

# Redistributing Power:

How can renewable energy communities  
relieve energy poverty?



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## Redistributing Power: How can renewable energy communities relieve energy poverty?

**Decades of delay to Europe's energy transition has now come at a highly visible and painful societal cost:** Last winter, volatile gas prices left millions of households across Europe exposed to skyrocketing energy bills. This has now bled into a general cost of living crisis, fueled by our deteriorating climate emergency, and war on the borders of Europe. All of which combined threatens to drive a severe spike in energy poverty while overwhelming existing low-income, energy poor and vulnerable households. By not investing in well-known and proven long-term solutions such as access to renewables and deep renovations, European decision makers are literally burning energy – and public money – or, letting it out of the single-glazed window, while people on low incomes cannot afford basic necessities like energy.

**But we can now envision a decentralised energy system with many citizens and municipalities participating in the production and distribution of energy:** Renewable energy communities offer an alternative to Europe's predatory corporate-dominated, fossil fuel-reliant, profit-driven energy market system. This decade has the potential to see the creation of a secure, decentralised energy system that is flexible, reliable and open to citizens, local communities and municipalities. We can imagine rebuilding a sense of public good when we begin to consider energy as an indispensable common good, one everyone should have access to.

**Assessing the ways renewable energy communities can address energy poverty:** Community energy offers the chance of tangible material benefits and empowerment; as passive consumers become active prosumers of energy. As we observe unprecedented mobilisations of government and EU funding to buffer skyrocketing energy prices, it is important to assess how energy communities may allow new ways of addressing both the structural causes of energy poverty and the need to ensure access to clean and affordable energy as a basic right.

## The scale of the European energy poverty crisis

**Between September 2021 and November 2022 over €700 Billion [1]** has been spent by EU member states to deal with the continent's gas price crisis. As emergency support packages have been heavily aimed at buffering consumer prices, structural energy poverty solutions, targeted subsidies for energy efficient and safe housing, and access to renewables that all could lower a household's long-term vulnerability to energy precarity or poverty have not been the focus of investment.

**"..... The surge in energy prices that started in 2021 and worsened with Russia's invasion of Ukraine in February 2022, along with the impact of the COVID-19 crisis, are likely to have worsened an already difficult situation for many EU citizens." [2] - The European Commission**



Even before the current crisis, one in four households in the EU [3], meaning **over 50 million individuals, could not afford to adequately heat, cool or light their homes** (HEAL, 2019). The lived experience of energy poverty differs across Member States, depending on factors such as quality of housing, weather and climate, presence of social safety nets and access to decent well-paying jobs. Many communities across Europe also face issues in terms of lack of access entirely; In 2020, ENGAGER reported an estimate of over 21,000 households lacking electricity grid connection in Romania [4].

However fragmented the **Europe-wide experience of energy poverty is, it is the most marginalised in our societies that bear its brunt:** There is no single energy poverty profile across Europe and there is a lack of reliable EU wide statistics but it is certain that low-income families, precarious workers, elderly people, single-parent homes, people with disabilities, people who identify as female or are gender non-conforming, as well as racialised communities are affected earliest and hardest.

One aspect lies in marginalised groups living in informal, unsafe or undocumented dwellings; For example, members of Slovakia's Roma communities face documentation issues that prevent legal electricity grid connection [5] to their homes. Even with documentation the distance and rural location of these dwellings makes grid connection unprofitable from the perspective of electricity distribution companies [6].

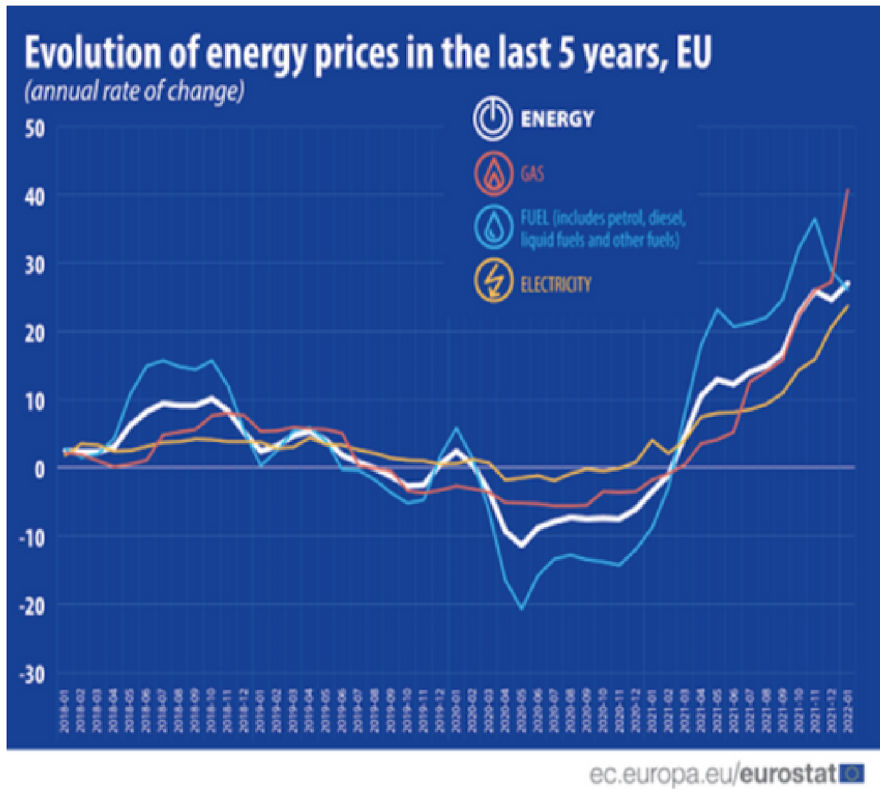
(Un)Affordability of utilities like energy is another strand, families and individuals are also forced to rely on illegal reconnection to the electricity, gas and water supplies when their means of paying for basic necessities has been eroded by austerity, lack of social safety nets, low pay, precarious or shrinking job markets, and unchecked rising bills; On the other side of the continent, in heavily urbanised parts of Spain and Catalonia, squatting became a key coping mechanism for the fall out of the 2008 financial crisis, yet firms will not connect to homes with living situations [7] that are defined as illegal.

The costs to the public are not just financial, far too many live in legal but unhealthy and energy inefficient homes. Across the EU27 and the UK there is an economic burden generated by the health costs associated with inadequate housing. This is estimated at over €194 billion [8] per year while the inability to adequately maintain a comfortable and safe temperature within homes is linked to the deaths of 100,000 people annually [9]. Finally, throughout Europe, we see how dirty fossil fuels are used to power decrepit, energy inefficient and unhealthy homes.



## Climate breakdown and fossil fuel dependence is fuelling our energy crisis

Buildings account for 40% of the EU’s energy consumption, and 36% of our CO2 emissions [10]. As Oil and gas majors like BP, Shell, TotalEnergies, Exxon and Chevron post third-quarter profits “totalling nearly \$50 billion”[11], the public can see a market system that is actively driving the climate catastrophe, enriching the few even as it impoverishes the many. While the war in Ukraine has done much to affect the supply and cost of gas in Europe, it has exacerbated a situation that had already become grave. As can be seen in Figure 1 (below), following the lifting of all restrictive lockdown measures, by September 2021 energy prices had already started to escalate to record highs.



**Figure 1:**  
Energy prices evolution and TTF price development over the last 5 years  
**Source:** Eurostat,  
<https://tradingeconomics.com/commodity/eu-natural-gas>

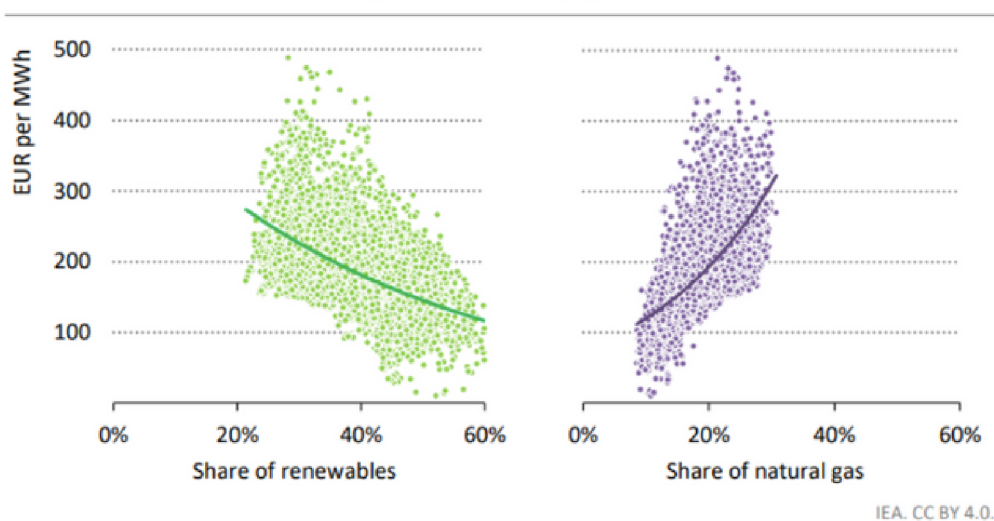
And these energy prices are intimately connected to the dependency on fossil fuels. According to the latest report from the International Energy Agency, namely the World Energy Outlook 2022 [12], there is a correlation between hourly wholesale prices and the share of renewables and gas. As can be seen from Figure 2 below, the higher the share of renewables in electricity generation, the lower the wholesale prices become. On the contrary, the higher the share of gas in electricity generation, the higher the wholesale prices become. The main - and obvious - conclusion is that if we want to **sustainably de-escalate prices for consumers, we need to quickly step up the efforts of accelerating the energy transition, focusing on quickly electrifying the power system with energy from clean energy sources.**

## Why renewable energy communities matter

Where those in power have failed to act, communities across Europe have taken energy ownership and production into their own hands: They are collaborating to forge an energy system that puts people and planet first; Not just as passive consumers, but as change makers and active participants in energy production.

Energy communities are an opportunity to build a new energy system that works to the benefit of people and planet, not the profit-margins of the powerful: Energy communities can ensure that benefits and savings are recycled within the local community not used to fund distant corporate shareholders or offshored.

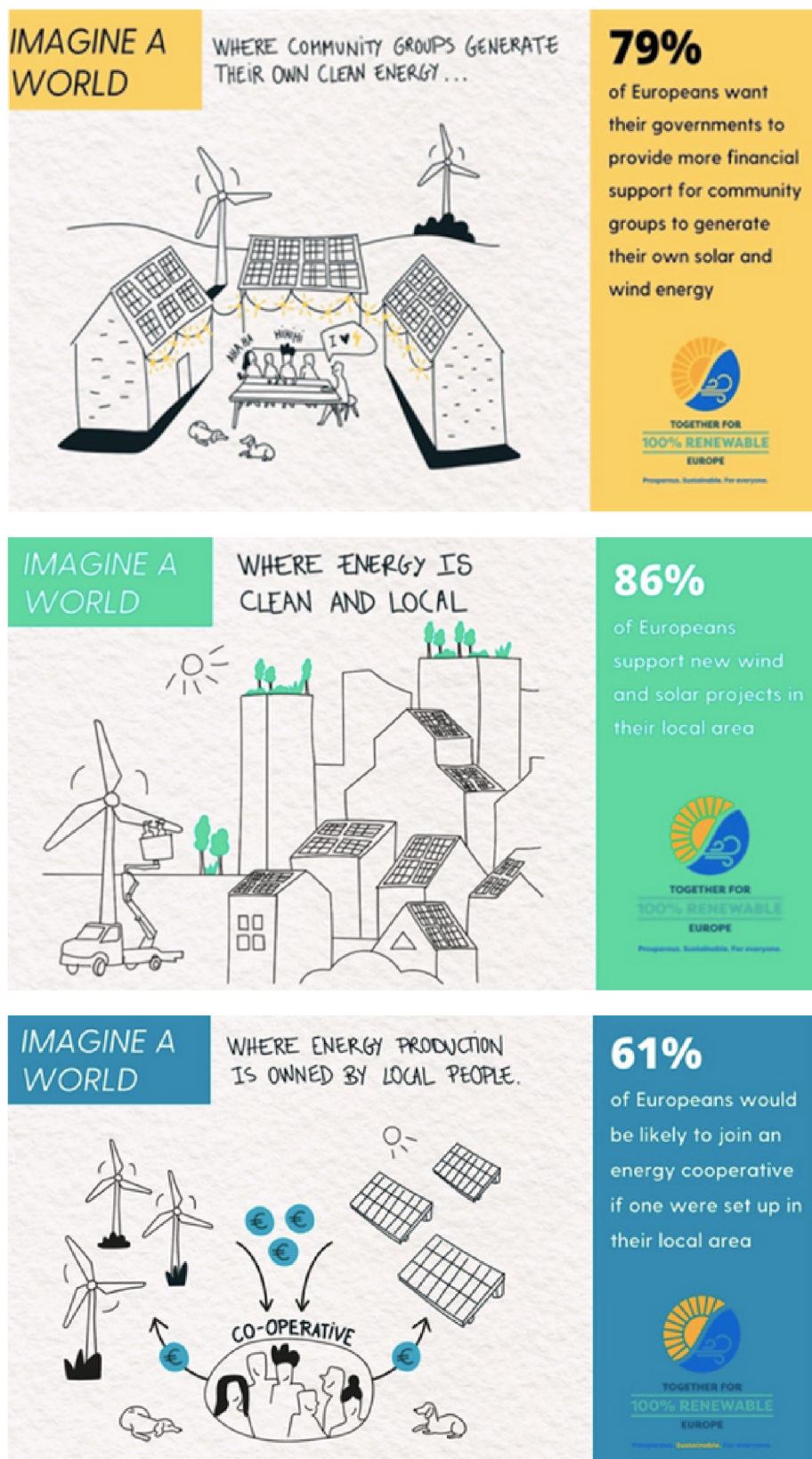
**Figure 6.12** ▶ EU hourly wholesale electricity prices by shares of renewables and natural gas in electricity generation, first-half of 2022



*High shares of renewables in electricity supply drove down wholesale electricity prices in 2022, while high shares of natural gas pushed them up*

**Figure 2:**  
Wholesale price correlation  
**Source:** IEA

Community and citizen ownership can ensure that the energy transition remains popular amongst EU citizens and receives political support, as exemplified by a recent poll conducted by ECF and YouGov [13] (Figure 3): "Across Europe, 86% of people questioned said they would support new wind and solar projects near to where they live. They also expressed a strong interest in joining a local energy cooperative and supported government measures to accelerate the rollout of wind and solar power." Moreover, 79% of Europeans want their governments to provide more financial support, while an impressive 61% would be likely to join an energy cooperative in their respective region.

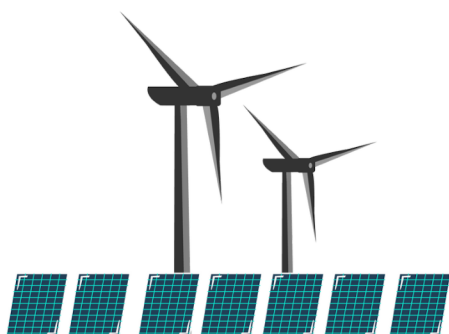


**Figure 3:** Europeans' opinion on renewables and community energy  
Source: ECF polling

## Ways and means of tackling energy poverty with energy communities

- Energy communities are well placed to take stock of local needs and recycle the benefits back into the community in the form of savings and investments.
- Community energy initiatives are also well-placed when it comes to identifying and building relationships with households experiencing energy poverty or precarity.
- Access to renewable energy can lead to lower energy costs for people in poverty.
- Energy communities can be a major enabler also for energy efficiency and energy savings: due to higher awareness and understanding of energy matters.
- Energy communities can raise public awareness of energy issues among the public generally, while building energy expertise and technical capacity among vulnerable households.
- Renewable energy communities may act as an anchor institution for building collective power and community cohesion.

As membership fees are an obstacle to participation, many renewable energy communities wishing to play a social role aim to relieve energy poverty through distributing their benefits indirectly via several different measures defined by ResCoop as awareness and capacity building, solidarity-based energy financing, and collaboration between citizens and local authorities [14].



ResCoop and the CEES Project highlight flagship projects such as ZEZ, a Croatian Green Energy Co-op, and UK-based Repowering offers courses and accreditation for young people as energy experts. ZEZ has developed an **Energy Advisors** programme to provide training and qualifications for 25 unemployed young people as energy advisors; Whereas Repowering offers a range of educational training programmes for children and adults, such as a youth training course (for 16-19 year olds) covering a range of subjects from low-carbon technologies and solar panel making to CV writing.

Scotland-based ALienergy offers professional targeted training to frontline workers most likely to encounter someone in need of support with energy poverty. They aim to proactively destigmatise energy poverty and refer people in critical situations to energy efficiency schemes. Importantly, they watch out for moments of material life change, for example, after having a baby or losing your job, where your energy needs may rise or your ability to afford them may drop. Beyond this, they also offer kits for keeping warm and for measuring energy consumption in the short-term.

Enercoop, a 100% renewable energy supplier, offers the Energy Solidaire micro donations scheme where 1 centime for each kw consumed is donated to organisations fighting energy poverty. Municipalities, also donate their surplus energy from their municipally owned renewables production, like the town of Prémian (Hérault) via its solar plant. While already offering financing schemes for solar installation, Portugal's Coopérnico is also trialling energy cafes and home visits to empower people to make more impactful choices rather than asking people already in energy poverty to ration their usage more.





## A promise unfulfilled - structural support for community energy

In 2018 and 2019, the EU adopted a series of energy policies under the Clean Energy for All package (CEP), in order to help decarbonise the EU's energy system in line with the Paris Agreement. For the first time, EU legislation recognised the role of community energy ownership in meeting these goals.

Of the eight laws included in the 2019 CEP, two directives in particular contained provisions to establish a supportive EU legal framework for community ownership of energy:

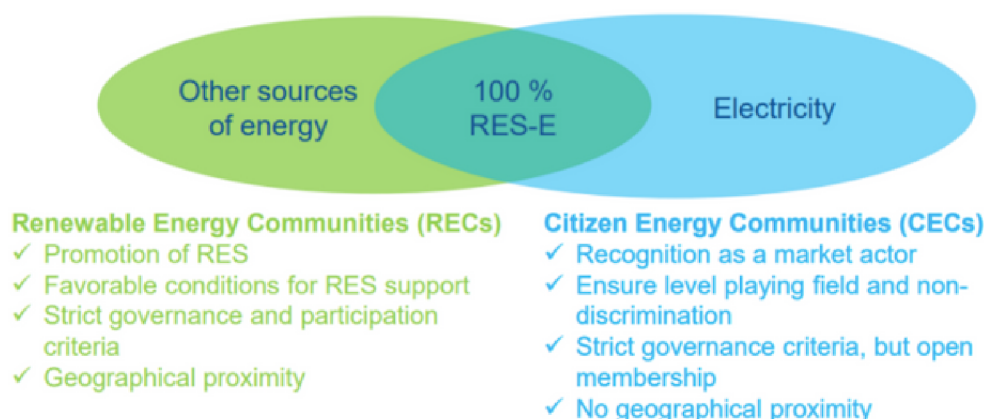
- The Renewable Energy Directive (RED)
- The Internal Electricity Market Directive (IEMD)

Under these directives, certain types of energy communities have been established in EU law, namely the Renewable Energy Communities (RECs) in the Renewable Energy Directive (RED) and Citizen Energy Communities (CECs) in the Internal Electricity Markets Directive (IEMD). Although they do present some overlaps, there are also differences in these definitions (Figure 4 below).

In addition to the legal frameworks to be established under the directives, member states have also the responsibility to assess the existing barriers and potential of development of renewable energy communities in their territories.

The transposition of the main Directives (RED and IEMD) into national legislation across the EU member states is imperative to unlocking the potential for energy communities to have deep social impact: However, many member states have yet to transpose the legislation or successfully include the definitions of energy communities into national law. [15] The lack of transposition blocks EU citizens' rights in participating in the energy transition, delays the energy transition and sustains high electricity and heating prices.

The EU has, as part of its RePowerEU response to the energy crisis, also proposed the establishment of 1 renewables-based energy community per municipality across the EU, for municipalities above 10,000 inhabitants by 2025.



**Figure 4:**

Overlap between RECs and CECs

**Source:** Arnould, J. and D. Quiroz (2022, September),

Energy communities in the EU: Opportunities and barriers to financing, Amsterdam, The Netherlands: Profundo

While it is clear that having a mandate to have an energy community wouldn't mean much for alleviating energy poverty without accompanying funding and technical expertise. There is also a concern that a blunt target may in fact increase the workload for already overstretched local administrators. If achieved successfully, this could be a significant contribution to building the decentralised power system we need and support local communities to help address energy poverty in the European Union.

It is therefore important to highlight how we can filter the various EU-level processes and funds downwards in order to enable municipalities and communities to assess and overcome existing barriers, such as:

- Access to funding (i.e. seed funding and project financing)
- Technical issues (i.e. grid access)
- Regulatory and administrative issues (i.e. delays in licensing, auctions)

However, this ambition needs to be backed by action at the member state level to ensure that citizens can truly participate together in building a new energy system. Member states now need to transpose the legislation, assess the barriers to community energy, establish the supporting legal framework and provide sufficient technical and financial support to ensure that communities can be part of the energy transition and make their contribution to eliminating energy poverty. This means addressing gaps in legislation and recognising that a lot of existing policy frameworks have been created for people, not necessarily with them.

### **The indirect impact of addressing energy poverty:**

Any localised wage growth and security will itself have an impact on ability for households to pay energy bills, whilst increased public control over local energy production allows for greater buffering of local households and public services from volatile and predatory markets.



## Conclusion: Energy communities want to fight energy poverty - we must enable them

Energy communities can identify, safeguard, and uplift households that are especially vulnerable to energy market volatility. But it is important to view renewable energy communities as one of several tools in the fight against energy poverty; They cannot be seen as a silver bullet solution, especially without the right enabling frameworks and incentives, or be tied to unreasonable expectations.

In the end, responsibility for ensuring energy justice must lie with governments, local authorities and policy makers. Regarding the ownership of energy production, the energy community movement can be perceived as the creation of a new relationship to energy, contributing to the resilience of communities. This process also strengthens the recycling of profits and benefits within communities and citizens, rather than being syphoned off towards big energy players.

How quickly can we undo decades of delayed action in Europe's energy transition? It currently remains to be seen to what extent those experiencing energy poverty are already able to benefit from the advantages offered by renewable energy communities. However, it is clear that community energy contains the potential to enable the collective empowerment of communities already facing the brunt of existing - and rising - energy poverty.



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