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SONNET – SOCIAL INNOVATION IN ENERGY TRANSITIONS

Co-creating a rich understanding of the diversity, processes, contributions, success and future potentials of social innovation in the energy sector

D5.1 (D20):

Final design of citizen surveys on individuals' perceptions and acceptance of SIE and EU energy transitions

Project Coordinator: Fraunhofer ISI (Karoline Rogge)

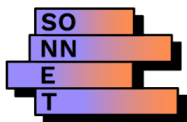
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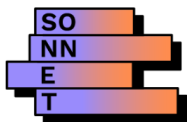
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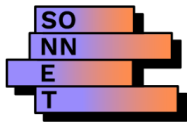
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Executive Summary

As an overarching objective, WP5 aims to quantitatively examine citizens' individual perceptions of different aspects of social innovations in energy (SIE) and to evaluate their acceptance of selected SIE types. WP5 hence contributes to developing a better understanding of the potential scope and diffusion of SIE necessary for sustainable energy transitions.

WP5 relies on large sample demographically representative household surveys with choice experiments in three countries: Germany, France and Poland. The WP5 survey focusses in particular on four SIE types that have been identified (milestone MS7) based on the SIE typology (T1.2, D1.1) and the conceptual framework (T1.3, D1.2) developed in WP1. These are

- (1) Investment in decentralised renewable electricity generation projects
(investigated in Germany, France and Poland)
- (2) Participation in renewable energy cooperatives
(investigated in France only)
- (3) Energy gamification through mobile apps
(investigated in Germany only)
- (4) Campaigns against specific energy pathways
(investigated in Poland only)

The SIE types studied in the citizen surveys in WP5 overlap with and complement the SIE types studied via case studies in SONNET's WP3 (T3.2) in France, Germany and Poland.

In designing the citizen surveys, which include stated preferences discrete choice experiments (CE), an information experiment in Poland, and the framework survey, WP5 builds on intermediary insights from WPs 1-4 and 6. As a core element, the survey includes CEs on SIE types (1), (2) and (3), as well as an alternative experimental design on SIE type (4). In particular, the experiments draw on insights from the case studies on related SIE types in SONNET's WP3. The survey further comprises a framework survey, which includes items on acceptance of SIE types (1) to (4), on past and current participation in SIE initiatives, on political preferences and attitudes regarding policies and policy objectives, and on household and individual characteristics of citizens. These parts allow in particular connecting the SIE types with general support for and acceptance of the energy transition. Lastly, the German survey includes an incentivised task to measure participants' level of competitiveness. This task complements the CE on energy gamification implemented in Germany to increase survey validity.

Deliverable D5.1 includes a description of the experimental methodology to be used and of the items to be included in the framework survey based on insights from WPs 1-4 and 6. While the general structure of the survey has been finalised, the experiments and framework survey items will continue to be updated based on general feedback and further insights from all project partners, notably from the case studies in WP3. The survey elements presented henceforward are thus subject to change. Prior to fielding the survey, pre-tests will be conducted - to be launched by the end of month 19 (MS9). Information from these pre-tests will be used to further refine the questionnaire. Also, constraints on survey length and the budget may require the questionnaire to be shortened.

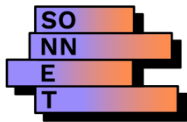
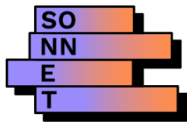


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1 DESCRIPTION OF METHODOLOGY

As an overarching objective, WP5 aims to quantitatively examine citizens' individual perceptions of socio-economic, socio-cultural and socio-political enabling and impeding conditions of SIE and their acceptance to develop a better understanding of the potential scope and diffusion of SIE necessary for sustainable energy transitions.

WP5 relies on large sample demographically representative household surveys with choice experiments in three countries: Germany, France and Poland. The WP5 survey focusses in particular on four SIE types that have been identified (milestone MS7) based on the SIE typology (T1.2, D1.1) and the conceptual framework (T1.3, D1.2) developed in WP1. These are

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- (4) Campaigns against specific energy pathways
(investigated in Poland only)

The SIE types studied in the citizen surveys in WP5 overlap with and complement the SIE types studied via case studies in SONNET's WP3 (T3.2) in France, Germany and Poland.

1.1 Survey methodology

The citizen surveys in WP5 are designed as demographically representative national online surveys which include choice experiments. They are conducted among a total of 6,000 citizens in Germany, France and Poland.

The general part of these surveys includes socio-economic items and standard items eliciting citizens' values and attitudes, socio-cultural characteristics (incl. gender) and socio-political opinions. Items are developed from existing scales and experiments.

The specific part involves three stated preference discrete choice experiments (CEs) and one alternative experimental design on specific SIE types. Thus, four different SIE types are investigated in depth. One CE is identical in each country, thus allowing findings across countries to be compared. One CE is implemented only in France, and one CE only in Germany. The alternative experimental design is implemented only in Poland. The rationale behind this deviation from a CE design is that campaigns against specific energy pathways are not very common in Poland and they are also difficult to describe by standardized attributes and attribute levels as required in a CE design. Thus, a different experimental approach was developed which consists of informational treatments.

CEs rely on hypothetical choice scenarios where alternatives are described by a range of attributes, and where participants are expected to make trade-offs between different attributes and to select their most preferred alternative. To address a potential hypothetical bias, the following calibration techniques are used: cheap talk design (a script explicitly encouraging participants to provide realistic answers), and additional inclusion of an "opt-out" option (allowing participants to choose none of the offered options).

The data from the framework survey is used to relate the findings from the experiments with households and individual characteristics, attitudes and perceptions and the relation between SIE and support for the energy transitions.

1.2 Implementation

The questionnaire (incl. the experiments) will be implemented via the Qualtrics software. Prior to fielding the survey, extensive pre-tests will be carried out with the currently developed English version (MS9). During this phase, the questionnaire will be distributed using existing online panels (e.g., Prolific Academic). The responses obtained in the pre-tests will notably allow to test the length of the questionnaire and participants' understanding of the different tasks and questions. Necessary adjustments will be made before the final questionnaire is translated from English into national languages and back translated (for quality control). The actual survey will then be administered in Germany, France and Poland through existing household panels of a professional market research institute via subcontracting. Representative samples will be drawn in each country by quota sampling, taking into account the distribution of the target population by several criteria such as gender, age, income and region.

2 SURVEY DESIGN

2.1 Outline

The survey starts with an introduction informing participants about survey procedures, anonymity, privacy and data protection, as well as their right to withdraw at any time.

The introduction is followed by screening questions to ensure that quota requirements are met and that only qualified participants (e.g. being of age) participate in the survey and experiments.

Following the screening questions, half of the participants in each country, i.e. 1,000 in each country and thus 3,000 overall, complete the CE on investment in decentralised renewable electricity generation projects. In France and Germany the other half of the sample, i.e. another 1,000 in each country, participates in a CE that is specific to this country. Participants in the CE on energy gamification through mobile apps in Germany further complete a short, incentivised task to elicit their competitiveness. In Poland, the 1,000 participants, who did not take part in the CE, take part in the alternative experiment on campaigns against specific energy pathways.

Following the CEs, participants answer a series of declarative survey questions related to the SIE type investigated in the experiment that they participated in. I.e., depending on the experiment, participants see different sets of questions. This part includes for instance questions on attitudes towards green investments (for participants in the CE on investments in decentralised renewable electricity generation projects), perception of energy saving apps (for participants in the CE on energy gamification through mobile apps), or attitude towards different renewable energy technologies (for participants in the CE on renewable energy cooperatives).

Next, all participants answer questions in the general survey part. This part first includes items on past or planned participation in SIE initiatives. These items are then followed by items on attitudes towards policies and policy objectives, including, for example, items on general acceptance of energy transitions, items on attitudes towards specific policies, or items on support of policy objectives. Participants are further asked about their general political orientation and trust in government or other actors or institutions. Participants then answer questions on individual behaviours, attitudes, and preferences (including environmental and social preferences). The survey concludes with some further questions on housing and socio-demographic characteristics.

The survey outline is depicted in Figure 1.

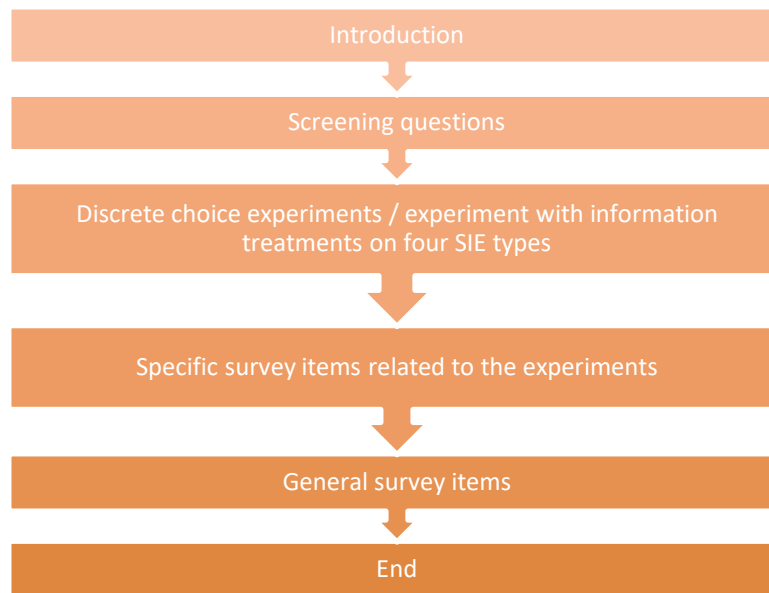


Figure 1: Survey outline

2.2 Detailed description of survey elements

2.2.1 Introduction

Participants are informed about survey procedures, privacy and data protection, as well as their right to withdraw at any time. As the survey participants will be recruited by a professional market research company many issues about data protection are covered by their procedures. As a consequence, the research team will not have access to sensitive information like names or contact data.

2.2.2 Screening questions

In order to ensure that quota requirements are met, participants answer screening questions on:

- Age (3-4 splits)
- Gender
- Region (NUTS 1 or 4-5 regions per country)
- Income (3-5 splits)

Questions are formulated according to the quotas provided by the survey institute providing the panel. Participants who do not fulfil the quota requirements receive a message informing them that they are not eligible to participate and are automatically directed back to the survey institute's website.

Certain parts of the survey require participants to be involved in their household's financial decision making, to be familiar with the use of mobile apps, or to have the right to vote in national elections. The following eligibility criteria apply:

Table 1: Additional eligibility criteria

Country	Overall sample	Additional eligibility criteria
France	2,000	All: Involved in financial decisions in the household
Germany	2,000	Thereof: N=1,000 involved in financial decisions in the household N=1,000 use a mobile phone and are willing to download and use apps in general
Poland	2,000	Thereof: N=1,000 involved in financial decisions in the household N=1,000 allowed to participate in national elections in Poland

In Germany and Poland, participants will randomly be assigned to answer questions on one of the two eligibility criteria. Participants who do not fulfil the criteria receive a message informing them that they are not eligible to participate and are automatically directed back to the survey institute's website.

2.2.3 Discrete Choice Experiments

In this part of the survey, participants will take part in a DCE on one of the following topics:

- Investment in decentralised renewable electricity generation projects (SIE type (1))
- Participation in renewable energy cooperatives (SIE type (2))
- Energy gamification through mobile apps (SIE type (3))

These SIE types have been identified (MS7) based on SONNET's SIE typology (Deliverable D1.1) and SONNET's conceptual framework (D1.2) developed in WP1. Moreover, they overlap with and complement the SIE types studied via case studies in SONNET's WP3 (T3.2).

Participants are assigned to one DCE according to the following criteria:

Table 2: Participation in choice experiments

Country	Overall sample	Participation in choice experiments
France	2,000	Thereof: 1,000 participants in DCE on Investment in decentralised renewable electricity generation projects (SIE type (1)) 1,000 participants in DCE on participation in renewable energy cooperatives (SIE type (2))
Germany	2,000	Thereof: 1,000 participants in DCE on Investment in decentralised renewable electricity generation projects (SIE type (1)) 1000 participants in DCE on energy gamification through mobile apps (SIE type (3))
Poland	2,000	Thereof: 1,000 participants in CE on Investment in decentralised renewable electricity generation projects (SIE type (1))

In France, participants are randomly assigned to either of the two choice experiments.

In Germany, participants who have been randomly assigned to answer questions on involvement in financial decision making in the screening section and were not screened out will participate in the DCE on investment in decentralised renewable electricity generation projects (SIE type (1)). Participants who have been randomly assigned to answer questions on use of a mobile phone and willingness to download and use apps in the screening section and were not screened out will participate in the DCE on energy gamification through mobile apps (SIE type (3)).

In Poland, participants who have been randomly assigned to answer questions on involvement in financial decision making in the screening section and were not screened out will participate in the DCE on investment in renewable electricity production (SIE type (1)). The remaining participants will not take part in a DCE, but instead in an informational treatment to capture campaigns against specific energy pathways (SIE type (4)).

Each discrete choice experiment contains:

- An introduction explaining the context and decisions to be made by the participant ('framing').
- A cheap talk design to reduce hypothetical bias so respondents provide valid answers.
- A description of the attributes that characterise the options and their levels.

- A set of choice scenarios in which participants have to choose between different options characterised by the attributes described previously and an opt-out option (i.e., choosing none of the offered options).
- A question on how much importance the participant paid to each attribute in the choice scenarios ('attention check').

The design of the DCEs relies heavily on insights from WPs 1-4 and 6. In particular, framings and attributes have been discussed with SONNET researchers working on the WP3 case studies on the related SIE types. Thus, most relevant (potentially country-specific) aspects for each SIE type can be identified and operationalised in the DCEs.

The framings and attributes will be further updated based on continued feedback and further insights from WPs 2, 3, 4 and 6. The elements presented below are thus subject to change. In addition, insight from the pre-tests might lead to modification of the attributes (e.g., if pre-test participants do not pay attention to an attribute or do not understand an attribute).

2.2.3.1 Discrete choice experiment on investment in decentralised renewable electricity generation projects

This experiment will be conducted with a total of 3,000 participants: 1,000 participants in France, 1,000 participants in Germany, and 1,000 participants in Poland. The experiment thus allows not only to investigate acceptance of this SIE type in one country but also to perform cross-country comparisons.

In this DCE, we are interested in the features (i.e. attributes and levels) that would allow a large part of the population to actively participate in SIEs/Citizen Energy Communities (CECs) through financial investments. In addition to the financial benefits/costs, we focus on other attributes of financial investments in energy communities such as risk and minimum participation threshold (to entice participation of low-income households). Finally, we explore the effects of matching private investments by municipality investments. The findings also provide guidance for the business models of SIEs/CECs (scalability).

In the experiment, participants face a series of 6 to 9 hypothetical choices between two different investment options and an opt-out option. The options differ only in the attributes previously described to participants. In each scenario, participants are asked to indicate which investment option they would choose if both options were available to them. If participants are unlikely to choose any of the investment options, they are invited to select the opt-out option which is available in each choice scenario.

2.2.3.2 Discrete Choice experiment on participation in renewable energy cooperatives

This experiment will be conducted with 1,000 participants in France.

In this CE, we are interested in the features (i.e. attributes and levels) that would encourage or discourage parts of the population to actively participate in a Renewable Energy Cooperative (REC) by becoming a member and investing money in the REC. In addition to financial benefits (rate of return) we focus on the role of collective self-consumption, the ownership structure, diversification in the REC's activities (e.g. to actions on energy efficiency) and the individual involvement in decision-making processes. The findings are expected to provide guidance for the business models of RECs in France.

In the experiment, participants face a series of 6 to 9 hypothetical choices between two different RECs and an opt-out option. The options differ only in the attributes previously described to participants. In each scenario, participants are asked to indicate which of the two RECs they would like to join. If participants are not willing to become a member in either REC, they are invited to select the opt-out option which is available in each choice scenario.

2.2.3.3 Discrete choice experiment on gamification through mobile apps

This experiment will be conducted with 1,000 participants in Germany.

In this DCE, we are interested in the features (i.e. attributes and levels) of mobile apps on energy topics. In particular, we are investigating which features could encourage parts of the population to download a mobile app and get involved in SIE through the app. We investigate the role of gamification elements, including social comparison or competition, and the importance of the application being embedded in a local context (e.g. city apps, information on local initiatives or events). Furthermore, we look at preferences for different providers (e.g. municipality, public agency, energy supplier). The experiment provides insight on the capacity of mobile apps to serve as a tool with low entry barriers to involve large parts of the population in SIE.

In the experiment, participants face a series of 6 to 9 hypothetical choices between two to three mobile apps and an opt-out option. The options differ only in the attributes previously described to participants. In each scenario, participants are asked to indicate which of the apps they would like to download if they were available to them. If participants are not willing to download any of the options, they are invited to select the opt-out option which is available in each choice scenario.

2.2.4 Experiment on campaigns against specific energy pathways

This experiment will be conducted with 1,000 participants in Poland who did not participate in the DCE described in 2.2.3.1. After intensive discussion in the project team a different experimental research design was developed for the fourth SIE type in Poland - campaigns against specific energy pathways. The rationale behind this deviation from a DCE design is that campaigns against specific energy pathways are not very common in Poland and they are also difficult to describe by standardized attributes and attribute levels. One of the main challenges when trying to apply the DCE methodology lies in defining an adequate dependent variable like willingness to pay. After an intensive discussion with the Polish partner we considered it important to also offer behavioural intentions that indicate a lower involvement. In case of using a DCE we had serious concerns that this would lead to many opt outs in the choice situations.

Thus, a different experimental approach was developed which consists of informational treatments. In line with the case study conducted in Poland in WP3 the experiment will focus on accelerating the coal phase-out in Poland. It includes two treatments which will be described in more detail below (see Figure 2 for an overview).

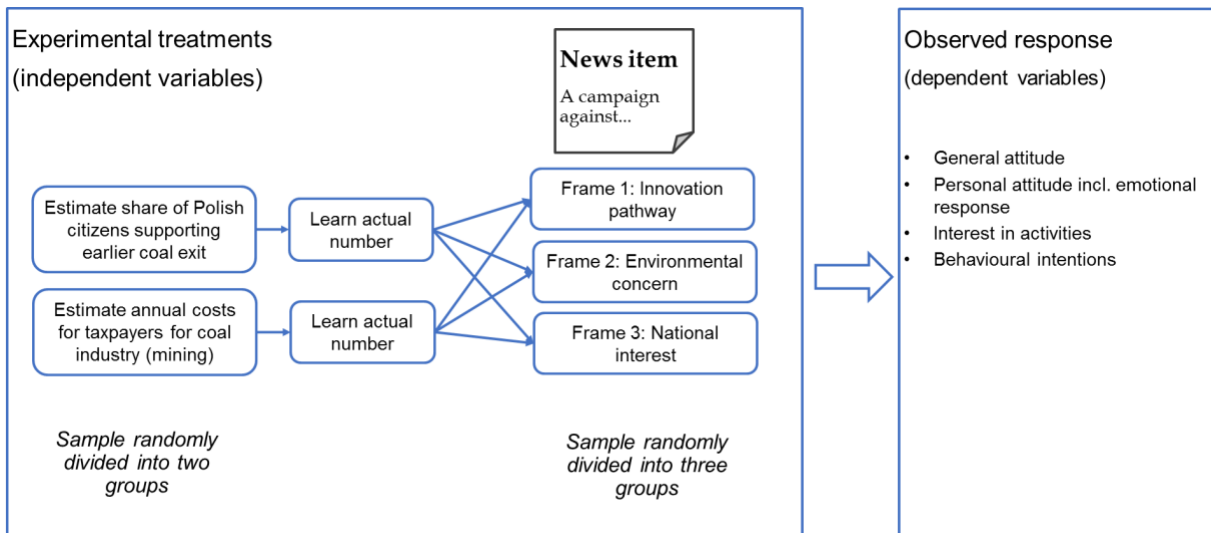


Figure 2: Experimental design on campaigns against specific energy pathways

Experimental condition 1

The first one compares the relevance of (i) perceived societal support for an earlier phase out with (ii) estimates of the annual costs for Polish taxpayers. Both treatments will be implemented similarly: First participants will be asked to estimate (i) the share of citizens supporting an earlier coal exit (“**societal support**”) or (ii) the annual costs respectively (“**costs**”). After giving their estimate participants will get feedback about the actual number. The 1,000 participants will be randomly assigned to one of these two treatments in experimental condition 1, i.e. each treatment is expected to be received by 500 participants.

Experimental condition 2

The second condition then focuses on the influence of the framing of certain arguments for an earlier coal-phase out. Three treatments were developed for this second condition. The frames will be presented as part of a fictitious news item that reports that a campaign for an earlier coal-phase out was recently launched. The reasoning for this campaign by its organisers will be the framing arguments.

- i. Framing as **innovation pathway** that will contribute to societal economic benefits and is financially supported by the EU
- ii. Framing as **environmental issue** (incl. health effects) and its contribution to climate change and the mitigation of global warming as well as local welfare
- iii. Framing as a **national interest** securing independence of energy imports and strengthening energy autonomy

Study participants will again be randomly assigned to one of the three frames, i.e. around 333 participants for each frame. This implies that half of the participants in each frame has either responded to the societal support treatment or the cost treatment before.

Dependent variable

A list of items will serve as the dependent variable and is supposed to grasp the influence of the two experimental conditions. This will include an attitudinal evaluation as well as behavioural intentions:

- *General attitude*: Do you think it is adequate that such a campaign triggers a discussion in the Polish society?
- *Personal attitude as emotional response*: How do you feel about the campaign?
- *Interest in activities*: How likely is it that you would look for further information about this campaign? (e.g. read newspaper article, search for information on the internet, talk to other people about it)
- *Behavioural intentions*: How likely would you...
 - o ...spread the word about the campaign in social media or among friends and family
 - o ...sign a petition to support the claims of the campaign
 - o ...participate in a protest event in your region / next town
 - o ...donate money to the campaign

All of these items will be formulated in such a way that they can be answered on a Likert-scale. Additional control variables for this experiment will include questions (i) on the perceived effectiveness of such a campaign and (ii) on the credibility of presented information.

At the end of this section of the questionnaire participants will receive the information that the campaign and the news item were fictitious.

2.2.5 Specific survey items related to the experiments

In this section, participants will answer a series of declarative survey questions related to the experiment that they participated in. I.e., depending on the experiment, participants will see a different set of questions.

The data from this part is used to relate the findings from the experiments with specific households and individual characteristics, attitudes and perceptions that are likely relevant in the context of the SIE type.

2.2.5.1 DCE on investment in decentralised renewable electricity generation projects

Participants that took part in the DCE on investment in decentralised renewable electricity generation projects (SIE type (1)) will answer questions on the following individual and household characteristics:

- Investment portfolio (actual investment portfolio of the participant or their household, including sustainable investments)
- Forms of securing retirement (actual forms of securing retirement by the participant or their household)
- For homeowners: forms of financing home
- Perceived access to capital
- Financial literacy

In addition, participants will answer questions regarding individual expectations and preferences on the following topics:

- Criteria for financial investments
- Financial planning horizon
- Expectations about returns
- Preferences for holding periods
- Preferences for transferability of shares
- Preferences for sustainable investments
- Attitude towards risk taking in investment decisions
- Loss aversion
- Debt aversion

2.2.5.2 DCE on participation in renewable energy cooperatives

Participants that took part in the DCE on participation in renewable energy cooperatives (SIE type (2)) will answer questions on the following individual and household characteristics:

- Investment portfolio (actual investment portfolio of the participant or their household, including sustainable investments)
- Financial literacy
- Knowledge of renewable energy cooperatives
- Use of solar panels
- Type of heating system

In addition, participants will answer questions regarding individual expectations and preferences on the following topics:

- Preferences for particular electricity production technologies
- Preferences for self-consumption / autonomy
- Preferences for different ownership and governance structures in REC
- Preferences for sustainable investments
- Expectations about returns or other benefits from REC

2.2.5.3 DCE on gamification through mobile apps

Participants that took part in the DCE on gamification through mobile apps (SIE type (3)) will answer questions on the following individual and household characteristics:

- Experience with mobile apps (and in particular apps on energy topics, e.g. energy saving apps, or city apps)

In addition, participants will answer questions regarding individual expectations and preferences on the following topics:

- Mobile applications:
 - Usefulness of mobile apps as tools for behavioural change
 - Usefulness of mobile apps as tools for energy transitions
 - Trust in mobile application developer
 - Privacy concerns
- Motivational factors:
 - Importance of feedback and clear goals
 - Preferences for personalised and general recommendations
 - Preferences for social interactions/connectedness
 - Preferences for social comparison
 - Preferences for competition/competitiveness

Since competition has been identified as an important element in many gamification approaches (including gamification through mobile apps), participants' competitiveness is further elicited by using an incentivized task. Specifically, participants are asked to complete a specific task (e.g., adding two-digit numbers, finding letter combinations in a letter grid) in a short amount of time. Participants are paid according to their performance and can choose between two evaluation and payment schemes: Either they are evaluated only based on their own performance and paid through a piece-rate scheme or they are evaluated in comparison to other participants and paid through a ranking scheme. 1 to 2 out of every 100 participants will actually be paid according to their performance on the task and choice of scheme. Preference for the ranking scheme (i.e. being paid based on performance compared to others) is an indicator for competitiveness.

2.2.5.4 Experiment on campaigns against specific energy pathways

Specifically, for the experiment on campaigns against specific energy pathways (SIE type (4)) the following items are considered to be relevant.

- Attitudinal indicators: attitudes on
 - Climate change
 - European Union
 - Political orientation
 - Technology beliefs
 - Scale on social dominance (as indicator for an openness towards change)
 - Trust in institutions / organisations (incl. NGOs)
 - Preference for certain energy pathways and energy sources

- Self-reported past behaviour: political engagement and activism
- Knowledge
 - o Carbon literacy
 - o Political initiatives (e.g. Coalition 'Development YES - Open-Pit Mines NO')
- Socio-economic indicators:
 - o Place of living (urban vs. rural, distance to coal regions)
 - o Personal/ family involvement in coal industry
 - o Past/ current heating system in home (coal y/n)
 - o Received subsidies from clean air program

While all survey participants see items on attitude towards policies and political orientation, questions are more detailed for participants in the experiment on campaigns against specific energy pathways in Poland.

Several other items are relevant in the context of the experiment but are included in other parts of the questionnaire. Environmental attitude and socio-economic indicators (gender, age, income, education) are specifically relevant for the SIE studied in Poland as for example earlier studies have shown that certain groups in the population are more likely to be politically active or join protest.

2.2.6 General survey items

All participants will answer questions on the following topics listed in the following sections. This list is tentative only, not least because of restrictions on the length of the questionnaire.

2.2.6.1 Items on participation in SIEs

All participants are briefly asked about their:

- o Past participation in SIE initiatives
- o Future / planned participation in SIE initiatives

(The concept of an SIE will be explained in general terms to participants and, more importantly, examples of different SIE types will be provided.)

2.2.6.2 Items on policies and policy making processes

- o Acceptance of sustainable energy transition
- o Support of EU policy objectives
- o Support of specific policies (e.g. public investments in infrastructure, phase-outs, ...)
- o Broader evaluation of possible characteristics of energy transition pathways, e.g. stronger cooperation in Europe, role of decentralization / small scale options
- o General perception of political decision-making and goal setting processes

The questions on policy objectives are derived from the questionnaires used in WP6. Input for questions on policies and policy making processes are derived from SONNET's case study findings in WP3.

2.2.6.3 Items on political orientation and trust

- Personal political orientation
- Trust in government
- Trust in other actors or institutions
- Political and social engagement

2.2.6.4 Energy consumption and behaviours

- Electricity expenditures
- Energy and sustainability behaviours

2.2.6.5 Personality, Preferences

- Environmental preferences (new environmental paradigm)
- Social/ Fairness preferences (e.g. altruism, warm glow, reciprocity, procedural and distributional fairness, social norms, social compliance)
- Local identity
- Concern for community
- Innovativeness
- Big Five
- Risk aversion
- Time preferences

2.2.6.6 Housing

- Type of primary residence (apartment/house)
- Ownership status (owner-occupier/tenant)
- Moving history
- Moving plans

2.2.6.7 Socio-demographics

- Civil status
- Household composition
- Level of education
- Employment status
- Living area
- Income (more detailed and with opt-out option compared to screening question on income)

2.2.7 End

Participants are thanked for their participation and asked to click on the “next” button to finish the survey and be redirected to the survey institute's website.

Appendix 1: EC summary requirements

Changes with respect to the DoA

Three SIE types are investigated using discrete choice experiments as proposed in the DoA. For the fourth SIE type (campaigns against specific energy pathways) a change in methodology was decided. Instead of a DCE, a more appropriate experimental design which consists of informational treatments has been developed.

Dissemination and uptake

This deliverable includes a description of the experimental methodology to be used and of the items to be included in the framework surveys based on insights from WPs 1-4 and 6. With the present deliverable, the general structure of the citizen surveys has been finalized. Based on the contents of the present deliverable, the experiments and framework survey items will continue to be updated by collecting further feedback and insights from all project partners, notably from the case studies in WP3. Pre-testing of the finalized surveys will start by the end of month 19 (MS9). Eventually, the final survey questionnaire will be published on the SONNET website.

Short Summary of results (<250 words)

This deliverable describes the final survey design used in the citizen surveys in WP5. The citizen surveys in WP5 are demographically representative national online surveys which include discrete choice experiments. They are conducted among a total of 6,000 citizens in Germany, France and Poland.

The general part of these surveys includes socio-economic items and standard items eliciting citizens' values and attitudes, socio-cultural characteristics (incl. gender) and socio-political opinions. Items listed in this deliverable are developed from existing scales and experiments.

The specific part involves three stated preference discrete choice experiments (DCEs) and one experiment using information treatments on the following four SIE types:

- (1) Investment in decentralised renewable electricity generation projects (investigated in Germany, France and Poland)
- (2) Participation in renewable energy cooperatives (investigated in France only)
- (3) Energy gamification through mobile apps (investigated in Germany only)
- (4) Campaigns against specific energy pathways (investigated in Poland only)

The deliverable details the design of the choice experiments on SIE types (1) to (3), the alternative experiment using information treatments on SIE type (4) and the items used in the general part of the survey. All parts rely heavily on insights from SONNET's WPs 1-4 and 6.

Evidence of accomplishment

This Deliverable and associated documents.

