale 1-10)	0.005	(0.015)	0.007	(0.018)
Can afford to adequately heat	0.066	(0.083)	0.082	(0.097)
Comfort with income (scale 1-5)	-0.060	(0.032)	-0.057	(0.038)
Previous energy organization	0.119	(0.093)	0.120	(0.110)
Previous investment experience	0.002	(0.066)	-0.048	(0.079)
Risk averse	0.110	(0.061)	0.139	(0.072)
Trust in energy saving claims (scale 1-5)	0.304***	(0.034)	0.305***	(0.039)
EU/state responsibility to empower (scale 1-5)	-0.082**	(0.030)	-0.076*	(0.035)
Climate change seriousness				
Not at all a serious problem (1)	-0.046	(0.162)	-0.009	(0.187)
2	-0.050	(0.134)	-0.046	(0.159)
3	<i>ref.</i>		<i>ref.</i>	
4	0.031	(0.084)	0.041	(0.098)
Its an extremely serious problem (5)	0.067	(0.081)	0.079	(0.096)
Considerable interest phone app	0.029	(0.070)	0.008	(0.082)
Considerable interest DSM device	0.092	(0.070)	0.094	(0.082)
Considerable comfort data sharing	0.151*	(0.071)	0.134	(0.083)
Considerably varying electricity tariff	0.062	(0.074)	0.048	(0.088)
N	8,014		8,014	

Standard errors in parentheses * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A 7: ZINB Inflation model results by business model group

	(1) Cooperative		(2) Crowdfunder		(3) P2P	
Female	-0.259*	(0.115)	-0.138	(0.107)	-0.370*	(0.156)
Age						
18-29	<i>ref.</i>		<i>ref.</i>		<i>ref.</i>	
30-39	-0.224	(0.188)	0.428*	(0.194)	-0.088	(0.280)
40-49	-0.545**	(0.193)	0.229	(0.189)	0.134	(0.277)
50-59	-0.400*	(0.194)	-0.039	(0.196)	0.139	(0.284)
60-69	-0.585**	(0.212)	-0.180	(0.219)	-0.187	(0.291)
70+	-0.828**	(0.297)	-0.595*	(0.297)	-0.382	(0.360)
Tertiary education	-0.137	(0.118)	-0.125	(0.113)	0.104	(0.167)
Number of children (number)	0.060	(0.057)	0.127**	(0.048)	0.161*	(0.077)
Number of adults (number)	0.046	(0.067)	0.034	(0.060)	0.168	(0.094)
Location						
Urban	0.377*	(0.160)	0.001	(0.148)	0.320	(0.220)
Suburban	0.031	(0.183)	-0.169	(0.146)	-0.002	(0.221)
Rural	<i>ref.</i>		<i>ref.</i>		<i>ref.</i>	
Tenure						
Owner with a mortgage	-0.218	(0.147)	-0.026	(0.135)	-0.153	(0.200)
Renter	-0.086	(0.160)	0.225	(0.150)	0.028	(0.225)
Other	0.477	(0.418)	-0.166	(0.283)	-0.012	(0.448)
Owner without a mortgage	<i>ref.</i>		<i>ref.</i>		<i>ref.</i>	
Heating type						
Electricity	<i>ref.</i>		<i>ref.</i>		<i>ref.</i>	
Gas	0.012	(0.143)	0.014	(0.144)	0.026	(0.190)
Oil	0.234	(0.228)	0.131	(0.225)	-0.524	(0.344)
Wood	-0.279	(0.226)	0.215	(0.202)	-0.076	(0.350)
Coal	0.009	(0.330)	-0.105	(0.460)	-12.608	(553.103)
I don't know	-0.088	(0.208)	-0.412	(0.501)	0.279	(0.403)
Electricity spend						
€0 - €25	-0.007	(0.189)	0.241	(0.202)	-0.148	(0.301)
€25 - €50	<i>ref.</i>		<i>ref.</i>		<i>ref.</i>	
€50 - €75	-0.207	(0.156)	0.025	(0.134)	-0.654**	(0.248)
€75 - €100	-0.159	(0.187)	-0.042	(0.168)	-0.020	(0.252)
€100 - €125	0.271	(0.223)	-0.234	(0.225)	-0.160	(0.293)
€125 - €150	-0.124	(0.271)	-0.378	(0.321)	-0.119	(0.334)
€150 - €175	-1.023	(0.685)	-0.495	(0.622)	-0.303	(0.435)
€175 - €200	0.061	(0.571)	0.405	(0.444)	0.091	(0.484)
> €200	0.281	(0.407)	0.043	(0.529)	-0.527	(0.409)
I don't know	-0.846*	(0.351)	-0.882	(0.515)	-0.550	(0.437)
Upgraded heating system	-0.126	(0.130)	-0.149	(0.109)	0.273	(0.172)
Air conditioning	0.267*	(0.130)	0.380**	(0.142)	-0.241	(0.192)
Heating temperature (scale 1-10)	-0.015	(0.032)	0.037	(0.026)	-0.039	(0.043)
Can afford to adequately heat	0.120	(0.163)	0.020	(0.145)	0.329	(0.255)
Comfort with income (scale 1-5)	-0.167**	(0.065)	-0.006	(0.063)	0.051	(0.077)
Previous investment experience	-0.066	(0.134)	-0.020	(0.122)	-0.148	(0.183)
Risk averse	0.082	(0.114)	0.236*	(0.115)	0.096	(0.175)
Trust in energy saving claims (scale 1-5)	0.298***	(0.066)	0.341***	(0.065)	0.308***	(0.083)
EU/state responsibility to empower (scale 1-5)	-0.141*	(0.058)	-0.011	(0.057)	-0.084	(0.074)
Climate change seriousness						
Not at all a serious problem (1)	0.383	(0.290)	-0.184	(0.354)	-0.394	(0.366)
2	-0.025	(0.256)	0.138	(0.277)	-0.593	(0.329)
3	<i>ref.</i>		<i>ref.</i>		<i>ref.</i>	
4	-0.006	(0.160)	0.113	(0.159)	-0.064	(0.214)
Its an extremely serious problem (5)	-0.103	(0.158)	0.168	(0.154)	0.153	(0.206)
Considerable interest phone app	-0.126	(0.136)	0.039	(0.129)	0.064	(0.190)
Considerable interest DSM device	-0.156	(0.138)	0.389**	(0.129)	0.052	(0.192)
Considerable comfort data sharing	0.333*	(0.144)	-0.100	(0.128)	0.366*	(0.187)
Considerably varying electricity tariff	0.076	(0.148)	0.028	(0.128)	0.020	(0.233)
Country FE	Yes		Yes		Yes	
N	3,091		3,143		1,780	

Note: Standard errors in parentheses. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Reference

de Brauwer, C. P. S., & Cohen, J. J. (2020). Analyzing the potential of citizen-financed community renewable energy to drive Europe's low-carbon energy transition. *Renewable and Sustainable Energy Reviews*, 133, 110300.