

# ECO-WELFARE AND THE ENERGY TRANSITION

THEMES AND DEBATES FOR AN EMERGING INTERPLAY

## THE ROLE OF RENEWABLE ENERGY COMMUNITIES IN THE ENERGY TRANSITION

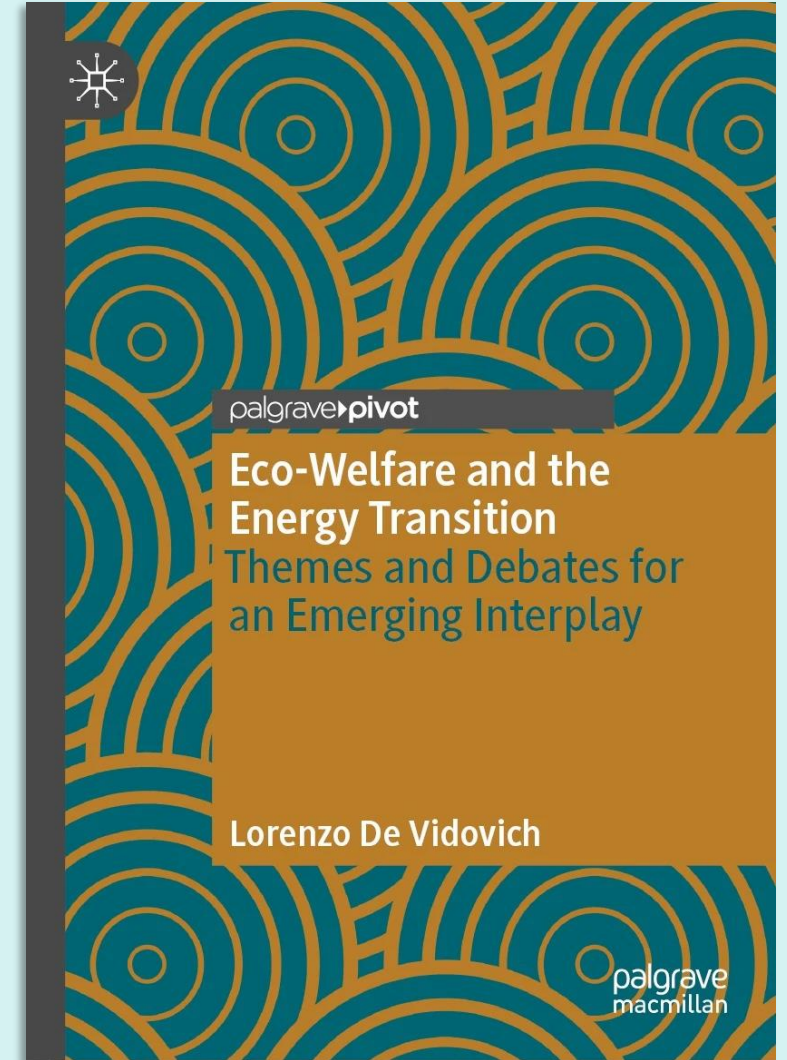
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# What is a Renewable Energy Community?

## Definition from the EU

Energy communities organise collective and citizen-driven energy actions that help pave the way for a clean energy transition, while moving citizens to the fore

They contribute to increasing public acceptance of renewable energy projects and make it easier to attract private investments in the clean energy transition.

At the same time, they have the potential to provide direct benefits to citizens by increasing energy efficiency, lowering their electricity bills and creating local opportunities in social cohesion projects and labour market

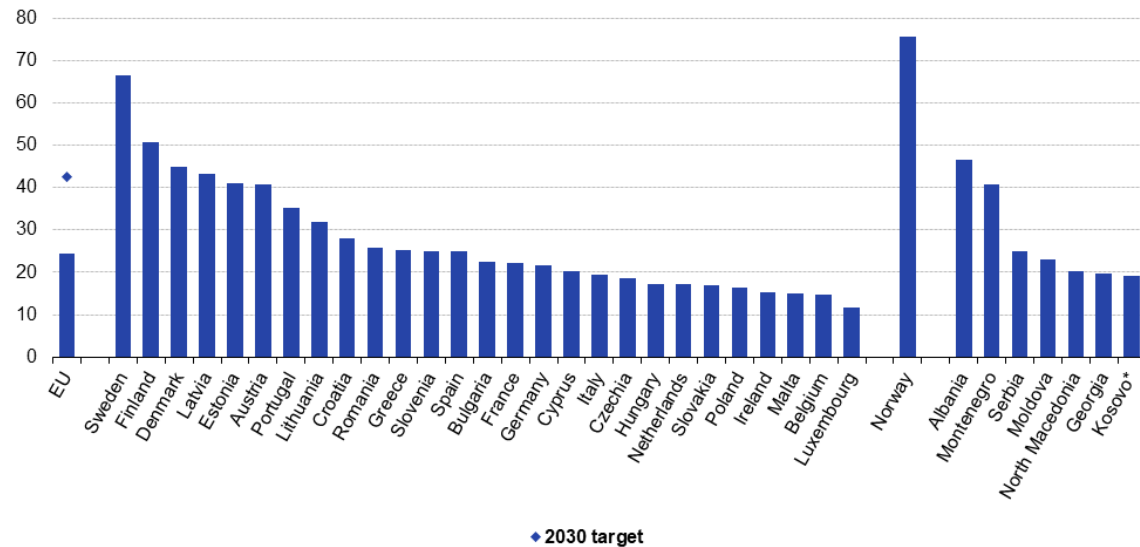
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# Placing RECs in the eco-social debate

## Share of renewable energy in gross final energy consumption (2023)

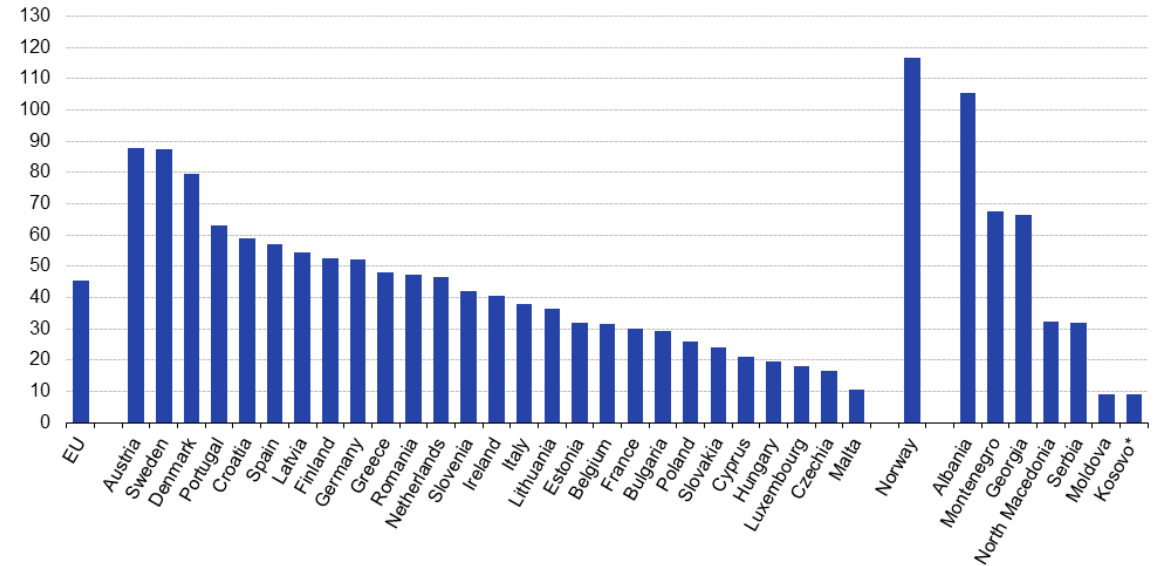
Share of energy from renewable sources, 2023 (%)



\* This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.  
Source: Eurostat (online data code: nrg\_ind\_ren)

## Share energy from renewable sources in electricity consumption (2023)

Share of energy from renewable sources in gross electricity consumption, 2023 (%)

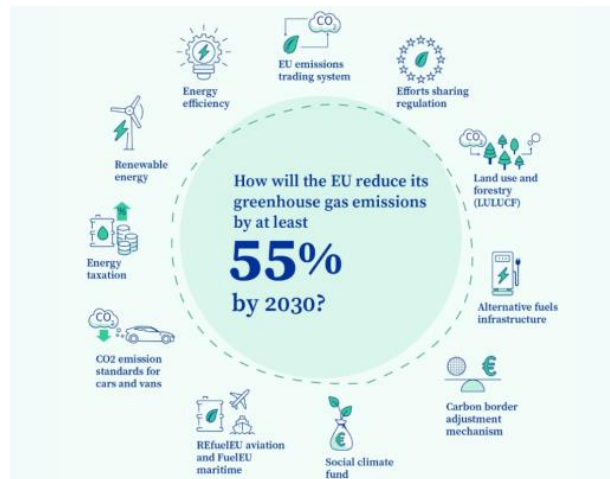
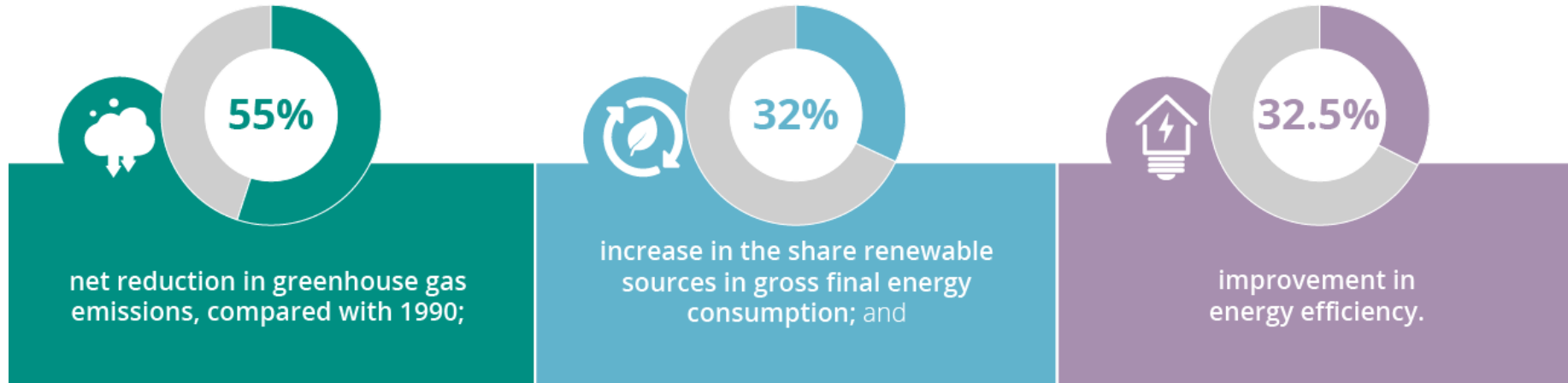


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Source: Eurostat (online data code: nrg\_ind\_ren)

In 2023, renewable energy represented 24.5% of energy consumed in the EU, up from 23.0% in 2022

# RECs in the European framework

The current 2030 minimum targets for greenhouse gas emissions, renewable energy and energy efficiency at the EU level are:



The banner features a globe with stars and a leaf icon, with the text "European Green Deal". To the right, it shows the European Commission logo and the text "REPowerEU: Joint European action for more affordable, secure and sustainable energy".

© Sources: European Environment Agency | European Commission

# RECs in the European framework

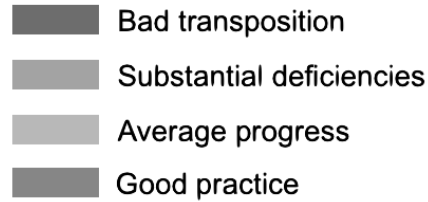
- Directive EU 2018/2001 | **RED II**  
Promotion of the use of energy from renewable sources
- Directive EU 2019/944  
Common rules for the internal market for electricity

- **Three aims**

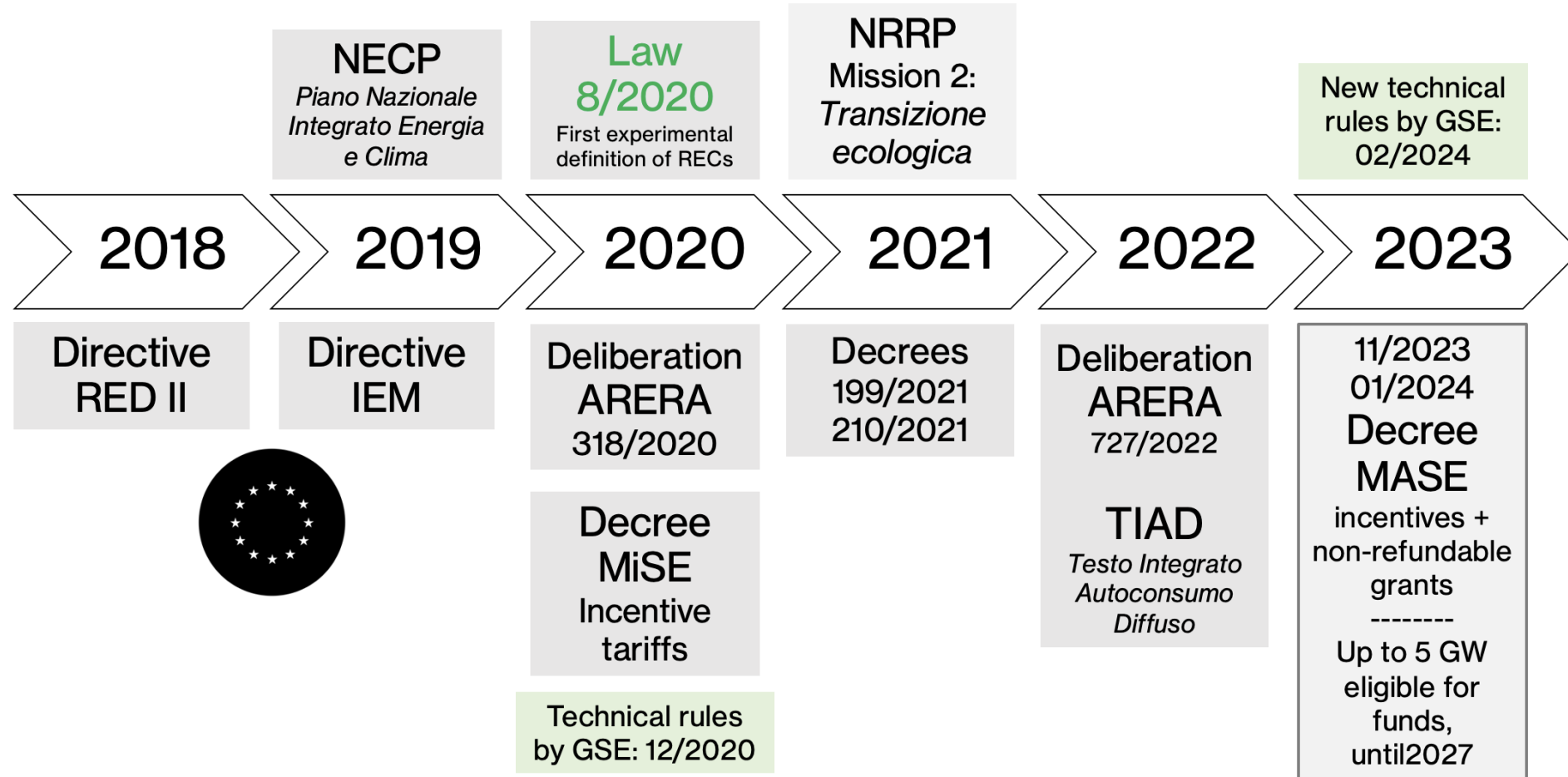
- Decarbonization
- Decentralization
- Localization

- **Tre typologies of benefit:**

- Environmental
- Economic
- Social



# A focus on Italy: regulatory framework



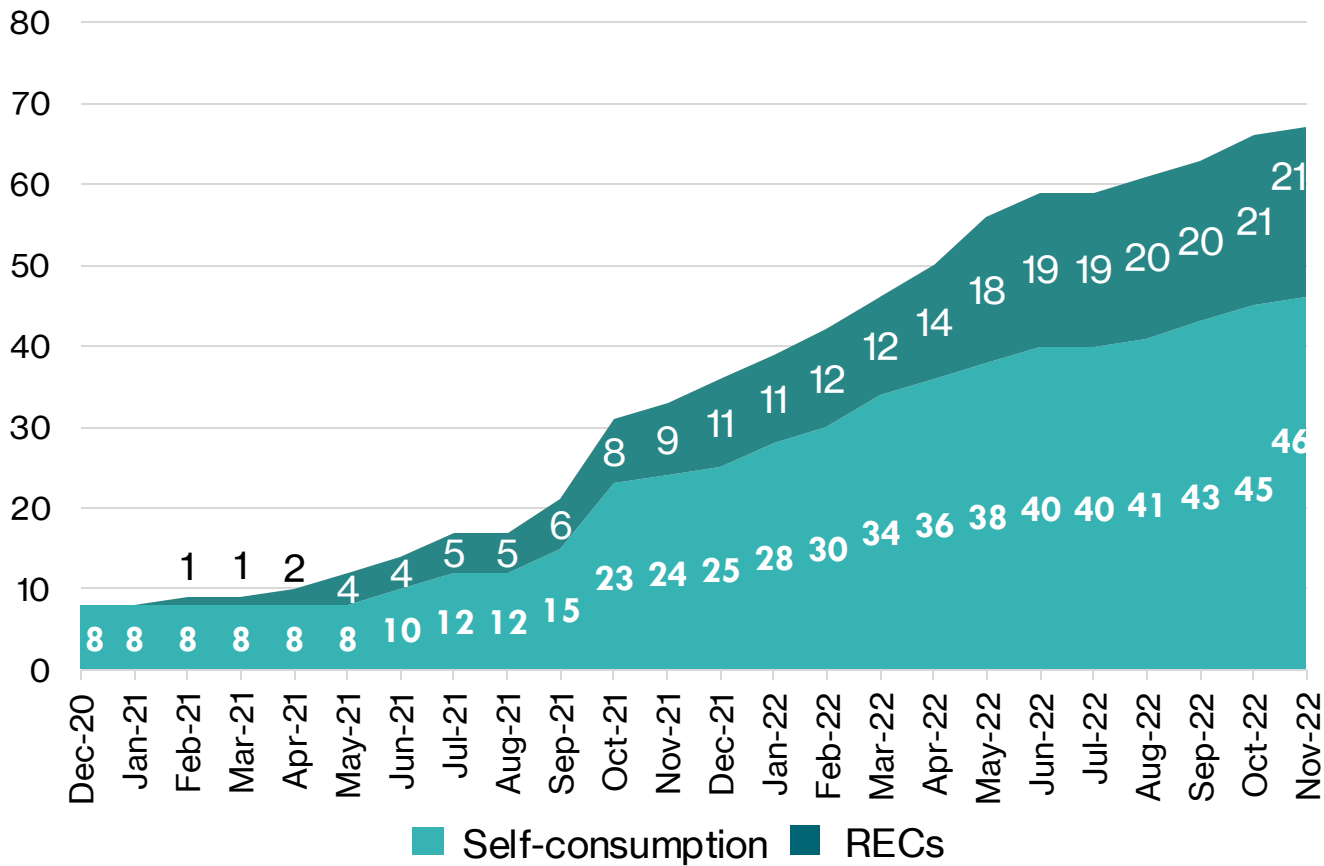


# A focus on Italy: emerging cases



in **2024**:  
192 configurations  
~60 MW power

Self-consumption schemes and RECs:  
cumulative trend in operation as of 31 December 2022.



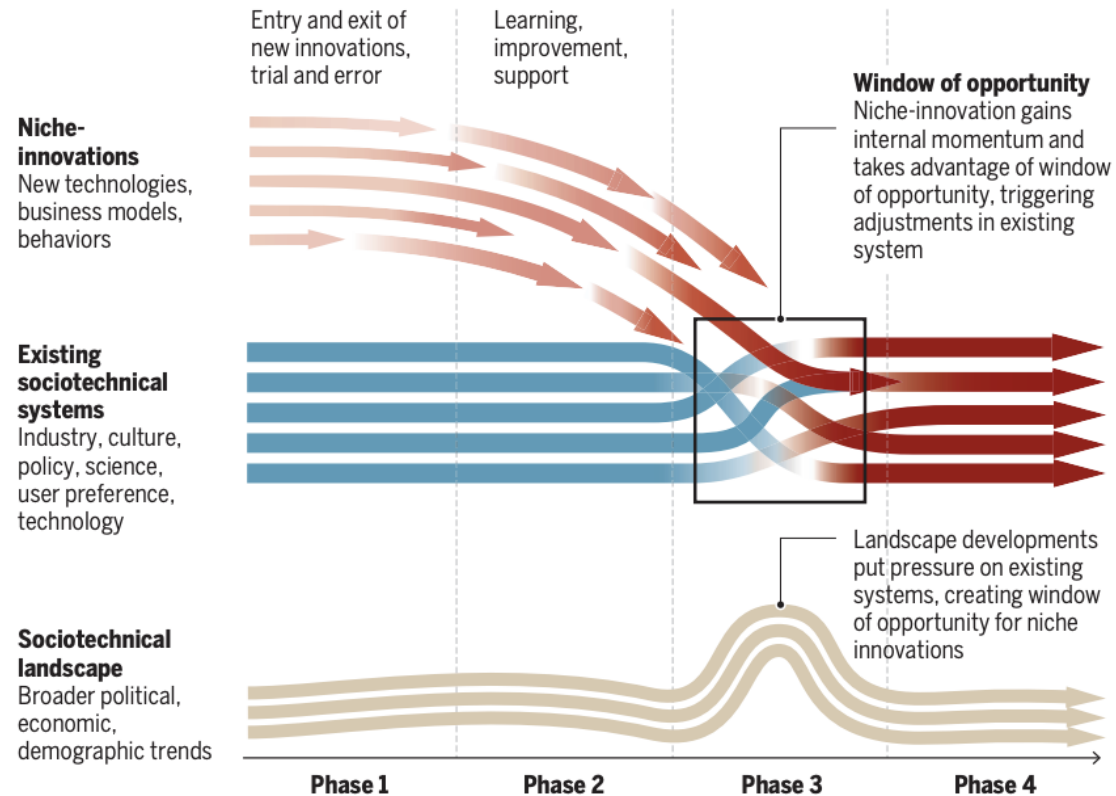
Source: GSE (Gestore Servizi Energetici)



# RECs and socio-technical implications: organizational innovations and the transformation of energy practices

## Foster innovations to take advantage of windows of opportunity

Internal and external forces pressure the existing system, which can realign around maturing innovations



# RECs and energy poverty: strong or weak tie?

**EMPOWERMENT**

ENERGY POVERTY

Empowering and protecting vulnerable end users

ENERGY COMMUNITIES

Empowering through community-based and self-consumption schemes

## **THREE CAVEATS**

### **Who to engage?**

*Fuel poor* is a hard-to-reach target

### **Where? Scale and place matter!**

Fragile neighbourhoods, rural or remote municipalities; not only cities.

### **Which regulatory scheme?**

Mitigation of energy poverty risk VS community energy support | Two different frameworks

## CONCLUDING REMARKS

# Sum-up

### A key message from the book

Energy fits into the eco-welfare framework insofar as it satisfies both societal and environmental needs, is a driver of the low-carbon transition, and interacts with the social practices that characterize a socio-technical system.

pp. 141 | 142

# CONCLUDING REMARKS

## RECS AS ECO-WELFARE TOOLS?

**RECs encourage energy citizenship:**  
joining a REC end users enact an active role in the energy system

**Socio-ecological implications:**  
beyond economic returns, RECs ensure **environmental** and **social** benefits for their members

**Socio-technical and organizational implications:**  
RECs are “sub-niches” of the socio-technical community energy system, bringing new organizational innovations

**A tension | RECs and energy vulnerabilities:**  
currently a weak tie, due to several barriers to be addressed (and investigated)



# THANK YOU | Q&A



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