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From Earthquake Reconstruction towards Sustainable Cities and Regions in the Post COVID-19 Era
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Clean energy and development of inland areas affected by the earthquake. Financing of Renewable Energy Communities.

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Introduction:

The local production and sharing of renewable energy through **Renewable Energy Communities (RECs)** contributes decisively to the enhancement and revitalization of the internal areas affected by the earthquake.

In this perspective, the **Complementary National Plan for the 2009-2016 Earthquake Areas** (sub-measure A2, intervention lines 3 and 4) establishes non-repayable contributions for:

- centralized systems for the intelligent production and distribution of energy and/or heat from renewable sources;
- local energy communities for sharing electricity from clean sources for the benefit of citizens and businesses.

The **National Recovery and Resilience Plan (PNRR)** also finances energy communities and self-consumption in small municipalities, i.e. under 5000 inhabitants (Mission 2, Component 2, Investment 1.2).



Research subject:

For the purposes of the economic sustainability of CERs, especially during their execution phase, the research focuses on **Social Impact Bonds (SIBs)**, forms of **Impact Investing** that combine financial returns and positive social and environmental impact.

Furthermore, for the advantages of disintermediation, it will be analysed the opportunity of adopting innovative technologies, such as **Blockchain** and **smart contracts**, in the context of the **peer-to-peer transactions** within and/or outside the CERs.

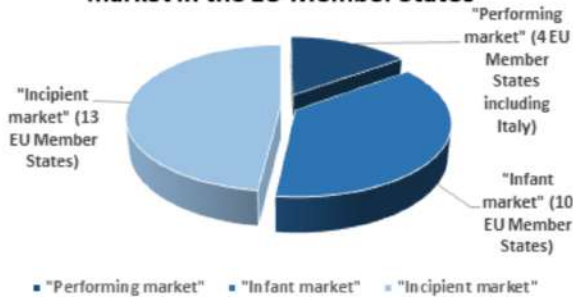


Conclusions:

The decentralization of the energy market promotes an active and direct participation of citizens in the process of development and revitalization of the areas of the crater. Energy, therefore, pursues a **"civic use"**, as example of functional property for the common good.

This **"bottom-up" approach** is also adopted through the use of the SIB. This alternative form of financing is suitable for finding more resources and improving the quality of services. Finally, the Blockchain and its applications (smart contracts) guarantee equality in negotiation relationships, contributing to greater **social inclusion**.

Maturity of the Social Impact Investing market in the EU Member States



Processing by the Author based on M. Maduro, G. Pasi e G. Misuraca, Social impact investment in the EU. Financing strategies and outcome oriented approaches for social policy innovation: narratives, experiences, and recommendations, 2018, <https://publications.jrc.ec.europa.eu/repository/handle/JRC111373>

Objectives:

The aim is to configure a scalable and replicable organizational scheme at a territorial level instrumental to the achievement of **social** and **economic results**, together with the **environmental ones**. The self-consumption of clean energy favours:

- the overcoming of **energy poverty** through savings in public and private energy expenditure;
- the decrease of intermediation costs thanks to the use of Distributed Ledger Technologies.

The sale of excess energy guarantees the necessary economic resources for the implementation of community services.

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