Factsheet #03

01/2023

Dreamstime / Martin Bergsma

COME RES

Advancing Renewable Energy Communities

Transferring Renewable Energy Communities and Inspiring Action

Transfer and cross learning between regions to promote renewable energy communities (RECs) are cornerstones of the COME RES project. This factsheets presents the main outcomes of the four transfer processes and how specific elements by selected REC best practices have been taken up in learning regions.

Transfer teams from the following regions have been formed to share experiences and knowledge:

Mentoring region	Learning region
North Brabant/ Gelderland (The Netherlands)	Thuringia (Germany)
Flanders (Belgium)	Apulia (Italy)
Magliano Alpi (Italy)	Latvia
Comunidad Valenciana (Spain)	Canary Islands (Spain)

Stakeholders from learning regions visited the mentoring regions with the purpose of studying a single best practice for community energy. During a return visit, a transfer roadmap was drawn up including steps towards implementing (aspects of) the best practice in the learning region.

In addition, the factsheets highlights four proposals for action plans which aim to remove the barriers and reinforce the enablers for the future development of RECs in selected target regions. The drafting of the action plans was a complementary process to the transfer exchanges and was, to an extent, inspired by the measures suggested in the transfer roadmaps.

Authors:

ICLEI Europe: Arthur Hinsch, Lucy Russell

Based on D.6.3. Four best practice transfer roadmaps for learning regions by Rien de Bont (TU/e) and D5.3 four action plans for target regions by Erika Meynaerts and Erik Laes (VITO). With contributions by all project partners.

TRANSFER OF ENERGY GARDENS

A transfer was initiated between stakeholders from Thuringia in Germany and the Dutch provinces of North Brabant and Gelderland. These included representatives of civil society, municipalities, the regional parliament and energy community promotors. **A major focus was on the transfer of the Dutch Energy Gardens**, although two other Dutch best practice energy communities – **the citizen wind farm 'de Spinder' and the community virtual power plant in Loenen** – had also been presented and analysed for their replicability potential.

The team analysed the multifunctional and **biodiverse Energy Gardens, which offers both recreational and educational services** for and with the local community, as the concept with the most transferable elements for the Thuringian context. The parks are administered by a managing foundation in which renewable energy technologies developers, the Dutch Nature and Environmental Federation, and the local community are represented. Several such projects are currently being planned in the Netherlands. For example, the Energy Garden De Langenberg will stretch over an area of 15 hectares with the area being used for solar, but mostly also for nature-related activities. The number of solar panels is currently being determined in consultation with residents and other stakeholders.

Local citizens and stakeholders are directly involved in the project's design from the start to better consider local characteristics (landscape, cultural-historical values) and to ensure a sense of co-ownership by the local community. It is foreseen to allow citizens to co-invest into the solar panels.

The transfer team found that the implementation of an Energy Garden in Thuringia could be relatively straight forward, given the existence of a market premium for open-space solar plants. Additional resources will likely be needed to fund the other elements of the Garden which are not necessarily linked to the business model based on solar electricity production / feed-in. The transfer team has decided to produce a brochure for Thuringian stakeholders, explaining the attractiveness (and feasibility) of the Energy Garden and potentially suitable locations will be considered. During the COME RES final conference, both parties signed a Memorandum of Understanding (MoU) to solidify the cooperation for the future.

NORTE REGION ACTION PLAN:

In order to speed up the uptake of RECs in the Portuguese Norte Region, stakeholders, including a local energy agency, energy cooperative and consumer association, decided that a demystification of the REC concept for local communities is needed. In order to achieve this, local entities, which already have the community's trust will have to be engaged.

Holding periodic information events, hosted by licensing agencies, to clarify doubts regarding the establishment and operation of RECs have also been brought up. In addition to general training and capacity building for local and regional authorities, the position of local process managers should be created who can accompany prospective RECs through the whole process from concept to the operational phase.

These managers would be local technical staff (from energy agencies, local authorities), with a direct link to the regulatory authorities and licensing entities. This shall be coupled with the establishment of (local) one-stop-shops as well as specific political targets for RECs.

Dreamstime / Michael Flippo

TRANSFER OF MUNICIPALITY-LED RECS

A team of experts from Latvia exchanged with colleagues from Magliano Alpi, located in the Piedmont Region of Italy, to learn from the best practice **"Energy City Hall REC-1"** which is an excellent example of a **municipality-driven REC**. As the first investment, the public administration of Magliano Alpi installed, a 20 kWp PV system on the town hall roof and smart meters to manage data from the points of delivery of the REC members, as well as two electric vehicle (EV) charging points. The ambition here is to provide tangible energy cost reduction to the REC members. **REC-1 aims at guaranteeing the self-sufficiency of the involved municipal buildings and sharing surplus electricity with the participating households and small enterprises. The municipality considers this project to be a key activity contained within its Sustainable Energy and Climate Action Plan (SECAP).**

During the visit, discussion arose around the legal eligibility for municipalities to participate in RECs and it was decided that, in Latvia, discussions need to be sought with the relevant ministries in order to enshrine the rights of public authorities to participate in RECs in municipal by-laws. This requires clarification of several points e.g. on the exact purpose of why the municipality is joining in the first place and how the provision of municipal land for REC technologies will be arranged.

While the current legal framework in Latvia would only allow for municipal co-financing, in the future legal rules should be adapted and should also extend to energy sharing, especially with a view to allowing the participation of vulnerable households to, primarily, lower their energy bills.

APULIA REGION ACTION PLAN:

As an additional project activity in Italy, an action plan has been drawn up for the Italian Region of Apulia. In order to further support the development of RECs across multiple municipalities in the region, regional stakeholders (energy agencies, municipalities, a funding agency and service providers) agreed on **the need to hold further workshops to present the benefits of the REC approach and what business models can be deployed.** Several municipalities in the Apulia Region have committed to further collaboration. For example, it is envisaged to introduce a regional platform, which allows RECs to be assessed based on common criteria and to introduce regional guidelines on how municipalities can support RECs.

During the COME RES final conference, an MoU was signed between Latvian transfer team representatives and the Town of Magliano Alpi.

ICLEI / Lucy Russell

The Latvian - Magliano Alpi Transfer Team at the MoU signing session.

TRANSFER OF THE ECOPOWER APPROACH

This transfer focused on the replication of the Ecopower (Belgium) experience to the city of Roseto Valfortore in Italy. Ecopower was officially established with the aim of **gathering people in a cooperative to invest in the production and supply of renewable energy and to promote energy efficiency.** The first milestone of the cooperative was winning the tender issued by the City of Eeklo, in the province of Oost-Vlaanderen, that allowed Ecopower to build three wind turbines (two of 1.8 MW and one of 600 kW) in 2001-2002.

Ecopower collects funds from its cooperative members to invest in, install and manage various installations that produce renewable energy. For electricity, those comprise wind turbines and PV installations on public roofs, a small hydro installation, and a cogeneration power plant. In 2020, 106 GWh of renewable electricity was produced by Ecopower. The energy cooperative also acts as an energy supplier: it supplies its members-customers with the renewable electricity that was produced in their installations. At the end of 2020, Ecopower counted 60.976 members and almost 50.000 electricity clients.

In Flanders, RECs can act as an energy supplier, assuming they comply with the required rules to act as licensed supplier. In Italy, however, this is not allowed with the current legislation. This hinders the direct replication of Ecopower's energy supply model. Citizens' interest in cooperative-based energy models also depends on the societal context. While in Flanders citizens' attitudes towards renewable energies has been heavily affected by the Chernobyl disaster, in Italy citizens' interest is still developing (and at a different pace). The transfer team therefore discussed how REC models can be best communicated. The team highlighted that the **active participation of the municipality is strategically important to increasing citizens' trust and therefore the municipality has to start acting as a driving force and creating events to disseminate the REC model**. For an overview of the different roles municipalities can play in general, please consult the COME RES factsheet #2 and the COME RES final publication.

LESSER POLAND ACTION PLAN:

In order to promote RECs in Poland, and in the COME RES target region Lesser Poland, a diverse group of stakeholders came together to decide concrete action for the future. The group included policy makers, civil society, local and regional government research organisations as well as associations. They will aim to introduce **a regional energy community incubator which will allow the selection and testing of REC investment plans.** One goal is to establish a public inventory of power grids in order to avoid difficulties with grid access for RECs. The group is also pursuing tax exemptions and the simplification of administrative procedures, as well as further training and capacity building around RECs.

Dreamstime / Gabe Palmer

TRANSFER OF THE REC COMPTEM APPROACH

A Spanish transfer team was formed between the COMPTEM project from Comunidad Valenciana and representatives of the Canary Islands, including also several local energy communities, to explore the potential of transfer within the same national context.

COMPTEM builds on a historical, nearly 100-year-old local energy cooperative based in the municipality of Crevillent, which is located in the COME RES model region of Comunidad Valenciana. COMPTEM, which stands for "Community for the Municipal Energy Transition" in the local language, is the name given to the energy community created in late 2019 with the aim to expand the scope of the cooperative and develop a renewable energy community. This pilot project is considered innovative because it constitutes a pioneering community energy experience at the national level and has attracted the attention of several institutional actors (among them the Ministry for the Ecological Transition), who see it as an example of the way forward for energy transition in Spain. **The concept of this energy community is based on the generation, distribution and commercialisation of 100% renewable energy for its 11,000 members**.

COMPTEM relies on PV solar energy generation facilities on public and private building roofs as well as on previously unused public plots of land. The current PV installation comprises 300 solar panels occupying an area of 600m^2 with a capacity of 120 kWp and producing 180,000 kWh per year, which amounts to around 50% of the electricity consumption of the 65 households in the vicinity (who participate in the energy community/ collective-self consumption scheme). The energy community further boasts a lithium-ion battery with 240kWh storage capacity.

Certain aspects of the COMPTEM model were considered highly replicable by the stakeholders in the Canary Islands, particularly its financing model. **COMPTEM's installations are owned by the prosumers, but since the cooperative made the initial investment, all participants, including those in situations of economic vulnerability, are able to benefit irrespective of their income or savings.** The municipality of Crevillent further provided administrative support and assigned public spaces for the development of the REC's activities, promoting the revitalisation of previously unused plots of public land and roofs. As a result of this learning experience, the transfer team agreed on the need to explore in more depth the most suitable legal forms, administrative procedures and business/ financial models for the constitution of RECs in the Canary Islands.

During the COME RES final conference an MoU was signed as well to indicate concrete plans to continue collaboration and exchanges further.

CANARY ISLANDS ACTION PLAN:

Inspired by the lessons from the COMPTEM Case, stakeholders from the Canary Islands have created an action plan to further support REC development. Especially with a view on the important role of municipalities, it was decided to **develop a common guidance to serve as a template for the development of RECs in municipalities at the local level.** Training activities for municipal staff are being considered as well.

At the same time, regional legislation has to catch up with a national decree which has already simplified the authorization process for small-scale self-consumption projects.

Discussions will be facilitated between electricity distributors and public entities to improve transparency on available connection points and their capacities. **It also needs to become possible for agricultural land to be usable for energy-related uses and to empower industrial RECs.** An information campaign, through the Office of Community Transformation, should be used more effectively in order to disseminate pertinent information to the public about RECs.

The estimated waiting time for RECs to receive a declaration of public social interest should be reduced drastically and tax exemptions for the installation of RECs also need to be implemented.

OUTLOOK

Going forward, it will be exciting to see how the stakeholders involved in the transfer and action plan processes will implement the diverse menu of actions, which have been co-created. It is also clear that many of the actions require the involvement of multiple stakeholders to be implemented. Therefore, much will depend on the continued development of laws and enabling frameworks as well as collaboration with all relevant actors of the electricity system to ensure an effective realisation of the actions suggested within the framework of the COME RES project.

Contact
info@come-res.eu
@comeres_eu
COME RES project
www.come-res.eu

Project Coordination
Research Centre for Sustainability
Freie Universität Berlin
Dr. Maria Rosaria Di Nucci

The sole responsibility for this publication's content lies with the authors and does not necessarily reflect the opinion of the European Commission This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 953040.

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