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algowATT GREEN TECH SOLUTIONS *eXperience*

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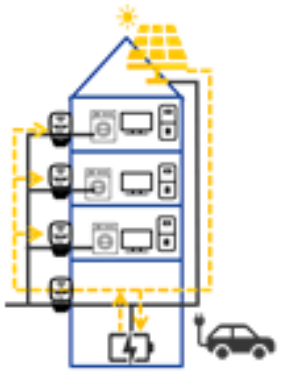
KEY ACCOUNT MANAGER

# ENERGY COMMUNITIES

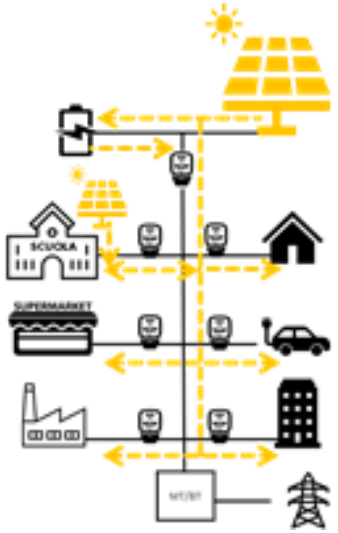
## Forms of aggregation on a local basis using ERC-owned renewable energy plants, with 'virtual' collective self-consumption

Participation by members is open and voluntary. It provides for the aggregation of individuals, SMEs, local authorities and territorial authorities, including municipal administrations, research and training organisations, religious bodies, third sector and environmental protection organisations, as well as other local administrations.



### Regulatory framework

- The **'Milleproroghe' Decree of 2019** that introduced the CERs
- **Law 8/2020 converting the 'Milleproroghe' decree**
- **Legislative Decree 199/2021 transposing the EU Red II Directive**




### Benefits for the community

- Promoting distributed renewable energy
- Promoting energy efficiency
- Broadening market participation

### Benefits for participants

- Reduced energy costs (especially with change of habits)

## Environmental and social sustainability

- Reducing CO2 emissions by harnessing energy from renewable sources
- Combating energy poverty through the distribution of the bonus on shared energy consumption

## Economic advantages

- Maximising the value of energy produced, self-consumed and shared thanks to GSE incentives
- Reducing the bill

## Reducing network dependency

- Realisation of renewable source plants where consumption occurs
- Lower network charges

**Specialised consultancy activities addressed to public bodies for the definition and activation of CERs**

Energy Communities are a formidable alliance tool between local authorities, citizens and SMEs in an area that can join forces for the local production and sharing of renewable energy. The transposition of the European Directive on Energy Communities (RED II) and the incentive system, open a new season of development for self-consumption of energy and give local authorities and public administrations the opportunity to valorise their real estate assets, reduce energy consumption, improve environmental sustainability and take the lead in an emerging sector such as zero-kilometre energy.

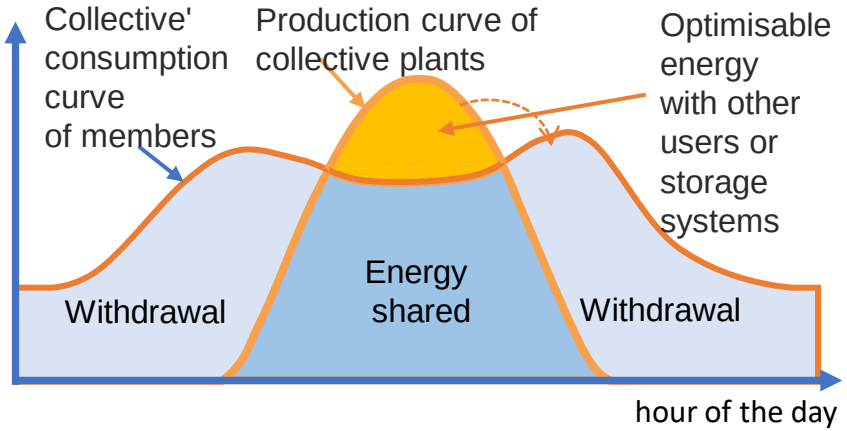
**Numerous funding lines have been earmarked for these new projects and to support these opportunities.**

The National Recovery and Resilience Plan (NRP) and the related 2021-2027 Multiannual Financial Framework allocate 2.2 billion, earmarked for municipalities with less than 5,000 inhabitants for the promotion of renewables for energy communities and self-consumption.

- The objective of Energy Communities is to harness energy generated from renewable sources locally (condominium or community)
- The benefits apply to 'shared energy' only:

**«energy produced and simultaneously consumed by members of the community»**

- Billing is done on an hourly basis on data measured by existing meters, no dedicated systems are required




**ECONOMIC BENEFITS**

- Refund of network charges for loss reduction (ARERA resolution)
  **8 - 9 €/MWh on shared energy**
- Incentive on produced and shared energy (MISE decree)
  **100 - 110 €/MWh on shared energy**
  (not combinable with Ecobonus110%)

*Additions to sale price to GSE or market*

## PRELIMINARY ASSESSMENT

- The study will analyse utilities and consumption, territorial distribution, type (industrial, commercial, residential, public use), energy use, the possible presence of renewable generation plants

## USERS ENGAGEMENT

- Based on the results of the preliminary analysis, a dissemination plan will be defined so as to enable the involvement and participation of all interested users

## GOVERNANCE TOOLS

- Support for the identification of the management model including: Draft Bylaws, Memorandum of Association, Rules of Procedure, Economic Management Models and Business Plan for RECs

## PLANT DESIGN

- Identification of sites for the installation of energy production plants from renewable sources (PV), technical/economic feasibility study, preliminary, definitive, executive and as-built design

## BUSINESS PLAN

- Development of the operation's financial business plan with evidence of initial investments, revenues and costs, determining the payback time and ensuring, at the same time, adequate recognition to all participating members

## FILING AND GSE RELATIONSHIP

- Preparation, drafting and management of administrative and authorisation paperwork for the construction of the plant and management of relations with the GSE for compliance with the "Technical rules for access to the shared electricity valorisation and incentive service»

## TURNKEY EPC OF PV PLANT

- Implementation of the plant's executive design, purchase of all materials (panels, structures, storage, etc.), civil, mechanical and electrical assembly of the installations and connection to the grid

## SELF CONSUMPTION & POWER GEN

- algoWatt has developed the Libra CE platform to offer an end-to-end service for the management of Energy Communities. Through the algoWatt solution, it is possible to monitor the progress of the CER on various user levels with customised dashboards.

## Turnkey proposal backed by a track record in renewable energy and energy efficiency and a dedicated team:

### ASSESSMENT

- Consumption analysis
- Feasibility and convenience analysis
- Definition of a customised technical-economic solution
- Possibility of access to credit

### DESIGN

- Plant sizing
- Support in obtaining tax deductions (Superbonus 110%, Bonus Casa 50%)
- Immediate economic valorisation of tax credit

### CONSTRUCTION

- Generators from renewable sources
- Instrumentation
- Management platform
- Tax deduction practices (ENEA)
- Credit transfer practices (AdE)

### MANAGEMENT

- Management platform "as a service»
- Maintenance

**TURNKEY PROPOSAL**

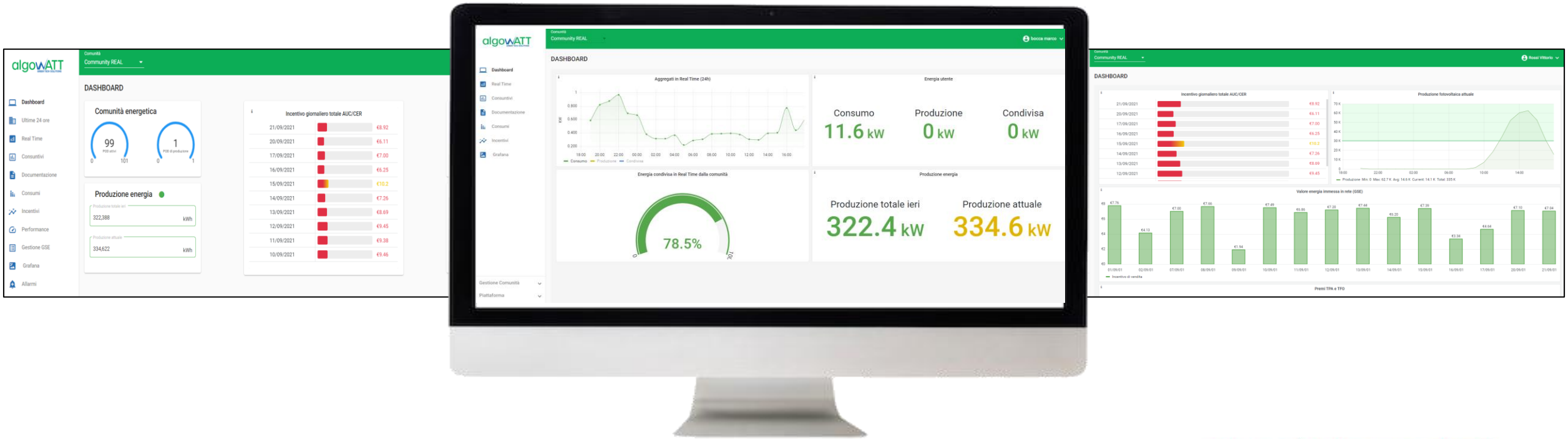
**IMMEDIATE ECONOMIC VALORISATION OF THE TAX CREDIT**

**GUARANTEE OF WORKS**

**QUALITY AND RELIABILITY**

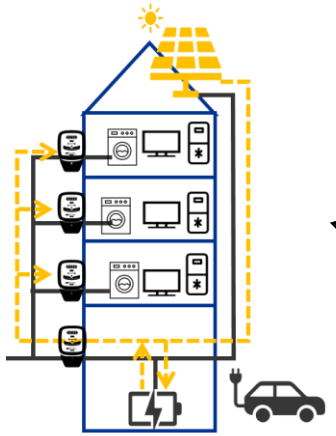
# ERLIBRACE

algoWatt has developed the Libra CE platform to offer an end-to-end service for the management of Energy Communities. Through the algoWatt solution, it is possible to monitor the performance of the EC on three possible user levels with customised dashboards. Thanks to this tool it is possible to graphically represent through dashboards and diagrams the data that are collected from the field in real time, it is possible to have the representation of the final data and to set the management rules of the EC by defining the values for the distribution of the rewards with respect to the capacity to consume the shared energy during the production of the plants from renewable sources.



# OPERATIONAL ARCHITECTURE

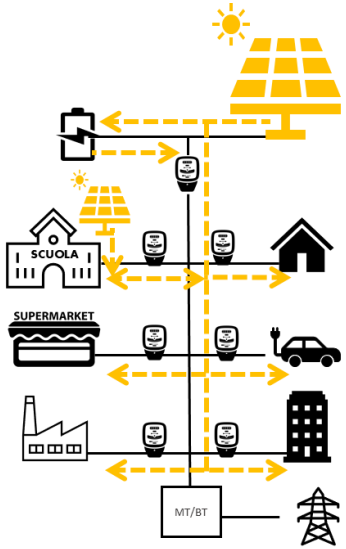


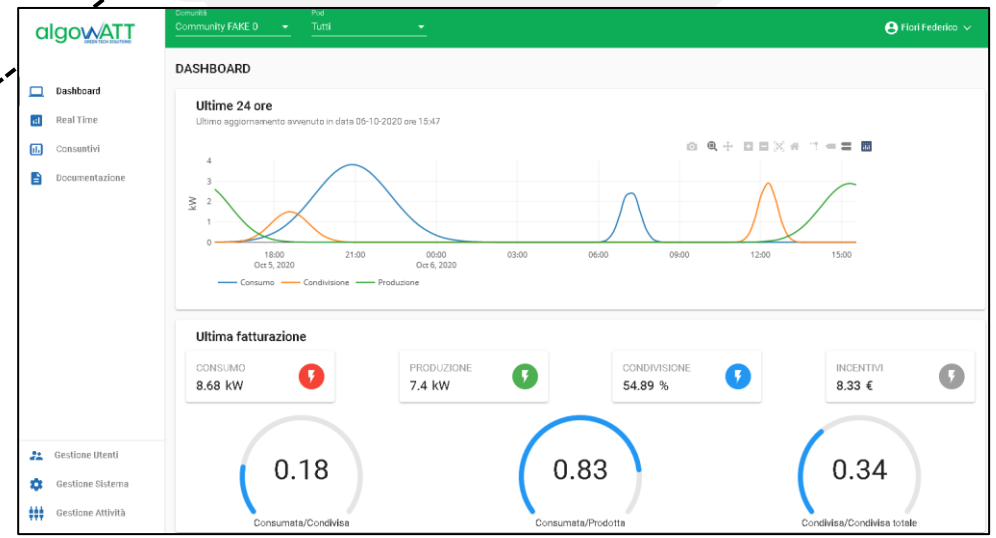



SERVICE PROVIDER

REC MANAGER

REC MEMBERS



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