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Renewable Energy Communities (RECs)

April 2024

*The **self-consumed shared energy** is the minimum, calculated for each hourly period, between the electric energy fed into the grid by renewable energy source installations and the electric energy drawn by all final customers associated with the community within the same primary substation.*

What is

A **Renewable Energy Community** (REC) is a **legal entity** where various stakeholders come together to produce, share, and consume energy generated from renewable sources (installations not exceeding 1 MW in size), aiming to provide environmental, economic, and social benefits to its members and the territory in which it operates.

The **geographical boundary** of the REC corresponds to the electricity market area of jurisdiction, whereas the calculation of self-consumed shared energy refers to the primary substation (HV/MV).

To self-consumed shared energy, the REC only considers the renewable energy production of **plants** that are under the **availability** and **control** of the community.

The energy sharing is defined by a **Virtual Model** based on the utilization of the public grid.

***Virtual Model:** Energy sharing that occurs between two or more users through the existing public grid.*

Who can Participate

Directive EU 2018/2001, :22

Individuals and **legal entities** holding (at least) one electricity meter can participate in a REC, including: citizens, SMEs, local authorities, Third Sector Entities, Research and Training Institutes, religious entities, and environmental protection bodies. For businesses (formerly art. 31, paragraph 1 letter c), DL 199/2021), participation in the REC cannot constitute the primary commercial and industrial activity. **Participation** is **open and voluntary**.

Lgs D. 199/2021

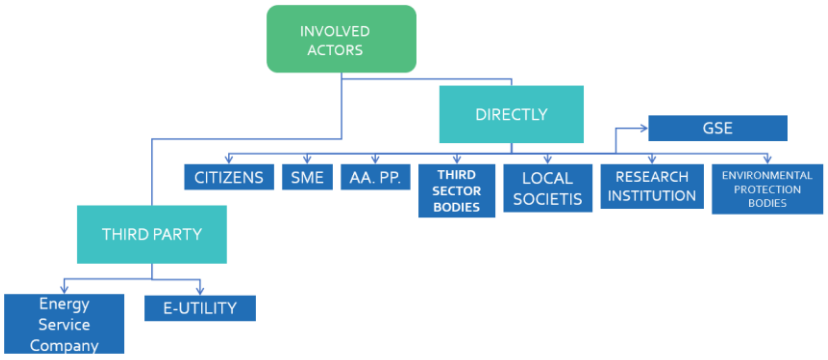


Diagram of actors involved in REC projects.

Large businesses and energy utilities cannot join a renewable energy community. However, these same entities can act as 'third-party' entities and provide financial, technical, or managerial services to the community.

Advocate

The novelty of **RECs** and its potential for participation imply the need to activate a comprehensive process of promotion and dissemination of information.

From this perspective, the action of the entity, whether public or private, that materially promotes the initiative plays a fundamental role. This importance is also reflected in defining the identity of the REC itself, in establishing the objectives guiding the action, and in managing the engagement process and participatory models.

In this sense, we can identify, based on the promoting entity, three macro-groups:

- Local public administrations (**Top-Down approach**).
- Local promoters enabling the implementation of horizontal community models (**Bottom-Up approach**).

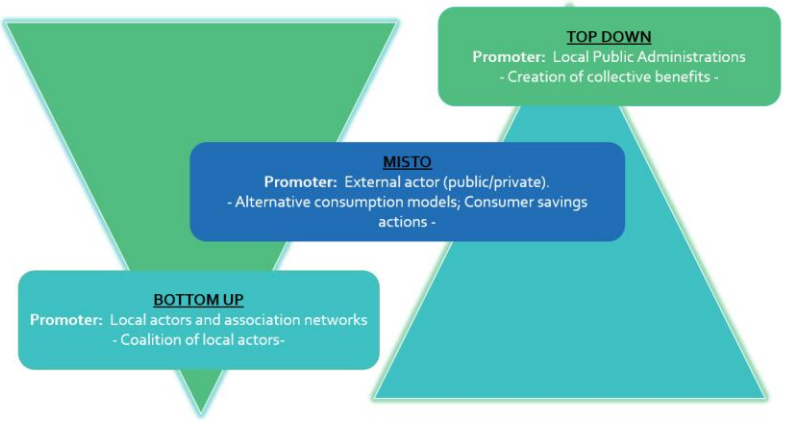
In the **top-down** approach, decisions and community management are centralized among a few entities (typically those responsible for public interest of citizens).

In the **bottom-up approach**, the decision-making process and management originate within the community itself and stem from shared ideas.

The **mixed approach** is a combination of top-down and bottom-up approaches.

- Promoters external to the community (**Mixed approach**).

The category to which the promoter belongs is not neutral regarding the definition of objectives and the weight that each of the three dimensions of the potential benefits of RECs (environmental, economic, social) assume in defining objectives. On one hand, promotion by the public actor and/or local actors and associations is likely to give greater importance to environmental and social benefits and potential impacts on the territory. On the other hand, an external promoter, typically, will prioritize actions more towards energy and economic savings, thus impacting individual consumers.

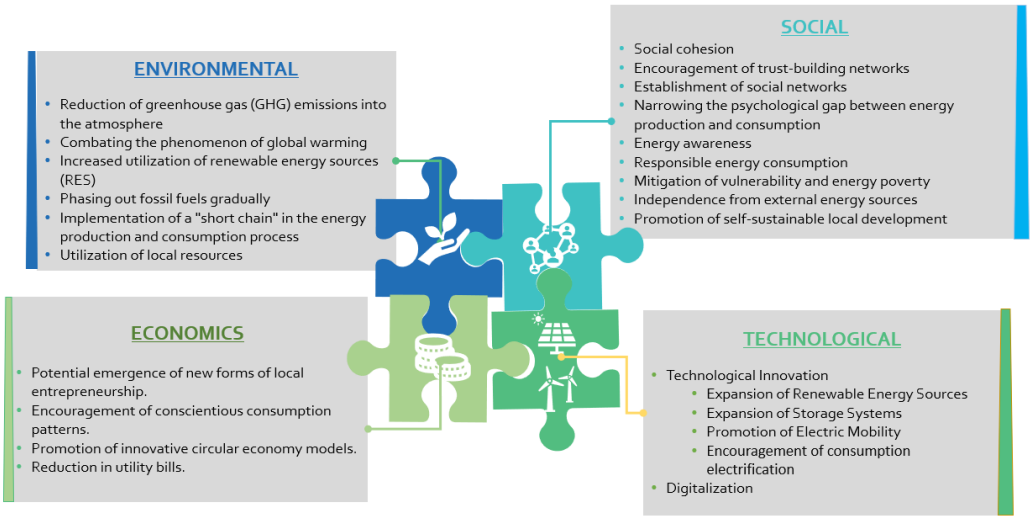


Summary diagram of the constitutive approaches for RECs

Benefits

DM CACER

From a general perspective, the establishment of renewable energy communities is accompanied by a series of advantages, inherently scalable over time and space, which are expressed - in a transversal manner - in the various dimensions that RECs encompass:



Summary diagram of potential benefits

RECs' Incentives

With the publication of the **CACER Ministerial Decree** by the Ministry of Environment and Energy Security (MASE) on January 23, 2024, and with the implementing rules released by GSE on February 23, 2024, the regulatory action of Legislative Decree 199/2021 was completed, and the

incentives for Configurations for **Self-Consumption and Sharing of Renewable Energy** (CACER) were officially defined, including **Community Energy Communities (REC)** among them.

The incentive, comprising a **premium tariff** granted for 20 years and applicable to self-consumed shared energy from incentivized installations, primarily comprises a **fixed component** determined by the size of the installation and a **variable component** that fluctuates according to the zonal energy price (ZeP).

Power	Premium rate	Limit
Power < 200 kW	80 €/MWh + max(0; 180-Pz)	120 €/MWh
200 kW < Power < 600 kW	70 €/MWh + max(0;180 – Pz)	110 €/MWh
Power > 600 kW	60 €/MWh + max(0;180 – Pz)	100 €/MWh

Incentive scheme and premium tariff

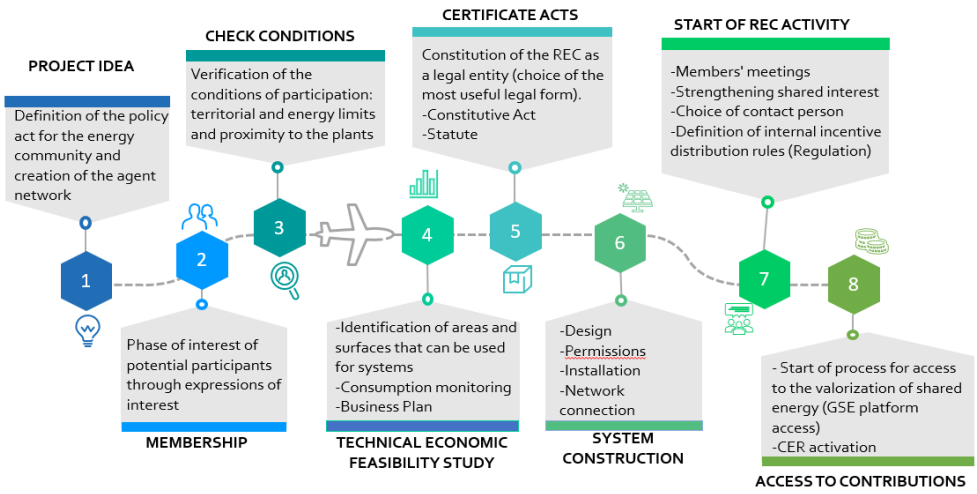
The premium tariff increases as the power of the installations decreases and as the market price of energy (Pz) decreases. Additionally, a tariff correction linked to the production potential of photovoltaic installations per geographical area is envisaged.

Regarding the allocation of the incentive, the CACER decree stipulates that the **portion exceeding** the shared energy quota exceeding the **55%** threshold should be allocated "[...] *solely to consumers other than businesses and/or used for social purposes with impacts on the territories where the sharing facilities are located*" In the case of access to capital contribution, the threshold value decreases to **45%.**

The Integrated Text on Distributed Self-Consumption (TIAD) also provides for the reimbursement of certain tariff components: since sharing occurs on the distribution network underlying the primary substation, the portion of variable components (which members regularly pay for their total energy consumption from the grid) related to the transmission network is refunded. The reimbursement applies for the entire duration of the REC's lifespan (not limited to 20 years). The unit components are defined by the Authority and updated quarterly (€10.57/MWh in March 2024).

RECs Establishment

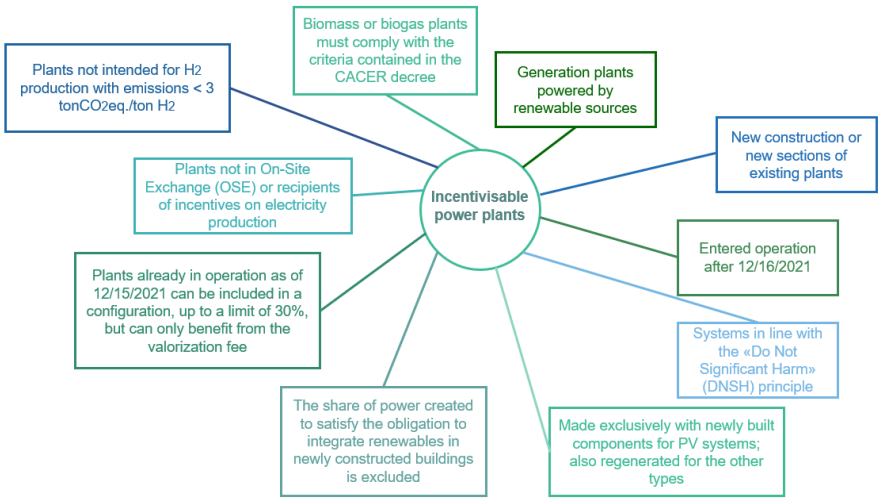
The complexity of establishing a REC is generally reflected in the timelines and associated choices. On one hand, it involves precise technological decisions - specifically, **electric generation systems powered by renewable sources**, with the electrical boundary for sharing identified in the distribution network underlying the reference **HV/MV substation** - along with **defined general objectives for the action**. On the other hand, the choice of the REC's legal form is left to the community's initiative. However, this choice must always adhere to certain principles: **autonomy**, the principle of **open access** (allowing free entry and exit), and prioritizing **environmental, economic, and social benefits** over financial profits.



Establishment of RECs 'step by step'"

The REC must have access to all generation facilities that are part of the configuration. In the case of a plant owned by a third party relative to the REC (whether it be a member or external to the community), this condition can be met through an agreement signed between the parties.

Incentivisable Renewable Power Plant



NRRP's Grant

In accordance with the provisions of the NRRP (M2C2I1.2), the Ministry of Environment and Energy Security also offers, through the managing entity (GSE), a capital contribution to support investments in the implementation of installations for the REC or groups of self-consumers. Among the main requirements, the installation must be situated in a municipality with fewer than 5,000 inhabitants and must commence operations within 18 months from admission to the contribution, but no later than June 30, 2026.

The contribution is cumulative with other capital contributions up to an overall maximum limit of 40% of the eligible expenditure. Access to the contribution also entails a reduction in the premium tariff related to the incentivized installation, proportional to the percentage of PNRR contribution received (a contribution of 40% corresponds to a reduction of 50% in the premium tariff).

The contribution is subject to spending caps per unit of power and will be disbursed until the allocated funds of 2.2 billion euros are exhausted. Applications for access to the PNRR capital contribution can be submitted through the window provided by GSE until March 31, 2025.

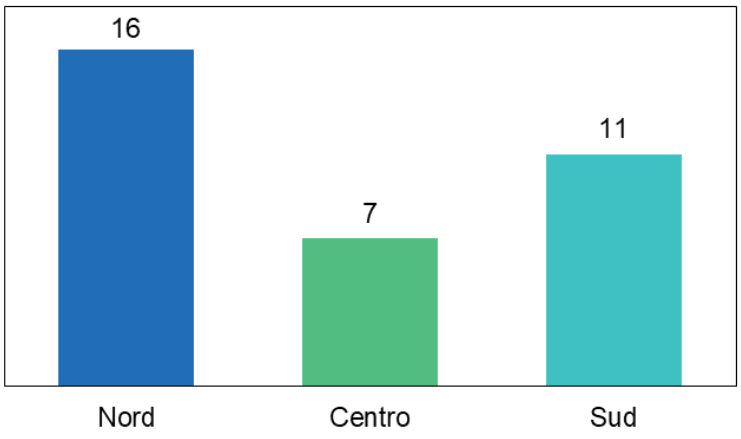
Access to the Grant

For requests for access to the **NRRP grant**, the **distributed self-consumption service**, and the **preliminary eligibility** check of applications, you can connect to the dedicated Portal developed by the **Gestore dei Servizi Energetici** (GSE) through the Customer Area, **SPC Application**.

SPC Application Guide

As of January 9, 2024, according to the latest data released by the GSE, there are a total of 122 configurations for distributed renewable energy self-consumption. Among these, **88 are collective self-consumptions** (AUC), and **34 are Renewable Energy Communities** (REC). Thus, at the beginning of 2024, only 27.9% of the total configurations with active service are REC configurations; of these, 47% are located in the northern regions (with Piedmont and Veneto leading), 20.6% in the central regions, and 32.4% in the South and Islands. There are approximately 150 newly built photovoltaic installations included, with an average capacity of about 20 kW per installation. The prevalent legal form for RECs configurations, as of the date of data dissemination, is the **Unrecognized Association** (due to the small size of the schemes activated so far).

Active REC today



Geographical distribution of active REC as of early January 2024.

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