

Regulatory aspects of energy communities, self-consumption, energy sharing and electromobility

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Energy Communities

- Collective and citizen-driven energy actions
- Help decentralisation
- Facilitate energy transition



Picture from JRC

Advantages of the energy communities

- Fair and affordable access to local, clean renewable energy resources
- Control and responsibility for consumers
- Investment opportunities for citizens and local businesses
- Create revenue
- Increase public acceptance



Solar panels on council housing in Warwickshire

Photo: Centre for Sustainable Energy
<https://www.cse.org.uk/>

Challenges

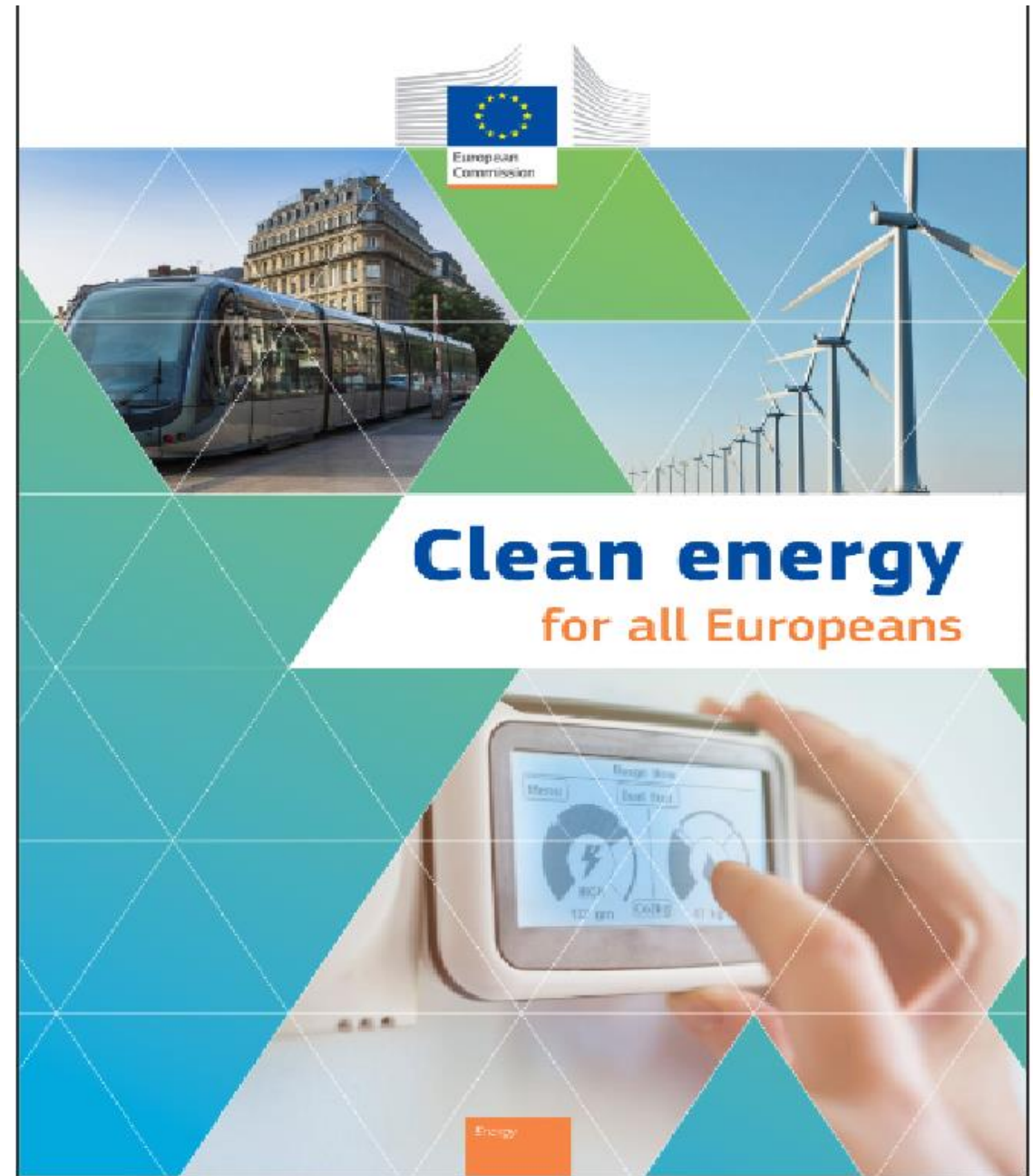


Picture: Trainers Library

- Financial difficulties
- Lack of experience
- Red tape
- Unstable policy schemes
- No support
- Lack of regulation or regulation lagging behind

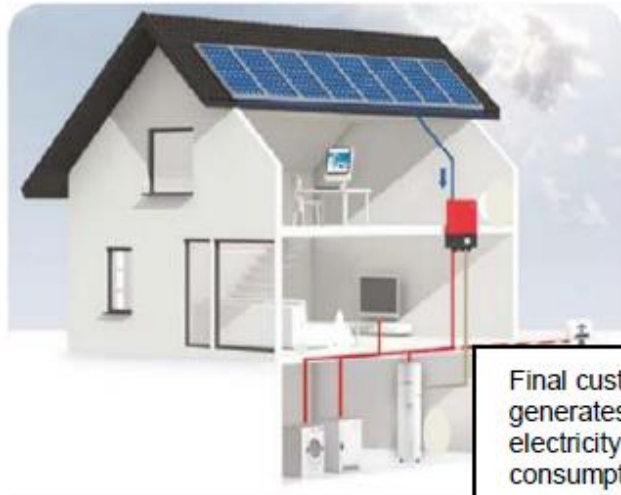
EU Policy I

- 2019 Clean Energy Package
- “Citizen energy community” in Electricity Market Directive
- “Renewable energy community” in Renewable Energy Directive



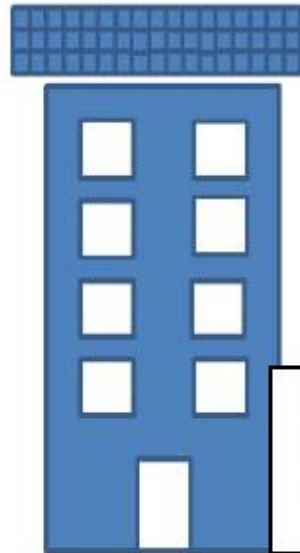
EU Policy II

Self-consumption



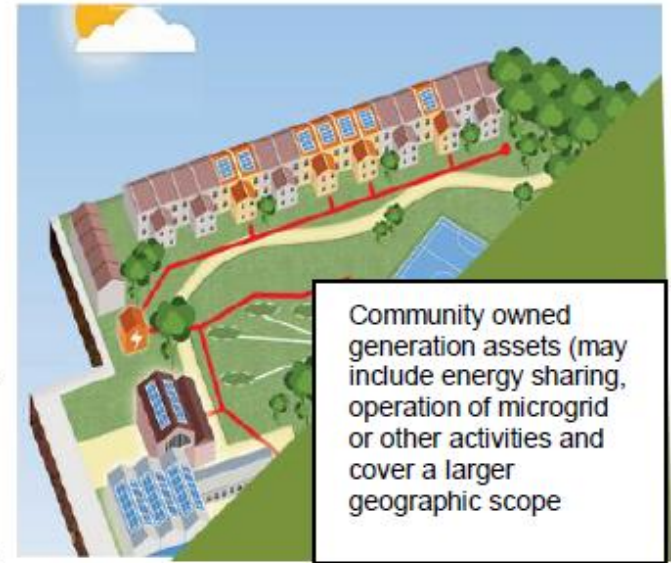
Final customer who generates renewable electricity for self-consumption

Collective self-consumption



Sharing of generation among several local consumers

Energy Community



Community owned generation assets (may include energy sharing, operation of microgrid or other activities and cover a larger geographic scope)

Diagram: CEER

EU Policy III: Differences between Citizen Energy Communities and Renewable Energy Communities

	Citizen Energy Community	Renewable Energy Community
Membership	Natural persons, local authorities, including municipalities, or small enterprises and microenterprises	Natural persons, local authorities, including municipalities, or small enterprises and microenterprises, provided that for private undertakings their participation does not constitute their primary commercial or professional activity
Geographic limitation	No geographic limitation, MS can choose to allow cross-border Citizen Energy Communities	The shareholders or members must be located in the proximity of the renewable energy projects that are owned and developed by the Renewable Energy Community
Allowed activities	Limited to activities in the electricity sector. Electricity generation, distribution and supply, consumption, aggregation, storage or energy efficiency services, generation of renewable electricity, charging services for electric vehicles or provide other energy services to its shareholders or members	Can be active in all energy sectors. Production, consumption and selling of renewable energy
Technologies	Technology neutral	Limited to renewable energy technologies

Table: CEER

Edinburgh Community Solar Co-operative

- 683 members
- 30 solar panel installations, a total capacity of 1.38MW.
- Annual generation approximately 1.1GWh of clean, renewable electricity for these buildings and the wider grid.
- Excess profits are invested in community projects throughout Edinburgh that promote sustainability and renewable energy.

SOLAR INSTALLATIONS



Davidson's Mains Primary School



Drumbrae Leisure Centre



Oaklands School



Carrick Knowe Primary School –
completed 50kW 8th July 2016. /
40,000kWh per year



Currie High School



Ratho School



Woodlands School



Craiglockhart Leisure Centre

More info: <https://www.edinburghsolar.coop/>

Hvide Sande-Denmark

- 100% Community-owned wind Turbines
- 45,000 MWh
- The expected returns will be invested in the modernisation and development of the harbour
- Hvide Sande promotes energy efficiency for public buildings, various business initiatives and initial steps towards public e-mobility.





**THANK YOU
FOR YOUR ATTENTION!**

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