STAKEHOLDER MAPPING AND ANALYSIS OF ENERGY COMMUNITIES WITHIN THE PROJECT 'INTERACT'

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Introduction

Energy Communities (ECs) help pave the way towards a clean energy transition by organising collective and citizen-driven actions, all the while moving citizens to the front [1]. As a consequence, ECs improve the public acceptance and promote further private investments for renewable energy projects. ECs can also provide flexibility to the energy system through demand response and energy storage, by supporting participation at citizen level. The Clean Energy Package (CEP) [2] of the European Union (EU), through legislation, enables the citizens to jointly generate and consume energy. As a result, there is an increased interest especially in the EU towards ECs. Furthermore, the Renewable Energy Expansion Act (Erneuerbare Ausbau Gesetz) [3] introduced in Austria in the year 2020 provides more motivation for participation in ECs.

The project Integration of Innovative Technologies of Positive Energy Districts into a Holistic Architecture (INTERACT) is an international research and innovation project, with participants from the countries of Austria, the Czech Republic and Sweden [4]. The project aspires to boost the emergence of ECs as one crucial building block to achieve Positive Energy Districts. INTERACT will develop a roadmap for the energy community's secure and reliable integration in to the power system structure, with focus on two pilot test regions - an existing community in Austria and a green field project in Sweden. Furthermore, the LINK-based holistic architecture is used to ensure the integrity of the solution by harmonizing all interactions within the energy community itself, and between the EC and the market, along with the European power system [5].

For the successful organisation of an EC, it is important that the requirements, responsibilities and the roles of the different stakeholders of the concerned energy community be analysed. A stakeholder analysis defines the roles of the stakeholders and their level of involvement along with the interpretation of the benefit of the stakeholder with the successful completion of the energy community project. In the scope of this paper, the stakeholder analysis conducted for the first INTERACT test region, an Austrian pilot project in the municipality of Großschönau, Lower Austria [6] is described in detail, and the various conclusions which were derived from the analysis are being presented. The second INTERACT test region at Fyllinge, Sweden is a greenfield project [7], where the representatives of the identified stakeholders were interviewed, and an initial outline of stakeholder mapping was conducted.

Stakeholder mapping and Analysis:

A comprehensive, detailed mapping and analysis of the various stakeholder groups for the test region Großschönau was conducted, and multiple factors contributing to the success of the EC were derived. The stakeholder mapping was conducted through either researching existing information or conducting detailed interviews or surveys with the identified stakeholder group representatives.

The initiative to establish an energy community was already taken at the test region Größschonau, and several actors are involved in the process and are committed to the cause. The stakeholder mapping process identified seven different stakeholder groups in the test region in Austria. The Table1 briefly describes all the stakeholder groups identified and gives the number of representatives from each group interviews in the mapping process. Since the process of establishing an energy community is already

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underway in the region, stakeholder mapping approach included assessment of stakeholder perspectives in regard to the current status of planning, as well as the goals for the energy community and the roles of the various representatives of stakeholder groups towards the listed goals.

In addition to the overall goals of the energy community, the stakeholder analysis also explores the individual goals and motivation for the participation, along with the burdens and interferences which are or would be faced by the stakeholder groups. Further analysis on the stakeholder group network also sheds light on the shared interests or conflicts between the various stakeholder groups. Figure 1 illustrates the stakeholder perspectives on the overall shared and opposing identified interests.

Table1: Stakeholder groups identified by the stakeholder mapping process at Größschonau, Austria

Nr	Stakeholder Category	Stakeholder Representatives	
		Number of representatives	Description
1	Municipality	1	Mayor
2	Municipal organisations	2	Representative of municipal council and public administration
3	Opinion leader organisations	2	Regional organisations with focus on climate strategies for municipalities, involved in strategic alliances and information campaigns.
4	Private Businesses	3	Representatives from Local businesses: tourism, guest house, farming and information centre/ local permanent exhibition on energy for the public.
5	Infrastructure	1	Energy and grid provider
6	Local associations	4	Representatives from associations: Tourism & local economic development, rural youth club, volunteer firefighter.
7	Citizens	2	Representatives from the community, consumer and prosumer.

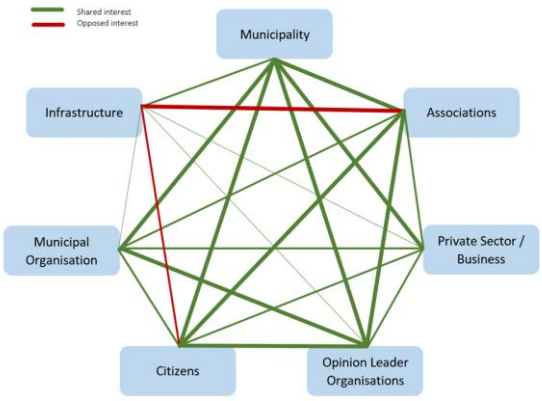

Figure1: Stakeholder perspectives on the overall shared and opposing identified interests

From the Figure 1 the intensity of the connections is indicated with the thickness of the connecting lines, and the colour indicates whether the connection resulted in shared interest (green) or mutual conflict (red).

Conclusions:

The results of the stakeholder mapping process and the stakeholder analysis can be taken as a first step towards the building of communication strategies and involvement management, to facilitate the transition and the introduction of energy communities and target groups could be addressed [1]. In the case of Großschönau, the results show high interest and motivation among the seven stakeholder groups. The results provided a broad spectrum of motives, expectations, challenges and visions of the stakeholder groups for the implementation of ECs in the coming future. These results serve as a basis for the creation of communicative narratives supporting the community building and the deployment of the EC's vision in the region. Yet there remain various open questions, potential gaps in roles and varying interpretations regarding the influences on the EC. The various stakeholders as mentioned are already involved and therefore highly informed about the energy community process, and should be prepared to function as communication hub, to build and showcase pilot cases to clarify future roles for replication and expansion of the energy community.

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