

Info Session



Acting for the rural vision: making a commitment for vibrant rural areas visible

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Setting up Renewable Energy Communities (REC) in Italian Villages

The CONCERNET Initiative

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Renewable Energy Communities (REC): Magliano Alpi and follow-ups



December 2020: the **first** Italian **Renewable Energy Community** (**REC**) was founded in the City of Magliano Alpi **https://cermaglianoalpi.it/** with the scientific support of the Energy Center of the Politecnico di Torino



Magliano & Friends

2021-2023: Magliano&Friends initiative, a network of Italian Municipalities who share expertise and know-how to create new RECs



October 2024: CONCERNET, the Confederation of Energy Communities) is founded in Magliano Alpi https://concernet.it/



Renewable Energy Communities (REC): definition

A *Renewable Energy Community* (REC) is a legal entity made up of energy *users*, *producers* and *prosumers* (*producers*+*users*) who are clustered to generate <u>economic</u>, <u>social</u> and <u>environmental</u> benefits deriving primarily from the <u>sharing of electricity</u> produced by <u>renewable</u> sources.



USER

Draws electricity from the grid and is the owner of the connection point to the grid, identified by a POD (Point Of Delivery) code



PRODUCER

Producer of energy from renewable sources, that is totally fed into the grid (potentially shareable energy)



PROSUMER

Producer of energy from renewable sources, which is partly consumed on site (physical self-consumption) and partly fed into the grid (potentially shareable energy)



Renewable Energy Communities (REC): EU&Italian legislation



European 2018/2001 (RED-II) Directive

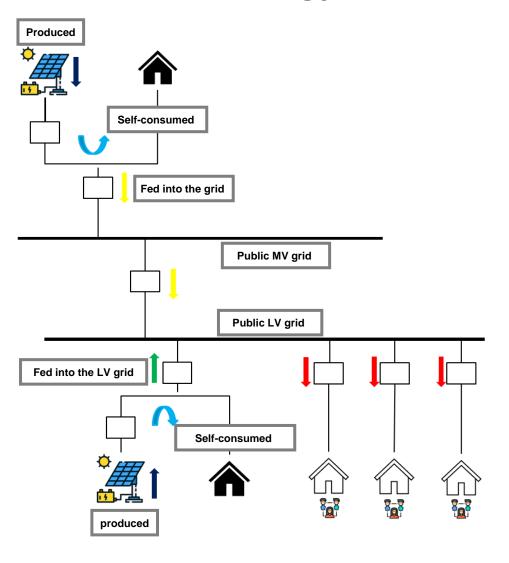


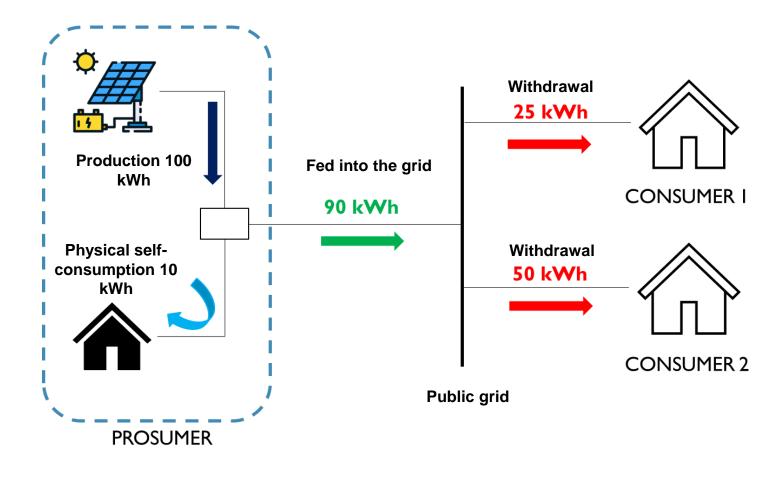
	TRANSITIONAL TRANSPOSITION 2020-2023 - Art. 42bis of D.L. 162/2019	FINAL TRANSPOSITION D.L. 199/2021 - executive law by Dec 2023
Maximum power size (single plant)	200 kW	1 MW
area	Members connected to the same LV/MV substation	Members connected to the same HV substation
Eligible members	Citizens/Families, Small and Medium Enterprises (SME), Municipalities	All Stakeholders (excluding companies for which energy is the core business activity)

transposition



Renewable Energy Communities (REC): sharing energy, an example

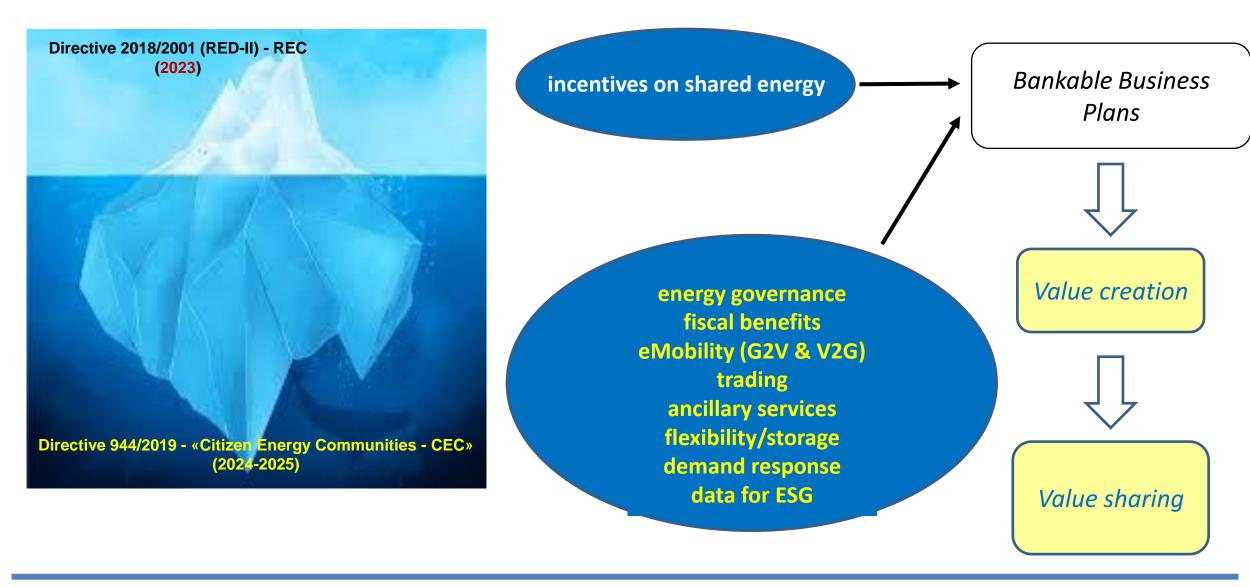




<u>Virtually</u> shared energy = min (90, 75) = 75 kWh (incentive about € 100/MWh)



Energy Communities: creating value to be locally shared





REC: role and perspectives





A Renewable Energy Community

(CER) is a private legal entity
governed by autonomous law with
mutualistic purposes, made up of
producers and consumers of energy

The main objective of the REC is to provide environmental, economic or social benefits to its members or to the local areas in which the community operates

A definition with high potential



REC is a company

REC creates value and must by law redistribute it on the territory it generated it

A REC is -above all- an organizational catalyst and an entrepreneurial tool for the governance of energy







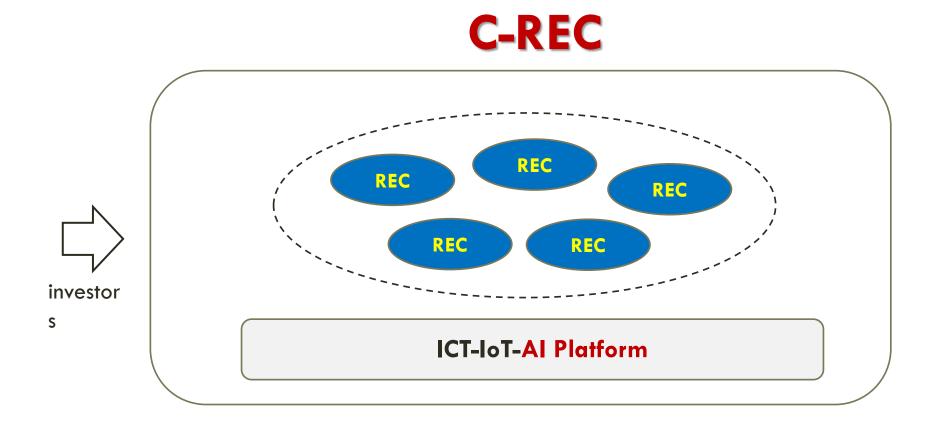
We need a vision that takes into account the evolution of the legislative and regulatory context

In Italy, Law 199/2021 (TIAD) and Law 210/2021 (TIDE)

Key word «disintermediation»



Clustering RECs: C-RECs - I



A single private entity (C-REC) can manage a cluster of RECs

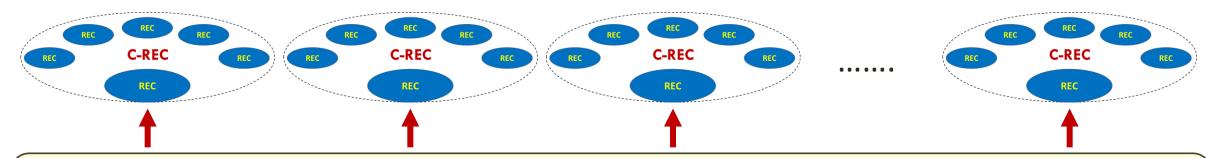
Tha area coverage of C-RECs can range up to the entire Italian National territory

ICT-IoT-Al platforms are the key enabler



Clustering RECs: C-RECs - II

- In Italy, a federation of C-RECs will play a major role in energy transition
- The objective: the same digital IoT-Al platform to enable data management, maximize economies of scale and provide energy services



digital IoT-AI platform

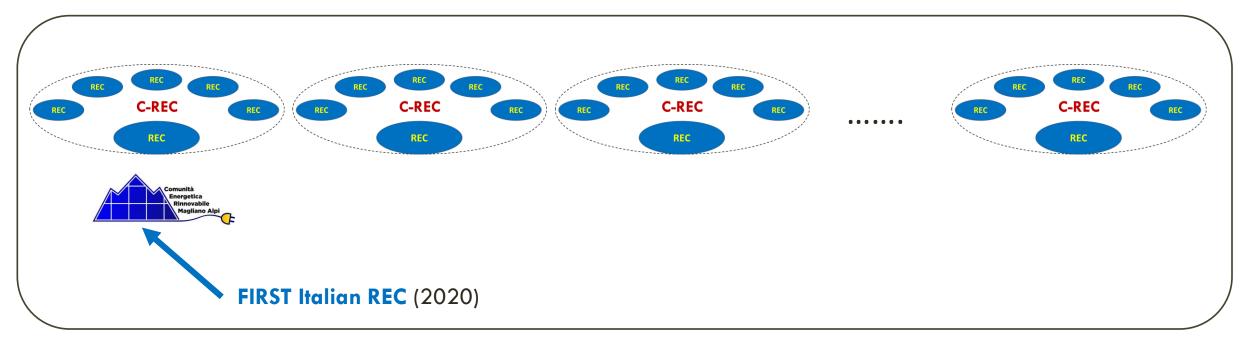
enabling: virtual/physical energy sharing, metering, ancillary&flexibility services, storage management, security/resilience

this is a

«Virtual Energy Company» (VEC)



Clustering RECs: CONCERNET

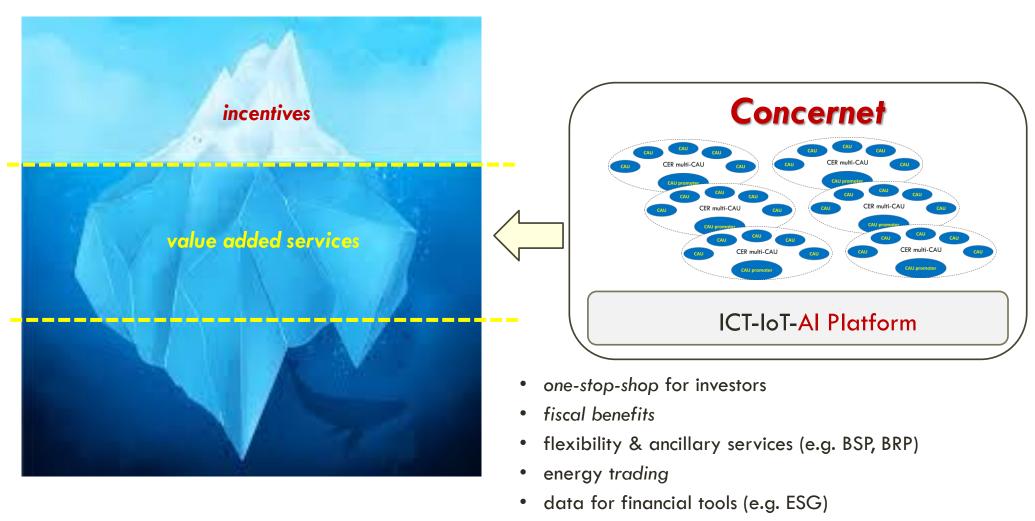




Italian National Network



CONCERNET: objective disintermediation



no mediators
(esco, utilities)
are needed:
CONCERNET
manages itself



- security/resilience
- innovative business models

WG5

https://smart-networks-energy-transition.ec.europa.eu/working-groups/wg5



Task force on Energy communities

Objective: evaluate the role of Energy communities (Ecom) as catalysts of energy transition

- Survey on the **transposition process** of Directives **2018/2001 (RED-II)** and **2019/944** into National regulation by the partner Countries of the EU
- **Benchmark among National regulations** on Ecom in EU partner Countries
- Analysis of the **drivers** leading to the creation of Ecom in Europe: business opportunity, incentives, ideology, environmental awareness, etc.
- Ecom technology enablers: focus on ICT IoT-AI management platforms and storage
- Ecom business models and governance systems (e.g. www.concernet.it)
- The role of Ecom to provide flexibility (e.g. BSP) and grid services
- Ecoms and Energy performance of building directive (EPBD): synergies for economically&environmentally **sustainable city renovation** through the electrification of thermal loads
- Network of Ecoms as «Virtual Energy Companies» (VEC)



THANK YOU FOR YOUR ATTENTION

Sergio Olivero



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