

# The Potential of Community Projects in the Renewable Energy Sector

This factsheet provides a concise overview of the potential of renewable energy communities (RECs) to contribute to renewable energy targets for 2030, in each of the COME RES project's target regions. This overview is based on an assessment which the project team has carried out into the potentials of RECs, as defined in the recast Renewable Energy Directive (RED II).

Overall, the findings show that a significant share of total investments into renewable energy projects has the potential to be covered by collective citizen investments. The factsheet provides a snapshot into every region, and concludes with some common factors which could both contribute to the regions reaching their potential in terms of citizen involvement in RECs, as well as hinder their progress.

The COME RES assessment (on which this factsheet is based) focused on those initiatives that put the citizen at the centre; projects where the free and voluntary participation in the ownership structure of the project is encouraged. Assumptions are based on the additional investment needs in community renewable energy sources (RES) until 2030. For an in-depth overview of the calculations, please consult the full assessment.<sup>1</sup>

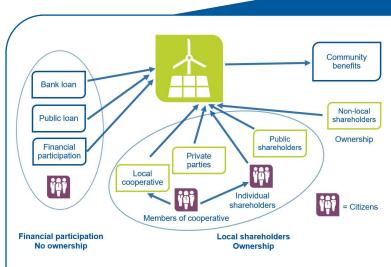


Figure 1: Different types of participation in a renewable energy project. Blue = financial participation without ownership;

Green = ownership by different types of shareholders

1 For the full assessment and calculations, please consult Deliverable 2.2. "Assessment report of potentials for RES community energy in the target region. (www.come-res.eu/resources)

#### APULIA, ITALY

There are currently only minimal opportunities in Apulia for citizen projects to contribute to the political goals for wind and photovoltaic energy (both ground-based and on rooftops). This is partially due to national regulation which limits energy production of RECs to no more than 200kW. This limitation would need to change, in compliance with European legislation. However, the Italian Recovery Plan, which aims to overcome the economic consequences of the COVID-19 pandemic, has created a fund of 2.2 billion Euro available for families, microenterprises and public administrations in municipalities with less than 5,000 inhabitants. This could potentially represent a useful support to finance public-private REC initiatives.

# NORTE REGION, PORTUGAL

Community photovoltaic (PV) initiatives in the Norte Region may well play an important role in the achievement of the national renewable energy sources' (RES) targets. However, it should also be noted that the investment potential of individual citizens alone would cover less than 30% of the required investment. Adequate policies will be required to mitigate existing mistrust regarding the concept, and a lack of capacity and know-how on procedures and best-practices.

#### THE BALEARIC AND CANARY ISLANDS, SPAIN

The political goal of 50% citizen ownership of PV capacity by 2030 is achievable in the Balearic and Canary Islands. But similarly to Portugal, where REC initiatives are also in a nascent stage, the RECs in Spain may still face additional, unforeseen barriers to the investment and development of RECs that need to be addressed by adequate policies.

#### LATVIA (ENTIRE COUNTRY)

The overall potential of PV in the Latvian National Energy and Climate Plan 2030 is, hugely underestimated. Latvia does have the potential for RECs to be able to contribute to the political goals set for PV capacity by 2030. However, putting this theoretical potential into practice will be a challenging task in the short-term, given the novelty of the REC concept in Latvia. It will require efforts to provide information and communicate in an effective way about why investing into a REC is attractive. Local leaders need to be found who can push forward this narrative.

## LIMBURG AND WEST-FLANDERS, BELGIUM

In Limburg, the provincial government decided at the end of 2013 on a minimum target of 20% direct participation in the ownership and management structure of large wind turbines by the local community and local authorities. In West-Flanders, the municipalities of Torhout and Oostkamp aim for a direct participation of 35% (of citizens and local authorities) in wind projects on their territory through an energy cooperative.

A share of 20% of the investments financed by citizens for both target regions can be considered a feasible goal, while higher shares (in the range of 50–100% of the investments financed by citizens) will be very challenging. With regard to PV, the Flemish Local Energy and Climate Pact aims for one cooperative/participatory project per 500 inhabitants in Flanders by 2030 (assuming an average PV project of 18 kWp). Given the investment potential for REC PV projects, these ambitions can be considered feasible.

#### **NOORD BRABANT, NETHERLANDS**

A political goal of 50% ownership of RES capacity on land by 2030 has been set. At the end of 2020, 1.3% of Dutch households were members of a cooperative. The 'latent potential' of 30% household participation in RECs by 2030 assumed in this REC potential calculation is therefore certainly challenging. It will require a significant leap in scale and professionalisation of the cooperative movement.

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## THURINGIA, GERMANY

Citizens in Thuringia have the potential to play a key role in achieving the political goals and transitioning towards a 100% RES supply. Assuming that 20% of the required investment costs are financed by citizens and 80% by other sources including debt capital, the new capacities of land-based PV installed by 2030 could be fully controlled by citizen collectives. For collective PV on rooftops, nearly all of the newly installed capacities could be controlled by citizen collectives. Only for wind energy, the values are lower, varying between 45% and 91%. The RED II provides new impetus for the development of community energy, but in Germany the transposition of the respective legal provisions into national law is lagging behind compared to other EU Member States.



The resources brought in by RECs in the Warmian-Masurian Province could significantly contribute to achieving 32% of RES in the electricity sector in Poland by 2030. Assuming that 20% of the needed investment costs are financed by citizens and the rest by other sources including financial support schemes and debt capital, the new capacities of both ground-based and rooftop PV could fully be controlled by citizens on the condition of utilisation of the maximum investment potential. For wind energy, the potential is lower, showing that necessary investments in large-scale wind energy also needs to be accompanied by other investors/companies.

#### **NORWAY (ENTIRE COUNTRY)**

Since Norway is not an EU member, it has not submitted a National Energy and Climate Plan (NECP), and has no related politically agreed, quantitative REC targets for 2030. Norwegian households do, however, have the theoretical potential to own 31% of the wind energy, 44% of the collective rooftop PV and 52% of the ground mounted PV capacity installations expected between 2020 and 2030. Realising the full investment potential would require addressing existing barriers, including regulatory barriers, a lack of enabling frameworks and support schemes for RES community energy.



#### **KEY TAKE-AWAYS:**

- → Access to finance with favourable conditions (e.g. public financing or low interest rates for investment loans in RECs) is a key enabler for allowing regions to live up to their potential and reach their targets for citizen ownership of renewable energy infrastructure.
- → Realising the full investment potential generally requires addressing existing (regulatory) barriers and calls for a proper definition of RECs in national law. The lack of enabling frameworks and support schemes for RECs, is a key reason why some target regions will likely struggle to reach their full potential. It is crucial that enabling frameworks are set in place and coordinated across the different government levels.
- → Municipalities as well as regions should be considered as the support centres for RECs and offer spaces for RES installations. Municipalities should be receiving capacity building on legal, economic and technical issues to be able to realise this vision. This is because participation of municipalities in RECs has been proven to provide the necessary trust for such projects. In several cases, mistrust towards the concept of RECs is still an issue, as well as a lack of capacity and know-how on the procedures and good practices by relevant stakeholders.
- → Although there is, generally speaking, a high potential for citizen ownership in the target regions, the targets can mostly only be reached by complementing the direct citizen investments with investments by local SMEs and local authorities.

# Looking ahead

RED II requires Member States to carry out an assessment of the existing barriers and potential of development of RECs. The COME RES assessment supports Member States in doing so, especially in those cases where such an assessment was not yet carried out.

Generally, there is a significant potential for citizen ownership of renewable energy infrastructure. This potential can, however, only be unleashed if the right kind of enabling frameworks are in place.

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