

Model Assessment of Potential and Barriers to the Development of Renewable Energy Communities at the National Level

Checklist

Date: 31 October 2022

Authors: Lars Holstenkamp, Christian Kriel (ECOLOG Institute for Social-Ecological Research and Education)

Acknowledgements

This study was conducted by ECOLOG Institute on behalf of REScoop.eu and funded by the European Climate Foundation.

The logo for REScoop.eu, featuring the text "REScoop.eu" in a blue, sans-serif font. The "o" in "Scop" is stylized with a yellow and green circular graphic.

We thank Josh Roberts, Stavroula Pappa and Sara Tachelet from REScoop.eu for helpful comments and suggestions to a previous draft. We take all responsibility for remaining mistakes.

Corresponding Author & Contact Details

Dr. Lars Holstenkamp

ECOLOG Institute for Social-Ecological Research and Education

Wichernstraße 34, Entrance B

21335 Lüneburg

Germany

lars.holstenkamp@ecolog-institut.de



Persistent Identifier

doi:10.5281/zenodo.7473388

1 The Mandate

“Member States shall carry out an assessment of the existing barriers and potential of development of renewable energy communities in their territories.” (RED II, Article 22 Paragraph 3)

2 Preparation of the Assessment

Question	Related Material from the Model Assessment Project
1. What are the relevant energy community stakeholders in the member state? ⇒ Include them in assessment design	
2. Is there an appropriate “monitoring system” in the member state? 3. If not: Are there any data on energy communities? Who collects these data? Is it possible to extend these data collections and build up a full monitoring system based on them?	Manual, Chapter 2.3 http://doi.org/10.5281/zenodo.7301314

3 Assessment of Barriers & Drivers

Question	Related Material from the Model Assessment Project
Leading question(s) to be reported on: - What are relevant barriers to the development of energy communities in the member state? - What are the main drivers of energy communities in the member state? - Are there any regional differences within the member state in this regard?	Background Paper #2 http://doi.org/10.5281/zenodo.7301507
4. How many resources are available? How much is already known about barriers & drivers for energy communities in the member state? ⇒ Take decision on rapid vs. participative assessment	
5. Which typology of barriers and drivers shall be used? ⇒ Use in survey and for coding interview results	Manual, Chapter 3.5 http://doi.org/10.5281/zenodo.7301314 In detail: Background Paper #2 http://doi.org/10.5281/zenodo.7301507
a) Participative assessment design	
6. What do we know from the literature on barriers and drivers of energy communities in the country?	E.g. references in http://doi.org/10.5281/zenodo.7301507
7. What could be meaningful indicators for barriers and drivers in the member state? ⇒ Collect and analyse data on these indicators	
8. Do you want to use the standardised questionnaire? With some country-specific additions? 9. Who is expert on barriers and drivers for energy communities and could be asked in qualitative interviews? ⇒ Select interviewees (e.g. representatives of associations, researchers, members of energy communities from different regions) ⇒ Stop interviews when (a) all relevant groups are represented in the sample and (b) interviewees keep on giving the same answers	Questionnaire: http://doi.org/10.5281/zenodo.7303799 (EN) http://doi.org/10.5281/zenodo.7303955 (DE) http://doi.org/10.5281/zenodo.7304044 (PL)
10. What are relevant stakeholders who can interpret results from literature review + indicator analysis + survey/interviews? ⇒ Invite stakeholders to a workshop and/or ⇒ Give stakeholders a chance to comment or reflect on results	
b) Rapid assessment design	
6. What do we know from the literature on barriers and drivers of energy communities in the country?	
7. Do you want to use the standardised questionnaire? With some country-specific additions? ⇒ Send questionnaire to selected experts (depending on country size and structure: meaningful number of responses, if certain disparities: from all regions of the country, necessary)	Questionnaire: http://doi.org/10.5281/zenodo.7303799 (EN) http://doi.org/10.5281/zenodo.7303955 (DE) http://doi.org/10.5281/zenodo.7304044 (PL)

4 Assessment of the Potential

Question	Related Material from the Model Assessment Project
Leading question(s) to be reported on: <ul style="list-style-type: none"> - How many energy communities could potentially evolve? How much could the installed capacity be? - How many energy communities are likely to evolve? How much capacity are they expected to develop? - What are likely/plausible/potential scenarios? - Are there any regional differences within the member state in this regard? 	Background Paper #3 http://doi.org/10.5281/zenodo.7301559
11. Which type of assessment methodology shall be used – sector-development, bottom-up modelling or a mix of both?	Examples in Background Paper #3 http://doi.org/10.5281/zenodo.7301559
a) Sector-development approach	
12. Which data on the current energy community sector and its development are available?	See Question #2
13. Which forecasting method shall be applied?	References in Background Paper #3 http://doi.org/10.5281/zenodo.7301559
14. What are political targets and/or future projections for installations of the relevant technologies? ⇒ Calculate community share	
b) Bottom-up modelling approach	
12. Are any studies on willingness to invest available? Alternatively: Are there enough resources to do an own study for the purpose of the assessment? ⇒ If both questions are answered with no: Choose path a! Otherwise: Use willingness-to-invest data as input!	References in Background Paper #3 http://doi.org/10.5281/zenodo.7301559
13. Depending on the exact modelling approach: What are reasonable assumption regarding financing conditions, shared ownership ratios and/or specific investment costs?	
14. What are political targets and/or future projections for installations of the relevant technologies? ⇒ Calculate community share	

5 Evaluation of Costs & Benefits

Question	Related Material from the Model Assessment Project
Leading question(s) to be reported on: <ul style="list-style-type: none"> - What is known about costs and benefits of energy communities in the member state? - If quantifiable: How large could net benefits be if the potentials (see Point 4) were to be realised? 	Background Paper #4 http://doi.org/10.5281/zenodo.7301723
15. Which costs and benefits or which typology of impacts shall be used for the assessment?	Manual, Chapter 5.2 http://doi.org/10.5281/zenodo.7301314
16. What does the literature tell us about these impacts of energy communities, specifically in the member state?	Starting point: references from Background Paper #4 http://doi.org/10.5281/zenodo.7304891
17. If no literature is available or state of knowledge not satisfactory: Are there enough resources to do an own impact evaluation?	

6 Policy Database, Selection of Measures and Their Evaluation

Question	Related Material from the Model Assessment Project
Leading question(s) to be reported on: <ul style="list-style-type: none"> - Which measures have been adopted as part of the enabling framework? - Which barriers and drivers to these policies address? - What are the impacts of these measures? 	Background Paper #5 http://doi.org/10.5281/zenodo.7301846
18. Which are the most pressing barriers or most effective drivers?	
19. What is known about the effectiveness and efficiency of measures taken elsewhere to address these barriers and/or drivers?	
20. How can impacts of the measures taken as part of the enabling framework for energy communities be evaluated?	