

Factsheet

Energy citizenship - Behind the concept

Climate change poses a major threat to the natural basis of human life on the planet, demanding a shift toward a sustainable energy system, from fossil to renewable, or from high to low energy usage, and active participation of citizens in the energy transition.



// What is energy transition?

A pathway towards the transformation of the global energy sector to diminish the reliance on limited fossil fuels for energy, electricity, and transport, to enlarge the use of renewable energy and to diversify energy mixes to ensure worldwide energy access, longer-term energy security, and enhanced climate resilience.

Johnson et al., 2020; Levenda et al., 2021

Citizens' active participation in the energy transition is central to structure a profound systematic transformation of the energy sector, and it is one of the core elements behind the concept of energy citizenship.

The urgency of the energy transition propels the conceptualisation of energy citizenship.





Energy citizenship indicates citizens' active and responsible participation through **individual** and **collective actions** in developing technologies, solutions, facilities, entrepreneurial ventures, and projects aimed at expanding energy access.

Therefore:

- Energy citizenship advocates a fundamental shift from centrally managed energy infrastructure and facilities toward a more decentralised and diversified energy generation model.
- Energy citizenship links to advancements in technological solutions and continuing societal changes, including citizens' everyday practices and values.

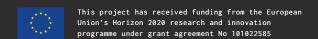
However, there is no consensus on the definition of energy citizenship in the literature within a generally accepted and consolidated framework.

It is crucial to frame the concept of energy citizenship and provide alternative definitions to reach a consensus, in order to establish a common ground for relevant research activities in this field.

Deconstructing the concept of energy citizenship:

According to the latest literature review conducted by the DIALOGUES project, energy citizenship is an inclusive concept associated with five different spheres that share common characteristics, such as:



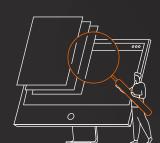






On top of that, the concept of energy citizenship is related to multiple disciplines of study and practice, such as:

- Economics;
- Psychology;
- Sociology;
- Transportation research;
- Urban design;
- Health;
- Systems planning.

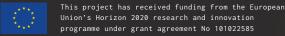


Each discipline approaches energy citizenship from a particular angle.

What does this mean?

- Science and technology studies focus on individuals' material participation through the adoption of energy technologies.
- Behavioural sciences and social psychology investigate the motivations for energy. related behaviour, which can take the form of either everyday life activities or occasional participation in the energy transition.
- **Community studies and human geography** stress that citizenship can also be understood as a process emerging from participation and community organisation, and not simply individual values and preferences. Thus, energy consumption can also be seen as a political action.

Furthermore, the concept of energy citizenship evolves due to internal and external factors, thus is influenced by individual, social, community, local, national, and transnational level variables.





Perspectives in the definition of "energy citizenship":

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Energy citizenship as a collective political engagement

One of the most prevalent approaches to defining energy citizenship is the active involvement and democratic engagement of individuals and communities within the energy systems to meet decarbonisation targets for sustainable energy transition.

The engagement is mainly observed at two particular levels:

- At the individual level: the citizen focuses on energy efficiency in the household or workplace.
- At the political level: the citizen engages in local, national, or international activities related to climate policies.

Engagement and participation in the energy systems require collaboration between citizens, civil society, and the local authorities.

In sum

According to this perspective, energy citizenship is a collective political engagement in energy consciousness, literacy, behaviour, and practices.

器② Energy citizens as "energy prosumers"

This other perspective considers energy communities that allow citizens to participate in the clean energy transition with the right to engage in producing, consuming, and sharing energy as active participants in the energy market.





In this context, there are hybrid relationships between people, energy technologies, and the different roles people can take, such as:

Users;

• Protesters;

Consumers;

Supporters;

 Prosumers (an individual that consumes and also produces energy).

It brings a more ambitious approach to energy citizenship, allowing citizens to become **co-producers** and **co-investors** and therefore **co-owners of energy systems**.

In sum

- According to this perspective, energy citizens are the prosumers who produce energy, ensure supply-demand side flexibility, or store energy in times of oversupply.
- The active role of citizens, not only as consumers but also as agents that shape energy policies, is regarded as an alternative way of representing the public as "energy citizens", who have the potential for action with equitable rights and responsibilities.



Energy citizenship through "collective energy actions and collective awareness"

In this perspective, energy citizenship is defined through collective energy actions and collective awareness, which mainly stems from the assumption that the energy transition might be achieved through the collective awareness of responsibility for climate change and the potential for collective energy actions, such as establishing community renewable energy projects.

Participation of energy citizens in collective energy actions may be realised in social and political ways. One political approach to engaging in collective actions is **participating in protests and movements**, namely political and civic activities on energy issues.







When considering **social and environmental responsibilities** the definition of energy citizenship is being linked to the ecological citizenship concept, referring mainly to the responsibilities of ecologically aware individuals who can make conscious energy behaviour choices for an environmentally-friendly future. But also, to the climate citizenship concept, where individuals become community members, and their commitment contributes to ecological protection using their rights, entitlements, and obligations.



器件 Energy citizenship through inclusivity,

Inclusivity in the energy system is a crucial aspect of energy citizenship. To this end, the definition of energy citizenship has a focus on the social acceptance in energy decision making, comprising different dimension such as gender, minorities, poverty, and justice.

- Gender: Incorporating the gender perspective, energy citizenship could be described as gender-equal participation in decision-making processes, integrating the interests of different genders into the policy design.
- Poverty: Diversity reaches beyond gender-related issues to the intersectionality between gender and other sensitive topics such as race, age, minority status, socioeconomic status, or vulnerable groups. Thus, an alternative definition of energy citizenship addresses poverty, since energy citizenship is undermined by the inability to adequately heat, cool, or provide other required energy services to homes.
- Justice: The association between energy citizenship and energy justice is built based on the energy justice framework's distributional, procedural, and recognition pillars since citizenship implies equal and just access to resources without discrimination.









Considering the different perspectives and dimensions analysed in the literature review:

DIALOGUES defines energy citizenship as:

the degree to which, and the ways in which, the goals of a sustainable energy transition enter into the everyday practices of an individual

- Energy transition emerges as one of the critical areas for citizens to demonstrate their participation.
- The inter-and transdisciplinary conceptualisation of energy citizenship (between multiple disciplines of study/practice and spheres) confirms individual citizens' "bottom-up" power as fundamental participants in a successful energy transition.

References

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