

HANDBOOK ON IMPLEMENTATION OF COMMUNITY RENEWABLE ENERGY PROJECTS IN LATVIA / SUMMARY

RIGA, 2020





INTRODUCTION

We need energy almost constantly, starting with the heat in our homes to the electricity in our computers, telephones and other devices. In order to be able to provide ourselves with clean and renewable energy, reduce our dependence on other energy suppliers, control energy costs, we need to make the most of local renewable energy sources (solar, biomass, wind, hydropower or geothermal energy). One way to do this is to unite the resident community and organize the production of energy on their own, using local resources. Thus, residents not only gain control over the cost of energy production, but also ensure the development of the local economy and increase the well-being of residents.

Renewable energy community projects in Latvia are currently new and little known. Therefore, in this handbook we have tried to gather the best examples from other EU countries, which would allow learning and would motivate the development of similar projects in Latvia as well. Based on the analysis of real energy community projects, which includes the analysis of both success and failure factors, we have also compiled recommendations for those who would like to work on the establishment of such an energy community in Latvia as well.

In order to promote the implementation of renewable energy community projects in Latvia, the Riga Planning Region has developed a handbook for project implementers within the framework of the project "Co2mmunity" (Co2mmunity: Co-producing and co-financing renewable community energy projects) of the EU Interreg Baltic Sea Region Transnational Cooperation Program 2014-2020.

The handbook summarizes the lessons learned from working with community energy projects in eight countries of the Baltic Sea region, including Latvia. The full version of the handbook has been prepared in Latvian, the English summary includes only a part of all the information.



Co2mmunity





During the implementation of the Co2mmunity project, the Riga Planning Region has carried out several studies regarding the possibilities of establishing renewable energy communities in Latvia. One of the studies is the “Assessment of the Technical, Financial and Legal Aspects of the Implementation of Community Energy Projects”, which includes an analytical overview of the feasibility and constraints of implementing specific types of renewable energy community projects. This overview has also been developed to serve as guidelines for project implementers or as an integrable module for implementation of community projects.

The overview is available on the website of the Riga Planning Region:

rpr.gov.lv/project/co2mmunity

The second analysis performed during the implementation of Co2mmunity refers to the current situation in the field of energy efficiency and use of renewable energy sources in Mārupe municipality and the possibilities to develop renewable energy community projects there. The study assesses community formation opportunities in Mārupe municipality for the production of electricity and / or heat using renewable energy sources, as well as outlines possible solutions for existing resident communities.

The feasibility study is available on the website of the Riga Planning Region:

rpr.gov.lv/project/co2mmunity

Recommendations have also been developed to promote the progress of community energy projects in the Riga planning region, the aim of which is to expand public awareness on energy-efficient community formation in Latvia. They include a description of the measures taken to date to promote renewable energy communities, as well as the results of workshops with representatives of energy and climate field development policy-makers, non-governmental organizations and field professionals.

The recommendations are available on the website of the Riga Planning Region:

rpr.gov.lv/project/co2mmunity



ESTABLISHING A RENEWABLE ENERGY COMMUNITY

The first Community energy project (s) promotion stage begins with the involvement of local stakeholders. It is first necessary to agree on a common idea for a community energy project. It is necessary to identify residents and others who could get involved in project implementation of projects. It is very important to understand the desire and motivation to implement the project, as well as goals that are important in addition to energy production. For example, a questionnaire can be distributed to identify stakeholders and list ideas for community energy projects or problems with locally desirable solutions. Thus, residents are addressed and their attitudes or opinions are clarified. After an analysis of the initial views of residents, the first meeting can be held and a wider communication campaign can be carried out with the aim of identifying all residents.



1 › FORMULATING AN IDEA

There are several ways to find ideas for community energy projects. First and foremost, the interest of a community and the ability to formulate their desire is important. Are residents interested in installing solar panels on the roof of a building, or perhaps in setting up a shared power charging point for electric cars? Use local media, Facebook and other social networking groups. Has the municipality shown an initiative to support some form of renewable energy? Are there people who want to develop a wind-energy park or establish a renewable-energy system for some residential neighborhood or an eco-village? Is there a desire for a biogas filling station and the transformation of cars to ride with biogas? Is there a desire to get rid of old diesel, coal or gas boilers and replace them with a small district heating network powered by woodchips, for example?

Always support local ideas! If community residents, resident associations or members of a housing association are not linked to a particular type of renewable energy, but wish to explore options that are environmentally friendly, technically and economically justified, meetings may be held to formulate common interests.

It is also recommended to look at examples of community energy projects on the Co2mmunity website to find ideas. Look for examples that are similar to the idea you are looking at, but you can also look at other ideas that will serve as a basis for further discussion.

Learning from others is a great way to find and develop your ideas.

Co2mmunity database available at:

<http://www.lei.lt/co2mmunity/>



Picture:

Establishing A Renewable Energy Community

Based on residents' expectations and needs (energy consumption) and available resources, identify a potential RES project such as solar energy, geothermal energy, renewable micro-cogeneration energy, wind energy, etc.

Define the geographical and thematic focus and identify the benefits to the local community (economic, social, environmental, health, etc.).
Outline the most important goals and find the motivation why it is important to implement such a project.

Identify key stakeholders and residents. How can it be managed together and who will help organize the whole process? How will the decision-making take place and what support is needed for the project implementation?
How could such a project be financed and what legal form should be used for the implementation of the project? What technical documentation and permits are required?

Inform key stakeholders about the objectives and operating model of the RES project. Start with active communication and technical-economic analysis of the project. Examine potential sources of funding. Commercial and bank loans, national or international grant programs, own funding, energy efficiency contract or other options.

Involve key stakeholders, draw up a work plan with indicators to be achieved and organize regular workshops to keep the whole community informed.



2 > DETAILING A PROJECT IDEA

It is important to clearly define the objectives of the joint project. This can be done by talking directly to the people involved, through social networks, meetings, associations, municipal opportunities, etc. What measures should be included in a community energy project, which residents could be interested in the project? The elaboration should consist of three stages:

1. Necessities and major challenges need to be identified and detailed. The political, economic, cultural and other factors that have caused the problem and prevented it from being addressed need to be assessed. What is the structure of the project? Can you influence these constraints and convert them into opportunities?
2. The objectives of the project must be defined. What are the goals we are trying to achieve? This can be thought of in both the short and long term. Short-term goals must be measurable, achievable, realistic and specific. Long-term goals can be, for example, a strategy to increase the group's capacity, engage others, work with governing bodies, and increase responsibility locally.
3. Target groups need to be defined by asking yourselves who the main stakeholders are, in particular in relation to the results of the previous two actions. Types of cooperation should be defined.

If you wish, you can use the strategic mapping tool developed within the Co2mmunity project and available online:

<http://co2mmunity.eu/outputs/download-area>

If you target your project to a specific geographical area, such as a small village or neighborhood, you can ask residents to complete a questionnaire asking (a) whether they are interested in community energy projects, (b) whether they are interested in setting up and developing a renewable energy community project(s) that you intend to implement in the particular neighborhood, or c) what their interests would be. Based on the answers, it is possible to move **to the development and operational stage of the community energy project.**



3 › LAUNCHING A PROJECT

After developing a general idea for the community energy project you want to promote and completion of the initial communication with residents, it is time to start the project implementation process itself. This can be done in different ways, depending on your goals, target group, location and type of project.

In Latvia, renewable energy community projects can be initiated and implemented in several ways: by establishing a new association, social enterprise, cooperative or by cooperating with existing organizations, apartment owners associations and / or energy service companies. You can look for opportunities to use existing NGOs, environmental associations, apartment owners associations or other organizations. It is important to inform and involve your municipality representatives in your activities.

If you want to develop a renewable energy community project in an apartment building, you should contact your housing association's board representatives and the house-manager.

4 › LEARNING FROM OTHERS

Learning from others is a great way to gain more knowledge and find inspiration for your project. Check the Co2mmunity database to find project locations near you and get in touch with contact persons to arrange an on-site visit.

Co2mmunity database is available here:

<http://www.lei.lt/co2mmunity/>

In Latvia, it is recommended to pay an experience exchange visit to those private or municipal apartment buildings, where RES projects have already been implemented. Initially, you need to inquire at your municipality or house-management company - they will be able to recommend sites to visit and organizations that can help arrange a visit to one of the implemented projects.



5 › STAKEHOLDER MOTIVATING AND COMMUNICATION WITH THEM

The implementation of energy projects in all communities is based on communication and mutual trust. When you start promoting a project idea, use face-to-face appointments at a housing association or at events organized by the municipality if possible.

Experience has shown that it is important to raise this issue in informal contexts as well, for example in various briefings where you might find local stakeholders who are motivated to participate. Social media is also a good platform for bringing together like-minded people and reaching large numbers of residents. You will need an idea facilitator and a leader, or even a multi-person support group with high motivation, energy and sufficient charisma - this will help guide and develop the project as well as ensure involvement of others.

It is important to follow local news related to renewable energy communities or RES projects (e.g. on the purchase of solar panels). This also applies to the above-mentioned on the formulation of a common idea.

Given that mutual communication is crucial, once you have identified motivated people who want to cooperate with you, contact and meet them in person. Try to involve the municipality and local entrepreneurs who work in the field of energy and can help develop the project.

It is important to demonstrate the benefits of community energy projects. Especially if you already have an estimate of the potential financial savings that could be achieved by implementing a community energy project (possible financial support, grants, etc.). In addition, it is important to emphasize other social and environmental benefits. Show that residents and the community as a whole benefit.

Once you are ready to launch a renewable energy community project in your municipality, start spreading the word in events and on social media. Contact your local newspaper and municipality. Communicate throughout the project implementation, not just during the initial stage. It will attract people as well as inspire the launch of other projects.



6 › ORGANIZING MEETINGS

Once you have agreed on a common idea and this idea has received the support of the resident community, it is time to move on to the second stage, which concerns the implementation of the community's renewable energy project. This stage includes the compilation and analysis of potential technical solutions, project implementation planning, identification of necessary resources, mutual learning and implementation of planned activities. Again, communication is the key. Meet people, learn from others and agree to work together!

This means that it is time to hold meetings with the stakeholder group again. If you represent the municipality, you can hold meetings with residents. If you represent a resident association, contact the local council, the house-manager or another non-governmental organization that can suggest where and how to hold a meeting. Before the meeting, clearly formulate the issues to be discussed so that it is clear to the participants how long the meeting could take, what it will be about and whether decisions need to be taken. Schedule meetings at convenient time, such as in the evenings and close to the place of residence. Inform all residents about the opportunity to participate by posting information on social networks, in the local press or other communication channels. If you are a resident of an apartment building, contact the house-manager or supervisor who can help hold the meeting.

7 › LEARNING FROM OTHERS

At this stage, learning from others' experience is not less important than initially. As your plans become clearer, for example, determining what type of project you want to implement (such as solar panels on the roof of an apartment building or another microgrid solution), look for similar types of projects, consult people who have already implemented a similar project and speak with experts in the field. If possible, together with other residents visit an already implemented project and arrange a meeting with experts. When learning from others' experience, it is very important to get to know both the success factors and the problems and mistakes, if any. The more you learn, the better you will be able to plan your activities.



8 › MOTIVATING AND AGREEMENT TO WORK TOGETHER

You need to continue to motivate and bring together local stakeholders. Use social media and the opportunity to meet. Talk to the local press, invite them to your events and talk about your plans. Constant communication will not only bring more people to your project, but will also make the process more democratic and transparent. Attend events, exhibitions, local business meetings, participate in energy conferences and workshops, and continue to communicate with people.

9 › INSPIRING OTHERS

One of the goals of the community energy project is the involvement of residents and the development of the community. Experience shows that it is important to support local ideas and enable resident involvement. Therefore, during the implementation of the project, it is important to ensure that as many representatives of the community as possible are involved in the discussion of issues and decision-making. This makes it possible to gain more support for the implementation of the project and reduce the likelihood of the emergence of opposition, which can suspend the implementation of a good idea even for several years.

10 › IDENTIFYING REQUIRED RESOURCES

Every good project needs a good plan. At this project development stage, it is important to carefully plan the project and assess the existing and necessary resources. Find out if you have the technical and financial experience to implement such a project. It may be necessary for the development of the project to involve energy and financial experts who are able to answer questions that cannot be answered by the community representatives themselves.



11 › INVOLVING RELEVANT EXPERTS

Identify the people who are ready to get involved in the project and find out what their knowledge and practical experience is. It is possible that there are already people in the community itself with knowledge of engineering or finance. These experts can assist during the development and implementation of the project by carrying out voluntary work. Practice shows that community trust in a local and familiar expert is greater compared to an unknown expert. Usually, in the case of each renewable energy community project, there are residents who are ready to dedicate part of their time and knowledge to the development of the project free of charge.

Secondly, there will always be external experts available to support your project. If necessary, you can address the experts in the field, asking them to help you find the best technical solution, attract funding, organize meetings or solve other project implementation issues. Energy companies are likely to have the resources, experience and capabilities to help and support your community's renewable energy project.

12 › PREPARING THE NECESSARY INFORMATION

Depending on the planned activities, whether it is the replacement of an old coal boiler or the creation of a small district heating network related to the use of renewable energy sources, or the installation of solar panels in an apartment building, it will almost always be necessary to prepare technical documentation and obtain certain permits. Therefore, it is necessary to identify the technical parameters of your project. If you want to replace an old energy supply system or install a system powered by renewable energy sources in parallel, at least the current annual energy consumption figures are required. You need to know the distance from the renewable energy production site to the place where the energy is consumed. Sometimes you will need geographic and climatic information (for example, in the case of solar and wind energy). You may need a construction plan, construction and environmental permits. Your project team's technical expert will be able to help clarify the necessary data and permissions.



13 › ORGANIZING CLEAR PROJECT IMPLEMENTATION PROCEDURES

The project implementation procedure depends on the type of renewable energy sources you have chosen for the implementation of the renewable energy community project. If it is a relatively simple project, such as the use of renewable energy sources for the lighting of common areas, all decisions can be taken without creating new structures; if you want to implement a more complex project, your organization will need a clear governance structure.

During the implementation of the Co2mmunity project, various types of management for the implementation of renewable energy community projects were examined and summarized - cooperatives, housing associations and social enterprise. (Ruggiero et al. (2019): Co2mmunity Working paper no. 2.3: Developing a joint perspective on community energy: best practices and challenges in the Baltic Sea Region). Choose an appropriate ownership model or type of business to implement your project.

Co2mmunity Working paper no. 2.3 is available here:

<http://co2mmunity.eu/wp-content/uploads/2019/03/Co2mmunity-working-paper-2.3.pdf>

14 › FINANCES

Financing a Community energy project is one of the most important components in putting a Community energy project into practice. Find out which funding mechanisms and support instruments are available:

- › specialized bank loans. Take a look at the options offered by ALTUM;
- › grant programs for RES and energy efficiency projects;
- › support for associations, NGOs and other initiatives by residents;
- › tax reliefs;
- › crowd funding opportunities.

Also check with your municipality for real estate discounts or support when preparing technical documentation in the case of an apartment building renovation, for example.



15 > ACTION

Once you have completed the technical and financial planning, it is time to act. At this stage qualitative implementation of the project and achievement of its planned results is very important. Make the necessary adjustments and purchase. When preparing your purchase, it is important to clearly define the technical requirements and guarantees you want to receive from technology suppliers. For larger projects, involve a technical supervisor or an energy service company to take on the technical risks of project implementation. Control project implementation quality, perform control measurements (achieved efficiency, amount of energy generated, etc.) before accepting the equipment. Plan proper maintenance of the equipment.

Once a community energy project is completed, you shift roles from being a passive energy consumer to a self-producer, actively taking part in community energy issues. This is also the time to consider implementing new energy efficiency and RES projects in your resident community.

16 > EVALUATION

After the work is done, it is necessary to evaluate the benefits of project implementation and tell about the results. If the activities of your project are long-term, cooperation within the community will continue. This will include both technology maintenance and community spirit, as well as the potential implementation of new ideas.

Evaluate how your solution has solved the initial problem you wanted to solve and whether the goals set have been achieved. Consider whether your project has been a success. Evaluate the experience gained. Are there things you would do differently if you started the project now? Carry out this assessment in collaboration with all the people involved in project implementation. Particularly important are the views of those community representatives, who directly engaged in all project development stages and really took the project forward.



17 > COMMUNICATION AND INSPIRING

Communication is important at all stages of a project. Tell others about the results to inspire them to take action. Talk to the press, use social media and share the results with other organizations. Invite people to visit the project you have implemented and see the technologies you have installed. Organize lectures for other resident associations if you are asked to do so. Tell them about the lessons learned - both successes and failures. Everything you have learned will facilitate the development and implementation of a new renewable energy community project and serve as motivation to others.

18 > MAINTAINING PROJECT RESULTS

Finally, keep involving more local residents into your community. An open and democratic approach must be maintained throughout the project operation. The process of maintaining and operating renewable community energy in the Community is a long one. This may give you new ideas for improving the process of implementing a renewable energy community project or starting a new community energy project. Most importantly, you will maintain a lasting community spirit and belonging to your territory, while contributing to a smart transition to climate neutrality.