

#### ΗΜΕΡΙΔΑ

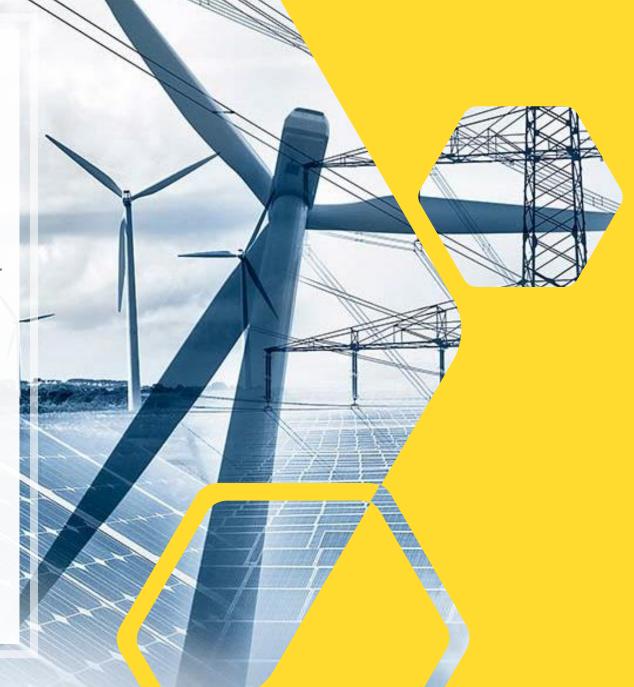
"Η επίτευξη των Κλιματικών και Ενεργειακών Στόχων της Κύπρου: Τεχνικές, Επιχειρηματικές, Επενδυτικές Ευκαιρίες και Προκλήσεις"

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#### Energy Communities and the role of CERA

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### Outline

- Energy Communities
- Establishing Energy Communities
- Primary Purpose
- Major Difference between CEC and REC
- Open and Voluntary participation
- Access to suitable markets
- Closed Distribution System Operators
- Capacity building for Local Authorities
- Distinguishing ECs and consumer empowerment
- Benefits of community energy
- The role of CERA



## **Energy Communities**

- Energy communities organise collective and citizen-driven energy actions that help pave the way for a clean energy transition, while moving citizens to the fore.
  - o contribute in increasing **public acceptance** of renewable energy projects
  - o easier to attract private investments in the clean energy transition
  - characterised by varying degrees of community involvement in decisionmaking and benefits sharing
  - o limited by a **geographical location** or a **community of interest**.
- Are contiguous processes of both the energy transition and social innovation.
  - As decentralised and renewable-based energy projects  $\rightarrow$  can promote sustainable energy production and consumption practices.
  - As consumer-empowerment and community-driven initiatives → can play a key role for social innovation as they reflect a fundamental shift in consumer behaviour.

## **Establishing Energy Communities**

- In May 2019, the European Union concluded the the Clean Energy for All Europeans Legislative Package (CEP)
  - will help the EU meet its 2030 climate and energy objectives.
- A strong shift in the role of citizens from passive consumers to active participants in the energy transition.
- In particular, the
  - o recast Directive 2018/2001 (Renewable Energy Directive II, or **REDII**),
  - recast Directive 2019/944 (the Internal Electricity Market Directive, or IEMD) and
  - recast Regulation 2019/943 (the Internal Electricity Market Regulation, or **IEMR**) contain provisions that establish a supportive EU legal framework for community ownership.
- The CEP defines two new concepts
  - 'Renewable Energy Communities' (RECs) and
  - 'Citizen Energy Communities' (CECs).

## **Establishing Energy Communities**

The REDII and the IEMD contain a number of new definitions

Article 2(16) - Recast Renewable Energy Directive 'Renewable Energy Community'	Article 2(11) - Recast Electricity Directive 'Citizen Energy Community'
<ul> <li>A legal entity:</li> <li>based on open and voluntary participation,</li> <li>is autonomous, and</li> <li>is effectively controlled by shareholders or members that are located in the proximity of the renewable energy projects that are owned and developed by that legal entity</li> <li>the shareholders or members of which are natural persons, SMEs or local authorities, including municipalities</li> </ul>	<ul> <li>A legal entity</li> <li>based on voluntary and open participation and</li> <li>is effectively controlled by members or shareholders that are natural persons, local authorities, including municipalities, or small enterprises;</li> </ul>
primary purpose $\rightarrow$ provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits.	primary purpose $\rightarrow$ provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits.
	may engage in generation, including from renewable sources, distribution, supply, consumption, aggregation, energy storage, energy efficiency services or charging services for electric vehicles or provide other energy services to its members or shareholders;

## **Primary Purpose**

Both RECs and CECs [Energy Communities - ECs] must have a non-commercial purpose.

- The definitions prohibit RECs or CECs from adopting a commercial motive (i.e. generating profits that are then distributed to their owners/shareholders).
  - does not forbid ECs from making profits that are reinvested into the community's activities,
  - o or are used to **pursue general public interest** aims (e.g. local development, education, or solidarity programmes).
- The definition does not prohibit ECs from providing a return on investment to its members.
  - returns on investment and other financial benefits to members should be secondary to other general aims of the community.

## Major Difference between CEC and REC

- CECs can operate across the electricity sector and do not have a technologyspecific focus
- RECs engage specifically on renewable energy.
- One important difference is that the CEC definition lists the activities that a CEC can engage in, while the REC definition **does not list any activities**.
- However, the rights contained in Article 22 of the REDII infer that RECs can engage in a number of different activities, as long as those activities are linked with renewable energy technologies.

## **Open and Voluntary participation**

- Both the REC and CEC definitions require that they be "based on open and voluntary participation.
  - Voluntariness should be understood as ensuring the right of members or shareholders to leave the REC or CEC (opt-in / opt-out).
- Regarding 'who' is eligible to participate in an energy community, the REC and CEC definitions diverge
  - REDII places some limitations on companies that can participate, based on their size.
    - Article 22(1) may also be interpreted as limiting the ability of companies that are already active in the energy sector, to participate in a REC.
  - IEMD takes a looser approach to eligibility for CECs
    - "membership of citizen energy communities should be open to all categories of entities" → large enterprises – not just SMEs – may become members
    - However, the participation of commercial energy companies must be limited to ensure they do not assume decisive control over the CEC

#### Access to suitable markets

- Article 22(2)(c) of the REDII, and Article 16(3)(a) IEMD require Member States to ensure the rights of RECs and CECs to access all suitable markets on a nondiscriminatory basis.
- ECs must be able to access any market as long as it is relevant to their potential activities.
- As a guide, Article 2(8) of the IEMD defines 'electricity markets' as markets for electricity including
  - o over-the-counter markets,
  - o capacity,
  - balancing and
  - ancillary services

in all timeframes, including forward, day-ahead and intraday markets.

This right would also apply to local flexibility markets.

### **Closed Distribution System Operators**

IEMD empowers MSs to allow citizen energy communities to become DSOs either under the general regime or as "Closed Distribution System Operators" (recital 47)

- The IMED leaves however to the MSs to regulate price setting and if energy communities will be able to act as distribution operators.
- "Energy communities owning grid infrastructure remains optional for MS. However, if and where this approach is adopted, it should
  - o avoid duplication of assets,
  - ensure economic efficiency,
  - be subject to appropriate regulation in line with the regulatory framework for DSOs and
  - ensure customers receive an adequate level of quality of service."1

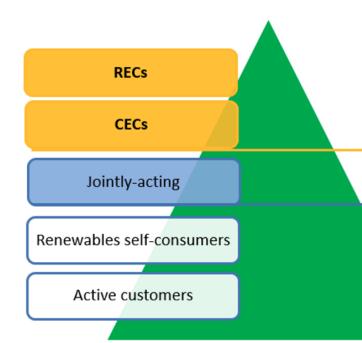
<sup>1</sup> "Regulatory Aspects of Self- Consumption and Energy Communities", Council of European Energy Regulators (CEER) Report, June 2019

## **Capacity building for Local Authorities**

- Local or regional governments can benefit from promoting the scale-up of ECs in their area, while they can initiate new projects themselves.
- Local and regional authorities can:
  - adopt specific land-use or buildings-related regulations that favour the development of citizen or community-owned energy sources
  - favour "green" but also "community-based" energy procurement → sign direct Power Purchase Agreements (PPAs) with energy communities to meet the energy demand of all the public buildings
  - o provide seed funding, for example through a revolving fund for community projects.
  - help ECs with relevant economic players, and other societal, environmental or energy actors in the area
  - become actual members and shareholders of energy communities, together with their citizens and local SMEs, without taking full control

### Distinguishing ECs and consumer empowerment,

#### **CEP Concept**



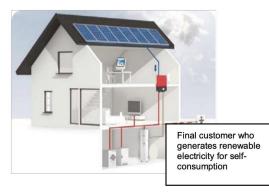
#### Characteristics

Limited in eligibility; must be a legal entity with specific ownership governance requirements, and based on a non-commercial business model

Open to any consumer on a collective basis; can be facilitated by any business model

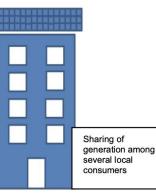
Open to any consumer on an individual basis; can be facilitated by any business model

#### Self-consumption





Collective self-consumption



Community owne generation asset include energy st operation of micr

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

Source: "Regulatory Aspects of Self- Consumption and Energy Communities", Council of European Energy Regulators (CEER) Report, June 2019

# Benefits of community energy

- Significantly cut carbon emissions by replacing fossil fuels
- Cutting energy consumption
- Investments in Clean Energy
- Winning public support for RES
- Tackling Energy poverty
- Support local economy
- Boost European Innovation



- CERA has fully transposed the provisions of IEMD regarding CECs through Article 123 in the national law N. 130(I)/2021.
- According to Article 123(1), CERA determines with its Regulatory Decision a regulatory framework for CEC and ensures that:
  - o participation in an energy community of citizens is open and voluntary;
  - shareholders or members of CEC may opt-out;
  - shareholders or members of CEC shall not lose their rights and obligations as household customers or active customers;
  - the **DSO shall cooperate** with CECs in order to facilitate electricity transport within communities;
  - are subject to non-discriminatory, fair, proportionate and transparent procedures and charges, including for registration and licensing, and to network charges;

According to Article 123(1), CERA ensures that CECs :

- have access to all electricity markets: directly or through cumulative representation;
- shall be treated in a proportionate and non-discriminatory manner as regards their activities, rights and obligations as final customers, producers, suppliers, distribution system operators or aggregators;
- shall be responsible for imbalances they cause in the electricity system and shall bear appropriate financial responsibility;
- shall be treated as active customers and shall pay network charges;
- are entitled to arrange within CEC the sharing of electricity that is produced by the production units owned by the community.

CERA has already received Technical Support in the wider scope of consumer empowerment

- REFORM/GA2020/022 Outcome 2: "Active participation of customers and increase of flexibility in the electricity market and in the power system, in line with Cypriot Integrated National Energy and Climate Plan"
- Formulation of the Regulatory Framework for ECs is under study by CERA.
- Several parameters are under investigation:
  - For example: REDII does not define precisely the concept of "proximity" of the RES of the community and the members with decision-making powers
    - might be a "physical" proximity (e.g., within X kilometers),
    - an "administrative" proximity (e.g., in the same municipality) or even
    - an "electric" proximity (for example a community with all the injection and withdrawal points connected under the same primary substation).

CERA will proceed with tendering procedures for acquiring Technical Support that will not only cover the regulatory framework for ECs but also for:

- Active Citizens
- Local Flexibility Markets
- Demand Response
- New technologies for energy trading (Blockchain P2P)

all aiming to support the promotion of ECs and consumer empowerment in general.

◆ Facilitation of ECs goes beyond regulation → Community energy projects always depend on individuals → need to start small, GROW BIG

"Once you got a solar panel on a roof, energy is free. Once we convert our entire electricity grid to green and renewable energy, cost of living goes down."

Elizabeth May



#### ρυθμιστική αρχή ενέργειας κύπρου

cyprus energy regulatory authority

