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Summary

This deliverable integrates the proceedings of the four regional workshops undertaken in WP2 of the EnergyPROSPECTS research project. This work (Task 2.3) complements and builds on the EnergyPROSPECTS conceptual framework (Task 2.1) and development of conceptual typology (Task 2.2) with a transdisciplinary elaboration, deepening the conceptual development in different regional perspectives on the energy citizenship concept.

Within this deliverable we examine how energy citizenship, and the associated normative ideals of ‘active’ energy citizenship, has developed and continues to develop differently across European contexts. We report the results from four (local language) one-day regional workshops, hosted in Spain, Belgium, Germany, Hungary – building on the geographical diversity contained in the consortium. Each workshop was limited to about 10 participants to facilitate in-depth exchange. During these workshops our typology development was strengthened and our theorised ideal-types were validated, critically discussed and refined through experts/practitioners (NGOs, governmental organizations, researchers, activists, entrepreneurs with existing knowledge of the social-political particularities of the local context).

The conclusions include observations on amongst others relevant contextual factors, alternative classifications and underspecified dimensions of our ENCI conceptualization. In addition to this report, the workshop proceedings will also be communicated through a series of blogs on the EnergyPROSPECTS website.

1 Introduction

This deliverable presents the results of a series of workshops, held in Belgium, Spain, Germany and Hungary between December 2021 and February 2022. This is a transdisciplinary deepening of the conceptual development on energy citizenship. ENCI, and the associated normative ideals of energy democracy, has developed and continues to develop differently across European regions. The workshop results have substantiated and detailed this starting assumption.

The workshops explored the forms of ENCI as they have developed in particular social-institutional contexts. That is to say: Certain forms of ENCI have become prominent across Europe, and they have started to dominate the public imagination of what ENCI is – the 'smart' energy citizen, the member of an energy cooperative, the energy prosumer, or the activist citizen. Yet beyond these generic figures and widespread imaginaries there is a broader range of energy citizenship – we have distinguished 10 ideal-types. Certain forms of ENCI may be common in Germany, yet hardly existing in Hungary. And there may be forms, types and aspects of ENCI that are just very specific to regions like Wallonia (Belgium) or Galicia (Spain).

The deliverable is structured as follows. First, we describe the general approach to the workshops, discussing the key theoretical and methodological considerations (**Chapter 2**). Next, we present the set-up and the results from the separate workshops in Belgium (**Chapter 3**), Spain (**Chapter 4**), Germany (**Chapter 5**) and Hungary (**Chapter 6**). We conclude with brief summary conclusions and implications for further research activities (**Chapter 7**).

2 Translating energy citizenship: Approach

2.0 Introduction

ENCI is not one and the same thing across contexts (Cf. Pel et al. 2021). In the following subsections we first briefly describe the theoretical-methodological considerations (2.1) and the policy context (2.2) informing the workshops. Next, we specify the workshop concept (2.3) and, in more operational terms, the format (2.4).

2.1 Theoretical and methodological considerations

Why 'translation'? Energy citizenship is an English-language concept for which no 100% equivalents exist across the various languages in the EU. Translation is needed if the concept is to be meaningful across the EU. This is not only a semantic matter. As indicated in innovation sociology and interpretive policy analysis literature, policy concepts and imaginaries do not simply diffuse. They need to be locally fit in, appropriated, made relevant, combined with other concepts, translated from English into local language. In the course of the 'travels of ideas' (like ENCI), these ideas materialise in objects, inspire actions, which in turn generate new ideas (Czarniawska & Sevón 2012). Insights on policy transfer – and ENCI is an emerging policy concept – emphasise that such transfer always implies a certain adaptation and translation to the local context.

Translations and actors: In Pel et al. (2021:64) we define ENCI as follows: "Energy citizenship refers to forms of civic involvement that pertain to the development of a more sustainable and democratic energy system. Beyond its manifest forms, ENCI also comprises various latent forms: it is an ideal that can be lived up to and realised to varying degrees, according to different framework conditions and states of empowerment." This definition reflects the awareness that ENCI is a co-produced set of political ideals, of which different variations and translations can be distinguished: The formulation of ENCI was itself a purposive translation: Academics like Devine-Wright coined the term as a deliberate recasting of the 'deficient publics'. Likewise we can

distinguish various ENCI translations in governmental and non-governmental circles, and there more radical and more conventional-reformist understandings of what it is and should be. The variety of translations also speaks from the wide range of visual cultural expressions that exists on the topic. Taken together, this indicates that the meaning of ENCI is shaped by a wide range of actors from different institutional backgrounds– and EnergyPROSPECTS is one of the actors shaping the understanding of what ENCI means and comprises.

Translations and ideal-types: In Debourdeau et al. (2021) we distinguish 10 ideal-types of ENCI. This discloses in a conceptually systematic way what kinds of ENCI translations can be distinguished, and which characteristic features are making these differences.

Translations and contexts: The conceptual distinction of ideal-types gives rise to a range of further questions about their empirical relevance, and about their pertinence to certain contexts. Certain forms and ideal-types of ENCI have become prominent *across Europe*, and they have started to dominate the public imagination of what ENCI is – the 'smart' energy citizen, the member of an energy cooperative, the energy prosumer, or the activist citizen. Yet beyond these generic figures and widespread imaginaries there must also be under-exposed, relatively latent (Cf. Pel et al. 2021) sides of energy citizenship. Certain forms (or ideal-types) of ENCI may be common in Germany, yet hardly existing in Hungary, and vice versa. Certain similarities may nevertheless come up, at least between the metropolitan regions of Budapest and Berlin. And there may be forms, types and aspects of ENCI that are just very specific to more rural regions like Wallonia (Belgium) or Galicia (Spain).

2.2 Policy context: Between EU discourse and regional contexts

Translation is clearly not just an academic matter of attention to regional detail. It is crucial to understand the local translation dynamics in order to develop implementable plans for ENCI and to couch ENCI principles in pre-existing forms of citizenship and energy practices. Most importantly, sensitivity to local translation is becoming an acute

concern as the European energy transition is at risk of creating a politically, economically, technologically and socially divided Europe ‘at two speeds’.

The series of ‘regional translation’ workshops served to capture a reasonable diversity of social-political contexts. The four workshops in Belgium, Spain, Germany and Hungary comprise a certain diversity of Northern, Central-Eastern and Southern European countries, and greater and smaller member states.

2.3 ENCI translation workshops: Approach

The workshops were established to consider how factors of local context are conducive to, or rule out, certain forms of ENCI. Beyond the two first phases of academic-theoretical, conceptual work (Cf. section 2.1), this is a transdisciplinary exercise of empirically concrete exploration. The approach adopted for these workshops is as follows:

Validation of ENCI typology: The key objective of the workshops is to validate the ENCI typology developed in Debourdeau et al. (2021). This implies **verification** of universality (*are the ideal-types recognizable to actors across EU regions?*), **falsification** (*are there persistent ‘empty cells’ in the typology for which even no remote empirical examples can be found?*), **underpinning** (*which are the social, political, economic and geographical factors that are conducive to the emergence of certain ideal-types?*) and **refinement** (*which under-theorized sub-categories and types have been observed by workshop participants?*).

Explorative approach. The validation of the conceptual typology will only be successful if workshop participants are permitted to provide authentic insights on ENCI in their regions. The conceptual work of this work package easily leads to imposed categorisations and overly abstract, conceptual discussions. Such discussions will not validate the conceptual typology, but rather repeat the exercise. The ideal-types are therefore used to structure and give focus to the workshops. The workshops seize the capacity of typologies to open up discussions, and to systematically explore a broader ‘property space’ beyond the stock examples. As indicated in the workshop format

presented below, the ideal-types are not introduced upfront, rather they are discussed at a later stage in the process.

Comparison. Apart from the common focus on the ENCI typology, the workshops were roughly comparable in the composition of the group of participants, and in reporting of workshop results. This common ground helps to disclose the differences between contextual translations of ENCI. Meanwhile, workshops were organized by different project partners in different contexts. These specifics will be registered in the respective chapters on the four workshops. The table below highlights how the workshop series involves certain local choices whilst maintaining a common focus – the ENCI typology.

EU country	region
Belgium	Wallonia
Spain	Galicia
Germany	Whole of Germany
Hungary	Whole of Hungary

Table 2.1: ENCI translation workshops (scope)

Empirical concreteness and ‘sense of place’: The workshops aim to complement the conceptual work of WP2. The typology serves to explore how ENCI manifests in different regions. Our conceptual categories will be deepened through a sense of the contextual social, cultural, economic and geographical conditions that give rise to certain forms of ENCI. It is therefore important to generate concrete insights on ENCI in these contexts. Workshop organisers have therefore aimed for empirically concrete discussions, rather than theoretical-conceptual debates.

Participants: The workshops strove to develop a concrete analysis that is informed by the experiences of people with strong roots in the indicated areas. Other than the international expert workshop that will be organized mid 2022, these workshops explored ENCI with mainly non-academic ENCI experts and practitioners. Participants were invited from NGOs, governmental organisations, enterprises, knowledge institutes and various intermediary institutions. Workshops were limited to about 6-10 participants, to facilitate in-depth exchange and active participation.

Mode of interaction: The basic principle is to collectively explore regional ENCI particularities, and to disclose as much of the local particularities as possible. Workshop organizers tried to play modest facilitating roles, and we insisted on an easy to follow workshop procedure. It seems desirable to alternate between plenary discussion and individual/duo work, and provide for an introduction round that helps to make participants acquainted with the program and with each other.

Duration: The workshops were limited to a program of 3 hours. This allows participants to spend only half a working day on it. Despite planning for a face-to-face-meeting, in light of the evolving COVID situation we had to adapt to an online/hybrid meeting model. This underlined the need to limit the duration to 3 hours.

2.4 ENCI translation workshops: Format

The workshops followed the following format (see Annexes for more details, presentation slides etc).

Workshop process (3h)

1. Introduction (*approx. 30 min*)
 - a. Welcome & introduction round: name, organisation, role (*10 min*)
 - b. **Tour-de-table:** What is energy citizenship for you? What (regional) examples do you have in mind? (support: post-its) (*20 min*)
2. Presentation of our definition of ENCI, the agency matrix and the objectives of the workshop, including reference to the other workshops/regions (*15 min*)
3. Sorting ENCI Examples in the agency matrix (*45min*)
 - a. **Individual round:** putting the identified ENCI examples in the agency matrix + thinking of examples for the forms not yet covered (support: agency matrix on a large sheet (one per duo) + post-its) (*30 min*)
 - b. **Plenary round:** Presentation and discussion of the sorting made by each duo (*15 min*)
4. Break (15 min)
5. Sorting ENCI Examples in the reformative-transformative matrix (*45 min*)
 - a. **Individual round:** putting the identified ENCI examples in the reformative-

transformative matrix (support: full typology matrix on a large sheet (one per duo) + post-its) *(30 min)*

- b. **Plenary round:** Presentation and discussion of the of sorting made by each duo (15 min)
6. Plenary discussion *(30 min)*
- a. Which types are most frequently found? What are the regional factors facilitating the occurrence of these types?
 - b. Which types are rarely or not found? What are the regional factors hindering the occurrence of these types?
 - c. Were some examples difficult or not classifiable in the typology ? Why?

3 Translating ENCI: Belgium/Wallonia

The four 'regional translation' workshops are configured as a coherent series. Sharing a common workshop set-up, however they have their own particularities. In the following sections we briefly describe some particular features of the ENCI context (section 3.1) and the workshop (section 3.2), before presenting key findings (section 3.3).

3.1 Description of ENCI context

What are the main characteristics of the region?

Wallonia is one of the three regions that make up Belgium, the other two regions being Flanders and the Brussels-Capital Region. Located in the south of the country, the Walloon Region covers an area of 16 901 km², which equates to 55.1% of the national territory (IWEPS, 2021).

Wallonia is **the least densely populated Belgian region**. With 3 648 206 inhabitants registered on 1 January 2021, it has a population density equivalent to 215,9 inhabitants/km², which corresponds to 31,7% of the Belgian population. As shown in the map below, these inhabitants are not evenly distributed in Walloon territory (Figure 1). The northern part of the territory which includes the main Walloon cities is much more populated than the South. Wallonia comprises seven urban regions (including part of the Brussels urban region) in which 49.1% of the population lived on January 1, 2021 (IWEPS, 2021).

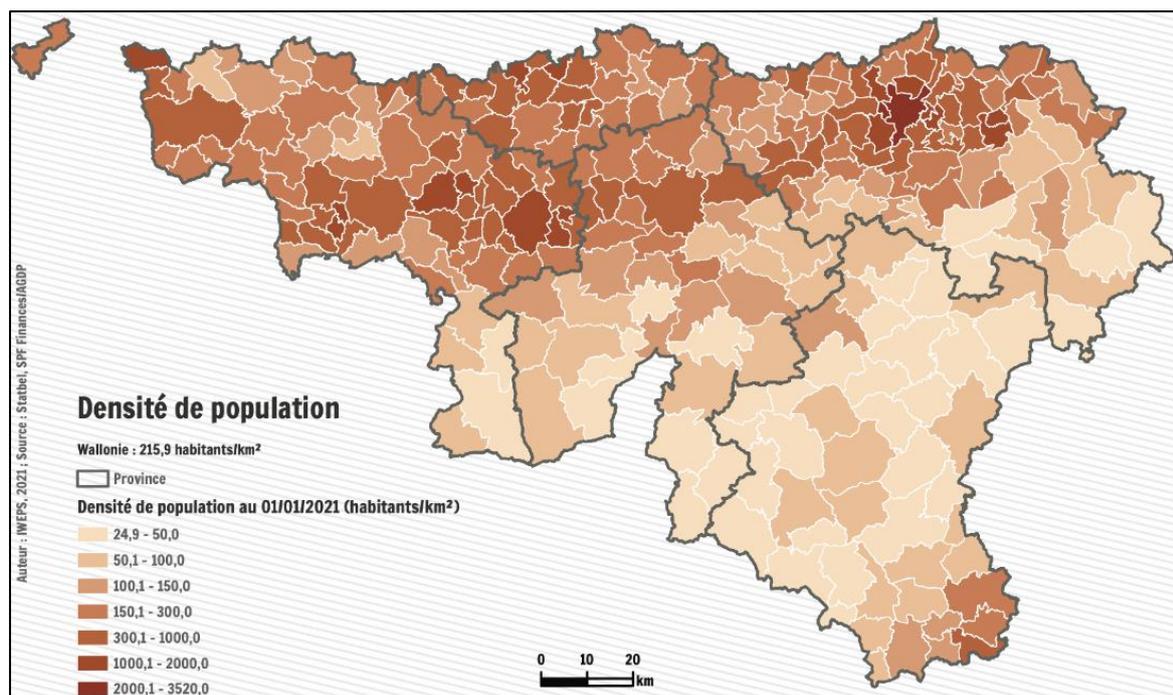


Figure 3.1: Population densities by commune Wallonia (IWEPS 2021:11)

At the economic level, Walloon GDP amounted to 23% of the national GDP in 2019. While industrial activity, and especially heavy industry, was particularly developed in Wallonia, the tertiarization of the economy and the crisis of 2008 which caused the closure of the hot phase sites of the steel industry led to a decline in the contribution of this sector of activity to the total economy. In 2018, the share of industry in GDP was 23% of GDP, while that of services was 76% (IWEPS, 2021).

As a result of its social system, Wallonia has low income inequalities (Gini coefficient of 0,246) in comparison with the European average. However, poverty in the region is particularly marked compared to other European regions. The material and social deprivation rate and the severe material deprivation rate of the region amount to 15.8% and 6.8% respectively (IWEPS, 2021).

What is its administrative status?

In the Belgian federal state, the regions (Wallonia, Flanders and Brussels) constitute federated entities, just like the three communities (Flemish, French and German). A specificity of Belgian federalism is the absence of hierarchy between the federal state,

the regions and the communities. In addition, the competences are divided on an exclusive basis between the three political-administrative levels. Therefore, a given competence can only be exercised by a single entity.

In Belgium, the power and the competences of the federated entities are relatively broad and the Sixth state reform, which has been implemented between 2011 and 2014, provided for the transfer of additional competences from the federal state to the regions and communities. As illustrated in the table below (table 2), a large part of the competences in energy policy are held by the regions, the federal state being responsible for matters whose technical and economic indivisibility requires equal treatment at the national level (Service federal Climat, 2021). Except for education, the communities have no political levers to develop energy policies.

Federal State	Regions
<ul style="list-style-type: none"> • Energy foresight • Nuclear fuel cycle • Energy production, including offshore • Major infrastructures of production and storage of energy • Transport of energy • Policy regarding final prices of energy for the consumer • Energy efficiency of federal buildings • Aspects of taxation 	<ul style="list-style-type: none"> • Distribution and local transport of electricity through networks with a nominal voltage of 70,000 volts or less • Rational use of energy • Distribution rates (gas and electricity) • Public distribution of gas • Use of firedamp and blast furnace gas • Distance heat distribution networks • Valorisation of slag heaps • New sources of energy with the exception of those related to nuclear energy • Energy recovery by industries and

	other users <ul style="list-style-type: none"> • Rational use of energy
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Table 3.2: Competences energy policy in Belgium (adapted from Climat.be, 2021)

At the middle and lowest political-administrative levels, we find respectively the provinces and the communes, which are under the supervision of the higher authorities, depending on the powers exercised. The Walloon region is made up of 5 provinces and 262 communes.

What are the specificities of its energy system?

Wallonia is one of the regions of Europe which is committed to the energy transition. The region has adopted the objective of achieving a reduction in GHG emissions of -55% by 2030 (compared to 1990) and carbon neutrality by 2050 at the latest.

Although nuclear and fossil fuels (petroleum and natural gas) still constitute a significant share of gross final energy consumption, the share of renewable energies increased from 4% to 12,4% between 2005 and 2019 (IWEPS, 2021). The share of renewable energies in gross final energy consumption in Wallonia is above the national average (9,9% in 2019), but remains below the European average (19,7% in 2019) (Eurostat, 2020a). Renewable energies represented 5% of final energy consumption and 15.7% of net electricity production in 2018. The main sources of renewable energy in Wallonia are wind power and biomass, followed by photovoltaics (IWEPS, 2021).

Regarding the consumption per sector, the most energy intensive sectors are industry, transport and housing, which contribute respectively to 34%, 29% et 26% of the final energy consumption in 2018 (IWEPS, 2021). Compared to European average (63,6% of energy consumption in households according to Eurostat (2020b)), Citizens’ energy consumption for space heating is particularly high in Belgium, and by extension in Wallonia (74% of energy consumption in households according to SPF Economie, 2019). This can be associated to the high proportion of old buildings with a low level of energy performance in the Walloon building stock.

A problem linked to the low level of energy performance of buildings and which strongly affects Wallonia is that of energy poverty. Energy poverty in Wallonia amounted to 28.3% in 2019, a percentage well above the national average of 20.7%. Besides the low energy performance level of the housing stock, other factors contribute to explaining the greater vulnerability of Wallon citizens to energy poverty, namely the higher size of housing, the higher price of natural gas and the lower level of income of the population (Fondation Roi Baudouin, 2021).

What is the translation of ENCI in this context?

In French, the main language spoken in Wallonia, energy citizenship translates as "citoyenneté énergétique". This term is however hardly used.

3.2 Particularities of workshop set-up

Regional focus: Wallonia, as a rural context facing important energy poverty issues

Language: French

Budget: Non applicable

Date: Friday December 3rd, 13.00-16.00H

Place/accommodation: Online (Teams)

Participants:

Name	Role	Organisation
Fabrice Collignon	Coordinator	Rescoop Wallonie
Françoise Marchal	Climate policy expert	AWAC
Grégoire Wallenborn	Researcher	ULB
Jean Tafforeau	Member of the board of directors	Champs d'Énergie
Julien Juprelle	Energy scientific attaché	IWEPS
Michel Huart	Professor	ULB
Nathalie Arnould	Energypolicy expert	Département Énergie du SPW
Sarah Delvaux	Researcher	ULiège

Yves Storder	Administrator	Lucéole
Aurore Fransolet	Organizer/facilitator	EnergyPROSPECT-ULB
Bonno Pel	Organizer/facilitator	EnergyPROSPECT-ULB

Table 3.3: Participants in the Walloon workshop

3.3 Key findings

Understanding 'energy citizenship'

The discussions held during the workshop highlighted many facets of this very broad ENCI concept. Even if it is hardly used in Wallonia, the participants all had an idea of what it could cover. In response to asking them what "energy citizenship" evoked to them, the workshop participants mentioned very varied aspects, which we have clustered into three main themes: **1) The acting citizen**, **2) Energy literacy and awareness**, and **3) Sustainable, just, and democratic energy transition**. The Figure below provides a representation of the translations of ENCI in Wallonia assigning a specific colour for each theme (Figure 4.4).



Figure 3.4: Translations of ENCI in Wallonia

1. The acting citizen: For many participants, “energy citizenship” involved a paradigm shift in the role of the citizen who is no longer “*just a consumer*” or an “*EAN code on the*

electricity network", but "*an actor in the same way as the other political and economic actors in society*". For them, the citizen is an actor at two levels: a) in the production, transformation, and consumption of energy, and 2) in the policy- and decision-making processes on energy issues. In this sense, the citizen is seen as an actor in energy transition. A participant explained that energy transition is no longer "*an (exclusive) matter of energy professionals like Engie or others*", citizens being equally "*capable to develop wind farms or other alternative energy sources*". Concomitant with this idea of "*actor citizen*", are that of "*(active) participation*", "*re-involvement*", "*reappropriation*" and the "*taking control*" of citizens.

2. Energy literacy and awareness: Some participants underlined that a knowledge and understanding of energy issues, but also an awareness of individual consumption practices, are a prerequisite for citizens' active roles in the energy transition. One participant explained that with "*information*" and a better "*understanding of the situation*", the citizen "*can intervene better and better play his role as an actor*". He emphasised the importance of the "*search for knowledge*" – which again evokes this idea of citizen as a resourceful agent rather than passive receiver of information –, but also of the "*education*" given to the next generations. In the same vein, another participant mentioned the necessity to "*increase the level of knowledge*" of citizens "*so that they can better manage their energy needs, energy savings...*".

3. Sustainable, just, and democratic energy transition: Several participants consider energy citizenship as a component of a transition towards a more sustainable, just, and democratic energy system. Energy citizenship is seen as a part of the sustainability transition in that it "*aims to create new economic models, new ways of living together compatible with a sustainable future for the generations to come*". More specifically, a participant mentioned the role of energy citizenship in facing "*energy and climate challenges*". Some participants also evoked the social objective of energy citizenship, namely, to promote "*equity*", "*justice*", "*social links*" and "*social cohesion*", and to reduce energy poverty. A participant explained that "*it is about escaping from the dominant techno-economic model, and from the market to focus on all the social aspects, (...)*"

[including] *the question of fuel poverty which is behind it*". Finally, energy citizenship is seen as a component of a transition aimed at moving from a representative democracy "*where people can vote for their supplier*" to a participatory democracy. In connection with the idea of democratic transition, some participants mentioned those of "*democratic governance*" and "*transparency*". ENCI is thus seen at the crossroad of multiple intertwined transitions.

Identification of regional examples of energy citizenship

Twenty-six examples of energy citizenship were identified during the Walloon workshop:

1. Public inquiries concerning the Walloon Climate Energy Plan (PWEC)
2. Call for Projects "Éner'Jeunes"
3. Walloon Climate Citizen Panel
4. Artistic communication of the visions of societal poles during the Walloon Climate Citizen Panel
5. Wind farm project of the "Champ d'énergie" cooperative
6. Photovoltaic and biomass energy development projects of the "Champ d'énergie" cooperative
7. Awareness-raising actions in the schools of the "Champ d'énergie" cooperative
8. Support of the "CORENOV" cooperative to citizens in the energy renovation of housing
9. Support of the "CooPERLIC" cooperative to citizens in the installation of photovoltaic panels
10. "COLECO" collective self-consumption project
11. Wind energy development projects of the "LUCOLE" cooperative
12. Hydroelectricity production project of the "HOSe" cooperative
13. Consultation of citizens concerning wind energy projects
14. Groups active against the development of alternative energies
15. Communal advisory commission on energy
16. Actions of the "Fin du nucléaire" movement for the closure of nuclear power plants
17. Actions of the "Dégaze" movement against the installation of gas-fired power

plants

18. "Ecowatcher" module
19. Citizen energy supplier "COCITER"
20. Citizen participation in the definition of social cohesion and its ramifications in terms of energy and housing
21. Local Rural Development Commission
22. Hydraulic cooperative "Waatardenne"
23. Energy cooperative "COZEOP"
24. Calls for projects of citizen mobilization as part of municipal action plans
25. Participation of citizens in the development and implementation of municipal action plans
26. Local action plans POLLEC ("Politique locale énergie climat")

The exercise of identifying concrete examples revealed that participants' understanding of ENCI was generally tied to the empowered, informed and initiative-taking citizens and organizations. The passive, disempowered, and perhaps less enlightened forms of ENCI were rather absent in the discussions, except for the various initiatives to empower disadvantaged citizens (ex.: "Ecowatcher" module). ENCI tended to be equated indeed with what we described as the 'manifest' forms of ENCI: The energy cooperatives, the energy communities and the energy activism movements.

It is also interesting to point the **over-representation of collective actions** (ex.: energy cooperatives, energy communities...), **and to a lesser extent, of actions of individuals in the public sphere**. In contrast, actions of individuals in households or in organizations were under-represented. This imbalance could however be partly explained by the over-representation of members of cooperatives and public administrations among the participants in this workshop.

Classification of examples according to the type of agency

The table below shows how participants classified the regional examples of energy citizenship according to the type of agency (Table 3.5). As mentioned in the previous section, a large part of the identified examples could be classified¹ as collective citizen-based and hybrid forms of ENCI and as forms of ENCI involving individuals in the public sphere. Some participants made this observation during the workshop: "*Many of the cases mentioned are hybrid collective cases; it is quite striking.*" or "*I basically had two categories: Hybrid Collective and Public Individual; very little of the rest*".

Interestingly, we noted that the introduction of the agency matrix allowed to broaden the participants' idea of what the concept of ENCI could cover and encouraged them to identify additional examples for the under-represented forms of ENCI: "*Perhaps we have forgotten in the cases that we give that putting photovoltaics on your roof could be an individual action within the household, but also all the questions of sobriety, of sufficiency would also be that order, just like individual flexibility.*"

Individual			Collective	
Private households	Organisationally embedded	Public	Citizen-based and Hybrid	Social movements
<ul style="list-style-type: none"> ● Installation of photovoltaic panels ● Sobriety / energy sufficiency ● Individual flexibility 	<ul style="list-style-type: none"> ● Awareness-raising actions in the schools of the "Champ d'énergie" cooperative ● Awareness-raising actions in the schools 	<ul style="list-style-type: none"> ● Public inquiries concerning the Walloon Climate Energy Plan (PWEC) ● Walloon climate 	<ul style="list-style-type: none"> ● Call for projects « Ener'Jeunes »⁴ ● Wind farm project of the "Champ d'énergie" cooperative ● Photovoltaic 	<ul style="list-style-type: none"> ● Actions of the "Fin du nucléaire" movement for the closure of nuclear power plants ● Actions of the "Dégaze"

¹ Additional examples that were not identified in the previous step are shown in italics. The examples shown in red are those that were subject to disagreement as to their classification.

⁴ A participant categorized this example as "individual within organizations."

	<p>of the “ASBL Hypothèse” cooperative</p> <ul style="list-style-type: none"> ● Awareness-raising actions in the schools of the “Vent d’Houyet” cooperative (children’s wind turbine) ● Actions taken by church factories (“fabriques d’églises”) to reduce energy consumption within the church 	<p>citizen panel</p> <ul style="list-style-type: none"> ● Artistic communication of the visions of societal poles during the Walloon Climate Citizen Panel)² ● Consultation of citizens concerning wind energy projects ● Local Rural Development Commission ● Local action plans POLLEC (“Politique locale énergie climat”)³ 	<p>and biomass energy development projects of the “Champ d’énergie” cooperative</p> <ul style="list-style-type: none"> ● Support of the “CORENOV” cooperative to citizens in the energy renovation of housing ● Support of the “CooPERLIC” cooperative to citizens in the installation of photovoltaic panels ● “COLECO” collective self-consumption project ● Wind energy development 	<p>movement against the installation of gas-fired power plants</p> <ul style="list-style-type: none"> ● Actions of the “<i>Youth for the Climate</i>” movement
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² One participant categorized this example as “collective Social movements”.

³One participant categorized this example as a “collective Hybrid”.

			<p>projects of the “LUCEOLE” cooperative</p> <ul style="list-style-type: none"> ● Hydroelectricity production project of the “HOSe” cooperative ● Ecowatcher Module ● Citizen energy supplier “COCITER” ● Offshore wind turbine installation project of Rescoop member cooperatives (based on a request from the federal government) 	
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Table 3.5: Classification of the Walloon ENCI examples according to the type of agency.

Regarding the process of classification of examples according to the type of agency, we observed that some participants experienced difficulties in carrying out this exercise. For them, **the distinction between individual and collective is not self-evident**. They explained that for a given ENCI example, some citizens may act as individuals, and

others as members of a collective.: *"In a cooperative, (...) are we an individual or a collective? When you look at people in a cooperative, some are really in a collective, others are just individuals who have invested their money."* To distinguish between collective and individual initiatives, one participant suggested to ask the following question: *"Can the action do without the collective or not? Would it take place without the collective?"*

This ambiguity on how to distinguish between collective and individual ENCI led to disagreements between participants regarding the classification of three examples: Artistic communication of the visions of societal poles during the Walloon Climate Citizen Panel), Local action plans POLLEC ("Politique locale énergie climat") and Call for projects « Ener'Jeunes ».

Classification according to 'reformative'/'transformative'

The classification of examples according to their "reformative" or "transformative" proved to be more difficult for the participants than the classification of examples according to the type of agency. Defining whether an example of energy citizenship is reformative or transformative was indeed even less obvious for some participants. As shown below, for a given ENCI example, some citizens may be in a reformative perspective, and others in a transformative perspective.

Considering that they have fundamentally transformed society by changing the perception of the role of the citizen in society, a participant classified the energy cooperatives as transformative. He explained that *"Companies like Electrabel-ENGIE and other provincial economic development companies like IDELUX said loud and clear when "LUCEOLE" was established that a citizen and even a group of citizens is unable to develop wind farms or other alternative energy sources: "Only companies like us are capable of doing this" said Electrabel-ENGIE. The revolution was to show that the informed, competent citizen can also intervene and revolutionize this public approach. For me, it's a transformation (...) It's not just LUCEOLE, there are others: the Enerjeune project, "Champs d'énergie", "Waatardenne" (...) It's a way of saying "yes, the citizen is capable of doing remarkable things", and that, the public was not used to hearing. For me, it's really transformative of a society"*.

Another participant who shared this point of view nevertheless wanted to qualify it by making a distinction between frontrunners and followers, considering that the former tended to be more transformative than the latter: *“We see a certain transformation between the avant-gardists, the innovators who launched the cooperatives, the first involved who did so for the new economic model: citizen reappropriation. And we see that from a certain moment, cooperatives can attract people who are looking for a more attractive alternative to their investment. And so, we can have people who stay completely in the system and simply see an investment that is better because there is a green part in it and a citizen part, but who remain fundamentally in an investment and not a citizen reappropriation. We also see that there are facade cooperatives that exist and which only offer an investor part and not an active citizen part. (...) “Vent d’Houyet” can be considered transformative, because it was one of the first projects to show that citizens could invest... it was really the very first ones to inspire others....”*

For many other examples of energy citizenship, it is much more difficult for the participants to evaluate the effects, because these are not yet palpable. Such evaluation is based on participants' visions of the future, expectations and hopes:

“I think it [ndlr.: Citizen energy supplier “**COCITER**”] is really transformative because it's about connecting cooperatives and taking it up a level. It is potentially, even if it remains quite marginal in the volumes of energy on the market, but it can completely change the idea we have of the procurement and supply of energy”.

“There is the “Dégaze” movement, because it asks questions: Beyond simply saying that we don't need power stations, which means accepting fairly strong forms of energy sufficiency in this case. (...) it will depend on their intensity, and it is difficult at this stage to know if it will be strong or weak. (...) There is a transformative potential if we set sufficiently high standards of sufficiency and which will correspond to the energy taming we will be able to have with renewables.”

“There is energy sobriety/sufficiency. (...) We talk a lot about renewable production, but I think that without individual action in terms of sobriety, we will never achieve

anything. And so, for me, it is potentially a radical change that could ultimately bring about the expected effects.”

“I may be getting ahead of myself, but I hope it [ndlr.: The **citizen panel**] will have transformative results, if only in terms of democracy and the seriousness with which citizens can take their opinion, the way they make their choice, once they decide to invest in a subject.”

Factors influencing ENCI development in Wallonia

Due to lack of time, the factors influencing the development of ENCI in Wallonia were not discussed in depth. A few factors were however mentioned, starting with the **Walloon Reference framework for the installation of wind turbines**. This framework, which includes since the beginning of the 2000s an obligation of municipal or citizen financial participation in the development of wind projects, has been identified as one of the factors that has favoured the deployment of wind cooperatives in Wallonia: *“For me, that's one of the elements that should be part of the examples as a transformer, because that's what, for me, was an ingredient in the development of wind cooperatives in Wallonia”*. While some see this framework as a factor that favoured the development of ENCI, several participants nevertheless believe that it should be reviewed, particularly to address the refusal of certain municipalities to deploy wind power: *“There are plenty of municipalities that still refuse to deploy wind power on their territory and since there is no regional framework, it's complicated, there are blockages too”*.

According to several participants, a second hindering factor in Wallonia is the **social fracture**. It remains difficult to involve disadvantaged households in the energy transition: *“I have the impression that the framework for deploying the energy transition is centred on the means of production with people who have the means. There is little redistribution, we get the money where it is and sometimes there is a lack of solidarity mechanisms. There is a real risk today, especially with energy communities, that it is the richest who benefit from it, and therefore that we widen social inequalities even further.”*

Another factor identified by several participants as an obstacle to development of energy communities is the **resistance of actors of the centralized energy system**: *“the*

prospects are not very clear and, in any case, not very encouraging, because we are affecting the prerogatives of the network managers and there is very strong resistance on their part to opening the floodgates to allow citizens to self-organize as a community of energy.” In the same vein, a participant evokes the inertia related to the current centralized system: “*there is an inertia linked to the current centralized system which also has its flaws and the remnants of monopoly and other, and which in themselves are also fixed towards a modification of the current consumption and production system”* .

Finally, the **Clean Energy Package and the energy community policies being developed at EU level** are identified as factors that could potentially promote ENCI in Wallonia.

4 Translating ENCI: Galicia/Spain

Focussing on the 'regional translation' workshop conducted in Galicia in Spain this chapter briefly describes some particular features of the ENCI context (**section 4.1**) and the workshop (**section 4.2**), before presenting key findings (**section 4.3**).

4.1 Description of ENCI context

What are the main characteristics of the region?

Galicia is one of the seventeen autonomous communities that make up Spain. Located in the northwest of the country, the Galician Authonomy covers an area of 29.574 km², characterised by its high rate of demographic dispersion and an aging population, which, together with a high number of towns, means that 50% of the population centers in Spain are located in Galicia, occupying only 5.8% of the total surface area (INE, 2021). The organisation of the population is substantially different from that of the rest of Spain, with the exception of Asturias. With 2.691.213 inhabitants registered on 1 January 2022, it has a population density equivalent to 92.35 inhabitants/km², that is similar (but lower) to the density of population in Spain.

As shown in the map below, inhabitants are not evenly distributed in Galician territory (Figure 4.1). The greatest concentration of population in Galicia can be found in coastal areas, with the areas of Rías Bajas and the Gulf of Ártabro (metropolitan areas of La Coruña and Ferrol) being the most densely populated. According to the National Statistical Office (INE, 2021), Vigo is the municipality with the highest number of inhabitants in the entire autonomous community.

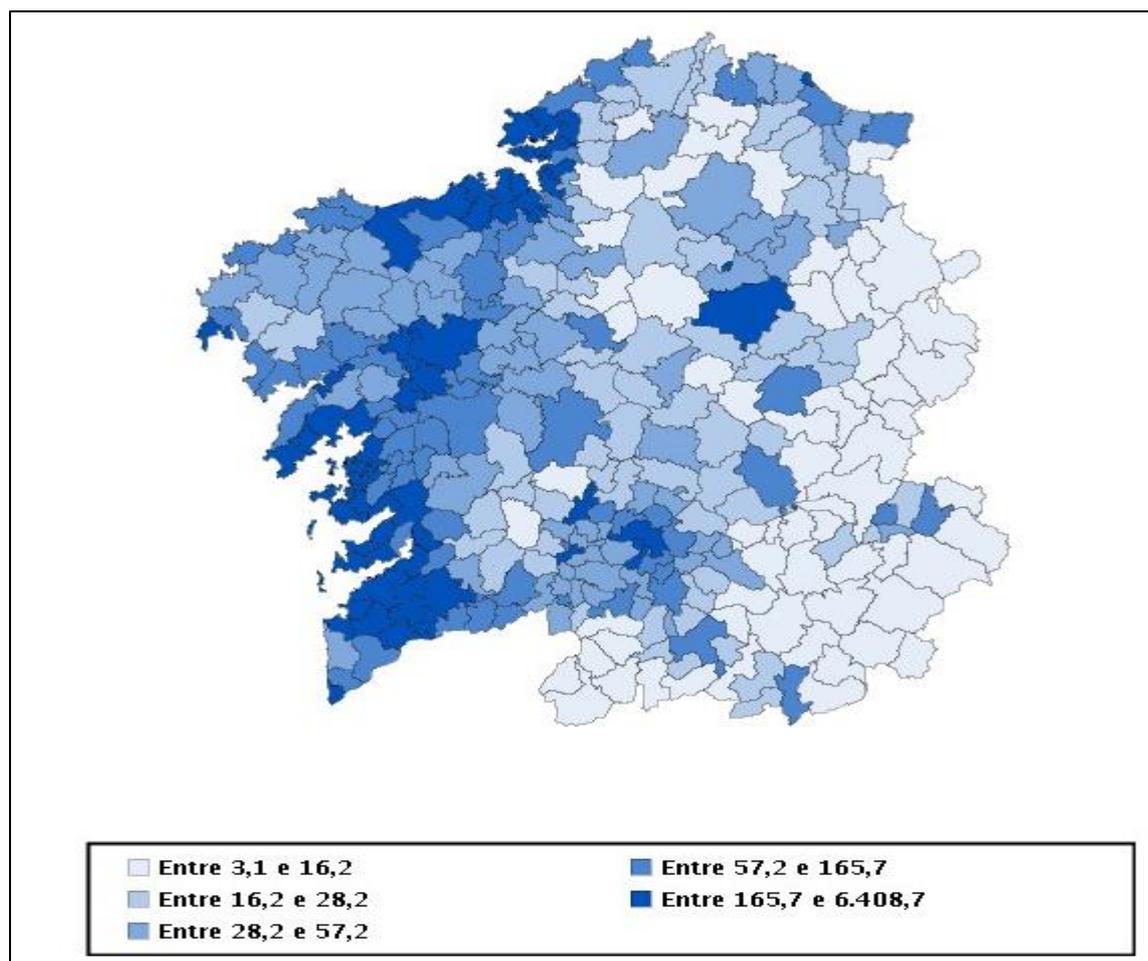


Figure 4.1: Population densities by municipality in Galicia (IGE. 2018)

Traditionally, at the economic level, most of Galicia's economy has depended on agriculture and fishing, although today the service sector has the highest concentration of the labor force (INE, 2021). The secondary sector includes shipbuilding in Vigo and Ferrol, the automobile industry in Vigo and the textile industry in La Coruña, as well as the granite handling industry in Porriño. Vigo also stands out in the agri-food sector (especially in the industry related to the sea: canning, frozen and pre-cooked fish) with multinationals such as Pescanova, in the textile sector (with companies such as Selmark, El Secreto del Mar or Umbro España), in the financial sector, the chemical-pharmaceutical sector (Zeltia), maritime (MetalShips & Docks, C. N.P. Freire, Vulcano, Rodman Polyships, Armón or Hijos de J. Barreras) and other productive sectors.

Tourism in Galicia, which developed later than in other areas of the peninsula, is today an important source of income, with the peculiarity that it is concentrated on the coast

(mainly in the Rías Bajas), in A Coruña and in Santiago de Compostela. Tourism accounts for 12% of the Galician Gross Domestic Product (GDP) and employs 12-13% of the workforce.

The configuration of the Galician social system allows this autonomous community to have a low level of income inequality (Gini coefficient of 0,321) in comparison with the European average (Gini coefficient of 0,68). However, Galicia has a 25.7% of the population at risk of poverty or social exclusion, compared to a 26.9% in Spain, and that represents a variation of 1.4 percentage points compared to the previous year (INE, 2020), according to the European indicator AROPE, which measures the *risk of poverty* (22.1% of the inhabitants of Galicia are in this situation), *severe material deprivation* (5.2%) and *low employment intensity* (8.5%) and crosses it with nine items on the manoeuvrability of households, such as their ability to cope with unforeseen events or to heat the house in winter, to estimate the volume of citizens who are at risk.

What is its administrative status?

Spain is known as a State of Autonomies, a formally unitary country that functions as a *sui generis* decentralised federation of autonomous communities, each with different levels of self-government and decentralized competencies. In the energy domain, policy responsibility is distributed between the Spanish state and the Autonomous community.

What are the specificities of its energy system?

In Galicia, as in the rest of the world, **the main source of energy is fossil fuel, namely oil** (57.5%). From 2008 onwards, environmental legislation made it necessary to stop using coal so, which in practice meant that the **coal-fired power plants** are experiencing a steady decline in the use of indigenous coal, due to the depletion of existing mines and the need to reduce emissions, while the increase in **natural gas consumption** is being observed since the commissioning of the combined cycle plants of As Pontes and Sabón - until 2007, the only plants using natural gas as fuel were cogeneration plants - (INEGA, 2020, 2021).

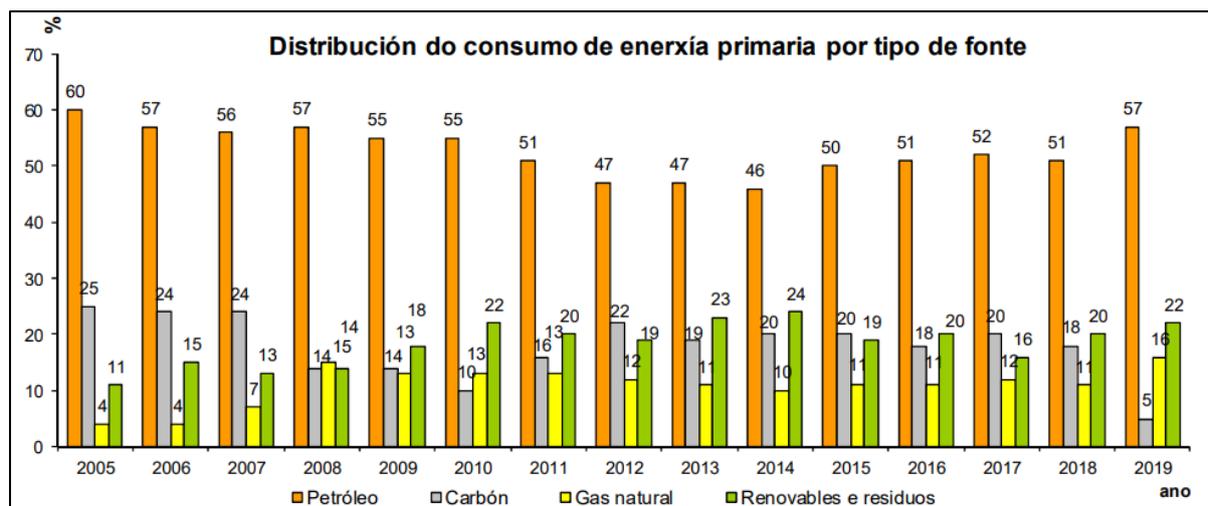


Figure 4.2: Primary energy consumption by type of source in Galicia (INEGA, 2020)

At this point, around 10% of all primary energy in Spain and a significant percentage of the final energy generated from indigenous and imported raw materials is exported to other regions or countries – (INEGA, 2020), as this is where 38% of the products processed in Galicia are destined (INEGA, 2021).

Renewable energies are an important part of the energy mix in Galicia. Their share in the gross final energy consumption (calculated according to Directive 2009/28/EC) was 37.8% in 2019 exceeding the 20% target for 2020 (INEGA, 2021). Primary energy from **renewable sources** in Galicia comes mainly from wind (30.5%), solid biomass (30%), water (25.1%) and other renewables, such as solar (14.5%). As one of the Autonomous Communities with the highest number of hours of wind per year, Galicia plans to develop its **wind energy** further. Also, **biomass** (solid biomass, residual biomass and biogas) constitutes 32,6 % of Galician primary energy consumption, making it the second largest source. Biomass is of great importance in the Galician energy balance, as it represents 28% of primary energy for thermal uses and 27.6% of heat. With regard to water use, Galicia has a large number of **hydroelectric power plants**, but annual precipitation causes variation in the percentage of the different renewable energy sources (INEGA, 2020).

Fuels and renewable sources used vary greatly from year to year. Until 2007, imported energy accounted for around 75% of the primary energy consumed in Galicia, but after the closure of the coal mines (As Pontes and Meirama) and the start-up of the Mugardos

regasification plant, imports fell in 2008. However, in 2010, imported energy fell to 79.3% due to the high availability of local renewable energy, but in other years, such as 2017, it rose again due to the decrease in hydroelectric generation as a result of low precipitation. In terms of the proportion of **electricity** generated from renewable sources, it was 65.3% in 2019 (compared to 56.1% in 2018); in contrast, the proportion generated by **coal-fired power** plants decreased from 32% in 2018 to 10% in 2019 (INEGA, 2021).

At a general level, **energy dependency** in Galicia decreased by 1.5% in 2019, from 72.9% in 2018 to 71.8% in 2019. The Integrated National Energy and Climate Plan (PNIEC) for 2021-2030 establishes a target of not exceeding **61% in 2030** (INEGA, 2021). Of the **electricity available for consumption**, some is exported, some goes to the Galician end consumer and a small percentage is lost in the transport and distribution of the electricity itself through the grid. The distribution of electricity consumption in the different sectors and sub-sectors are: 1.9% for the primary sector (fishing, agriculture and mining), 51.9% for the secondary sector (50% industry and 1.9% pumping) and 46.2 for the tertiary sector (0.8% construction, 19.9% services, 0.4% transport; 25.1% domestic).

In relation to domestic use, we emphasise a growing problem in the Spanish context, and one to which the Galician autonomous community is no stranger: **energy poverty**. INE (2020) uses as indicators to measure the poverty or social exclusion of households aspects such as not being able to meet unforeseen expenses, not enough budget to go on holiday for one week a year, accumulating energy payments, as well as not being able to turn on the heating as much as would be advisable, due to the constant increase in electricity bills (Figure 4.3).

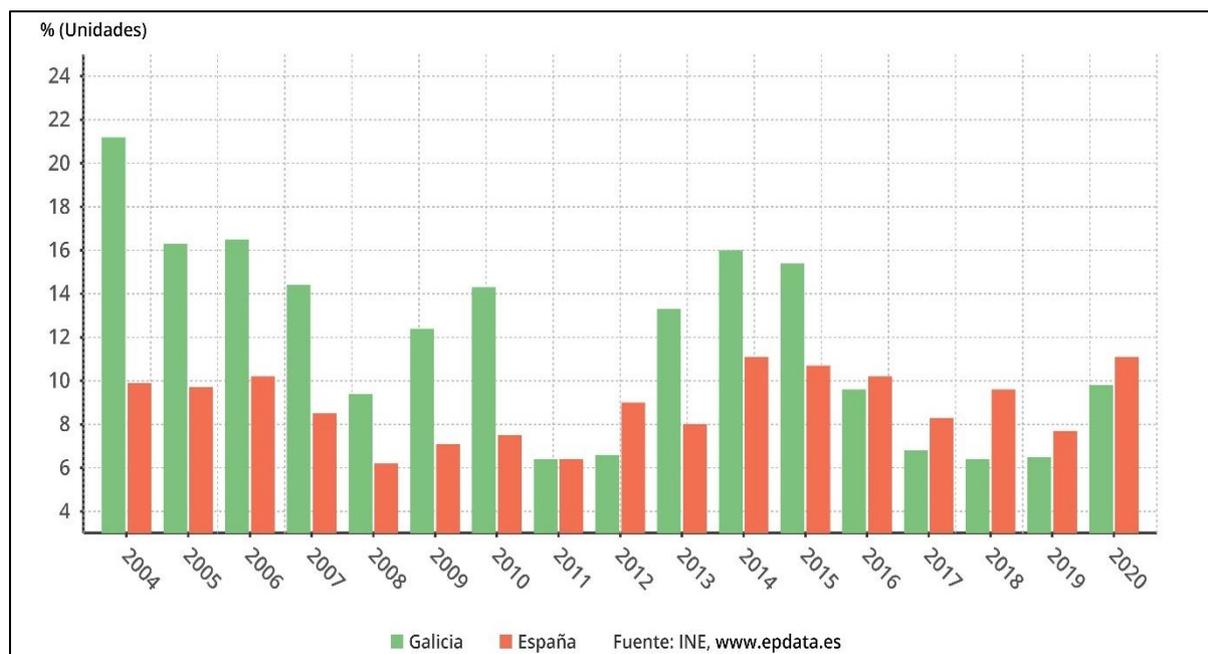


Figure 4.3: Percentage of households that cannot afford to keep dwelling at adequate temperature (Galicia/Spain), Living Conditions Survey (INE. 2020)

What is the translation of ENCI in this context?

The literal translation on ENCI in Spanish is “Ciudadanía energética”, a term that is easily understood by workshop participants but not yet used extensively. Some participants even referred to their lack of knowledge about the term, compared to other more common terms such as “energy sovereignty”, “energy saving”... or stressed that although it can be understood in various ways, “apparently, there is still no official definition in Spain, but almost in Europe”. Likewise, it is attended to equate this concept with that of energy community, expressly alluding “to Directive 2019/944, which defines what a citizen energy community is, beyond the fact that this concept at the national level is not yet included in any standard, is it not? but that of renewable energy community”. In the light of this information, some ideas about what different websites understand by “Ciudadanía Energética” in Spain can be raised:

<https://www.idae.es/ayudas-y-financiacion/comunidades-energeticas>

<https://energia.gob.es/es-es/Participacion/Paginas/DetalleParticipacionPublica.aspx?k=358>

<https://www.unionrenovables.coop/>

<https://sapiensenergia.es/somossapiens/>

<https://www.grupoenercoop.es/conocecomptem/>

<https://laenergiadeluzia.es/de-ciudadano-consumidor-a-ciudadano-productor-la-democracia-llega-a-la-energia/>

4.2 Particularities of workshop set-up

Regional focus: Galicia (Autonomous Community of Spain). Bilingual (Spanish and Galician speaking)

Budget: Non applicable

Date: Friday February 11th, 11.00-14.00H

Place/accommodation: Hybrid (Presential and Teams)

Participants:

Name	Role	Organisation
Participant 1	Managerial role within the regional government	Axencia Instituto Enerxético de Galicia (INEGA)
Participant 2	Environmental policy officer	A Coruña City Council
Participant 3	Environmental engineer	Instituto Tecnológico de Galicia (ITG)
Participant 4	Environmental engineers specializing in energy efficiency	EnergyLab (University of Vigo)
Participant 5	Regional officer for the energy company	IBERDROLA
Participant 6	Administrator	Teu Vento Passive House
Participant 7	Architect	E S P I G A. Galician Association for Bioconstruction
Adina Claudia Dumitru	Organizer/moderator	EnergyPROSPECTS-UDC
Manuel Peralbo Uzquiano	Organizer/moderator	EnergyPROSPECTS-UDC
Manuel García García	Organizer/moderator	EnergyPROSPECTS-UDC
Juan Carlos Brenlla Blanco	Organizer/moderator	EnergyPROSPECTS-UDC

Nuria Rebollo Quintela	Organizer/moderator	EnergyPROSPECTS-UDC
Luisa Losada Puente	Organizer/moderator	EnergyPROSPECTS-UDC

Table 4.4: Participants Galicia workshop

4.3 Key findings

The format of the workshop was based on the original Wallonie proposal. We started with a general definition of ENCI, and created the opportunity for participants to contribute their own vision of it. Participants were invited to present themselves, the organisation they represented, and also present their own understanding of energy citizenship, with initial regional examples.

As the participants' high level of knowledge on the subject was observed (more or less explicitly), as well as their interest in introducing small debates on key regulatory and governance aspects of energy citizenship, modifications were made in situ, and a decision was made to classify the cases according to the dimensions of individual/collective and reforming/transforming characteristics in one go. In this debate, although there were differences of opinion and positions more focused on the political, business, social and/or directly citizen-centred spheres, participants engaged in open and constructive criticism of the different ways of understanding and approaching energy citizenship.

Understanding 'energy citizenship'

The discussions held during the workshop highlighted many facets of the concept of “energy citizenship”. Three dimensions seem to characterise participants’ understanding of “energy citizenship”: 1) a reconceptualization of the citizen 2) the knowledge, sensitivity and economic support needed to contribute to a sustainable transition; and 3) a vision of a sustainable, just, and democratic energy transition. Figure 4.6 visualizes the ENCI translations. The color and size indicate the relative frequency of concepts.

2. **Knowledge, sensitivity and economic support:** Starting from the observation that "everyone will have to become an energy citizen: individual citizens, communities of neighbors, communities of forests, medium, small and large municipalities, autonomies, states and the world, and small, individual, large and very large companies", two motivations for mobilization are listed: a) "a growing sensibility influenced by European policies, portrayed by the media" and b) "**inflation**, which is noticeable from one's home". The relevance of the economic support to the individual to become an active consumer is evident because "when **subsidies** are available, people move (...) there are few people who have sufficient resources for insulation for example, unless there is a subsidy", as well as when effective information campaigns are put in place. One of the participants mentioned that "There is **misinformation** about energy and options (...) and this **pedagogy** has to come from those who are granting the subsidies".
3. **Sustainable, just, and democratic energy transition:** energy citizenship is defined as a key element of the transition towards a sustainable, justice and democratic energy system insofar as it represents "*precisely the future that awaits us (...) energy, which is free, which is accessible to citizens, but we do not have to buy it, we do not have to make it, we have it at our disposal at any point*". One participant explained that it is a matter of generating awareness and acting to minimise "*energy impacts of their daily activity, or even business (...) [both at the] economic and environmental [level]*". What is evident is the commitment to new economic models, new forms of coexistence compatible with a sustainable future that constitutes a "*formidable challenge*" involving "*all citizens, communities, small companies, medium-sized companies, large companies...*". Some participants also evoked the social relevance of energy citizenship, namely to promote "*energy sovereignty*", "*savings*", address the "*problem of energy poverty*", starting from an idea supported by two participants "*to start by reducing consumption so as to have less need for production*". Finally, energy citizenship is seen as a component of a transition aimed at moving from a model of representative democracy to a **model based on participatory democratic engagement**. Participants mention the need to advance on aspects such as the

"*democratic governance*" of energy communities, the elimination or reduction of the "*bureaucracy*" coupled with increased "*information*" and "*transparency*" in the processes since citizens recognize, as one participant mentions "*that yes, many feel motivated*".

Identification of regional ENCI examples

Sixteen examples of energy citizenship were identified during the Galician workshop:

1. Mountain Joint Communities
2. "Manzaneda" Energy community (photovoltaic installations)
3. "Moaña" Energy community (photovoltaic installations)
4. "Tameiga" Energy community (photovoltaic installations)
5. Companies on the industrial area of Mount Faquiña
6. Associative network of the Port of A Coruna
7. Each of the companies adhere to the associative network of the Port of A Coruña
8. Environmental awareness movements
9. Protest movements against alternative forms of energy consumption.
10. Individual citizens installing and using heat pumps in houses
11. Individual citizens installing and using solar energy
12. Individual citizens insulating their homes
13. The Galician electricity sector (concern for the electrification of mobility and air-conditioning systems)
14. The cooperative „Nosa Enerxia”
15. City Council project "PractiseEnergy"
16. The creation of the municipal Energy Operator

Three key points were noted regarding participants' understandings of the typology:

- a) Participants found it **easier to understand and deal** with the individual/collective dimension in the classification of cases, although the majority focus was on examples of the latter.
- b) Reflecting the experience in Wallonia in Belgium, participants found the **transformative/ reformative dimension was more challenging**, perhaps because they analysed the examples from the perspectives of their chances of

success in terms of legal, normative and administrative requirements... and not so much in relation to the essence or the basis that underpins such initiatives (e.g. energy communities).

- c) **Some forms of ENCI** present in the typology, such as the organisational ones, **did not appear in the discussion**, although the role of organizations such as public institutions or energy companies as collective actors was signalled as important.
- d) Some of the typologies from the conceptual framework were **clearly identified** in the discourse of the participants, as well as in the examples provided by them. In other cases, it was observed that the participants' discourse hinted at **latent forms of ENCI**, which we tried to capture and analyse together with proposals made by participants.

Classification of examples according to the type of agency

The table below shows how participants classified the regional examples of energy citizenship according to the type of agency (Table 4.6). A large part of the examples has been classified as **collective citizen-led and hybrid** forms of energy citizenship. The most noteworthy cases in Galicia were mainly **energy communities**, due to "*the existence and inheritance of mountain land and the creation of joint mountain communities*", considered to be most advanced in terms of regulations and governance models. The most recurrent examples in participants' speeches were those related to cases of **mountain joint communities**, such as the photovoltaic installations carried out in **Montes de Tameiga** "*very important among its community members*" and in **Moaña** "*which has the technical support of the Technological Institute of Galicia*", as well as in **Manzaneda**, where photovoltaic installations have been carried out in aparthotels, referred to by two participants, one of them as a case characterised by "*the formation of an energy community in which they joined forces to minimise the impacts of being isolated*", and highlight the importance of public-private collaboration "*public-private collaboration, because the entire installation has been carried out on the roof of some aparthotels. And all this is also done in public-private collaborations, therefore, with public entities and with the ski resort itself, which also seeks to be independent in its energy needs*". In line with the relevance given to this public-private collaboration, attention was also drawn to the current creation of the **associative energy network of the port community**

of **A Coruña**, whose aim is to "form a large energy community, where everyone can have access to energy generated on site at very competitive prices, because in addition to being, in general, they will be able to exchange it between all these actors", as well as an already completed **project, PractiseEnergy**, coordinated by the City Council, with the collaboration of the Faculty of Education of the UDC and which aimed at the "*creation of an energy community*".

As latent cases it is worth highlighting the mentions made to **environmental awareness movements** as "*we are increasingly aware of what our activity involves and we are concerned about it*". Participants mention being **concerned with the consequences of the electrification of mobility and air-conditioning systems**: "*surely if we electrify all mobility and electrify all air-conditioning systems and others, the system we currently have to distribute electricity would not be sufficient to cover needs*" and **protest against alternative forms of energy consumption**. Similarly, mention was made of what would constitute individual cases, in which the **citizen in the private sphere** takes part, pointing out that "*the figure of the prosumer is going to be very important*" and which, in the Galician context, means actions such as those of "*some citizens, (...) who have put solar panels on the roof, we have put a vehicle charging point, and we try to switch to 100% mobility with an electric car (...) just like me, many people in Galicia*", or through the business environment, such as the **adhesion of companies in the industrial area of Mount Faquiña** "*through this traditional organizational form that had the purpose of taking care of its communal forests*", or each of the **companies adhering to the associative network of the Port of A Coruña** as "*it is another example of a public-private collaboration, the ports have this legal form and all the companies of the port, they will want to be part of that*".

Individual			Collective	
Private households	Organizationally embedded	Public	Citizen-based and Hybrid	Social movements
▪ Individual	▪ Companies	▪ City Council	▪ Mountain	▪ Environmental

<p>citizens using heat pumps in houses</p> <ul style="list-style-type: none"> ▪ Individual citizens using solar energy ▪ Individual citizens insulating homes 	<p>the industrial area of Mount Faquiña</p> <ul style="list-style-type: none"> ▪ Companies adhere to the proposed Energy Community of the Port of A Coruña 	<p>l project “PractiseEnergy”</p> <ul style="list-style-type: none"> ▪ Actions of the “The Galicia n electric ity sector” 	<p>Commonwealths</p> <ul style="list-style-type: none"> ▪ “Manzaneda” Energy community ▪ “Moaña” Energy community ▪ Municipal Energy Operator ▪ Nosa energy 	<p>awareness movements</p> <ul style="list-style-type: none"> ▪ Protest movements against alternative forms of energy consumption.
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Table 4.6: Classification of examples according to the type of agency

A key aspect pointed out when referring to examples of ENCI was the recognition of the **incipient nature of the initiatives**, such as *"the development of unique projects related to local energy communities"*, which are being implemented *"at the local level"*, but that in reality have a **deeply-rooted base** (or heritage) in our autonomous community, through the *mountain land joint communities*, as collective initiatives *"which I would highlight as a social group already empowering itself and trying to generate its own energy"* and that , currently, are moving towards so-called **citizen communities, energy or local energy communities** that represent *"the union of citizens, entities that generate, consume, and manage their own energy, in principle, of renewable origin"*.

Although most of the references were explicitly made to collective agents, in some cases the attention given to the concept of **the energy citizen**, at an individual level, was observed in the discourse of the participants. They point out that *“now we are getting to see how this citizenship is empowering itself, and transforming from passive energy consumers to a term that now I think is quite widespread, which is the prosumer”*. In the case of individuals, the first objective should be *“to reduce consumption and then later it was to see how I can make the remaining consumption as self-sufficient as possible”*.

Examples of individual energy citizenship refer to protests against windmill farms for example, where the individual is considered to have considerable agency, especially in pressuring the city council to reject particular projects., *“[in relation to the protest against the wind farms] people say no, well, the democratically elected City Council says if you want it, then it's done. If you don't want it, it won't be done, obviously if they consider that this wind farm shouldn't be done”*.

Classification along reformative or transformative character

In considering the reformative/transformative nature of the proposed examples, it should be noted that the participants continually refer to the fact that Galicia is at an **incipient stage in the development of initiatives** by pointing out that *“I think it has been an evolution, and that now we are getting to see how the citizenry is empowering itself”* and *“what we see is the dawn of initiatives of this type (...) in a phase that is super embryonic despite the fact that there are already concrete subsidies or support funds”*.

In fact, one of the participants with significant experience in the field highlights the evolution of the concern for energy, **from an issue addressed in the private business sphere, towards a collective concern**: *“before there were like four professionals who dealt with energy. It was a matter for specialists and there were large centralized facilities and so it worked in a completely different way, now we are in the headlines of the information media, on television, in the press... (...) Which I think it is good because people are also learning to make their decisions, they are becoming aware of what is an essential sector for the citizen, for the administrations, for a community (...), for all”*.

Several participants refer to the importance that **small and medium-sized companies**

linked to the improvement of energy efficiency are having in acting “in many cases also (as) facilitators and managers for the beneficiary”, or even **bureaucratic processing** that can be an obstacle for the more active involvement of citizens because, as one participant recounted, *"the bureaucratic part that they demand of us is impossible"* so in the end the citizen gives up.

An in-depth analysis allows us to observe that **some of the most traditional initiatives in the Galician sector**, such as the mountainous joint communities, **could be seen as having a transformative vision**, and this is stated by a participant who expressly indicates that *"although there are still certain challenges, I believe they have a transformative character"*. Another agent adds that these constitute *"already a social group that is empowered and tries to generate its own energy"*. Likewise, it is emphasized that although **the changes are gradual** they present *"with increasing speed, the decision that is at the bottom of everything we are talking about here, that the energy sector has to change overnight"*.

Making a **distinction between frontrunners and laggards**, the Galician energy system is considered as a late majority, as the context is prepared due to previous **experiences** in other areas with favorable results *"Galicia in general, we have extensive experience in a related field, with agricultural cooperatives, but that experience has to be adapted to the energy domain"*.

One of the trends participants mention refers to **gradual changes** as a result of *"electrification in all systems"* and what that means for the citizen is that *"when we abandon fossil fuels and then the global demand will increase and the citizens are going to want to produce and consume their own energy"*. In this line, there is talk of **profound forms of change that are beginning to emerge in the Galician context** under the term prosumerism, referred to as... *"that citizen or groups of citizens who are not only capable of consuming energy passively, but can act on the system, store energy and introduce energy into the system"*, while referring to the ecological transition that is taking place as a result of the closure of the coal-fired power plants (As Pontes), in the collective sphere, but that they affect the citizen insofar as the form of energy

consumption at homes is been modified, for example by "*decarbonizing heating, which is very important because it entails tremendous consumption of fossil fuels*" and replacing fossil fuels with "*heat pump, aerothermal, external heat pump and photovoltaic self-consumption, which are the effective alternatives and for which the Xunta (i.e. the regional government) can help*".

Factors influencing ENCI development in Galicia

To some extent, we found that we needed more time for the different conceptual debates around the understanding of ENCI as well as the factors facilitating or hindering it, and it was relatively difficult to have an in-depth conversation about the different types of ENCI in a short period of time. More time would have probably been useful, although we also found that gathering participants for longer was complicated. Some of the principal keypoints highlighted at the workshop are syntetized below:

The geographical, climatological and social characteristics of the Galician context provide **optimal conditions for the development of grassroots initiatives** grouped mainly under the concept of "**energy communities**"; but also, these characteristics (e.g. geographical dispersion) prevent the use of some types of renewable energies such as heat pumps, as there is insufficient voltage in the power line.

Given these characteristics (geography, climatology and society), and due to a series of economic, geographic and cultural factors characterizing the region, some of the **main forms of energy citizenships in Galicia are considered to be individual**, and more potential for such forms is envisaged: "*well, some citizens, among whom I count myself, have put solar panels on the roof, we have put a car charging point, bought an electric car and we try to use the electric car for a 100 % of our mobility needs, and we have replaced the diesel boiler with a heat pump... just like me, many people in Galicia have done so*", "*I mean, in Galicia there is enormous potential for citizens to have autonomy, great autonomy or even independence when it comes to energy, and that is an advantage*". However, **the development of collective forms**, and the need to steer them especially in large transformative projects such as the reconversion of the port of A Coruña, with clear normative and financial incentives, and training support by state/public institutions **is considered essential**.

Institutionally, the role of the administration is called into question in relation to the **lack of local regulation** "*especially urban regulation*", and of **adaptation** of urban plans "*Urbanism has many general plans that are not adapted in many cases and [each Galician context] has its own uniqueness*". Participants emphasise the need for **training** "*by those who manage*" and **information** to the citizen: "*we must explain the advantages of the actions that we promote (...) more pedagogy, more explanation, more communication of the general advantages of the ecological transition and of large renewable installations*". This is fundamentally **demanded from the administration**, which is considered to be the one who "*has to pull the strings and pull people by the ears (...) it is essential*". For its part, representatives of the local government mention that a "*change in mentality is needed*" and this requires "*the participation of all agents, as we alone we cannot do anything because we are limited in terms of the human, technical and economic resources and for the implementation and to make a change of mentality we undeniably need the participation of all the agents*".

In this sense, Galicia is at an **incipient stage in the development of more transformative forms** of ENCI, with a dominantly reformative, and to some extent pragmatic, perspective still prevailing, with a relatively low level of commitment (mostly dependent on external and immediate incentives), although with a clear intention, especially of some communities as well as institutional actors towards achieving more radical change.

There is evidence of a shift **from the passive consumer model towards prosumerism** (production and consumption of goods and services), especially when it comes to making improvements or designing living spaces that reduce carbon emissions, or encourage self-consumption in individual dwellings: "*There is this constantly reviled dispersion of the Galician population, which we have to listen to continuously, because we, Galicians, like to live in a house on a farm. Well, it is an advantage for the ecological transition and for the fostering of the energy citizenship. You can end up growing part of your vegetables, and raising part of your animals and have your own eggs to*

consume. And you can produce a good part of the energy you need for consumption because you have land and you can then install solar panels or a charging point for your electric car in your garage'. But many of the initiatives that have a commitment to **deep environmental sustainability (transformative), and that are shared by citizens (collective)**, tend to start before there is regulation in place, which hinders or diminishes their chances of receiving the necessary economic and social support to develop effectively and/or last over time.

Both advantages and disadvantages of the geographical, economic, climatological and social characteristics of Galicia are discussed, as the participants reference weather related interference with the production of renewable energies, difficulties related to connections to the grid, as well as distrust, especially in rural communities of initiatives related to alternative land uses, as well as concerns related to *"for example, energy markets, instabilities, political systems etc"* are obstacles to the acceleration of energy transformations, and ultimately affect the decisions that citizens make about their commitment to the transition towards more **sustainable, democratic and socially responsible forms of energy**.

5 Translating ENCI: Berlin/Germany

This chapter briefly describes some particular features of the ENCI context in Germany (**section 5.1**) and the workshop hosted by the TU Berlin (**section 5.2**), before presenting key findings from the Berlin/Germany event (**section 5.3**).

5.1 Description of ENCI context

Three main parameters have impacted the conception and the organisation of the regional workshop in Berlin: first, our intent to find a set of participants that could “represent” as much as possible the various ideal-types identified within the conceptual typology, which led us to invite people located in other German states (“Länder”); second, as a capital of a federal state, a large range of actors have a nationwide scope rather than one limited to Berlin or Brandenburg solely, which made a narrow regional focus quite impossible; third, the great differences between the Berlin Metropole and the surrounding Brandenburg area made a regional approach all the more difficult to conceive.

For these reasons, the description of the ENCI context for the Berlin workshop deals more with the whole Germany than with a well-defined regional area. Of course, the situation of energy transition differs from one German state to another according to their specific energy policies and to other factors that have been well analysed in the literature (Diekmann et al. 2019). Yet the global picture of Germany shows a rather high degree of citizens’ involvement in the energy transition process.

Energy transition in citizens’ hands

One of the key features of ENCI in Germany consists in the ownership of renewable energy sources, which contributes to place the energy transition in citizens’ hands. Indeed, more than 30 % of the renewable energy capacity belongs to private people — as stated in 2019 by the German Agency for Renewable Energies in the figure 5.1 below:

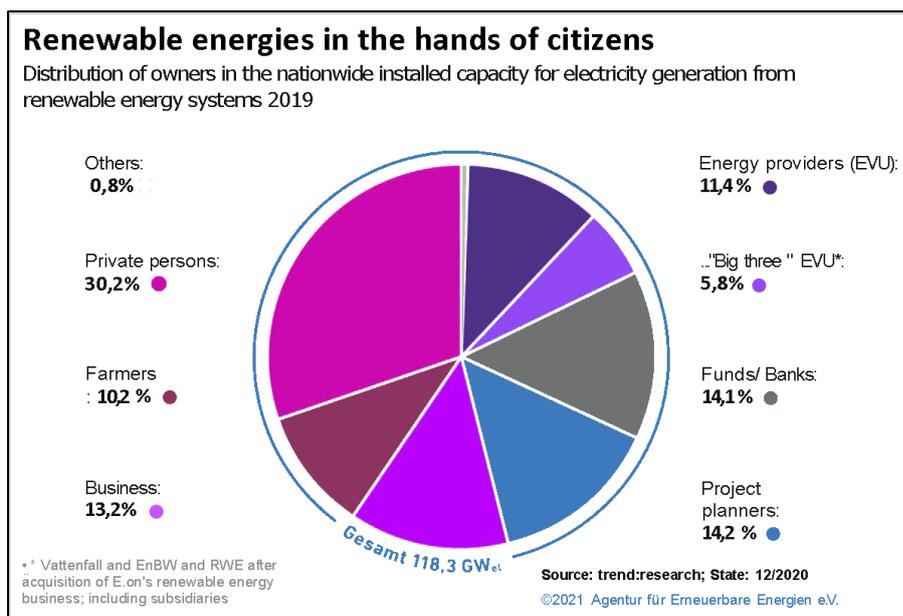


Figure 5.1: Renewable energies in citizens' hands - German Energy Agency 2019

More specifically, the cooperative movement in the energy sector is remarkably developed, with almost 1000 renewable energy cooperative and more than 200.000 people directly involved, as reported by the Co-operative federation for German Co-operative (DGRV 2021):

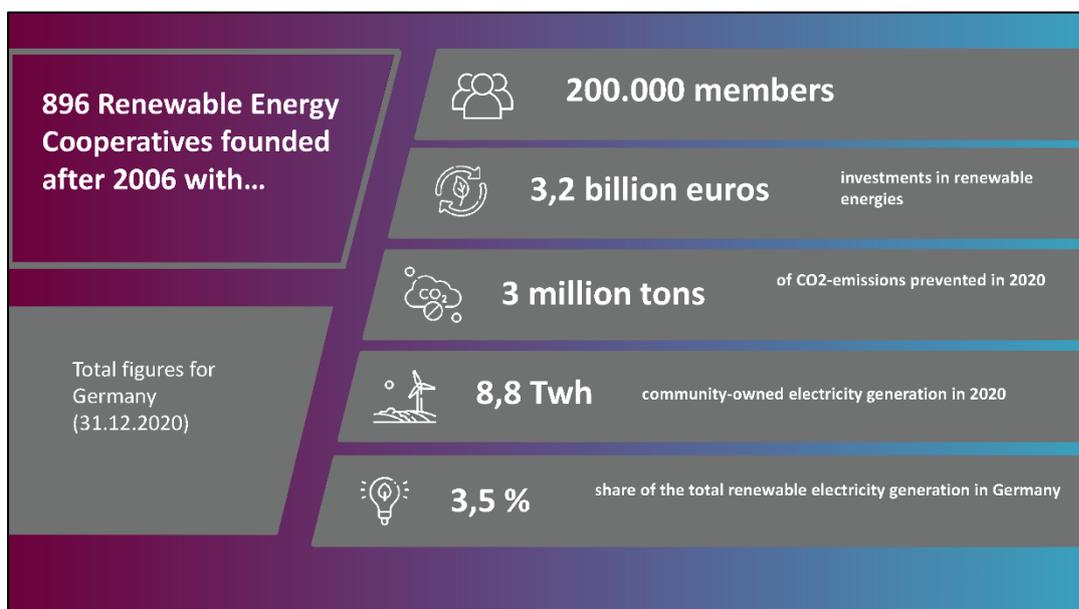


Figure 5.2: DGRV - Energy Cooperatives in Germany: State of sector 2021 Report

It is also interesting to consider the scope of these energy cooperatives, which is not limited to the production of renewable energy. Though electricity production through

PV installations and wind as well as energy supply are the most common areas of the energy cooperatives activity, the later encompasses also a lot of energy transition-related areas, as underlined in the figure below:

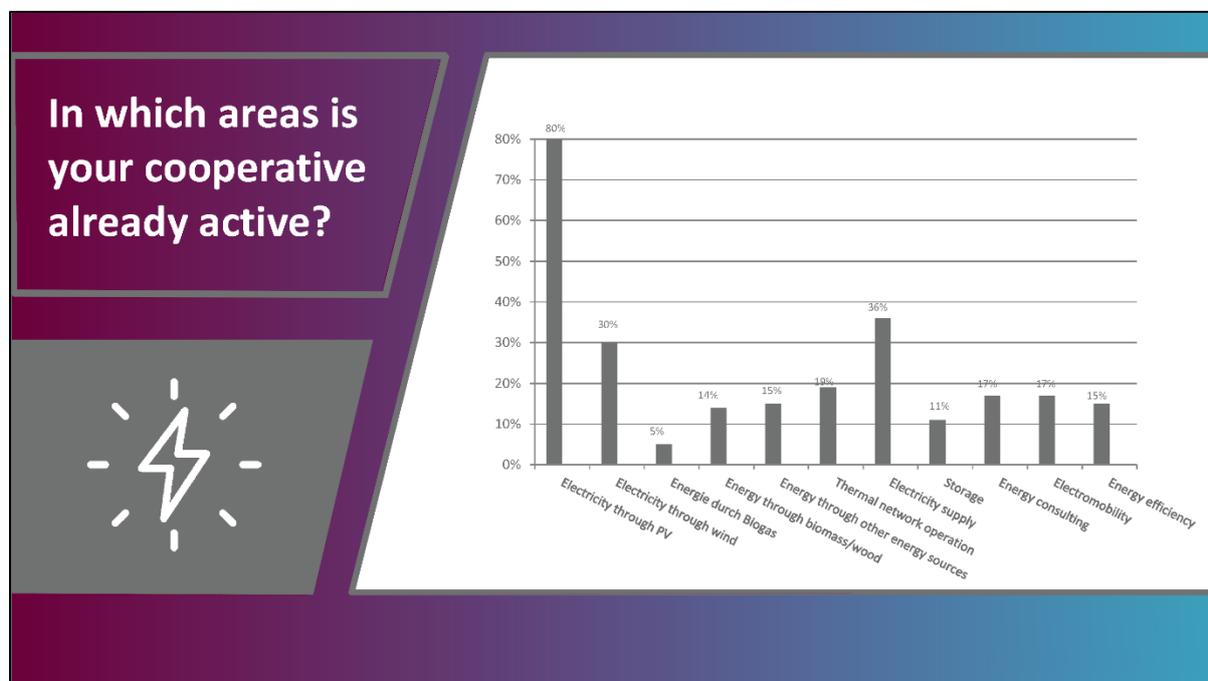


Figure 5.3: Areas of activity of the energy cooperatives (DGRV, 2021)

The citizens' ownership and a rather developed energy cooperative movement remain the tip of the iceberg i.e., the most visible forms of ENCI to be found in Germany. They cannot account for the whole ENCI context. Some detailed inquiries into the citizens' view on the ongoing energy transition have therefore helped us to complete the general picture of the ENCI context in Germany.

Citizens' view on energy transition

Energy transition („Energiewende“) became very early a core theme in Germany, where the word itself emerges already in 1980. This specificity contributes certainly to the wide agreement that energy and mobility transition encounter among German citizens, though some aspects of the transition remain largely criticized (notably the high costs, the lack of social justice or the slowness of the whole process). It is shown clearly in the barometer 2021 (Wolf et al. 2021), of which some results reproduced in figure 5.4 below are providing interesting insights on energy citizenship in Germany.

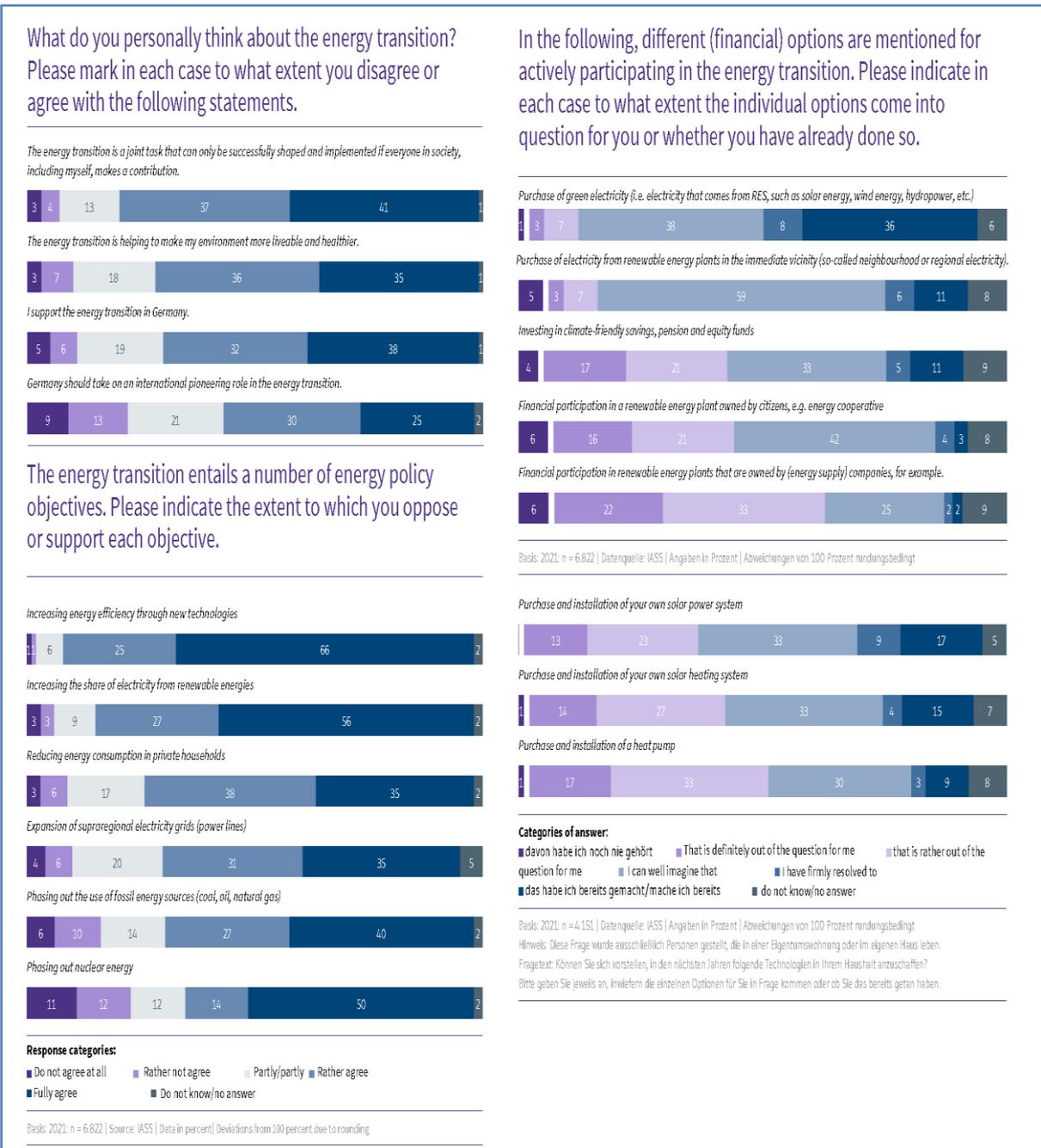


Figure 5.4: Key results of Soc. Sust. Barometer Energy & Transport Transition 2021

There is no need to comment this survey extensively, which has been done by its authors, yet some of the results put an interesting light on the actual and potential forms ENCI in Germany. Quite remarkable is the fact that more than the 80% of the Germans consider that energy transition requires the contribution of each citizen, 80% support the energy transition in Germany and believe that it makes the environment healthier

and more liveable. Similarly, most of the energy policy objectives encounter a massive support, reaching over 80% of agreement (fully agree and rather agree) regarding the energy efficiency through new technologies, the share of renewable energies or the reduction of energy consumption within the households. More than 60% are also in favour of the phasing out of the use of fossil and nuclear energies.

The questions dealing with the financial participation are also clearly in favour of a citizen commitment towards a civil ownership of the energy plants: almost 50% can at least well imagine participating in a citizen-owned renewable energy plant, whilst a bit less than 30% can imagine the same for a plant that is owned by a company. Similarly, more than 60% of the Germans can imagine purchasing their own solar power or heating system.

However, the issue of participation calls for tempered conclusion. As Ortwin Renn (ibid.: 3) underlines: "There is no doubt that the desire for participation is shared by the citizens surveyed. At the same time, however, the willingness to participate in a participation process is rather low." Indeed, for most of the people, the existence of rather fair participation procedures is enough, and they do not intend to participate in them. Similarly, while more than 60% agree with the phasing out of fossil fuels, the mobility transition remains highly problematic, since personal vehicles remain a particularly sensitive matter, where achieving a fundamental change in behaviour will be very difficult.

To conclude, the participation in the energy and mobility transition seems to be widely accepted among the population and rather well developed comparing to many EU countries; yet, only a tiny minority of the population seems to be effectively and/or actively engaged in the energy transition, which lets a large place for the emergence of new forms of ENCI.

[What is the translation of ENCI in this context?](#)

Rooted in the environmentalist and anti-nuclear movements, and supported in the 1990's by the EEG Law (law on renewable energy sources that notably setup the feed-in tariffs), the notion of energy transition is highly anchored in the German society and it has become a motto in the German energy policy since 2011.

Next to it, the notion of “ENCI” does not have any literal translation or doesn’t really exist in German. In line with the previous observations, (i.e., citizen energy) refers mostly to energy cooperatives and prosumers. The nearest translation of energy citizenship would then be the „civil engagement for the energy transition” (*bürgerschaftliches / zivilgesellschaftliches Engagement in der Energiewende*). The expression “*Energiebürgerschaft*” is sometime used in the scientific literature⁵, but it is not highly disseminated, whether on the policy makers side, nor on that of the population

5.2 Particularities of workshop set-up

Among the people contacted, 15 accepted the invitation for the workshop on 8th February 2022 from 09:00 to 13:00. Two of them had unfortunately to cancel their participation, hence the workshop commenced with 13 participants, of which 11 were women. Eight of the participants are located in Berlin, and five outside of the Berlin-Brandenburg area, yet their participation was considered as relevant for the purpose of the workshop. The participant list below summarises the type of actor and the organisation and role:

	Type of actor	Name	Organisation and role
1	Private Actors	Teresa Sterling	Expert in energy concepts, primarily energy factors and energy management, formerly employed by ENERKO and now in charge of energy issues by Zalando
2		Urszula Papajak	Social innovation for the energy transition, participation, energy democracy, social innovation, digitalisation, p2p/Blockchain.
3*	NGOs/ NPOs (e. V.)	Kerstin Lopau	SoLocal Energy e.V. Is a NPO created in 2020. K. Lopau is one of the two board members. Located in Kassel.

⁵ One of the main authors that are using this expression is Radtke, who defines it as: “an “Energiebürgerschaft” (« Energy Citizenship », cf. Morris 2001, Devine-Wright 2007), for example in the sense of a climate citizen who actively promotes individual action (e.g. energy efficiency in the household) and socio-political engagement (measures in local, national and international climate protection, engagement in action groups, organisations or energy cooperatives, etc.) for climate protection and environmentally friendly energy use.” [Radtke 2016: 480]

4*		Anna Hülle	In charge of EU perspectives for the Energy avant-garde Anhalt NPO.
5		Werner Neumann	BUND (Bund für Umwelt und Naturschutz Deutschland e.V.) Working Group Energy spokesperson for the NGO.
6	Institutional actors	Tobias Kampet / Steffen Joest	DENA (German energy agency) - Project partners (LOI). Deputy Head of Energy Systems and Energy Services.
7*		Dorothee Avenhövel	Umweltbundesamt (UBA) - Federal Environmental Agency. Located in Dessau-Roßlau.
8		Lisa Bührmann	In charge of the campaign management and stakeholder network for "Berlin spart Energie" (Berlin saves energy)
9*	Experts and/or	Elisabeth Dütschke	ISI - Fraunhofer Institute. Located in Karlsruhe.
10	Researchers	Arwen Colell	Engaged in Bürger Energie Berlin Now working for DECARBON1ZE company
11		Katja Treichel	Post-doc and Policy analyst - Mercator Research Institute on Global Commons and Climate Change (MCC).
12*		Theresa Herdlitschka	ARL (DFG-Project on spatial transformation processes from the perspective of gender research in the ARL). Located in Hanover
13		Friederike Rohde	IÖW - Sociologist specialised in the transformation of the energy system, smart living, smart city, sustainable cities and neighbourhoods, participation and involvement
* Participant located outside of the Berlin-Brandenburg area.			

Table 5.5: Participants of the Berlin Workshop

The participants' locations are mapped below:



Figure 5.6: Participants' locations in Germany

5.3 Key findings

The following section outlines the key findings from the workshop, however the workshop proceedings will also be communicated through a series of blogs available from the EnergyPROSPECTS website in 2022.

Understanding 'energy citizenship'

Just after presenting themselves, the participants of the workshop were asked to provide their views on Energy Citizenship by writing a sort of definition of ENCI on the Miroboard.

Their inputs are highlighted in Figure 5.7:



Figure 5.7: ENCI interpretations (Germany workshop)

The definitions provided by the participants tend to focus on the ideas of personal engagement, of participation of the citizens towards energy transition and their commitment to the transformation. They suggest a broad spectrum of forms of engagement in every aspect of the energy transition, with a focus on active participation, whether personally or collectively, through collective organisation to change/transform the current energy system.

The political and economic —beyond the financial incentives — dimensions of participation are also given a specific attention, as well as the participation in governance processes at various levels, especially that of the local and regional.

Energy communities and cooperatives were quite surprisingly not mentioned as self-evident equivalents of energy citizenship. On the contrary, the definitions proposed by the participants of the workshop suggest a view of energy citizenship that goes beyond the most salient forms represented by energy communities and cooperatives.

The following figure (Figure5.8) created on the basis of all the proposed definitions illustrates these statements:

ENERGY PROSPECTS

What (regional) examples do you associate with it? What are the actors engaging for?

Write the name of the example on a sticky note and write a short description in the box on the right.

Berlin Start Energy	Kampagne in Rahmen des Berliner Energie- und Klimaschutzprogramms	Citizens own cooperative for the purchase of the electricity grid in Berlin, various other projects for the implementation of the energy transition: Tenant electricity projects, balcony modules, Energy savings	Kelling Energy decision makers	Shareholders campaign for an accelerated mobility transition in Freiburg
Local FFF-Groups	Political protest, one acceleration of national and international regulations and effective action on climate change.	Participation process for the further development of the Berlin Energy and Climate Protection Programme 2030 (BKE)	Local level: energy decision makers	Mrs. and Mr. B. stand in the heating conflict on their property in Straßensee r. Jena/Sachsen. From there, they will supply 80 buildings in the village with regeneratively generated local heat in the "Juche". This is generated in the three ovens behind them, which are fired with wood chips.
Non-Local Energy Supplier (EVS)	Energy cooperative that initially aimed to supply its own village with renewable energy and is now one of the main national renewable energy providers.	Cooperative, split electricity grid in the hands of citizens	Local level: energy decision makers	e.g. in NRW and Brandenburg against coal mining
the citizen	Who is motivated and self-responsible to put solar cells on their roof in the balcony.	Combination of the two	Local level: energy decision makers	
Prosumer	Actors as consumers and producers of renewable energies. This can also be individual households	Wolter-Nord (spoil) Producing approach, use of renewable energies, circular economy	MIEG	T used with an affinity for technology job forces to install solar systems (keywords: lack of skilled workers) - exchange their experiences nationwide
EAA (Energie-Anbieter)	Wellschöbber network for the design of the energy transition in Saxony-Anhalt (for the Bitterfeld-Halle region)	Energy Cooperatives Germany-wide	Electricity Savings check	Competition between municipalities to see who can build the largest solar power plant within a year
Citizen Participation AG	Membership Western Pomerania. Obligation of project developers to establish a limited liability company for new wind farms and/or solar farms - at least 20 percent of this company to the immediate neighbours for participation.	Friday for Future Halle, E.g. demand for savings programme for installation of solar cells	Pebbles	Various solar markets at transport companies against each other
Rugger Energy Plant	The members of the cooperative buy electricity from existing photovoltaic or wind plants and build their own PV plants to promote the energy transition on Rugger.	Citizen's financial & operate renewable energy plants	Okoprofit	
PLUULLS	The development of a future decentralised electricity loading model. Prosumer organisations generate self-sustainable energy - energy community	People try to live quarters cheap, energy self-sufficiency	Give choice	Behavioural changes, renunciation of consumption
Lauter	Lauter: Lauter Energie, Community of responsibility for Energy Transition in Lauter	People advocate for a decentralised energy transition through campaigns and/or demonstrated concrete actions.	Be a role model	Energy efficiency, purchase of sustainable (renewable) energy

Further examples

Energy cooperative that transforms the county				
Energy cooperative that transforms the county				
Energy cooperative that transforms the county				



D2.3 Regional workshops: ‘translating energy citizenship’

A regional aspect put into brackets

The following table synthetises the examples provided:

German name	English name	1st round	Late r add	Location	Short description
Lausitzer Perspektive (x2)	Lausitz (x2)	X		Berlin	1. Various municipalities contributing to the coal phase-out with civil society involvement (Boxberg, Raddusch, Görlitz) 2. Lusatian Perspectives: Communities of Responsibility for Energy Transition in Lausitz
Beteiligungsprozess BEK 2030	Participation process BEK 2030	X		Berlin	Participation process for the further development of the Berlin Energy and Climate Protection Programme 2030 (BEK)
BürgerEnergie Berlin	CitizenEnergy Berlin (x2)	X		Berlin	1. Cooperative; goal: electricity grid in the hands of citizens 2. Citizens' own cooperative for the purchase of the electricity grid in Berlin, various other projects for the implementation of the energy transition: Tenant electricity projects, balcony modules, ENergy savings
aWATTar Deutschland GmbH	aWATTar Germany	X		Berlin	Citizens can participate in favourable renewable electricity exchange prices and adjust their consumption accordingly.
Kampagnen für und gegen bestimmte Energiewendeoptionen	Campaign against coal mining in Brandenburg or NRW	X		Berlin	e.g. in NRW and Brandenburg against coal mining

EWS Schönau	Schönau Energy Supplier (EWS)	X		Schönau, Baden- Württem- berg	Energy cooperative that initially aimed to supply its own village with renewable energy and is now one of the main national renewable electricity providers.
EAA (Energie- avantgarde Anhalt)	EnergieAv antgarde Anhalt (EAA)	X		Anhalt	Multi-stakeholder network for the design of the energy transition in Saxony-Anhalt (or the Bitterfeld-Wolfen region)
Bürger- Beteiligungs gesetz MV	Citizen Participati on Act MV	X		Mecklem burg Western Pome- rania	Obligation of project developers to establish a limited liability company for new wind farms and to offer shares of at least 20 percent of this company to the immediate neighbors for participation.
Energiewer k Rügen	Rügen Ene rgy Plant	X		Rügen	The members of the cooperative buy electricity from existing photovoltaic or wind plants and build their own PV plants to promote the energy transition on Rügen.
Peebles	Peebles (x2)	X		Allgäu	1. Community electricity generation and purchase and storage with digital technology (RE community) 2. The development of a future decentralised electricity trading model. Prosumer organisation Generate sell store electricity together. Renewable energy - energy community
Tiny-house Projekt in Bitterfeld- Wolfen (Wolfen-	Tiny- house Projekt in Bitterfeld- Wolfen	X		Bitterfeld -Wolfen, Sachsen- Anhalt	(Wolfen-Nord npo) Prosuming approach, use of renewable energies, circular economy

Nord e.V.)					
FFF Halle	FFF Halle	X		Halle, Sachsen-Anhalt	Friday for Future Halle. E.g. demand for savings programme for installation of solar cells
Renewable Energy Island Samsö	Renewable Energy Island Samsö [Denmark]	X		Samsö, Denmark	Citizens organise the switch to 100% renewable energy in different economic and ownership structures within 10 years.
Fuß- und Radentscheid FR	Walking and cycling decision Freiburg	X		Freiburg	Stakeholders campaign for an accelerated mobility transition in Freiburg
Lokale Nahwärmernetze Unterspiesheim	Local heating networks Unterspiesheim	X		Unterspiesheim, Unterfranken	Mrs. and Mr. B. stand in the heating centre on their property in Schafgasse in Unterspiesheim. From there, they will supply 80 buildings in the village with regeneratively generated local heat in the future. This is generated in the three ovens behind them, which are fired with wood chips.
MIEG	MIEG (Mittelhessische Energiegenossenschaft)	X		Hesse	Regional energy cooperative with investments in PV and wind power
Solar-cup	Solar-Cup			Hesse	Various solar means of transport compete against each other
Marburg-Biedenkopf	Marburg-Biedenkopf	X		Hesse	Energy municipality
Saerbeck	Saerbeck	X		NRW	Citizens' Energy Cooperative

	citizen energy cooperative				
Morbach Energieland-schaft	Energy Landscape Morbach		X	Rhineland-Palatinate	Energy cooperative that transforms the county
Wolfhagen Stadtwerke und Gemossenschaft	Wolfhagen municipal utility + cooperative		X	Hesse	Energy cooperative that transforms the county
Buergerinitiative Buendnis Windpark Winterstein	Citizen Alliance for Wind Energy Winterstein	X		Hesse	30 organisations, largest PRO Wind citizens' initiative in Hesse
Stromspar-Check	Electricity-Savings check	X		Frankfurt	Joint project of Caritas, City of Frankfurt, municipalities, public utilities to help low-income households save electricity.
Lokale FFF Gruppen	Local FFF groups	X		Germany-wide	political protest and acceleration of national and international negotiations and effective action on climate change.
der/die Bürger*in	The citizen's PV (rooftop or balcony)	X		Germany-wide	...who is motivated and self-responsible to put solar cells on the roof/on the balcony.
Prosumer*innen (X2)	Prosumerism (X2)	X		Germany-wide	1. Actors as consumers and producers of renewable energies. This can also

					be individual households. 2. People try to live (balance sheet) energy self-sufficiently
Deutschland -weit Energiege- nossenschaft en	Energy Cooperativ es Germanwi de	X		Germany -wide	Energy Cooperatives Germanywide
Bürger- energieproj ekte	Citizen Renewable energy projects	X		Germany -wide	Citizens finance & operate renewable energy plants
Aktivismus	Activism	X		Germany -wide	People advocate for a decentralised energy transition through campaigns and/or demonstrations/ other actions.
Preisvariabl e Stromtarife (e.g. aWATTar)	Variable price electricity tariffs (e.g. aWATTar)	X		Germany -wide	Citizens can participate in favourable renewable electricity exchange prices and adjust their consumption accordingly.
Kampagnen für und gegen bestimmte Energiewen deoptionen	Campaigni ng for and against specific energy transition options	X		Germany -wide	e.g. in NRW and Brandenburg against coal mining
Ökoprofit	Ökoprofit	X		Germany -wide	Changing community to energy audit of small and medium enterprises, saving, renewable, environmental protection
Solar- Selbstbau-	Solar Self- Constructi	X		Germany -wide	Those with an affinity for technology join forces to install solar systems

Vernetzung D	on Networkin g				(keyword: lack of skilled workers) + exchange their experiences nationwide
Wattbewerb	Watt Contest	X		Germany -wide	Competition between municipalities to see who can build the largest solar power plant within a year
Wahl geben	Give choice	X		Germany -wide	Giving consumers the choice between sustainable products and conventional ones
Vorbildfunk tion, early changer	Be a role model	X		Germany -wide	Setting a good example as a company without legal constraints, electricity from RE, supporting RE projects, working energy-efficiently
Verhaltensä nderungen, Konsumverz icht	Behaviour al changes, renunciati on of consumpti on	X		Germany -wide	Behavioural changes, renunciation of consumption
Energieeffiz ienz, Bezug nachhaltiger (erneuerbar er) Energie	Energy efficiency, purchase of green power	X		Germany -wide	Energy efficiency, purchase of sustainable (renewable) energy

Table 5.10: German examples provided by the participants

The locations of the examples that have been provided by the participants confirm the difficulty in focusing on either the Berlin metropole or on the Brandenburg area, especially while looking for a diversity of examples.

The question of the regionality was raised by the participants and we decided not to constrain them to provide examples from the Berliner area. It is interesting to note that several of the cases that are located in Berlin and Brandenburg were mentioned

D2.3 Regional workshops: ‘translating energy citizenship’

twice (BürgerEnergie Berlin and Lausitz), which tend to confirm that such a narrow regional focus would hardly apply within the Berlin Workshop.

The other examples, located in other German regions or German-wide offer a large panel of ENCI forms, whether in term of focus or agency.

A large coverage of individual and collective forms of ENCI

The examples provided offer a large spectrum of forms of ENCI, well distributed between individual and collective forms.

On the one hand, individual commitment is clearly underlined: e. g. with citizens investing in renewable energies, participating in the corresponding discussion processes, trying to adjust their consumption to favourable prices in electricity exchanges. At this individual level, that the forms of ENCI are varying from minor behavioural changes to aspirations to energy self-sufficient lifestyles.

On the other hand, collective actors were mentioned a lot e.g. municipalities, community projects, charities, cities, energy cooperatives, multi-stakeholders' networks, shaping the energy transition at regional level, companies that take the lead, use electricity from renewable energies themselves or invest in them.

Classification of examples according to the agency

Individual and collective agency: pragmatic and theoretical issues

After the participants provided their examples of ENCI, we introduced our definition of ENCI and of an ENCI case. Then, the agency dimension was presented and discussed. The individual agency was especially questioned and commented with regard to the collective forms of ENCI – of which the energy community are seen as exemplary.

The first intervention pointed out the economic and financial aspects at stake in the political approach of ENCI and of any attempt to define it: *“In the individual examples you can see the political and also the economic-financial aspects. There has been a definition for three or four years of the renewable energy community from the EU directive, will that be embedded or at least mentioned? After all, that is also the legal*

framework, which (...) has to be implemented this year. That is also a definition that is important for concrete economic activity."

The second intervention questioned the joint consideration of the collective and individual level within the agency dimension: *"I am surprised that the individual and the collective are brought together in the term 'energy citizenship', with regard to the literature I wonder which part of it speaks for the energy citizenship literature and which for the community energy literature, they are definitely two different things."* Referring to a definition of citizenship rooted in traditional political theory, the participant underlined that the rights and duties attached to the notion of citizenship are distinct from activist forms of commitment: *"With regard to citizenship, I miss the aspect of exercising one's own rights and duties, so if I act as an energy citizen and have certain attitudes, that's not a commitment in the sense, necessarily, and yet it makes a big difference whether I have this attitude or not. And also, at this point, whether I have possibilities to act according to my attitudes. From my point of view, that is separate from civic engagement in an organisation or somewhere where I am activist."*

This remark operates as a good reminder of the work realised within the conceptual framework, and especially regarding the definitions and views on citizenship. The agency dimension has its origin from it, and particularly in its intent to cover the whole spectrum of ENCI. The view on rights and duties can notably include the latent forms of ENCI, which corresponds here for instance to situations in which one's attitudes are very supportive, but this is not always visible to the outside, one buys green electricity, but is not an activist on the street. The EP project considers that these various forms are also part of civic engagement, but in a more passive form, a more individual form than activist engagement that is highly visible in the public space.

Following the discussion on agency, the participants were asked to place their examples within a table displaying the five agency categories. The output of the ordering process is reproduced in Figure 5.11 below. It calls for several key comments:

Individual examples: uncertainties about private and organisationally embedded. About 15 examples are considered as belonging to individual ENCI. Amongst them, the participants were sometimes hesitating between the private and the organisationally

embedded categories. It is for instance the case when a company that seeks for becoming a “role model” decides to “give the choice” to the users: “It’s an individual decision when a company decides to put money in its hands and go for renewable energy. I wouldn’t call that public or civic now.” Here, the organisation is indeed seen by our participant as the catalysis of ENCI: “It’s an individual decision when I as a consumer say: “I’d rather spend 10 euros more on a pair of jeans, knowing that people weren’t exploited for them”. And you have to have the offer first.” A similar sort of hesitation can be found in the example of a local heating network: “I had picked out a concrete example from a farmer who does it locally. Private household doesn’t quite fit there, whether it’s more of a company, a small farm, I wasn’t so sure. The others are simply customers, not share owners or anything. Nevertheless, it belongs to citizenship, because it moves into a completely different field, but goes outwards.”

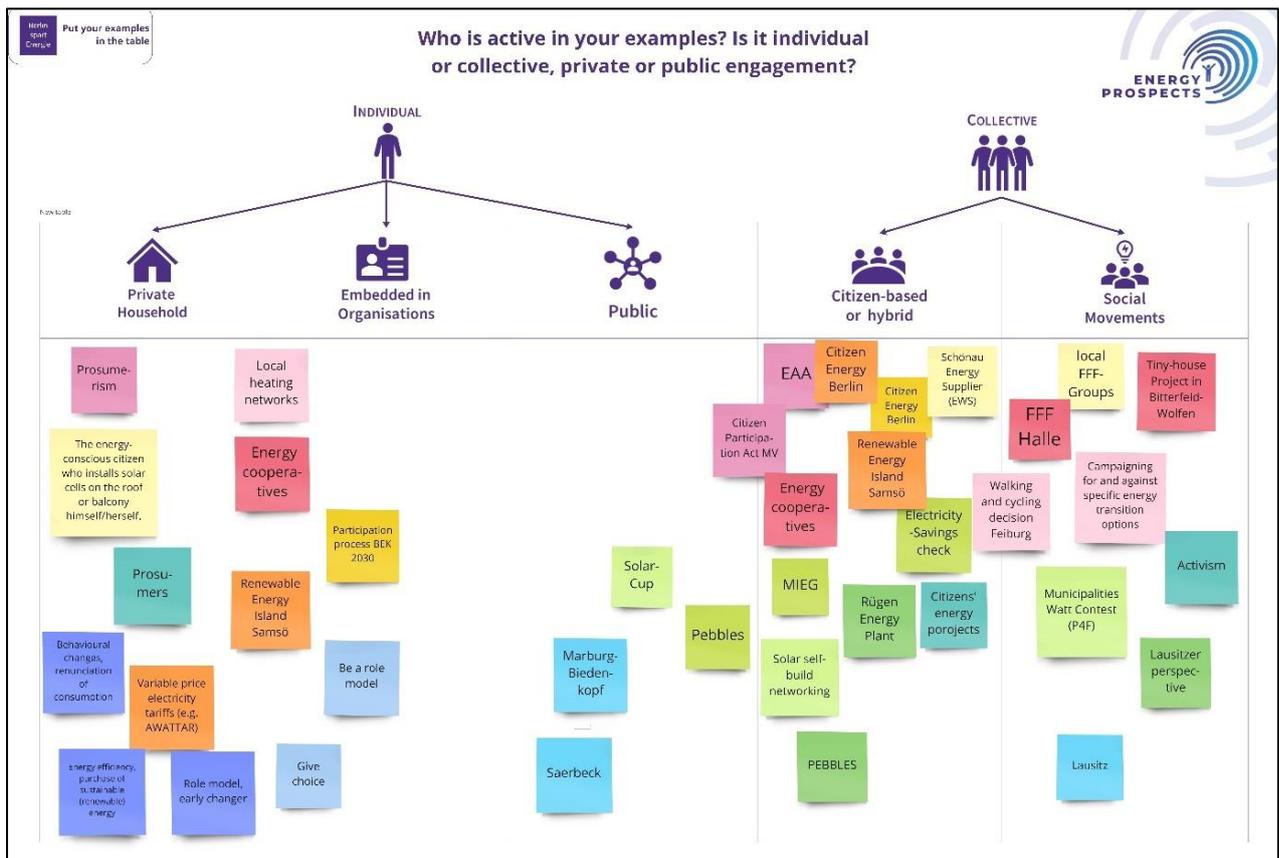


Figure 5.11: Examples ordered according to the 5 agency categories

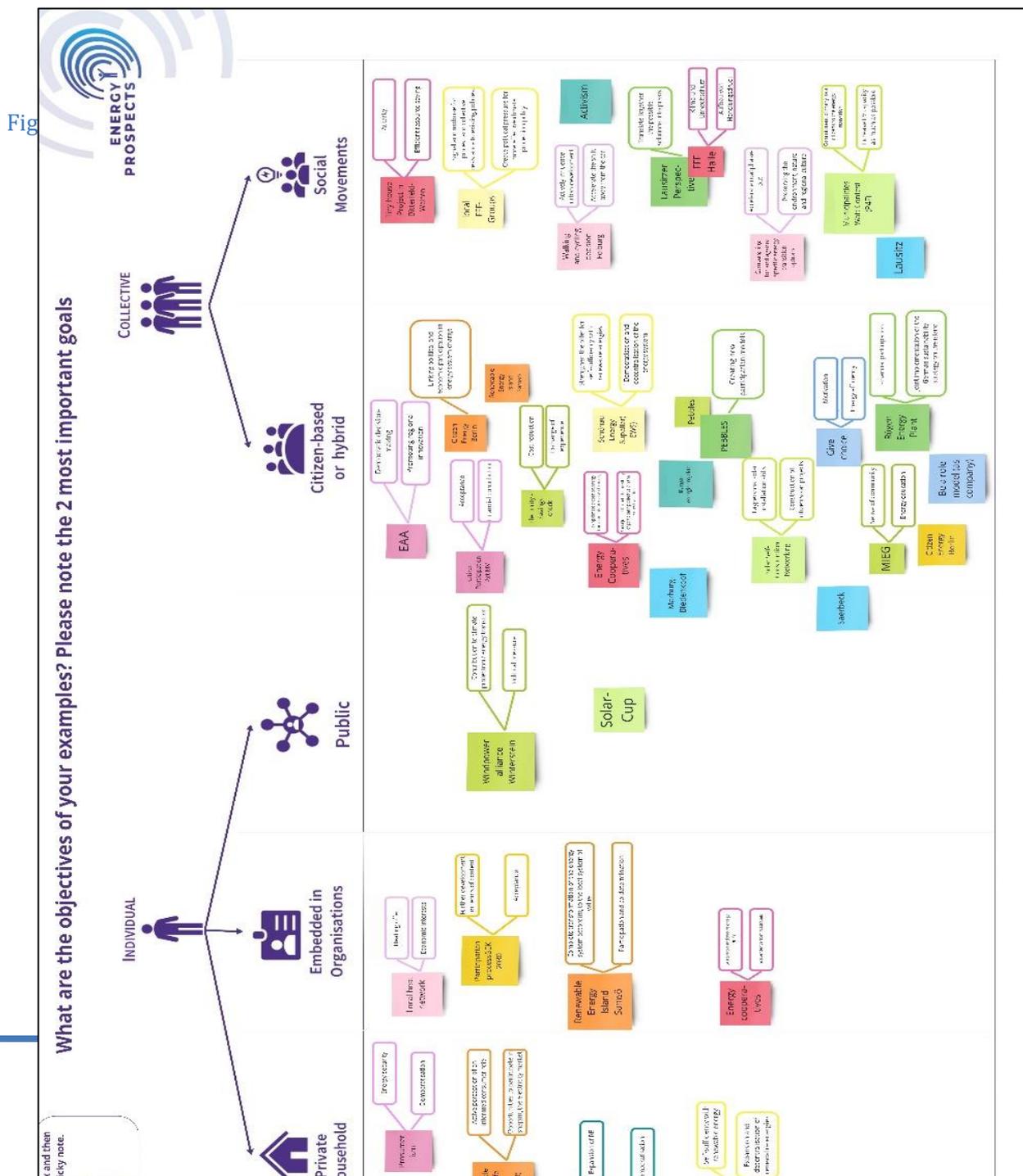
Individual/collective uncertainties: Some of the participants underlined their difficulty

to order the examples according to individual or collective, mostly because collective cases always involve individuals: *"The scheme is basically difficult, it is always individuals"*. The example of the Energy Island Samso pushed forward the discussion on the individual/collective distinction: *"The principle of this island was to transform the whole system top-down. The implementation was on the one hand individual and on the other hand jointly realised and therefore embedded in organisations, civic actions. Local forms of energy production are built together, as a village or as a community, which then belong to us together. But because there is no social movement in the sense that one could also make it citizen-based or hybrid, I have left it as it is for now, because the difference is that when you talk to the people there, there are also people who say that I don't own any part of the project, but I am part of this energy system change and I am just as proud of it and it is also my project"*. This example raised indeed an interesting question with regard to top-down initiated transformation-processes that entail several facets, projects, initiatives which might be more or less appropriated or reappropriated by citizens. Such cases entail obviously many forms of both individual and collective forms of ENCI, and it might be sometimes difficult to identify a predominant type.

Difficulty to grasp the individual/public sub-dimension: Within the five sub-dimensions of agency, the individual/public is the one who entails the littlest number of examples. Some of the multi-faceted process previously evoked have been considered by the participant as „public” (Marburg Biedenkopf and Saerbeck), as well as public events such as the solar-cup in Hesse, or public regulations that are dealing with the citizen participation in energy project (Citizen Participation Act in Mecklemburg Vorpommern). All these examples can hardly be attributed to the public category as defined in the conceptual framework, grounded on the public/private distinction. Conversely, the most obvious example of „individual/public” — the BEK2030 participation process — has been initially seen as „embedded in organisation” rather than public by the participant who submitted it. This way to order the example underlines how much the point of view adopted by the participant is impacting the assessment of the example, and especially when the participant is a practitioner: Here, the organisation of the participation process seems to prime over the citizens that are effectively participating.

Identification of the two main goals pursued by the examples

Before introducing the second dimension of the typology, that is, the reformative or transformative outcome-orientation, we asked the participants to explain the two main objectives that are associated with their examples. This step was notably thought to avoid imposing too much our views, and especially on the two dimensions of the typology. Asking for the two main goals had therefore been considered as a good way to initiate the discussion on the outcome-orientations of the ENCI cases. The time allocated was not sufficient to enable the participant to add the two main goals for all the mentioned examples. However, they provide a large number of answers, as shown by the following figure 5.12.



We put also the mentioned goals in a word cloud that highlights some of the key words used by the participants:



Figure 5.13: Key words defining the main goals associated with the examples

The two main goals mentioned by the participants show a series of clear foci:

participation and democratisation of the energy system

economic and financial aspects

energy transition through decentralisation, renewable energy and self-sufficiency

climate and environment protection

political pressure

The main goals that the participants have associated with the various examples tend to be in line with the bundle of attributes that formed the reformative and transformative outcome-orientations for the typology matrix.

Outcome-orientation dimension

On the basis of the work on the goals of the examples, we introduced the outcome-orientation dimension of the typology, which raised many questions.

Goals, outcome-orientations: identification and normative values: the main issue with the outcome-orientation dimension was undoubtedly the distinction operated between the goals, effective outcomes and the outcome-orientation. It is hard to stick to the outcome-orientation and to avoid looking for achievements: *"How do we read out the goals? What is the target level? Do the initiatives / people themselves know what the goals are?"* These general questions induced more precise comments regarding the identification of the goals and their normative dimension: *"I find the classification interesting, even if it's unclear. I also find it very difficult with the goals. Are these goals that we somehow read out, are they goals that the actors explicitly set, are they normative goals or something that you look at from an objective point of view? You say these are goals that the actors themselves have. If you look at a cooperative, maybe they don't all want the overthrow."*

Assessing the outcome-orientation requires thus a cautious methodological approach, especially to decipher the outcome-orientation on the basis of the actors' claims: *"I found the distinction interesting again, because I also got stuck when it came to the claim. The second element, the contribution, ultimately the effect, must be evaluated and that is what you would have to do yourself, what effect do these organisations create, that is the view from the outside. Then it gets even better for me. But that can also be a discrepancy. I find it exciting again, to classify that in the typology more precisely, what lies further behind for you, intention, effect, how can that also be evaluated. That can even lead to depth psychology, how can I filter out the intention there? What the actors give me or what I interpret into it is not that easy."*

Another participant carried on with the normative values that are bearing the outcome-orientation dimension by underlining the difficulty attached with the dimensional continuum and the combinations of actions in line with one's values: *"What was missing from my point of view in order to be able to classify the dimensional continuum is the underlying value system, whether citizens act on the basis of their values. If I use green electricity, then that is on a reformative level, but if you take a closer look at the people,*

you can see that these customers are also systematically using less electricity. These people also behave according to their values and become transformatively active."

A reformative/transformative distinction that is sometimes blurry, especially according to the considered scales of action. A large number of reformative initiatives can indeed result in more transformative outputs than an isolated transformative initiative: *"1000 energy cooperatives in recent years: work reformatively (within system) - cannot be revolution (but are revolution by replacing countless small systems). All have elements of the current energy system, as they function within it - but are thus part of the transformation."*

The reformative/transformative distinction tended also to be considered in a hierarchical normative way, implicitly considering that the transformative outcome-orientation is more desirable than the reformative one: *"Many cannot do more than take reformative action to save their energy. The creation of such all-transformative elements is already part of this transformation. I have a hard time dividing it up. Sure, with some you can say they do their job and don't want to go beyond it. Some may not be as revolutionary as one might imagine, but one should still appreciate that energy cooperatives etc. are doing their part to transform."* This different value associated with the reformative and transformative outcome-orientation might also result from the wording adopted to describe the bundle of attributes of each sub-dimension, in which the reformative side is depicted with negatively-connoted terms such as little, low, etc. *"I am familiar with this division. I just noticed that in the first category, energy democracy, I don't find this negation so concise somehow. I can't say what it would be for me yet either. Energy democracy has a high meaning, so I can do something with it right away. The wording here is a bit fuzzy."*

More in the detail of the outcome-orientation dimension, several participants emphasised the difficulty in coping with the bundle of attributes, especially regarding environmental sustainability and the assessment of the ecological goals: *"The question is how transformative sustainability is achieved? The goal is nevertheless an ecological goal, even in the case of activities that are reform-oriented."*

The rather theoretical focus of these comments made it all the more interesting to continue with the presentation of the typology and its ten types, and to ask the participants to classify their examples according to the types – which proved easier than expected in the light of the debates on the outcome-orientation.

Assignment of the examples to the types

After discussing the outcome-orientation, we presented the ten types of ENCI from our conceptual typology and asked the participants if they could assign their examples to one (or more) of the ten types (Figure 5.14).

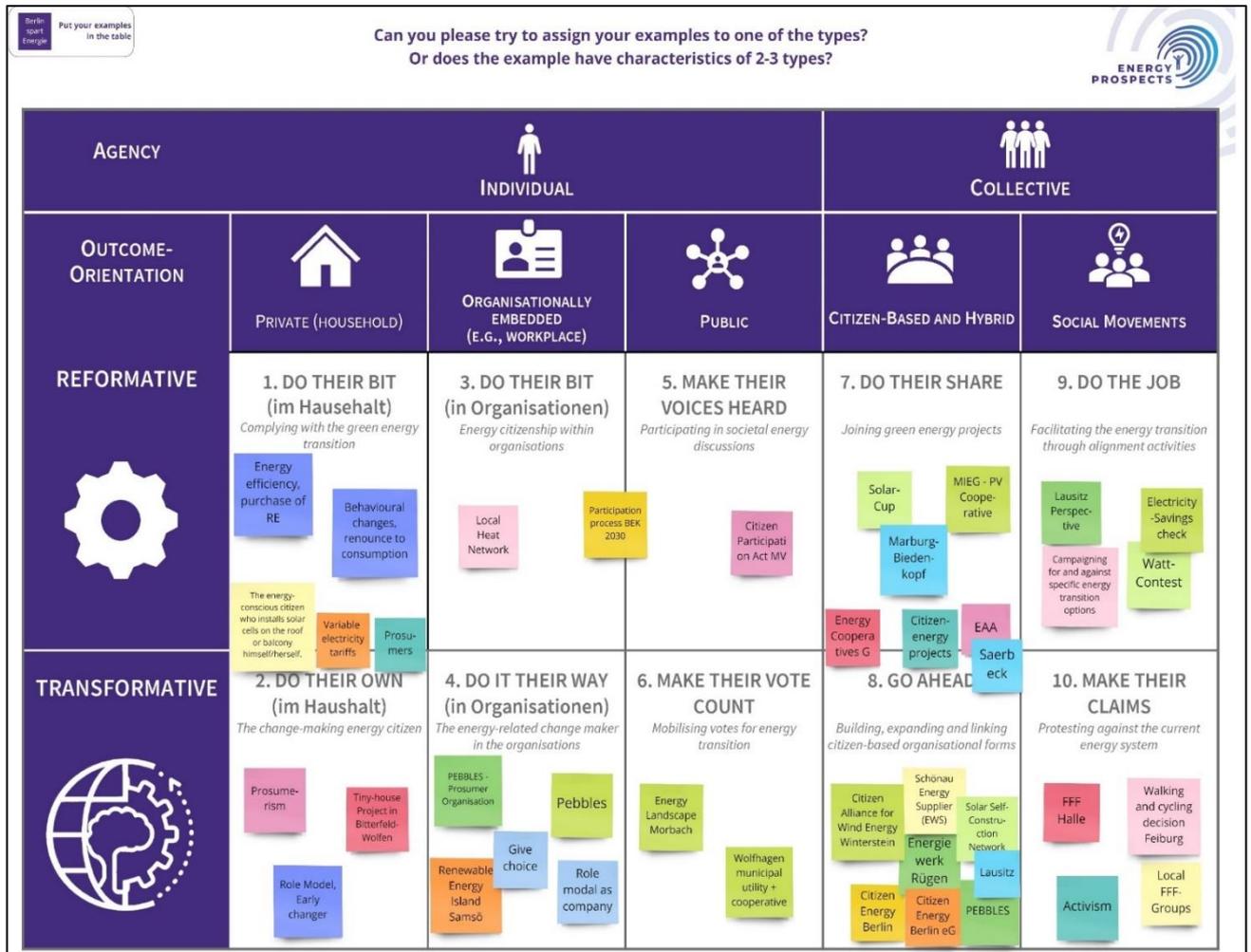


Figure 5.14: Assignment of the examples to the types

The assignment of the examples covers all the 10 types, with a significant over-representation of the types 7 and 8, and an under-representation of the types 5 and 6 – in line with the few examples of individual public forms of ENCI. The participants didn't find the ordering of their examples particularly difficult except for the *“generic examples”* (as opposed to the specific and precise ones), which can entail in context either reformative or transformative forms of ENCI: *“F4F fits very well into category 10; secondly, I had IWS Schönau and there I would also say that ultimately type 8, go ahead, fits well. That is a transformational story that makes a difference. The third is the individual citizen who puts solar cells on her roof. If there are a lot of them, it has transformation potential, someone has to start. I find it difficult to categorise this, because it is not easy to grasp this individual claim.”* The same idea is shared by another participant: *“So in my first example, which is aimed more at the individual level, prosumerism or citizen energy, whether that is reform-oriented or transformation-oriented. You could say it is reform-oriented because it doesn't change that much in the existing energy structure, but you can say that it is a building block of the decentralized energy transition, that would be transformation-oriented.”* Assigning individual examples to a type induces quite systematically questions about the addition of these individual forms of ENCI, which is somehow a core issue linked with the notion of citizen and citizenship, granted to individuals but also taken as a whole. By changing the considered scale, the outcome-orientations may then change (e.g., from reformative to transformative): this idea is also found for collective example.

A similar statement is indeed worth for collectives such as energy cooperatives: *“On the subject of cooperatives: there are of course cooperatives that operate 10-20 solar systems in kindergartens, but there are also cooperatives that have more plans, they want to stir up the whole district, that is of course a different claim.”* In other words, the „generic examples” encompass a large number of possible specificities that may result in either reformative or transformative types: *“There is also a wide range, I also find it difficult when citizen cooperatives don't even consider who they are reaching. If in the end only old white men gather there, I find that problematic because some groups are misjudged. It depends on the rules of procedure of the cooperatives and who is sitting there.”*

The focus adopted and the position from which the participants are considering the forms of ENCI impact quite decisively their type assignment. It is for instance the case for the BEK2030 participation process: *"The BEK, the Berlin Energy and Climate Protection Programme, is the central instrument for achieving the climate protection goals in Berlin and is currently in the participation process, it is about the further development for the next few years. I have classified it under 3, because it is reform-oriented, it is not about overturning the existing BEK, but about improving it and embedded in organisations, because it is about addressing the companies or institutions that are already involved with individual measures. It can probably also be categorised under 5."*

The discussion raised by the examples of the tiny house proved also very enlightening about both the hesitation between reformative or transformative classification and the question of the scales from which the case has to be considered: *"I find my example with the Tiny House settlement difficult, because they would like to do prosuming, sharing economy, use renewable energies, etc. I think it's also more reform-oriented, they want to promote the energy transition, but with their entire concept they are protesting against the current situation. They are also pushing for change and inspiring others with it. I find it difficult to distinguish between the two."*

As a provisional conclusion, it seemed us that the assignment of the examples to the 10 types raised a series of key issues related to ENCI cases and types, and basically that of the uncertainties between the reformative and transformative qualification. Some other issues are of highest interest, especially regarding the scales of action — and notably by comparing specific contextualised cases with more generic examples —, the time dimension and the dynamics and combinations of the types. It also seems us that the typology proved to be a very efficient tool that enables to distinguish various forms of ENCI within generic examples (such as the energy cooperatives): it adds a further degree of understanding for various sorts of manifest ENCI and invites to further investigations for many specific cases, for instance to provide a better understanding on how various types can combine with each other in an optimal way and how they do

evolve across time and space. This is in our view one of the most promising outputs of the Berlin workshop.

Facilitating and hindering factors

The last task — the collective reflexion on the facilitating and hindering factors according to the various types — proved to be very fruitful, as the following figure 5.15 from the collaborative Miroboard shows:

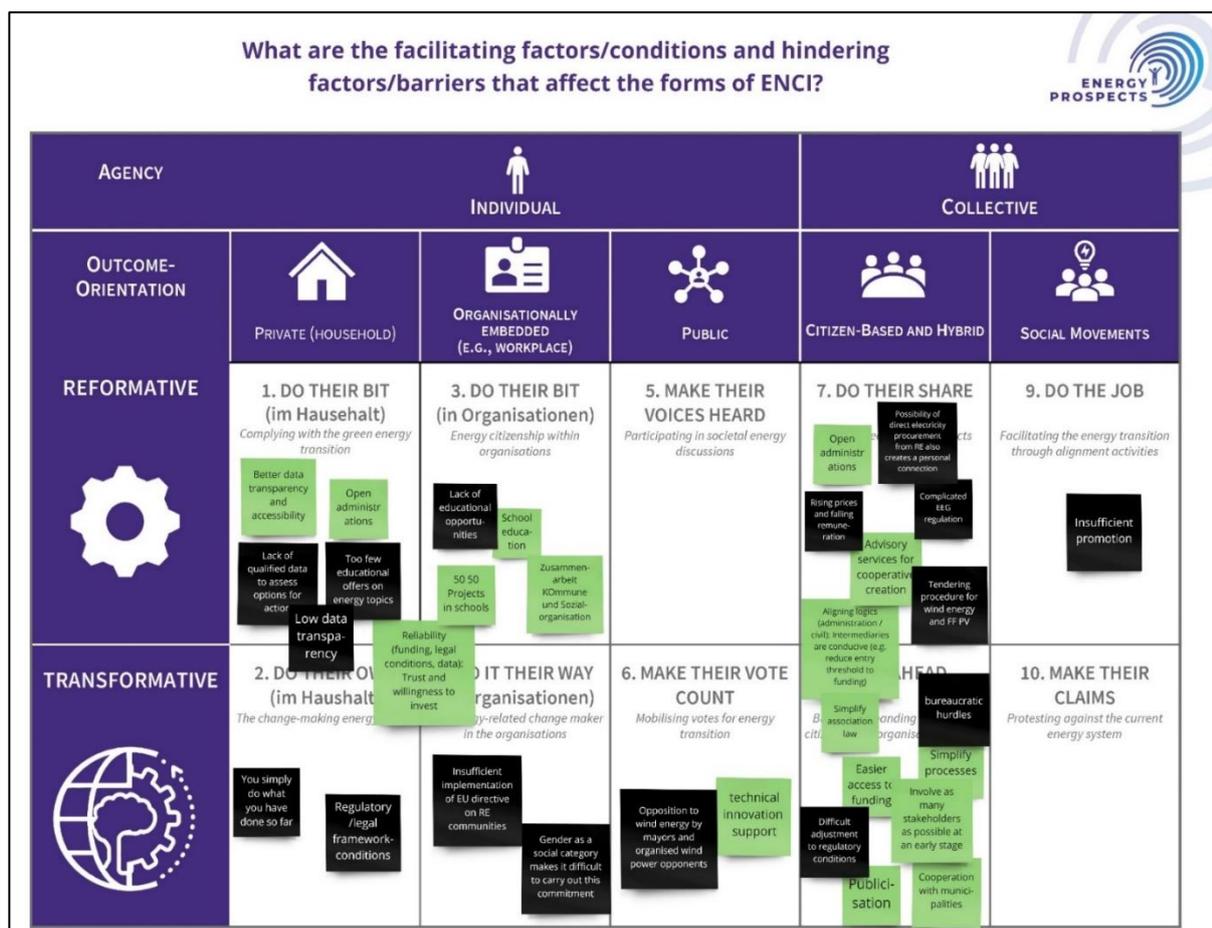


Figure 5.15: Facilitating and hindering factors per type of ENCI

Among the facilitating and hindering factors, some have been given a specific importance by the participants and tend to reach a sort of consensus.

On the individual side, educational aspects are seen as a key factor (the lack of educational offer as a hindering factor and the need for more education as a facilitating one): “Another thing that comes to mind is that if you look at the school, there is no

subject in which something like this is taught: "where does the energy come from?" Educational opportunities are lacking and could be absolutely conducive to people wanting to get involved. If one were to start at the beginning, at grammar school level, etc., or even much earlier, make sure that people even think about contributing to change. Generally, education in this area is lacking." This statement is considered as particularly valid for the reformative individual types 1 and 3. On the more transformative side, the legal, regulatory, and administrative framework conditions are considered as key hindering factors.

The impact of these legal, regulatory and administrative framework conditions is even more critical *on the collective side: "I would always mention the lack of legal certainty or financial support as inhibiting factors"*. Another participant took up, insisting on the necessity *"that processes are simplified. What I often hear as feedback is that the regulatory conditions are not changing fast enough. New models that legally support technical and social innovation would be very helpful. I find this slide particularly helpful."* The bureaucratic hurdles are also clearly underlined by another participant, noticing that intermediaries and mediators could represent a solution to these hindering factors: *"Intermediaries as mediators are very beneficial, both at the city and at the state level, where counselling services are provided to make the entry threshold easier and to remove hurdles. These would be actors who try to simplify civil society's entry into bureaucracy; on the other hand, it is necessary to simplify bureaucracy in general. It is also necessary to make funding more accessible. We also need to simplify the law on associations. Often, the organisational forms do not fit the initiatives at all, so that informal bodies often remain, which have a harder time getting funding. Existing law should be adapted to this. These were experiences from various projects that we accompanied."*

Among the other factors underlined by the participants, the data transparency was also underlined as a key aspect to build the trust required for the citizens to get involved at the individual level: *"I would like to address the issue of data or data transparency. A prerequisite for acting or deciding in one direction or another is to have an overview, and in the field of energy or emissions, most actors have little more than numbers, data and facts to assess their consumption or that of the environment. On the basis of greater*

transparency, significantly more low-threshold activities could be encouraged or initiated where low data availability is an obstacle. This data would also have to be put in relation to what is typical for energy consumption. That could send a signal and motivate initial action.”

Lastly gender issues were also raised as a barrier, especially within the organisations: “Especially for point 4, gender is relevant as a structural category; women often don't even have the opportunity to participate in decision-making because decision-making positions are still occupied by men. This could also be extended to socio-economic categories. Women are less likely to have the opportunity to participate in the type 4.”

This quick mapping of the hindering and facilitating factors according to the types leads us to this general concluding remark: the individual/collective and reformative/transformational distinctions seemed to make sense to point out some specific factors and their specific impacts on the various forms of ENCI. For instance, if the legal, regulatory and administrative framework conditions are underlined as a main factor on ENCI, their impact differ noticeably according to the ideal-types, which is a result of particular interest for EP project.

6 Translating ENCI: Budapest/Hungary

. In the following chapter we focus on the Budapest/Hungary event and briefly describe some particular features of the ENCI context (**section 6.1**) and the workshop hosted by GDI in Budapest (**section 6.2**), before presenting key findings from the workshop (**section 6.3**).

6.1 Description of ENCI context

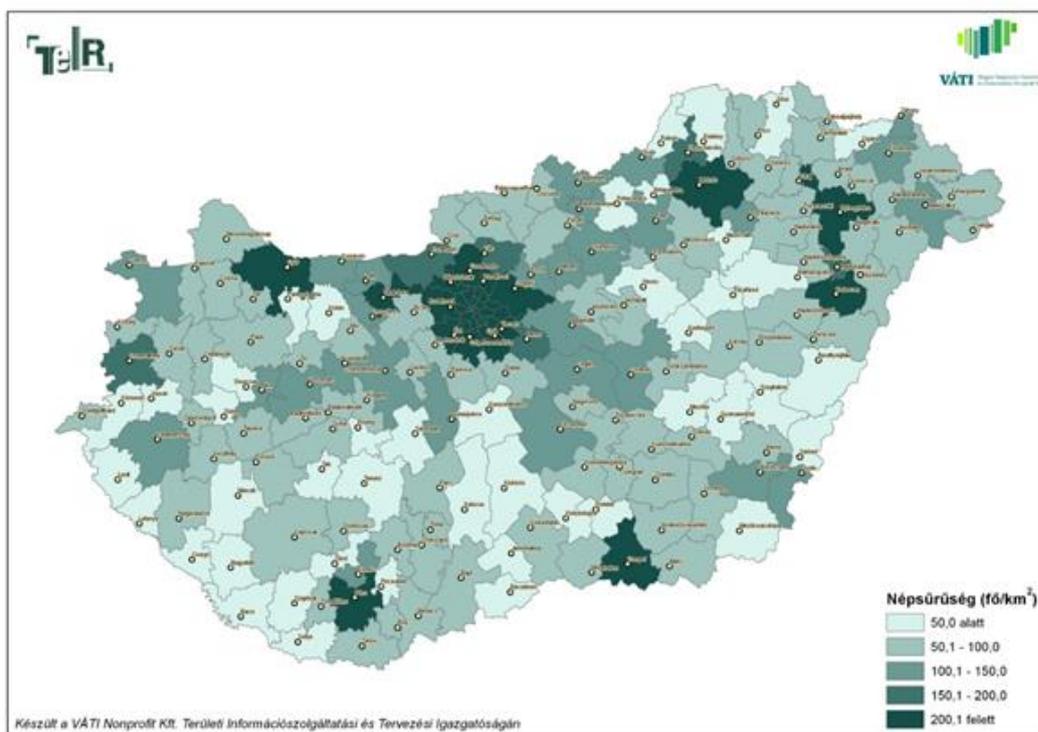
For this workshop, Hungary (the country as a whole) has been chosen as a ‘region in the context of this Task, as after a very careful deliberation process the workshop organisers found that there are not very significant differences between the various regions of Hungary in terms of energy citizenship, not least because there are no differences in legislation related to initiatives that can be categorised as cases of energy citizenship. Naturally, there are more developed areas within the country (e.g. capital city, Central Hungary or some major towns), but the developmental differences are not due to geographical locations but rather some other factors.

Furthermore, the number of experts working in areas related to energy citizenship is smaller compared to the Western European regions where the workshop was also organized (e.g. Wallonia, Galicia, Berlin/Brandenburg) and they are (as well as the organisations they are affiliated with) scattered all over the Hungary. Due to the Covid pandemic situation ‘gathering’ these experts proved to be less problematic for an online workshop than trying to organise a face-to-face meeting with them, so such a workshop format was selected.

In summary, for the reasons outlined above the workshop was organised for the whole of Hungary, with the objective of defining energy citizenship for the whole country. Consequently, the examples mentioned at the workshop are typical of Hungary rather than a specific region.

Hungary is a country in Central Eastern Europe with an area of 93 030 km², and with a population of 9,730,772 (KSH, 2021). There are eight NUTS 2 level regions, out of which Budapest, the capital of Hungary is a separate one.

The population density is 104.6 inhabitants/km² in Hungary, which naturally varies within the country, Budapest and the central regions alongside with the surrounding



areas of larger cities have higher density (above 200 inhabitants/km²), while the external regions have smaller (between 60 and 82 inhabitants/km²).

Figure 6.1: Population density of Hungary

From an economic point of view Hungary has a 15,866 USD/capita GDP (KSH, 2020), 22nd in Europe.

Relying on Vadovics, 2019, we observe that a considerable share of the society (around 35%) live under the “subsistence” levels and **21% in fuel poverty** (Fülöp and Lehoczki-Krsjak, 2014). 26.7% of homes have inadequate walls and roofs, and 9.2 % of the population is unable to keep their homes warm (Eurostat in HBS, FoE Hungary, 2018). Thus the affordability of energy is a major issue and the popular policy of the

government is to regulate the price of energy. Hungary is the second poorest country in the EU.

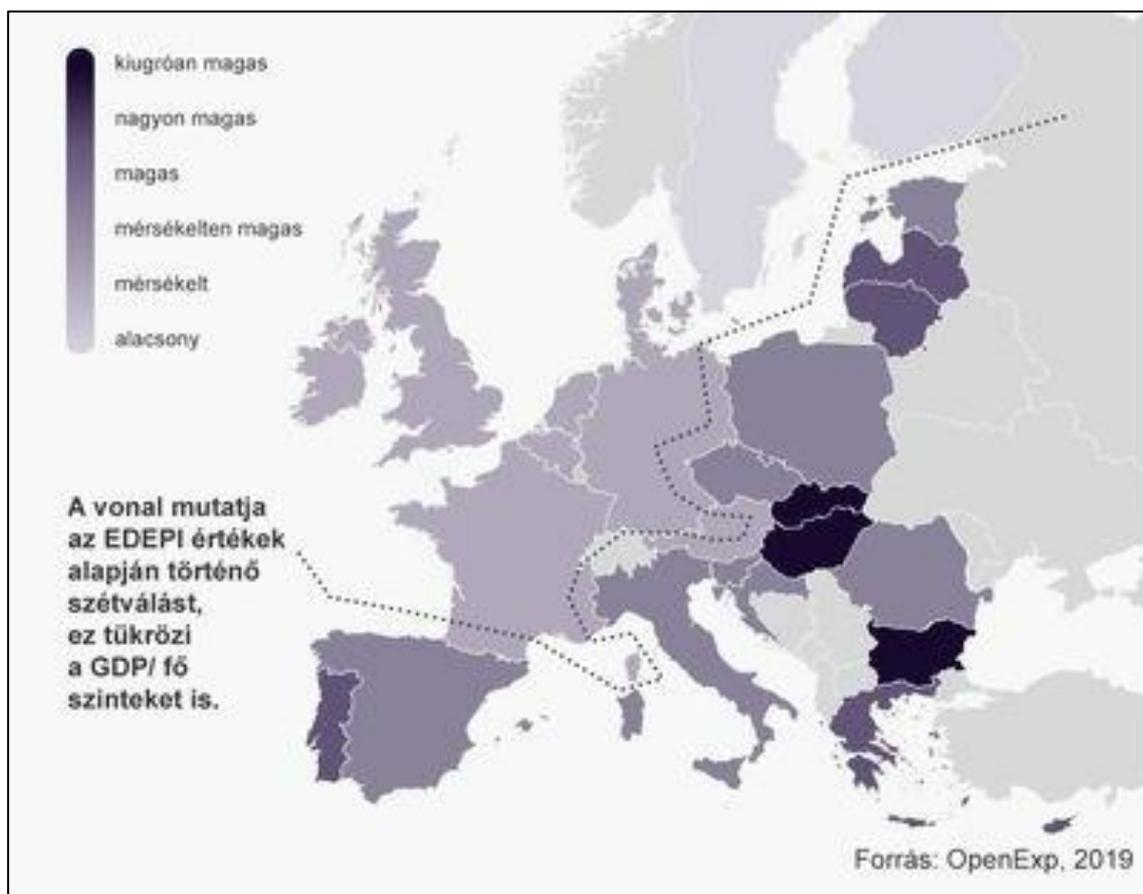


Figure 6.2: Cumulated energy poverty within the EU (Source: OpenExp. 2018)

In relation to energy use, the **level of consciousness is low**, the majority of the households do not follow their energy consumption data and the household appliances stock is outdated and inefficient on a large scale (Slezák et al., 2015). On the other hand, when asked in representative surveys, the Hungarian population expressed willingness and interest in energy efficient home improvements (see e.g. Fülöp, Kun, 2014), but on the whole **lacks the financial resources to act** on this interest (Vadovics, 2019).

What is its administrative status?

In Hungary a large part of the competences in energy policy and finances **are held by the central government**, including energy and environmental regulation and

administration, as well as the financial incentives and funding opportunities. In the meanwhile, the eight regional level administrations have very limited competences and resources.

What are the specificities of its energy system?

In June 2020, Hungary adopted a new law making the net-zero emission target by 2050 a binding obligation. This is part of a wider change in the country's energy and climate policies.

As Vadovics(2019) summarises, Hungary is poor in fossil fuel resources but at the same time close to **90% of its total primary energy supply comes from fossil fuel and nuclear sources** (MEKH, 2017). Thus, dependence on external fossil fuel and non-renewable resources is one of the biggest issues energy and climate policy need to deal with. With regards to energy system ownership structures, there is an explicit policy by the government to establish a state-owned, centralized infrastructure as the main means for the provision of energy for the household sector, one of the largest final energy user sector with 31.1%, followed by the transportation (22.3%) and industrial (21.5%) sectors (MEKH, 2017;Vadovics, 2019).

The ratio of electricity produced from renewable sources within the gross final energy consumption in Hungary was 10% in 2019 (KSH, 2019), but this ratio has been increasing.

Thus, in agreement with Vadovics (2019), we can observe that perhaps it is not surprising that the country is **lagging behind** other European countries **in terms of both renewable energy utilization and community energy as well as supporting the transition to a prosumer culture**, all of which would require a more flexible and less centralized energy system. At the same time, per capita carbon emissions in Hungary are lower than the European average, and in fact lower than in most European countries (EEA, 2019, based on data from 2016). This fact if considered together with the rather high (cc. 40%) saving potential in the household sector means that there is a so far unrealized potential towards a low-carbon economy (Energiaklub, 2011). It is also worth noting

that although according to the latest Eurobarometer survey (2018) climate change is not considered to be a central issue by Hungarian citizens, there is a higher than average (76%) support for the common European energy policy (Bart et al., 2018;Vadovics, 2019).

Although the concept of energy communities appears in the plan in the context of support for the integration of weather-dependent renewable energy production and the flexibility of the electricity system, only a certain type of energy community is mentioned and it is only referred to as a generating unit served by the investment. Energy communities are much more than simply energy generators: they can even provide flexibility services according to the current law, so they can be not only beneficiaries, but also project owners and consortium members for such developments. Moreover, planners do not take into account the fact that energy communities increase the social acceptance of investments in renewables, involve local capital in the energy transition, and can help reduce energy poverty and increase energy efficiency (Assessment of Hungary’s recovery and resilience plan, CEE Bankwatch Network, 2021).

[What is the translation of ENCI in this context?](#)

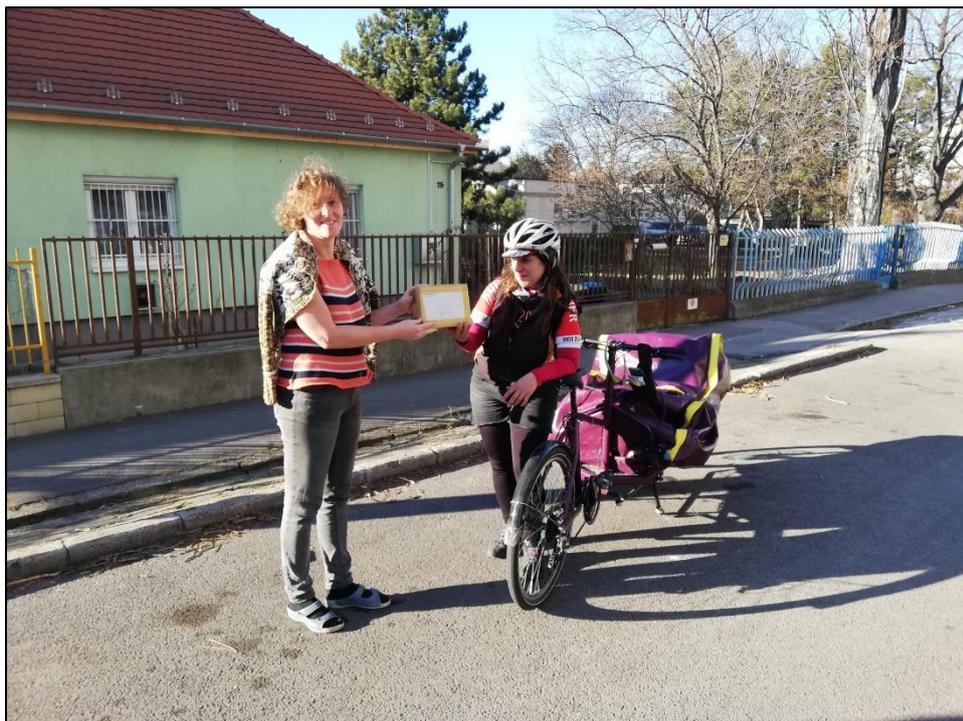
The literal translation on ENCI into Hungarian (‘energia állam-polgárság’ - energy state-citizenship) is not in use in Hungarian at all, it is a completely novel notion and terminology. The workshop participants understood the term but some had difficulty ‘picturing’ it and explaining it (see the workshop description for more details below). There was a debate whether the term ‘állam’ (state) should be omitted, but finally the decision was made that ‘állampolgárság’ is better for this instance. There are various reasons for this. First, in Hungarian ‘polgárság’ in itself does mean citizenship, but at the same time, especially lately it has also been extensively used as a reference to the social class between the working class and aristocracy, especially by some Hungarian political entities, which might cause confusion in some people and may also evoke particular connotations of the term. Second, the more established term “active citizenship” has been translated into Hungarian as “aktív állampolgárság”, and has been rather widely used. Thus came the decision to use the term ‘állampolgárság’, which clearly means

citizenship (= a member of society) in Hungarian, and can also thus be connected to the already established understanding and definition of “active citizenship”.

6.2 Particularities of workshop set-up

Regional focus: Hungary as a country

Budget: Due to the online nature of the workshop no room renting and catering costs emerged, however we spent about €200 on small snack packages for the participants and on their delivery/posting. Where possible, the packages were delivered using a cargo bike courier service, also with the intention to potentially draw the invited participants’ attention to one form of energy citizenship (which, actually, they did make a reference to at the workshop as well as listed the carbo bike courier service (“Gólya Futár/Courier”) as an example. The picture below illustrated the delivery of the snack package to one of the workshop participants.



Date: 11th February 2022, Friday, 10.00-13.30

Place/accommodation: Online (Zoom)

Participants: 12 external experts were invited from different areas of operation and expertise, out of which 10 were able to participate in the workshop. In the table below we only listed those who participated at the workshop.



Figure 6.3: Hungarian ENCI workshop

Name	Organisation	Role / Type of actor
Márton Fabók	Közösségi Energia Szolgáltató (KESZ) - Community Energy Service Company (CESCO)	Co-Founder (also researcher at the Solidarity Economy Centre)
József Fucskó	Magyar Környezetgazdaságtani Központ (MAKK) - Hungarian Environmental Economics Centre	Lead Researcher
Bence Kovács	Magyar Természetvédők Szövetsége (MTVSZ) - National Society of Conservationists / Friends of the Earth Hungary	Sustainable Energy Expert (responsible mainly for the community energy programme)
László Magyar	Energiaklub Association Climate Policy	Energy Expert

	Institute and Applied Communications	
Béla Munkácsy	Eötvös Lóránd Tudományegyetem (ELTE) - Eötvös Lóránd University, Budapest, Institute of Geography and Earth Sciences	Assistant Professor
Levente Pribéli	Eötvös Loránd University (ELTE) // Fridays For Future Magyarország / Hungary	Student; Activist
Zoltán Rózsa	Klímaparát Települések Szövetsége - Alliance of Climate Friendly Municipalities // Municipality of 12 th District of Budapest	Member of the Supervisory Board // Head of Department
Ágnes Szalkai- Lőrincz	Energiahatékony Wekerle – Energy Efficient Wekerle (community initiative)	Project development specialist
Lili Vankó	Habitat for Humanity Hungary	Policy Manager
Ilona Szécsi	Magyar Energhatékonyági Intézet (MEHI) - Hungarian Energy Efficiency Institute	Expert
Edina Vadovics	EnergyPROSPECTS - GDI	Organizer/facilitator
Kristóf Vadovics	EnergyPROSPECTS - GDI	Organizer/facilitator
Anna Farády	EnergyPROSPECTS - GDI	Organizer/notetaker

Table 6.4: Participants Hungarian regional translation workshop



Figure 6.5: Location/origins of the Hungarian participants

6.3 Key findings

Understanding 'energy citizenship'

Following the introduction of participants, and then the project, participants were asked to share their current understanding of energy citizenship and/or what energy citizenship means to them. Their responses are shown in Figure 6.6, as grouped by GreenDependent.

It can be seen that participants' responses can be placed into, by and large, three groups, with two of them somewhat overlapping. First of all, it needs to be recognised that some participants preferred not to provide a definition for energy citizenship, saying that although they do understand that their work can be connected to it in some ways, they are not yet using it, and do not yet describe what they do in relation to energy citizenship. Then, there were those who highlighted the aware, (climate-) conscious citizen and/or energy user aspect of the term. Finally, there were participants who attempted to grasp the complexity of the term, and pointed out both the individual and systemic aspect of it, and the fact that the transformation of the energy system needs to happen at both of these levels. In addition, the importance of empowering citizens and

empowered citizens taking control in a decentralised energy system was discussed by several participants.

It is also worth noting that some participants noted the **connection between “active and responsible citizenship” and “energy citizenship”**, saying that the latter is a specific manifestation of the former. However, even in this understanding of energy citizenship a connection between the individual and community was made, and the fact that both aspects are important noted. Figure 6.6 includes both the Hungarian, and the translated English definition of energy citizenship as provided by participants.

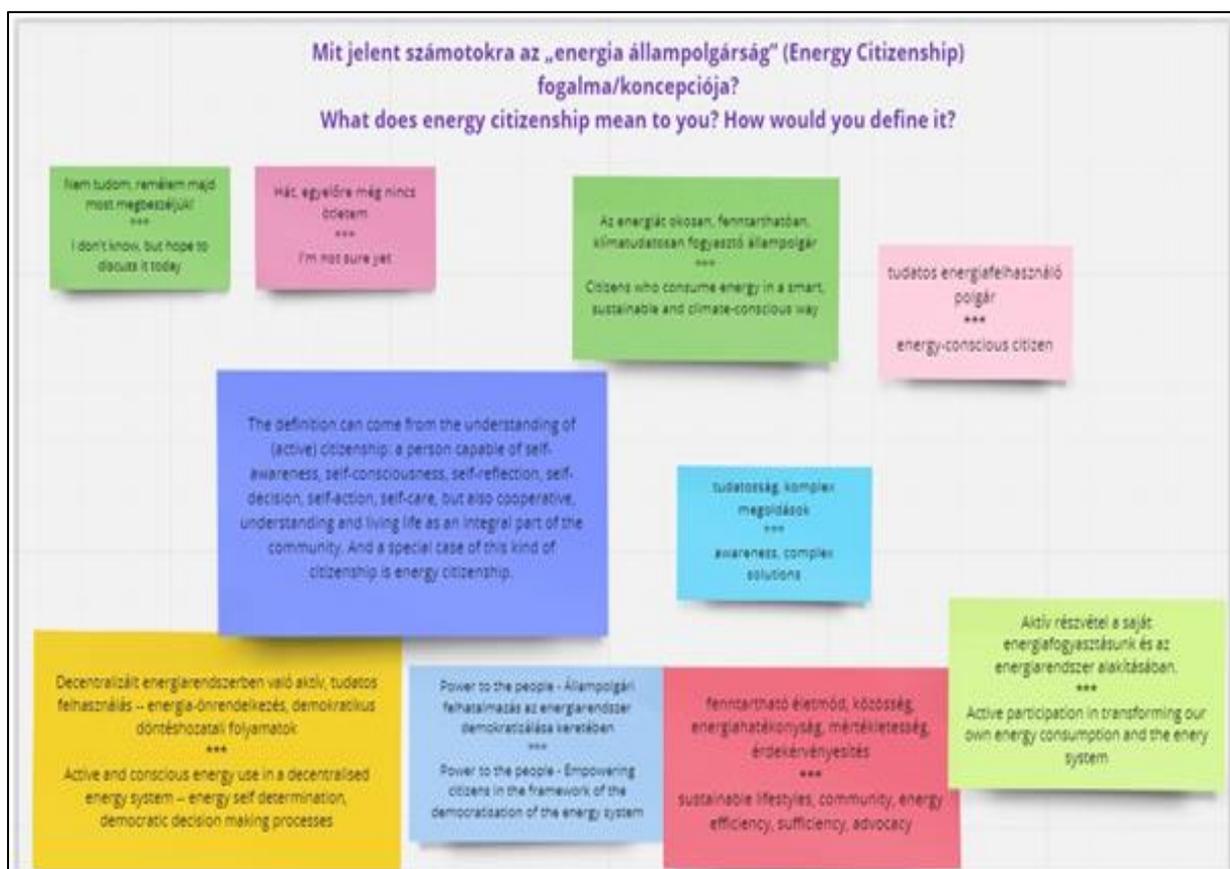


Figure 6.6: Translations of ENCI in Hungary

The word cloud below provides a summary of the various definitions provided. The words that stand out are “community” (közösség), “conscious/aware” (tudatos), “energy” (energia), and then “quality” (minőség), “energy consumption” (energiafogyasztás), “energy system” (energiarendszer), “self-aware” (öntudatos), “human”, “active”, “own” and “has the ability”.



Figure 6.7: Energy citizenship interpretations Hungary

Identification of regional examples of energy citizenship

Following the discussion of energy citizenship both as understood by participants, and as understood by the EnergyPROSPECTS project, they were asked to come up with examples of energy citizenship. It is important to mention that **although a definition of energy citizenship as defined by the project (in D2.1) was provided to participants, no definition of what we understand as concrete cases (as defined in D3.1) was given in order to not to limit or influence in any way their view** of what the examples of energy citizenship could be in Hungary.

Figure 6.8 shows the examples as they were listed on the Miroboard by participants, each participant using a different colour (the same colour used to provide the definitions shown in Figure 6.6), and Table 6.9 provides a summary of the cases with a brief description. Participants listed 25 examples at this stage, but these were later supplemented by further examples in an effort to see how the typology works in Hungary (see more about this below). Table 6.10 provides an overview of all examples

of energy citizenship discussed at the workshop.

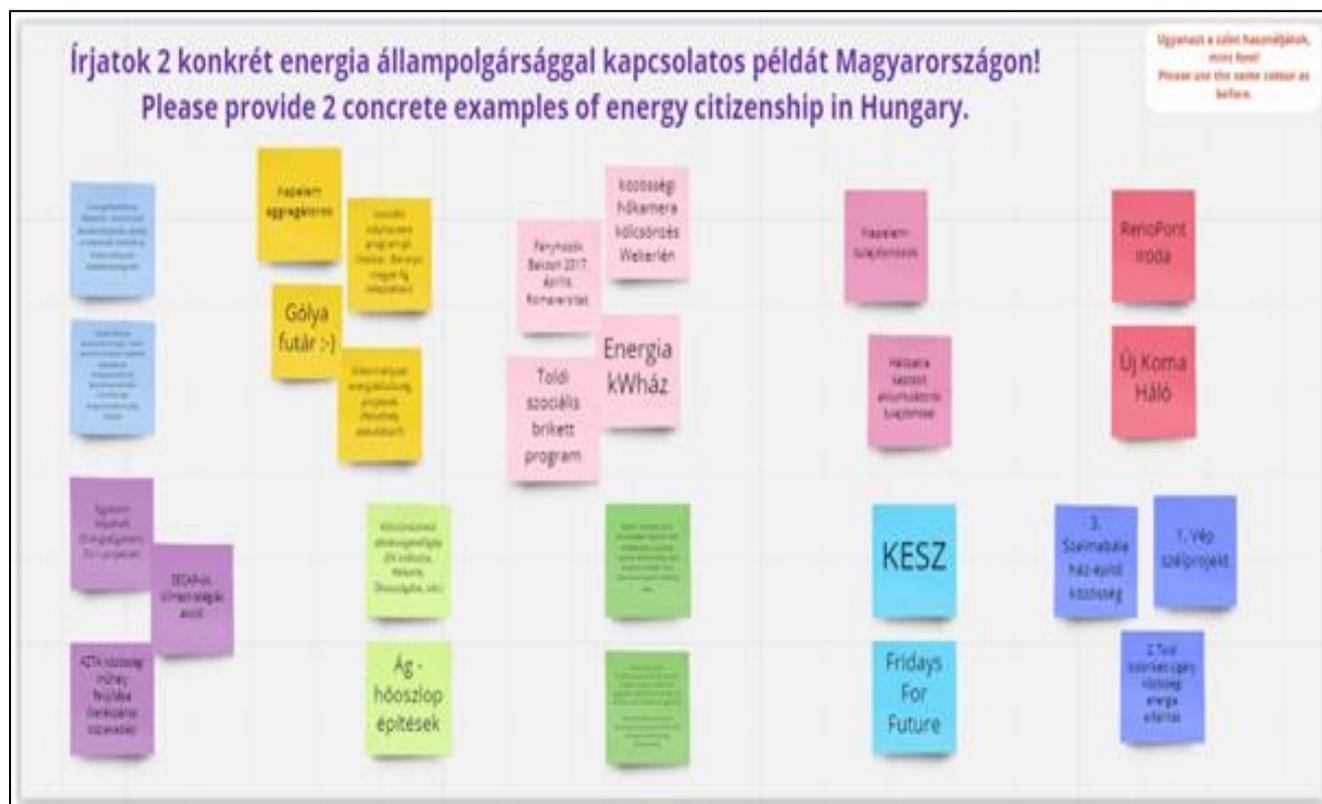


Figure 6.8: Examples of ENCI in Hungary as listed by participants

Main observations:

- The examples provided include **both concrete cases of energy citizenship** (e.g. Energy efficient Wekerle, Community wind turbine in Vép, etc.) and **types of cases or "generic" examples** (e.g. SECAPs and climate strategies, solar panel owners, etc.). Participants repeatedly recognised that in the case of the latter many concrete examples could be listed as well, so it seemed to be more practical to mention a case type (generic example) instead. About a third of the examples mentioned fall in this category of case types.
- Examples were listed **both from the capital, Budapest, and the countryside**, from various locations in the country. In the case of the case types, such a location cannot be established as concrete examples falling under the case type can be found both in Budapest and the country, in various regions.
- **The majority of the cases identified in the countryside are to do with communities or households living in energy poverty** (e.g. Heat columns, "Light-bringers",

Biobriquette programme). In Hungary, energy poverty is important and pressing issue as around 20% of the population is impacted by it. It appears that as a result, it is also an important aspect of energy citizenship.

- Some participants mentioned more general cases as well (e.g. Network of new eco communities) and noted that they are not focused on energy, but are still important cases from the point of view of energy citizenship. Interestingly, more of these types of cases were added in subsequent stages of the workshop when participants had the chance to work more closely with the typology (e.g. Eco villages, Co-housing, Degrowth movement, etc.).
- There were also participants who made a conscious effort to focus on the individual – because of the term “citizenship” - and listed such examples, e.g. solar panel owners, and owners of grid-connected batteries. Still, **examples of specific individuals identified by name were not mentioned at any point of the workshop.**
- Although the definition of energy citizenship was not limited during the discussion to any specific foci, **there was only one example mentioned with a focus on food/nutrition**, added in later stages of the workshop (the Vegan January campaign). There were cases with a focus on direct energy consumption/production, on mobility, and quite a lot with a more holistic focus (e.g. eco villages, the Degrowth movement, etc.).

As several participants noted in the first stage of the workshop when we were discussing the understanding and definition of ENCI with them that they are not yet using the term and have not really considered it explicitly so far, we have decided not to focus on the location of cases at the workshop, as it did not seem to be the most defining issue at this point. It seemed to be more important, including for participants, to discuss what energy citizenship is, what examples we can find, how these examples can be characterised, etc.

D2.3 Regional workshops: 'translating energy citizenship'

Hungarian name	English name	1st round	Added later	Location	Brief description
Energiahatékony Wekerle	Energy efficient Wekerle	x		Budapest	bottom-up initiative for change from the household to the municipal level (later link to and part of Transition Wekerle)
Közösségi hőkamera kölcsönzés Wekerlén	Community thermal imaging camera rental in Wekerle	x		Budapest	Community owned thermal imaging camera can be rented by households living and Wekerle to gain information on the thermal properties and energy efficiency of their homes.
Energia kWház Wekerlén	Energy kW-house (in HU kW reads like "coffee", so it sounds like coffee house)	x		Budapest	Community events to help improve energy efficiency in the home, especially heating, insulation, etc. Linked to Energy efficient Wekerle.
Gólya Kazánház	Gólya Kazánház	x		Budapest	community energy initiative with a communal learning element
Gólya Futár	Gólya Courier	x		Budapest	cargo bike base courier service
Energia Egyetem	Energy University	x		Budapest	an initiative between a university and an NGO for more sustainable energy
AZTA közösségi műhely felújítása (kerékpáros közlekedés)	AZTA community DIY workshop (bicycle repair workshop)	x		Budapest	community-based workshop space organising and providing space for various activities, among them bicycle repair
Zuglói "energia pont, tanácsadás"	Energy advice office in Zuglói	x		Budapest	municipality set-up energy advice office for households
Közösségi Energia Szolgáltató (KESZ)	Community Energy Services	x		Budapest	Based in Budapest, this organisation was set up by several others to support community energy projects, related learning and lobbying.
RenoPont iroda	RenoPoint office	x		Budapest	There are several offices set up by several organisations to provide information and advice to households about energy efficiency improvements in their homes. They are usually set up in cooperation with municipalities in the framework of a H2020 project.
Kölcsönözhető ablakszigetelő	Rentable DIY window insulator	x		Budapest and countryside	An NGO started a programme to enable people to improve the insulation of their windows and doors (and thus forego replacement). This consists of having a rentable machine for the task and a training programme for people. Other NGOs have taken up the programme by now at several locations in the country.
Fridays for Future Magyarország	Fridays for Future Hungary	x		Budapest and countryside	
Hőoszlopok építése (Ág, Habitat for Humanity)	Heat columns building (Habitat for Humanity in the village of Ág)	x		countryside	building efficient and cheap heat columns to help improve the heating of homes especially of those in energy poverty
Fényhozók (Baks, Romaversitas)	"Light-bringers" (Romaversitas, in the village of Baks)	x		countryside	Solar panels in Roma households to enable solar energy based lighting, organised by the NGO Romaversitas, who not only installed the panels but also taught recipients to maintain them.
Biobrikett program (Told, Igazgyongy Alapítvány)	Biobriquette programme (Real Pearl Foundation, in the village of Told)	x		countryside	A programme to involve energy poor families in biobriquette making using agricultural waste and lowtech solutions in order to ensure that they have fuel (and jobs).
Vép széliprojekt	Community wind turbine in Vép	x		countryside	
SECAP-ok, klímastratégiák, kapcsolódó akciók	SECAPs, climate strategies and connecting actions	x		n/a	municipal sustainable energy and climate plans, strategies and actions
(Közösségi) napelem aggregátorok	(Community) solar panel aggregators	x		n/a	
Önkormányzati kezdeményezések, beruházás nélküli energiacsökkentés jegyében	Behaviour change based energy use reduction programmes by municipalities	x		n/a	
Napelem-tulajdonosok	Solar panel owners	x		n/a	Households and organisations that have solar panels
Hálózatra kapcsolt akkumulátorok tulajdonosai	Owners of grid-connected batteries	x		n/a	
Szalmabálaház-építő közösség	Strawbale house building community	x		n/a	
Új koma Háló	Network of new eco communities	x		n/a	Coordinated by a group in Budapest, this network is for eco groups and communities who are looking for an alternative way of life in their settlements.
szociális kályhacsere program (pl. Habitat for Humanity - Baranya megyei Ág településen)	Social stove replacement programmes (e.g. in the village of Ág)	x		n/a and countryside	replacement of inefficient stoves with more efficient ones in order to reduce energy poverty organised by the NGO Habitat for Humanity
önkormányzati energiaközösség projektek (Keszthely alakulóban?)	Community energy projects initiated by municipalities (e.g. in the town of Keszthely)	x		n/a and countryside	
BuBi	BuBi bicycle sharing network in Budapest		x	Budapest	This is a system of rentable bikes in Budapest set up by MOL, the Hungarian Oil and Gas Co.
Extinction Rebellion Magyarország	Extinction Rebellion Hungary		x	Budapest	
Greenpeace Magyarország	Greenpeace Hungary		x	Budapest	
Atomenergia ellenes tüntetések	Anti-nuclear protests		x	Budapest	
Co-housing	Co-housing		x	n/a	
Power Poor tanácsadók	Power Poor consultants		x	n/a	AH2020-supported programme run by an NGO (based in Budapest) to train mentors to help energy poor households improve their energy efficiency through behaviour change and low tech methods.
Veganuár	Vegan January campaign		x	n/a	
BAM - Bríngázz a munkába	Bike to Work! Campaign		x	n/a	This is a campaign run by the Hungarian Cyclists' Club to promote going to work by bike.
Ökofalvak	Eco villages		x	n/a	
Nemnövekedés mozgalom	Degrowth movement		x	n/a	
Gyüttment fesztivál és mozgalom	"Gyüttment" festival and movement		x	n/a	"Gyüttment" is a funny Hungarian nickname for newcomers starting a new life in the countryside. This is movement that organizes smaller meetings throughout the year, but its main focus is an annual festival in the countryside to learn about and practice close to zero impact living and related spirituality.
Ökofilmklub	Eco film club		x		

Table 6.9: Examples of ENCI mentioned by participants (Hungary)

Classification of examples according to the type of agency

For the classification of examples of ENCI according to the type of agency, participants were asked to **work in pairs**. This allowed for some discussion of the cases and their joint categorisation by the pairs of participants. The figure and table below show how participants classified the examples (Figure 6.10 and Table 6.11). In addition, as already pointed out above, they listed some additional examples especially for the categories that they could not put many examples in from those collected earlier (*in Table 6.8 these are written in purple, and in Figure 6.10 shown in pale yellow post-its to be able to distinguish them from examples collected earlier*). This way, it can be concluded that using the typology motivated finding additional examples of ENCI in Hungary. These additional examples were added mostly to the “Individual/Public” and “Collective/Social movements” ideal type categories. The circles are denoting examples of cases that were placed in multiple categories

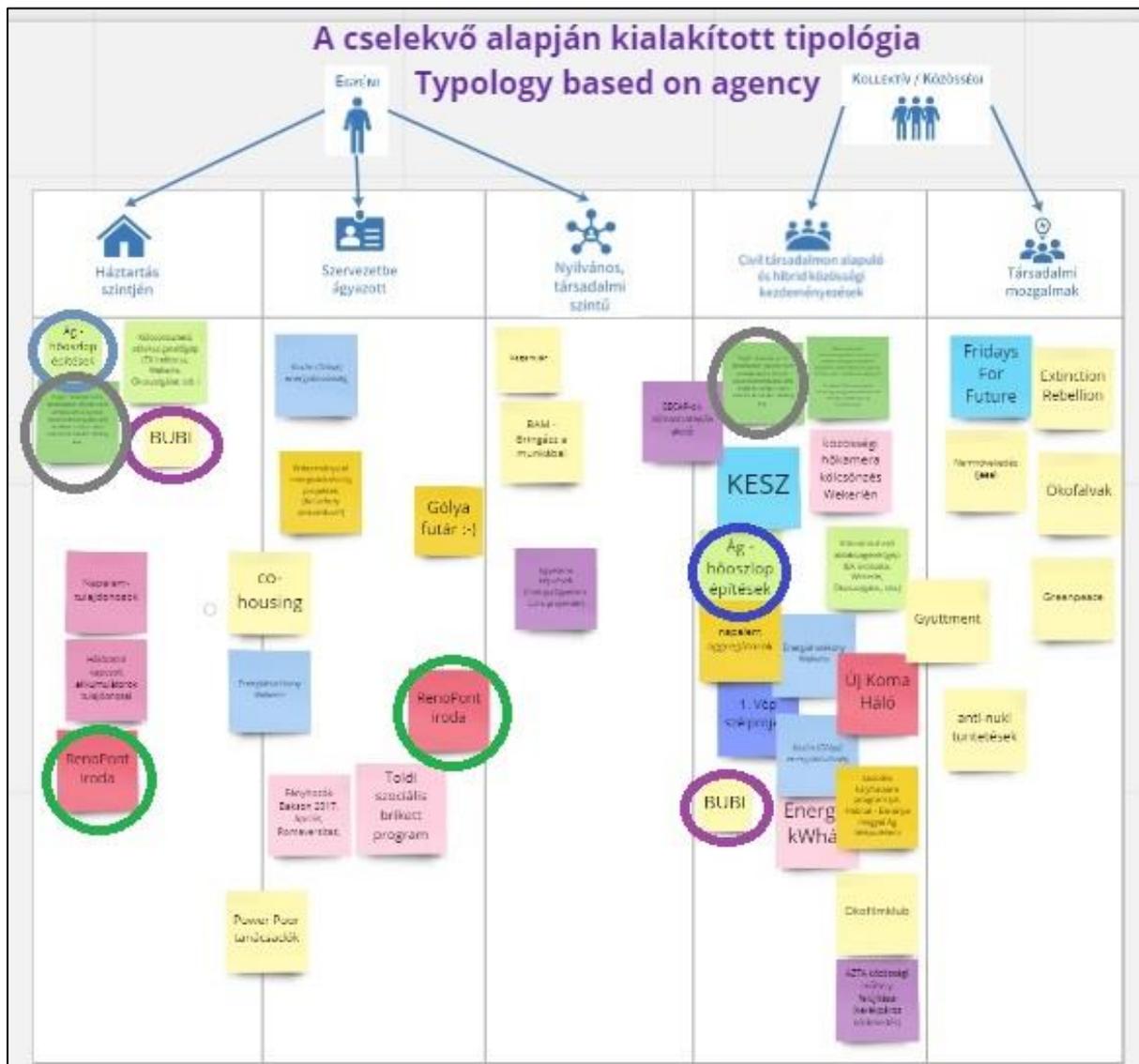


Figure 6.10: Participants’ (Hungary) classification of ENCI cases (w/r to agency)

Individual			Collective	
Private households	Organizationally embedded	Public	Citizen-based and Hybrid	Social movements
<ul style="list-style-type: none"> Heat columns building (Habitat for Humanity in the village of Ág) Community thermal imaging camera rental in Wekerle Energy advice office in Zugló Solar panel owners Owners of grid-connected batteries RenoPoint office BuBi bicycle sharing network in Budapest 	<ul style="list-style-type: none"> "Light-bringers" (Romaversitas, in the village of Baka) Biobriquette programme (Real Pearl Foundation, in the village of Told) Gólya Kazánház (community energy) Community energy projects initiated by municipalities (e.g. in the town of Keszthely) RenoPoint office Gólya Courier 	<ul style="list-style-type: none"> Energy University Vegan January campaign Bike to Work! campaign 	<ul style="list-style-type: none"> Energy advice office in Zugló Community Energy Services Community thermal imaging camera rental in Wekerle Energy efficient Wekerle Energy kW-house (in HU kW reads like "coffee", so it sounds like coffee house) Rentable DIY window insulator Gólya Kazánház (community energy) Behaviour change based energy use reduction programmes by municipalities Heat columns building (Habitat for Humanity in the village of Ág) Community wind turbine in Vép (Community) solar panel aggregators AZTA community DIY workshop (bicycle repair workshop) Social stove replacement programmes (e.g. in the village of Ág) Strawbale house building community BuBi bicycle sharing network in Budapest Eco film club Network of new eco communities 	<ul style="list-style-type: none"> Fridays for Future Hungary Extinction Rebellion Hungary Greenpeace Hungary Anti-nuclear protests Degrowth movement Eco villages
	<ul style="list-style-type: none"> Energy efficient Wekerle Co-housing PowerPoor consultants 		<ul style="list-style-type: none"> SECAPs, climate strategies and connecting actions 	
			<ul style="list-style-type: none"> "Gyüttment" festival and movement 	

Table 6.11: ENCI examples (agency); cases classified within multiple categories

It is important to note that participants placed some cases on the border between two typology categories (see at the bottom of Table 6.13 in the merged cells), mentioning that it is very difficult to classify them into either categories, or they could easily be placed into both.

It is also interesting to note that already at this point in the workshop **participants recognised the fact that several cases support various types of ENCI at the same time**. Examples of these are shown in Figure 6.12 : cases circled using the same colour, and also in Table 6.13 by using colour highlights. Concrete examples include the BuBi bicycle sharing network in Budapest, building Heat columns in the village of Ág, but also Energy efficient Wekerle or the RenoPoint office. In relation to most of these cases participants noted that they supported both individual and collective forms of energy citizenship, or in the case of the RenoPoint office the case enabled two different forms of individual energy citizenship.

Finally, one of the participants noted that it still remains to be seen whether all these positive, but small, local initiatives and cases will really lead to a situation where the majority of people become active consumers and citizens, and not just passive users.

As for the EnergyPROSPECTS team work with the typology, it is important to note that the way workshop participants placed certain cases of energy citizenship may not be the same as how researchers placed the same cases in their mapping work (see WP3). Thus, from the point of view of using the typology, it may be interesting to uncover what these differences in placement are, and how they could impact the future application of the typology. Some of the observations below made by workshop participants also refer to this issue, and help to unpack it further.

Participants mentioned several points for consideration in relation to the agency dimension:

- **Almost any example of ENCI could be considered to belong to both an individual and a collective category.** One example is the RenoPoint office, which has a very straightforward focus on individuals in a household setting. However, since these offices are operated in an organisational setting, and by several types of organisations, it definitely belongs to that category as well.

Or, from a different point of view, the Bike to Work! campaign targets individuals, but from the organisation point of view it could also be considered a “hybrid collective” type as it is jointly organised by an NGO, municipalities, and often other actors as well. Or, still another consideration is whether the organisation behind a case is formally established (e.g. as it is the case in the case of the Straw-bale house builders’ community), or an informal group, not (yet) having a formal structure. Do we classify these cases the same way?

- It would be important to consider whether **the motivation to become a more active energy citizen comes from the individual**, and then he/she goes out and does something about it, finds an initiative to join, etc., **or the impulse comes from an organisation/initiative** which is then seen or heard by the individual who gets activated. Or, **the motivation/impulse can come from both directions**. It is difficult to untangle these processes, thus the challenge in placing the cases in the typology.
- **How do we define the point at which something becomes a social movement and is not an organisation anymore?** For example, Greenpeace was placed under “social movements”, but it could easily be placed into a different category as well as it is still very much a well-defined organisation. Also, the “Gyüttment festival and movement” is on the borderline between being a “citizen based collective” and “social movements”, as it incorporates the elements of both ideal types.

Classification according to 'reformative'/'transformative'

After the presentation of the reformative-transformative dimension of the typology, it was evident from the number of participants wanting to comment and ask clarifying questions that they wanted to discuss it in more detail before getting down to the task of classifying the cases. **Unpacking especially the transformative dimension really sparked interest and discussion between them**, so quite a bit of time was spent talking about it. The following points and considerations were raised:

- “Reformative”, if placed next to “transformative” suggests some kind of a value judgement. The typology needs to be communicated very carefully in order to not have this impact. On the one hand, it is important to remember that all kinds of cases are needed for the sustainable energy transition, so it is important that

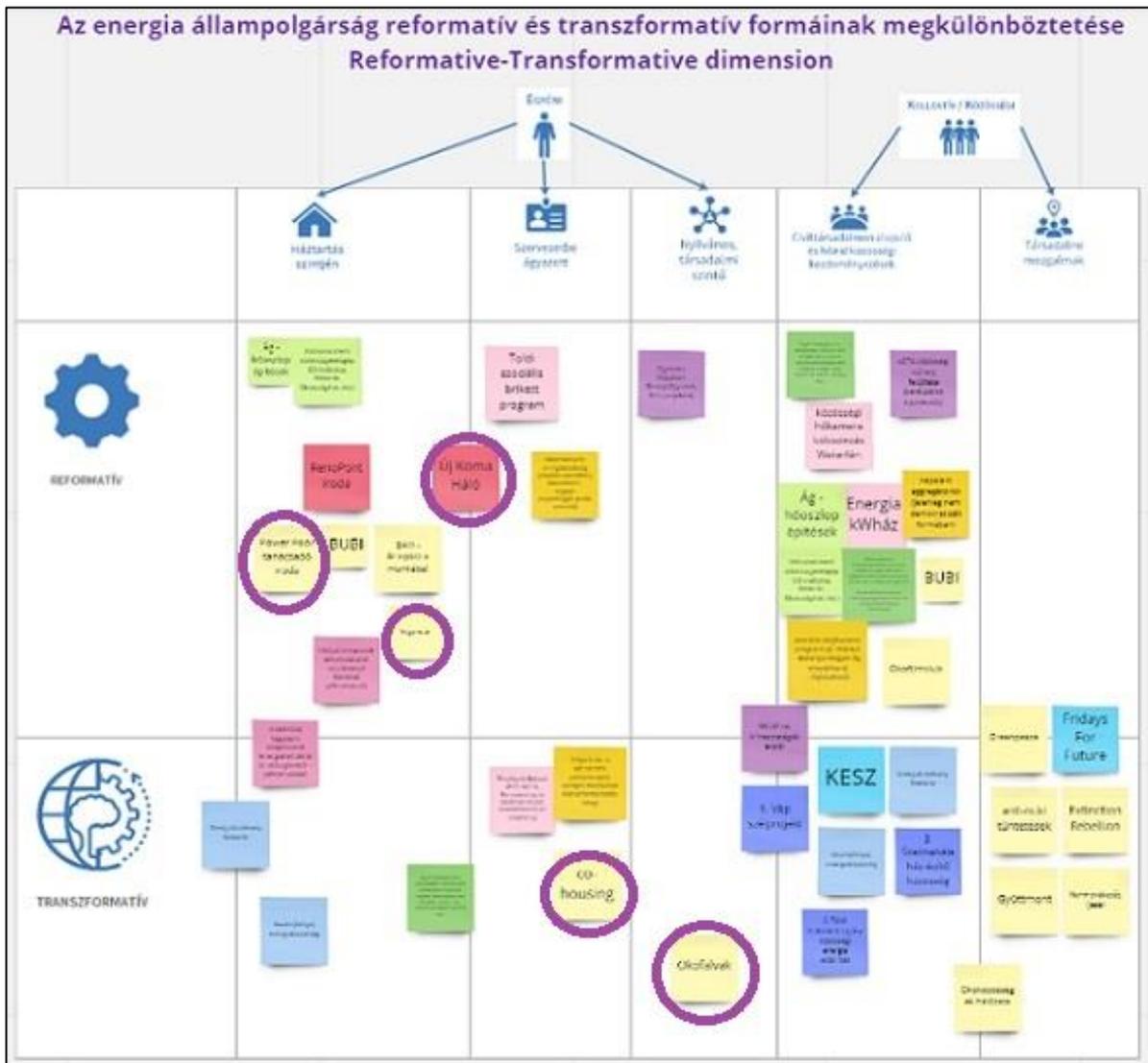
people and organisations active in any of them know this and do not feel any less useful or valuable than others. On the other hand, efficiency related cases, which are considered reformative in the current typology, can actually lead to great carbon footprint reductions (e.g. in the case of deep renovation of buildings), and thus can have transformative impact. Similarly, a case that starts out as reformative, could even stay reformative based on the definition, but can lead to transformative impact if the right people and organisations join, or a sufficient number of people and organisations take it up.

- When analysing the transformative nature of cases, it is important to look at whether cases (1) only focus on energy, or on other ecological issues as well, and whether it is an overall attempt to aim for ecological sustainability or ‘only’ from the point of view of using and producing energy; (2) want to create a new kind social and economic model. Thus, it is **important to distinguish between cases that are transformative only from the point of view of the energy system, or are transformative beyond that, and wish to contribute to creating an alternative social and economic model.** *(It is important to note here that the ENCI mapping exercise conducted in WP3 wishes to investigate this and thus includes questions to find out more about cases in this regard. This was mentioned to workshop participants as well who welcomed the idea.)*
- Several participants commented that **using scales** to ‘categorise’ or rather describe the cases in terms of the various components of the transformative dimension may be better as there do not appear to be any concrete demarcation points for something being reformative or transformative.

Following this discussion, participants again were asked to **work in pairs** to place the cases identified earlier in the reformative/transformative dimension of the typology matrix on the Miroboard. The outcomes of their work and the distribution of ENCI cases identified at the workshop in the matrix are shown in Figure 6.14.

Interestingly, some of the cases were re-classified even on the individual-collective dimension as compared to the previous stage of the workshop. Some examples of these are circled in Figure 6.12. They include the Network of new eco communities (Új Koma Háló) which was in the collective-citizen based and hybrid category, but is now in the

individual category, classified to be in between the household and organisation-based types. Or the Vegan January campaign which was moved from the “individual-public” category to the “individual-household based”. This shows that as participants think more about the typology and how the different ideal types can be described, they may re-consider their first analysis. Also, it is possible that in this part of the workshop they highlighted a different aspect of the same case, and as a result decided to place it



differently.

Figure 6.12: Distribution of ENCI cases in the typology matrix (Hungary)

Main observations and considerations raised by participants after classifying the cases in pairs:

- It is challenging to decide whether a case is reformative or transformative as we would need to know (or decide and define carefully together) **in comparison to what they can be considered to be reformative or transformative.**
- Often **the focus of the case is not transformative, but the way it is organised is** (e.g. a purchasing community in itself is reformative, but if it directly connects growers and consumers, it creates a new form of transaction and thus becomes transformative; it also becomes transformative if it operates as a cooperative and thus the buying process becomes more democratic). Similarly, regarding cases concerned with technology improvements or introduction of new technologies, we need to analyse whether the technology itself is transformative, or the way it is introduced, or perhaps the target group it is introduced to makes it transformative. For example, a rentable window insulator is not a very innovative technology, but the fact that it creates a mini shared economy model, is. Or a heat column in itself may not be transformative, but the fact that it is introduced to energy poor communities in a way that they also learn to build it, is, and creates a new system.
- It is perhaps easier to be transformative if a case is larger, i.e. deals with a number of issues, such as for examples eco villages. Also, if **a case cooperates with other cases or actors**, and thus involves other target groups or incorporates other objectives, or connects its own objectives to others', **it can become more transformative**, or can move from reformative to transformative (e.g. a RenoPoint office in itself is reformative as it provides sound renovation advice to households, but if it cooperates with an energy poverty organisation, and thus starts working with groups or communities in energy poverty, its advice can become transformative, partly through connecting environmental and social objectives).
- If types of cases, or generic cases are considered, the concrete examples belonging to them could be either reformative or transformative. Examples are SECAPs and climate strategies developed by municipalities: there are transformative ones that aim to create new social and economic models, but there are also reformative ones. It also depends on why an action is undertaken: for example, if building

insulation is undertaken in order to save money, it is reformative, but if the same insulation is carried out in order to reduce the carbon footprint and move towards sufficiency and staying within ecological limits, it becomes transformative.

- **Important considerations when deciding whether a case is transformative** or not:
 - (1) Does it wish to change the currently dominant (energy) system? Does it take the current context and circumstances as given and wants to operate **while observing** them, or does it consciously set out to change them?
 - (2) To what extent does the case recognise that changing the energy system requires changing the current social and economic system as well?
 - (3) Does the case have objectives that are transformative, or does it already have an impact that is transformative?
- **When we evaluate the transformative nature of a case, to what extent do we consider its scale?** Does a case have to have a large impact in order to be considered transformative, or can it be transformative at the individual or household level as well?

Some of these considerations have obviously been raised by the EnergyPROSPECTS research team as well, and thus are reflected or discussed in D2.1 and D3.1 as well, and the mapping survey questions (D3.1) were also designed to see how a large number of concrete ENCI examples manifest them.

As participants were really interested in discussing and considering the reformative-transformative dimension of the typology, there was no time left to discuss the hindering and supportive factors of energy citizenship. Still, when sharing last thoughts, several participants mentioned, and even brought examples from their personal lives (e.g. going through and energy efficiency renovation) that **in the current infrastructural and legal context in Hungary it is extremely difficult to be an active energy citizen.**

Even though there was no time for a detailed discussion at the workshop, detailed studies exist, for example, for the analysis of barriers to and opportunities for energy communities in Hungary. Furthermore, other H2020 projects (e.g. the ENERGISE project) also studied aspects of the energy transition and barriers and opportunities for change (Vadovics, 2019). These could be referred to in later stages of the project if needed.

Finally, it is worth noting that participants expressed an explicit wish for continuing the dialogue on energy citizenship, not just in the framework of the EnergyPROSPECTS projects, but also related to other similar projects they themselves are part of. Furthermore, they **welcomed the fact that EnergyPROSPECTS started communication about energy citizenship in partner countries, including Hungary, and that this way the project is actively introducing the term into professional and mainstream discussions,** which, they believe, will contribute to raising awareness, communicating examples, and overall to a greater level of active energy citizenship.

7 Conclusions

The workshop series has explored our ENCI understanding and typology through workshop discussions in several European contexts. The key observations of these workshops will be communicated through a series of blogs⁶. Beyond their immediate empirical findings, these workshop discussions also amounted to a round of reflections – what do these workshop results imply for further ENCI conceptualization and empirical research? Conclusions will therefore be drawn separately on the levels of empirical observations (**section 7.1**), methodology and co-creation (**section 7.2**), and further research activities (**sections 7.3**). Formulated to inform further project proceedings, many of the conclusions are formulated as discussion points rather than definitive assessments.

7.1 Empirical observations

Apart from the general aim to substantiate and explore ENCI across EU context, a key objective of the workshops was to validate the ENCI typology developed in Debourdeau et al. (2021). Empirical observations comprise 1) verification, 2) falsification, 3) underpinning and universality, and 4) refinement and expansion and these are discussed in this section

Verification

Are the ideal-types recognizable to actors across EU ENCI contexts?

This question can be answered affirmatively. The respective overviews of classifications (Cf. list of figures and tables) testify to the capacity of workshop participants to work with the ideal-types, to discuss them, and to come up with empirical examples. Even if they display marked differences in the relative frequencies of occurrence of ENCI forms,

⁶ The first blog of the series, in the Belgian workshop, has been published on the project website: <https://www.energyprospects.eu/news/translating-energy-citizenship-i-wallonia-belgium/>

these overviews do suggest that the typology provides a set of recognizable, evocative constructions of ENCI.

The workshop procedures have not only presented the 10 ideal-types, but also the two constituent main distinctions. Both the agency and the outcome-orientation dimensions led to divergent interpretations, second thoughts and challenges of categories – yet at the same time it can be concluded that participants generally agreed with the importance of distinguishing different forms of ENCI agency, and with the practical-political salience of distinguishing between ‘reformative’ and ‘transformative’ outcome orientations. The overall relevance and the practical salience speak from the fact that the discussions that flared up in all four workshops. The following fragment from the Spanish/Galician workshop sketches the overall picture of a an ENCI typology that is not straightforward, but basically understandable and intuitive.

“Participants found it easier to understand and deal with the individual/collective dimension in the classification of cases, although the majority focus was on examples of the latter. As expected, the transformative/ reformative dimension was more challenging, perhaps because they analysed the examples from the perspectives of their chances of success in terms of legal, normative and administrative requirements... and not so much in relation to the essence or the basis that underpins such initiatives (e.g. energy communities).” (see p.37)

Falsification

Are there theorized ideal-types for which no empirical examples have been found? Are there ‘empty cells’ in the typology? Have the categorizations and underlying distinctions been challenged?

The workshops have not brought out any clear indications of superfluous categories or empirically virtually non-existent ENCI ideal-types. Considering the existence of large variations in the prevalence/relative frequency of ideal-types, it appears that examples can be found for all 10 categories through some stretching and narrowing down of their respective characteristics. The following fragment from the Belgian/Walloon workshop

exemplifies how initially overlooked categories and ideal-types turned out quite recognisable to participants after some second consideration.

“Some forms of ENCI present in the typology, such as the organizational ones, did not appear in the discussion, although the role of organizations such as public institutions or energy companies as collective actors was signalled as important.” (p.37)

Actual falsification of the conceptual typology through this workshop series was not possible: Certain difficulties to come up with empirical examples do not by themselves invalidate the conceptual categorization. Various confusions over categories and distinctions can also be attributed to differing backgrounds of participants, context-bound assumptions and translations, and the (deliberately) limited specification of concepts and ideal-types. The workshops were explorations, not rigorous tests.

Still the workshops have yielded several challenges to our categorizations:

- **Can ENCI be collective?** This issue was raised by a participant of the German workshop: “I am surprised that the individual and the collective are brought together in the term ‘energy citizenship’, with regard to the literature I wonder which part of it speaks for the energy citizenship literature and which for the community energy literature, they are definitely two different things.” Referring to a definition of citizenship rooted in traditional political theory, the participant underlined that the rights and duties attached to the notion of citizenship are distinct from activist forms of commitment: (p. 56)
- **Against individual/collective distinction: embedded individuals.** At several workshops occasions the issue came up that certain empirical examples could reasonably be considered both ‘individual’ and ‘collective’ ENCI at once. The agency-dimension of the typology expresses much of this point, yet the distinction of 5 agency-variations may also obscure some it: Individual agency is often agency of *embedded* individuals. (Just as citizens are by definition members of certain political communities).
- **Can reformative/transformational outcome orientations be clearly distinguished (conceptually, and empirically)?** It has become apparent first of all, throughout the 4 workshops, that this the relatively more abstract and complex dimension of the typology. Practitioners struggle with the difference between orientation and

intentions on the one hand, and outcomes/consequences/states of affairs) on the other hand. See for example in the German workshop report: *"...the main issue with the outcome-orientation dimension was undoubtedly the distinction operated between the goals, effective outcomes and the outcome-orientation."* (p. 60/61) and *"A large number of reformative initiatives can indeed result in more transformative outputs than an isolated transformative initiative"* (p.60/61). Meanwhile, the broader issue of more-or-less transformative potentials of ENCI does seem to be salient to participants. Perhaps this is indeed an essential dimension of ENCI, but one that could be expressed through a sharper and more operational distinction?

Underpinning and universality

Which are the social, political, economic and geographical factors that are conducive to the emergence of certain ideal-types? Which typical examples and distinctive features of ideal-types have workshop participants brought up? Are the theorized ideal-types equally recognisable and relevant to actors across EU contexts?

A general observation is that there are marked differences in the distribution over the types across the 4 different ENCI contexts. These can be partly attributed to differences in individual interpretations, and in backgrounds of participants (governmental officials and energy sector professionals may quite naturally focus on institutionally hybrid ENCI, for example). Still there are insightful linkages to explore between prevalence of ENCI types on the one hand, and on the other hand the variations in context factors. Key observations:

- **ENCI, irrelevant policy jargon or emerging imaginary?** It is safe to say that ENCI is not a household term beyond (Anglophone) academic and policy circles. In French, the main language spoken in Wallonia, ENCI translates as 'citoyenneté énergétique'. This term is however hardly used (p.17). The literal Spanish translation is "Ciudadania energetica", a term that is easily understood by workshop participants but not yet used extensively (p.32). Neither is ENCI very prominent in Germany. The nearest translation would be the „civil engagement

for the energy transition” (bürgerschaftliches/ zivilgesellschaftliches Engagement in der Energiewende). The expression „Energiebürgerschaft“ is sometimes used in the scientific literature , but does not hold currency in broader society (p.49). Finally, also the literal ENCI translation (‘energia állam-polgárság’ - energy state-citizenship) is a completely novel terminology to the Hungarian context. By contrast, ENCI can be linked to ‘active citizenship’, a quite common concept in Hungary (p.72).

- **Relevant context factors.** The respective descriptions of ENCI contexts have brought up – inductively, and not guided by a systematic comparison along a specific understanding of ‘context - a wide range of relevant context factors. The four ENCI contexts display important differences in levels of energy poverty, regional/national energy mix, urbanization (age and spread of housing stock), demography (aging), economic structure, social-economic equality, modes of governance, and civic culture (for example, the greater and lesser prominence of cooperatives).
- **European energy transition at different speeds.** The workshop reports remind us that the ENCI concept is launched into European contexts that find themselves in different stages of energy transition. Particularly telling is the Galician case: *“In this sense, Galicia is at an incipient stage in the development of more transformative typologies of ENCI, with a dominantly reformative, and to some extent pragmatic, perspective still prevailing, with a relatively low level of commitment (mostly dependent on external and immediate incentives), although with a clear intention, especially of some communities as well as institutional actors towards achieving more radical change”* (p. 44). This workshop report highlighted how certain transformation-oriented forms of ENCI are yet to emerge, not yet very prominent, or calling for empowering support measures to help them break through. The Hungarian and Belgian/Walloon cases showed furthermore how many cases respond to conditions of quite widespread energy poverty. In Hungary, energy poverty is a pressing issue as around 20% of the population is impacted by it (p.78). Meanwhile, the description of the German context substantiates the situation of a country in which the energy transition has become a quite normal, accepted and desired

reality.

Refinement and expansion

Which sub-categories and apparently under-theorized ENCI categories have been observed by workshop participants? Which alternative distinctions have been brought forward?

The workshops yielded few explicit proposals for new idealtypes. This reflects the choice for empirically concrete exploration, rather than abstract debates on ENCI categories. Still the four ENCI discussions did generate such conceptual advances. It is all the more useful to consider a few of these alternative classifications:

- **Social strata.** The social-economic cleavage was a prominent theme in the Belgian/Walloon workshop. Whilst the various energy cooperatives and prosumerism could bring a certain democratization, they could also increase the gap between the haves and the have-nots. This attention to social strata and social inequality came up quite spontaneously; nothing in our framing of the ENCI discussion evoked it. The issue also came up prominently in the Hungarian workshop. The very ENCI concept (that is, one of the possible Hungarian translations of it) appeared to bear connotations of a specific socio-economic group, rather than all citizens. So even if not building a typology based on social strata, it may be useful to consider possible implicit 'bourgeois' assumptions in our conceptualisation.
- **The intention-to-action spectrum.** A recurring theme that came up across the workshop discussions is the idea that ENCI refers to several different behavioural categories – to intentions and attitudes, to actions and material effects, and everything in between. For example, for the German workshop it was observed: *“To conclude, the participation in the energy and mobility transition seems to be widely accepted among the population and rather well developed comparing to many EU countries; yet, only a tiny minority of the population seems to be effectively and/or actively engaged in the energy transition, which lets a large place for the emergence of new forms of ENCI.”* (p. 49). The

Hungarian report similarly pointed out how the development stage of Hungarian ENCI is a somewhat mixed picture of high awareness, and low degrees of action and material results. *„As for the use of energy, the level of consciousness is low, the majority of the households do not follow their energy consumption data and the household appliances stock is outdated and inefficient on a large scale (Slezák et al., 2015). On the other hand, when asked in representative surveys, the Hungarian population expressed willingness and interest in energy efficient home improvements (see e.g. Fülöp, Kun, 2014), but on the whole lacks the financial resources to act on this interest (Vadovics, 2019)”* (p.70). To be sure, this 'intention-to-action spectrum' is partly present in our distinction of 'outcome orientations' – these observation can be taken as an encouragement to elaborate a bit.

- **Consumers and citizens.** This is a quite classical and common distinction, also beyond the specific issue of energy citizenship. The workshop discussions showed how many practitioners seek to distinguish ENCI from energy prosumerism. For example, in the Galician case: Being an energy citizen "*goes a step beyond mere shared self-consumption*" since "*the basis is that the citizen is a real citizen (...) can choose and has the capacity to choose according to his/her options or according to what he/she thinks*". (p.35) In the German workshop, a somewhat similar emphasis was placed on civic action, indeed different from the prosumer-mode implication in energy transition. *“The definitions provided by the participants tend to focus on the ideas of personal engagement, of participation of the citizens towards energy transition and their commitment to the transformation. They suggest a broad spectrum of forms of engagement in every aspect of the energy transition, with a focus on active participation, whether personally or collectively, through collective organisation to change/transform the current energy system. The political and economic — beyond the financial incentives — dimensions of participation are also given a specific attention, as well as the participation in governance processes at various levels, especially that of the local and regional.”* (p.52, GER)
- **Male/Female, or gender.** The importance of this ENCI dimension was raised only in (the report on) the Germany workshop. Apart from the general problems of

working with binary M/F distinctions it is also unlikely to have a gender-differentiated ENCI understanding (citizenship being an universal category). Still: Gender has not been accounted for in ENCI conceptualization thus far.

- **Frontrunners and followers.** Finally, various workshop participants made temporal distinctions in terms of phases: Some participants seemed to apply the innovation diffusion distinction (Figure 7.1) of 'frontrunners' and 'followers', which is quite common in discussions on energy transition and diffusion of renewable energy technologies. As discussed above, others referred to regions and countries being in 'incipient' stage of ENCI. In the Belgian/Walloon workshop, these distinctions between 'first-movers' and 'followers', between first and second generation initiatives, were made as parts of the struggles to make sense of the 'reformative'-'transformative' outcome orientation distinction. *"We see a certain transformation between the avant-gardists, the innovators who launched the cooperatives, the first involved who did so for the new economic model: citizen reappropriation. And we see that from a certain moment, cooperatives can attract people who are looking for a more attractive alternative to their investment."* (p.24/25)

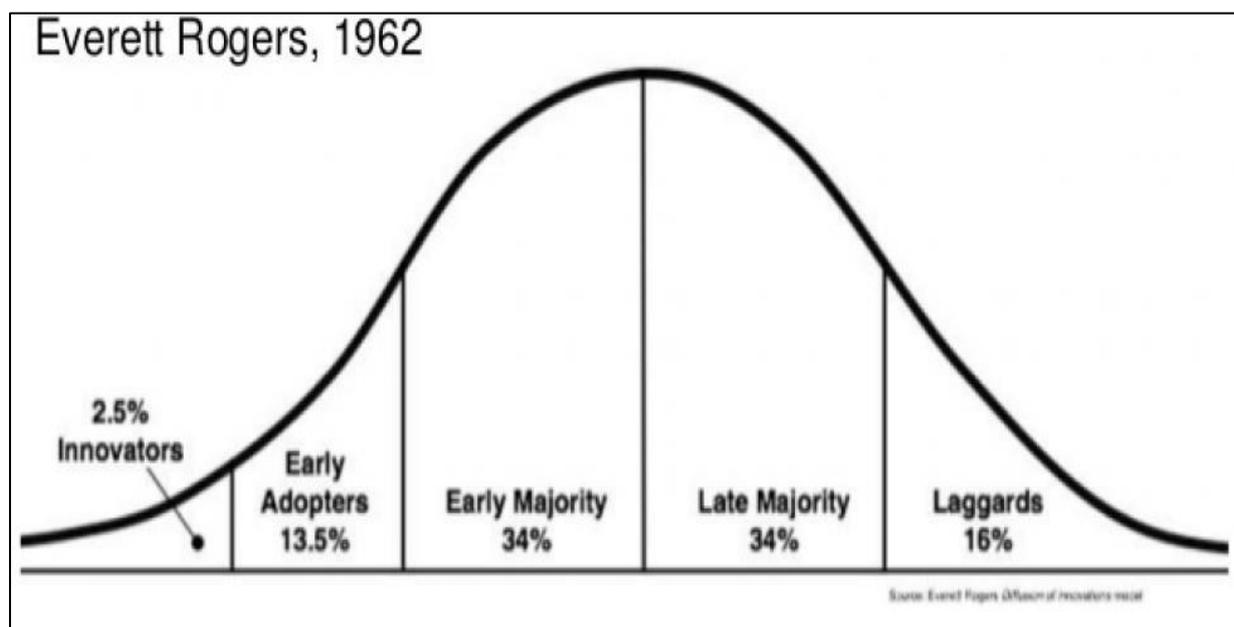


Figure 7.1: Frontrunner and follower categories

7.2 Reflections on the workshop methodology

A concern from the beginning was that the structure adopted for the workshop discussions (i.e. through the lens of the ENCI conceptual typology) could work in two ways. It could open up the discussion, raising attention to the diversity of ENCI. Yet it could also close down the matter, through 'pigeon-holing' i.e. reduction of practitioners' ENCI exploration to our theorised categories. The workshops – with slight differences in set-ups and in the presentation of the typology - did in fact demonstrate both sides of the coin. The following observations are worthwhile to consider for further dissemination and discussions of the ENCI concept.

Opening up

- **Looking beyond the ENCI exemplars.** The typology helped participants to consider a broader range of ENCI, beyond their own examples and their immediate associations with the concept. For example, the introduction of the five 'agency' categories helped participants to what actors and actions the concept of ENCI could cover. It encouraged them to identify additional examples for the under-represented forms of ENCI, and to consider examples from different angles: *"Perhaps we have forgotten in the cases that we give that putting photovoltaics on your roof could be an individual action within the household, but also all the questions of sobriety, of sufficiency would also be that order, just like individual flexibility."* (p.22)
- **Exploring linkages between ENCI actors and ENCI forms.** The example outlined above also shows what happened throughout the workshops. Once categorised under form of agency or another, further discussions developed on the overlaps, mutual conditioning, and other linkages between ideal-types.
- **Approximating the essence of ENCI** The distinctions between ENCI ideal-types may have led to many confusions about the precise lines to draw between one type or the other, and about the precise classification of a particular case. Yet beyond these concerns about particular ideal-types, it also can be observed that the set of ideal-types as a whole appeared to be intuitive and relevant. Importantly, the typology

1.0 evoked questions and discussions about the appropriate distinctions and characteristics. *What is it that defines ENCI?*

Closing down

- **Forcing an alien category?** Notwithstanding this capacity of the typology to open up the ENCI imaginary, it struck all organizers that the open, unstructured parts of the workshops were generally quite fruitful. It is also a relevant fact that several participants (notably in the Hungarian case), hesitated to frame their activities and energy-related visions in terms of ENCI. This suggests that ENCI workshops could be quite fruitful without introducing a typology, or even without the ENCI term.
- **Highlighting the manifest, empirically tangible forms of ENCI?** To what extent has deployment of typology helped to disclose 'manifest' as well as 'latent', and 'early' adopters as well as 'laggards'? Setting the exercise of identifying concrete examples, the workshops may have forced participants to find foothold in the evident examples. There is also the factor of social desirability: *"I don't know if you consider this is a correct example, but..."*. The Belgian workshop report observed that **participants' understanding of ENCI was generally tied to the empowered, informed and initiative-taking citizens and organizations**. The passive, disempowered, and perhaps less enlightened forms of ENCI were rather absent in the discussions - except for the various initiatives with the objectives to empower disadvantaged citizens (ex.: "Ecowatcher" module). ENCI tended to be equated indeed with what we described as the 'manifest' forms of ENCI: The energy cooperatives, the energy communities and the energy activism movements. In light of these considerations it would be useful to elaborate the earlier EnergyPROSPECTS WP3 brainstorm on 'how to find/observe the latent cases'?

7.3 Implications for further research activities

The above workshop results inform further conceptual development (WP2), but they also feed into research activities from WPs 3-6:

WP2: Towards ENCI framework 2.0

The workshops have brought up new themes and dimensions, and they also have underlined certain important aspects of our conceptualisation thus far:

Normative dimension. Workshop participants expressed in various ways how ENCI concept has normative-ideological connotations. Especially the reformative-transformative distinction carries normative assumptions that became more evident during the workshops: ‘Reformative’ is often considered as somehow less desirable, progressive as ‘transformative’. These assumptions and connotations need to be handled carefully. The workshops have confirmed that they are essential elements of what ENCI is. The international expert workshop (D2.4) will take this point into account.

Narrowing down ENCI? A participant of the German workshop remarked that ENCI should arguably be narrowed down to individual agency. A stronger understanding of ENCI in terms of individual rights and duties would distinguish ENCI more clearly from the adjacent concept of energy communities (p.57). In fact, various adjacent concepts have been brought up that similarly suggest to delineate ENCI more sharply – or to connect explicitly with adjacent terms (see the respective word clouds). One can think of the idea (Hungary) to consider ENCI a specific manifestation of “active and responsible citizenship” (p.75/76), or as a concept presupposing energy literacy (Belgium). Our ENCI conceptualization 1.0 may contain too much.

Towards dynamic, embedded ENCI understandings. The assignment of examples to ideal-types also led to issues beyond classification and categorisation. The report on the German case mentions several possible elaborations: Distinctions between scales of action (comparing contextualised cases with more generic examples), the time dimension (actors and initiatives shifting between different types over time), the

dynamics and combinations of the types, and the distinction between various forms of ENCI within generic examples (such as the energy cooperatives) (p.66).

Manifest and latent ENCI. As discussed, both the workshop set-up and the typology 1.0 itself may have directed attention to the relatively manifest and easily-recognizable types. It also has sensitized us to the fact certain types maybe relatively latent in particular contexts: In Spain this applied to the organization-bound types, in the Belgian workshop one tended to overlook the ENCI within the household. This reasserts and deepens the question raised from the start of WP2 work: *Which ENCI types are escaping us – conceptually, but also empirically? Which parts are we observing beyond the 'tip of the iceberg'?*



Figure 7.2: Manifest ENCI, the tip of the iceberg

WP3: Towards sophisticated in-depth case analysis

Structured around the ENCI typology 1.0, this workshop series provides foothold for more systematic and extensive analysis. Task 3.3 will analyse 500 cases of energy citizenship, testing, validating, refining and expanding on the conceptual typologies.

Beyond this analysis of the empirical mapping, the workshop results also yielded several suggestions for the in-depth case analysis. *Which cases and empirical phenomena to study?* Ideas to consider:

- **Embedded case analysis.** The classification exercises along the agency dimension have raised attention to it: Individuals tend to be embedded in initiatives, which in turn are often nested within broader networks. Likewise, workshop participants (Hungary) recognised the fact that several cases support various types of ENCI at the same time. (p.83)
- **Processual analysis.** Workshop discussions showed interests in how certain ENCI types come into being, and change over time. The distinctions of 'frontrunners', 'laggards', 'incipient' initiatives and first and second generation ENCI similar indicates that processual analysis will be worthwhile.
- **Empowerment mechanisms.** Starting from practical interests, many participants were concerned with the ways in which ENCI initiatives could empower, and be empowered by, other actors.
- **Evaluation and impacts.** The discussions over the 'outcome orientation' dimension of the typology evoked quite some critical remarks. How can ENCI be considered 'transformative' or not without further specification of the kinds of relevant impacts? How can impacts be attributed? More generally, there are practical interests in the impacts of ENCI.

WP4: Towards refined distinction between ENCI and ENCI intermediaries

The workshops did not yield much regarding the conditions facilitating/constraining ENCI. They did, through the discussions on the 'agency' dimension, underline the importance of analyzing the collective agency behind apparent individual actions (in terms of intermediaries, ecosystems, initiatives). The suggestions to narrow down ENCI to more individual forms of agency are relevant –they indirectly define ENCI context, intermediaries, and ecosystems.

WP5: Towards a fine-tuned PESTEL analysis

The comparison across the four ENCI contexts yielded a range of useful basic distinctions and context factors (section 7.1). The analysis is far from systematic and conclusive, but has confirmed the relevance of regional differences – and the basic circumstance that ENCI is not at all a common term in the (non-Anglophone) European contexts.

The PESTEL analysis promises a more systematic analysis across contexts. For that analysis is crucial to specify what kinds of units we try to compare. The respective workshop reports have clarified already that 'regional contexts' – or national contexts, for that matter, are far from self-evident contexts: Galicia and Wallonie are quite autonomous, distinct units within their countries, but no clear equivalents exist in Hungary and Germany. A [research note on 'regions'](#) has proposed a more functional-geographic approach, taking us beyond cartographic-administrative units. This suggests that the *"conception of region should take into account notions of language, culture, norms and social-institutional, political and legislative contexts."*

WP6: Towards context-sensitive ENCI policy discourse

As evidenced in the word clouds presented earlier in this deliverable. from the discussion held in the four contexts it is clear that the term ENCI is neither obvious nor neutral as soon as it is introduced in European contexts. We may want to consider for our future policy briefs whether we need other concepts, adjacent to ENCI, that help towards more context-sensitive communication/policy discourse.

A more context-sensitive policy discourse would potentially strengthen the empowerment that ENCI brings to practitioners. This emancipatory force of the ENCI concept was mentioned explicitly in the Hungary workshop: *"Furthermore, they welcomed the fact that EnergyPROSPECTS started communication about energy citizenship in partner countries, including Hungary, and that this way the project is actively introducing the term into professional and mainstream discussions, which, they believe, will contribute to raising awareness, communicating examples, and overall to a greater level of active energy citizenship."* (p.88)

Bibliography

Climat.be (2022). Les compétences. <https://climat.be/politique-climatique/belge/nationale/competences>

Czarniawska, B., & Sevón, G. (Eds.). (2011). Translating organizational change (Vol. 56). Walter de Gruyter.

Debourdeau, A. Schäfer, M. Pel, B., Kemp, R., Vadovics, E. & Dumitru, A. (2021), Conceptual Typology, EnergyPROSPECTS Deliverable 2.1, European Commission Grant Agreement No. 101022492.

DGRV Deutscher Genossenschafts- und Raiffeisenverband (2021). *Energy Cooperatives in Germany – State of the Sector 2021 Report*.

Eurostat (2020 a). Share of renewable energy in the EU up to 19.7% in 2019. <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20201218-1>

Eurostat (2020b). Energy consumption and use by households. <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20200626-1>

Instituto Enerxético De Galicia (2020). Consumo de enerxía primaria. http://www.inega.gal/sites/default/descargas/enerxia_galicia/evolucion_consumo_enerxia_primaria.pdf

Instituto Enerxético De Galicia (2021). Balance energético de Galicia, 2019. http://www.inega.gal/sites/default/descargas/publicacions/balance_enerxetico_Galicia_2019.pdf

Instituto Galego de Estatística (2018). Densidad de población de los municipios gallegos [official website]. https://www.ige.eu/web/mostrar_actividade_estadistica.jsp?idioma=es&codigo=0501&num_pag=17

Instituto Nacional de Estadística (2020). Encuesta de condiciones de vida. Año 2020 [official website]. https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176807&menu=ultiDatos&idp=1254735976608

Instituto Nacional de Estadística (2021). Cifras oficiales de población resultantes de la revisión del Padrón municipal a 1 de enero [official website]. <https://www.ine.es/jaxiT3/Datos.htm?t=2853>

IWEPS (2021). Les chiffres clés de la Wallonie: Edition 2021. <https://www.iweeps.be/publication/cc2021/>

Fondation Roi Baudouin (2021). Baromètre de la précarité énergétique et hydrique (2009-2019). <https://www.kbs-frb.be/fr/barometres-de-la-precarite-energetique-et-hydrique-2009-2019>

Hewitt, R. J., Bradley, N., Baggio Compagnucci, A., Barlagne, C., Ceglarz, A., Cremades, R., ... & Slee, B. (2019). Social innovation in community energy in Europe: A review of the evidence. *Frontiers in Energy Research*, 7, 31.

Diekmann J. et al. (2019). *Vergleich der Bundesländer: Analyse der Erfolgsfaktoren für den Ausbau der Erneuerbaren Energien 2019 Indikatoren und Ranking*. https://www.unendlich-viel-energie.de/media/file/3381.Bundeslaendervergleich_EE_2019_Endbericht-web.pdf

Magyar Természetvédők Szövetsége (MTVSz), Szolidáris Gazdaság Központ, EMLA (2021). Megújuló-eneriga közösségek lehetőségei és akadályai Magyarországon. Értékelő tanulmány. [Hungarian Society of Conservationists-FoE Hungary, Solidarity Economy Centre and Environmental Management and Law Association (2021). Opportunities and barriers for renewable energy communities in Hungary.) Available from: https://mtvsz.hu/uploads/files/Megujuloenergia-kozossegek_Ertekelo_tanulmany_MTVSZ-SZGK-EMLA_final.pdf (accessed 14 March 2021)

Pel, B., Debourdeau, A., Kemp, R. Dumitru, A., Schäfer, M., Vadovics, E., Fahy, F., Fransolet, A. & Pellerin-Carlin, T. (2021), Conceptual framework energy citizenship, EnergyPROSPECTS Deliverable 2.1, European Commission Grant Agreement No. 101022492.

SPF Economie (2019), Analyse de la consommation énergétique des ménages en Belgique. <https://economie.fgov.be/fr/publications/analyse-de-la-consommation>

Rodhouse, T. S. G. H., Pesch, U., Cuppen, E. H. W. J., & Correljé, A. F. (2021). Public agency and responsibility in energy governance: A Q study on diverse imagined publics in the Dutch heat transition. *Energy Research & Social Science*, 77, 102046.

Vadovics, E. (2019). The Energy Challenge in Hungary: A Need for More Complex Approaches. pp. 83-94. In: Fahy, F. et al. (2019) *Energy Demand Challenges in Europe: Implications for policy, planning and practice*. Palgrave-Macmillan.

<https://doi.org/10.1007/978-3-030-20339-9>

Wolf I., Fischer A.-K., Huttarsch J.-H. 2021. Soziales Nachhaltigkeitsbarometer der Energie- und Verkehrswende 2021: Kernaussagen und Zusammenfassung der wesentlichen Ergebnisse, IASS.

Appendix 1. Workshop invitation


UNIVERSITÉ LIBRE DE BRUXELLES


Regional Workshop "Translating Energy Citizenship"

Namur | Vendredi 3 décembre 2021, de 13h00 à 16h00

Madame, Monsieur,

Dans le cadre du projet EnergyPROSPECTS («PROactive Strategies and Policies for Energy Citizenship Transformation» - <https://www.energyprospects.eu>) financé par le programme européen Horizon 2020 et mené par l'ULB en collaboration avec huit autres universités, nous effectuons des recherches sur la «**citoyenneté énergétique**». Ce projet se base sur une conception très large de la citoyenneté énergétique, couvrant toutes formes d'**engagements des citoyens dans le développement d'un système énergétique plus durable et plus démocratique**. Ces formes d'engagements incluent, entre autres, des initiatives individuelles privées (ex. : adoption de pratiques énergétiques plus efficaces) et publiques (ex. : Convention citoyenne pour le climat, enquêtes publiques pour les plans énergie-climat), mais aussi différents types d'actions collectives (ex. : coopératives énergétiques, marches pour le climat).

Nous nous intéressons actuellement aux manifestations empiriques de la citoyenneté énergétique dans différentes régions d'Europe (Wallonie, Galice, Berlin et Budapest). C'est dans ce contexte que nous organisons un **atelier sur la citoyenneté énergétique en Wallonie**. Il se tiendra (en français) à **Namur** (lieu à préciser) le **vendredi 3 décembre de 13h à 16h**. Dans le cadre de cet atelier, nous identifierons et discuterons des cas wallons d'engagements des citoyens dans le développement d'un système énergétique plus durable et plus démocratique. L'objectif de la discussion est de mettre en lumière les principales caractéristiques et spécificités de la Wallonie dans ce domaine.

Au vu de votre expérience en la matière, nous serions heureux de vous compter parmi les participants à l'atelier.

Accepteriez-vous d'y participer ? Dans l'affirmative, pourriez-vous nous confirmer votre participation par retour de mail ?

Nous vous communiquerons dans la semaine du 22 novembre, le programme détaillé de l'événement ainsi que l'adresse du lieu à Namur où il se tiendra. Notez que si nécessaire, un budget est disponible pour couvrir les frais de déplacement et une modeste compensation pour le temps consacré à cet atelier.

Si vous avez la moindre question par rapport à cette invitation, n'hésitez pas à nous contacter par mail ou au 0494 64 57 30.

En espérant pouvoir compter sur votre collaboration, nous vous remercions et vous présentons nos meilleures salutations,

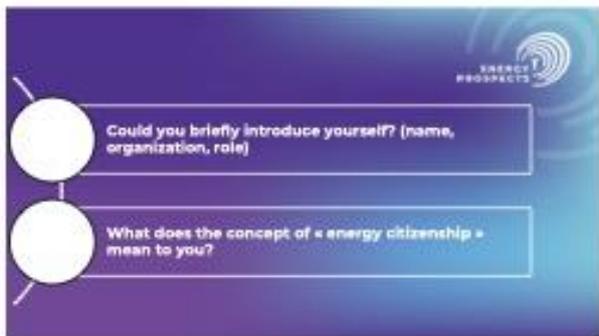
Dr. Aurore Fransolet, Dr. Bonno Pel et Prof. Tom Bauler, pour l'équipe d'EnergyPROSPECTS

✉ **Contact** : Aurore Fransolet – Aurore.Fransolet@ulb.be / 0494 64 57 30



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Appendix 2. Workshop Process



EnergyPROSPECTS

Typology:

- Individual/Collective
- Informative/Transformative

“Energy citizenship (ENC) refers to **forms of civic involvement** that pertain to the development of a more sustainable and democratic energy system. Beyond its manifest forms, ENC also comprises various latent forms. It is an ideal that can be lived up to and realized to varying degrees, according to **different framework conditions** and states of empowerment.”

EnergyPROSPECTS

Typology:

- Individual/Collective
- Informative/Transformative

Regional Translation

- Galicia (ES)
- Sabina (IT)
- Bavaria (DE)
- Berlin (DE)

“Energy citizenship (ENC) refers to **forms of civic involvement** that pertain to the development of a more sustainable and democratic energy system. Beyond its manifest forms, ENC also comprises various latent forms. It is an ideal that can be lived up to and realized to varying degrees, according to **different framework conditions** and states of empowerment.”

WORKSHOP OBJECTIVES

- Regional translation: Identify empirical manifestations of energy citizenship in REGION X**
- Validate the ENC typology**
 - **Verification:** Are the ideal types recognizable by actors in all regions of the EU?
 - **Feasibility:** Are there empirical types for which concrete examples can be found?
 - **Impressions:** What other theoretical types were observed by workshop participants?
 - **Substrates:** What are the social, political, economic, and geographic factors that favor the emergence of the different ideal types?

WORKSHOP PROGRAM

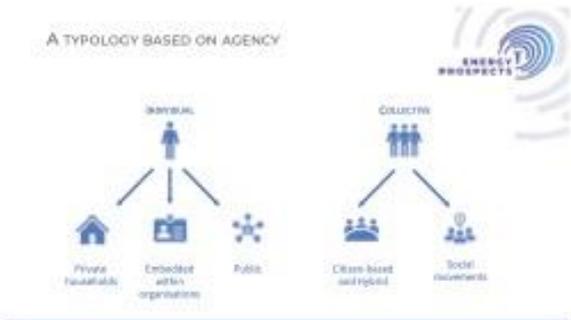
- 12:00-12:30 Introduction
- 12:30-13:00 Identification of regional examples of energy citizenship
- 13:00-13:45 Classification of examples according to the type of agency
- 13:45-14:00 **Break**
- 14:00-14:30 Classification of examples according to their “informative” or “transformative” character
- 14:30-15:00 Discussion
- 15:00 End

Identification of regional examples of energy citizenship

Could you identify 2 concrete examples of ENC in REGION X

Could you briefly describe these examples? (what? who? where? how? why?)

Classification of examples according to the type of agency



Could you identify an example of energy citizenship for each type of agency?

Individual			Collective	
Private households	Organisationally embedded	Public	Citizen-based and hybrid	Social movements
To be completed "in real time" during the tour-de-table				

Break