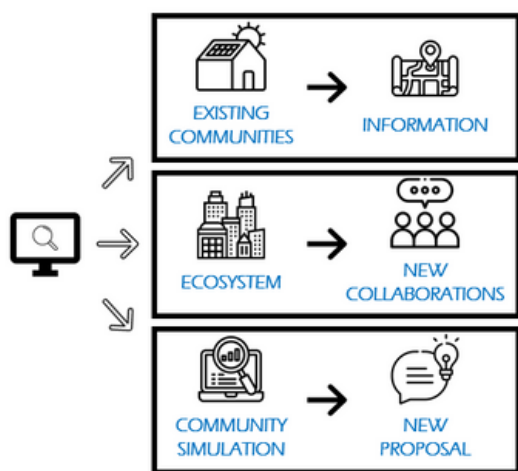




COMUNITAT ENERGÈTICA

A WEB PLATFORM TO SCALE-UP ENERGY COMMUNITIES IN YOUR TERRITORY

THE CONCEPT



ADDED VALUE

- User -friendly
- Tailored for each potential user

TRL

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CONTACT

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PRODUCT DESCRIPTION

- Web platform that promotes **energy communities** deployment
- Stands out for its **simulation engine** of PV collective self-consumption for **residential and tertiary sectors**, and under consumer to prosumer modes
- Helps to discover initiatives, connect with key stakeholders, and access targeted resources
- Oriented to **different actors** (citizens, associations, professionals, administrations)
- Can be tailor-adjusted for **any region world-wide**
- Based on 4 fundamental **pillars**: Energy communities repository, stakeholders repository, PV simulator and open resources

APPLICATIONS

Related to energy communities in residential and tertiary buildings:

- Territory repository
- Simulation of scenarios in new locations
- Creation of new connections

DESIRED PARTNERS

- Regional to national public bodies
- Consultancy groups
- Research entities

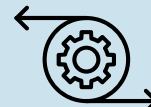
EXPECTED BENEFITS



Beyond existing tools



Optimal user experience



Large-scale analysis



Powerful modelling

technical details



INNOVATION SOLUTION

Comunitat Energètica is a tool that enables the deployment of energy communities throughout the territories. Based on detailed, automated modeling, the platform is presented as a **layered tool** that can offer **targeted information** for **different stakeholders** (individual users, associations, public administrations, and companies in the sector), with special attention to providing an optimal user experience. Beyond the operational features focused on energy sharing through photovoltaic installations, the platform will offer functionalities to exploit the **broader concept of energy services**, including the potential for building renovation and the potential for heat exchange based on district heating and cooling networks.

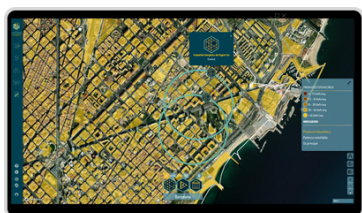
TECHNICAL DETAILS

The platform goes beyond the various tools existing on the market by delivering:

- **Volumetric characterization** of the building stock, and its orographic environment, in an automated manner based on cadastral data.
- **Automated sizing**, with the option of detailed characterization by the user, of the potential for installing PV panels on the roofs
- **Multiple users** can be considered (producers, consumers, prosumers)
- Modeling scenarios based on an **hourly calculation engine**, providing energy and economic results on an hourly basis or aggregated monthly or annually.
- **Detailed calculations** based on an optimized combination of stored data and detailed cloud simulations, in a process based on optimized runtime

IMPLEMENTATION

The **official platform of Generalitat de Catalunya** to promote energy communities (validated for 1.4M buildings). All climate conditions and building uses are considered.



<https://comunitatenergetica.cat>