



Against All Odds: Community-owned Renewable Energy Projects in North-West Romania

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Abstract

The emergence of community-owned renewable energy projects in Western Europe are rooted in favorable internal community dynamics and an enabling policy contexts. However, in countries like Romania, community-owned renewable energy projects (COREPs) are almost inexistent. By looking at solar power projects in northwestern Romania we discover that, out of 97 projects deployed in rural areas, only two are owned by the local communities. This paper seeks to find out what is the general context surrounding community-renewables interplay in Romania. Specifically it discusses the ways in which public policies hinder the development of COREPs and what alternatives could be implemented to change this situation. For this task, present research relies on a multi-method approach combining questionnaires with local authorities, document analysis and a series of in-depth interviews with representatives of local authorities owning the two COREPs. Based on the empirical data, this paper finds that there is a weak relationship between renewable energy projects and host communities. Even in the case when local authorities own the project, we cannot discuss about effective COREPs in Romania yet. Public policies in the field are quite restrictive, centralized and inflexible, while the selection mechanisms exclude small and peripheral communities from the opportunity of reaping the benefits of renewable energy projects. Discussing with representatives of local communities I also found that projects are poorly integrated in the local socio-economic landscape. The implementation and the management of the projects are outsourced to private companies from outside of these communities. On the bright side, I argue that the two COREPs still produced important benefits for local communities in terms of savings for the local budget, support for innovative thinking (to avoid the difficult bureaucratic processes) and increasing self-awareness of the local authorities regarding their energy options and negotiation capacities.

Keywords

Renewable energy projects; innovation; energy policy; North-West Romania; community development

Introduction

Community-owned renewable energy is a topic widely discussed in both the academic literature and policy making in Western Europe. It does not come as a surprise since the development of community owned renewable energy projects (COREPs) is relatively old in countries like Denmark, the Netherlands, the UK, or Germany. For example, in 1970s Denmark, a total of 160,000 households held shares in at least one wind power turbine (Schreuer and Weismeier-Sammer 2010, 4). Similar evolutions are characteristic to the Netherlands, the UK and Germany. The development of this type of projects relies on a combination of locally rooted factors and governmental policies (Walker 2008). At the same time, it is argued that COREPs can improve the level of social capital and community cohesion (Walker et al. 2010; Yildiz 2015; del Rio and Burguillo 2008), while also fostering public participation in local energy planning (Rogers et al. 2008, 4216).

Given all these benefits, are community owned renewable energy projects a valuable resource to counter-act peripheralization dynamics in Central and Eastern European (CEE) context? Rural communities in CEE countries are characterized by scarce access to valuable natural and material resources, and due to their peripheral position, those communities lack access to otherwise available resources in urban centers, such as highly educated workforce, well developed infrastructure, industrial production units and political representation (Benedek 2004; Benedek and Moldovan 2015). To overcome these disadvantages, rural communities must capitalize on available local resources and ensure that the outcomes and revenues are distributed at the local level to contribute to local development. Given the wide access to renewable energy sources in rural areas (OECD 2012), renewables represent a valuable and important resource for the communities, both to supply their own energy needs, and outside by selling the excess energy and making a profit. Beyond these material benefits, COREPs may constitute solid foundations for wider community engagement (Rogers et al. 2008) thus empowering local authorities and action groups to become socially and politically engaged. Because of the increasing polarization and peripheralization dynamics in CEE countries, remote and isolated (spatially, economically and politically) communities are getting poorer, lose access to important resources, and witness increasing outmigration and overall decrease in the quality of life ((Lang 2010; Kuhn 2014; Benedek and Moldovan 2015). Given this context, such positive developments as deployment of a locally owned COREP are crucial for rural communities offering a possible tool to counter-act peripheralization dynamics.

In this respect, I argue that the development of COREPs is a necessary tool to promote inclusive and sustainable growth in peripheral communities. This development requires an enabling local context as much as it needs a policy framework that encourages local initiatives (Walker 2008). Unfortunately, the policy context, even when present, may discourage the development of a COREP, which is particularly true in the Romanian case. The current energy legislation in Romania is complex and poorly interconnected. A diverse range of institutions dealing with energy related issues make the implementation of a COREP difficult, and due to the over-centralization of the legislative and executive powers, all the important decisions are taken at the central level, in Bucharest. This makes it even more difficult for local, peripheral actors to have a say in those policies. This type of deficient public policy can simply discredit the whole idea of community ownership and transform the available local capital into a governmental-led, poorly performing initiative.

Studies looking at Western European experience acknowledge the important role played by the legislative and policy context in the development of COREPs. For example, Walker et al. (2010)

identified six different policies, either partially or completely supported by the state budget, aiming to boost the development of community-owned renewable energy projects. Beyond financial support, they also offer guidance, training and advice regarding the implementation of a renewable energy project. However, it is important to emphasize, that in the UK, Germany, Denmark and the Netherlands studies do not present government policies as the main cause for COREPs' development (Schreuer and Weismeyer-Sammer 2010). Those policies are rather a supportive external environment, and are meant to offer guidance and financial support to local initiatives. To understand the development of COREPs, it is necessary then to look at the internal context and the way in which these projects interact with the host communities.

Considering COREPs as an important tool for local community development and empowerment, this study looks at the interplay of national policies and the emergence of COREPs in North-West Romania. It is intriguing to observe the small number of deployed COREPs in a region that encountered an impressive boom in renewable energy projects. Since 2010, 97 solar power projects were deployed in 68 rural areas in the North-West region, representing the highest share in Romania. Out of these, however, only two of them are owned by local communities. Given the general technological and policy context, this research has three interlinked aims: to present the general renewable energy projects' context in North-West Romania, to understand the mechanisms behind the development of these two particular COREPs, and to highlight the main issues within the existing policy, presenting at the same time alternative public policy solutions. Throughout this paper, I take a critical post-positivist stance avoiding the search of 'the final, generalizable truth', and focusing instead on the fluid realities that characterize the development of these projects within the broader context of renewable energy development in Romania.

First part of this paper defines the main concepts, sets out the guiding normative arguments and discusses COREPs in a broader frame. Further on, I follow with a short methodology chapter to explain the tools I used to collect and analyze the data. The next section is dedicated to data analysis, discussions and conclusions. And the last part focuses on policy recommendations formulated on the basis of the empirical analysis.

Main concepts and normative standpoints

Conceptualizing community owned renewable energy projects

Stamford (2004) argues that a community-owned project is that involving communities through financial investment or managerial control by, or on behalf of, groups of 'members of the public'. Projects can also be only partially owned by the local community, if they are developed in cooperation with a private agent (Walker 2008). Walker and Devine-Wright offer a more detailed insight, considering for their definition the *process dimension*, "concerned with who a project is developed and run by, who is involved and has influence," and the *outcome dimension*, which refers to "how the outcomes of a project are spatially and socially distributed – in other words who the project is for" (2008, 498).

COREPs must be developed, implemented and run through an open and inclusive scheme that involves as many relevant community stakeholders as possible. At the same time, they should provide direct gains to the local community where they are installed. For that matter the process and outcome dimensions are clearly interconnected since the willingness of individuals to get involved in a COREP is linked to the expected gains for the individual and for the community (Rogers et al. 2008). Failing on one of the two dimensions can lead to poor acceptance of the project by the local community, and even to make it controversial (Walker et al. 2010).

There are three types of relevant local stakeholders involved in the process dimension: local business stakeholders (Walker et al. 2010; Destouni and Frank 2010), local authorities (OECD 2012; del

Rio and Burguillo 2008), and citizen action groups (Buchan 2012; Hanley and Nevin 1999). Projects run by local authorities are the only type of community owned projects in Romania. Unfortunately, the legislative basis is poorly developed and does not encourage the creation of cooperatives or citizen associations that could own a renewable energy project. It does not mean however that these projects cannot have a wider participation since it corresponds to the local decision-makers to define how the project will interact with the local community.

Regarding the outcome dimension, there are two types of benefits for the local communities linked to a renewable energy project: direct (material/financial) and indirect (soft) gains. The former refer to the economic benefits for the community due to the location of the project and its related activities, such as: positive impact on employment (OECD 2012); infrastructure development (OECD 2012; del Rio and Burguillo 2009); financial gains for local land owners who lease or sell land for the project (Dulcinea Cuellar 2009; ADAS Consulting 2003); revenues or financial savings derived from the commercial management (Walker and Devine-Wright 2008); direct financial gains from taxes and levies (OECD 2012; Kammen, Kapadia, and Fripp 2004). The latter are more difficult to measure, but equally important for community development. COREPs can have an important impact on trust (Walker et al. 2010), community cohesion (Walker et al. 2010; del Rio and Burguillo 2009) and active participation in decision making process (Rogers et al. 2008; Yildiz 2015). Based on the former concepts, a COREP can be defined as a project that is either totally or partially owned by the local community through an open and participatory ownership and management scheme, which allows for redistribution of the project outcomes within the community.

Policy context

An accurate understanding of COREPs should also consider the external context in which projects are developed. This includes the main policies, support schemes, laws and regulations that shape and influence a community-owned project. Literature on the subject significantly points out to the distinction between external policy context, on the one hand, and the internal, locally rooted community initiatives, on the other. For instance, by highlighting the importance of the local community leadership and the relevance of the existing government-led initiatives to encourage local community ownership (Walker et al. 2010). Schreuer and Weismeier-Sammer describe a similar situation in Denmark, where the initial boom of COREPs was based on citizen-led bottom-up initiatives coupled with a series of legislative provisions (Schreuer and Weismeier-Sammer 2010). Buchan observes the same type of experience in Germany (Buchan 2012), and del Rio and Burguillo, in Spain (del Rio and Burguillo 2009).

For the case of renewable energy sector, the policy context has gone through two different phases: intense support for all sort of renewable energy projects between 2008 and 2013, and the opposite, a reduced support since 2013. The latter is a result of over-compensation during between 2008 and 2013, when Romania achieved the 2020 EU targets for renewable energy generation (Cebotari 2015, 113–14). Existing support schemes are undergoing a permanent change and adaptation since 2008 and are the result of constant negotiations and discussions between multiple stakeholders, and is in line with Romania's commitments to support the development or renewable energy project and increase the generation from renewable energy sources (*Directive 2009/28/CE 2009*).

Because the existing support schemes were difficult to access and understand for non-energy stakeholders, in 2010, the Ministry of Energy and the Ministry of EU Funds launched a special financial assistance program to foster the development of renewable energy projects in rural areas. This program was separated from the existing support scheme (Organismul Intermediar Pentru Energie 2010), and was not integrated into the energy legislation as such. Its main goal was to attract new types of investments to peripheral, isolated rural areas by promoting new types of energy generation. The two COREPs examined here accessed to financing through this scheme.

A critical perspective on the development of renewable energy projects

Renewable energy projects cannot be excluded from the general organization of production and distribution of resources. From a critical perspective, both instances of production are a part of the collective struggle between man and nature, and between man and man (Wisner, 2008). In the case of the production of renewable energy projects, this is critical since it is with the local communities to engage into the “man versus nature” struggle in order to “harvest” renewable energy. To benefit from the produced energy, local community has to engage into the “man versus man” struggle. In this particular instance, “man versus man” struggle translates into a tension between local actors and their need to use the energy locally and the central authorities which requires them to become part of the national infrastructure and pay an extra cost. It is interesting to note how energy resources, even though available locally and belonging to the local community, must also be “harvested” from the central authorities through a long list of approvals and taxes in order to be used locally.

From this standpoint, since the existing forces of production refer mostly to the personal activity of men, then work itself (Wisner, 2008) is of lesser interest for the present research. However, social relations of production are crucial in order to understand the main shortages of the COREPs and associated legislation in Romania. Social forces of production organize labor, control the allocation or the access to resources, the instruments of labor, and the appropriation and distribution of human labor and its results (Hindess & Hirst, 1975). The same stands when it comes to renewable energy projects, since the exploitation of the energy resources requires evaluating and assessing the existing energy resources at the local level. For this study, the instruments of labor are divided in two – the hardware arrangements (solar panels, grid, cables, etc.), and software arrangements, i.e. the knowledge on how to operate the equipment and its social integration (Walker & Cass, 2007). It is assumed that local shareholders should have access/own both types of arrangements.

Now, in the case of COREPs, since they are projects aimed to provide incentives for local development, it is important to also observe how labor is organized and results are shared. Renewable energy technology can bring new type of technological infrastructure to rural areas, so reliance on this resource can offer an alternative way for using it. Slater proposes an understanding of resource usage in relation to the instruments of labor (1977, 68). He observes that “... the nature of resource utilization all vary with the relative levels of socio-economic development and in particular with changes in the relative sophistication in the instrument of labor”. In line with his observation, I argue that implementing a renewable energy project is an evidence of higher degree of ‘sophistication’ to harvest the locally available resources; so communities that own and operate a sophisticated instruments of labor could foster local development through increased innovation capacity and place-based development initiatives. This understanding echoes the discussion on peripheralization as a process presented by Kuhn (2014) who argues that innovation capacity of a given locality is at the core of its socio-economic wellbeing.

Considering these normative concepts, this study pays focuses the social forces of production as a means to understand the dynamics of community owned renewable energy projects and their potential to foster locally rooted development.

Methods and data

Methods

This article relies on a multi-method approach combining quantitative questionnaires, qualitative semi-structure interviews and document analysis. This strategy allows applying data triangulation to observe the interplay between renewable energy projects and local communities from different standpoints. Questionnaires map the attitudes of local authorities regarding renewable energy projects installed in their communities. Document analysis uncovers the perspective of the national policy-makers

regarding the development of renewable energy projects in rural areas. It also provides an insight into how the government's policies aim to boost local development through renewable energy projects by promoting local ownership of renewables. Semi-structured interviews inquire into dynamics of community-REP relationship when a local community owns the project. In particular, to expand on the dynamics that characterize community-project interactions and how local ownership shapes the project's image within the community. Data was collected from November 2015 to March of 2016.

This multi-method approach ultimately leads to inquire not only what are the benefits or disadvantages of COREPs in Romania, but also to understand the reasoning behind investing in such projects from the perspective of local authorities. Nevertheless, this methodological approach is limited to the extent that it was not possible for me to include a broader pool of informants, either through questionnaires with the inhabitants of these villages, NGO's and community organizations, or in-depth interviews with the locals. On the quantitative side, applying questionnaires to a greater number of inhabitants was costly and time-consuming with the limited financial and time resources I had at the time. On the qualitative side, it was very difficult to find people or NGOs willing to discuss the implementation of the COREP in their village. The most common argument for declining to participate was that they had no position or knowledge on the subject. This in itself is another important piece of information, which shows a scarce participation of community members and informal community leaders in the development and management of projects.

Limitations such as the mentioned above are important to consider for future research, including a larger number of community members that are not part of the project management team, could improved the capacity of the present analysis to understand non-participation and its effects on the project-community relationship. Among others, how the non-participation can trigger further contestation actions, or even the denial of the community benefits resulting from the project.

Data collection

Quantitative stage – Questionnaires

Before 2010 there were none solar power projects in the North-West region. After 2010, there are 68 villages with one or several projects deployed. From November 2015 to March 2016, I designed and applied a telephone questionnaire to map the perspective of local authorities regarding this situation. Questionnaires were applied to 52 local representatives out of the 68 villages; of them only 28 knew or confirmed the existence of a renewable energy project.

Qualitative stage – semi-structured interviews

Based on the general context obtained in the questionnaires, I followed up in-depth study of two cases of COREPs, in Hustiu and Batrana villages¹. In both cases local authorities were the legal owners of the projects. To understand how the projects performed on both process and outcome dimensions, I used semi-structured interviews with local authorities. I used the obtained information to map the trajectory of the projects from the planning to the management phase, identifying relevant stakeholders and the evolution of the project. Three interviews were conducted in April-June, 2016: with the local

¹ Names were changed to keep the anonymity of respondents, and protect them from eventual political repercussions.

mayor in Hustiu (I1),² the vice-mayor (I2)³ in Batrana, and with a private consultant (I3)⁴ who is a park manager in both communities.

Quantitative stage – Document analysis

Since both projects relied on government policy for financial and organizational support, I followed up a detailed analysis of two policy documents addressing the development of COREPs: the official call for proposals (Organismul Intermediar Pentru Energie 2010), and the guide for applicants (Organismul Intermediar pentru Energie 2010). These documents offer guidance and explanations on the types of stakeholders and projects eligible for financial support. Their analysis unravels how national public policies aim to encourage community-owned projects.

Results and discussion

Solar power projects in North-West Romania – a general context

Figure 1, presents the answers obtained to measure the benefits resulting from the deployment of renewable energy projects. They are organized according to three material indicators: employment, infrastructure development, and revenues to the local budget. They reflect how local authorities interact with the deployed projects and whether they see the projects as beneficial for the development of local communities.

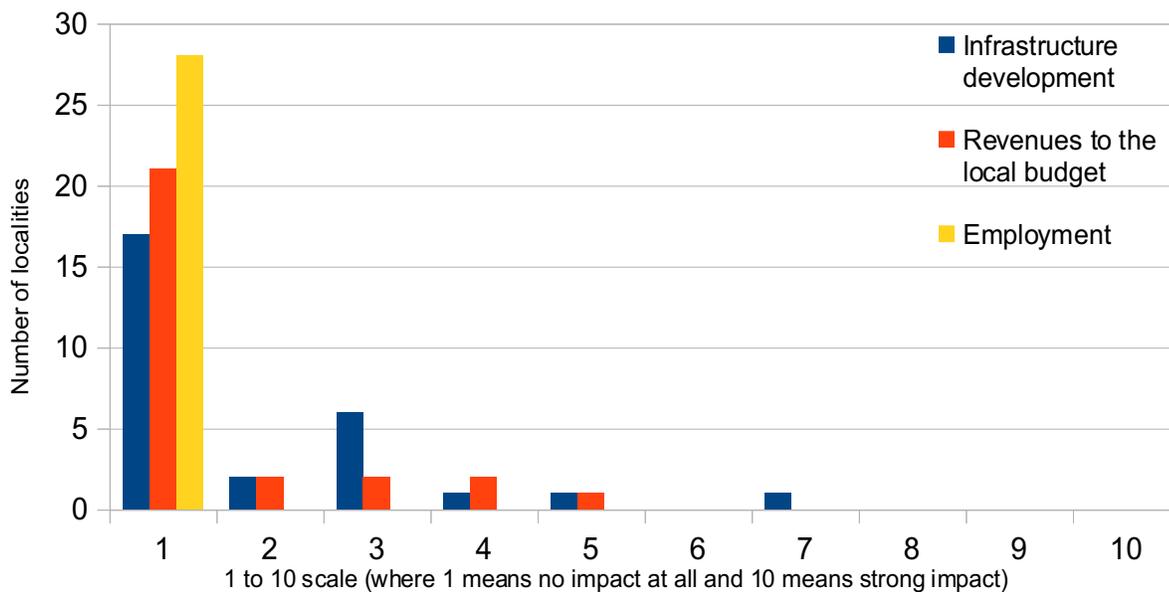


Figure 1: Distribution of answers on renewable energy projects' impact (infrastructure development, revenues to the local budget and employment). Source: elaborated by author

² I1 – Mayor of Hustiu (middle age, male), interview conducted by author in April 2016.

³ I2 – Vice-mayor of Batrana (middle age, male), interview conducted by author in April/May 2016.

⁴ I3 – Private manager (middle age, male), interview conducted by author in June 2016.

As it can be seen, the majority of respondents said that the projects produced no impact on any of the three indicators. Overall scores are tilted to the left side of the chart, with only few cases scoring higher than 3. Considering that majority of the projects are privately owned, such results could be expected. It seems that local authorities have little to do with the projects that are privately owned, and that all benefits are going to the metropolitan areas where the companies are registered.

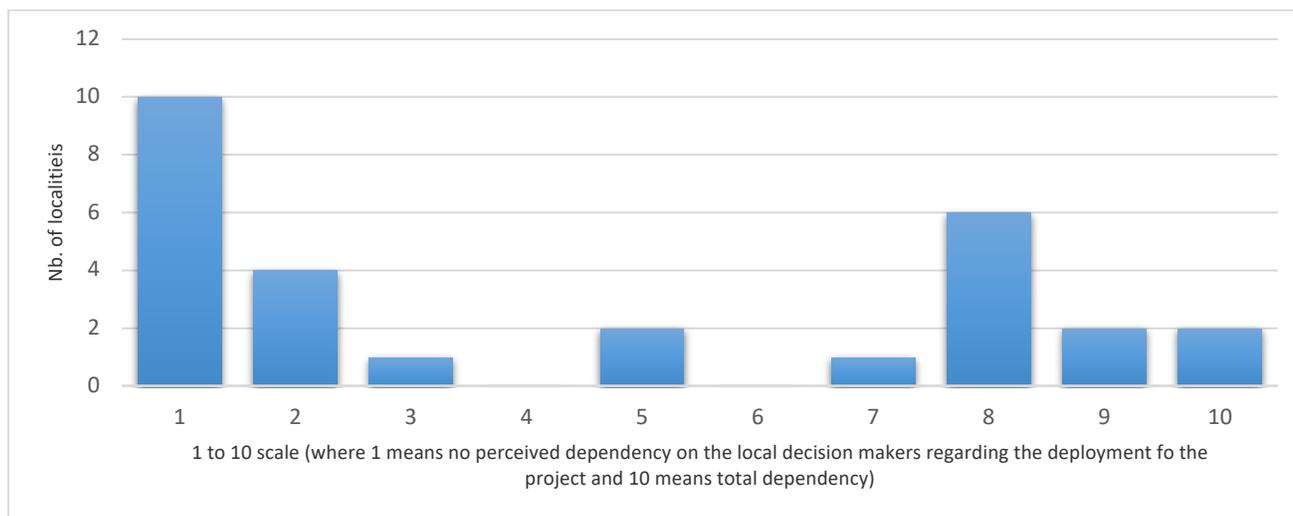


Figure 2: Project's dependency upon local decision makers. Source: elaborated by author.

In figure 2, answers on the perceived role played by local authorities are clustered at the two extremities. They correspond to how local representatives assess the importance of their institutions in deploying the projects. A part of respondents consider that this impact is negligible, while others believe that the deployment of the project was dependent very considerably on them. All respondents who scored high referred to the fact that, to implement the project, investors needed a construction notice from local authorities, without it, they could not proceed. While local authorities perceive this as a way to influence the deployment of a renewable energy project, it seems to be a rather limited tool. As pointed out by one of the mayors, although he had the capacity to grant the construction licence, there was not much he could do to really intervene, since all other legal documents had to be completed online. Then, although it seemed that he was a decisive factor, his capacity was only an administrative decision over which he had little control. So, although local authorities have some decision-making power over the deployment of projects, their opinion is quite limited and, rather than reflecting the local interests, is indicative of a "bureaucratic" procedure. In this way, although privately owned renewable energy projects use existing resources, they produce little or no significant impact, and are almost not subject to any local influence.

Community owned renewable energy projects – going into details

Two community owned projects, located in the villages of Hustiu and Batrana in North-West Romania, will be examined in detail in this section. As mentioned earlier, these were selected based on the results of the questionnaires. Hustiu and Batrana villages are situated near the Hungarian border, at a distance of 20 km from each other. These are the only villages in the region that received financial assistance to develop their own solar power projects and that made them work. In both cases, the mayors were directly involved in all stages, from the application to the management stages. Their level of engagement with the projects offers a possibility of examining the challenges faced along the way, the

level of community involvement, as well as the mapping all the other relevant actors who were involved in the projects development.

An interesting commonality between the two villages is the reasoning given by the local officials about their involvement in the project. In both cases, interviewees confirmed that they were not particularly looking for an opportunity in the renewable energy field, but rather any opportunity that would improve the socio-economic situation of their village. So their decision had to do with the opportunity to reduce local energy spending without any extra financial investment. The availability of EU funding was decisive and without it, they would have not decided to invest. They were not the only ones who applied for this support and obtained the funding, there were at least 10 other mayors, however, they were the only ones “stubborn” enough, they said, to go through with it, and it took them more than 3 years to do it.

Process dimension

Previous studies focusing on Western Europe have indicated that community owned projects involve a larger number of diverse social agents (Becker, Kunze, and Vancea 2017; Rogers et al. 2008; Walker 2008; Walker and Cass 2007). Local authorities could play a central role in some cases, but often a broader participation of different stakeholders and community actors is sought. Local officials and other stakeholders involved in the development of the REP were interviewed in the villages of Hustiu and Batrana to investigate the actual situation for the two projects in North-West Romania.

The situation in the two studied communities is different from the cases reported in Western Europe. There were no other people or agents, outside the team of local authorities, involved in the deployment of both projects. In practical terms, either the mayor (in Hustiu) or the vice-mayor (in Batrana) were responsible for coordinating the project, without any other extern involvement from the local community. In both cases, the interviewed officials seemed quite surprised by my request to meet other engaged stakeholders. There were no other actors involved, they confirmed.

This limited involvement is caused by the gap in the financial support scheme discussed previously. According to it, local authorities are in charge of the project and are not expected to consolidate a wider community engagement. However, the legal provisions do not ban them from having a more open scheme of implementation of the renewable energy project. As one of the projects’ manager says:

I3: “On one hand people are not so interested in this kind of projects, they go to the mayor and ask him to solve their personal problems, and no one really cares about a public good. On the other hand, the mayors are not so transparent either, they do not talk to the people directly, only through the representatives in the local council”.⁵

This attitude signals that, while the projects belong to the local community, wider community engagement with the project is non-existent, this in turn means that people simply do not perceive them as something they can benefit from. This might have a negative effect on the level of public acceptance of the project and future support for similar projects.

Although they lacked wide public involvement, the two projects were developed and deployed by the local authorities to support the development of their communities. Local authorities are the sole beneficiaries and owners of the projects, however some other actors are involved during the different stages of the project. Both projects were conceived and implemented to foster the local wellbeing, either

⁵ All quotations are taken from the interview materials and were translated from Romanian to English by author.

by reducing of the electricity spending or by selling the excess energy and earning extra revenues. Given that the financing was granted to the local authorities, it was also depended on them to project, deploy and manage the project. Due to limited human resources available locally, in both cases, the authorities decided to subcontract other companies to assist them throughout all of the phases of the project – application, deployment and project management.

For the writing of the project proposal, the very first stage, both mayors mentioned that they worked with private consultancy companies. Local authorities had their input into the proposal, however the companies did the main body of work. That is, the authorities looked for help outside of their communities to find private agents specialized in writing project proposals. This practice is widespread in Romania, where local authorities simply lack the knowledge and the human resources to apply for a project. However, these companies are mainly concerned with winning the project and getting paid, and are less preoccupied about what the communities need. As a result, the projects they recommend, in many cases may not fit the needs and interests of the communities in the long term.

For the next two stages, namely, project deployment and project management, local authorities hired private companies to implement the projects. In both communities, local authorities had to go through a public trading platform and source the best offer. In Batrana, local officials hired three different companies in order to implement different parts of the project. None of them was local, and they did not employ locals. In Hustiu, only one company based in Cluj-Napoca was hired.⁶ The company did not hire any locals and had all the work done with a team of employees from Cluj-Napoca. In this case, failing to involve local private actors is a setback for the community-owned character of the project. By outsourcing the development of some important parts of the project, local authorities outsourced also the knowledge and the innovation capacity that could have ultimately contributed to the community development.

It can be observed that, in both cases, local authorities and external companies are the only actors involved. Because the projects have unclear benefits for the local actors, and also because of the low engagement of a larger number of community agents, there is little public interest in the projects. Local authorities, on the other hand, have no incentives to promote the project due to the structure of the financing scheme that places them at the center without any requirement for public participation. The mayor of Hustiu summarizes the interaction between the members of the community and the project in this way:

I1: “People from the village were not against it, but we often received answers like “Ok, the village gains something, but what do I get from that, personally? [...] it seems that the people saw no benefit for them personally.. How can I explain them that there would be more money left for the community’s budget so we could build new things? So we had to continue with my team.”

Also in both cases, local authorities believe that poorly informed, non-participative locals were to blame for the low level of participation. However, both agree that the deployment and management of the projects did not involve any community actors, nor did they seek for such.

In summary, the level of involvement of local communities in both cases is small. Local authorities have legal ownership of the projects, however, due to limited technical knowledge and human resources, they must subcontracted third parties. All subcontractors come from outside, not from the

⁶ Cluj-Napoca, a regional economic and political center, is the second biggest city in Romania. It is often called the “capital city of Transilvania”.

Batrana or Hustiu villages, so there is no real benefit for the communities neither direct (employment, taxes, local firm development) nor indirect (knowledge creation, innovation capacity building, social capital development). Moreover, the lack of involvement of no other community actors in all other stages of the projects' development causes apathy with regard to the benefits. Thus, although the projects belong to the communities, the general public certainly does not perceive them in that way.

Outcome dimension

Financially, the projects represent a good investment for the communities. In both cases, villages managed to obtain important savings. I2: "We spend around 10,000 EURO on electricity, [but] we can recover this money through the project. And we can even reinvest the money. We could build sidewalks, repair buildings, invest the money back in community."

The financial benefits provided by the projects should not be neglected because they helped local authorities to secure an alternative source of income, and so they represent a mean to increase their economic resilience and boost their autonomy from the central authorities. At the time of the interviews, both officials stressed that these savings have not been used, but that they were glad to have this extra money for the local budget, so they were considering other projects for the next year.

However, although these financial savings are important for local communities, the projects did not generate other important material gains. As mentioned earlier, in both cases the authorities hired external companies, which in turn did not hire people from the communities to carry out the deployment and operation of projects. Once the construction is finished, no employees are needed to run the projects, except for a park manager who is a private consultant. In terms of soft gains, it cannot be expected the projects to have an impact on social capital, community cohesion and education, because of the lack of a wider community participation. Compared to Western European examples, where community-owned renewable energy projects reflect the aggregated interests of community members, the Romanian cases only reflect an active involvement of local authorities. Although the soft gains are quite limited, local authorities have begun developing a more innovative attitude. They faced a series of challenges in adapting the project to their needs, because of the rigid structure of the projects outlined in the application guide. One of the mayors commented that he had to navigate through a very complex legislation in order to ensure that the project was developing according to the law and the provisions of the financing agreement. Thus, local authorities had to go through a long and difficult negotiation with central authorities to get the project running. They learned from these setbacks and found new opportunities to develop renewable energy projects by circumventing national authorities and their bureaucracy. In Batrana, local officials have already implemented a new project to meet the local energy needs, without having to connect to the national grid. However, if the project could produce more energy than required for local consumption, there would be a possibility to feed this surplus into the national grid and obtain additional revenue. By implementing a decentralized project, which is connected only to the local grid, authorities from Batrana avoided the need to negotiate with central authorities, paying taxes for the usage of the national grid and become vulnerable to energy price fluctuations. By doing so, local authorities managed to localize the project and build a closed, local energy cycle. If all the produced energy is used locally without feeding it into the national grid, then there will be no need for a complex process of buying and selling electricity through energy suppliers. In Hustiu, the mayor confirmed that they are also considering a new project that would allow them to consume the energy locally:

I1: "Now we are preparing a geothermal project [...]. We would like to develop a system that would allow us to supply energy to public buildings with thermal sources and we are already applying for a project in this direction. We have another goal, that after 5 years, when the thermal water well belongs to us, we would like to develop a thermal spa here in our village."

This type of initiatives shows the innovative thinking and highlights how much local authorities learned from experiences with previous projects. Moreover, it shows that local authorities are still interested in renewable energy projects, despite the difficulties they had to face with the current projects. In summary, both projects produced significant savings for the local budget. However, scarce public participation, poor communication of the project benefits, and the limited involvement of local community actors have led to poor redistribution of the benefits and, ultimately, to a low impact of these on the communities.

Policy support for renewable energy projects in rural areas in Romania

To foster local development and achieve renewable energy goals, Romanian government decided to encourage the deployment and ownership of renewable energy projects among local authorities in rural areas. This offered an alternative to the existing support scheme and aimed to boost economic development while encouraging renewable energy production. To apply for financing with this support scheme, local authorities had to work with two distinct policy documents that set the main roadmap. First, they should first consult the Request for Project Proposal (RPP) and if they qualify, obtain all the required details from the Applicant's Guide (AG). Unfortunately, both policy documents show a rigid, restrictive and top-down logic. Looking closely at the specific details of these policies, it can be seen how they could hinder a proper and long-term development of COREPs in Romania.

Declared goals of the support. The official RPP outlines six main goals. Out of them, two are energy related goals, another is an environmentalist goal, and three are economic goals. Economic goals aim to create new employment opportunities throughout the country by integrating isolated areas in the economic circuit, creating employment opportunities and promoting the active participation of private companies and local authorities in the exploitation of the existing energy resources (Organismul Intermediar Pentru Energie 2010, 2). The way how these goals are formulated suggests a directional understanding of the process through which renewable energy projects, once deployed, will lead to the expected results with or without community involvement. Thus way, the program fails to address local community engagement and the autonomous development of own energy management structures.

Eligibility. Only two types of commercial agents and administrative bodies are eligible to apply for financial assistance. In the case of the administrative stakeholders, these are the local authority (mayor's office), or the associations of local authorities (*asociatia de dezvoltare intracomunitara*). With this filter, the Ministry of Energy excludes all other types of citizens associations (local NGO's, local cooperatives, citizen's associations, local business associations, etc.), which could represent the interests of a community. At the level of local community, this restriction can lead to low levels of involvement, since only the mayor can decide whether to apply for the project or not.

Eligible costs. Allocated funds can be used for the acquisition of land, technology, workers and payments for connection to the grid (Organismul Intermediar Pentru Energie 2010, 3). However, funds are not available for educational and training activities, which means that project managers cannot train themselves or other members of the community to manage and develop the project properly. This is a serious setback, considering that local administrations often lack knowledge about the energy sector.

Application procedure. Application must be submitted in person at the Ministry of Energy in Bucharest (Organismul Intermediar Pentru Energie 2010, 4). Traveling to Bucharest from any of the villages takes more than eight hours by car. This requirement seems rather odd, considering the fact that the file could be mailed or delivered personally to the government regional representation. This highlights once again the hierarchical and centralized logic of the policy.

Restrictions for local authorities. The GA encourages local authorities to develop energy-producing capacities that would supply power or heat directly to the local consumption facilities.

However, if they wish to be connected to the national grid, they face several restrictions: “Owner of the project cannot invoice or bill the energy fed into the grid. He can be reimbursed by deducing local energy spending from the energy fed into the grid” (Organismul Intermediar pentru Energie 2010, 20).

This means that local authorities cannot sell the energy if the price of energy rises. It also means that if they produce more energy than they consume, it will be fed into the grid without any benefit for them. In practical terms, it means that the energy will be passed through the system, and the authority will be compensated in kWh. However, as confirmed by the vice-mayor of Batrana, they must find an energy supplier that would agree to take away their energy based on one contract, and then supply the energy back to them based on another contract. In the end, the supplier shall absorb all the expenses and simply balance the local authorities in kWh consumed. This is a very difficult process and finding a supplier that would be willing to do it is rather challenging. Even if found, the cost of its services will be higher than usual given the complexity of the issue, thus the producer (COREP) will have to pay a higher price than usual

With these restrictions, local authorities have no flexibility for the financial and technical management of their projects. They cannot change the way they work, at least during the first 5 years (Organismul Intermediar pentru Energie 2010). This leads to certain risks, such as to not being able to adapt the project to market pressures, redistributing benefits, and negotiating a better deal for the energy supplied to the grid.

While the projects intend to assist isolated communities that are lagging behind, they offer no real opportunities to change this situation. Through the provisions discussed above, policy-makers impose a rigid structure on the social forces of production. Specifically, the policy is strict about what resources are to be exploited and how access is granted to them. In addition, the instrument of labor is defined and can not be subject to any change, therefore, if local decision-makers wish to improve the hardware or software arrangements, or obtain better revenues, they can not do so. Moreover, the legislation offers financial support only for hardware equipment; there is no opportunity for the communities to obtain support to acquire the knowledge to operate the equipment. This, in turn, leads to the fact that the distribution of labor and its results are carried outside the community where the projects are deployed, even when they belong to the community.

Conclusions

This research examined the community-renewable energy projects interplay in North-West region of Romania. Specifically, it looked into how local authorities perceive renewable energy projects, how do existing policies impact this relationship, and for the case of the two studied COREPs, what is to be gained and lost from a community owned renewable energy project. Based on the collected empirical data, it has been shown that there is a weak connection between renewable energy projects and local host communities in the region. The policies that aim to support local ownership of these projects are highly problematic and restrictive. Unlike Western Europe, Romania lacks a long history of policies to support renewable energy projects and a supportive environment for community-owned renewable energy projects. Both the legislative and socio-economic contexts are a constraint for this type of initiatives, which ultimately explains the small number of COREPs deployed.

For the case of deployed COREPs, the evidence points out to some material gains in terms of energy related savings and subsequent budget flexibility at the local level. Along the process of project deployment and management, local authorities also learned to sail their way through difficult legislation and stand out for their interest. Initial experience with the solar power project served as a lesson for further investments in renewable energy technology, avoiding the complex and difficult legislation in place for COREPs.

Considering this, I argue that the two analyzed COREPs are, in many respects, lost opportunities for the local communities. Due to lack of prior experience or appropriate advisory support, in both cases they ended up outsourcing the instrument of labour. Although the hardware arrangements belong to the local authorities, they lack of any software support arrangements and, therefore, have no knowledge how to operate or manage them properly. In this way, local authorities lack the capacity to change the project according to their needs, and therefore to innovate. In the end, this leads to the inability of local actors to take full ownership of an innovative technology. While they are formally in their possession, they lack the knowledge and human resources to properly manage it. Consequently, the level of innovation and subsequent local socio-economic development related to the project is quite low.

Furthermore, instead of focusing on maximizing the output of the project and redistributing the project's benefits, local authorities had to focus on navigating their way through difficult bureaucratic procedures and odd, complex legal requirements. At the local level, neither the distribution nor the results of human labour have been a collective decision. While it is argued that community stands to benefit from the project, with the exception of local authorities, no other community actors were involved. As discussed earlier, this is rather problematic, as it can lead to questioning the legitimacy of the project and further undermine the support of the public. While there were important material gains for the local budget, they were not communicated or discussed with the members of the community, which may further diminish the project's impact on building local cohesion in the long run.

Policy implications

Analysis of the policy context shows that it is poorly adapted to the realities of community owned renewable energy projects. It also suggests a weak integration of renewable energy projects into the socio-economic infrastructure of the host communities. Given this context, I argue that Romania needs to rethink the policies related to the COREPs.

Policies should broaden the meaning of "community" by allowing a greater participation of the communities in these projects, which in turn would represent a valuable resource for community development. In the same way, local authorities, local business actors and other community organizations must also be participants in all phases of these projects. This type of engagement can foster innovative thinking and expand public support for new and undergoing projects.

Likewise, the problem of eligible expenses is another important change that should be fixed. In addition, legislators should include training and educational activities within the eligible spending. COREPs should promote the development of local human resources through training activities. By ensuring that the local actors have the knowledge to operate and manage the projects, they will have greater impact on the well-being, engagement and innovative capacity of the communities. It will also transfer a good amount of social relations of production to the local level, meaning that not only the resources, but also the knowledge on how to collect and valorize those resources will be enhanced locally.

It is also necessary to have a consultancy body that would support grassroots initiatives with technical and legal details. Communities have different needs and it is important that a local action group gain an initial understanding of the renewable energy projects, requirements, benefits and available assistance, before starting a project. This intermediary body would ensure that communities do not end up with projects that do not fit their needs. These bodies should be located in all administrative regions, to avoid over-centralization and to guarantee that actors have access to specialized assistance without having to travel to Bucharest.

Policy-makers should also offer more flexibility for the communities operating renewable energy projects. Restricting them to build and run their projects in a specific way can deprive the communities of the possibility to adapt the project to the local needs, or to change it if required by technological, social

or economic developments, in order to innovate. For now, current legislation does not allow any of these initiatives to the local communities.

In addition, these public policies should be designed and implemented through an open discussion with the representatives of local authorities, private and non-governmental actors. A public policy meant to encourage local development is likely to fail if it avoids involving local actors in the policy design stage. These possible policy improvements would have three types of effects on the well-being of communities. First, they would benefit financially if a broader participation of the communities was ensured and the required works related to the project's deployment were carried out in cooperation with the local actors. Second, if communities participate in the design and implementation of the project, local stakeholders could boost their innovative potential by learning to adapt and change the initial technology according to their own needs. Last but not least, to point out other potential benefits of changing current policies would bring, having a larger involvement of the communities in the projects would increase the level of cohesion, political participation and contestation of the existing legal provisions within. As was shown in the villages analyzed, local authorities have taken some actions to change the existing legislation because it was not responding to their interests. With a greater community involvement, COREPs can prove to be not only an economic instrument, but also a political tool communities can use to promote their own agenda at regional and national level.

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