

## **LIFE-2024-CET - Topic: LIFE-2024-CET-ENERCOM - Developing support mechanisms for Energy Communities – RSE’s Expertise offer.**

**Ricerca sul Sistema Energetico – RSE SpA** is a Non-profit Research Organisation established in Italy to carry out funded research activities of national and international interest. By considering the objective of a fairer and more just ecological transition, Renewable Energy Communities (RECs) can have great potential for mitigating inequalities and supporting the most vulnerable users. RSE can provide support in identifying tools and schemes that can directly or indirectly (e.g., through funds allocated to social and energy efficiency projects) foster the development of RECs and involve users in conditions of vulnerability and energy poverty.

In relation to the call **LIFE-2024-CET - Topic: LIFE-2024-CET-ENERCOM - Developing support mechanisms for Energy Communities**, RSE offers its expertise for cooperating with a robust international consortium to submit a project proposal.

Areas of consolidated expertise of RSE regarding Renewable Energy Communities (RECs):

- Energy modelling of electric power systems and diffused generation from renewable energy sources.
- Financial modelling and Discounted Cash Flow analysis of RECs.
- Power Flow analysis of distribution grids for systemic impact assessment.
- Optimization of RECs (heat pumps, storage and electric vehicles management, load shifting).
- Building Information Modeling (BIM), CAD.

RSE’s skills:

- Programming languages: Python, Julia, Matlab.
- Data analysis (Python).