

# Energy poverty, energy crisis and a just transition *with* the people

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Tackling energy poverty through the right to energy and just energy transition

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# Energy poverty is so much more than just lacking a service



## Outline

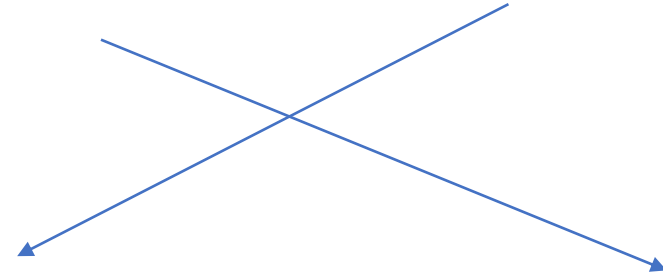
- Just transition and energy poverty
- Are the emergency measures socially just and climate friendly?
- What could be done in a more structural way? Renewable Energy Communities (RECs) as an answer

# What does just transition mean?

Decarbonation of our energy system and more globally of our economy to reduce emissions and their impacts on the climate

May create losers and winners

Will provoke resistance to change



**SO**

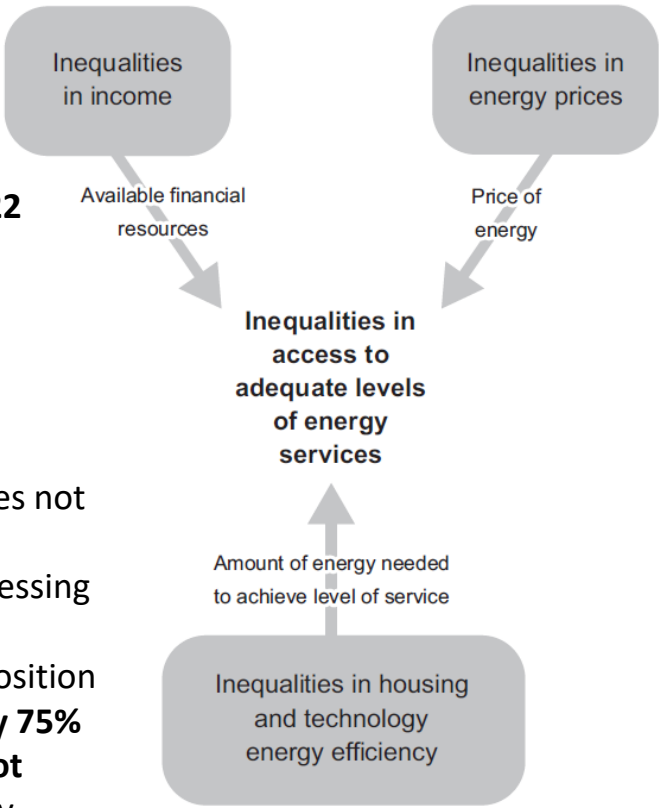
A just transition should overcome structural barriers to tackle:

- **Unequal access to low carbon energy services**
- **Unequal access to rights and decision making**
- **Unequal distribution of costs and benefits**

Just Transition is both a process (how we reach it) and an outcome (it has to be fair)

# How to talk about just transition when 42 million Europeans can't heat their homes adequately?

The successive crises and the current economic model increased income inequalities: **9.3% of the population unable to keep their homes adequately warm in 2022 (42 million Europeans)**



Worsened – as illustrated by the energy price crisis: market volatility + carbon pricing - **increase of gas prices between 67% to 271% depending on the country in Europe**

Energy efficiency measures not targeted to vulnerable households, same for accessing low carbon technologies, « renoviction » risks, imposition of new standards – **nearly 75% of the building stock is not energy efficient**, with only about 1% undergoing renovation each year

Fig. 1. Interacting distributional inequalities in fuel poverty.

Walker & Day, 2012

Energy poverty: « the inability of a household to attain a socially and materially necessitated level of domestic energy services” (Bouzarovski & Petrova 2015)

Driven by low income, high prices, bad housing

Shaped by the inertia and path dependent energy infrastructures and dependencies and policies

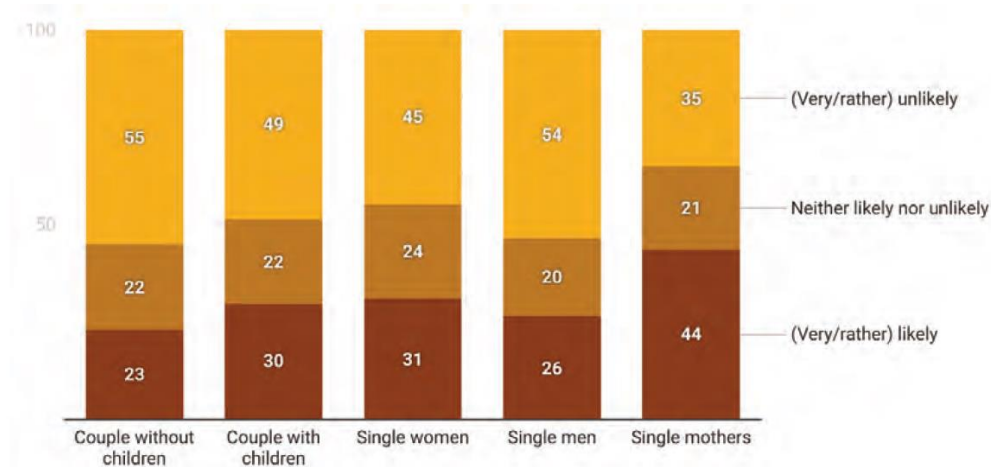


Leading to

- Lack of individual choices
- Health issues
- More polluting coping strategies with health impacts
- Affordability and lack of capital to invest
- Incapacity to function as a citizen

# Energy poverty is exacerbated by the crisis

Anticipated difficulty paying energy bills (electricity, water and gas) EU27 (%)



Note: Responses to the question 'How likely or unlikely is it that in the next 3 months your household will have difficulties with the following payments? ... Utility bills (electricity, water, gas)'

Source: Eurofound, Living, working and COVID-19 e-survey (March-May 2022)

- Q2 2022: +20% for the electricity price, +46% for the gas price on average in the EU
- 80% of Europeans declare that the crisis has reduced their purchasing power
- An increasing number of Europeans anticipating difficulty paying the energy bill
- Not all countries were hit at the same level by the price increases depending on their level of dependencies, energy mix, tariff policies etc.
- Low income households are usually disproportionately affected
- 44% of single mothers and 31% of single women anticipated difficulties paying their energy bills (vs 26% of single men)
- Middle class households were facing difficulties too: 40% of the German lower middle class could be exposed to energy poverty



Are the emergency measures socially just  
and climate friendly?

# 1st tool used: financial support

Without mitigation measures the impacts of the energy price crisis would have been worse

HOWEVER

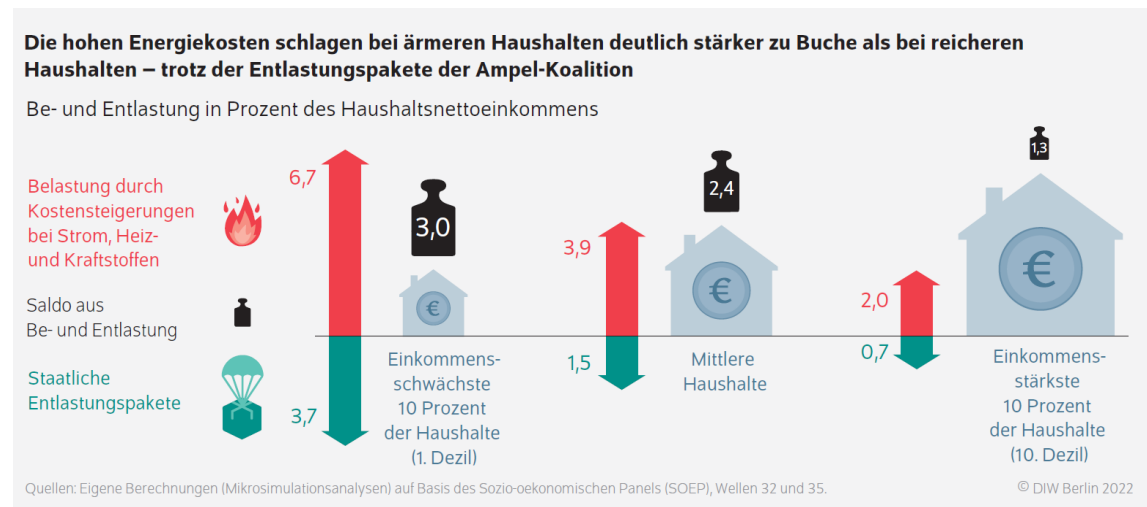
Most measures were universal and benefited more the high income households contributing to support the consumption of fossil fuel based energy

While low income households are still disproportionately affected by the price hike

Mitigation measures do not address the root causes of the problem and don't protect citizens against the next crisis

Energy price increase for households - France	With price cap (in %)	Without price cap (en %)
Oil based products among which	39.5	49.7
<i>Fuel at the pump</i>	22.8	46.4
Gas	37.6	105.0
Electricity	4.7	36.9
Average effect	28.5	54.2

<https://www.precarite-energie.org/les-plus-modestes-plus-durement-touchees-par-la-hausse-des-prix-de-lenergie>



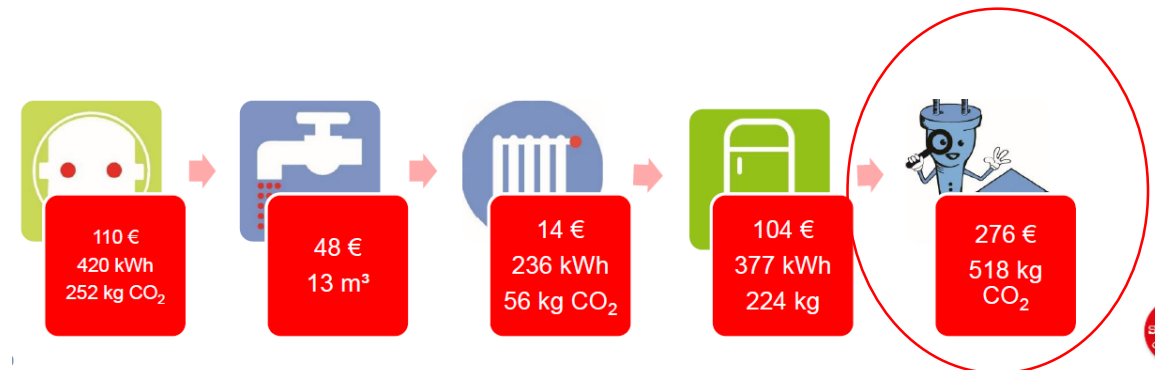
## 2<sup>nd</sup> tool: energy saving measures

- Changing and reducing energy consumption behaviour is necessary

BUT

- Because the consumption patterns between low and high income households, differ, the potential of energy savings is higher among high income households in volume
- While low income households are often faced with forced energy saving behaviour sometimes to the detriment of their well-being
- Energy saving measures have an impact on the effort of low income households to save on their bills

70 € worth energy saving devices  
Social welfare budget saving for municipalities: 156€ per check  
Social welfare budget saving for the state: 100€

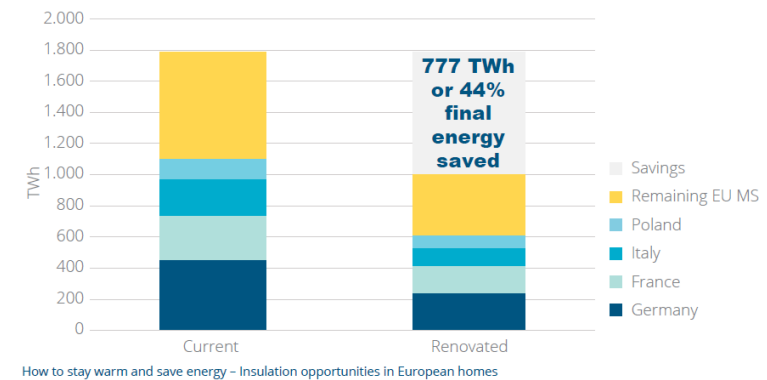




3rd tool to reach energy savings target but not so widespread: energy efficiency and low carbon energy technologies

- Energy efficiency measures are long term measures with a more preventive role
- that can improve the comfort of a home, reduce the bills and tackle CO2 emissions,
- can be combined with low carbon energy technologies
- But it was not a discussion during the peak of the crisis but it is now
- Energy efficiency and investment in low carbon technology alone are not enough if they are not targeted and if support is not provided
- Out of 13 decarbonation programmes in Germany 3 are targeting the most vulnerable (more focusing on small energy savings than deep retrofiting)

**Figure 3:** Final energy consumption for residential space heating in current and renovated buildings (in TWh) and final energy saved in EU 27



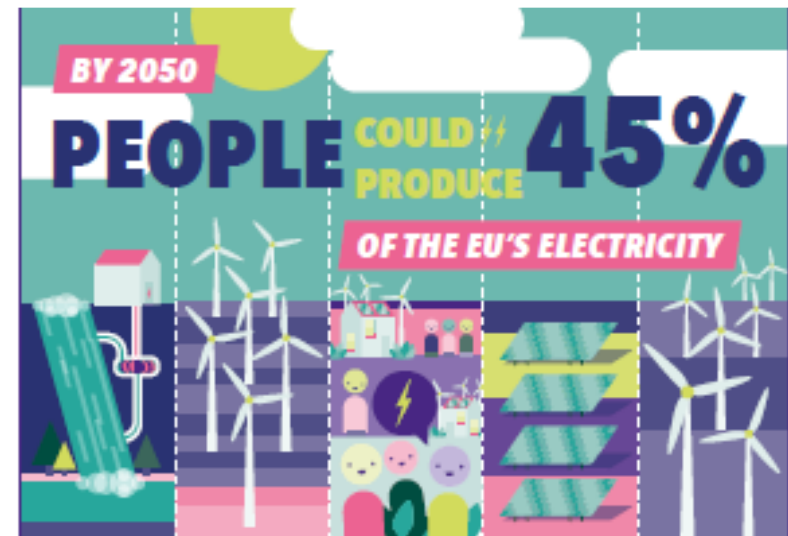
<https://www.bpie.eu/publication/how-to-stay-warm-and-save-energy-insulation-opportunities-in-european-homes/>



<https://www.qualit-enr.org/wp-content/uploads/2021/11/admin.png>

What could be done  
in a more structural  
way? Renewable  
Energy Communities  
(RECs) as an answer

Power to the people



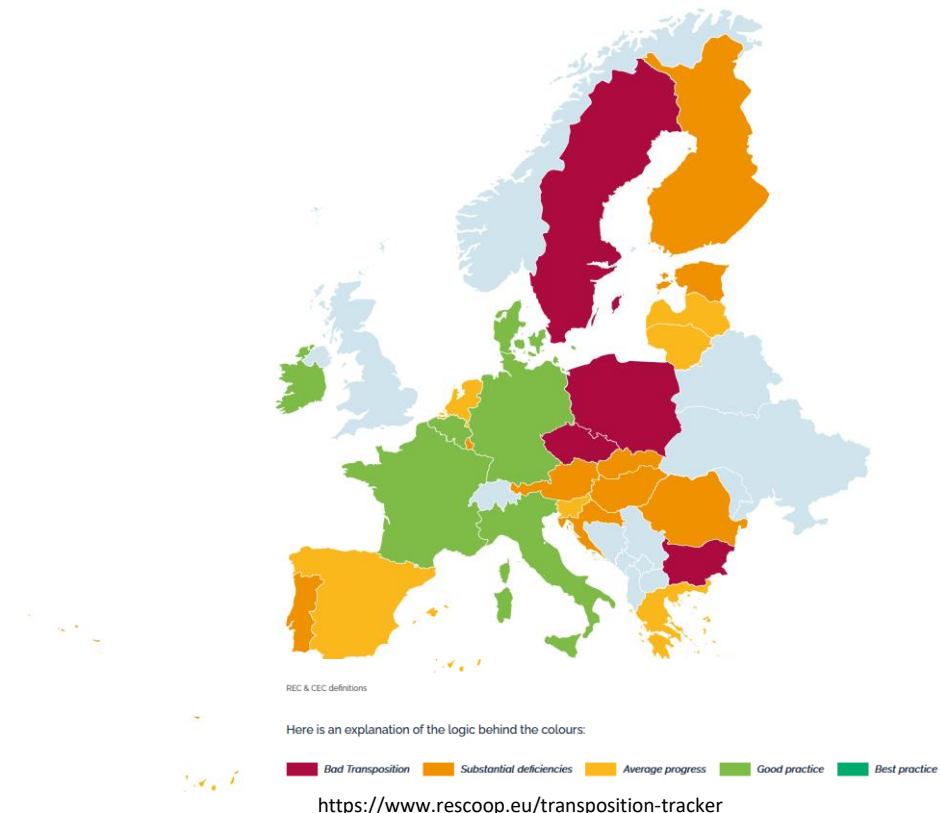
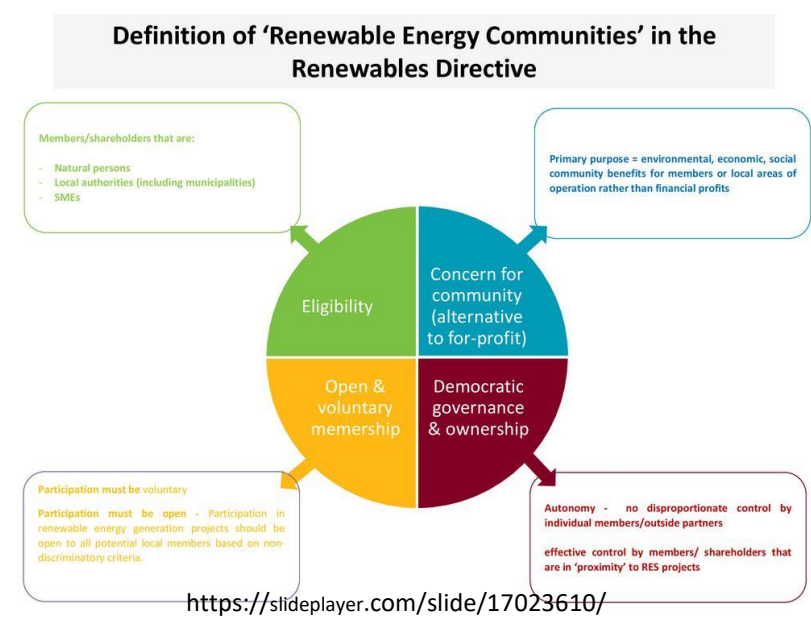
# Renewable Energy communities (RECs): combining social justice and energy transition

The revised [Renewable Energy Directive](#) (2018/2001/EU), recognizes the role of renewable energy communities in:

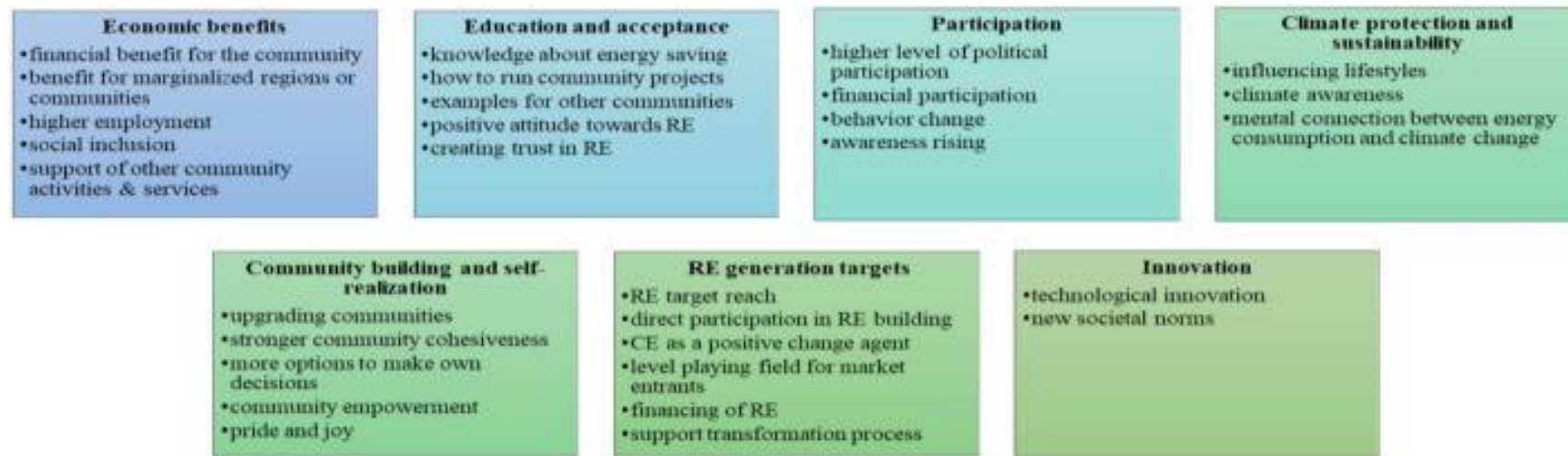
- Contributing to the energy transition targets of the EU by investing in **RE or EE projects**
- Stimulating **innovation in the governance** of the energy system
- Giving **all citizens ownership** of the energy transition (diversity and inclusivity)
- Providing **environmental, economic and social benefits** to the community rather than financial profits (not for profit local organizations)
- Contributing a **more equal distribution of benefits and sharing of burdens**

The directive needs to be **transposed** in the Member States

And RECs need an **enabling framework** from the public authorities

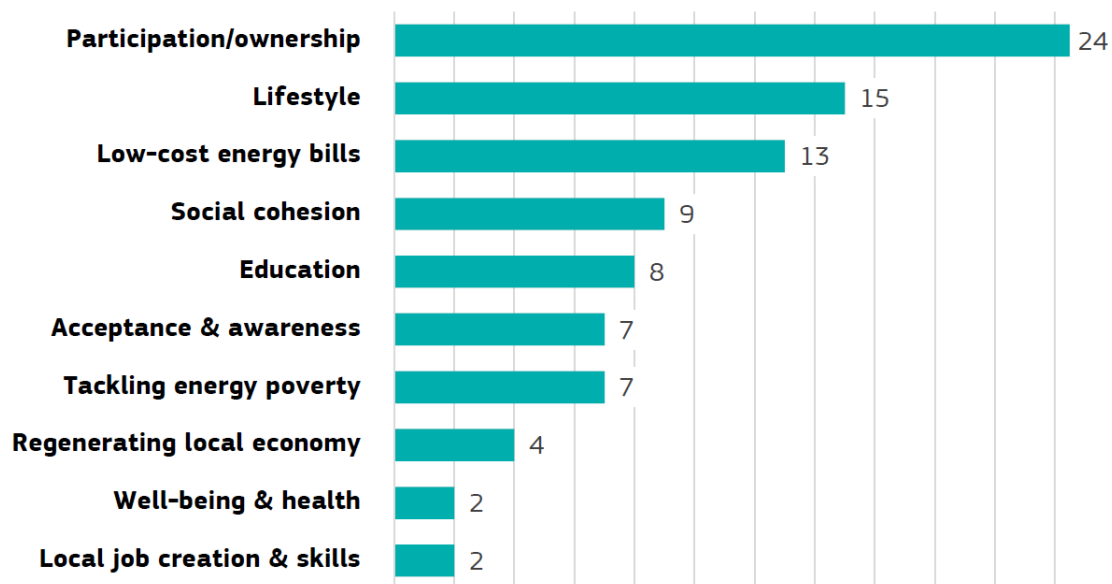


# Benefits for the society: addressing a diversity of economic, environmental and social objectives

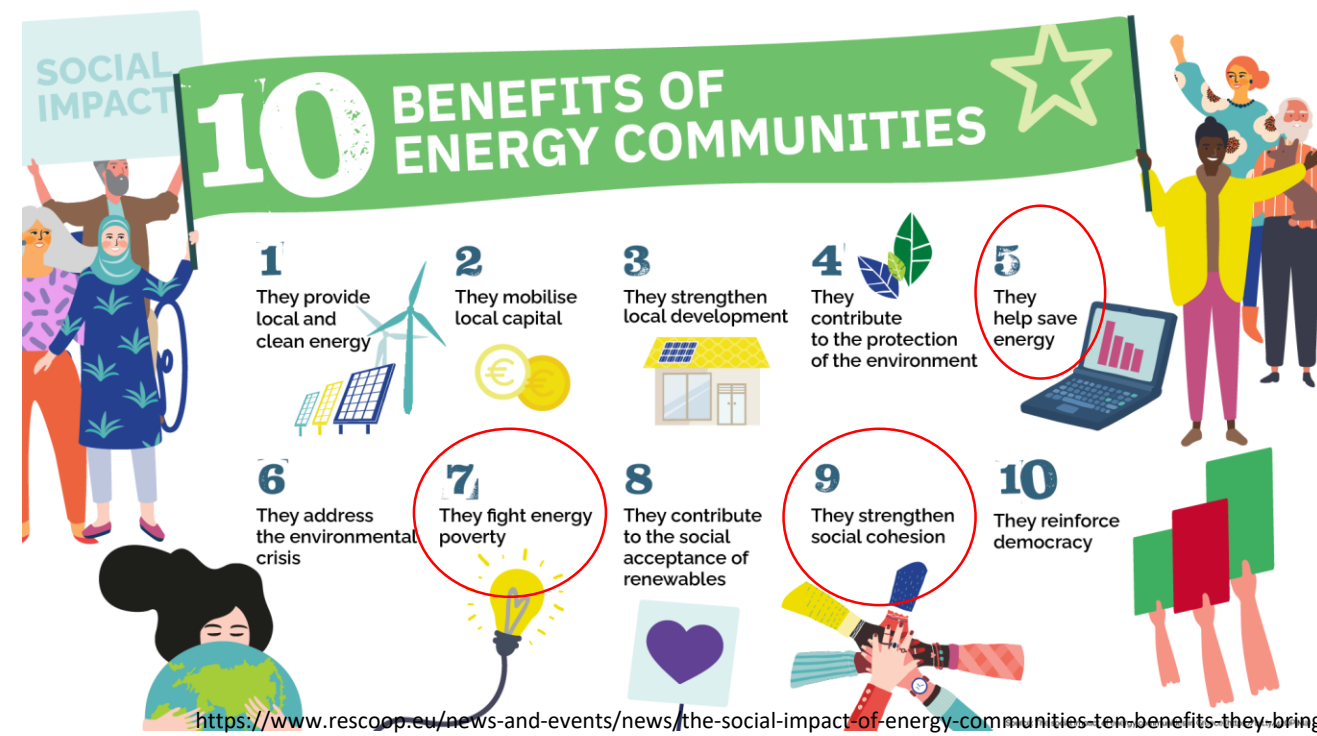


<https://doi.org/10.1016/j.egy.2020.11.087>

Figure 6 Socio-economic benefits corresponding to the 24 case studies



Source: JRC based on the case studies, 2019



<https://www.rescoop.eu/news-and-events/news/the-social-impact-of-energy-communities-ten-benefits-they-bring>

# Do RECs address energy poverty?

- Yes but in a limited way
- Little is done to allow RECs to reconcile economic, environmental, energy and social purpose, ie include vulnerable households in RECs and provide benefits of RECs to them
- Disclaimer: the survey was carried out in Germany, the Netherlands and France while the first two have definition of energy poverty

**Table 3**  
Primary Purpose of energy communities in our survey.

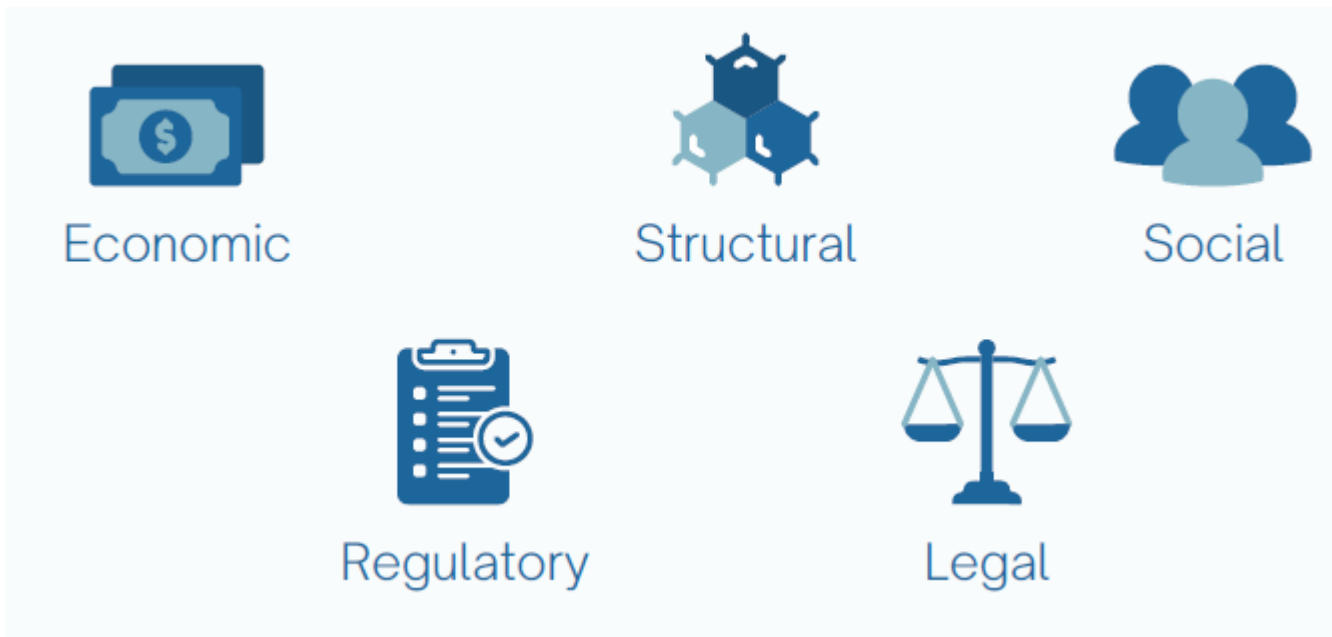
Type of Purpose	N	Per cent of cases
Promotion of Renewable Energies	60	85
Promotion of regional value creation	33	46
Dividend payments for members	17	24
Energy supply in your own hands	33	46
Provision of social benefits	10	14
Other, please specify*	10	14
None of the above	1	1,4

**Table 8**  
Reasons for not addressing energy poverty.

Reasons for not addressing energy poverty	N	Per cent
The topic was never discussed.	19	36
We need to focus on our core activities.	11	22
We do not have sufficient means to address energy poverty.	5	10
We would like to, but we do not know how to identify them and what they need.	4	8
Energy poverty is not a problem in our community.	5	10
Other, please specify:	7	14
Total	54	100

Source: Authors.

# Energy communities as social actor contributing to a fair transition? External barriers



<https://ieecp.org/wp-content/uploads/2023/04/Collaborative-briefing-energy-communities-and-the-energy-crisis-2023.pdf>

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Original research article

Do renewable energy communities deliver energy justice? Exploring insights from 71 European cases

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ABSTRACT

A growing energy justice literature underlines that complex energy injustices in energy transition disproportionately affect vulnerable and energy-poor households. Literature and policies discuss renewable energy communities' (RECs) potential to enable citizen participation in energy transition and shape a just transition. Low-income and energy-poor households could benefit from granting access to affordable energy tariffs and energy efficiency measures when participating in RECs. Recent EU legislation highlights RECs' social role in energy poverty alleviation and stipulates the participation of all social groups in RECs, especially those groups that are underrepresented under RECs' members. In this light, the energy justice framework is increasingly applied to analyse RECs' social contributions in different countries. Still, empirical evidence of RECs' capacity to include underrepresented and vulnerable groups and mitigate energy poverty as a particular form of energy justice remains scarce. Drawing on data collected among 71 European RECs, our exploratory research investigates how RECs engage in this social role by improving participatory procedures to enable vulnerable groups' participation and by distributing affordable energy and energy efficiency to vulnerable households. Using the energy justice framework, we explore how RECs resonate with the three energy justice tenets (distributive, recognitional and procedural) by addressing underrepresented groups and energy poverty.

## 1. Introduction

Concerning equity and justice, RECs are increasingly discussed as taking a central role in overcoming energy-related injustices with a

# Energy communities as social actor contributing to a fair transition? Internal barriers

**Table 9**  
Applying recognitional justice to the survey's results.

Element	Indicator	Challenges	Opportunities
Awareness of energy vulnerability and energy poverty	Knowledge about energy vulnerability & poverty, preferences & living situation of vulnerable and energy-poor households	Lack of human & financial resources, of knowledge about vulnerability, of social purpose	Collaboration with partners to share knowledge about energy-poor households
Engagement of vulnerable energy consumers	Engagement with energy vulnerable and energy-poor households	Competitive market environment	

Source: Authors.

**Table 10**  
Applying procedural justice to the survey's results.

Element	Indicator	Challenges	Opportunities
Access to information	Overcoming barriers for participation:	High share prices	Collaboration with partners to share good practices
Access to membership	- reduced membership fees	Lack of targeted information campaigns	Redesigning financial participation
Access to decision making	-lower share prices for vulnerable groups	Lack of targeted engagement activities	Adequate and accessible engagement tools
Absence of bias	- targeted information and engagement activities		
Representation of stakeholders			

Source: Authors.

**Table 11**  
Applying distributional justice to the survey's results.

Element	Indicator	Challenges	Opportunities
Access to benefits	Membership diversity	Membership/ participation determines access to benefits	Social energy tariffs for vulnerable households
Access to services	Lower tariffs for vulnerable groups		Provision of additional services
	Lower share prices for vulnerable groups		Collaboration with partners to share benefits indirectly
	Energy efficiency services targeted at vulnerable groups		

Source: Authors.

# Good practices

## WIND AGAINST ENERGY POVERTY EEKLO | BELGIUM

The wind is a common resource and should be for everyone. In Eeklo (Belgium) the Ecopower cooperative shares ownership of a wind turbine with the local authority. This type of public-civil cooperation has great potential: elected officials have a stake in benefiting from wind, while the energy cooperative provides technical know-how, reflects the voice of the citizen directly, and involves vulnerable groups.

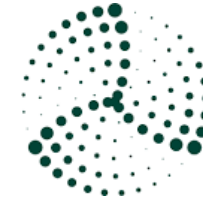
The Eeklo project started slowly, to consult people and make sure there was real support from the local community. The city is now trying to involve families in energy poverty, often people with a budget meter who are actually paying a high electricity price. Eeklo now considers to provide 750 people with a pre-financed share of the citizen energy cooperative, based on its 25% ownership of one wind turbine. By doing so these people get all the advantages of full members of Ecopower who co-own the wind turbine and can use electricity at cost, lowering their energy bills and allowing them to pay off energy debts. These members can also save up the cost of an own share (250€) in the cooperative with the savings they make on their energy bill.



Community workers from local social services will then support the energy poor families with guidance and budget management at the same time, to reduce the risk of non-payment for the cooperative.

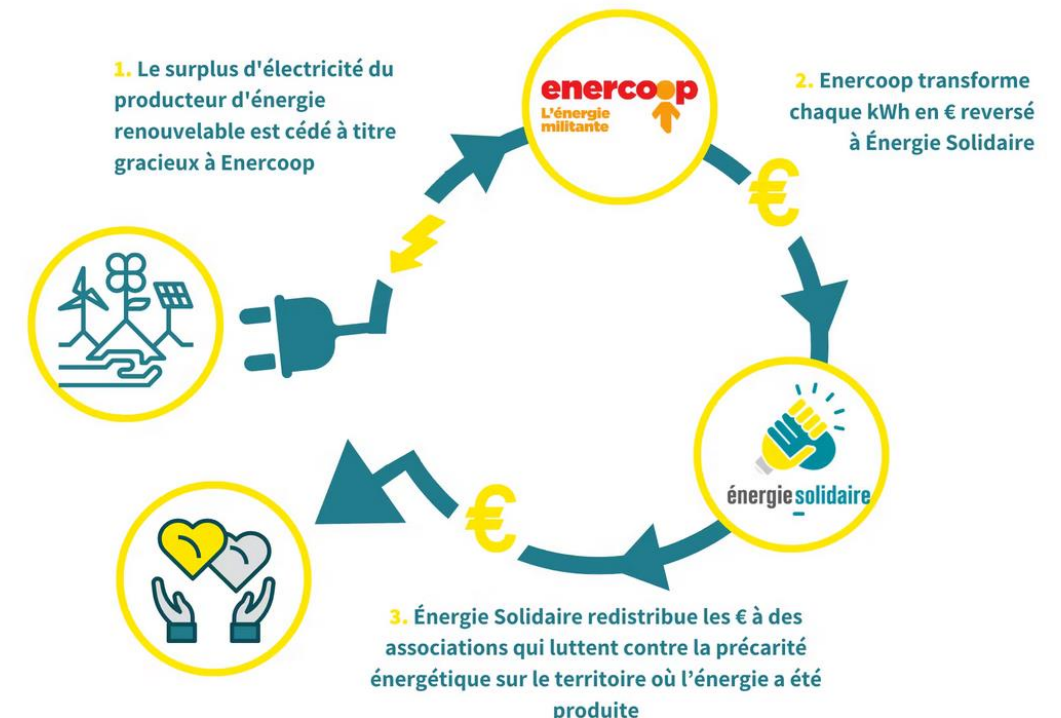
The initiative shows how you can involve people who struggle with energy bills, providing them with access to renewable and affordable electricity without having to buy a cooperative share worth €250. Without the risk of social stigma, people can become full members of the energy community and pay the cost of the share as they save.

The cooperative and the municipality in Eeklo are also cooperating on heat supply, as the city commissioned the construction of a district heating network based on waste heat and renewables. When the city issued a tender for the construction of a large district heating network, it required a 100% renewable energy target and a minimum of 30% citizen ownership. The winning consortium managed to guarantee this through a partnership with Ecopower, to make heat sustainable and affordable for everyone.



**Ecopower**  
CV

- Involving low income households
- Combining RECs and the fight against energy poverty
- The role of citizens and municipalities
- Adjusting the business models
- Recognizing who needs support





# To conclude RECs can contribute to a just transition if

- They manage to open their membership to ALL citizens or at least produce services to the whole local community
- Their role as economic, environmental and social actors is recognized and supported as such externally and internally
- An enabling framework is implemented to allow a citizen-based energy ownership structure (market reform, bank reform, business models support, simplification of procedures, grid access...) and to support them tackle energy poverty
- If it is done in good coordination with existing stakeholders involved in the ecosystem of energy poverty policies
- Education in energy transition is developed to empower ALL citizens and give them a voice
- However there is no one size-fits all and the condition for RECs to contribute to a just transition depends on context-based institutional and market settings

## A toolkit for a just transition *with the people*



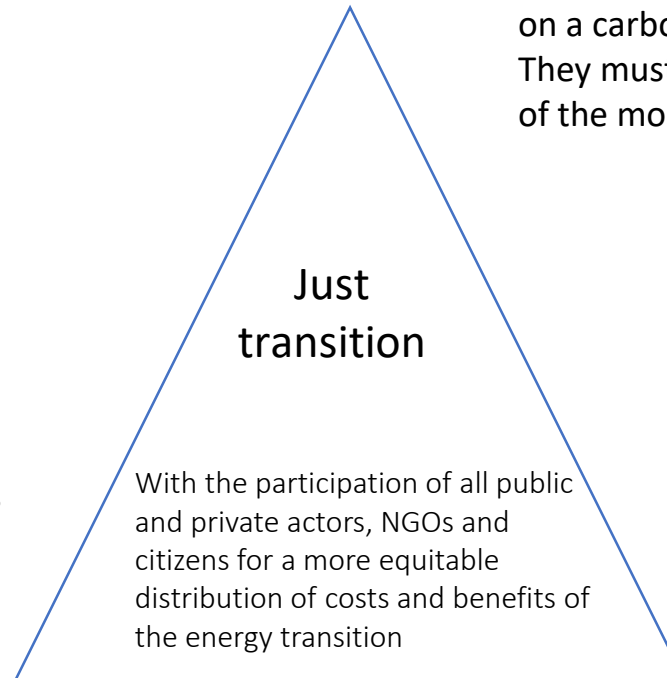
*Agenda Co-Creation and Knowledge  
Innovation (ENGAGER 2017-2021)*



# A just transition: an action based on three pillars

**Procedural Justice:** Investing in empowering citizens so that they can

- Claim their rights
- Partipate in decision making process of solutions that affect them,
- Regain confidence in institutions
- And contribute to a more positive and inclusive energy transition



**Recognitional justice:**

Regulations must recognize that energy is an essential basic service

They must take into consideration the impacts of the transition on different groups when deciding on a carbon price, ban on gas boilers, eVs etc.

They must facilitate access to funding and support of the most vulnerable

**Distributional Justice:** implementation of redistributive mechanisms

- Developing a more structural and systemic approach targeting the most vulnerable people
- Organising access to low carbon energy technologies, including RECs, for all including low income households
- Implementing a social and energy safety net
- And going a bit further, introducing a right to energy in the framework of a new social contract