

# *Observations on energy community adoption in the EU Member States*

*Dorian Frieden*



# *General observations*

---

- Many Member States have a partial transposition in place or underway
- The clear differentiation between Renewable and Citizen Energy Communities is not always made – tendency towards RECs (# Greece including Gas)
- Partial linking of the activity-based collective (jointly acting) self-consumption to REC concepts (Wallonia/Belgium)
- Some core streams of legal/regulatory developments
  - Localisation (geographical – proximity / physical)
  - grid tariffs
  - options for grid management and ownership
  - ...

## *Example Localisation*

---

**Several MS aim to link regulatory boundaries to physical boundaries of the energy system**

the LV and/or the MV transformer station

- Austria: Discussion about transformer station as a physical boundary
- Spain (collective self-consumption!): LV network in same center of transformation
- Belgium (Wallonia): „local perimeter“ – grid segment downstream of one or more public transformer stations of medium or low voltage, to be specified (link to self-consumption!)
- France (collective self-consumption!): switch from transformer station to distance within the LV grid (probably 1km)

# *Example Grid tariffs*

---

**Different options** (discussed in, e.g., Austria, Belgium, France, in Spain no tariff for CSC):

- Local grid tariffs (assuming a reduced use of higher grid levels)  
(e.g. Wallonia, exclusion of net metering)
- Rolling cost models (e.g. based on peak load over a period)
- Ex-post remuneration (e.g. existing/previous cases in Netherlands, Germany)
- Dynamic tariffs

## **Challenges:**

- Estimation of system impact of energy communities
- Guarantee a reasonable distribution of system costs over all customer groups

# Some open questions

How to define...



...100% RES (RECs)?  
...100% electricity  
(CECs)?

Which extent/form of  
citizen/consumer  
engagement?

...cost-reflective network charges?

...proximity?

## ***Preliminary conclusions and additional thoughts***

---

- The overlap with other ongoing incentive processes needs to be handled with care (e.g. grid tariffs for households vs. for energy communities)
- A lot of learning will be required, e.g., regarding the actual physical impact of energy communities
- We speak about an enabling framework with the potential for a major transformative shift

*Thanks for your attention!*

Dorian Frieden

JOANNEUM RESEARCH  
Forschungsgesellschaft mbH

LIFE  
Centre for Climate, Energy and Society

Science Tower  
Waagner-Biro-Straße 100  
8020 Graz, Austria

Tel. +43 316 876-7652  
dorian.frieden@joanneum.at

[www.joanneum.at/life](http://www.joanneum.at/life)

