

Northern lights of energy democracy: How community energy drives Northern Europe's green transition.

An introduction to the Special Focus

This Special Focus examines energy communities (ECs) as part of a broader transition in Northern Europe. Rather than assuming that ECs are automatically democratic, inclusive, or socially beneficial, the papers analyse the institutional, political, and spatial conditions under which more democratic and just energy transitions can emerge. Across Denmark, Finland, Germany, Norway, and Sweden, with Germany included for comparison, they show that outcomes depend on planning capacity, regulatory design, ownership structures, grid regimes, and the recognition of local and Indigenous claims. The collection shifts the discussion from celebratory accounts of community energy to a more conditional understanding of energy democracy: as a concept that must be organised, negotiated, and protected in practice.

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The concept of renewable energy communities and citizen energy communities (hereafter collectively referred to as energy communities [ECs]) has become an important reference point in European debates on decarbonisation, citizen participation, and local value creation. It promises more than renewable electricity generation alone. In its strongest formulations, community energy is associated with decentralised production of renewable energy, local ownership, democratic control, public participation, and a fairer distribution of the benefits and burdens of the energy transition (Berka and Creamer 2018). Yet the papers in this Special Focus demonstrate that these outcomes cannot automatically be assumed – at least concurrently. Community energy is not necessarily identical with a democratic and just transition; rather, it is one possible arena in which struggles over democracy, justice, ownership, planning, and recognition become visible.

This collection therefore reframes the discussion on implementing ECs in accordance with the EU's *Renewable Energy Directive (RED II)* (Directive [EU] 2018/2001) and *Internal Electricity Market Directive (IEMD)* (Directive [EU] 2019/944). Instead of treating EC as a uniform policy model, it examines how democratic and just transitions are institutionally enabled, politically contested, and territorially differentiated across (Northern) Europe. The cases stretch from rural Danish planning arenas to Swedish and German community-energy niches, from Nordic legal transposition of EU energy-community provisions to the chronopolitics of wind power conflicts in Norway. Together, they show that the relevant question is not simply whether ECs exist and are beneficial to the community, but under what conditions they can broaden participation, retain local benefits, recognise affected communities, and contribute to legitimate transition pathways.

From this perspective, community energy (CE) is neither a finished institutional design promising energy democracy nor a guaranteed outcome of decentralisation. Its development is a fragile and uneven process that depends on technology paths, supportive regulation, municipal capacity, intermediary institutions, procedural openness, and attention to distributive and recognition-based justice. Then, the democratic and just transition emerges not from technology alone, but from the political organisation of energy infrastructures and the social relations around them.

Framing the Special Focus

The Special Focus is anchored in three closely related discussions. First, research on ECs has shown that locally rooted renewable-energy initiatives may create economic value, foster acceptance, and facilitate citizen participation (e.g., Brummer 2018). Second, work on energy democracy has emphasised the need for a redistribution of power in energy systems and the importance of collective control over infrastructure and decision-making (e.g., Burke and Stephens 2017). Third, scholarship on energy justice has highlighted that transitions must be assessed not only by their decarbonisation effects, but also by distributive, procedural, and recognition-based criteria (e.g., Sovacool and Dworkin 2015).

Taken together, these perspectives suggest a productive but demanding national and community agenda. A democratic and just transition requires more than the diffusion of renewables. It requires institutions that enable meaningful participation, reduce structural exclusions, and recognise that transition conflicts are often conflicts over land, technology, temporality, authority, and social recognition. This is precisely what the papers in this Special Focus illuminate. Some contributions analyse enabling conditions, such as municipal planning capacities or legal frameworks for energy communities. Others foreground conflicts and limits, showing how community-energy narratives can coexist with exclusionary ownership structures, centralised governance, or violations of local and Indigenous rights. A comparative perspective is especially useful in this regard. Denmark, Finland, Germany, Norway, and Sweden all combine ambitious climate politics with distinctive institutional legacies. These include strong municipalities, cooperative traditions, district-heating systems, hydropower regimes, and, in some cases, highly centralised electricity sectors. Yet the papers show that these similarities do not produce similar outcomes. National path dependencies, regulatory details, and local political capacities matter greatly. The result is a highly uneven landscape of energy democracy.

The contributions

Borch et al. (2026, in this issue) examine how EU-defined renewable and citizen energy communities are implemented in Denmark, Finland, Norway, and Sweden. Their comparative institu-

tional analysis shows that the practical scope for energy communities depends less on cooperative traditions alone than on regulatory design, ownership rules, tariff structures, and grid access. Finland appears comparatively well aligned with EU provisions because it has established clearer enabling rules, while Denmark and Sweden show only partial alignment and Norway remains largely outside the EU framework. The article demonstrates that democratic ambitions travel through legal and infrastructural filters: policy categories only become meaningful when national frameworks make them operable.

Sperling et al. (2026, in this issue) turn to the municipal level in Denmark and ask how community support for renewable-energy projects can be fostered more strategically. Their analysis shows the limits of the prevalent developer-led planning process where projects often arrive as set proposals and public participation enters too late. In contrast, the article argues for a stronger role for municipalities and local communities in pre-project planning, zoning, and engagement. Particularly important is the argument for a “phase 0” before project initiation, where local criteria, political dialogue, and forms of support can be organised in advance. This contribution highlights that democratic transitions require not just participation but planning capabilities that allow for timely participation under conditions that enable communities to shape projects rather than merely react to them.

Radtke et al. (2026, in this issue) compare community-energy trajectories in Germany and Sweden. Their central argument is that community energy is not intrinsically democratic. In Germany, a once expansive community-energy field has been narrowed by professionalisation, auction regimes, and rising entry barriers, even as new initiatives emerge in coal-transition regions and via tenant-electricity or local heat projects. In Sweden, by contrast, centralised governance, slow transposition of EU provisions, and the gatekeeping role of distribution system operators restrict bottom-up initiatives to niches and hybrid arrangements. The article thus shows how different national pathways produce different justice claims, participation patterns, and ownership constellations, while converging on one basic insight: without supportive legal, civic, and financial infrastructures, the democratic promise of EC remains fragile.

Ellingsen's (2026, in this issue) contribution examines wind-power conflicts in Fosen and Frøya, Norway. Instead of treating conflict only in spatial terms, the article introduces the concept of time grabbing to analyse how acceleration, protraction, and epistemic exclusion reorganise local temporalities in favour of national energy agendas. In doing so, it shows how the green transition can undermine democratic legitimacy when local and Indigenous communities are forced to bear not only the spatial burdens of energy infrastructures, but also the temporal burdens of delayed justice, compressed decision-making, and the devaluation of situated knowledge. This article broadens the Special Focus from CE narrowly defined toward the larger question of what a just transition requires when renewable energy projects intersect with colonial histories, land-use conflicts, and contested authorities.

Cross-cutting insights

Several common insights emerge from the four contributions. A first concerns the central role of institutions. None of the papers treat CE as a spontaneous grassroots sphere that develops independently of the state. On the contrary, the collection shows that regulation, municipal mandates, concession systems, grid governance, and planning procedures decisively shape the possible forms of participation and ownership. This is particularly evident in the Nordic comparison of EU-defined ECs and in the German-Swedish comparison of uneven democratic outcomes.

A second insight concerns the local state. The Danish cases in particular show that municipalities are not merely implementing agencies. They are coordinators, facilitators, translators, and, at times, political entrepreneurs. Where municipal actors are able to organise early engagement, define local criteria, and coordinate across governance arenas, more legitimate transition pathways become conceivable. Yet these contributions also show the limits of localism. Municipal initiative cannot compensate indefinitely for unclear national visions, weak enabling frameworks, or structural resource shortages.

A third insight is that justice must be treated as multidimensional. Distributive questions about who receives benefits remain important, but the papers repeatedly underline the importance of procedure and recognition. Community participation that begins too late, membership structures that favour already privileged groups, grid rules that exclude collective self-consumption, and decision-making processes that dismiss local or Indigenous knowledge all narrow the democratic substance of energy transition. In this respect, Ellingsen's analysis of land-grabbing and Radtke et al.'s discussion of exclusionary participation make a particularly strong intervention: both show that the language of transition can mask deep asymmetries in power.

A fourth insight concerns the conceptual nature of ECs itself. Throughout the collection, ECs do not emerge as a singular institutional model but rather as a diverse and context-dependent field. The concept encompasses a wide range of initiatives, including cooperatives, district-heating systems, municipal-citizen hybrids, housing-company photovoltaics, hydropower schemes, tenant-electricity models, and planning processes around renewable-energy siting. This diversity is analytically valuable because it prevents a narrow equation of ECs to a single legal or institutional framework. It also demands clearer evaluative criteria to assess the varied forms and impacts of ECs. If the term is to remain meaningful, it must stay connected to questions of control, appropriate planning, community benefit, participation, and justice rather than functioning as a generic label for decentralised renewables.

Conclusion

The Special Focus therefore makes two broader contributions. Empirically, it provides a differentiated picture of how demo-

cratic and just energy transitions are being pursued, enabled, and contested across Northern Europe. Conceptually, it argues against any automatic equation between renewable expansion, CE, and energy democracy. The relationship between them is conditional and politically mediated.

What the papers share is an insistence that transition pathways must be judged by how they organise power. A democratic and just transition depends on whether communities are empowered to participate in a timely and meaningful way, whether benefits and burdens are distributed fairly, whether legal frameworks support collective agency, and whether affected groups are recognised as legitimate knowledge holders and political actors. In that sense, the Northern lights gathered here do not illuminate a single model. They illuminate an uneven field of experimentation and conflict in which the democratic quality of the energy transition remains an open question.

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