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for Energy Citizenship Transformation

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Deliverable 3.3

Case study data collection methodology (including list of cases for in-depth study)

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Summary

This deliverable includes the methodology in EnergyPROSPECTS for an in-depth study of energy citizenship. It features the criteria used for selecting the cases for in-depth study, the list of cases selected for in-depth study as well as key research foci and empirical research questions.

This methodology development started in parallel with Task 3.3, the analysis of the empirical mapping. It has been developed in collaborative fashion, to ensure due consideration of the perspectives and data/information needs of WP2, 3, 4, 5 and 6. Similar to the previous landscape review, data will be collected through an online tool in a manner which supports subsequent analysis (i.e. the creation of case study reports, and academic papers). The empirical research will consist of a variety of case study methods such as the study of documents (e.g. mission statement and other strategic documents, annual reports, evaluation reports.), a review of existing relevant research reports on cases, interviews, and site visit(s). Qualitative and quantitative information will be collected on a variety of topics, bundled under three key research foci: 1) ENCI achievements, including the motivations, perceptions, goals and normative commitments of ENCI initiatives; 2) the contextual conditions (supportive conditions as well as barriers) and intermediaries through which achievements have been made; and 3) the development of ENCI cases over time. Before finalisation, the methodology will also be piloted by selected partners. These experiences will be incorporated in the questionnaire, and in the template for case study reports (see Task 3.6).

In order to achieve a high level of consistency and quality in data collection, a short online training will be developed by WP lead GDI in cooperation with other partners. During the training, the methods will be presented, discussed and standardised. A guidebook will also accompany the training (D3.4). This guidebook and training package will be available for use by other projects.

1 Introduction

This deliverable presents the methodology for in-depth study of energy citizenship. It specifies first the organisational aspects of the research. This includes person months available, roles and responsibilities, and linkages to related tasks. It also sketches papers and specific outputs that we're working towards – to provide researchers with goals, ambitions, and a sense of the purposes of their empirical investigations **(Chapter 2)**. Next, it outlines the methodological approach where the research foci on the basis of research and methodological requirements of the various work packages are identified **(Chapter 3)**. These requirements and research foci inform the case selection criteria and the 40 selected (+2 reserve) cases **(Chapter 4)**. The last chapter specifies the three research foci into themed sets of empirical questions **(Chapter 5)**. The associated protocols for data gathering will be developed in the next deliverable (D3.4).

2   Organisation and planning

This task informs a range of further research activities - within and beyond WP3. Importantly, the time available for in-depth case studies is limited. Synergies between work packages are therefore essential. Below we indicate a timeline and linkages to other research activities **(section 2.1)**, and roles and responsibilities of consortium members **(section 2.2)**. This planning also comprises a sketch of the outputs we are working towards **(section 2.3)**.

2.1   Timeline & linkages to other research activities

The case study guidelines should support empirical research that is scheduled to start in July 2022 (M15). Figure 2.1 below indicates the WP3 timeline.
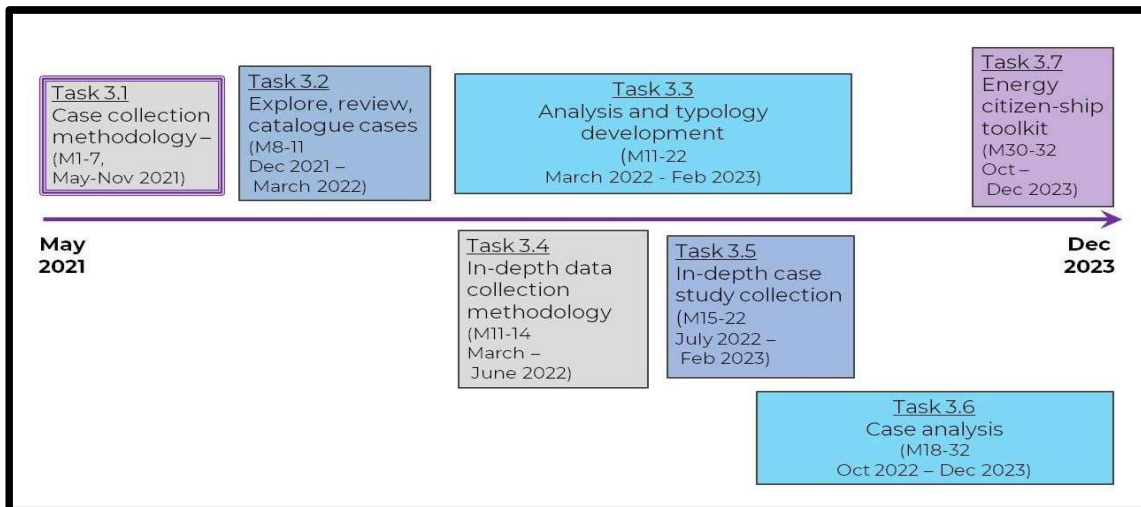

Figure 2.1:   WP3 planning

Figure 2.1 clarifies the following points:

Case research will follow up on/take **lessons from preceding empirical mapping**. It also builds on the **conceptual development** of year 1 (Task 3.2 + D2.1-2.3).

Case guidelines are due for the end of June 2022 (M14)

An advanced **first draft** was **discussed** at the Brussels meeting May 31st 2022.

Data gathering (Task 3.5) is scheduled for **M15-M22** (July 2022 - Feb 2023).

- **Data analysis.** The collected data will be analysed in the context of **Task 3.6**, scheduled for **M18-32:** Importantly, analysis will also take place in the context of WP4, WP2, and WP6 (Cf. section 2.2): The research topics and empirical questions have been formulated in line with the foci of these work packages.

- **Piloting and training.** Working with the methodology and (online) questionnaire[1] will require training and testing. Before finalisation, the methodology will be piloted and tested by the EnergyPROSPECTS team in the framework of the internal training. A case that is familiar to all partners – and already studied during the mapping stage – will be tested, analysed and discussed by the case researcher team in the following way. First, prior to the internal training, the case and information collected on it during the mapping stage together with the online questionnaire will be given to partners for an overview, in preparation for discussion and testing at the training itself. Then, during the training session, it will be discussed in detail through the example of the specific case. This allows for fine- tuning and standardisation on the basis of experiences with the methodology.

- **Regular case research team check-ins and learning.** During data collection, regular team meetings will be organised to discuss the experience of using the methodology and ensure a common, standardised research approach (see D3.4 for more details).

2.2 Roles & responsibilities in the research process

All partners from all WPs are involved in this empirical research – through WP3, but also through the other work packages that will work with the empirical data. **Figure 2.2** indicates PMs/institute[2] for WP3; **Figure 2.3** indicates PMs/institute for the collection of case study data.

Partners	NUIG	ULB	GDI	UM	ARC	JDI	UL	TUB	UDC
Available resources	6	6	21	6	6	6	6	7	7

Figure 2.2:   Person Months per institute (for WP3)

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1 The questionnaire will also be available offline, to provide greater flexibility to researchers.
2 Correction:4 cases for ARC, JDI, TUB, UDC, UL, ULB, 5 cases for NUIG and UM, 6 cases for GDI

Task	Overall goal	Goal per partner	Time available per partner from WP3 resources
ENCI mapping	500+ cases	50-70 / partner (more for GDI)	2-3 man-months/partner (more for GDI)
Detailed cases collection	40 cases	4 cases: ARC Fund, UL, ULB, JDI, TUB, UDC	2.0 man-months / partner
		5 cases: NUIG, UM	2.5 man-months / partner
		6 cases: GDI	3 man-months
Other tasks (methodology piloting, deliverables preparation and review, public database, task and WP leadership, publications, etc.)	As per task	As per task	Varies by partner

Figure 2.3:   WP3 Tasks and Person Months

Based on WP3 resources, the time available for case study is thus **0,5 PM per case**. This 0,5 PM will be dedicated as much as possible to data collection. Still, this is very limited time, considering the need for sufficiently detailed data on rather complex research topics and questions **(Cf. Chapters 3 and 5)**. Moreover, beyond data collection there will be the need/desire for subsequent empirical analysis (single-case as well as comparison), crafting of case study reports, teasing out of WP-specific conclusions and elaboration into publications. **Altogether, such complete processing of the case study data will amount to approximately 1,0 PM per case, and will require time by WPs other than WP3.** This additional time beyond data gathering will take place as part of the following already programmed activities:

WP3: The data gathering for the 40 case studies will be followed by meta-analysis (Task 3.6). This meta-analysis will be conducted mainly through the 21 PM of WP lead GDI and the PM allowance of UDC, who is co-leading the task. For the meta-analysis, there

will need to be cooperation with Task 4.3 (QCA) in WP4 as well in order to avoid duplication of work.

WP4: The case studies are configured to a large degree around the research foci of WP4 (the analysis of Intermediaries, ICT and business models). They are also configured to develop the WP4 activity of Qualitative Comparative Analysis (Cf. Chapter 3), a research approach that will allow us to identify conditioning factors - and subsequently, to come up with well-founded policy advice. The synergy with WP4 tasks is thus large. WP4 has an allocation of total 4 PMs per partner. In WP4, further exploration of intermediaries (T4.1)/transformative agency (T4.4) will be covered with additional 1,5 PMs, ICT (T4.2) with 0.5 PM and business models (BMs) (T4.5) with 2 PMs.

WP2: The case studies will also investigate the development of ENCI cases/initiatives over time (Cf. Chapters 3 and 5). This processual aspect of ENCI is underlined in the conceptual framework and in our ENCI working definition (Pel et al. 2021). The investigation of development over time serves in particular to deepen the ENCI typology, as developed conceptually in WP2 and empirically in WP3. More generally, the case studies will support empirically informed theorisation in the deliverables D2.5 and D2.6. Accordingly, WP2 can spend approximately 10 PM on case analysis.

WP6: The research foci are configured as much as possible to develop practically relevant observations. Especially research foci 1 and 2 (impacts and conditions) speak quite directly to WP6 objectives. Accordingly, WP6 can spend approximately 8PM on case analysis.

Roles in the case study research process:

GDI is WP lead. GDI has the specific task of coordinating, following-up through check-ins, during data collection process (Task 3.5, together with NUIG) and case analysis (Task 3.6, together with UDC)

ULB is Task lead for the formulation of case study guidelines (and submission of D3.3), coordinating closely with WP3 lead GDI.

Task partners have specific roles in ensuring that data needs of different WPs are met **(NUIG, UM, TUB, ARC)**, with input from WP leads.

WP leads (2,3,4,6) are to set up processes (within their respective workflows) for analysis of the collected data, and to assess/monitor how much work capacity can be mobilised for this.

The whole consortium has responsibilities in ensuring timely delivery and high-quality case reporting

Project leads NUIG ensure synergies between WPs and achievement of overall project objectives.

2.3   Future outputs

This task prepares for empirical research of 40 cases. This involves a considerable amount of resource capacity and research efforts. To ensure that the case studies are set up in a realistic, thorough and fruitful way, it will be helpful to anticipate subsequent (comparative) analysis and outputs. This also provides case researchers with a sense of purpose, and intrinsic interest to go the extra mile. In-depth cases will be published as follows:

Case reports (Task 3.5 and 3.6) to be published attached to the ENCI map to be created. Based on T3.6, these reports will be published in attachment to the online ENCI database. The descriptions of the 40 cases should be easy to follow. A template will be developed in T3.6 for the case reports to ensure a comparable structure, and case researchers will be asked to collaborate in writing the case reports following it. Case reports will consist of three main parts: 1) A general description of and introduction of the ENCI case, and how it supports energy citizenship; 2) A summary of the main research findings relating to the three research foci of the EnergyPROSPECTS research; 3) Conclusions and references.

The time to be used for preparing the case reports should partly be covered by the resources partners have in WP3 (in addition to the time spent on data collection) as well as from WP7: The reports will consist partly of dissemination and communication activities and will be included in the online database.

Meta-analysis report (D3.5). And at least one consortium-authored peer-reviewed paper on the summary of meta-analysis.

WP6: the in depth case studies will contribute to several WP6 outputs: the national knowledge exchange workshops; and the policy briefs.

Academic outputs. The above reports/deliverables will in turn provide materials for high-quality academic outputs. In line with ongoing work and with research foci of the case studies, empirical studies could be developed on key issues like the following: **WP4:** Specific insights on intermediaries and ICT, transformative agency of intermediaries, business and innovation models, QCA analysis on explaining ENCI impact through conditioning factors. **WP2:** Showing empirics beyond the 'manifest' tip of the ENCI iceberg, presenting an empirically informed typology, showing relevant regional/national/contextual differences and translations. **WP3:** supporting and empowering energy citizenship, how ENCI contributes to the energy transition (more equal and within limits, low-carbon and resilient future).

3 Methodological approach

The methodological approach is informed by the research aims and requirements of the various work packages that will be working with the 40 cases **(section 3.1)**. It is also informed by methodological requirements **(section 3.2)**. Finally, we conclude with the identification of 3 research topics, which bundle the various requirements and interests into a sufficiently focused approach **(section 3.3)**. These associated research questions will be specified in **Chapter 5**.

3.1 Research aims & requirements

This section takes stock of the data needs as formulated in the Grant Agreement, and as identified for the different WPs that will be working with the case study data.

Grant Agreement. This provides a starting point/checklist of very roughly defined research foci. It also indicates how the cases should support research activities in other WPs (Cf. section 2). Some narrowing down will be needed though, considering time resources and the need to generate data at a reasonable level of precision.

WP3. There is comparative and meta-analysis done in WP3 (T3.6). The meta-analysis of the 40 cases will deepen the analysis of cc. 600 cases gathered in the WP3 empirical mapping activity. The results/outputs of the analysis of the database will be studied further in the meta-analysis of the 40 cases, most importantly regarding

Who are the key players in EU and also at the sovereign state level regarding energy?

What motivates them and what goals are they setting? Are they the same across Europe?

How is energy doing acting to the transformation of the energy system regarding environmental study, social justice and empowering citizens? Are there ENGs that take an integral view and combine these three important aims? Which types of actors have integrated, how have they done it?

Empowerment toolkit. Importantly, the empowerment roughly coincides with the WP4 on intermediaries (which after all are relevant because they empower or enhance ENCI). For the development of this visual tool for citizen empowerment, it is necessary to be clear about how citizens themselves understand that they should be empowered; thus, we need to directly ask the cases how they think they could be empowered. Otherwise, we may run the risk of (dis)empowerment (Avelino et al., 2019). Since the in-depth cases analysis in WP3 corresponds to the organisational context, we will try to identify potential existing tools and potential improvements. The development of the tool will not only take into consideration this input, but its development will also benefit from the input of citizens in the survey conducted in WP5.

WP2: The conceptual framework WP tries to consolidate/deepen our conceptual insights thus far. The cases could provide substantiation of concepts, distinctions, and the theorised variety of ENCI.

ENCI beyond the tip of the iceberg. Cases could help to substantiate, specify, refine the 7 distinctions in D2.1 (Pel et al. 2021). Ideally the cases would cover the whole range of theorised manifest/latent ENCI forms, but this is practically impossible. It would be worthwhile though to highlight, one way or another not ONLY the 'manifest' forms that we distinguished, the tip of the iceberg. This can be done in many ways. A focus on intermediaries reaches beyond the common focus on private sphere and individual ENCI, for example. A focus on empowerment takes in the phenomenon of 'passive' ENCI. Also a focus on transformation-oriented ENCI and 'deep' environmental citizenship would take up forms of ENCI that we considered theoretically as relatively less prominent forms.

ENCI ideals. We have conceptualised ENCI as a normatively rich concept, and as 'crossroads' of political ideals/ethical commitments. The cases could provide substantiation/specification of this. What, more precisely, beyond general slogans and abstractions of 'sustainability' and 'justice', are people seeking to achieve through ENCI? Do they encounter dilemmas, or tradeoffs between different objectives//ideals/values? Which ones?

ENCI typology. Cases should also help to deepen/refine the ENCI typology (as far as not already done through the empirical mapping). To do so, the cases presenting an

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interesting trajectory (in terms of types and/or impacts) are a preferable choice, as well as the combinations of types and their possible evolution across time/space. Which conceptual types can be differentiated in the analyses of the empirical cases in regard of actors involved and outcome orientation? Importantly, the individual/collective agency dimension of the typology implicitly contains the intermediaries that are the focus of WP4. We can thus combine the interests of WP2 and WP4 in the set-up of case studies.

WP4: This WP offers an analysis of the energy citizenship element in intermediary activities with special attention into the role of ICT, transformative agency and business models. The influence of intermediation activities for achieving impact will be studied via the QCA method and via dedicated case analysis on the nature of intermediation, the actors involved in it and the success or non-success of such activities in achieving aims for which intermediation is used. The five forms of intermediation identified by Broers (2022) (knowledge development and exchange, networking, facilitating, visioning, institutional change) will act as a starting point to analyse what type of intermediary activities are needed in the selected 40 case studies.

WP5: It is not necessary to serve WP5 through this empirical activity. WP5 conducts its own analysis of external factors and conditions, and examines how they influence the selected cases. There are two aspects that the case studies could be minding:

The 40 selected cases (whatever they are) could be matched with the existing external circumstances – (as identified through PESTEL analysis).

Cases could cover different territorial scales: supranational (EU), national and sub-national.

WP6: From the WP6 point of view, the cases need to be policy-relevant. The QCA analysis, formalising the comparison and working towards solid understandings of conditions conducive to active/desirable ENCI, helps towards policy relevance.

Intermediaries. Rigorous research on intermediaries is by definition policy-relevant. Case studies could also foreground the political struggles around how intermediary spaces not only shape, but are also shaped by, the political and economic contexts in which they operate.

Levels of government. Case studies would ideally comprise a diversity of cases that are supported/enabled/initiated by **different levels of government** (local, regional, national and EU-level).

Inclusion of marginalised groups. Case selection would ideally feature cases addressing issues of social justice, inclusion, gender, vulnerability/disadvantaged groups. This would also provide relevant inputs for the empowerment toolkit.

Beyond the West-European perspective. Case study research foci should be sensitive to the particularities of ENCI in non-Western European contexts. Apart from being conducted in a diversity of countries, the analytical foci should not silently presuppose Western-European contexts.

Policy-relevant themes. Cases could address themes with particular policy relevance in the current debate, such as youth (relates to the EU year of the youth), energy and transport poverty (current discussions and proposals on the energy price crisis, e.g., REPowerEU, and negotiations within the 'Fit for 55'-policy package, renovation (EU renovation wave, EPBD), or citizen participation at the city level (EU net zero cities mission).

3.2 Methodological considerations

Apart from requirements and research interests, there are several methodological requirements and desiderata. The QCA is a big trump of our project. It sets certain very methodological requirements on the kind of (comparable, diverse qua manifestations of explanans and explanandum) data we need and the kinds of empirical questions to ask. These QCA requirements give important direction to our case study set-up. Furthermore, there are other considerations, notably on the pragmatic side of the methodology: *With and how much data can most as and require to derive?* Key methodological considerations are the following:

Time constraints/depth. As indicated earlier **(Cf. section 2.2)**, it is essential to develop synergies between work packages. These will secure sufficient capacity for accurate observations and fruitful analysis. Combining hours available through WP3 and other

WPs, about 1 PM per case will be available per case. Importantly, this allows to do qualitative interviews, and gathering of sufficiently detailed data on our complex research topics.

Accessibility of cases. We choose from the 500 cases studied in the empirical mapping. Only cases that are rich enough, well-documented, good contacts, and interesting in light of above-identified research foci (see further under case selection, Chapter 4).

Methodological-formal requirements for QCA: Homogeneity criterion: QCA should be understood as a research approach (not only as a technique for data analysis). It typically aims to answer a 'why'-research question, i.e. to explain a phenomenon (an 'outcome') through conditioning factors ('conditions'). It requires a medium-N number of case studies that all adhere to these requirements (about half of our N=40 can be sufficient). All included cases must be comparable: They should work with the same unit of analysis, address the same research questions, and have some contextual factor in common. Furthermore, all cases also need to be developed along a common format. This ensures consistency (different research teams will need to achieve reasonably harmonised results) and efficiency (it is qua not possible to develop several methodological guidelines, in light of organisational implications and the limited time resources available).

Methodological-formal requirements for QCA: Conceptualising the outcome. QCA addresses questions such as "Why/under which circumstances is energy citizenship impactful?". Case studies should establish a certain outcome, in our case a certain "achievement of ENCI". Importantly, it must be possible to assess these achievements on the basis of available case study materials.

Methodological-formal requirements for QCA: Heterogeneity criterion: Case selection should be based on theoretical sampling. It should follow from research questions and theoretical framings. Across selected cases, the manifestations of the **"outcome"** (the aforementioned achievements and the conditions theorised to be relevant) **must vary.** Cases selection should differentiate between cases considerd 'high' and cases considered 'low' on achievement – however 'achievement' is defined.

Methodological-formal requirements for QCA: 6-8 conditions. The case studies should all inquire the same 6-8 selected explanatory factors ("conditions"). These conditions

comprise both remote and proximate factors. Importantly, the evaluation of the manifestations of all these conditions must be reasonably consistent across selected cases – so the conditions must be formulated in a straightforward and unambiguous way that is understandable for all researchers. Furthermore, QCA requires within-case study evidence to establish causal relations in-between conditions and between configurations of conditions and the outcome.

Process analysis. It is useful to get a sense of change, development and dynamics of cases. Especially for the development of the ideal-types it is worthwhile considering how cases develop from one ENCI form into another.

Multiple levels of analysis: Embedded ENCI individuals. ENCI comprises individual as well as collective forms of agency, our conceptual typology and conceptual framework indicate. Methodological individualism is therefore not a suitable approach – yet the behaviours of (embedded) ENCI individuals are relevant. Even when focusing on intermediaries and broader ENCI ecosystems, it is worthwhile to maintain attention to certain individuals – individual intermediaries, or individuals supported by certain intermediaries.

QCA conditions. These must fulfil a number of methodological requirements. They must be empirically investigable in all included cases; they must represent a set in which cases can be members (1) or non-members (0) - or gradations thereof as we use a fuzzy set QCA. Ideally, the condition comes with an adjective as qualifier of this set (e.g. extensive collaboration with local government as a condition); they should mean the same for all included cases and there must be no "does not apply" answers; they should allow positive and negative cases with respect to the condition.

Deduction and induction in the development of explanatory conditions. These QCA requirements pertain mostly to the use of the final data at the end of the case studies.Yet QCA has a strong qualitative orientation. It is therefore neither required nor desirable to already have a fixed and fully operationalised list of conditions prior to the start of the empirical work. This would impede learning processes during the case studies. At the same time, a purely explorative, inductive approach is not expedient either, especially as the case studies are conducted by different teams (i.e. requiring a considerable degree of standardisation). It is important to develop the conditions through a theory-guided but iterative process. The research focus 2 (Cf. section 5.2) is therefore

configured to contain empirical questions that are reasonably focused but still open to identify a borad range of potentially relevant causal factors conditions to explain ENCI achievements.

3.3   Conclusions

The various research interests **(section 3.1)** and methodological requirements **(section 3.2)** make for a rather overwhelming list. Still, they also allow us to narrow down, and focus. The various requirements and constraints point in mutually compatible directions. Especially the methodological requirements for QCA help to structure the case research. They inform the first two of three key research topics:

Research topic 1: ENCI achievements. For the QCA it is essential to establish ENCI achievements. It is important in this regard to ensure case diversity in terms of 'negative' and 'positive' cases (Cf. Ch4), and to analyse subsequently which configurations of conditioning factors make the difference. Achievements need to be observable and precise (no abstractions like 'empowerment' or 'justice', but more concrete manifestations and indicators of these). It also should mean the same thing among the analysed cases. Apart from the formal assessment of greater and lesser achievements, we will also unpack the achievements in more qualitative detail – ENCI is a crossroads of political ideals, involving normative commitments to environmental sustainability, inclusion, social justice, amongst others (Pel et al. 2021). This qualitative deepening of achievements pursued by ENCI initiatives – including the dilemmas, trade-offs and the politics - is elaborated in **section 5.1**.

Research topic 2: Conditioning factors and intermediation. This topic is the focus of WP4, and it forms the heart of the overall EP aim to identify conditioning factors for 'successful' ENCI (the ENCI impacts specified in topic 1). The conditioning factors will be analysed through the QCA analysis. These insights on conditioning factors will in turn form important inputs for policy advice (WP6). These insights can also be linked to the analysis of (remote) conditioning factors in WP5 (PESTEL analysis). This research topic is elaborated in **section 5.2**.

Research topic 3: Development over time. This topic addresses the important fact that ENCI initiatives/individuals change over time. These insights complement the relatively static mapping of ENCI cases (WP3). They are relevant for policy as well (WP6). They also help to substantiate and deepen our conceptualisations of the various 'manifest' and 'latent' ENCI categories (WP2): Active ENCI may have evolved from activation processes out of earlier passivity, individual ENCI may have turned into more collective ENCI (Pel et al. 2021), earlier 'frontrunners' may have evolved into other roles in the course of energy transition processes. Furthermore, ENCI initiatives may go through different phases and develop characteristics of different ENCI ideal-types or combinations of ideal-types (e.g. from reformative to transformative, Cf. Debourdeau et al. 2022). The dynamic analysis helps to deepen our conceptual ENCI typology.

4 Selection of case studies

Cases will be selected from the earlier empirical mapping of 500+ cases. The selected 40 cases will have to be relevant in light of our research foci. They also need to be accessible and sufficiently documented, and sufficiently clear-cut and variegated in terms of high/low achievements to allow for QCA analysis. In the following we first reflect on the demarcation of cases **(section 4.1)**. Next, we discuss considerations and criteria for case selection, also specifying the procedure through which the consortium identified the suitable cases **(section 4.2)**. In conclusion, we present the list of selected cases **(section 4.3)**.

4.1 Case demarcations

For empirical analysis, and especially for the QCA (Cf. section 3.2 on the 'homogeneity criterion'), it is imperative to develop a set of comparable cases. This harmonisation is not easy, as our empirical mapping contains a mixture of cases on individuals, organisations and 'initiatives'. As our research address impacts and conditions, it needs to be clear **whose achievements** we establish and who/what is being subject to certain conditions. The questionnaire will therefore contain a question to specify the focal actor of the case study.

Another issue is the size, or the **aggregation level**, of cases. Importantly, the cases on our longlist of the empirical mapping are not intrinsically linked to one of these levels – they can be expanded or narrowed down, researchers can zoom in or zoom out. These are our framings of cases, our choices – and we may thus have to rename our longlist-case 'the case of energy citizen Leonardo di Caprio' into 'the case of the ENCI-movement in Hollywood'.

Furthermore, we need explicit **temporal demarcations**. Research topic 3 (Cf. section 5.3) addresses the development of ENCI cases over time. This includes the reconstruction of past developments, but also a degree of anticipation of future development. Arguably, case descriptions should contain a basic timeline featuring at least a few important/remarkable moments/phases. This may imply that a case on focal actor Leonardo di Caprio, a recent ENCI manifestation, has also to include predecessors Jodie Foster or perhaps even John Wayne.

4.2   Case selection criteria

The cases are selected from the 500+ cases studied in the empirical mapping. Our N=40 constitute only less than 10% from those. For this narrowing down we have considered the following issues. Some of these are decisive criteria, while others act as background considerations:

Nominations/interest: Researchers have nominated cases during the empirical mapping. These nominations were important starting points as they reflect the cases that our expereinced team of reserachers identified as meriting deeper investigation.

Positive/negative cases: Achievement. As indicated through the heterogeneity criterion for QCA analysis (section 3.2), the overall set of cases needs to show positive as well as negative scores on the QCA-outcome. Negative does not mean that an initiative is a 'bad' initiative, but some positive/negative contrast must exist in our set. As it requires some degree of within-case knowledge on the cases to be studied to pre-determine a 'positive' or 'negative' case, we relied on empirical data from previous work (mapping of 500+) regarding this case selection criterion. Needing preliminary empirical knowledge about the achievements of a case in order to choose "positive" and "negative" cases, we took into account the questions already answered in the mapping of the cases when defining impact/achievements. This offered us a relatively easy way to identify "negative" cases, i.e. cases with little or low achievements. As a first proxy we took the assessments of effective citizen power/control (Cf. Section 5.1).

Variety in conditioning factors. As indicated through the heterogeneity criterion for QCA analysis (section 3.2), the overall set of cases needs to display a variety in conditioning factors. This means that there must also be 'positive' and 'negative' cases regarding all selected conditions in the final technical analysis. Outcome heterogeneity is the more important case selection criterion, however.

Outlier cases and paradigmatic cases. Especially when considered in comparison with other cases, cases can be considered as extraordinary outliers or as 'paradigmatic' cases that are particularly revealing about a particular aspect of ENCI (Flyvbjerg 2006). On the basis of our prior knowledge of the cases, we may have early insights on this. Still, these considerations cannot serve easily as case selection criteria. They are rather

characterisations to deploy in later case analysis, i.e. ex post.

Diversity across ENCI typology. This is a possible selection criterion. It is also relevant as a way to homogenise, narrowing down the cases to particular kinds of actors (Cf. section 4.1). The sub-set of cases selected for QCA has therefore been restricted to the ideal-types 7 and 8. By contrast, the overall set has been constructed to contain a broader diversity across the 10 ideal-types (Debourdeau et al. 2021). Through research focus 3 (section 5.3), all cases will also be investigated for their changing forms, and their changing similarity to the theorised ideal-types.

'Transformative' and 'reformative' cases. It may be that the 5-fold distinction of the agency-dimension of the typology is not suitable to apply as selection criterion (Cf. 5.1 on the issue of the 'focal actor'). Still there is also this second dimension of the typology ('Transformative'/'reformative'). This twofold distinction is easy to apply, and we also considered it important as a way to diversify regarding the various possible ENCI achivements.

'Manifest' and 'latent' cases. This is, as elaborated in Pel et al. (2021), not a singular, dichotomous, distinction. It reminds of several (we identified 7 of them) remainder categories that tend to be included less in ENCI case selection exercises like ours. It is as such not a (directly applicable) criterion for case selection. Nevertheless, future WP2 analysis of cases may consider how various theorised categories of latent ENCI are visible in the cases selected.

Accessibility. It is crucial that cases are rich and well-documented, and that individuals can be recruited for interviews. The nominations did take this into account. Still, the questions remains whether cases will turn out accessible and rich enough to generate accurate and rich data on the given research foci.

Countries/context. Selected from the longlist and conducted by different partners, our N=40 covers a broad range of countries. The influence of geographical/political contexts will be analysed in a later stage, when combining case findings with the PESTEL analyses of WP5.

4.3   Selected cases

The case selection has been implemented through a collective process of nomination along a pre-defined template of selection criteria and case characteristics. The selection was set up to secure a sub-set of approx. 20 cases that is sufficiently homogeneous for QCA analysis, whilst maintaining sufficient overall diversity. Cases have been selected along the following procedure:

Step 1: Pre-selection. From the ENCI database of 596 cases (collected as a result of preceding tasks in WP3), cases were pre-selected by the WP3 lead. This pre-selection was developed through the following filters:

- nominated by a partner for further study, in order to ensure that the case has something interesting and relevant from the point of view of understandng ENCI and the research foci to investigate. In addition, since the members of the consortium were selected partly regarding also representation of different European regions, we believe that by focusing on partner countries we will at the same time achieve diversity in contect;

- located in a partner country, in order for ease of access to information and interview subjects as well as relevance to other project tasks, e.g. the PESTEL analysis;

- sufficient amount of information about the case available and/or the partner in question has existing contact with the case in order to ensure that the case can indeed be studied in detail.

For those cases that will be analysed through QCA methodology, additional filters were applied:

- evaluated "high", "medium" or "low" (but not "n/a", etc.) on 'achievements' related to citizen power during the mapping stage, in order to ensure that this condition of the QCA methodology is met;

- typologised as "citizen-based and hybrid" during the mapping stage to ensure homogeneity of cases for the QCA analysis;

- currently active and started no later than 2020, also to ensure the homogeneity

of cases for the QCA analisys;

- operating at the local, municipal or regional level, as a last condition to ensure the homogeneity of cases for the QCA analysis.

Step 2: Selection by case researchers. Following the filtering process, suitable cases were presented to project partners along with instructions to select the most appropriate cases in their countries. These instructions included additional criteria to consider such as:

- relevance for studying intermediaries, (innovative) business models and the various roles of ICT in cases, regarding all 40 cases selected;

- focus on disadvantaged target groups and gender, in order to ensure that some of the cases selected for detailed study have such a focus, which can be considered for the meta analysis and policy recommendations; and

- diversity in the type of cases for those not subjected to QCA analysis later.

Step 3: Verification. Once partners made their selection of cases, members of WP3 and WP4 task leader teams completed a final review. The final list of cases selected is presented in the table below. It contains 42 cases, with 2 additional reserve cases indentifed to anticipate unforeseen issues.

Case no.	Title of case in English	Partner	Country	Main focus As in mapping survey: **Energy** (i.e. Direct energy production and/or consumption) **Mobility** **Holistic**
1 - QCA	Bike Evolution	ARCFund	BG	Mobility
2 - QCA	Energy Transition of City of Burgas: Going Smart and Sustainable	ARCFund	BG	Holistic
3 - QCA	Biobriquettes for the energy poor	GDI	HU	Energy
4 - QCA	Nagypáli, the renewable energy village	GDI	HU	Holistic
5 - QCA	TreeDependent	GDI	HU	Holistic
6 - QCA	Tregor Energ'ethic	JDI	FR	Energy
7 - QCA	Energy Community Tipperary Cooperative ECTC	NUIG	IRL	Energy
8 - QCA	Ringsend Irishtown Sustainable Energy Community	NUIG	IRL	Holistic
9 - QCA	Galway Energy Co-operative	NUIG	IRL	Energy
10 - QCA	Solocal Energy	TUB	DE	Holistic
11 - QCA	LAVIDAVERDE	TUB	DE	Holistic
12 - QCA	Berlin Citizen Energy (BEB)	TUB	DE	Energy
13 - QCA	GoiEner	UDC	SP	Energy
14 - QCA	Couso's Project	UDC	SP	holistic
15 - QCA	La Borda. Housing cooperative in transfer of use	UDC	SP	Holistic
16 - QCA	Installation of solar heat panels in multi-apartment buildings, with energy efficiency improvement of the building	UL	LV	Energy
17 - QCA	HOSe (hydroelectric project: enterprise + cooperatives)	ULB	BE	Energy
18 - QCA	Corenove	ULB	BE	Energy
19 - QCA	Weert Energy	UM	NL	Energy
20 - QCA	Reindonk Energy & Co: Energy from your own region	UM	NL	Energy
21 - QCA	The Drechtsteden cooperative	UM	NL	Energy

Case no.	Title of case in English	Partner	Country	Main focus As in mapping survey: **Energy** (i.e. Direct energy production and/or consumption) **Mobility** **Holistic**
22	Student Switch Off campaigns in Bulgaria	ARCFund	BG	Energy
23	Student Energy Teams	ARCFund	BG	Energy
24	Zsuzsanna Hojtsy-Keresztény - EnergyNeighbourhoods energy master, local change maker	GDI	HU	Holistic
25	Cargonomia	GDI	HU	Holistic
26	Community Energy Service Company	GDI	HU	Energy
27	Energie Partagée	JDI	FR	Energy
28	Railcoop	JDI	FR	Mobility
29	Hauts de France Pass Renovation	JDI	FR	Energy
30	Citizens' Assembly on "How the state can make Ireland a leader in tackling climate change"	NUIG	IRL	Holistic
31	Public Consultation: Shaping Our Electricity Future	NUIG	IRL	Energy
32	NATURSTROM AG	TUB	DE	Energy
33	Holger Laudeley	TUB	DE	Energy
34	Federal Association of Citizens' Initiatives against SuedLink	TUB	DE	holistic
35	SomEnergia	UDC	SP	Energy
36	Association "city for people"	UL	LV	Mobility
37	OFF-GRID: Renewable energy DIY(do it yourself) for rural development	UL	LV	Energy
38	Edgars Fresh	UL	LV	Holistic
39	Jeasy	ULB	BE	Mobility
40	Michel Huart	ULB	BE	Energy
41	Loenen Energy - community virtual power plant (cVPP)	UM	NL	Energy
42	National Association of Active Residents - Landelijk Samenwerkingsverband Actieve bewoners (LSA)	UM	NL	Holistic

Figure 4.1   *42 selected cases and their criteria (Cf. Appendices for more details)*

5 Research questions and data gathering

The case studies will be addressed through the lens of three research topics. Each of them comprises a few themed clusters of empirical questions, displayed as subsections. The case studies will address ENCI achievements **(section 5.1)**, conditioning factors and intermediation **(section 5.2)**, and development over time **(section 5.3).** Specifics of the data gathering and the questionnaire are provided in deliverable D3.4.

5.1 Research topic 1: ENCI achievements

This is a key topic for our research project. It is highly relevant for policy (WP6), it allows us to be more specific about ENCI as 'crossroads of political ideals', and for the QCA analysis it represents the QCA-outcome that we aim to explain. Beyond this formal outcome in terms of high/low achievement, we also want to have more qualitative detail on the kinds of achievements the organisations/individuals in the cases pursue.

Generally, this research topic focuses on achievements of ENCI cases. Broadly, achievements refer to fulfilment in line with outcome-orientation, goals towards a sustainable and low-carbon energy transition and/or more democratic energy decision-making or what ENCI actors and initiatives feel they have achieved in their pathway towards a (just) energy transition through individual and collective actions. In that light, ENCI can refer to the active and responsible participation of citizens, through individual and collective actions, in the development of public policy, (ICT) technologies, business and social innovation models and projects, as well as practices, aimed at expanding energy democracy, energy access and achieving the green energy transition. Finally, achievements also imply the existence of *non*achievements in the ENCI cases, for example, when ENCI actors did not manage to fulfill or reach a certain goal or purpose.

Based on the above, the **main research question** related to the ENCI achievements is:

This question will be investigated through a series of empirical questions, divided over subsections 5.1.1-5.1.5.

5.1.1 Achievements and goals

1. *What do (all) the actors want to achieve³ through the ENCI site they are involved in?*

2. *Is the case considered to be successful in terms of the intended kinds of change(s) or not successful (compared to actors they worked with in the ENCI site working to achieve)?*

3. *What are the three greatest achievements of the ENCI site in relation to stakeholders? and Why?*

4. *Which of the goals does the ENCI site consider most trouble? and why?*

5. *What determines whether goals are achieved if any?*

6. *Do the actors envision and pursue a more decent energy future? If so, in which ways do (all) they envision and pursue a more decent energy future?*
[Answer by selecting categories high-medium-low]

7. *Why and what drives the energy system to be so in a just way that is?*

5.1.2 Reformative and transformative goals

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3 Examples of achievements: ENCI actors may feel the need to achieve, 1) a more democratic energy decision-making and greater community ownership of a decentralised energy system; 2) influence thinking and decision-making in national, local and regional political sites as part of their goals and aims; 3) influence regulations on sustainable energy; 4) ability to get good deals for themselves; 5) turning adversary relations into cooperative relations; 6) professionalisation of their activities; 7) manage to get funding from commercial banks; 8) consulted by local authorities on (community) energy matters; 9) strike deals with grid operators; 10) help to build social capital; 11) to counteract fuel poverty; 12) increase employment opportunities at the local and/or regional level; 13) facilitate the move towards a sustainable (or 1.5-degree) carbon limit on various levels (individual, community, organisation, region, etc.); 14) reduce the environmental impact of energy consumption and production beyond climate goals, incorporating other resource and ecological limits considerations; 15) just access to and distribution of energy; 16) facilitating the meeting of everyone's basic energy needs.

8. *hwtaysldhepnsefnrdegoshudhwtaysdltd*
lepnrastfrndego?

WkdaleEN9menbyfprndeandtnfprndegd
[Explain how they address issues such as equity and justice, environmental sustainability, observing the carbon limits or other ecological limits]

5.1.3 Effective citizen control: democratisation of the energy system

10. *Das (d) he cae elbi stog dents of gfe den cord?* Specifically, in what ways do (did) citizens engage in participation that goes beyond 'simple' investment and/or attendance at annual meetings and are (were) they the majority among the participating actors?

11. *Hw ae (we) dasnudeintece?Sgfs (w)hean   enphasoresdkin nkgndhowds(l)deionwkfd   devos?*

12. *Aveginteoomphxapaedkingfe?*

13. *Dasaidewdsjefersjfatcdasgntde   haudgfes?Jpov?*

5.1.4 Marginalised groups, poverty, gender, inclusivity

14. *Hw ds (d) he ae aontfpnsxgednigdsgsand*
idnss ise? [Please elaborate, considering issues of energy justice, disadvantaged groups in North and South, access to affordable energy and inequalities in terms of climate vulnerability (e.g. rural/remote locations)][4].

15. *In wih way do he ats in he cae see hrnsks as*

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[4] Some examples of inclusion of marginal groups are: Reduced membership fees, lower share of prices for vulnerable groups; targeted information and engagement activities; member diversity; energy efficiency services targeted at vulnerable groups; lower energy tariffs for vulnerable groups; knowledge about energy vulnerability, poverty, the preferences, needs and living situations of vulnerable and energy poor households; engagement with energy vulnerable and poor households; addressing energy poverty in organisational statutes (Hanke et al. 2021).

eqkodefschous?

16. *Waejnefymslenetoboneanvelotgfea?*

5.1.5 Participation in public policy-making processes:

17. *Hehetsinhecelenivkelinldongdpbeg* *goroenotby* *mligrese?fchow?*

5.2 Research topic 2: Conditioning factors and intermediation

This topic is the focus of WP4, and it forms the heart of the overall EP aim to identify conditioning factors for ENCI achievements as specified in Research Topic 1. We focus on identifying conditions that are internal to the cases[5], i.e. on conditions that can be empirically evaluated as part of these case studies.

The investigation of conditioning factors overlaps with the research focus on **intermediaries**. Collaboration between very different organisations with different mindsets and interests often requires the involvement of intermediaries who act as "in-betweeners". Intermediation can be done by individuals and organisations on a paid or unpaid, voluntary basis. Intermediation is done by the following intermediary types:

- **Commercial intermediaries** for example banks who offer a mortgage or a loan (thus connecting capital providers with those that need capital), business lawyers and consultants who are hired for assisting in deals between two parties.

- **Intermediaries created by the government,** local and regional energy agencies that manage special support programmes with loans and technical assistance.

- **Chambers of commerce, sector organisations** (e.g., REScoop), civil society umbrella organisations (for transition towns).

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5 Another set of external conditions will focus on more 'remote conditions' that relate to properties of the case contexts (e.g., properties of the national context in which a case is located). Despite being part of the QCA, those remote conditions will not be empirically investigated in the case studies but in a later stage of the project (through the task 5.2, PESTEL on national contexts).

- Other, **varied civil society organisations**, including organisations that may not have been created with the explicit aim of being intermediaries, and are not sector or umbrella organisations

- **Individuals** who talk to different actors with the aim of learning about possibilities for collective action, cooperation, partnerships, institutional change by learning about the beliefs, material interests, mandates, responsibilities, capabilities and resources of specific actors.

- Intermediation is also done via **direct encounters of people**, in special platforms and bilateral or multilateral meetings. Intermediaries can help ENCI initiatives to achieve a bigger impact and help them reach their goals/achievements.

Below we identify a set of questions that will help us to learn more about the extent to which ENCI cases are able to do intermediary work by themselves through knowledgeable, self-confident members who are trusted by others and to what extent this requires the involvement of external organisations such as intermediaries. By asking questions on the nature of intermediation in relation to ICT, business models and obtaining external funding we will learn more about the role of intermediation therein.

The central research question of this research topic is:

What role do intermediaries play and which conditions enable or hinder ENCI cases to achieve their goals?

This question will be investigated through a series of empirical questions, divided over subsections 5.2.1-5.2.6.

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6 Conditions or causal factors why ENCI cases achieve their goals and make achievements towards the democratisation of the energy system might due to: 1) intermediation, 2) certain types of business and/or social innovation models, 3) ICT-technologies, 4) relationship to government or government-like organisations, 5) modes of empowerment. Below the empirical questions are elaborated under these themes.

5.2.1 Intermediation

1   *What information is good and clear information? What is this information or ...?*

2   *What is the background and history of the intermediary ...?*

3   *What problems (what are they) does it solve (d) ...?*

5.2.2 Business and social innovation models

4   *What ... business ... social innovation models does ... suit?*

5   *How have ... models ... been able to ...?*

6   *A ... of ... the role of ... done*

7   *Feel free to ... what we can (could) work ... state? ... also ... this or similar models and ...*

5.2.3 ICT

8 *Does [the case] use ICT[10] [and if so,] how? What type of technology [and how is it used can] and why, and how?[11]*

5.2.4 Relationship to government

9. *How is the ENCI [case] supported by (regional and EU) policy [or new]?*

10. *How does [the] engagement in ENCI in the case relate to [local] governance?* Please pay particular attention to the organisational and personal ties and whether and how the actors in this case are part of, cooperate with and/or are supported by, local and regional governments.

11. *Does [the] case [provide a] service/function to the system that makes it an important or even indispensable actor in [local] energy governance?* If yes, please elaborate on this service/function and explain what makes the actor in the case indispensable.

5.2.5 Modes of empowerment

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10 Some ICT case examples: community self-consumption platforms, peer-to-peer energy trading within the community, ICT - Energy Management System, decentralising trading platform - blockchain, digital smart metering, aggregator of flexibility.

11 Examples of how an ICT technology can help cases achieve their goals can be: 1) Through dedicated algorithms on a fair allocation of value; 2) Dedicated support networks to incorporate ENCI in (new) ICT technologies; 3) Through transparent and fair rules on designing ICT technologies together with citizens and their needs; 4) Making ICT platforms user and citizen centred; 5) Increasing scale of the ICT technology by working together with citizens (or energy communities); 6) Apply real time energy prices; 7) New ways for enabling neighbourhood batteries; 8) Simplify collective-citizen energy storage systems that are not located 'behind the meter' of households.

12. *Dd h torsgg gi*   *ENCThax fe h d yn dhea tr ony*
a d q proje kt i n pn ed ie glo ht b3?

13. *D o d t h e ao s ee g gi n EN Ti n he ac ef le hj heh e ks oud*
ko ve e ge c n p ne ndie gn b3?

14. *l as dll e acxe rieo ne nfd su io n fti s dyo ud dl*   *i n pa st he oed of oi g?*

15. *Wla n n da o st d sg fir ns fo on r vni in o te ed a tdll te pe pe i n dl*

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a d e ov n m en la st gt
ad e st i n gd t o v a sd e EN T au d ra nm re js t aud stde
au gg st en?

5.2.6 Further questions

16. *W la d e (o y et mi n do e) v id e o ds we p ie rl by he oe*   *ao s su d f he n ge ro eu kd lo p m nte jo g de sl jl te a x?*

5.3 Research topic 3: Development over time

This topic addresses the important temporal nature of ENCI initiatives, i.e. that ENCI initiatives,/individuals change over time. These insights complement the relatively static mapping of ENCI cases (WP3)They also help to substantiate and deepen our conceptualisations of the various 'manifest' and 'latent' ENCI categories. For example active ENCI may have resulted from activation processes out of earlier passivity, individual ENCI may have turned into more collective ENCI (Pel et al. 2021), earlier 'frontrunners' may have evolved into other roles in the course of energy transition processes. Furthermore, ENCI initiatives may go through different phases and develop characteristics of different ENCI ideal-types. The dynamic analysis thus helps to deepen our conceptual ENCI typology.

Main research question:

How will ENCI change over time?

This question will be investigated through a series of empirical questions, divided over subsections 5.3.1-5.3.2.

5.3.1 Changing Agency, Aims and ideal-types

1. *What kind of collective agency does the case display and how is it changing over time?*

2. *Have the (confidential) aims of the case changed over time? Has the case moved from one to another, or is it still developing in this respect?*

3. *Did you need to introduce mixed ideal-types that can be aigned to the case? Did the main type and/or secondary type change over now?*

5.3.2 Changing roles and transition contexts

4. *Does the ENCI take on a different role (actor) in the energy transition? How has this role in the energy transition changed over time?*

5. *Which enabling and constraining developments does the ENCI create space for the (case)?*

6. *Would they be different in the coming years? What do you expect the case to become next?*

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Appendix: List of 42 cases (detailed along selection criteria)

Case no.	Title of case in English	Partner	Country	Main focus As in mapping survey: **Energy** (i.e. Direct energy production and/or consumption) **Mobility** **Holistic**	Special focus Disadvantaged/ Gender/ None	Criterion 1 GEN: Outcome orientation Reformative/ Transformative	Criterion 2 GEN: WP4 relevance Intermediary (INT)/ Business model (BM)/ ICT	Criterion 1 QCA: Citizen power Must be: * Low/Medium (negative) * High (positive)	Criterion 2 QCA: Typology type Must be: citizen-based and hybrid (Type7 *or* Type 8 in typology, see D2.2)	Criterion 3 QCA: Level of operation Must be: * Local *or* * Municipal *or* * Regional	Criterion 4 QCA: When did it start to operate? Must be: no later than 2020
1 - QCA	Bike Evolution	ARCFund	BG	Mobility	None	reformative	INT, ICT	medium	Type 7	municipal	2007
2 - QCA	Energy Transition of City of Burgas: Going Smart and Sustainable	ARCFund	BG	Holistic	None	reformative	INT, BM	medium	Type 7	municipal	2006
3 - QCA	Biobriquettes for the energy poor	GDI	HU	Energy	Disadvantaged	transformative	INT, BM	high	Type 8	local	2011-2015
4 - QCA	Nagypáli, the renewable energy village	GDI	HU	Holistic	None	transformative	INT, BM	high	Type 8	municipal	1997
5 - QCA	TreeDependent	GDI	HU	Holistic	None	reformative	INT, BM	medium	Type 7	regional	2011
6 - QCA	Tregor Energ'ethic	JDI	FR	Energy	none	transformative	INT (BM?)	high	Type 8	Local	2016-2020
7 - QCA	Energy Community Tipperary Cooperative ECTC	NUIG	IRL	Energy	none	transformative	INT, BM	high	Type 8	regional	2011-2015
8 - QCA	Ringsend Irishtown Sustainable Energy Community	NUIG	IRL	Holistic	none	transformative	BM	high	Type 8	local	2016-2020
9 - QCA	Galway Energy Co-operative	NUIG	IRL	Energy	none	transformative	BM	high*	Type 8	local/regional	2016-2020
10 - QCA	Solocal Energy	TUB	DE	Holistic	Disadvantaged	transformative	INT, BM	high	type 8	municipal, regional	2020
11 - QCA	LAVIDAVERDE	TUB	DE	Holistic	Disadvantaged	transformative	BM	high	type 8	local	2011
12 - QCA	Berlin Citizen Energy (BEB)	TUB	DE	Energy	None	transformative	BM, INT	high	type 8	municipal	2011
13 - QCA	GoiEner	UDC	SP	Energy	Disadvantaged	Transformative	INT, BM	high	Type 8	regional	2011-2015
14 - QCA	Couso's Project	UDC	SP	holistic	none	Reformative	BM	low	Type 7 and Type 9	regional	2011-2015
15 - QCA	La Borda. Housing cooperative in transfer of use	UDC	SP	Holistic	none	Reformative/ Transformative	BM	high	Type 7 and Type 8	local	2011-2015
16 - QCA	Installation of solar heat panels in multi-apartment buildings, with energy efficiency improvement of the building.	UL	LV	Energy	None	Reformative	BM	high	Type 7	municipal	2016-2020
17 - QCA	HOSe (hydroelectric project: enterprise + cooperatives)	ULB	BE	Energy	None	Reformative	INT, BM,	low	Type 7	regional	2016-2020
18 - QCA	Corenove	ULB	BE	Energy	None	Reformative	INT	medium	Type 7	regional	2018
19 - QCA	Weert Energy	UM	NL	Energy	None	transformative	BM/ICT	high	Type 8	municipal	2016-2020
20 - QCA	Reindonk Energy & Co: Energy from your own region	UM	NL	Energy	None	transformative	BM	high	Type 8	municipal	2016-2020
21 - QCA	The Drechtsteden cooperative	UM	NL	Energy	Disadvantaged	reformative	BM	medium	Type 7	regional	2016-2020

Case no.	Title of case in English	Partner	Country	Main focus As in mapping survey: Energy (i.e. Direct energy production and/or consumption) Mobility Holistic	Special focus Disadvantaged/ Gender/ None	Criterion 1 GEN: Outcome orientation Reformative/ Transformative	Criterion 2 GEN: WP4 relevance Intermediary (INT)/ Businessmodel (BM)/ ICT	Criterion 1 QCA: Citizen power Must be: * Low/Medium (negative) * High (positive)	Criterion 2 QCA: Typology type Must be: citizen-based and hybrid (Type 7 or Type 8 in typology, see D2.2)	Criterion 3 QCA: Level of operation Must be: * Local or * Municipal or * Regional	Criterion 4 QCA: When did it start to operate? Must be: no later than 2020
22	Student Switch Off campaigns in Bulgaria	ARCFund	BG	Energy	Disadvantaged - partially	Reformative	INT		Type 3 and Type 1	organisational	2016-2020
23	Student Energy Teams	ARCFund	BG	Energy	None	Reformative	INT		Type 1	local	2018
24	Zsuzsanna Hojtsy-Keresztény - EnergyNeighbourhoods energy master, local change maker	GDI	HU	Holistic	None	Transformative	N/A		Type 8 and Type 2	local	2011-2015
25	Cargonomia	GDI	HU	Holistic	Gender - partially	Transformative	INT, BM		Type 8 and Type 10	local, regional	2021
26	Community Energy Service Company	GDI	HU	Energy	None	Transformative	INT, BM		Type 8	local, regional	2021
27	Energie Partagée	JDI	FR	Energy	Disadvantaged	Transformattive	INT		Type 8 and type 10	National (but also regional and local)	2006-2010
28	Railcoop	JDI	FR	Mobility	Disadvantaged	Transformative	BM		Type 8 and type 10	National	2016-2020
29	Hauts de France Pass Renovation	JDI	FR	Energy	None	Reformative	INT		Type 1 and Type 9 (does not fit perfectly)	Regional	2011-2015
30	Citizens' Assembly on "How the state can make Ireland a leader in tackling climate change"	NUIG	IRL	Holistic	Disadvantaged	Reformative	INT		Type 5	national	2016-2020
31	Public Consultation: Shaping Our Electricity Future	NUIG	IRL	Energy	None	Reformative	ICT		Type 5	national	2021
32	NATURSTROM AG	TUB	DE	Energy	none	Transformative	INT/BM		Type 8 and Type 4	National	1998
33	Holger Laudeley	TUB	DE	Energy	none	Transformative	INT/BM		Type 4	Individual and household / organisational / regional / national	Earlier than 1992
34	Federal Association of Citizens' Initiatives against SuedLink	TUB	DE	holistic	none	Transformative	INT		Type 10	regional / national	2011-2015
35	SomEnergia	UDC	SP	Energy	none	Transformative	INT, BM		Type 8	National	2011-2015
36	Association "city for people"	UL	LV	Mobility	None	Transformative	ICT		Type 10	Regional	2016-2020
37	OFF-GRID: Renewable energy DIY (do it yourself) for rural development	UL	LV	Energy	Partially	Reformative	BM		Type 1	local	2016-2020
38	Edgars Fresh	UL	LV	Holistic	None	Transformative	N/A		Type 6	National	2016-2020
39	Jeasy	ULB	BE	Mobility	None	Reformative	ICT		Type 1	regional	2016-2020
40	Michel Huart	ULB	BE	Energy	None	Reformative/	INT		Type 3	local	2016-2020
41	Loenen Energy - community virtual power plant (cVPP)	UM	NL	Energy	Disadvantaged	Transformative	BM/ICT		Type 8	Local/Regional but also multi-country	2016-2020
42	National Association of Active Residents - Landelijk Samenwerkingsverband Actieve bewoners (LSA)	UM	NL	Holistic	Disadvantaged and gender	Transformative	INT		Type 10 and Type 8	National but also local and neighborhood level	2016-2020