

Minutes of the BRIDGE Task Force Energy Communities Meeting

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1. Part 1: presentation of TF results

1.1. Introduction by EC and TF leaders

EC project officers' comments:

- Sana Kronberga: This is an active TF, we need to see what has been done and insights gathered so far. Topics raised will be useful for policy makers. Also important to know what still needs to be done and how commission can contribute
- Eric Lecomte: Having positioned the meeting this afternoon will feed results for CEER training tomorrow

TF leaders' comment:

- Leen Peeters (LP): We need to raise relevant outputs, as well as making a double check of the inputs survey (opinion in state of progress). This is an interactive session. 3 working groups made during the afternoon to make sure they will provide additional inputs
- Ludwig Karg (LK): Communities can afraid population and utilities, concept is still opened. Need to be more aligned with all the members of the TF and this is the goal of this meeting

1.2. Presentation of the agenda

LP: Legal framework developments treated by the TF, through consultation of concrete examples. See how national concepts match, and the replicability of the concepts. Understand what needs to be researched and if we need demonstrators.

1.3. Presentation of Expera platform

LK: Very useful platform, including for data protection. All the members need to register and contribute to the deliverables if it's not done yet. Online discussions are available to follow the progress.

1.4. Work process

LK: We don't know enough what's going on in the countries regarding the Energy Communities, and this is the aim of the survey and countries examples in the living document. Another report is under construction with Achille Hannoset and DOWEL, with presentation of the results of the survey from BRIDGE projects. It was an opened survey, projects outside BRIDGE also answered to the projects and applied information in the living document (other view than H2020 projects).

EC Comment: Information coming from outside are more than welcome, but BRIDGE stays reserved to H2020 projects.

LK: Hard to collect information, issue is to keep updated documents because innovation/progress in energy communities is moving faster than the deliverables built in few months.

10 topics/questions identified by the core-team and treated in the living document:

1. What are Citizen Energy Communities (CEC) and Renewable Energy Communities (REC)?
2. Which potential for renewable energy use can be triggered by a CEC or REC in addition to existing schemes?
3. What would be benefits and options for a CEC to operate its own (sub) grid?
4. To what extent can a CEC or REC be superior in relation to existing means and measures of citizen involvement?
5. Which overall cost savings can be expected from CECs compared to existing schemes?

6. What are feasible tariffs to allow for the implementation of a CEC as part of the overall energy system?
7. How can candidates be supported to establish a CEC or REC?
8. What are requirements to ICT solutions for the implementation of a CEC or REC?
9. How can data collection and management be limited and data security be ensured in a CEC or REC?
10. What is the existing national situation of Energy Communities in the context of the Clean Energy Package?

EC comments:

- Scheme can be confused (question 2), it is not incentives in this case. Maybe organization would be better
- Consumer rights don't appear in the questions, what are their rights in energy communities?

Participant comment: energy communities must be seen with all its potential/overall value at the system level.

LK: A lot of cases are not "entering" in the CEC/REC definitions

1.5. Presentation of BRIDGE EC TF Questionnaire

Achille Hannoset (AH): 22 answers received mostly from researchers, from 10 countries. One of the main problems was the multi-interpretability of the questionnaire. Some participants provided different answers for the same country. Only rights and responsibilities were treated. Government officials have been contacted for the outlook of the document, based on structured interviews. Frameworks have been highlighted between existing and emerging, depending on the countries. Value of the survey regards Member States that still need help to define what are Energy Communities.

Participants comments:

- Participants to the questionnaire answered to the survey but were not satisfied of their answer, due to high level questions not applied to the scale of their projects (due to a misunderstanding that the questions related to legislative developments for energy communities at the national or regional level and not the level of corporate structures potentially of interest for energy communities)
- Self-consumption is introduced in the regulation of some countries, and they are missing some EC cases
- Need to mobilize other directions in companies to answer to the survey due to high level questions, very difficult questions with a room for ambiguity → LP comment: organize meetings (semi-structured interviews over the phone) with the relevant persons in the utilities/companies/government, even if it's not BRIDGE participants (Achille contact details below)

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1.6. Scope of investigation of the 10 questions:

By LP, LK, AH and Andreas Tuerk (AT). See PPT presentation for more details.

1.6.1. Question 1: What are Citizen Energy Communities (CEC) and Renewable Energy Communities (REC)?

Social arrangements will have a huge impact on the aim of the community, but also the design of the associated framework of rights, privileges and responsibilities. F.ex. the type of actors that can participate will determine how the community will need to be financially supported, regulated, etc. In the literature, a set of umbrella definitions are used to capture the variety of social arrangements and activities that energy communities can engage in. However, there is a call for further specification in order to identify which entities link to which policy goal (expansion versus democratization), foster which values (social cohesion versus cost-efficiency) and need which legal governance framework. In this regard, the EU has taken to first steps to further specify types of energy communities - REC and CEC are just a part of the communities. It is, however, important to keep in mind that other types of energy communities that are not captured by the definitions in RED II and EMD need to be considered, in particular to the extent that they have certain needs that requires a specific policy framework to level the playing-field for them.

In this regard, 10 classes of EC have been identified:

1. Collective generation and trading of electricity
2. Generation-Consumption Communities
3. Collective residential and industrial self-consumption
4. Energy positive districts
5. Energy islands
6. Municipal utilities
7. Financial aggregation and investment
8. Cooperative Financing of Energy Efficiency
9. Collective service providers
10. Digital energy supply and demand response systems

Participants comments:

- Some overlaps in the classes appear and it can be confusing → LK comment: Classes have been constructed from inputs of real demos and these are not scientific classification
- Interested to see the roles in the markets and their tasks
- Make clear that it is not only about electricity
- EC are benefits beyond energy renewables, with indirect effects to consider

1.6.2. Question 2: Which potential for renewable energy use can be triggered by a CEC or REC in addition to existing schemes?

Direct effects of EC implementation would be building refurbishment, PV installations, and joint operations for windfarms.

1.6.3. Question 3: What would be benefits and options for a CEC to operate its own (sub) grid?

An energy community should operate its own grid, but it creates issue with responsibilities. Investigations concerned operation of the grid, economics, services to system operators and local benefits. Status of identification are in preliminary phase, try to know how to value the participation in EC that should be the purpose of it.

Participant comment: in Denmark, grids are owned by the population, they faced challenges, but it works → LK comment: Difficult to invest in sub-grid when you initially built a centralized grid.

1.6.4. Question 4: To what extent can a CEC or REC be superior in relation to existing means and measures of citizen involvement?

Organizational arrangements can lead to perceived justice, direct the social acceptance and can increase the legitimacy of institutions. Key principles have been identified by the team. The concept of RECs holds great potential to foster justice. However, further research on the causal linkages between institutional/social arrangements and justice, legitimacy and social acceptance is necessary.

Participant comment: associations already tried to set up a definition for EC and experiences showed it was very difficult. Giving a definition to the role for communities could also increase their participation.

1.6.5. Question 5: Which overall cost savings can be expected from CECs compared to existing schemes?

Added value from EC is cheaper energy, also grids are built oversights so there is place for additional electricity volumes. It is also important to communicate on the financial profits that can be made with EC, this will be the main driver (financial gain). Lack of technical knowledge is not an issue because people trust specialists.

EC comment: Fighting on climate change is not a driver? LP: not that much.

1.6.6. Question 6: What are feasible tariffs to allow for the implementation of a CEC as part of the overall energy system?

TF collected household electricity price compositions from 7 countries to highlight understand impacts of EC in grid tariffs. Some countries consider local tariffs, -40% of the grid charges in some countries (Austria for instance). Room for incentives is very limited in other countries (Greece for instance). It has been and it is still hard to quantify the added value for citizens.

1.6.7. Question 7: How can candidates be supported to establish a CEC or REC?

Investigation per countries, here are potential supports in member States:

- clear legal framework
- financial support for setup
- financial support for operating
- capacity building for key actors
- capacity in terms of time
- counselling with models / templates
- network for knowledge exchange
- umbrella to reduce risks, costs etc.
- electrical technology
- software for operating the community
- clear positioning of DSO / TSO

Communities can share assets, knowledge (other than energies).

1.6.8. Question 8: What are requirements to ICT solutions for the implementation of a CEC or REC?

Operating a community is a real company, with commercial transactions... Is it free? Will someone calculate this, or will it be with Blockchain?

1.6.9. Question 9: How can data collection and management be limited and data security be ensured in a CEC or REC?

No specific comment.

1.6.10. Question 10: What is the existing national situation of Energy Communities in the context of the Clean Energy Package?

3 main scenarios identified from Portugal (box ticking approach), Netherlands (contextual approach) and Germany (liberal approach). In the Netherlands, some actors, such as grid operators are out from communities but they could have interesting competences for the communities. Liberal approach can give privileges to the wrong actors. Hybrid approaches have been identified in Belgium, France and Spain (Liberal & Box ticking approach), Slovenia (liberal and contextual approach) and Greece (liberal, box ticking and contextual approach). Matrix created to cross EC classes identified and the country approaches (still need to be completed) in order to identify which classes of energy communities are not yet covered by the institutional frameworks at European and national level.

Really need contribution for the living document to complete ongoing analysis launched!

2. Part 2: working sessions

2.1. Working sessions with participants

WG 1: What are appropriate, cost-reflective network tariffs for energy communities? (LP & AT)

The WG agreed to create 10 country examples with scenarios for tariff setting, based on work done for Belgium and Austria by THINK and Joanneum Research. A template will be created and circulated among TF participants.

WG 2: Which support needs do different classes of energy communities have? (LK)

No specific points identified

WG 3: What is an energy community? (AH)

IN	OUT
<ul style="list-style-type: none"> - Voluntary - Payment for services - Data Management to create collective incomes from member - Legal form <ul style="list-style-type: none"> o Actual reasons o What do they want to do o Responsibilities & Liabilities 	<ul style="list-style-type: none"> - Collective financial profit distributed by one company - Profit-making - Unorganized - Individual contracts

2.2. General feed-back participants

Comment: I would like to see for each country which actor can do what at which moment. At the end it is also about implementing this new legislative framework (ie the clean energy package). The slides at the end show what has been done already in the different countries, but if I go through that list a lot of thing are already possible actually... However, I want to know which barriers there are still.

LP: This morning we looked at the different stakeholders that are involved in energy communities, the nature of these stakeholders and how these different stakeholders interact with each other. These are not only stakeholders at the local level, but also at the national level with regard to the design and implementation of the enabling framework.

Comment: energy communities is a new actor with a variety of potential roles. I want to know what's in these different articles, what are they allowed to do that they were not allowed before.

LK: in LD10 we describe the different national frameworks. The pyramids are a way to conceptualize the abundance of information on these different frameworks. If you go to LD10, you will see a more detailed description of what is possible and what is not per country. You can also find this in the BRIDGE EC TF Questionnaire report.

Comment: in the classes you can read a lot of roles and if you really break the specific roles down (f.ex. balancing responsibility, can you directly put your load on different balancing markets).

LP: now you are referring also to other articles than those related to RECs and CECs in the Clean Energy Package. If we would take those into account we will be expanding the scope of our research considerably...

Comment: yes, but the provisions in RED II and EMD refer to those roles/activities so they should be researched as well.

AH: what we can do is explain the implications of the different provisions for RECs and CECs and where there is a reference to other articles explicitly, we can discuss these as well.

Comment: that would be great, but I really think you can discuss all of the different relevant articles even when there is no explicit reference. F.ex. if you say: you can trade energy. It is different when you say you can trade it through an aggregator or supplier ; or you can trade it directly – so you can easily get mixed up in interpretations of these classes. I think they are very interesting because they show what we have, but to make really pure and clean, I think we have to get to the actual what is it; what are the implications of the variety of terms that are being used.

AH: ok but not you are mixing the clarifications of the provisions in the Clean Energy Package with that of the different classes here... I do agree that both require further clarification in order to determine what there different potential roles are and what the rights, privileges and responsibilities mean.

LK: In addition, it important to remember that these classes are different per country, which makes it a bit difficult/big to assess this and that is why we need your support by filling in LD11 (case-examples) and LD7 (support needs and interpretation of different classes).

Comment: What is the scope of your research / what is the aim of this group?

We want to formulate advice to policy and decision-makers in order to support the variety of energy communities that exist within each member state, each in accordance with their particular needs and capacity that flows from their organizational/social arrangements. This includes those energy community initiatives that are covered by the provisions in the CEP for RECs and CECs, but also takes a wider view for those member states that are willing to be ambitious and maximize the impact of energy communities. It is an indirect approach...

Sana Kronberga: I have to agree with that to some extent because EU regulation is not aimed at the highest common denominator, so it is always good to have tips for those who are ready to go beyond. Of course, it is helpful to have good recommendations on how in a meaningful way the Clean Energy Package can be transposed.

LK: I am being approached by municipal utilities with the question on whether there will also be a supporting framework for them in the near future. The question is of course whether they need such a supporting framework, but that is up to us to find out.

LP: the association of energy producers in Belgium approached me this morning and they said that they want to go beyond the provisions in the Clean Energy Package, but it is mainly the national regulator that is holding things back so what we are going to do now is develop something ourselves. The point is that we can show that other countries are going beyond as well and thereby motivate them to do the same. The only problem is the massive amount of work that it implies.

Comment: case in Italy which supplies demand-response services, but does not identify itself as a community and all of the sudden they are being called a community in the Directives...

LP: let's not explain every case here in detail, but please contribute the examples to the Expera platform, LD 11. This will help us to look bottom-up at the cases itself to really assess what works and what does not. Failures must be acknowledged. This includes the organizational features, technical limitations (e.g. one cable that connects Samsø energy island to the mainland).

LK: the question is how long can we go? The question is whether we have a sufficient amount of projects to fund this project. I would suggest to go on for a while. The projects should contribute and

the TF members should be involved. We can take present substantial, but not within 3 months. Some of the projects will end by the end of the year.

Comment: to create an opportunity / show opportunities by these projects that are actually happening. The Dutch government is struggling with cost-reflective network tariffs. How will we deal with that? What is the societal cost?

LP: regulators are forced to look into dynamic tariffing.

Comment: what is the timeline? They have one year. The French government is practically copy-pasting the concept and not the associated legal framework.

LP: how do we transpose our knowledge? We want their input and in exchange provide policy recommendation thereby creating a win-win. However, when do we formulate our recommendations?