

## Survey of Energy-Related Decisions and Behaviour

**Programming Notes:** Instructions for the survey company are enclosed in square brackets “[ ]”. Highlighted things in **yellow** involve text being displayed on the screen. Highlighted things in **green** involve the programming of the survey, e.g. the order items are to appear or moving between questions.

[Add welcome/greeting, to be proposed by survey company]

We are extremely grateful for your willingness to support this important study, which is taking place amongst 31 European countries.

This research is part of the European Commission funded research project ECHOES which attempts to understand the individual’s place in the transition to a renewable energy system and energy choices.

[Add anonymity and survey conduct statement, to be proposed by survey company]

You will need about **20** minutes to answer these questions.

For more information, please visit the ECHOES project website at <https://echoes-project.eu/>

[Add reference to EU funding somewhere on start screen, use text and logo as provided below]

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 727470.



To better understand your answers, first we ask you some questions about you and your living situation.

1. How old are you?

a	<18 [THANK YOU & CLOSE]	
b	19-34	
c	35-49	
d	50-65	
e	>65	

2. Please indicate your gender:

Male (0)	Female (1)	Other (2)
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3. Which of the following best describes you?

	Payed employed (30 hours a week or more)	
	Payed employed (less than 30 hours a week)	
	Self employed	
	Retired/pensioned	
	Doing housework, and not in paid employment	
	Full time student	
	Unemployed	
	Disabled	
	Other	

4. Which of the following best describes where you live? Please select one.

0	Town/city (with more than 10,000 inhabitants)	
1	A village or small town (with less than 10,000 inhabitants)	

5. For approximately how many years have you been living at your current address?

< 1-5 years	5-10 years	10-20 years	more than 20 years
a	b	c	d

6. Please provide your postal code (ZIP code): [please ensure that for each country the postal code has the right format, e.g. correct number of digits]

7. Which nationality were you born with? [supply drop-down menu of all possibilities]

8. How many people currently live in your household, including yourself?

1	2	3	4	5	More than 5
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a	b	c	d	e	f
---	---	---	---	---	---

9. How many children do you have?

0	1	2	3	4	5	More than 5
---	---	---	---	---	---	-------------

**[ask only if 9 ≠ 0]**

10. How many of your children are under the age of 14?

0	1	2	3	4	5	More than 5
---	---	---	---	---	---	-------------

11. Which of the following is your highest level of education?

Elementary or secondary school	a	University or college degree	d
Professional training (Practical skills)	b	Other	e
A-Levels (qualification for university entrance)	c		

12. Think of a ladder with 5 steps representing where people stand in **[insert country]**. At step 5 are people who are the best off – those who have the most money, the most education, and the most respected jobs. At step 1 are the people who are worst off – those who have the least money, least education, and the least respected jobs or no job.

Where would you place yourself on this ladder?

1 – worst off	2	3	4	5 – best off
a	b	c	d	e

In political matters, people talk of the “left” and the “right”.

13. How would you describe your political outlook with regard to economic issues (e.g. taxes, cooperative vs. protective foreign economic policy, etc.)?

Left	Center-left	Center	Center-right	Right
a	b	c	d	e

14. How would you describe your political outlook with regard to social issues (e.g., family, religion, traditional values, etc.)?

Left	Center-left	Center	Center-right	Right
a	b	c	d	e

15. To ensure that we include the views of a good range of people from different social levels – please indicate if your household's monthly net income is less than [INSERT median-income threshold per country]? Your best estimate will be fine.

By net income we mean the combined income of ALL household members after taxes, including social transfers.

Yes, less than that	a	[Go to a]
No, greater than that	b	[Go to b]

a. And is your household's monthly net income less than [INSERT 1<sup>st</sup> quartile-income threshold per country]?

Yes, less than that	a	Allocate to low-income quota (at least XX %) [skip to 16]
No, greater than that	b	Allocate to lower middle income quota (XX %) And [skip to 16]

b. And is your household's monthly net income less than [INSERT 3<sup>d</sup> quartile-income threshold per country]?

Yes, less than that	a	Allocate to middle-income quota (at least XX %) [skip to 16]
No, greater than that	b	[Go to c]

c. And is your household's monthly net income less than [INSERT 90<sup>th</sup> percentile-income threshold per country]?

Yes, less than that	a	Allocate to higher middle-income quota (at least XX %) [skip to 16]
No, greater than that	b	Allocate to higher income quota (XX %) And [skip to 16]

16. Imagine you are being offered the opportunity to buy a share of a renewable electricity project that will cost you [randomly assign a value version: 100, 500, 1000, 2000, 5000, henceforth referenced bidVALUE1", store used bid value as variable "bVscenariosRES" in dataset] EUR.

You choose to invest in the presented opportunities or not. If you choose to invest you would have to pay [include bidVALUE1 here] EUR today.

**You get** to own a part of a solar or wind power plant that is co-owned by you and other private citizens. The power plant sells carbon-free renewable power into the electricity grid to make money over time.

**You are paid** back your initial investment plus any profits made from selling the power. You get one lump-sum payment after a period of time called the “holding period”.

[assign respondent to 1 of the 4 groups **randomly**: gMUNICIPALITY, gCOUNTRY, gEU, gControl; ensure per group 25% of national sample; the respondent remains in the group until defined different; store the group in variable “gScenarios” in the final data set]

[add for gMUNICIPALITY **only**] Suppose also that your municipality’s government recommends these projects as a good way to increase the penetration of renewable electricity.

[add for gCOUNTRY **only**] Suppose also that the country you live in’s government recommends these projects as a good way to increase the penetration of renewable electricity.

[add for gEU **only**] Suppose also that the EU’s government recommends these projects as a good way to increase the penetration of renewable electricity.

[no additional information for gCONTROL]

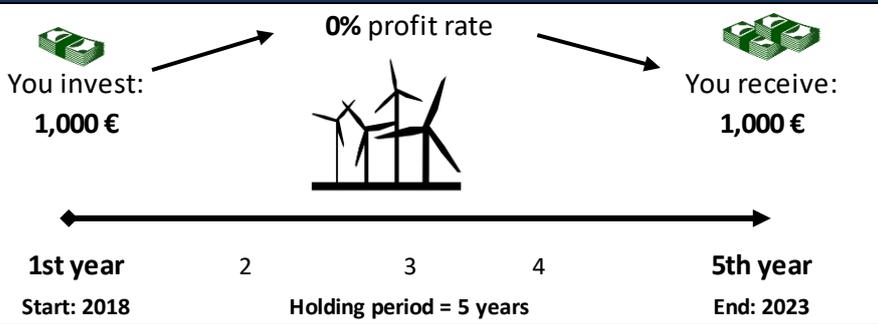
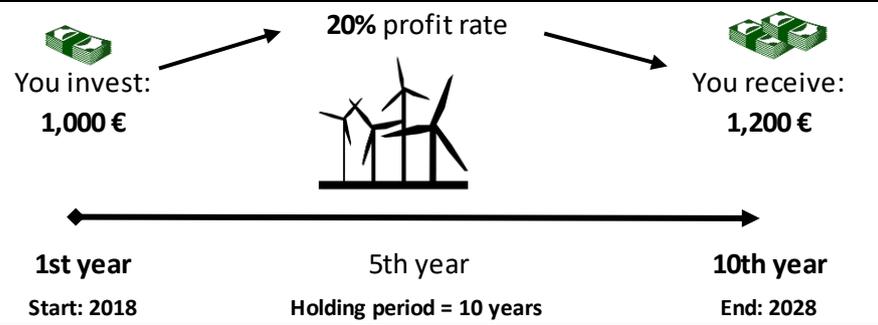
The investment opportunities vary based on the attributes shown below; please take a moment to read **the different attributes and their definitions**:

Characteristic	Description
Profit Rate	The percent of money you get on top of your initial investment. For example if the profit rate is <b>10%</b> then you receive the equivalent of <b>100 EUR profit + your 1,000 EUR = 1,100 EUR</b> at the end of the holding period. Consider this a risk-free investment, where the profit rate is a real rate that already accounts for inflation..
Holding Period	The number of years until get your money back, including any profits.
Visibility	If the proposed wind or solar park is visible from your home.
Administrator	The group that handles your investment and is in charge of building and running the power plant. This can be either a <i>community organization</i> , which is a group of private citizens, a <i>utility company</i> , which is a company that provides energy, or a <i>government</i> entity.

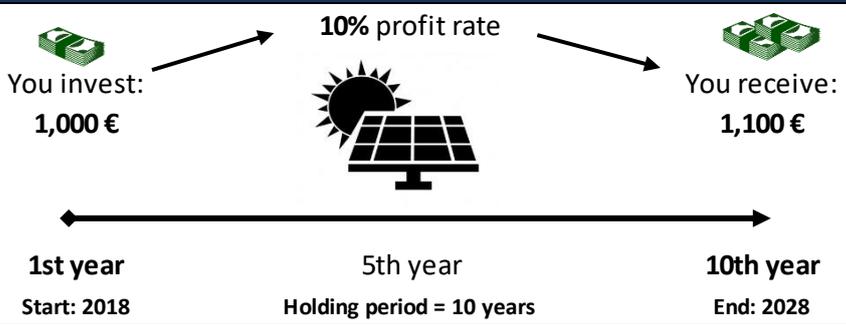
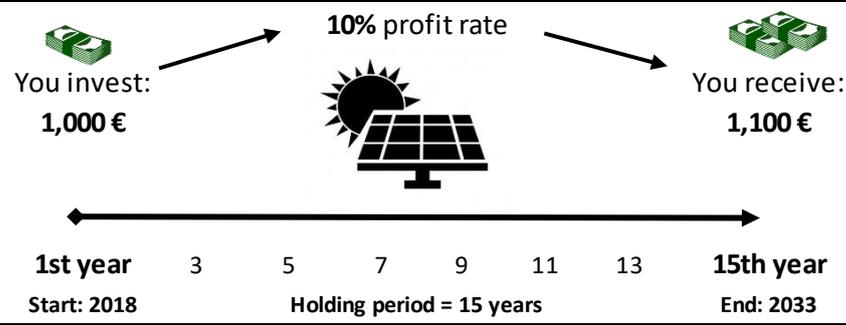
Please select your most preferred option for each of the questions below. Please consider each question separately, such that A and B are the only community renewable investment options available to you in each question. [please see the Appendix how scenarios shall be assigned to respondents]



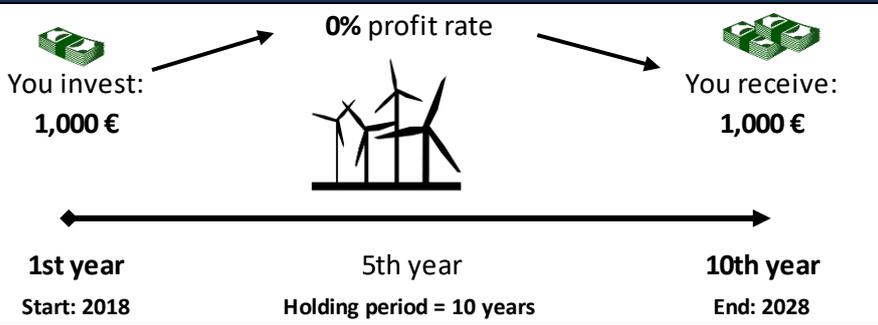
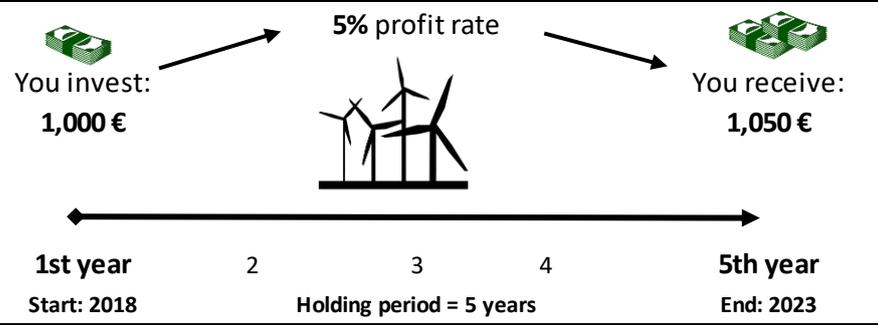
**[Scenario 5:]** Please tick the preferred option.

OPTION A	
<p><b>Visibility:</b> &lt;10 km <b>Admin:</b> Government</p> <p><b>Profit rate:</b> 0% <b>Holding period:</b> 5 years</p>	 <p>You invest: 1,000 €</p> <p>0% profit rate</p> <p>You receive: 1,000 €</p> <p>1st year      2      3      4      5th year</p> <p>Start: 2018      Holding period = 5 years      End: 2023</p>
OPTION B	
<p><b>Visibility:</b> &gt;10 km <b>Admin:</b> Community Organization</p> <p><b>Profit rate:</b> 20% <b>Holding period:</b> 10 years</p>	 <p>You invest: 1,000 €</p> <p>20% profit rate</p> <p>You receive: 1,200 €</p> <p>1st year      5th year      10th year</p> <p>Start: 2018      Holding period = 10 years      End: 2028</p>
OPTION C	
	<p>I would NOT invest in one of these options.</p>

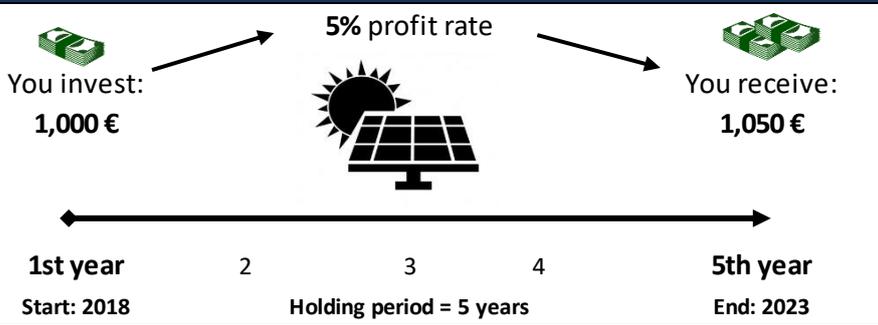
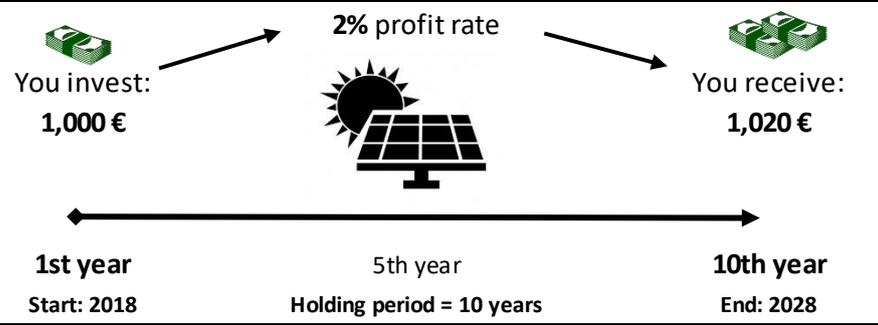
**Scenario 6:** Please tick the preferred option.

OPTION A	
<p>Distance from your home: &gt;10 km Admin: Utility Company</p> <p>Profit rate: 10% Holding period: 10 years</p>	
OPTION B	
<p>Distance from your home: &lt;10 km Admin: Utility Company</p> <p>Profit rate: 10% Holding period: 15 years</p>	
OPTION C	
	<p>I would NOT invest in one of these options.</p>

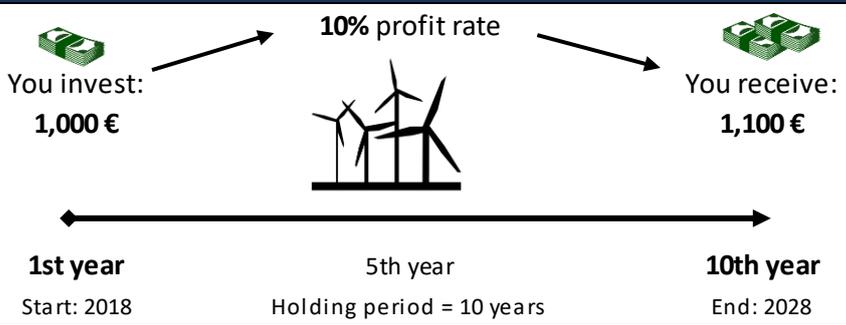
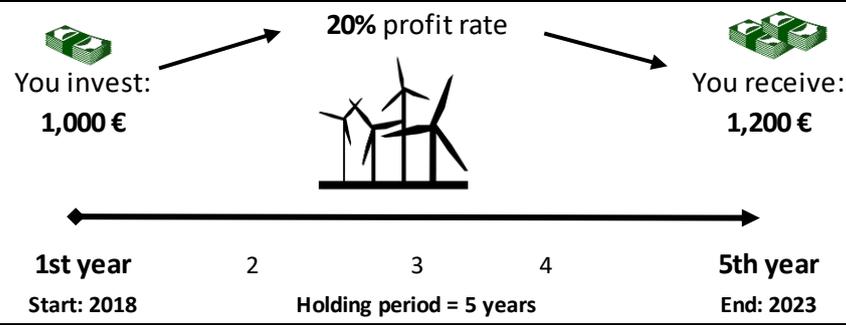
**[Scenario 14:]** Please tick the preferred option.

OPTION A	
<p>Distance from your home: &gt;10 km Administration: Utility Company</p> <p>Profit rate: 0% Holding period: 10 years</p>	 <p>You invest: 1,000 €</p> <p>0% profit rate</p> <p>You receive: 1,000 €</p> <p>1st year (Start: 2018)      5th year (Holding period = 10 years)      10th year (End: 2028)</p>
OPTION B	
<p>Distance from your home: &lt;10 km Admin: Community Organization</p> <p>Profit rate: 5% Holding period: 5 years</p>	 <p>You invest: 1,000 €</p> <p>5% profit rate</p> <p>You receive: 1,050 €</p> <p>1st year (Start: 2018)      2      3      4      5th year (End: 2023)</p> <p>Holding period = 5 years</p>
OPTION C	
	<p>I would NOT invest in one of these options.</p>

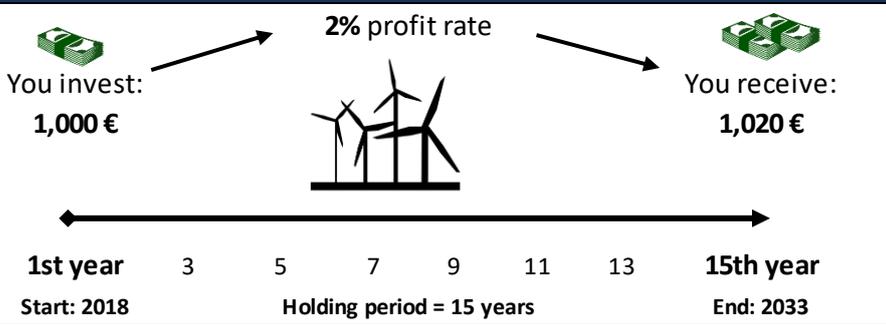
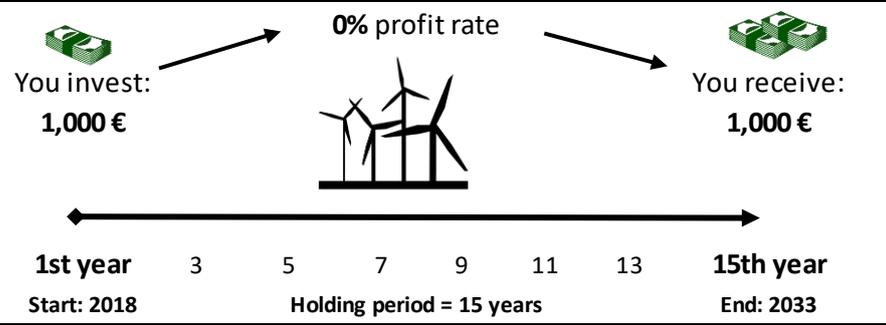
**Scenario 17:** Please tick the preferred option.

OPTION A	
<p>Distance from your home: &lt;10 km Admin: Utility Company</p> <p>Profit rate: 5% Holding period: 5 years</p>	 <p>You invest: 1,000 €</p> <p>5% profit rate</p> <p>You receive: 1,050 €</p> <p>1st year      2      3      4      5th year</p> <p>Start: 2018      Holding period = 5 years      End: 2023</p>
OPTION B	
<p>Distance from your home: &lt;10 km Admin: Government</p> <p>Profit rate: 2% Holding period: 10 years</p>	 <p>You invest: 1,000 €</p> <p>2% profit rate</p> <p>You receive: 1,020 €</p> <p>1st year      5th year      10th year</p> <p>Start: 2018      Holding period = 10 years      End: 2028</p>
OPTION C	
	<p>I would NOT invest in one of these options.</p>

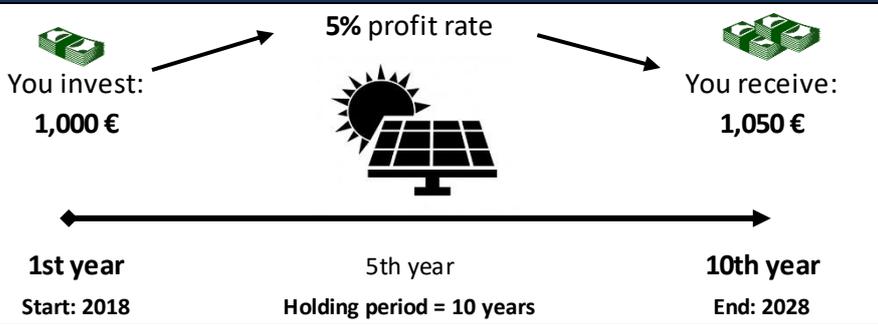
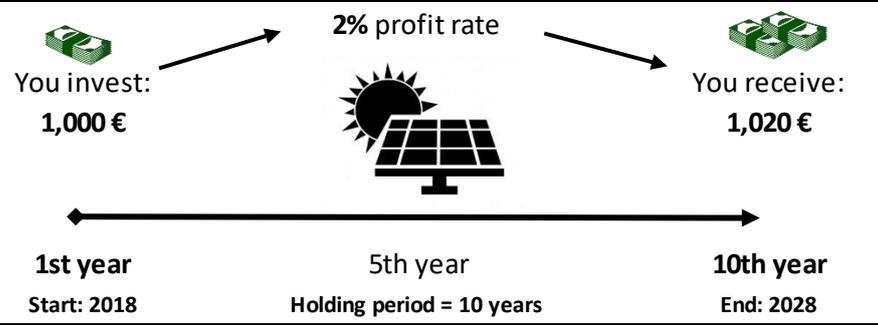
**[Scenario 18:]** Please tick the preferred option.

OPTION A	
<p>Distance from your home: &gt;10 km Admin: Government</p> <p>Profit rate: 10% Holding period: 10 years</p>	 <p>You invest: 1,000 €</p> <p>10% profit rate</p> <p>You receive: 1,100 €</p> <p>1st year (Start: 2018)      5th year (Holding period = 10 years)      10th year (End: 2028)</p>
OPTION B	
<p>Distance from your home: &gt;10 km Admin: Government</p> <p>Profit rate: 20% Holding period: 5 years</p>	 <p>You invest: 1,000 €</p> <p>20% profit rate</p> <p>You receive: 1,200 €</p> <p>1st year (Start: 2018)      2      3      4      5th year (End: 2023)</p> <p>Holding period = 5 years</p>
OPTION C	
	<p>I would NOT invest in one of these options.</p>

**[Scenario 19:]** Please tick the preferred option.

OPTION A	
<p>Distance from your home: &gt;10 km Admin: Community Organization</p> <p>Profit rate: 2% Holding period: 15 years</p>	 <p>The diagram shows a timeline from the 1st year (Start: 2018) to the 15th year (End: 2033). An investment of 1,000 € is made at the start. The holding period is 15 years. At the end of the period, the investment has grown to 1,020 € due to a 2% profit rate. The diagram includes icons of money and wind turbines.</p>
OPTION B	
<p>Distance from your home: &gt;10 km Admin: Government</p> <p>Profit rate: 0% Holding period: 15 years</p>	 <p>The diagram shows a timeline from the 1st year (Start: 2018) to the 15th year (End: 2033). An investment of 1,000 € is made at the start. The holding period is 15 years. At the end of the period, you receive exactly 1,000 € because the profit rate is 0%. The diagram includes icons of money and wind turbines.</p>
OPTION C	
	<p>I would NOT invest in one of these options.</p>

**[Scenario 21:]** Please tick the preferred option.

OPTION A	
<p>Distance from your home: &gt;10 km Admin: Utility Company</p> <p>Profit rate: 5% Holding period: 10 years</p>	 <p>You invest: 1,000 €</p> <p>5% profit rate</p> <p>You receive: 1,050 €</p> <p>1st year Start: 2018      5th year Holding period = 10 years      10th year End: 2028</p>
OPTION B	
<p>Distance from your home: &lt;10 km Admin: Community Organization</p> <p>Profit rate: 2% Holding period: 10 years</p>	 <p>You invest: 1,000 €</p> <p>2% profit rate</p> <p>You receive: 1,020 €</p> <p>1st year Start: 2018      5th year Holding period = 10 years      10th year End: 2028</p>
OPTION C	
	<p>I would NOT invest in one of these options.</p>

[on a new page show the following]

17. Are you interested in the possibility of a real investment in renewable energy? If so, we could forward your email address to respected companies that offer community-based investments in green power. Your email would be used for sending you investment opportunities, while you can withdraw your confirmation to receive such offers at any time.

No (0)	Yes, forward my email address [include respondents email address here] to an investment company offering such options(1)
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[go to a new page and show the following text]

We would now like to ask you a few questions about the public transportation system in your area. By **public transportation system**, we mean any buses, trams, trains, subways, or other public vehicles that you can use to travel around your area.

18. How satisfied are you with the current public transportation system in your area?

1	Very dissatisfied	
2	Dissatisfied	
3	Neither satisfied nor dissatisfied	
4	Satisfied	
5	Very satisfied	
0	My area has no public transit [Skip to Question 22]	

19. I consider the public transportation system in my area to be environmentally-friendly

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

20. How many trips do you take per week using public transportation on average? By "trip" we mean one instance of travel from one place to another. Traveling to and from work would be two trips.

I rarely use public transportation	1-4 trips	5-8 trips	9-12 trips	More than 12 trips
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1	2	3	4	5
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[new page]

Imagine that the current fleet of public transportation vehicles in your area will be upgraded to be more environmentally friendly.

The new vehicles will decrease air pollution within your area and will lower the carbon emissions from the public transportation sector. However, the new vehicles will be more costly to run.

Therefore, local politicians ask all residents in the area in a referendum whether this change to environmentally friendly vehicles shall take place.

**21. [50% of sample should receive question I first, and 50% should receive question II first; store in variable "orderTransport" value "I" if question I was asked first, an "II" if question II was asked first].**

- I. Imagine you would be required to pay [randomly assign a national bid price from list "Bid Values in nat currencies.xlsx", store used bid value as variable "bV17perTrip" in dataset] more for every trip with public transit you take, no matter what kind of ticket you usually buy. How would you vote in the referendum?

<p>I would vote "YES" to support the new public transportation system</p> <p>(1)</p>	<p>I would vote "NO" and not support the new public transportation system</p> <p>(2)</p>
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- II. How would you would vote on the referendum if you would be required to pay [randomly assign a national bid price from list "Bid Values public transport questions.xlsx", store used bid value as variable "bV17perMonth" in dataset] more per month in taxes? You would have to pay this fee even if you never use public transport.

<p>I would vote "YES" to support the new public transportation system</p> <p>(1)</p>	<p>I would vote "NO" and not support the new public transportation system</p> <p>(2)</p>
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Below you will find statements regarding your experiences in daily life situations. Please indicate the extent of your agreement or disagreement with each statement.

**22. I control my emotions by not expressing them.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**23. I control my emotions by changing the way I think about the situation I am in.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**24. I consider how things might be in the future, and try to influence those things with my day to day behavior.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**25. I think it is important to take warnings about negative outcomes seriously even if the negative outcome will not occur for many years.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**26. It is easy for me to concentrate on what I am doing.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**27. I am able to pay close attention to one thing for a long period of time.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

Please rate the extent to which you agree with the following statements regarding your emotions and beliefs in relation to energy saving behavior, renewable energy and climate change.

**28. I feel guilty if other people in**

**[include for** **gMUNICIPALITY** my municipality  
**gCOUNTRY:** the country I live in  
**gEU:** the EU  
**gCONTROL:** randomly assign the respondent to one of the three other groups (gMUNICIPALITY, or gCOUNTRY, or gEU) and include the above statement for the new group; the respondent remains in this new group for the rest of the survey then. Store the group in variable "gWP4" in the final data set]

**do not save energy.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**29. I feel proud if other people in**

**[include for** **gMUNICIPALITY:** my municipality  
**gCOUNTRY:** the country I live in  
**gEU:** the EU  
**gCONTROL:** from here onwards only the 3 other groups exist (no group gCONTROL should exist anymore).]

**save energy.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**30. I am angry about the fact that many people in**

**[include for** **gMUNICIPALITY:** my municipality  
**gCOUNTRY:** the country I live in  
**gEU:** the EU]

**do not save energy.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**31. The use of more renewable energy sources will benefit the environment.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**32. The use of more renewable energy sources will create new jobs in**

**[include for** **gMUNICIPALITY:** my municipality  
**gCOUNTRY:** the country I live in  
**gEU:** the EU].

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**33. Most scientists say that the world’s temperature has slowly been rising over the past 100 years. Do you think this has been happening?**

No, definitely not	Probably not	Maybe, I don’t know	Probably	Yes, definitely
1	2	3	4	5

**34. Assuming that the world’s temperature is rising, do you think this is caused mostly by natural causes, about equally by natural causes and human activity, or mostly by human activity?**

Mostly by natural causes	About equally by natural causes and human activity	Mostly by human activities
1	2	3

Please choose the answer that best describes you.

**35. How much do you see yourself as a citizen of**

**[include for** **gMUNICIPALITY:** your municipality  
**gCOUNTRY:** the country you live in  
**gEU:** Europe]?

Not at all	Slightly	Moderately	Very	Extremely
1	2	3	4	5

Below you will find statements regarding other people opinions on energy saving issues. Please, rate how strongly you agree or disagree with each of the following statements.

**36. Many people in**

**[include for** **gMUNICIPALITY:** my municipality  
**gCOUNTRY:** the country I live in  
**gEU:** the EU]

would support it if I used less energy (e.g., using public transport instead of a personal car, turning off lights when leaving the room, using technical appliances which help to save energy).

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**37. Many people in**

[include for **gMUNICIPALITY:** my municipality  
**gCOUNTRY:** the country I live in  
**gEU:** the EU]

would support it if I favored energy policies that support the energy transition (e.g., policies that increase the prices of fossil fuels).

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**38. A growing number of people in**

[include for **gMUNICIPALITY:** my municipality  
**gCOUNTRY:** the country I live in  
**gEU:** the EU]

try to save energy (e.g., using public transport instead of a personal car, turning off lights when leaving the room, using technical appliances which help to save energy).

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**39. A growing number of people in**

[include for **gMUNICIPALITY:** my municipality  
**gCOUNTRY:** the country I live in  
**gEU:** the EU]

favor energy policies that support the energy transition.

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

[Assign respondent randomly to either portion pMOBILITY, or pBUILDINGS, or pSMART. Store this variable in variable "pWP4". Each respondent is now in two groups, e.g. pMOBILITY and gCOUNTRY.]

40. [Ask this question only if respondent is in pBUILDINGS, other portions skip this question]

Many people in

[include for gMUNICIPALITY: my municipality  
gCOUNTRY: the country I live in  
gEU: the EU]

would support me decreasing my energy consumption for heating and cooling my dwelling.

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

41. [Ask this question only if respondent is in pBUILDINGS, other portions skip this question]

A growing number of people in

[include for gMUNICIPALITY: my municipality  
gCOUNTRY: the country I live in  
gEU: the EU]

have decreased their energy consumption for heating and cooling their dwelling.

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

42. [Ask this question only if respondent is in pMOBILITY, other portions skip this question]

Many people in

[include for gMUNICIPALITY: my municipality  
gCOUNTRY: the country I live in  
gEU: the EU]

would support me purchasing an electric bicycle.

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
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43. [Ask this question only if respondent is in pMOBILITY, other portions skip this question]

A growing number of people in

[include for gMUNICIPALITY: my municipality  
gCOUNTRY: the country I live in  
gEU: the EU]

will buy an electric bicycle within the next five years.

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

44. **[Ask this question only if respondent is in pMOBILITY, other portions skip this question]**

In my opinion, people will buy many more electric bicycles as soon as the current obstacles have been dealt with.

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

45. **[Ask this question only if respondent is in pSMART, other portions skip this question]**

Wind and sun produce environmentally friendly electricity, but the amount of electricity produced varies strongly with momentary weather conditions. As electricity cannot be stored and must be used in the moment when it is produced, we need to find ways to increase electricity consumption in times of high production, and decrease demand when the output from wind and sun is low.

This could be achieved if many people in

**[include for** **gMUNICIPALITY:** your municipality  
**gCOUNTRY:** the country you live in  
**gEU:** the EU]

allow their electricity grid operator to switch some non-critical appliances on and off remotely, depending on current weather situation. By “non-critical” we mean only those appliances where loss of electricity would not cause any damage, such as washing machines, and dish washers.

Many people in

**[include for** **gMUNICIPALITY:** my municipality  
**gCOUNTRY:** the country I live in  
**gEU:** the EU]

would support me if I allowed my grid operator to remotely switch on and off non-critical appliances in my home.

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
-------------------	---------------------	----------------------------	------------------	----------------

1	2	3	4	5
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**46. [Ask this question only if respondent is in pSMART, other portions skip this question]**

A growing number of people in

**[include for** **gMUNICIPALITY:** my municipality  
**gCOUNTRY:** the country I live in  
**gEU:** the EU]

have allowed their grid operator to remotely switch on and off non-critical appliances in their home.

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**47. [Ask this question only if respondent is in pSMART, other portions skip this question]**

In my opinion, people will allow grid operators to remotely switch on and off their non-critical appliances as soon as the current obstacles will be dealt with.

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

Below you will find statements regarding your ability to act in relation to energy saving issues. Please, rate how strongly you agree or disagree with each of following statements.

**48. We as people in**

**[include for** **gMUNICIPALITY:** my municipality  
**gCOUNTRY:** the country I live in  
**gEU:** the EU]

**can act together to achieve the energy transition.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**49. As an individual, I can do a lot to support the energy transition.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
-------------------	---------------------	----------------------------	------------------	----------------

1	2	3	4	5
---	---	---	---	---

**50. [Ask this question only if respondent is in pBUILDINGS, other portions skip this question]**

Suppose you decrease your energy consumption for heating and cooling your dwelling. Would you say that would benefit the energy transition?

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**51. [Ask this question only if respondent is in pMOBILITY, other portions skip this question]**

Suppose you buy an electric bicycle within the next five years. Would you say that would benefit the energy transition?

If you already have an electric bicycle, please indicate whether you think purchasing it contributed to the transition to a renewable energy system.

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**52. [Ask this question only if respondent is in pSMART, other portions skip this question]**

Suppose you allow your grid operator to remotely switch on and off non-critical appliances in your home. Would you say that would benefit the energy transition?

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

Below you will find statements regarding your personal feelings in relation to energy saving issues. Please choose the answers that best describe your feelings.

**53. I feel a personal obligation to be energy efficient (e.g., using public transport instead of a personal car, turning off lights when leaving the room, using technical appliances which help to save energy).**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**54. I feel a personal obligation to support energy policies that support the energy transition.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
-------------------	---------------------	----------------------------	------------------	----------------

1	2	3	4	5
---	---	---	---	---

**55. [Ask this question only if respondent is in pBUILDINGS, other portions skip this question]**

I feel a personal obligation to decrease my current energy consumption for heating and cooling my dwelling.

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**56. [Ask this question only if respondent is in pBUILDINGS, other portions skip this question]**

How would you feel if you decreased your energy consumption for heating and cooling your dwelling by 10% over the next year?

Not at all proud	Slightly proud	Moderately proud	Mostly proud	Very proud
1	2	3	4	5

**57. [Ask this question only if respondent is in pMOBILITY, other portions skip this question]**

I feel a personal obligation to purchase an electric bicycle within the next five years. (If you already have an electric bicycle, please indicate whether you felt a personal obligation to buy it prior to the purchase.)

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree	I do not ride a bike
1	2	3	4	5	6

**58. [Ask this question only if respondent is in pMOBILITY, other portions skip this question]**

How would you feel if you purchased an electric bicycle within the next five years?

Not at all proud	Slightly proud	Moderately proud	Mostly proud	Very proud
1	2	3	4	5

**59. [Ask this question only if respondent is in pSMART, other portions skip this question]**

I feel a personal obligation to allow my grid operator to remotely switch on and off non-critical appliances in my home.

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**60. [Ask this question only if respondent is in pSMART, other portions skip this question]**

How would you feel if you allowed your grid operator to remotely switch on and off

non-critical appliances in your home?

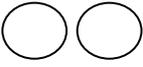
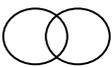
Not at all proud	Slightly proud	Moderately proud	Mostly proud	Very proud
1	2	3	4	5

Please choose the answers that best describe you.

**61. Acting pro-environmentally is an important part of who I am.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**62. Please choose the picture below which best describes your relationship with the natural environment.**

Me – Nature 	Me – Nature 	Me – Nature 	Me – Nature 	Me – Nature 
1	2	3	4	5

Below you will find statements regarding your personal intentions and behaviors. Please, choose the answers that best describe you.

**63. I intend to use energy in a way that helps bringing the transition to a renewable energy system.**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**64. I would accept energy policies that protect the environment even when these induce higher costs (e.g., policies that increase the prices of fossil fuels).**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**65. I would accept energy policies that protect the environment even when these induce some loss in comfort (e.g., policies that restrict car traffic in cities).**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

66. I would accept energy policies that create new jobs in  
 [include for gMUNICIPALITY: my municipality  
 gCOUNTRY: the country I live in  
 gEU: the EU]

even when these induce higher costs (e.g., policies that increase the prices of fossil fuels).

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

67. I would accept energy policies that create new jobs in  
 [include for gMUNICIPALITY: my municipality  
 gCOUNTRY: the country I live in  
 gEU: the EU]

even when these induce some loss in comfort (e.g., policies that restrict car traffic in cities).

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

68. [Ask this question only if respondent is in pBUILDINGS, other portions skip this question]

I intend to decrease my energy consumption for heating and cooling my dwelling.

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

69. [Ask this question only if respondent is in pMOBILITY, other portions skip this question]

I intend to purchase an electric bicycle within the next five years.

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree	I already own it
-------------------	---------------------	----------------------------	------------------	----------------	------------------

70. [Ask this question only if respondent is in pSMART, other portions skip this question]

Would you allow your grid operator to remotely switch on and off non-critical appliances in your home if you were offered an annual discount of [assign the national bid price from list "Bid Values in nat currencies.xlsx", store used bid value as variable "bVremote" in dataset]

Definitely not allow	Probably not allow	Not sure	Probably not allow	Definitely not allow
----------------------	--------------------	----------	--------------------	----------------------

**71. I intend to commit in collective action together with other consumers or providers of energy (e.g. joining consumer initiatives, joining photovoltaic producer groups).**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
1	2	3	4	5

**72. I behave more environmentally friendly if my friends do it**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
a	B	c	d	e

**73. I behave more environmentally friendly if my neighbours do it**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
a	B	c	d	e

**74. I behave more environmentally friendly if most of other people do it**

Strongly disagree	Moderately disagree	Neither disagree nor agree	Moderately agree	Strongly agree
a	B	c	d	e

Now we would like to ask you some questions about your daily life. Please choose the answers that fit best.

First we would like to learn more about your personal mobility.

**75. How many km per year do you drive a car as a driver (privately incl. driving to work)?**

a	0km (0 miles)
b	1km-5,000km (1 mile – 3,110 miles)
c	5,000-10,000km (3,110 miles – 6,210 miles)
d	10,000-15,000km (6,210 miles - 9,320 miles)
e	15,000-20,000km (9,320 miles – 12,430 miles)
f	20,000-30,000km (12,430 miles – 18,640 miles)
g	30,000-40,000km (18,640 miles – 24,850 miles)
h	40,000-50,000km (24,850 miles – 31,070 miles)

i	More than 50,000km (> 31,070 miles)
j	I don't know

76. **[ask only if 75 ≠ a]**

How often do you drive alone in the car? (For private purposes - including trips between your home and working place)

Almost never	Rarely	50% of time	Very often	Almost always
a	B	c	d	e

77. **[ask only if 75 ≠ a]**

How many people in total are usually in the car when you are the driver?

For private purposes including trips between your home and working place.

a)	1
b)	2
c)	3
d)	4
e)	5 or more

78. **[ask only if 75 ≠ a]**

What type of propulsion does the private car you most commonly use have?

a	Petrol
b	Diesel
c	Hybrid-electric
d	Plug-in Hybrid
e	Fully Electric
f	Gas
g	I don't know

79. **[ask only if 75 ≠ a AND 78 ≠ e, g]**

What is the fuel consumption (litres per 100km) you have with your most commonly used car?

(privately incl. driving to work).

a	3-5L (0.66 – 1.10 Imp. gal)
b	5 -7L (1.10 – 1.54 Imp. gal)
c	7-10L (1.54 – 2.20 Imp. gal)
d	10 - 12L (2.20 – 2.64 Imp. gal)
e	12 or more L (2.64 or more Imp. gal)
f	I don't know

80. **[ask only if 75 ≠ a AND 78 = e]**

What is the average distance you can drive with a fully charged battery?

a	up to 100km (< 62 miles)
b	100-150km (62 miles – 93 miles)
c	150-200km (93 miles – 124 miles)
d	200-250km (124 miles – 155 miles)
e	250-300km (155 miles – 186 miles)
f	300-400km (186 miles – 249 miles)
g	More than 400km (> 2249 miles )

**81. How many km per year do you ride a motorbike or scooter (privately incl. driving to work)?**

a)	0km (0 miles)
b)	1km-2,500km (1 mile – 1,550 miles)
c)	2,500-5,000km (1,550 miles – 3,110 miles)
d)	5,000-7,000km (3,110 miles – 4,350 miles)
e)	7,000-10,000km (4,350 miles – 6,210 miles)
f)	10,000-12,500km (6,210 miles – 7,770 miles)
g)	12,500-15,000km (7,770 miles – 9,320 miles)
h)	15,000-20,000km (9,320 miles – 12,4300 miles)
i)	More than 20,000km (more than 12,430 miles)
j)	I don't know

**82. [ask only if 81 ≠ a]**

**What is the fuel consumption (litres per 100km) of your most commonly used motorbike or scooter? (privately incl. driving to work)**

a)	1-2L (0.22 – 0.44 Imp. gal)
b)	2-4L (0.44 – 0.88 Imp. gal)
c)	4-5L (0.88 – 1.10 Imp. gal)
d)	5-7L (1.10 – 1.54 Imp. gal)
e)	7 or more L (1.54 or more Imp. gal)
f)	It is electric
g)	I don't know

**83. For how many trips per week are you a passenger in a private vehicle?**

- a) 0
- b) 1-2
- c) 3-4
- d) 5-6
- e) 7 or more

**84. [ask only if 83 ≠ a]**

**When you are a passenger in a private vehicle, how many people including yourself are usually in the car?**

- a) 2
- b) 3
- c) 4
- d) 5
- e) 6 or more

**85. [allow multiple answers]**

**Which type(s) of public transportation do you use as a part of your routine mobility? (please choose all that apply)**

- a) Bus
- b) Train
- c) Tram or streetcar
- d) Underground
- e) None of the above

<b>[ask only if 85 = a]</b>	<b>[ask only if 85 = b]</b>	<b>[ask only if 85= c]</b>	<b>[ask only if 85 = d]</b>
<b>86. Bus</b> a) 1-10 minutes a day b) 11-20 minutes a day c) 21-40 minutes a day d) 41-60 minutes a day e) More than 60 minutes a day f) I do not use the bus regularly.	<b>87. Train</b> a) 1-10 minutes a day b) 11-20 minutes a day c) 21-40 minutes a day d) 41-60 minutes a day e) More than 60 minutes a day f) I do not use the train regularly.	<b>88. Tram</b> a) 1-10 minutes a day b) 11-20 minutes a day c) 21-40 minutes a day d) 41-60 minutes a day e) More than 60 minutes a day f) I do not use the tram regularly.	<b>89. Underground</b> a) 1-10 minutes a day b) 11-20 minutes a day c) 21-40 minutes a day d) 41-60 minutes a day e) More than 60 minutes a day f) I do not use the underground regularly.

**90. Please choose the answer that best describes your bicycle use.**

- a) I almost never go to work or shopping by bike.
- b) I rarely go to work or shopping by bike.
- c) I sometimes go to work or shopping by bike.
- d) I usually go to work or shopping by bike during the warm season.
- e) I usually go to work or shopping by bike during winter.

**91. Please choose the response that fits your opinion about carsharing the best.**

By carsharing we mean a very short (hourly) to short (days) rental of cars, operated by companies or private initiatives. Usually accessible twenty-four-seven and located close to the user.

- a) Not tried it and not interested.
- b) Not tried it, but it sounds interesting.
- c) Tried it and liked it.
- d) Tried it and did not like it.

***Please tell us something about how and how often you use Air Transport for private purposes like holidays.***

**92. About how many hours have you spent on private flights during the last year?**

Please consider only the time between departures and landings.

- a) 0
- b) less than 3 hours
- c) between 3 and 6 hours
- d) between 6 and 10 hours
- e) between 10 and 15 hours
- f) between 15 and 20 hours
- g) between 20 and 25 hours
- h) between 25 and 30 hours
- i) more than 30 hours

**93. Did you take any business trips by plane during the past year?**

- a) No, I did not.
- b) Yes, 1-2
- c) Yes, 3-4
- d) Yes, 5 or more

**We will now ask you some questions about your residence.**

**94. In what type of house do you live?**

- a) Single Family Home
- b) Farmhouse
- c) Semi-detached or terraced home
- d) Flat in block with up to 10 dwellings
- e) Flat in block with more than 10 dwellings
- f) Other

**95. How much indoor living space does your household have?**

- a) 30m<sup>2</sup> or less (223sqft or less)
- b) 31-50m<sup>2</sup> (224 – 538sqft)
- c) 51-70m<sup>2</sup> (539 – 753sqft)
- d) 71-90m<sup>2</sup> (754 – 969sqft)
- e) 91-110m<sup>2</sup> (970 – 1184sqft)
- f) 111-130m<sup>2</sup> (1185 – 1399sqft)
- g) 131-150m<sup>2</sup> (1400 – 1615sqft)
- h) 151-170m<sup>2</sup> (1616 – 1830sqft)
- i) 171-190m<sup>2</sup> (1831 – 2045sqft)
- j) more than 190m<sup>2</sup> (more than 2045sqft)
- k) I don't know

**96. How is your home primarily heated?**

- a) Central heating (in the house) for the whole dwelling
- b) District heating (heat provided to several or many houses by a larger heating plant)
- c) One or more standalone stoves
- d) One or more standalone electric heaters
- e) I don't know

**97. Do you know what your primary heating fuel is?**

- a) Coal
- b) Gas
- c) Oil
- d) Wood
- e) Electricity
- f) Heat Pump – Geothermals
- g) Heat Pump – Air
- h) Solarthermals
- i) Other
- j) I don't know

**98. What do you think about your preferred room temperature setting compared to other people you know in your country?**

- a) much cooler
- b) slightly cooler
- c) about average
- d) slightly warmer
- e) much warmer
- f) don't know

**99. How often do you use air condition at home during the summer?**

- a) almost never
- b) rarely
- c) sometimes
- d) regularly
- e) often
- f) I do not have an air condition

**100. When was the house in which you live built?**

Your best estimate will be fine.

- a) 1900 and before
- b) 1901-1920
- c) 1921-1940
- d) 1941-1960
- e) 1961-1980
- f) 1981-2000
- g) After 2000
- h) I don't know

**101. [allow multiple answers]**

**Have energy efficiency renovations been made to your dwelling? (Select all that apply)**

- a) No
- b) Outside-walls insulation
- c) Roof insulation

- d) Cellar ceiling insulation
- e) Windows retrofitted
- f) Top floor ceiling insulation
- g) I don't know

***Now we would like to know something more about your household and your culinary preferences.***

**102. How often do you disconnect electric appliances from the power supply when you are currently not using them? (Specifically TV, PC, Notebook, DVD-Player etc.)**

- a) never
- b) rarely
- c) occasionally
- d) often
- e) always

**103. What proportion of your light bulbs at home are energy saving varieties (e.g. LED, compact fluorescent, etc.)?**

- a) zero or only a few
- b) several
- c) most (around 75%)
- d) all (100%)
- e) I don't know

**104. Do you purchase your electricity from a provider with a particularly high share of renewable energy production?**

- a) No
- b) Yes
- c) I don't know

**Personal cooking and eating habits are an important factor of an individual's lifestyle. The variety of preferences is large, which is why we would like to ask some questions about your personal choices.**

**105. How many warm meals do you personally eat per week?**

- a) 0-1
- b) 2-5
- c) 6-9
- d) 10-13
- e) 14 or more

**106. Please choose the answer that best describes your diet.**

- a) Meat in most meals
- b) Meat in some meals
- c) Meat very rarely
- d) No meat, but fish
- e) Vegetarian
- f) Vegan

**107. How is hot water provided in your home?**

- a) Electric
- b) Solar-thermal
- c) Oil
- d) Gas
- e) District heating
- f) Geo-thermal
- g) Other
- h) I don't know

**108. Do you have a bathtub?**

- a) Yes
- b) No

**109. [ask only if 108 = a]****What do you choose more often?**

- a) taking a bath
- b) taking a shower
- c) use both equally

*Now we would like to ask you four short questions about your lifestyle in general.*

**110. Please choose the answer that best fits your hobbies and leisure activities.**

- a) Very little equipment and infrastructure needed (e.g. playing board games, reading, ...)
- b) Little equipment and infrastructure needed (e.g. playing music, hiking, cycling ...)
- c) Moderate amount of equipment and infrastructure (e.g. computer games, photography, ...)
- d) More equipment and infrastructure needed (e.g. skiing, team sports, ...)
- e) A lot of equipment and infrastructure needed (e.g. motorsports, heli-skiing, ...)

**111. Please choose the answer that best describes your preferences in fashion.**

- a) Modest
- b) Long use, also second hand
- c) About average
- d) New clothes quite often
- e) Highly fashionable, always the latest style

**112. Please choose the answer that best fits your preferences in purchasing electronics (PC, Notebook, Tablet, Smartphone, TV, Hi-Fi Equipment)**

- a) I do not need most of it
- b) Long use, replace only if broken
- c) About average
- d) New equipment regularly
- e) I like to always have the latest technology

**113. Please choose the answer that best describes your private usage of electronics. (PC, Notebook, Tablet, Smartphone, TV, Hi-Fi Equipment)**

- a) I use electronics very little
- b) I use electronics less than most others

- c) I use electronics about average
- d) I use electronics quite intensively
- e) I use electronics very intensively.

[Insert the following at the end of the survey:]

**Thank you for participating in the ECHOES research project.**

You will receive [insert compensation amount XX] additional compensation for your participation in this survey, if you wish you can **donate** some or all of this amount **to help fight against climate change**. For every 5 Euros donated about 0.2 tons of CO2 will be saved. [Insert for 50% of respondents: “- about the amount that results from driving 800 kilometers in an average passenger car<sup>1</sup>. If 1,000 survey participants choose to give 5 Euros you will collectively offset the green house gas emissions produced by driving 800,000 Kilometers (= 20 times around the world!).” Create variable “expRevealed” and set it to “1” if the respective respondent was given this information.]

The donations help to reduce the future effects of climate change by funding energy efficiency measures, low-carbon renewable energy production and reforestation initiatives. The carbon funds are administered by myclimate.org.

**114. Would you like to donate some of your compensation to myclimate.org to help fight climate change?**

(1) Yes, I donate 1 EUR	
(2) Yes, I donate 2 EUR	
(3) Yes, I donate 3 EUR	
(4) Yes, I donate 4 EUR	
(5) Yes, I donate 5 EUR	
(6) No, I don't want to donate	

**NEW and LAST PAGE:**

Thank you very much for providing your e-mail address and thereby asking for more in-depth information on investment opportunities in renewable energy projects. However, considering the strict EU data protection laws we did not store your email address to avoid any risk of deanonymizing your identity. In this respect we are very sorry, but we cannot send you the requested information.

<sup>1</sup> <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

**APPENDIX** – Guidance how to select the CHOICE SETS shown to a respondent in Q15.

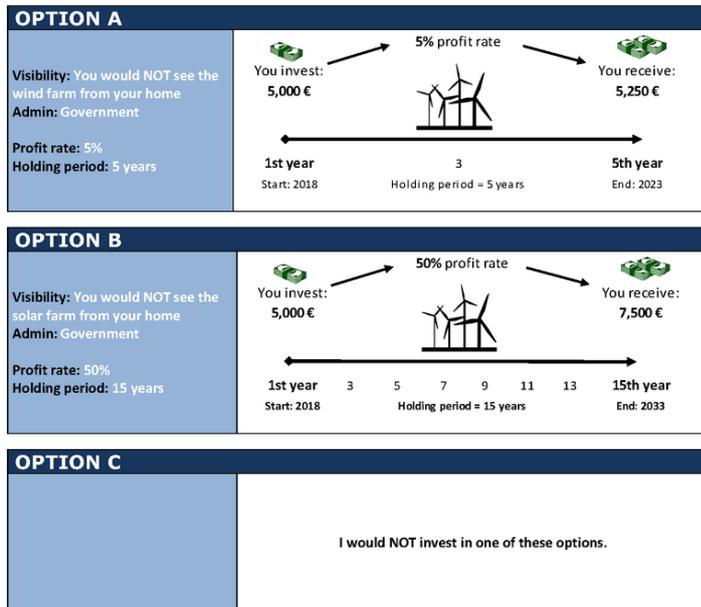
Every participant will be receiving 8 different CHOICE SETS with three options each. Each bundle of 8 CHOICE SETS is called a BLOCK and we have 3 different BLOCKS in our survey. To the participants *one randomly chosen BLOCK* shall be displayed.

This means you have to

1. take variable “bidVALUE1” as randomly created in Q15, this is the value displayed in “You invest:” in Figure 1. This value remains the same for a respondent throughout her 8 CHOICE SETS,
2. then randomly assign a respondent to a BLOCK, and you store the assignment in variable “scenBlock”,
3. then you show the respondent the 1<sup>st</sup> three options of the assigned BLOCK (3 pictures + text) on the screen and ask her to tick the preferred option,
4. then you repeat step 2 with CHOICE SET 2 to 8 of the assigned BLOCK.

Each CHOICE SET is made up of textual as well as numerical information (see Figure 1), which need to be translated into the main 24 EU languages plus Norwegian, Russian and Turkish (in total 27 languages).

Figure 1: Example for choice set #1 of BLOCK #1



The graphics for options A to C have been made in Excel, and the only graphical difference is the holding period, which can be 5, 10 and 15 years. Other information, such as “You invest: X National Currency” or “Y% profit rate” are different with respect to text only, i.e. numbers, currency symbol and language, henceforth called “text fields”.

We expect you have graphical tools that can rebuild the structure of Figure 1, while the text fields can be filled according to a table with nation specific content and a random selection (such as bidVALUE1). Of course we can also provide you the excel graphics for one language (English) and one

bidVALUE1, and you use these as base for constructing the choice sets. However, be advised that we have 48 options A and B and 1 option C per country and 5 different variants of bidVALUE1 (100, 500, 1000, 2000, 5000 € and the equivalent in some national currencies), so the effort for creating the graphics by hand may be significant.

THIS IS 3 BLOCKS OF 8 SETS EACH FROM MMNL OUTPUT WITH PRIORS ON admin variable AND 50 included as a interest rate  
 KEY: tech=1 then project is a solar farm; Location=1 then project is NOT visible; Administrator=0 means community, =1 means Utility company, =2 means government

Choice situati	a.rate	a.hold	a.tech	a.loc	a.admin	b.rate	b.hold	b.tech	b.loc	b.admin	Block
5	5	5	0	1	2	50	15	0	1	2	1
6	10	5	1	1	0	20	10	1	0	1	1
10	20	10	1	1	0	0	15	1	0	0	1
11	0	15	0	1	2	20	10	0	0	2	1
12	50	5	0	0	1	20	5	0	1	1	1
15	5	15	1	0	0	5	5	1	0	1	1
16	20	10	1	0	2	50	15	1	1	1	1
24	0	10	0	0	1	10	15	0	1	0	1
2	5	5	0	0	1	20	5	0	0	1	2
4	5	10	1	0	0	5	5	1	0	2	2
7	50	10	1	0	0	0	15	1	1	2	2
9	50	10	0	1	1	0	5	0	0	0	2
14	5	10	1	1	0	10	5	1	0	0	2
19	10	10	0	1	2	5	15	0	1	2	2
20	0	15	1	0	0	0	10	1	1	1	2
22	10	15	0	1	2	10	5	0	1	0	2
1	10	5	1	1	0	20	15	1	0	2	3
3	0	5	1	1	1	50	5	1	0	2	3
8	20	15	0	0	1	0	15	0	1	0	3
13	50	5	0	0	0	5	10	0	0	0	3
17	20	15	1	0	2	10	10	1	0	1	3
18	0	15	0	0	2	50	10	0	1	1	3
21	10	15	1	1	1	20	10	1	1	0	3
23	10	5	0	1	2	5	10	0	1	2	3