



Energy Communities in the European Panorama

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Renewable Energy Directive

Electricity Market Directive

Art 20: Jointly acting RE-self consumers

Art 21 Renewable Energy Communities

Art 15 Active consumers

Art 16 Citizen Energy communities

Spatial boundaries

Multiapartment building, if MS allow broader scope

Proximity of members

Multiapartment building, if MS allow broader scope

No boundaries

Market activities

directly

directly

Third parties

This parties can operate installations but not be member

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Country	Renewable energy communities	Citizen energy communities
Austria	✓	✓
Belgium: Wallonia	✓	✓
Belgium: Flanders	✓	✓
Belgium: Brussels	✓	✓
Bulgaria	draft	-
Croatia	✓	✓
Cyprus	✓	✓
Czech Republic	-	-
Denmark	✓	✓
Estonia	✓	✓
Finland	✓	✓
France	✓	✓
Germany	draft	-
Greece	✓	✓
Hungary	✓	-
Ireland	draft	draft
Italy	✓	✓
Latvia	✓	✓
Lithuania	✓	-
Luxemburg	✓	-
Malta	✓	-
Netherlands	✓	✓
Portugal	✓	✓
Poland	✓	✓
Romania	-	-
Slovakia	✓	-
Slovenia	✓	✓
Spain	✓	-
Sweden	draft	draft

Source JR, Status
May 2023

Overall transposition picture

- Some member states have just transposed the text of the EU directive into national law, without defining details, others have created **tailored national frameworks**.
- Some member states have focused on Renewable Energy Communities others on collective self-consumption
- Many countries have made **exceptions from the EU provisions** eg Austria allows third party ownership in Renewable Energy Communities

Overall transposition picture

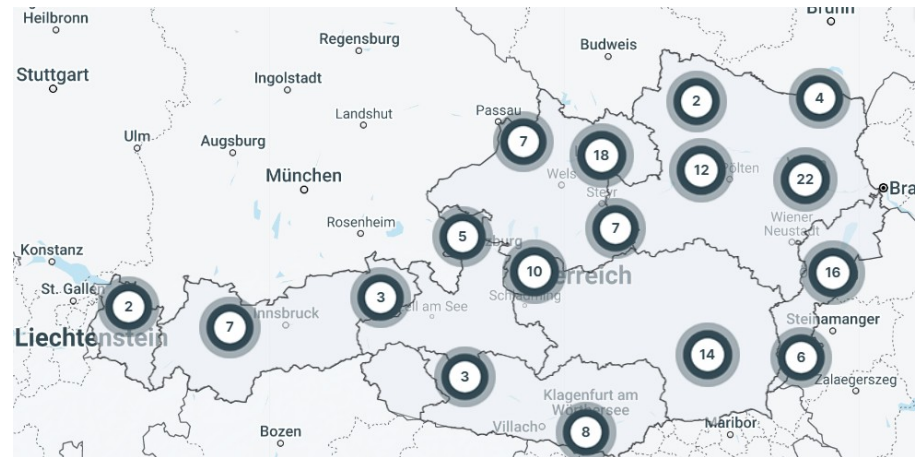
Apart from Spain, France and Portugal, member states have limited **collective self-consumption** to the **multiapartment level**.

- This may correspond to the philosophy of the RED that emphasizes the local level, but often may not enable or encourage the building of sound business cases.
- On the other hand limiting collective self consumption to the building level avoids the use of the public grid, and seems easier to policymaker to implement.

With regard to **active customers**, many member states have no clear vision and have barely begun to implement the concept. The few countries that have transposed the concept limit them to multi-apartment level.

In a few EU countries large increase of energy communities

- 400 registered Energy Communities in Austria, 400 in the pipeline, more than 180 in France
- Most are residential energy communities, limited cases of commercial or mixed set ups
- Strong focus on self-consumption, hardly any flexibility provision



Heterogenous Transposition: Proximity

Austria	LV/MV
Belgium/Wallonia	LV/MV and distance
Belgium/Flanders	LV/MV and activity
Hungary	MV/HV
Slovenia	LV
Italy	MV/LV
Croatia	Municipality
Lithuania	Municipality
Greece	Regions
Ireland	Existing sustainable communities
France	Distance (up to 20km for CSC)
Spain	Distance (500m, only CSC)
Portugal	activities

Heterogenous Transposition: Networks tariffs and support

Member State	Network Tariff for CSC/REC	Other Tariff Elements
Austria	No consumption-based grid fees for grid-level superordinate to LV or MV REC. Net capacity-based tariffs	Removal of consumption-based renewables surcharges and electricity tax
Italy	Refund of consumption-based part of network tariff, covering transmission-related costs	No other tariff elements reduced
Portugal	Consumption-based grid fees above the grid level of REC do not need to be paid	Reduction of consumption-based surcharges (policy costs CIEG: 100% for CSC, 50% for individual self-consumption in the first 7 years)
France	Tariff for CSC	No other tariff elements reduced
Belgium (Wallonia/Flanders)	To be defined based on expected benefits	To be defined based on expected benefits
Poland	-	Removal of consumption-based surcharges
Spain	No grid fees for CSC within 500 m limit between production and consumption connection points (neither capacity-based nor consumption-based fees).	No other tariff elements reduced

Allocation keys (1)

Static  dynamic

Statisch

- Allocation of fixed amounts, maybe differentiation for working days, weekends, holidays

Dynamic:

- Ex-ante coefficients
- Allocation based on real time data

Change of allocation key:

- Yearly, monthly, 3 monthly etc...

Allocation keys (2)

- In some countries, the modus of dynamic sharing is proposed by DSOs such as in Austria, where energy communities in practice have **no free choice of the sharing mechanism**
- Dynamic distribution in Austria means that a **community-wide quotient between community generation and community demand** is equally applied to every member's individual consumption quarter hourly.
 - Members with higher consumption in a quarter-hourly interval receive more energy in absolute terms. In case the community has a few large consumers small ones are disadvantaged.

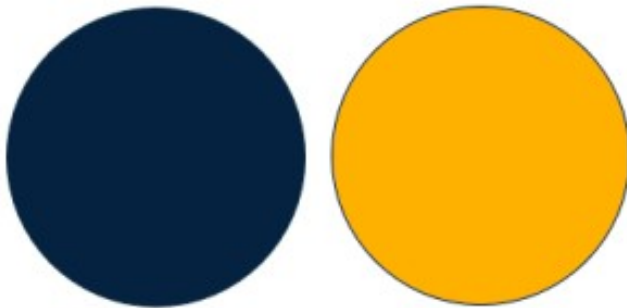
Role of DSOs

- Slowing down energy community deployment in many Member States
- DSOs have to change routines and IT systems that were in place for many years
- Often dont see the benefits of energy communities

Do we need umbrella structures?

Relation between RECs and CECs

Independent definition



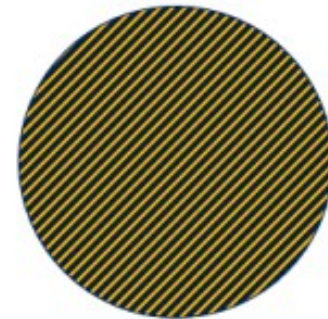
Austria, Slovenia, France, Denmark, Belgium

Specific provisions on the interaction



Italy, Ireland

Hybrid definition



Greece, Croatia

Do we need umbrella structures?

- Risk of having a **mosaic of small autonomous communities** without contributing to the broader energy system
- Legal frameworks must allow for and support the establishment of umbrella organizations and structures.
- Umbrellas for RECs can be CECs or municipal utilities, larger cooperatives...

Energy Poverty

Will participating in an energy community mitigate energy poverty?

- In Greece energy poor households can participate without any membership fees
- Cost savings in the energy community often rather small
 - in some cases (eg Spain) getting electricity from the energy community is more beneficial than the social tariff (SCR 30%)
 - in others (Portugal) the social tarrif is better (SCR 30%)

Energy communities and energy poverty mitigation: Quantitative assessments of cases in Portugal and Spain, Anna Eisner, Camilla Neumann, Andreas Tuerk (Joanneum Research), 2022

Looking beyond energy communities?

- Energy communities may be built on social targets such as energy efficiency investments; education of community members; change in consumption patterns or energy culture in general; as well as energy poverty abatement.
- legislative and regulatory frameworks should be flexible to allow for **various types of collective energy actions**
- This includes existing and emerging collective energy actions outside the CEP that may not need public subsidies, are profit oriented, include larger companies and traditional investors enabling economies of scale...