



Report No ECHOES 3.2 – D3.2 Data Collection Strategy Plan

ECHOES Report

Data Collection Strategy Plan



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ECHOES Report

Data Collection Strategy Plan

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ABSTRACT

This report is an internal working document for ECHOES which outlines the different types of data collections in the WPs, links them to each other, to the ECHOES objectives, to the ECHOES research questions, and to the research gaps identified in the literature study published in deliverable D3.1. The report serves as a strategy document to avoid duplication of work in ECHOES and to secure that all objectives and research questions are adequately covered. The report is also an input to the design of the ECHOES database in WP2.

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SUMMARY

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1 INTRODUCTION AND OVERVIEW

ECHOES is a project with extensive data collection activities conducted throughout almost the complete project period. With seven out of eight workpackages involved in data collection activities to some degree, it is of utmost importance to coordinate the data collections across WPs and consortium members to (1) avoid unnecessary duplication of work, (2) make sure that all ECHOES objectives and research questions are sufficiently covered by empirical data, and (3) to unlock the synergies that lie in such a substantial empirical project by combining data collection activities where feasible.

In the ECHOES project description the following objectives have been defined, which are now structuring and defining the data collection activities in ECHOES:

[...] The overarching objective of ECHOES is to unlock the policy potential of an integrated social science perspective of central socio-cultural, socio-economic, socio-political, and gender issues that influence individual and collective energy choices and social acceptance of the energy transition in Europe. Hereby, ECHOES will foster the implementation of the SET Action Plan and advance the Energy Transition, as well as the decarbonizing of the EU's future energy system. [...]

Objective 1: Creating understanding: ECHOES a) develops a new paradigm for energy related behavioural research through the introduction of energy collectives as a bridge between different perspectives and disciplines, b) implements an outstanding empiric research agenda collecting and analysing data from 30 European nations and through different data gathering techniques, c) distils the policy relevant findings in an unprecedented multi-evidence based synthesis process.

Objective 2: Tackling cross-cutting issues through multi-disciplinary expertise: The ECHOES approach ties the disciplines of psychology, sociology, political science, social statistics and economics together, to comprehensively foster understanding of the cross-cutting issues related to socioeconomic, gender, sociocultural, and socio-political aspects of the energy transition. The disciplines challenge each other's assumptions and methods, and jointly develop a coordinated approach breaking down the mono-disciplinary silos hampering in-depth understanding of energy choices and energy related behaviour, which is impossible to get from a single-discipline perspective. Through this multi-faceted research agenda, the ECHOES project establishes a new perspective on the topic of energy related behaviour and will achieve a real breakthrough on how Europeans' engagement with the energy transition and related policy measures can be improved.

Objective 3: Provision of policy-ready recommendations: ECHOES aims at the provision of theoretically sound and empirically supported policy-ready recommendations about how best to design impact maximising energy policies and programmes, and how to increase their acceptance among the European population. The demand for scientific support is derived from existing and forthcoming European regulation and policy papers to tailor the ECHOES agenda towards the actual knowledge gaps, and the needs of all stakeholder groups. A consensus building foresight process is done together with stakeholders from politics, NGOs, and related companies to derive those recommendations that are most promising and practicable.

Objective 4: Making impact: An important success indicator of the ECHOES project is the impact it actually has on European, national, and regional policymaking, the design of programmes and measures, and the public perception thereof. While most of this impact can only be assessed after the runtime of the project, the ECHOES project establishes a substantial dissemination and exploitation strategy to introduce the project's findings into the important policy making fora not only punctually, but continuously throughout the project's runtime and beyond. Additionally to the impact on policy making, ECHOES functions as an enabler of future behavioural research for the energy transition through its provision of an exceptionally detailed data base making the extensive data collected during ECHOES (and preceding projects or existing databases) available to the public.

[...]

More specifically, the four main objectives of ECHOES will be achieved through a dedicated research agenda consecutively addressing

- (1) identification and quantification of the driving factors behind energy choices and behaviour on all levels (micro, meso, and macro) and by synergistically analysing the individual and collective mechanisms,
- (2) an in-depth analysis of the paradigm shift from pure energy consumers to prosumers, and the respective role of cultures, markets, and policy,
- (3) the investigation of the current role and future potentials of governance frameworks for energy transition on the European and national level,
- (4) thereby removing the comprehensively derived knowledge gaps in the social science discipline for the support of more effective policy making, and
- (5) the provision of profound advice and recommendations for the development of impact-maximising energy policies to further the Energy Union.

During the intensive research activities in ECHOES' first year, a number of relevant research questions that had been outlined in the project description have been refined and are now the second structuring dimension for the continuing empirical work in ECHOES. These research questions are:

- (1) What do we know about individual and collective drivers of energy choices from different perspectives on collectives?
- (2) What is the potential to be unlocked if we combine the perspectives?
- (3) To which degree is this knowledge already utilized in policy-making?
- (4) What additional knowledge do we need to increase the utility of this knowledge for fostering the Energy Union?

For this report, the ECHOES consortium decided to apply a very broad understanding of what a data collection is, also including the study of documents (both scientific publications and policy documents) and ECHOES internal and external expert workshops and discussion events. This was done to make sure that such events – which contribute to the empirical grounding of the ECHOES work – are adequately integrated with the rest of the more classical data collection activities.

In the following sub-chapters, the data collection activities are first grouped in an overview, then per WP, then per data collection type, and finally chronologically. This is done to make the identification of the relevant data collection activities easy for different kinds of needs. In the second part of this report, each data collection activity is presented in more detail.

1.1 Data collection in ECHOES

ECHOES is a project, which is not only characterized by strong interdisciplinarity of researchers and user partners, but also by a strong focus on multiple methods and triangulation of findings. It utilizes a large variety of data collection techniques from the qualitative and quantitative spectrum, ranging from experimental research testing the effect of manipulation of central variables to text analysis, focus groups and discussion events; ranging from a large international quantitative survey to individual interviews with key experts; and ranging from netnographic analysis to case studies. The following table gives an overview of all data collection activities as proposed in the project description.

Method /WP	WP1	WP2	WP3	WP4	WP5	WP6	WP7	WP8
Literature search		✓	✓	✓	✓	✓		
Document study		✓	✓		✓	✓	✓	
International survey		✓	Coordinates	✓	✓	✓		
Local surveys		✓		✓		✓		
Quantitative experiments				✓				
Interviews		✓			✓	✓	✓	
Case studies					✓	✓		
Netnography						✓		
Workshop		✓			✓	✓	✓	✓
Focus Groups					✓	✓		
Site visits					✓	✓		
Discussion events					✓		✓	

1.2 Overview of the data collection activities per WP

All WPs but WP1 are involved in one or more data collection activity, most of which with external respondents, some of them restricted to ECHOES consortium members. The following list gives an overview about the data collection activities per WP.

WP1 (project management) is not directly involved in any data collection activity.

WP2 (ECHOES database) is only marginally involved in *collection* of primary data from external sources for ECHOES, but WP2 is the focal point of the *data storage* and *curation* for secondary use. Nevertheless, also in WP2 some data collection activities have been and will be conducted: A literature and document study identified existing social science energy databases and outlined the design criteria for the ECHOES database. WP2 will also contribute to the international survey and used a local survey on the ECHOES consortium and potential users of the ECHOES database to map out needs for the database. In an expert workshop and through selected expert interviews in October 2017, these needs were refined.

WP3 (Assessment of state of the art) has two functions with respect to data collection in ECHOES: (1) it provides a detailed picture of the state of the art by analysis of the scientific literature and policy documents; (2) it supports all other data collection activities in ECHOES by harmonizing and coordinating them across the other WPs. As such, WP3 has also a key position in designing the large multinational survey.

WP4 (individual energy choices in group contexts) is using a selection of quantitative methods to address the research questions relevant for this WP. This includes contributing to the multinational survey (especially the choice experiment included in the survey), and conducting local surveys and experiments in a number of countries. Furthermore, WP4 contributed to the literature review coordinated by WP3 and uses this literature data for two meta-analyses.

WP5 (energy cultures and lifestyles) uses a combination of qualitative and quantitative methods with an emphasis on qualitative methods. WP5 contributes to the multinational survey and will use this data to explore a behaviour based energy lifestyle concept. WP5 also contributed to the literature review and contributes to the policy document

analysis in WP3. To explore and develop the concept of energy cultures and energy memories, WP5 will conduct interviews and focus groups, case studies and site visits, and will organize workshops and discussion events.

WP6 (formal social units) also utilizes a comprehensive combination of qualitative and quantitative methods. It contributed to the literature review, analyses policy and strategy documents for formal social units, contributes to the multinational survey and joins WP4 in the local survey activities (see Chapter 1.4). In WP6, interviews and focus groups with representatives of three levels of formal social units are conducted in 2017, supplemented by case studies, site visits and a workshop later in the project. Also netnography will be used in a later project stage to explore questions that opened during WP6 empirical research in the first stage of ECHOES.

WP7 (knowledge synthesis) is a WP that is rather focussed on synthesizing data produced in the empirical WPs (4-6) than collecting own data. However, together with WP3, the function of WP7 is to coordinate the activities in the empirical WPs and make sure the results are synthesized in a way that secures their impact on the stakeholders. Supporting this activities, WP7 will conduct policy document studies, interviews with single experts and organize stakeholder workshops and discussion events towards the end of the project. Furthermore, WP7 is strongly involved with WP3 in organizing and structuring the multinational survey.

WP8 (communication, dissemination, impact) is another WP that is not directly involved in most of the data collections but rather active in structuring the access of external users to the ECHOES data, ensuring the successful exploitation of the data produced in ECHOES. This will be achieved together with WP2 and WP7. However, in the process of developing an exploitation strategy, WP8 held an internal workshop on the second general assembly in San Sebastian in September 2017. The results of that workshop feed into the revised exploitation strategy.

1.3 Overview of the data collection activities per data collection type

ECHOES employs a large selection of qualitative and quantitative data collection strategies. In the following sections, each type is briefly defined.

Literature search (WP2-6): In this activity, all three ECHOES perspectives conducted an extensive literature research within their perspective's body of scientific publications. Several thousand papers were initially identified through search in scientific databases, screened and 597 of them reviewed in a comprehensive synthesis document outlining the state-of-the-art (see Deliverable D3.1). The activity was coordinated by WP3 and finished in April 2017. It also led to identification of papers suitable for two meta-analyses conducted in Autumn 2017 in WP4.

Document study (WP2, 3, 5, 6, 7): Within ECHOES a number of policy and strategy document analyses will be conducted. In WP2, existing policy documents and strategy documents of political and economic actors are studied to identify their need to social science data to be provided by the ECHOES database. WP3 conducts a large policy and strategy document study from the EU level, via the member state level, down to the local administrative and company level. These documents will be selected to present interesting cases (e.g., electric mobility policies, smart meter policies, photovoltaic policies) and the policy and strategy documents will be analysed to identify the degree to which social science knowledge could be utilized in a more efficient way to foster the effect of such policies. WP6 analyzed policy documents already together with the literature analysis to understand the interplay between

Multinational survey (WP2, 4, 5, 6): The multinational survey is without doubt the most substantial data collection activity in ECHOES. More than 9000 participants in all 28 EU member states, plus Norway and Turkey will be surveyed in 2018 with a comprehensive quantitative questionnaire instrument including a choice experiment. The survey includes sections relevant for all three ECHOES perspectives and is coordinated by WP3 and WP7.

Local surveys (WP2, 4, 6): Even though the multinational survey will be comprehensive, it is impossible to include all relevant research questions that can be addressed with survey methodology in this large survey if the participants should not be overwhelmed and the quality of the data impaired. Therefore, ECHOES will use additional surveys in WP4 and WP6 to study questions that cannot be included in the multinational survey. To increase efficiency, these surveys will be integrated into one survey and recruitment will be combined with the experiments (see next section). In WP2 an initial survey was used on the consortium members and selected external experts to structure the needs aimed to be filled with the ECHOES database.

Quantitative experiments (WP4): Experiments in ECHOES will be conducted in WP4 to establish causal relations between variables connected to the collective identity and efficacy, which are systematically varied in the experimental design, and outcomes such as energy relevant decisions. Participants will be randomly assigned to different conditions with systematically designed combinations of variables. These experiments will be conducted for example as choice experiments, partly under controlled laboratory conditions, partly in the field (for example as an online experiment).

Interviews (WP2, 5, 6, 7): Interviews with individual respondents will be conducted for several purposes in ECHOES. Such interviews have an interview guideline which is defined a priori the data collection to structure the interview process. Nonetheless, the respondent has more freedom to answer and the interviews might uncover unexpected topics. Especially WP5 and WP6 will use such interviews with selected experts or representatives of social groups to gather a deep understanding of the processes behind energy choices. In WP2, such interviews will be used to inform the design of the database, in WP7 interviews will contribute to an understanding of the needs of the stakeholders.

Case studies (WP5, 6): Case studies in WP5 and WP6 refer to a comprehensive, in-depth analysis of a limited number of cases for especially relevant and interesting energy choices. Such cases could be a company, a municipality, or a social group involved in a relevant energy decision. Here, the strength of the method is the comprehensiveness of the perspective, including the focus on the human decision-making in a very specific context. Which cases will be identified for an in-depth analysis will be the result of the preceding empirical work in WP5 and WP6.

Netnography (WP6): Netnography is a methodology that studies social interactions in electronic communication media. Netnography is based in the analysis of digital traces people leave when participating in social activities in the net, such as contributions to discussion fora, facebook or Instagram entries, or tweets. In the final stage of ECHOES, methods from netnography will be used to supplement findings produced earlier in WP6.

Workshop (WP2, 5, 6, 7, 8): A workshop is a broad concept that includes the gathering of a smaller group of people to address a given challenge or problem. The focus of a workshop is to efficiently get the input from a group of people to a problem at hand. ECHOES has and will use such workshops at different points of the project, for example to get input to design criteria of the database (WP2), get feedback on empirical findings and theoretical concepts (WP5, 6), to get the consortium's input to the exploitation strategy (WP8), and to involve stakeholders in the interpretation, dissemination and exploitation of the ECHOES results (WP7).

Focus group (WP5, 6): Like a workshop, a focus group is also a gathering of typically 6-8 participants discussing a topic of interest to the researchers. The difference is, that a focus group is usually more structured and the focus lies on understanding the participant's decision processes or feelings about a topic more than finding a solution. As compared to individual interviews (see above), focus groups allow for studying social interaction. WP5 and WP6 will use focus groups as a core research instrument, combined with individual interviews as supplements.

Site visits (WP5, 6): Site visits are an important element in case studies to understand the structural context of decision-making in the energy sector. In WP5 and WP6 such site visits will be included in the case studies.

Discussion events (WP5, 7): Discussion events, like focus groups and workshops, are gatherings of a number of representatives of different positions. However, the difference is that in discussion events neither the data collection (such as in focus groups), nor the solving of a given challenge (like in workshops) is the prime objective. In a discussion event, the main issue is to involve different stakeholders in the interpretation of findings and conclusions. It might be debated if discussion events can be counted as a data collection activity, but since also in this context, ECHOES findings are confronted with the empirical world, we chose to include them in this document. WP5 will use discussions for developing the theoretical concepts, especially the energy memory concept. WP7 will use discussion events for stakeholder engagement.

1.4 Synergies between data collection activities

Some data collection activities planned in separate WPs coincide in timing and are compatible with methodology. To ensure the best value for money, the ECHOES consortium decided to combine a number of data collection activities across WPs into joint data collections which now fulfil multiple purposes. This concerns the following activities:

- (1) In WP6, the literature study and the policy document study were combined to make the search more efficient. Whereas the first contributed to the general literature review, will a combination of the results from the literature review and the policy document analysis result in a number of papers studying the interplay between policy and processes identified by social science in the ECHOES technology foci.
- (2) The local surveys planned in WP4 will be combined with the experimental studies, which means that the same participants recruited to participate in the psychological experiments will also be recruited to fill a questionnaire which will be used to address research questions of WP4 which can be studied in a correlational design based on survey data.
- (3) The local survey planned in WP6 will be combined with the same survey and experiments as the local survey in WP4. That will make sure that no additional respondents need to be recruited.
- (4) In WP5, the workshops and the discussion events regarding energy memories will be combined to make optimal use of the recruited informants.
- (5) Site visits in WP5 and WP6 will be combined with conduction of other data collection activities such as for example case studies, focus groups, individual interviews, workshops, or discussion events.

1.5 Chronology of data collection activities

Even if ECHOES is characterized by continuous data collection almost from the outset of the project until the end, there will be phases in ECHOES where the empirical work peaks. The following chart displays when the data collection activities in which WP will be conducted. This overview is now well grounded in detail planning, but the timing of especially the later data collection activities might be adjusted to the need of the tasks they are contributing to. From the chart it can be seen that in 2017 the main focus on the data collections is in the literature and document analyses, as well as data collections for WP6, whereas in 2018, the main data collection activities will happen in WP4, WP5, WP6, and the multinational survey. 2019 will be characterized by less intensive data collection activities.

	2016		2017												2018												2019									
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Literature Research (WP3)																																				
Local Survey (WP2)																																				
Document Study (WP3)																																				
Interviews (WP6)																																				
Focus Groups (WP6)																																				
Interviews (WP2)																																				
Internal Workshop (WP8)																																				
Expert Workshop (WP2)																																				
Local Survey (WP4)																																				
Local Survey (WP6)																																				
Psychological Experiments (WP4)																																				
Multinational Survey (WP7, WP3)																																				
Workshop (WP5)																																				
Discussion Event (WP5)																																				
Case Studies / Site Visits (WP6)																																				
Interviews (WP5)																																				
Focus Groups (WP5)																																				
Case Studies / Site Visits (WP5)																																				
Netnography (WP6)																																				
Workshop (WP6)																																				

2 DATA COLLECTION ACTIVITIES IN DETAIL

2.1 Literature Research (WP3)

Data collection No:	1	WP:	WP3 (WP2-6)
Internal name of the data collection activity	Literature study		
Type of data collection	Literature search		
Main contact person in ECHOES	Jens Røyrvik, Gudrun Lettmeyer, Giuseppe Carrus, Mehmet Efe Biresselioglu,		
Addressed research questions	<ul style="list-style-type: none"> • What do we know about individual and collective drivers of energy choices from different perspectives on collectives? • What is the potential to be unlocked if we combine the perspectives? • What additional knowledge do we need to increase the utility of this knowledge for fostering the Energy Union? 		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	The literature study is the basis for addressing all five ECHOES objectives - especially objective 4 (fill important knowledge gaps)		
Which research gaps does this data collection address?	To identify and close knowledge gaps on factors that are drivers or barriers for choices enabling sustainable energy transitions on the three ECHOES levels (individual, group, formal social units)		
How will the results be used in ECHOES?	The result of this activity is documented in deliverable D3.1. It will also be used as a basis for targeting research focus in ECHOES.		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Further research in ECHOES, and policy makers (EU, national and local level); academia, industries, associations; publication as project report and research papers.		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	Text, literature references		
Planned schedule for data collection (start / end month)	11/2016 – 04/2017 (concluded)		
Type of data collected	Literature review		
Which social level is addressed?	representatives of individuals/households, representatives of collectives, representatives of formal social units		
Expected number of respondents or other units (e.g., documents, websites)	597 texts were reviewed in detail, several thousand texts were initially screened.		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	This review covers in total 597 texts, mainly consisting of academic manuscripts, research articles, policy documents, public and business reports. There is some overlap in the sense that some texts are reviewed from multiple perspectives and thus parts of different sections of the report, this is seen as a strength as it allows for central documents to be interpreted from multiple perspectives and thus contribute to the different perspectives.		

Which variables/aspects/ interview questions... are planned to be included in the data collection?	<p>Person level: group identify, group efficacy, emotions, CADM variables.</p> <p>Group level: energy lifestyles, energy cultures, energy memories</p> <p>Formal social units level: methods, aims etc., attitude dimensions</p>
Are there any restrictions to use this data in the open access database (e.g., confidentiality of information given, copyright issues, or data needs to be anonymized first	Literature references are the data core of this activity, they are not problematic with respect to restrictions to use. The papers themselves are mostly not open-access, therefore the texts themselves cannot be archived in the database.
other relevant information	<p>At least four papers/articles will be published as a result of the literature review. Following the literature review, it is decided that focus groups and in-depth interviews are the most rigorous and scientifically significant to use for the Task 6.2. The local surveys will be conducted in a limited form together with the local surveys in WP4 due to the planned multi-national survey effort. Netnography analysis is planned to be used towards the end of the project to supplement findings from earlier work.</p>

2.2 Policy Document Study (WP3)

Data collection No:	2	WP:	WP3 (WP2, 5, 6)
Internal name of the data collection activity	Policy potential analysis		
Type of data collection	Document study		
Main contact person in ECHOES	Christian Klöckner		
Addressed research question	<ul style="list-style-type: none"> • To which degree is the knowledge from social science identified in the literature review already utilized in policy-making? • What additional knowledge do we need to increase the utility of this knowledge for fostering the Energy Union? 		
Technology focus	Electric mobility, smart technology (smart meters), energy in buildings (photovoltaics)		
How does the data collection respond to the ECHOES objectives?	Input to all five ECHOES objectives - especially objective 3; evaluate impact of national and EU governance framework		
Which research gaps does this data collection address?	This data collection does identify gaps in policy papers.		
How will the results be used in ECHOES?	It will be used to increase the impact of ECHOES results by targeting specific needs identified in the policy paper analysis.		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Further research in ECHOES, and policymakers (EU, national and local level); academia, industries, associations; project report; scientific papers.		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	Text, references to policy documents		
Planned schedule for data collection (start / end month)	03/2017-02/2018		
Type of data collected	Documents		
Which social level is addressed?	Representatives of individuals/households, representatives of collectives, representatives of formal social units		
Expected number of respondents or other units (e.g., documents, websites)	not identified, most likely between 40 and 60 policy documents on EU, member state, regional and local level (including energy company strategy papers).		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	The relevant documents will be identified and analyzed by research and user partner experts and then analysed with respect to if and how they refer to social science knowledge.		
Which variables/aspects/ interview questions... are planned to be included in the data collection?	N/A		

Are there any restrictions to use this data in the open access database (e.g., confidentiality of information given, copyright issues, or data needs to be anonymized first	N/A
other relevant information	

2.3 International Survey (WP7, WP3)

Data collection No:	3	WP:	WP7, WP3
Internal name of the data collection activity	Multinational Survey		
Type of data collection	International survey		
Main contact person in ECHOES	Andrea Kollmann, Johannes Reichl, Valeriya Azarova, Jed Cohen		
Addressed research question	<p>The Survey covers determinants of energy choices from the individual level to formal social units. The concept will integrate three main theoretical perspectives, namely: (1) Individual decision-making as part of collectives, (2) The perspective of collectives constituting energy cultures and life-styles, and (3) The perspective of formal social units such as municipalities, states, energy providers, or NGOs;</p> <p>In the centre of all research activities are the technological topics of a) smart energy technology, b) electric mobility, and c) buildings.</p> <p>The ECHOES survey effort will provide insight on the perspectives and topics mentioned above.</p>		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	<p>The multinational survey is one of the key elements of ECHOES project. The survey will be held in 28 EU countries plus Norway and Turkey. The ECHOES survey will help to identify the driving factors of energy related choices and behaviour in electric mobility, smart technology and energy buildings foci.</p> <p>Survey results will also serve as a solid basis for evidence-based policy-ready recommendations.</p>		
Which research gaps does this data collection address?	<p>The multinational survey studies drivers of energy choices in the three technology foci that are likely to differ between the EU member states (plus Norway and Turkey). Furthermore, the survey will serve as a means to measure some key indicators of the energy union.</p>		
How will the results be used in ECHOES?	<p>The data from the survey will feed into several tasks in ECHOES WP 7 and 8. It will also be used further in the empirical WPs 4-6. The data will be used as an input for Tasks 7.1 and 7.4, especially for policy recommendations. The data collected from the survey will help to assess the potential impact of identified decision-driving factors on energy related choices and behaviour. Further, the potential for exploiting them in energy policy will be assessed from a scientific perspective and recommendations on how to best target the individual factors will be done.</p>		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	<p>NGOs; Governments of member states and municipalities; Energy providers; Renewable energy generators; Social, environmental, energy, behavioral scientists; The Commission Services; The European Parliament; The Member States, represented in the SET Plan Steering Committee and other forums; The European regions, represented in the Committee of the Regions and associations such as FEDARENE or ERRIN;</p>		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	Numbers, text strings		

Planned schedule for data collection (start / end month)	02.2018-10.2018
Type of data collected	Quantitative survey
Which social level is addressed?	Individuals
Expected number of respondents or other units (e.g., documents, websites)	9000
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Data is collected through online survey in 30 countries, translated in 27 languages. The recruiting and data collection is accomplished by an experienced data collection company. A tender will be held in order to chose the company which will correspond to the quality criteria and also will provide the best value within the available budget.
Which variables/aspects/ interview questions... are planned to be included in the data collection?	Socio-demographic data (age, gender, income, type of household); Energy history and perceptions of respondents (climate change perceptions, energy consumption over the past 10 years, energy efficiency innovations, etc) Factors influencing energy choices of individuals, acceptance of energy transition (social norms, personal gains/loss, peer effect, etc.)
Are there any restrictions to use this data in the open access database (e.g., confidentiality of information given, copyright issues, or data needs to be anonymized first	Data needs to be anonymized first
other relevant information	N/A

2.4 Local Survey (WP2)

Data collection No:	4	WP:	WP2
Internal name of the data collection activity	Database survey		
Type of data collection	Local surveys		
Main contact person in ECHOES	Tiina Koljonen, Lassi Similä		
Addressed research question	Analysis of existing SSH data and databases as well as major gaps in SSH data.		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	Developing the ECHOES database so that it addresses the needs of the stakeholders best, is directly responding to Objective 4.		
Which research gaps does this data collection address?	The database is not addressing research gaps in itself but gaps in the <u>availability</u> of reliable social science data for stakeholders and researchers.		
How will the results be used in ECHOES?	The database will ensure the access to ECHOES findings and data during and beyond the project's lifetime.		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Policymakers (EU, national and local level); academia, industries, associations; database will be open access and have a user interface that makes extraction of data easy.		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	N/A		
Planned schedule for data collection (start / end month)	01/2017-05/2017		
Type of data collected	The data collected in this activity is estimated availability of data within each of the technology foci.		
Which social level is addressed?	Individual, social groups, formal social units.		
Expected number of respondents or other units (e.g., documents, websites)	The survey was addressing the consortium (13 answers) and a very limited number of external experts (6 answers).		

Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	All consortium members were asked to respond to an online questionnaire; participants of an energy related workshop were asked to participate as external experts.
Which variables/aspects/ interview questions... are planned to be included in the data collection?	Estimated availability of data bases in general and within each of the technology foci on social science aspects and energy choices.
Are there any restrictions to use this data in the open access database (e.g., confidentiality of information given, copyright issues, or data needs to be anonymized first	The data is anonymized and used in a report (D2.1).
other relevant information	

2.5 Local Survey (WP4)

Data collection No:	5	WP:	WP4
Internal name of the data collection activity	Identity Survey		
Type of data collection	Local surveys		
Main contact person in ECHOES	Angelo Panno, Giuseppe Carrus, Torsten Masson, Immo Fritsche, Stepan Vesely, Christian Klöckner,		
Addressed research question	Relations between individual and group-related psychological variables and pro-environmental / energy-related behaviors		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	Coherently with the description of work, the aim is to explore the interplays between individual level factors and collective processes in the decision-making process in the energy domain in correlational studies		
Which research gaps does this data collection address?	Broadening and deepening the explicative power and applicability of well-tested models (e.g., CADM) to the domain of energy-related behaviors; potential need to extend such models by identity variables and emotions.		
How will the results be used in ECHOES?	Research papers, reports, policy recommendations / policy briefs, guidelines for designing of new scalable interventions, proceedings of conferences.		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Researchers in environmental and social psychology, practitioners employing normative and other behavioral interventions to increase energy conservation and other pro-environmental behaviors (e.g., educational context) (e.g., OPOWER)		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	numbers, document references		
Planned schedule for data collection (start / end month)	tbd (likely 01/2018 – beginning 2019)		
Type of data collected	Quantifiable responses to standardized surveys items		
Which social level is addressed?	Individuals and their social context (e.g., individuals as representatives of collectives)		
Expected number of respondents or other units (e.g., documents, websites)	TBD based on a priori power calculations (probably in the Order of 100-200 participants per survey)		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Paper-and-pencil and possibly online questionnaires		
Which variables/aspects/ interview questions... are planned to be included in the data collection?	CADM variables, identity variables, emotions.		
Are there any restrictions to use this data in the open access database (e.g., confidentiality of	After anonymization, no restrictions (maybe some embargo period for internal data use only)		

information given, copyright
issues, or data needs to be
anonymized first

other relevant information

The local survey will be conducted together with the psychological experiments
in WP4.

2.6 Local Survey (WP6)

Data collection No:	6	WP:	WP6
Internal name of the data collection activity	Local Surveys		
Type of data collection	Local surveys		
Main contact person in ECHOES	Mehmet Efe Biresselioglu, Muhittin Hakan Demir, Jens Røyrvik, Elena Dimitrova		
Addressed research question	The identification of the drivers of energy choices and energy related behaviour for individuals and their social context		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	Identification and quantification of the driving factors behind energy choices and behaviour		
Which research gaps does this data collection address?	To identify and close knowledge gaps on factors that are drivers or barriers for choices enabling sustainable energy transitions		
How will the results be used in ECHOES?	Research papers, reports, policy recommendations, presentations in dissemination workshop		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Policy makers (EU, national and local level); academia, industries, associations		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	Quantitative data, document references		
Planned schedule for data collection (start / end month)	tbd (likely 01/2018 – beginning 2019) similar to WP4		
Type of data collected	Quantifiable responses to standardized surveys items		
Which social level is addressed?	Individuals and their social context (e.g., individuals as representatives of collectives)		
Expected number of respondents or other units (e.g., documents, websites)	Tbd. based on a priori power calculations based in WP4 (probably in the Order of 100-200 participants per survey)		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Paper-and-pencil and possibly online questionnaires		
Which variables/aspects/ interview questions... are planned to be included in the data collection?	Attitude variables and dimensions		
Are there any restrictions to use this data in the open access database (e.g., confidentiality of	After anonymization, no restrictions (maybe some embargo period for internal data use only)		

information given, copyright issues, or data needs to be anonymized first	
other relevant information	The local survey in WP6 will be conducted together with the local survey in WP4

2.7 Psychological Experiments (WP4)

Data collection No:	7	WP:	WP4
Internal name of the data collection activity	Experiments		
Type of data collection	Quantitative experiments		
Main contact person in ECHOES	Torsten Masson, Immo Fritsche, Stepan Vesely, Christian Klöckner, Angelo Panno, Giuseppe Carrus		
Addressed research question	(1) Increasing the impact of social norms – what are the key contextual and personal-level moderators (e.g., self-control, cognitive load)? (2) Assessing and mitigating unintended side-effects of behavioral interventions (e.g., negative emotions, reactance, motivation crowding out). (3) A new approach to manipulating group identification. (4) A new approach to measuring collective efficacy. (5) Effects of norm conflict on behavior (6) Effects of different framings (personal vs. collective) on acceptance of energy-related collective projects (e.g., Energy Union)		
Technology focus	Probably energy in buildings, but very likely other areas as well.		
How does the data collection respond to the ECHOES objectives?	The objective is to "assess mechanisms for energy choices of individuals in groups", such as norm compliance, group processes (e.g. collective efficacy), self-regulation and emotional reactions.		
Which research gaps does this data collection address?	Improving the effectiveness of normative and other behavioral interventions, while avoiding or mitigating their unintended side-effects (see esp. subsections "Social Norms" and "Enhancing norm effects" in section II.1.3 in the literature review). Supporting the validity of previous SIT-related findings pertaining to ECHOES' objectives with novel methodological approaches (see sections II.3.2 and II.3.3 in the literature review). Shedding light on the role of emotions in energy saving behavior as a factor augmenting the predictive power of well-tested models (e.g., CADM).		
How will the results be used in ECHOES?	Research papers, reports, policy recommendations / policy briefs, guidelines for designing of new scalable interventions, proceedings of conferences.		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Researchers in environmental and social psychology, practitioners employing normative and other behavioral interventions to increase energy conservation and other pro-environmental behaviors (e.g., educational context). (e.g., OPOWER)		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	numbers, document references		
Planned schedule for data collection (start / end month)	tbd (likely 01/2018 – beginning 2019)		
Type of data collected	Quantifiable responses to experimental treatments and possibly two short pre- or post-treatment surveys (survey data, see also "local survey [WP4]")		
Which social level is addressed?	Individuals and their social context (e.g., individuals as representatives of collectives)		
Expected number of respondents or other units (e.g., documents, websites)	TBD based on a priori power calculations (probably in the Order of 100-300 participants per study; 3-5 studies planned)		

Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Paper-and-pencil and possibly lab or online experiments
Which variables/aspects/ interview questions... are planned to be included in the data collection?	Social identity, collective efficacy and other variables from the SIT. Potential moderator variables like norm compliance, self regulation or emotional reactions.
Are there any restrictions to use this data in the open access database (e.g., confidentiality of information given, copyright issues, or data needs to be anonymized first	After anonymization, no restrictions (maybe some embargo period for internal data use only)
other relevant information	

2.8 Interviews (WP2)

Data collection No:	8	WP:	WP2
Internal name of the data collection activity	Database interviews		
Type of data collection	Interviews		
Main contact person in ECHOES	Tiina Koljonen & Lassi Similä		
Addressed research question	Stakeholder and expert interviews to review the exsisting SSH data and major gaps. Stakeholder opinion is also needed to formulate indicators.		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	SSH data collected in the ECHOES database will support the Set Plan implementation (especially Action 3.1) and national policy making; indicators will be defined and measured on the member state level in the multinational survey.		
Which research gaps does this data collection address?	Lack of data on SSH dimension relevant for energy system transition		
How will the results be used in ECHOES?	Design of the ECHOES database		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Policymakers (EU, national and local level); academia, industries, associations; database will be open access and have a user interface that makes extraction of data easy.		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	N/A		
Planned schedule for data collection (start / end month)	08/2017 – 12/2017		
Type of data collected	Interview responses / text		
Which social level is addressed?	All three ECHOES levels		
Expected number of respondents or other units (e.g., documents, websites)	5-8		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Policy experts from the EU level will be addressed personally.		
Which variables/aspects/ interview questions... are planned to be included in the data collection?	Where is the lack of accessible social science data and how should a database look like		
Are there any restrictions to use this data in the open access database (e.g.,	N/A		

confidentiality of
information given, copyright
issues, or data needs to be
anonymized first

other relevant information N/A

2.9 Interviews (WP5)

Data collection No:	9	WP:	WP5
Internal name of the data collection activity	Interviews energy lifestyles		
Type of data collection	Interviews		
Main contact person in ECHOES	Stephan Schwarzingner, Gudrun Lettmayer		
Addressed research question	Interviews are conducted if important questions remain unanswered during the focus groups.		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	(1) Identification and quantification of the driving factors behind energy choices and behaviour on the meso level, (2) the investigation of the current role and future potentials of governance frameworks for energy transition on the European and national level, (3) the provision of profound advice and recommendations for the development of impact-maximising energy policies to further the Energy Union.		
Which research gaps does this data collection address?	Together with analyses based on the multinational survey, "Energy Lifestyles" in different European countries will be identified and characterised.		
How will the results be used in ECHOES?	Findings about particular lifestyles are refined by a cross-validation of quantitative and qualitative data.		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	EU and national policy makers, researchers, green tech industry, NGOs - the data should be used in combination with the survey data		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	transcripts and translations		
Planned schedule for data collection (start / end month)	May 2018 - October 2018		
Type of data collected	qualitative data (+ordinal statements if applicable)		
Which social level is addressed?	Representatives of lifestyle groups		
Expected number of respondents or other units (e.g., documents, websites)	To be decided based on results of focus groups, most likely not more than 5-8 per country interviews are conducted in.		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Focus group participants will be interviewed individually in addition if necessary.		
Which variables/aspects/ interview questions... are planned to be included in the data collection?	Special emphasis on group specific and energy relevant reactions to external influence factors.		

Are there any restrictions to use this data in the open access database (e.g., confidentiality of information given, copyright issues, or data needs to be anonymized first	Transcriptions etc. will be anonymised
other relevant information	

2.10 Interviews (WP6)

Data collection No:	10	WP:	WP6
Internal name of the data collection activity	Formal social units interviews		
Type of data collection	Interviews		
Main contact person in ECHOES	Mehmet Efe Biresselioglu, Muhittin Hakan Demir		
Addressed research question	The identification of the drivers of energy choices and energy related behaviour and the assessment of how crucial and influential the transition towards the decarbonized energy system of the future targeted in Energy Union is in the decision-making processes of the formal social units		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	Identification and quantification of the driving factors behind energy choices and behaviour; an in-depth analysis of the paradigm shift from pure energy consumers to prosumers, and the respective role of cultures, markets, and policy		
Which research gaps does this data collection address?	To identify and close knowledge gaps on factors that are drivers or barriers for choices enabling sustainable energy transitions; providing an insight of the interrelationships between the identified factors and their interrelations with technological, regulatory, and investment related aspects to implement the SET-plan and meet the challenges specified in the SET-plan integrated roadmap		
How will the results be used in ECHOES?	The data from this activity will contribute to D6.1 and D6.2		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Policy makers (EU, national and local level); academia, industries, associations		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	transcription (original language and anonymized), translation to English (anonymized)		
Planned schedule for data collection (start / end month)	04/2017 – 12/2017		
Type of data collected	Interview data		
Which social level is addressed?	Formal social units		
Expected number of respondents or other units (e.g., documents, websites)	70 interviews in 6 countries		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Purposeful sampling and homogenous sampling is being implemented IUE first developed a semi-structured interview protocol – which includes the general framework sample questions for each technical focus and collective decision-making unit – and circulated it among partners that will be conducting in depth interviews in their respective countries/settings.		
Which variables/aspects/ interview questions... are	The protocol aims to collect; personal, demographic and professional data from the interviewees, their role in energy transition projects and decision-making		

planned to be included in the data collection?	processes, understanding the collective processes that influence the perception of motivating factors and barriers in making these decisions
Are there any restrictions to use this data in the open access database (e.g., confidentiality of information given, copyright issues, or data needs to be anonymized first other relevant information	Due to confidentiality clause in the agreement, the data should be anonymized before its possible use.

2.11 Case Studies (WP5)

Data collection No:	11	WP:	WP5
Internal name of the data collection activity	Case studies energy cultures		
Type of data collection	Case studies / site visits		
Main contact person in ECHOES	Gudrun Lettmayer, Stephan Schwarzingner		
Addressed research question	National & international case studies will identify both enabling factors for consumer/prosumer action and present collective energy practices		
Technology focus	Electric Mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	Driving factors (1) and relevant governance frameworks (3) can be identified and their impact can be estimated by the analysis of the historical development up to the status quo. This is especially relevant for the transition from consumers to prosumers (2).		
Which research gaps does this data collection address?	To improve the analysis of the historical development of energy cultures up to the status-quo and to create an understanding for the role of different cultural and technological factors.		
How will the results be used in ECHOES?	The data will be used in preparation of deliverable D5.4.		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Primarily the project consortium; external use in academia is most likely.		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	Quantitative data of different national development paths, references, text		
Planned schedule for data collection (start / end month)	06/2017 – 04/2019		
Type of data collected	Mainly secondary data		
Which social level is addressed?	National level (+ meso collectives if applicable)		
Expected number of respondents or other units (e.g., documents, websites)	7 countries (+ relevant energy collectives if applicable)		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Selective sampling with the aim of identifying cases where driving factors for change and innovation adoption can be assessed.		
Which variables/aspects/ interview questions... are planned to be included in the data collection?	All variables that are needed to describe and understand the particular nature of the case.		
Are there any restrictions to use this data in the open access database (e.g.,	Depends on the individual case. Data will be anonymised if desired.		

confidentiality of
information given, copyright
issues, or data needs to be
anonymized first
other relevant information

2.12 Case Studies (WP6)

Data collection No:	12	WP:	WP6
Internal name of the data collection activity	Case studies formal units		
Type of data collection	Case studies / site visits		
Main contact person in ECHOES	Mehmet Efe Biresselioglu, Muhittin Hakan Demir		
Addressed research question	Suggestions and recommendations for a better understanding of the factors driving collective energy choices and energy related behaviour		
Technology focus	Electric Mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	Identification and quantification of the driving factors behind energy choices and behaviour; an in-depth analysis of the paradigm shift from pure energy consumers to prosumers, and the respective role of cultures, markets, and policy		
Which research gaps does this data collection address?	to identify and close knowledge gaps on factors that are drivers or barriers for choices enabling sustainable energy transitions; providing an insight of the interrelationships between the identified factors and their interrelations with technological, regulatory, and investmentrelated aspects to implement the SET-plan and meet the challenges specified in the SET-plan integrated roadmap		
How will the results be used in ECHOES?	Results will be used in deliverable D6.3.		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Policy makers (EU, national and local level); academia, industries, associations		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	Text, literature references, quantitative data, qualitative data		
Planned schedule for data collection (start / end month)	04/2018 – 02/2019		
Type of data collected	Qualitative data, observations, document study		
Which social level is addressed?	Formal social units		
Expected number of respondents or other units (e.g., documents, websites)	TBD based on a priori power calculations (expected number is between 8-12 Case studies in 6 or 7 countries)		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Purposive modes of sampling, exploratory research, most similar/most different cases		
Which variables/aspects/ interview questions... are planned to be included in the data collection?	Aims to identify: the lower level dynamics affecting energy choices and energy related behaviour of formal social units; the key points of the bottom-up mechanisms together with top-down policy		

Are there any restrictions to use this data in the open access database (e.g., confidentiality of information given, copyright issues, or data needs to be anonymized first	Due to confidentiality clause in the agreement, the data should be anonymized before its possible use.
other relevant information	

2.13 Netnography (WP6)

Data collection No:	13	WP:	WP6
Internal name of the data collection activity	NET		
Type of data collection	Netnography		
Main contact person in ECHOES	Mehmet Efe Biresselioglu, Gitte Koksvik, Jens Røyrvik		
Addressed research question	Suggestions and recommendations for a better understanding of the factors driving collective energy choices and energy related behaviour		
Technology focus	Electric Mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	An in-depth analysis of the paradigm shift from pure energy consumers to prosumers, and the respective role of cultures, markets, and policy		
Which research gaps does this data collection address?	Providing an insight of the interrelationships between the identified factors and their interrelations with technological, regulatory, and investment related aspects		
How will the results be used in ECHOES?	policy recommendations, presentations in dissemination workshop.		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Policy makers (EU, national and local level); academia, industries, associations		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	Qualitative data		
Planned schedule for data collection (start / end month)	01/2019 – 04/2019		
Type of data collected	Qualitative data, Interpretive Data, Observations		
Which social level is addressed?	Individuals engaging joint contracts and their social context, including individuals also as representatives of collectives		
Expected number of respondents or other units (e.g., documents, websites)	Tbd based on a priori calculations		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Application of qualitative research in an online context, focusing on the online communities and using observational data; collection of computer based and secondary data; observation of their practises and interaction related to the defined technology focus		
Which variables/aspects/ interview questions... are planned to be included in the data collection?	Attitude variables and dimensions related to energy choices and related behaviour		
Are there any restrictions to use this data in the open access database (e.g., confidentiality of	Due to confidentiality clause in the agreement, the data should be anonymized before its possible use.		

information given, copyright
issues, or data needs to be
anonymized first
other relevant information

2.14 Expert Workshop (WP2)

Data collection No:	14	WP:	WP2
Internal name of the data collection activity	Database expert workshop		
Type of data collection	Workshop		
Main contact person in ECHOES	Tiina Koljonen		
Addressed research question	Stakeholder workshop in Brussels to discuss about the needs of SSH data and to start formulating the SSH indicators		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	SSH data collected in the ECHOES database will support the Set Plan implementation (especially Action 3.1) and national policy making; indicators will be defined and measured on the member state level in the multinational survey.		
Which research gaps does this data collection address?	Lack of data on SSH dimension relevant for energy system transition		
How will the results be used in ECHOES?	Design of the ECHOES database		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Policymakers (EU, national and local level); academia, industries, associations; database will be open access and have a user interface that makes extraction of data easy.		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	N/A		
Planned schedule for data collection (start / end month)	10/2017		
Type of data collected	Interview responses / text		
Which social level is addressed?	All three ECHOES levels		
Expected number of respondents or other units (e.g., documents, websites)	20		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Policy experts from the EU level will be addressed personally.		
Which variables/aspects/ interview questions... are planned to be included in the data collection?	Where is the lack of accessible social science data and how should a database look like		
Are there any restrictions to use this data in the open access database (e.g.,	N/A		

confidentiality of
information given, copyright
issues, or data needs to be
anonymized first

other relevant information N/A

2.15 Workshop (WP5)

Data collection No:	15	WP:	WP5
Internal name of the data collection activity	Workshop energy memory		
Type of data collection	Workshop		
Main contact person in ECHOES	Gudrun Lettmayer, Stephan Schwarzingner		
Addressed research question	The discussion events (see below) can also have workshop character, depending on the country.		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	Identification of driving factors behind energy choices and behaviour		
Which research gaps does this data collection address?	The role of energy memories within the concept of energy cultures will be explored		
How will the results be used in ECHOES?	Complementing the information provided by the national case studies , contributing to the energy memories concept development		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Policy makers (EU, national and local level); academia, industries, associations		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	Transcripts		
Planned schedule for data collection (start / end month)	02/2018 – 05/2018		
Type of data collected	Qualitative data, discussion data		
Which social level is addressed?	Representatives of formal social units (policy makers, scientists, energy providers)		
Expected number of respondents or other units (e.g., documents, websites)	1 event per partner country in this task (6 countries) IF discussion-events are conducted with workshop-character		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Invitation to representatives of stakeholder groups having knowledge and interest in national energy culture and energy history. Discussion facilitated by ECHOES, confronting the participants with main findings from the case study. Registration of the discussion		
Which variables/aspects/ interview questions... are planned to be included in the data collection?	Elaborate on main aspects of national energy culture and identify the role of energy memories		
Are there any restrictions to use this data in the open access database (e.g., confidentiality of	Due to confidentiality clause in the agreement, the data should be anonymized before its possible use.		

information given, copyright
issues, or data needs to be
anonymized first
other relevant information

2.16 Workshop (WP6)

Data collection No:	16	WP:	WP6
Internal name of the data collection activity	Dissemination workshop (not a data collection primarily)		
Type of data collection	Workshop		
Main contact person in ECHOES	Mehmet Efe Biresselioglu		
Addressed research question	N/A		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	Dissemination responds directly to Objective 4.		
Which research gaps does this data collection address?	N/A		
How will the results be used in ECHOES?	This workshop stands at the end of ECHOES and will contribute to its impact.		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Policy makers (EU, national and local level); academia, industries, associations		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	N/A		
Planned schedule for data collection (start / end month)	September 2019 (planned)		
Type of data collected	Dissemination workshop, spreading the evidence from good practices and successful implementations of formal social units		
Which social level is addressed?	Formal Social units		
Expected number of respondents or other units (e.g., documents, websites)	Participation is expected to be between 50-75		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Dissemination workshop, spreading the evidence from good practices and successful implementations of formal social units		
Which variables/aspects/ interview questions... are planned to be included in the data collection?	Good practices and successful implementations of formal social units		
Are there any restrictions to use this data in the open access database (e.g.,	N/A		

confidentiality of
information given, copyright
issues, or data needs to be
anonymized first

other relevant information

It is a dissemination workshop not a data collection activity

2.17 Internal Workshop (WP8)

Data collection No:	17	WP:	WP8
Internal name of the data collection activity	Bundling of data packages		
Type of data collection	Workshop		
Main contact person in ECHOES	Izaskun Jimenez Xabier Uriarte		
Addressed research question	Which are the most relevant raw/processed data, information and methodological approaches in terms of exploitation purposes? Which are the main exploitable results of the ECHOES project? Which are the main target groups of ECHOES' exploitable results? Which are the target groups or stakeholders of the mentioned results?		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	This data collection aims at helping the consortium to identify the most relevant outcomes of the project, in order to achieve a substantial impact among policymakers and other relevant stakeholders. It also aims at identifying the most efficient exploitation routes to reach our target audience and translating the data and information derived from other WPs into easy to understand and catchy messages for that target audience.		
Which research gaps does this data collection address?	N/A		
How will the results be used in ECHOES?	This data collection has a secondary character as it relies on previous data collections in other WPs. It will be used to define the exploitation strategy of the different results of the project and to, ultimately, draw the ECHOES' business plan.		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	It will be mainly used internally for the project's exploitation purposes. The definition of the final users of ECHOES' results will be progressive and will be describe in detail in the ECHOES' business plan.		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	N/A		
Planned schedule for data collection (start / end month)	09/2017		
Type of data collected	No such data typology will be collected, only indirectly. We will collect the analysis and findings that each WP produces with the data they collect.		
Which social level is addressed?	N/A		
Expected number of respondents or other units (e.g., documents, websites)	N/A		
Brief description of the data collection design (sampling, experimental procedures,	Internal workshop with the active participation of WPs' leaders. The participants were divided in different tables and discussed about the main project results that had been previously identified. Each table presented their findings and a consensus was reached. WP8 leader will further work on the		

recruiting, search strategy for documents, etc.)	information gathered in the workshop in order to develop the exploitation strategy of the project.
Which variables/aspects/ interview questions... are planned to be included in the data collection?	N/A
Are there any restrictions to use this data in the open access database (e.g., confidentiality of information given, copyright issues, or data needs to be anonymized first	N/A
other relevant information	

2.18 Focus Groups (WP5)

Data collection No:	18	WP:	WP5
Internal name of the data collection activity	Lifestyle Focus Groups		
Type of data collection	Focus groups		
Main contact person in ECHOES	Stephan Schwarzingner, Gudrun Lettmayer		
Addressed research question	Deeper insights in behavioural patterns and technology choices on lifestyle group level.		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	(1) Identification and quantification of the driving factors behind energy choices and behaviour on meso level, (2) the investigation of the current role and future potentials of governance frameworks for energy transition on the European and national level, (3) the provision of profound advice and recommendations for the development of impact-maximising energy policies to further the Energy Union.		
Which research gaps does this data collection address?	Together with analyses based on the multinational survey, "Energy Lifestyles" in different European countries will be identified and characterised.		
How will the results be used in ECHOES?	Findings about particular lifestyles are refined by a cross-validation of quantitative and qualitative data.		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	EU and national policy makers, researchers, green tech industry, NGOs - the data should be used in combination with the survey data		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	Transcripts and translations		
Planned schedule for data collection (start / end month)	05/2018 – 10/2018		
Type of data collected	Qualitative data (+ordinal statements if applicable)		
Which social level is addressed?	Representatives of lifestyle groups		
Expected number of respondents or other units (e.g., documents, websites)	To be decided based on results of survey analysis, most likely about 20 per country that conducts focus groups.		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Focus group participants will be recruited based on their lifestyle group membership. Each focus group will consist of individuals assigned to the same lifestyle group.		
Which variables/aspects/ interview questions... are planned to be included in the data collection?	Special emphasis on group specific and energy relevant reactions to external influence factors.		

Are there any restrictions to use this data in the open access database (e.g., confidentiality of information given, copyright issues, or data needs to be anonymized first	Transcriptions etc. will be anonymised
other relevant information	

2.19 Focus Groups (WP6)

Data collection No:	19	WP:	WP6
Internal name of the data collection activity	Formal social units focus groups		
Type of data collection	Focus groups		
Main contact person in ECHOES	Mehmet Efe Biresselioglu		
Addressed research question	The identification of the drivers of energy choices and energy related behaviour and the assessment of how crucial and influential the transition towards the decarbonized energy system of the future targeted in Energy Union is in the decision-making processes of the formal social units		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	Identification and quantification of the driving factors behind energy choices and behaviour; an in-depth analysis of the paradigm shift from pure energy consumers to prosumers, and the respective role of cultures, markets, and policy		
Which research gaps does this data collection address?	To identify and close knowledge gaps on factors that are drivers or barriers for choices enabling sustainable energy transitions; providing an insight of the interrelationships between the identified factors and their interrelations with technological, regulatory, and investmentrelated aspects to implement the SET-plan and meet the challenges specified in the SET-plan integrated roadmap		
How will the results be used in ECHOES?	The focus groups results together with the interview results will go into deliverables D6.1 and D6.2		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Policy makers (EU, national and local level); academia, industries, associations		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	transcription (original language and anonymized), translation to English (anonymized)		
Planned schedule for data collection (start / end month)	04/2017 – 12/2017		
Type of data collected	Focus Group data		
Which social level is addressed?	Formal social units		
Expected number of respondents or other units (e.g., documents, websites)	14 focus groups in 6 countries		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Purposeful sampling and homogenous sampling is being implemented Each focus group will consist of members from the same decision making level IUE has developed a guideline to assist project partners in conducting focus group studies, including basics of focus groups, roles of moderators, general framework with sample questions, and other useful tips.		
Which variables/aspects/ interview questions... are	Deemed appropriate for collecting initial information about how decision making on low carbon energy consumption is realized in collective settings.		

planned to be included in the data collection?

Are there any restrictions to use this data in the open access database (e.g., confidentiality of information given, copyright issues, or data needs to be anonymized first other relevant information

Due to confidentiality clause in the agreement, the data should be anonymized before its possible use.

2.20 Discussion Event (WP5)

Data collection No:	20	WP:	WP5
Internal name of the data collection activity	Discussion events energy memories		
Type of data collection	Discussion events		
Main contact person in ECHOES	Gudrun Lettmayer, Stephan Schwarzingner		
Addressed research question	The discussion between representatives from national stakeholder groups will open a deeper insight in the results obtained by the desktop research in task 5.4		
Technology focus	Electric mobility, smart technology, energy in buildings		
How does the data collection respond to the ECHOES objectives?	Identification of driving factors behind energy choices and behaviour		
Which research gaps does this data collection address?	The role of energy memories within the concept of energy cultures will be explored		
How will the results be used in ECHOES?	Complementing the information provided by the national case studies, contributing to the energy memories concept development		
Who are potential users of this data (and in which form should it be made available in the Echoes database) after the project?	Policy makers (EU, national and local level); academia, industries, associations		
What kind of data from this data collection will be stored in the ECHOES database (WP2)?	Transcripts		
Planned schedule for data collection (start / end month)	02/2018 – 05/2018		
Type of data collected	Qualitative data, discussion data		
Which social level is addressed?	Representatives of formal social units (policy makers, scientists, energy providers)		
Expected number of respondents or other units (e.g., documents, websites)	1 discussion event per partner country in this task (6 countries)		
Brief description of the data collection design (sampling, experimental procedures, recruiting, search strategy for documents, etc.)	Invitation to representatives of stakeholder groups having knowledge and interest in national energy culture and energy history. Discussion facilitated by ECHOES, confronting the participants with main findings from the case study. Registratin of the discussion		
Which variables/aspects/ interview questions... are planned to be included in the data collection?	Elaborate on main aspects of national energy culture and identify the role of energy memories		
Are there any restrictions to use this data in the open access database (e.g.,	Due to confidentiality clause in the agreement, the data should be anonymized before its possible use.		

**confidentiality of
information given, copyright
issues, or data needs to be
anonymized first**

other relevant information

The discussion events and the energy memory focus groups may be combined.