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Summary

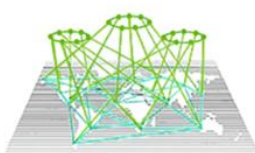
This deliverable examines the transformative agency of people who are named “energy citizens”. As described in [D2.1](#), Energy citizenship (ENCI) refers to “forms of civic involvement that pertain to the development of a more sustainable and democratic energy system. Beyond its manifest forms, ENCI also comprises various latent forms: it is an ideal that can be lived up to and realised to varying degrees according to different framework conditions and states of empowerment” (Pel et al., 2021:64)

Transformative agency refers to: *actions* and *capacities* of individuals and collectives, that interact with the given socio-material context, to achieve transformative goals, such as a just energy system, a circular economy, lifestyles of sufficiency, equal chances for everyone and direct democracy. Transformative agency changes not only the context but also the people in it, who (thanks to transformative engagement) acquire experiences and competences they did not have before and refined views about a transformative phenomenon.

This report presents the findings of 5 workshops on transformative agency in relation to energy citizenship action, held in the Netherlands (Eindhoven), Germany (Berlin), Spain (La Coruna), Ireland (Dublin) and Latvia (Riga). The workshop in Berlin was done online, whilst all the other workshops took place face-to-face. The workshops included people from energy citizenship initiatives, government, energy systems experts and social scientists (an overview of the experts who attended the workshops is provided in the Appendix).

The transformative agency of energy citizenships is investigated with the help of the 3D framework about transformative impacts and capacities (Strasser et al., 2019, 2020) and the frameworks of transformative social innovation (Avelino et al. 2019; Pel et al. 2020) and empowerment (Coy et al. 2021). In the workshops, we adapted the 3D framework to ENCI issues. We opted for a more selective focus by articulating discussion questions related to (and slightly adapting the terminology of) three transformative capacities for each of the three dimensions (width, depth and length), instead of including all the capacities from the 3D model. The 3D model broadly aligns with and builds on other typologies for scaling, diffusing, or amplifying social innovation (Lam et al, 2020).

Discussion questions about transformative agency in 3 Dimensions



Widening

1. How can civic engagement in the energy transition continue to **grow**? How can ENCI initiatives be scaled out?
2. How can the energy transition become **more inclusive** of more diverse population groups?
3. How can **synergies** among different forms of ENCI be strengthened?



Deepening

1. How can ENCI become **more transformative**? (Addressing justice issues, holistic sustainability, radical system change)
2. How can **cross-sector cooperation** improve? (Private, public, civil society, science)
3. Which **power relations** need to be changed and how?



Lengthening

1. How can the **continuity** of ENCI initiatives be increased (e.g. via models of ownership, financing, partnership)?
2. How can the **resilience** of ENCI initiatives be strengthened, to better adapt to changing context conditions?
3. In what way is a **professionalisation** of bottom-up initiatives desirable / possible (beyond voluntary engagement)?

The *widening* of ENCI refers to how civic engagement can grow or be 'scaled out', and how engagement in the energy transition can become more inclusive. In the Netherlands, the growth of energy cooperative has slowed down but we observe an expansion in the nature of activities (towards the generation of wind power, energy advisory services and trading in the energy market). Scaling out depends on an enabling environment. A participant from the Dublin workshop suggested the creation of a county level office, or an officer, that functions like "the Enterprise Office, but for climate issues", tasked with ensuring that communities have readily available knowledge resources and practical support, preventing them from "reinventing the wheel." Overall, workshop participants from all five workshops suggested that better structural support is needed at different levels of governmental institutions to facilitate knowledge transfer and support the growth of ENCI initiatives. Overall, ENCI initiatives are well-networked: we came across many examples of non-governmental networks that play an intermediary role in sharing lessons amongst practitioners and supporting the growth of initiatives. Next to sharing lessons, they often facilitate discussions on strategic action and producing intelligence about bottlenecks and institutional change. This shows that ENCI actors are active with creating an enabling environment (which enhances their agency).

Diversifying the membership basis is a challenge for all ENCI initiatives, with which some are actively dealing. Presently, high-educated, male, white and older people are overrepresented, especially in energy cooperatives. The involvement of students, migrants and females would make ENCI initiatives more inclusive and responsive to the perspectives, needs, and life experiences of larger parts of the population. Offering paid positions, instead of relying solely on volunteers, can also enable broader engagement, especially for low-income groups. A training effort is needed to be less reliant on white-male experts. Becoming more pluralistic is difficult, given that energy citizenship actions are done by like-minded people. Increasing diversity and inclusion also requires addressing structural barriers and mechanisms of exclusion, which is further discussed in relation to 'deepening'.

The discussions underscored the need to move beyond treating the energy transition as a middle-class concept. Low-income communities who are grappling with survival needs are largely not included in the energy transition, or sometimes actively resist measures such as installation of heat pumps in social housing, which increases their monthly electricity bill. The negative implications of using non-renewable energy sources (such as exposure to toxic emissions) disproportionately affect the health and wellbeing of vulnerable communities. They are also negatively affected by the energy crises that cause increases in the prices of fossil fuels. Ensuring that the benefits of the energy transition are broadly accessible and that energy projects do not disproportionately impact specific communities should be a priority. A just transition agency may be useful in this regard.

Gender issues in the energy transition are receiving a good deal of attention in Germany. In 2020 in Germany, some key actors of citizen energy published the position paper: *Frauen, Energie, Wende!* There also exists a wind cooperative which is founded and run by women: *Windfang Frauen Energy Cooperative*, acting as (a possible) role model.

Deepening refers to how energy citizenship can become more transformative, in terms of fundamentally changing dominant systems, practices and mindsets. This involves embedding more democratic and equitable relationships in the way energy systems are designed and governed, while also considering inter-relations between the energy transition and other domains of societal change in a holistic and integrated manner. Deepening means that ENCI becomes more strongly rooted in both civil society and institutions, while challenging and



replacing established institutions that perpetuate injustices and top-down power relations. We studied deepening, or "Scaling deep", in terms of making ENCI more transformative (through improving local decision-making that serves community interests, and addressing social justice issues, among others), enhancing cross-sector cooperation (for strengthening trusting partnership relations between government and civil society, and more effective multi-stakeholder system change efforts), as well as changing power relations. Participants (in Dublin) suggested "bringing a just transition lens to everything you're doing" so that ENCI activities are not only focused on the energy transition in a narrowly technical or managerial way, but simultaneously address pre-existing societal inequalities that are inextricably linked to the energy transition. Critical thinking about the energy system is a common feature of ENCI. This includes attention to reducing energy poverty, promoting the inclusivity of the initiatives, caring for environmental sustainability, and replacing consumption and profit maximisation with sufficiency approaches.

Participants also noted the challenges of departmental silos and the lack of joined-up thinking within governmental institutions. "Departments work in siloes, and within departments there are siloes. We need to work in a strategic and systematic way, not firefighting once we're forced to, in the face of climate breakdown" (Dublin). Often, there is a rush to achieve CO2 reduction goals, though it is essential to consider diverse outcomes and success metrics, related to various budgets and political priorities around health, clean air, national wellbeing, climate adaptation, etc. (but there are also cases where CO2 emissions did not play a prominent role). The discussions also touched upon the importance of addressing problems using an integral approach, promoting trust, and rewarding innovation. A partnership model was suggested, in which the government seeks to understand and support the initiatives proposed by citizens rather than merely offering subsidies that lead energy citizenship initiatives to apply for funding based on policy goals that are defined in a top-down manner. A key point was the importance of municipal officials taking the time to listen to the needs and goals of citizens and to channel funds to the kind of initiatives they seek to implement. The question of what communities want to achieve should be considered in an integral way in each region-specific context, taking into account concerns related to health, lower energy bills, or extreme weather conditions.

Workshop participants mentioned bureaucratic barriers that communities face when trying to understand and apply for funding, where disconnected public agencies offer funding with different rules and timelines, which should be better aligned (Berlin). Changing prevailing power relations is a key challenge for deepening of ENCI. The profit maximisation rationality that drives private energy companies and traditional players in the energy sector is still strongly related to consumption maximisation, and asymmetries of power between big players and ENCI initiatives from below (aimed at satisfying the basic need for energy) continue to favour the former rationality that is not compatible with just transition goals.

Lengthening refers to how civic engagement can become more sustained in the long-run, and how it can professionalise in appropriate ways. Reliable sources of long-term funding were repeatedly raised as foundational for keeping sustainable energy communities and other energy citizen initiatives going and growing over a sustained period. These resources could be provided through local development companies or local government. Such resourcing models need to ensure that the citizen efforts are not just short-term project-based or temporary contracts focused on 2-3 years, but part of a long-term commitment of over 20 years. Community energy initiatives need access to core funding, instead of "keeping your heads above water with projects, which creates a huge waste of potential of people's intelligence" and the possibility to evolve a project as they learn over time (Dublin). This



requires “real partnership approaches with funders” who are more open for projects to experiment and learn instead of delivering on fixed predetermined outcomes. Aspects of accountability were less discussed at the workshops. Handing over public money comes with obligations of spending the money well and accounting for this (which requires accounting systems).

The discussions in the workshops touched upon the professionalisation of bottom-up energy citizenship initiatives, emphasising both the potential and the challenges of this process. Discussions revolved around a tension between volunteer work that is common in citizen energy initiatives and professionalisation that is needed where only volunteer-based work faces limitations, without losing the original ethos and community-based character of those initiatives. A hybrid model that combines professional expertise with the involvement of community members was suggested as an alternative approach to simply hiring professionals for any installation tasks (Berlin). This model acknowledges the need for technical expertise, such as the construction of solar plants, without excluding the active participation of citizens. The idea is to find a middle ground where professionals and volunteers work together, allowing people to engage in energy projects without requiring professional certification. In the absence of finding appropriate forms of professionalisation, the need to professionalise may result in the (partial) loss of transformative agency.

In Latvia, workshop participants raised various substantial concerns within the existing legislative framework, including the underdeveloped legislation pertaining to the formation and operation of energy communities, the absence of legislation addressing compensatory mechanisms for community-based energy production, the need to revise current air pollution legislation in the context of the energy sector and the utilisation of domestic resources, particularly biomass. They also noted the lack of a clear and elaborated definition for “energy poverty” in national legislation and the presence of two terms, “energy poverty” and “unprotected users,” with potential inconsistencies in norms that provide subsidised energy for unprotected users, which may not necessarily align with energy conservation objectives. Further clarification is required regarding households facing energy-related difficulties. A changing discourse is part of transformations.

The concept of ‘energy sharing’ was highlighted as a key aspect for lengthening ENCI in the Berlin workshop, in which several actors were strongly claiming for the setup of the framework conditions that would allow P2P-trading and energy sharing to enhance the local consumption of locally produced energy. The desire for energy sharing (where a community produces and consumes energy via a shared distribution system) often comes from citizens and initiatives seeking to both decentralise and democratise further the energy system, which has been made possible in the Netherlands (in Austria and Italy as well), while remaining impossible in Germany despite the intensive lobbying activity done by the national association of energy cooperatives (*Bündnis BürgerEnergie*), research institutes (IÖW), Renewable energy agencies, etc.

Experts at the workshops emphasised the need to rethink the financing of citizen engagement. ENCI actors expressed a need for funding that goes beyond projects, as this leads them to orient themselves towards subsidy schemes which not always fit with the activities they want to do.¹ There can be a risk in professionalisation of citizen initiatives and the need to align with

¹ Info about funding of the 600 cases of the EnergyPROSPECTS database can be found at https://www.energyprospects.eu/fileadmin/user_upload/lu_portal/www.energycitizen.eu/EP_Factsheet_Series_Part_4_Funding_final.pdf



funding criteria. It was suggested that it is crucial that public authorities preserve the freedom of citizen initiatives and that they recognise and resource the initiatives that are already present in a community. Alternative financing models, such as crowdfunding, were recognised as having great potential (Berlin). These models include both direct monetary contributions and social participation, creating a sense of shared ownership that can help avoid "not in my backyard" sentiments and other forms of opposition. In the case of Weert (NL), the energy cooperative Weert Energie was given a building by the Weert municipality in the centre of Weert (at a top location) for providing energy advice to citizens. At this location, advisory services are provided by educated volunteers (often retired professionals and students from higher education institutes). It is an example of resourcing, different from the provision of financial resources for doing public good tasks.

Science could be much more involved in energy citizenship activities, but this requires a willingness from scientists to participate in transdisciplinary research and expand the (often disciplinary) boundary of knowledge.

One issue which is weakly developed is taking stock of landscape developments (such as the emerging smart grids and the growing willingness of scientists to do transdisciplinary research, and to utilise emerging opportunities in projects with other actors (science, business and local government). For example, energy cooperatives could pay more attention to smart grids (local energy systems for electricity and heat where local actors trade energy under rules to be determined or adjusted), making energy systems resilient (to suffer less from future energy crises) and benefit from students doing educational projects (thesis work and group research activities), through which students obtain practical knowledge and sensitivity to the needs and wants of less-privileged people. Involving students in projects rejuvenates the initiatives, helps science to focus more on the needs of people and lowers the barriers between highly educated people (the green middleclass) and the working poor and people without jobs.

In general, we came across relatively few examples of disruptive institutional change, in which the power of business and government is replaced by a logic aimed at social justice, community well-being and different ownership. Common institutional changes are about finding an institutional home for new ENCI activities (often for collaborative projects with other actors) and various forms of collaboration. An example of disruptive institutional change is the creation of A Citizen's Fund (Shared energy fund) alongside the Charter that ensures that their citizen-oriented view on energy transition is part of the projects they contribute to finance. Another example is the creation of TEPOS (positive energy territories) in 2011 (Nadai et al. 2015). TEPOS was reappropriated in 2014 by the ministry of the environment to become "The positive energy territories for green growth".

Collective initiatives are a source of empowerment. They encourage people to be active, informed citizens who are committed to a better world. Their influence goes beyond the growth of the initiatives (widening). They involve processes of deepening by spreading critical thinking and values of justice via webs of social relations and influence. Transformative change beyond the initiators take times, they slowly enter the domains of government and business. We do observe a greater attention to fairness after the energy crisis of 2020-2022, which led political parties and governments to pay more attention to energy poverty and aspects of justice in relation to the energy transition.



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List of Abbreviations

3D Framework: 3 Dimensions Framework

CLER: Energy Transition Network (formerly Liaison Committee for Renewable Energies)

ENCI: Energy citizenship

EU: European Union

HAVO: *Hoger Algemeen Voortgezet Onderwijs* (HAVO) means "higher general continued education" in Dutch.

LSA: Landelijk Samenwerkingsverband Actieve Bewoners (National Association of Active Citizens)

NGO: Non-Governmental Organisation

PESTEL: Political, Economic, Social, Technological, Environmental, Legal (factors)

PV: Photovoltaic

RESS: Renewable Electricity Support Scheme

TEPOS: Territoire à Energie POSitive (Positive energy territory)

TEPCV: Territoire à Energie Positive pour la Croissance Verte (Positive energy territory for green growth)

TSI: Transformative Social Innovation

VWO: *Vorbereidend Wetenschappelijk Onderwijs* (VWO) means "preparatory scientific education" in Dutch.



1 Introduction: What is Transformative Agency?

Energy citizenship refers to “people's active participation in energy systems: engaging in energy-related discourse and making conscious decisions related to energy” (Pel et al., 2021). Some examples are: i) energy cooperatives who jointly own renewable energy assets and produce energy for members and possibly for non-members (in the market), ii) citizens who engage in deep home renovation with the help of others, iii) people who protest against climate change, acting as a diffuse source of influence in the policy and a point source of influence in personal contact networks (family, friends, neighbours, team sport members, schools).

This deliverable is about the transformative agency of people who are referred here as “energy citizens”. In EnergyPROSPECTS, energy citizens are defined as “*forms of civic involvement that pertain to the development of a more sustainable and democratic energy system. Beyond its manifest forms, ENCI also comprises various latent forms: It is an ideal that can be lived up to and realised to varying degrees, according to different framework conditions and states of empowerment*”. (Pel et al., 2021: 64).

Energy citizenship is not a self-chosen label or identity by those who practice energy citizenship (ENCI). Within the literature, the focus is on justice. In the EC2 project, ENCI is defined as “people’s rights to and responsibilities for a just and sustainable energy transition”. In our project, we pay attention to people’s doings and the agency in energy system-related actions and we broaden the focus of justice beyond energy justice. As shown by the case studies in [D3.3](#) and deep dive case analysis in [D4.1](#) and [D4.2](#), concerns for justice are not limited to energy but extend to ecological and environmental responsibility and both direct and deliberative democracy and various other issues such as fair pay and care for the well-being of others. The degree to which justice (in its various forms) is a motivating factor differs between people. Material benefits such as lower energy bills, extra comfort from deep home renovations and positive feelings of “making a difference” often play an important role in projects relating to energy conservation.

Insights on the emergence of agency: factors and landscape

According to Westley and Antadze (2010), the occurring of change cannot be accounted for by agency alone within a complex system: “Agency must coincide with *opportunity* that is a feature of the broader social and institutional context”. However, the context of opportunity remains particularly difficult to decipher and the factors that might impact the emergence of transformative agency are still hard to assess precisely. Agency depends on motivation, capabilities and an enabling context. Hicks and Ison (2018) found motivations in community renewable energy projects to be wide-ranging and overlapping, covering environmental, social, political, economic and technological. (see Figure 1).



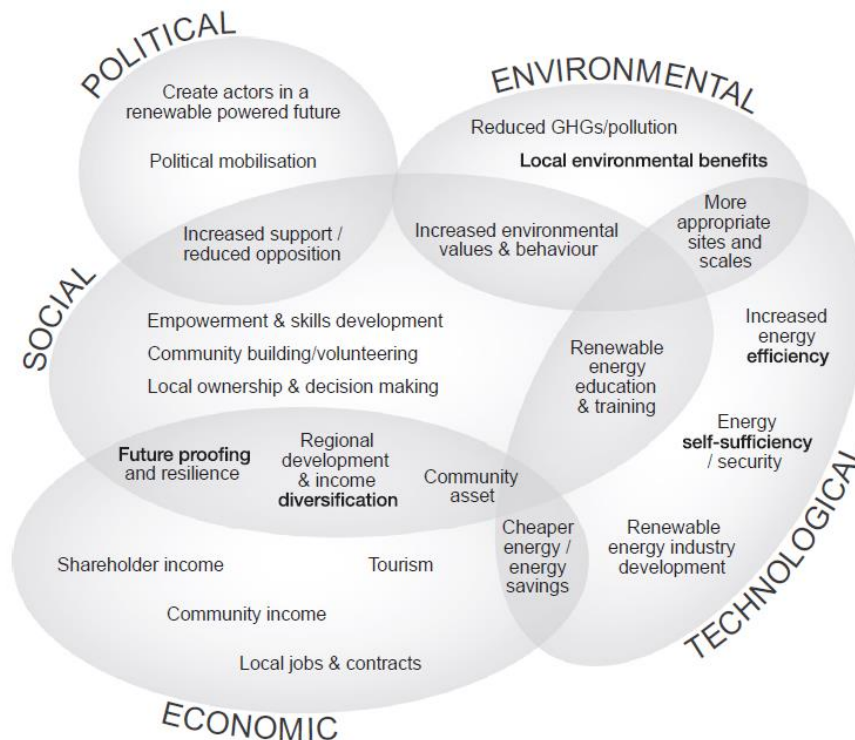


Figure 1: Motivations in community renewable energy projects (Source: Hicks & Ison 2018: 527).

The landscape of ENCI and the various factors that impact ENCI have been explored in EnergyPROSPECTS by a consolidated methodological approach of the PESTEL analysis at the European level (see D5.1 Debourdeau et al. 2022)², leading to identify political, economic, social, technological, environmental and legal factors that are impacting ENCI (resulting in identifying a total of 32 main factors and 96 sub-factors that are facilitating and/or hindering ENCI). Crossing the DEMATEL and AHP methods, the ranking of the respective impact of the main factors on ENCI underlined the key role played by political factors, the variable impacts of the economic, social and legal factors, and the relative low importance of the technological factors. This snapshot of the landscape of ENCI opens the possibility to better understand the configurations that create opportunities for agency to emerge. However, this remains a landscape overview, on the basis of which no univocal and unidirectional activation factors can be identified.

Transformative agency and Transformative Social Innovation (TSI)

In this deliverable, transformative agency refers to: *actions and capacities of individuals and collectives, that interact with the given socio-material context, to achieve transformative goals, such as a just energy system, a circular economy, equal chances for everyone and direct democracy.* Transformative agency changes not only the context but also the people in it, who (thanks to transformative engagement) acquire experiences and competences they did not have before and refined views about a transformative phenomenon. The newly gained competences include enhanced capacities for action and voicing (sophisticated) opinions about a transformative phenomenon.

² This analysis of the EU context was thereafter used for the analysis of national level factors impacting ENCI for the 9 member countries of the EnergyPROSPECTS project (see D5.2 Hadjinjak et al., 2023).

Actors are part of relations of interdependence. An important question is “how is it possible for actors to ever mediate or transform their own relationship to these contexts?” (Emirbayer and Mische, 1998, p. 964). Haapasaari, Engeström, and Kerosuo (2014) identified six processes, “ranging from resisting change and criticising current practices to explicating and envisioning new possibilities and models, and finally committing to and taking action to transform the current situation or activity” (quoted in Lund and Vestol, 2020, p. 2).

Transformative goal achievement involves changes in relations and the actors themselves, who get “transformed by their transformative engagements, activities and social practices” (Stetsenko, 2017). Projects that require money, depend on the ability to gather resources from members and non-members. Technological knowledge and energy literacy is important for certain projects. Complex projects may depend on regulatory permission and the knowledge and resources of others, whose cooperation has to be secured. The interaction with other actors offers an opportunity to influence them, helping them to do things differently. Joint projects with scientists may offer science a better insight into relevant situational aspects. Platforms of interaction help to aggregate and transmit lessons, they enlarge the transformative capacity of actors by preparing them better for “challenges that are complex and context sensitive, do not have one correct answer, involve risk and uncertainty, require collaboration and productive use of sophisticated resources, and an active, future oriented transformative stance”(Lund and Vestol, 2020, referring to Stetsenko, 2017).

For getting a grip on transformative change in an action-focussed way, Strasser et al (2019, 2020) developed an analytical framework – the 3D framework - based on a distinction between transformative impact and capacity and a distinction between three dimensions of depth, width and length of institutional change for achieving transformative goals (see Fig 2 and Table 1).

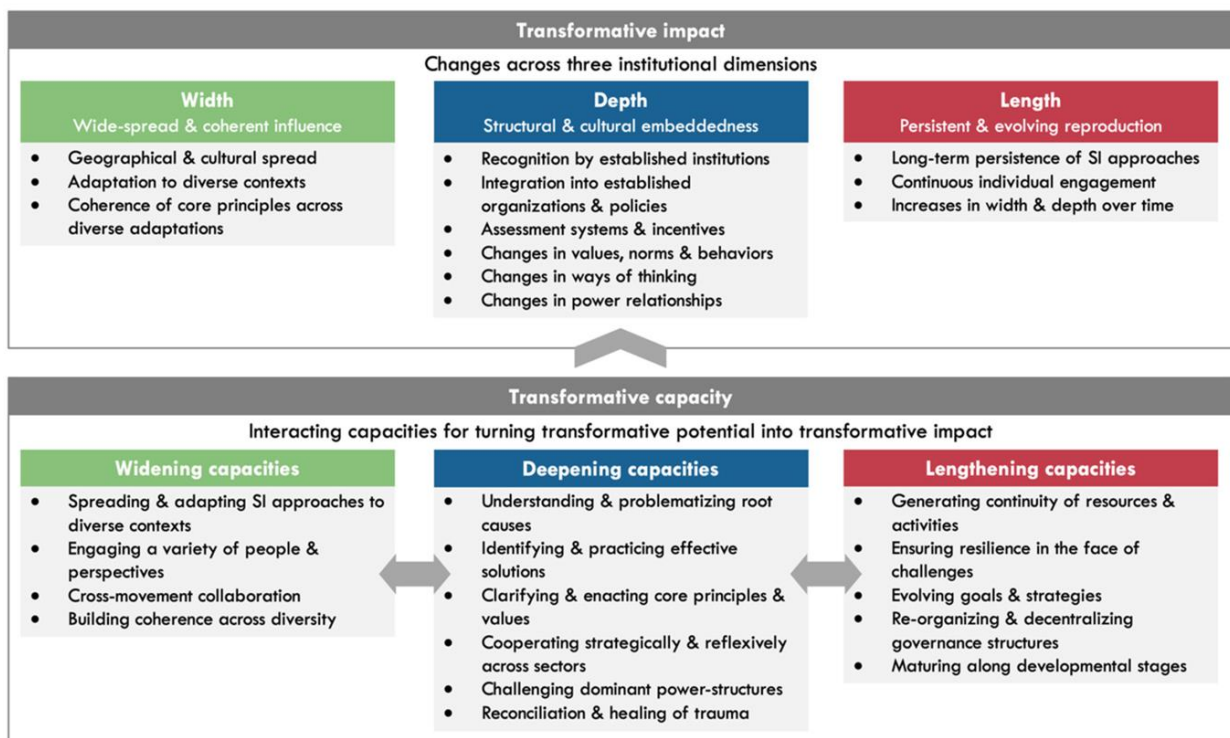


Figure 2: 3D Framework by Strasser et al, 2020

Depth: structural and cultural embeddedness	Depth refers to how deeply ways of doing, organizing, framing, and knowing (DOFK) are embedded in formal structures like policies, incentive mechanisms, legal codes, as well as cultural values, mental models, and worldviews. Social change can take place at different degrees of depth, in terms of incremental, reformative, or transformative change [20,21]. Transformation is the most fundamental type of change, where deeply embedded rules or assumptions are changed.
Width: wide-spread and coherent influence	Width refers to how widely influential ways of doing, organizing, framing, and knowing (DOFK) are across different geographic and cultural contexts, or societal sub-sectors, where core characteristics are coherent despite contextual differences. Transformation can take place at different levels of scale or in different contexts. What may be transformational within a certain context or level of scale (e.g., an individual or organization) may not be transformative at a different level (e.g., the economy as a whole).
Length: persistent and evolving reproduction	Length refers to how persistently ways of doing, organizing, framing, and knowing (DOFK) are reproduced over long periods of time, while evolving to adapt to changing conditions. Some changes are temporary or easily reversed. Transformation is long-lasting and irreversible, at least for a long period of time.

Table I: Summary of three institutional dimensions

The 3D framework draws on insights from the TRANSIT project³ about Transformative Social Innovation (TSI): new ways of doing, knowing, framing and organising that challenge, alter and/or replace dominant institutions.

This concept of TSI implies a systemic perspective on Social Innovation (SI), similar to Westley's (2013, keynote speech) definition: "social innovation is any initiative's product, process, programme, project, or platform that challenges and over time contributes to changing the defining routines, resources and authority flows of beliefs of the broader social system in which it is introduced; successful social innovations have durability, scale and transformative impact".

Transformative change is tied to scale: transformative change always manifests itself locally in new practices, which spread and get transformed over time, through the actions of those engaged in institutional work: "the purposive action of individuals and organisations aimed at creating, maintaining and disrupting institutions" (Lawrence & Suddaby, 2006: 215). Transformative change is not a simple sum of local transformative change but tied up with other developments and agency of many actors (including those who resist it). For example, the attention to energy poverty during the energy crisis of 2020-2021 (linked to Ukrainian-Russian war) led policy makers to focus more on making the energy transition affordable, because of the energy poverty agenda. In adhering to a just transition, policy makers also want to avoid that the energy transition is something for wealthy people ("the green elite"). Energy independence may come to have an important impact on the energy transition process in the years to come. Transformative change does not occur outside of existing systems and authority structures, but within the context of various systems and forms of governance: "instead of reducing TSI to revolutionary actions against monolithically conceived 'institutions' or 'systems', it is considered to take place through them, i.e. through a diversified institutional landscape of multiple intertwined 'action fields' or 'arenas' "(Pel et al., 2020).

³ <http://www.transitsocialinnovation.eu/>

TSI can be understood as a reaction to a changing context (of marketisation, competition, climate change, state bureaucracy) and as an assertive historical process of emancipation, want for self-direction, democracy, contributing to good causes and doing purposeful things with others (based on relational values) (Kemp et al. 2022). Because of the presence of transformative goals, TSI researchers typically assume that the initiatives have a drive for expansion, but this may not hold true for the local initiatives, who are often content with the present size. Over time, they may come to broaden their mission and adopt other logics, as something which requires transformative agency.

According to TSI theory, “social innovation is fundamentally about changing social relations. It is important to understand how an initiative is changing social relations. A key proposition is that the experimentation with novel or unfamiliar social relations within an initiative can in itself be a necessary precursor to wider institutional change” (Transit Brief #3 by Haxeltine et al 2015).

Transformative social innovation is oriented at altering or replacing dominant institutions, through institutional change. “Social innovators often come together to form an initiative in response to a local problem or unmet need, and must then translate this into an identification of what institutions need to be transformed or provided. The challenge may involve both ‘de-institutionalisation’ as well as the demonstration and diffusion of new ‘proto’ institutions. Understanding the inter-relations of current institutional arrangements is a key to success. Initiatives need to understand how institutions are connected, and the ways in which their stability presents barriers to transformative change”. (Transit Brief #3 by Haxeltine et al 2015).

Figuring how to operate in a field of social relations is key to achieving impact: “Institutional change happens through the changing webs of social relations between the agents in a social innovation field. The concept of the social innovation field describes the webs of social relations and institutional arrangements through which the emergence and unfolding of a social innovation process takes place. Figuring out how to operate advantageously within this field of relations, how to cope with changing power relations, is key to success. The interactions between different social innovation initiatives are of great importance, especially in terms of the development of common framings and common narratives of change. Identification of the relations within a particular social innovation field also provides a way to better resolve the context—happenings in one ‘field’ of social innovation may influence happenings in another” (Transit Brief #3 by Haxeltine et al. 2015).

Translocal networks play an important role in enhancing the agency of TSI in fostering lessons about setting up and scaling the initiatives, cooperating with established institutions without mission drift, creating visibility and legitimacy for alternative practices, construction of a collective identity and narratives of change, and advocacy for institutional reforms based on identified barriers to TSI. Some of the barriers are internal such as lack of strategic thinking, others are external such as access to finance and requirements of tendering which favour commercial organisations (Pel et al. 2020).

Finding an institutional home is challenge for each initiative (Pel et al. 2020). It requires legal knowledge and internal rules and procedures for decision making. Accountability, diverse membership and deep democracy are other institutional challenges. The institutional home may involve various legal entities and working groups or teams.



The evolution of TSI initiatives is strongly shaped by the historical development of the wider socio-material context (Proposition 10 of TRANSIT theory) (Pel et al. 2020). The energy transition process is an example of an important landscape development, which lends legitimacy to energy citizenship but also causes all kinds of resistance, from citizens who do not want a wind turbine in their surrounding and a lack of cooperation from incumbent energy companies. In the last two years, the frame of energy poverty and frame of “imposed change” obtained a greater salience in politics. This constitutes evidence that multiple agendas are likely to come into play with each other in attempts at creating a different energy system. Different social relations, may stem from different agendas coming into play.

A visual representation of a TSI process and its interlinked dynamics is shown in Figure 3.

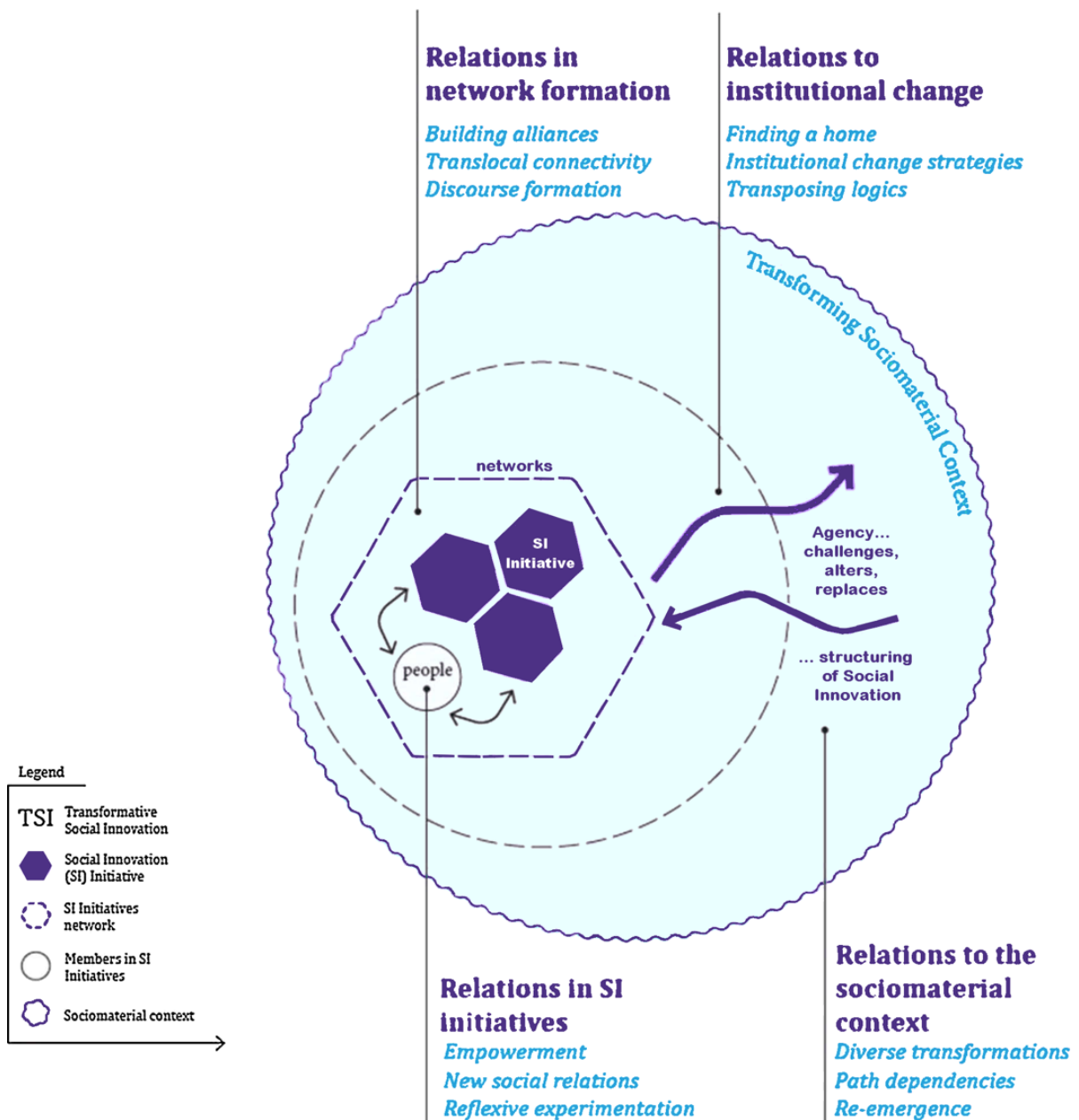


Figure 3: A TSI process and its interlinked dynamics (Source: Pel et al. 2020)

Institutional work: an obligatory point of passage for citizens' agency

Energy citizens exercise “agency” but such attempts are heavily influenced by existing structures (material and immaterial ones such as laws, norms, more or less taken for granted worldviews, identities and attachments to particular issues and people, which are not purely personal). Structures do not fully determine action, as actors can choose to act otherwise (Giddens, 1976). The non-acceptance of a structure or rule and voicing of criticisms counts as agency. People are thus not prisoners of structures. Structuration theory (Giddens, 1976, Stones, 2005) views people as knowledgeable (about the context in which they operate and their wants), capable of reflection and capable of action (which includes acts of speech). Those characteristics help them to navigate change in a world of social innovation fields, socio-technical systems, socio-cultural differences and (changing) economic-institutional order. Structuration theory places “phenomenology, hermeneutics and practices at the heart of the interrelationships and interdependencies between the two” (Stones, 2005, p. 4). Agents draw on their knowledge of ‘the situation’, which includes assumptions about possibilities and ideas how they can be utilised through individual and collective actions. The local and supralocal context plays an enabling and constraining role in complex ways.

-In an important article in the *American Journal of Sociology*, agency is said to have three constitutional elements: iteration, projectivity, and practical evaluation (The chordal triad of agency) (Emirbayer and Mische, 1998). The *iterational* element refers to “the selective reactivation by actors of past patterns of thought and action, as routinely incorporated in practical activity, thereby giving stability and order to social universes and helping to sustain identities, interactions, and institutions over time”. *Projectivity* is the capability to imagine non-existing futures (threats, possibilities which are important to consider in a proactive way). The *practical-evaluative element* “entails the capacity of actors to make practical and normative judgments among alternative possible trajectories of action, in response to the emerging demands, dilemmas, and ambiguities of presently evolving situations.” The first aspect draws attention to the importance of acquired competences and identities. The practical-evaluative element highlights that imagination and literacy are not enough: you need to be able to evaluate choices without being paralysed by uncertainties and ambiguities.

To different degrees (and in different ways), *the past, present and future are part of any action situation*: the past through inherited capabilities, assets, routines, procedures, ways of thinking and authority structures and the future through articulations of what is possible, good and bad, all of which are likely to influence decisions in the present. Any action situation involves broader contexts: 1) proximate and distal *social-structural* contexts comprising interpersonal, interorganisational, or transnational settings of action, 2) *social-psychological* contexts involving attachment, trust, shared values, emotional solidarity, 3) a *techno-economic* context and 4) the *economic-institutional* order (which includes banks, ownership structures and patterns, policy goals, requirements for municipalities to locally support the energy transition, national policy instruments and requirements for tendering and accountability).

The 3D model includes all of these, but does not distinguish between them. Each context is relevant for deepening, widening and lengthening, but further work is needed to take those up explicitly. According to transition theory, each of those contexts are subject to change. From a shaping factor a socio-technical system or institutional order may become a subject of change thanks to niche and regime developments and calls for action (Rip and Kemp, 1998, Geels, 2005). The creation of energy cooperatives is a niche development against existing



energy regimes, with whom they may form a symbiotic relation although differences in goals and values with commercial energy companies will remain. Government policies are difficult to place in this framework. They are a collective action response to regime problems, but they deal with other issues as well, such as market liberalisation, energy poverty and just transition. They reflect power relations and the influence of various actors in systems of governance.

According to Adrian Smith, the spread of critical insights is an important mechanism behind transformative change:

Practically oriented sustainability groups can be wary of being construed as political. Nevertheless, all grassroots developments soon encounter impediments arising from social structures inherent to regimes. Influence is seen arising through the shared discussion, awareness, reflection, and points of action towards these social structures. Consequently, even grassroots innovations that 'fail' to scale-up have value so long as they mobilise critical insight: how choices, trade-offs, and social as well as material activity is structured, and how these limited freedoms for manoeuvre might be overcome in future mobilisations of political agency beyond the niche. It is the spread of critical insight, and transformative politics, that becomes the indicator of success (Smith et al., 2016: 412).

A second route through which local initiatives can have a notable impact is through individuals obtaining positions of influence in systems of governance. In 1986, Frans van der Loo, a schoolteacher at a secondary school in the Netherlands, joined the wind cooperative Zuidwester as a board member. This step paved the way for other steps: becoming board member of ODE (a national association for sustainable energy), organising sustainable energy conferences, working for NUON (a commercial energy distributor owned by municipalities) and working for the government innovation agency Agentschap NL. In 2005, he was appointed as secretary of the IPE (interdepartmental programme directorate for the energy transition), a powerful position that he held until 2011. (based on his book *Op reis naar het Zuiden*). In the workshops, such routes were not discussed.

Webs of social relations and influence

All actors are part of a context, composed of other actors with resources. A study about renewable energy cooperatives in Groningen showed that energy cooperatives are part of a multi-actor playing field involving many civil society organisations and partnerships with government, the local university and (public and private) companies. In Eastern Europe, such relations are less extensive, limiting the agency of energy citizenship. All actors are configured in a certain way through their experiences and position-practices; interactions with others may cause a reconfiguration of actors. People are not born as energy citizens but made into them. Societal expectations are something to deal with by companies. They can fight those or do things that are more in line with the societal expectations. Everyone is part of webs of influence which change over time. Webs of influence are not under the control of any actor, which is why transformative change cannot be achieved from the top, and why bottom-up stimuli come into play with top-down pressures. Attention to sustainable energy and democratic decision-making diffuses through webs of influence.



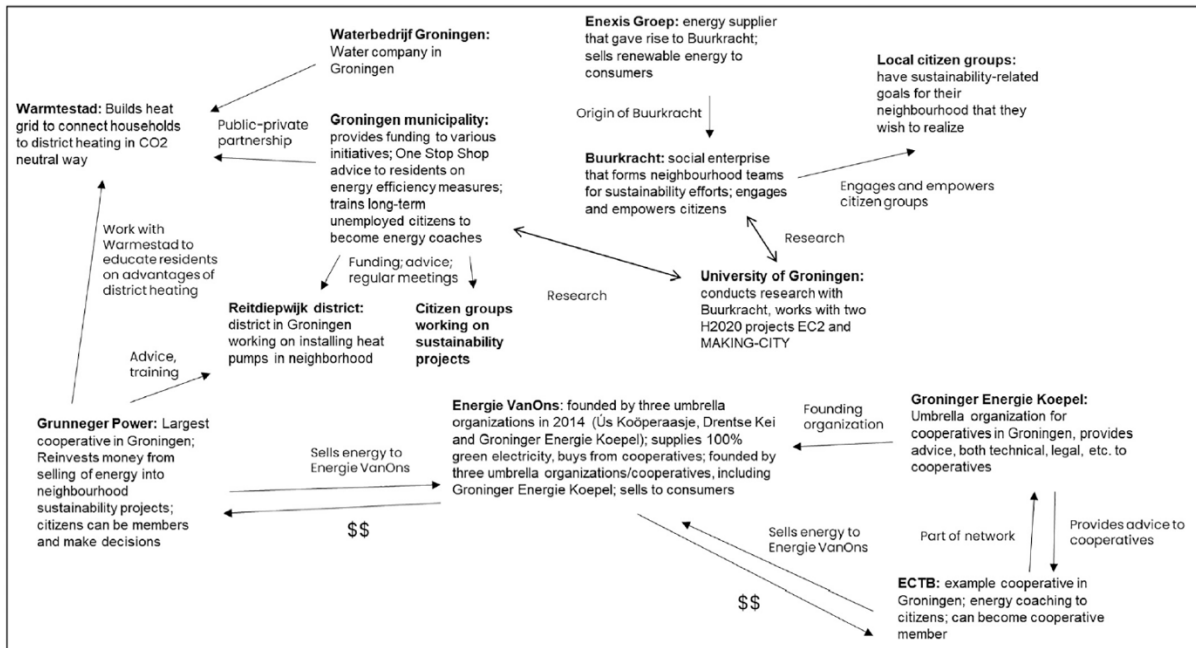


Figure 4: Mapping of stakeholder network of energy actors in Groningen (Source: Mihailova, 2023)

Being part of webs of social relations, means that you are influenced by others who either may offer support. Institutional voids call for the creation of new organisation (for example organisations that offer intermediation and support services. The agency of ENCI actors depends on the existence of public energy organisations, umbrella organisations, local obligations for consultation and co-ownership. In Groningen, Energy van Ons sells green electricity from cooperatives, thus enhancing the agency of its members (energy cooperatives such as ECTB and Grunneer Power). The agency of cooperatives is also enhanced by cooperation with scientists in innovation projects and having members who are able to engage in intermediary services (getting loans and permits and creating institutional homes for projects with incumbents).

Delegating responsibility: the views of local government officials in the Netherlands

The views of Dutch local government officials regarding tasks they can delegate to citizens and their ability to do so are described in the article “Everybody should contribute, but not too much” by Uittenbroek et al. (2019). The overall conclusion is that local government officials have “moderate trust in citizens' capabilities, but a low willingness to transfer responsibilities”. They welcome ENCI activities of sharing energy expertise in the neighbourhood and organising community activities. They appreciate to hear suggestions for policy by them, but actual policy choices are viewed as essentially a government task. Devolution of government tasks raises difficult issues of who is accountable for the quality of outcomes and adequate use of tax-based resources. Devolution is usually associated with imposed obligations for accountability.

Plan tasks	CAN	WANT
Agenda setting	Come up with ideas and initiatives	More often act as expert of their neighbourhood
	Use social media to share information	Organise public support for (their own) initiatives
Knowledge creation	Share their expert knowledge about their neighbourhood	Share their expertise and (tacit) knowledge
Initiation of policy	Think about the policy design and measures	Take initiative and implement it, but within the institutional context
Target setting	Set goals together to generate ownership	Set goals together; if possibly set up a foundation in order to secure goals
Do tasks	CAN	WANT
Strategy making	Contribute in participatory practices such as walk-in sessions, kitchen-table talks, ateliers/workshops	Actively contribute in participatory processes such as mentioned in the 'can' section
Information provision and dissemination	Setting an example for the neighbourhood by taking measures and sharing them with their neighbours	Communicate about water nuisance and share information about measures
Financing of measures	Finance public measures by paying taxes; taking measures on their own private properties	Financing measures on their own properties
Physical implementation	Think of effective technical measures; thinking along about the design and actual implementation	Provide input/feedback on specific elements (e.g., aesthetics/colour) of the design
Check tasks	CAN	WANT
Monitoring of results against targets	Those who want, can monitor	Monitoring done by government is leading
Enforcement through sanctions/incentives	No task	No task
Policy adjustment	Provide feedback for adjustments based on practical experiences with the measures	Feedback is wanted, but government interprets and decides on adjustments
Maintenance tasks	CAN	WANT
Maintenance after instalment	Adopt public green and take responsibility for the provision of green.	Take responsibilities for green maintenance, but only if continuity and quality can be guaranteed.

Figure 5: Delegating responsibilities (Source: Uittenbroek et al. 2019, p. 197)

Delegation of responsibilities goes against the nature of municipal organisations as essentially implementation-oriented bureaucracies.

Navigating transformative change in a world of power and rules

The power of incumbents (holding key assets and decision-making powers) in the energy system is not easily overthrown or reduced, but if initiatives can offer a solution to problems experienced by incumbents, such as net congestion, they are able to work with them on their own terms. Weert Energy struck a deal with Eneco Wind (a private company) where Eneco agreed that 30,000 euro from the profits from wind energy operations go into a community energy fund. In Parkstad, the municipalities decided to create a public energy company, a move which empowers energy cooperatives in the region as a supplier of energy vis-à-vis commercial energy companies. The creation of a public energy company is an example of disruptive change, which stems from political decision-making. In Germany, the process of remunicipalisation of the power grid ownership and supply operates similar disruptive change, which can be initiated either by political decision-making or even through direct democracy processes, such as the referendum initiated by the citizen's initiative 'Our Hamburg – Our Grid' (OHOG) for the full remunicipalisation of the energy distribution grids in the city of Hamburg, voted by a majority in 2013. In Berlin, a similar referendum did not reach the required quorum, yet the Bürger Energie Berlin cooperative still claims for a citizen participation in the ownership and management of the Berlin power grid, which has meanwhile been remunicipalised. The cooperative had in 2022 more than 12 million euros available for a share in the Berlin energy grids, and still pushes the Berlin Senate to accept citizen participation,

External rules for tendering and rules against state funding are often viewed as unnegotiable facts of life but they can be neglected, interpreted differently or circumvented by exploiting conflicts of those rules with other rules. Transformative agency is about navigating such matters. Structures are not objectively given, but subject to interpretation and re-interpretation: "intersubjectivity, social interaction, and communication as critical components of agentic processes: agency is always a dialogical process by and through which actors immersed in temporal passage engage with others within collectively organised contexts of action" (Emirbayer and Mische, 1998, referring to Mead and Joas).

ENCI initiatives favour justice and inclusivity but male, high-educated people are over-represented (a survey on membership of German energy communities found a strong overrepresentation of males in the 45–64 age bracket and overrepresentation of high-educated people, with 60% of members holding a university degree (Radtke and Ohlhorst, 2021)). Low-income people are not deliberately kept out of energy communities, some have strategies for bringing in young people (especially students), many of the initiatives are engaged in increasing energy literacy in the local community and working with government does not mean that you are selling out. The interaction with others is a mechanism for diffusing values and altering existing institutions.



Empowerment framework

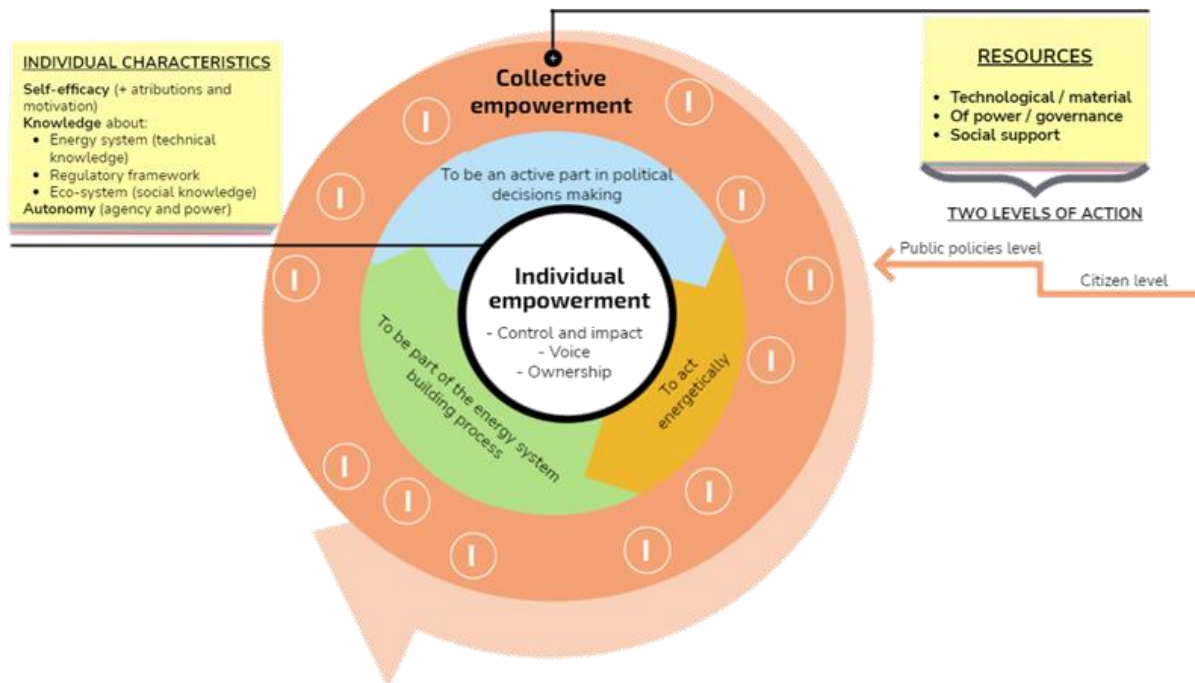


Figure 6: From individual to collective empowerment: interactions between the individual and their personal characteristics and environmental systems mediated by available resources⁴

Transformative agency depends (amongst others) on psychological aspects of empowerment. Empowerment is an emergent property of three elements: 1) having a motivation to act for a certain cause, 2) having knowledge and skills for acting and 3) and having a certain amount of autonomy to exercise those skills. When people join an initiative of like-minded people, all three aspects are often enhanced, by openly discussing transformative change issues, by having others to collaborate with and by being part of an organisation which has agency towards the outside world.

As shown by Figure 6, the process of individual empowerment occurs in a dynamic framework of relationships between the individual and the environmental systems in which it develops, from which it extracts and uses its resources to respond to the needs of control, autonomy, and power. As expressed by Coy et al. (2021), it is "the process by which an individual or group or community increases its capacity and contextual power to achieve its own objectives, which leads to its transformative action" (p. 10).

Factors such as social cohesion, sense of belonging, equal participation, social learning, quality of leadership and collective self-efficacy contribute to the sense of empowerment from the individual to the community, allowing the development of strong community networks and a sense of citizenship (Coy et al., 2021). By working together in a collaborative activity such as community energy, members of the initiative develop a collective identity that also becomes a social resource. As noted by Avelino et al. (2020), the experience of empowerment cannot happen in isolation from the social dimension, since "it is constituted through social interaction and is mediated by the construction of socially shared experience" (p. 959).

⁴ Source: Report of EnergyPROSPECTS WP4 Workshop: "Enhancing the transformative impact of energy citizenship in Spain".

By joining an initiative, as a *microcosmos* for social interaction, people's sense of autonomy (to make decisions about one's own actions) and effectiveness may be boosted. Organisational membership and projects may bring the actor in contact with others, people who are a source of inspiration and learning, and organisations who hold different views and critical resources: "initiatives offer spaces for participation, giving a voice not only to their members within the initiative, but also in contact with other actors in the territory where it is located and beyond" (Empowerment toolkit EnergyPROSPECTS produced by UDC). Such interactions may deepen emotional commitment, enhance energy literacy (and other types of literacy) and interactions with other-minded people may encourage them to critically reflect upon themselves, regarding their inclusiveness and their strategies for achieving impact.

Empowerment depends on interaction with socioeconomic, political, and organisational conditions and challenges at a given time (Avelino et al., 2019; Strauss et al., 2022), as well as the resources available to citizens. The following resources are relevant: *material resources* (mainly technological and financial), *knowledge* (technical, political, regulatory, and social), *social* (support, collaboration, networks, and coalitions) and *power and governance resources* (autonomy, elections, motivation, control and impact, voice, property). In the 3D framework, the focus is on the dimensions of scaling out, up and deep. Common elements amongst the empowerment framework, the TSI framework and 3D framework are the importance of transformative goals and values, feelings of efficacy which are related to the mobilisation of resources (people, knowledge, finance) and institutional work for creating an institutional home and changing dominant institutions (government programmes, bureaucratic rules and the profit motive).

In ENCI activities, agency is exercised by capable actors who exploit opportunities afforded by the context (available technologies, suited locations for collective energy generation, subsidy schemes, people who can be expected or persuaded to fund something, etc.). Agency requires knowledge of situational aspects, instead of having general knowledge. It involves "an epistemic principle of 'we-know-the-world as we change it' and an ontological principle of 'we-come-to-be-as-we-change-the-world'" (Stetsenko, 2017, p. 197). In a world in which the energy transition is an official project, energy citizens and their organisations may be approached by energy agencies responsible for the energy transition, political parties and by scientists who want to do projects with them. Especially when municipalities are keen to work with energy cooperatives. Such cooperations offer ways of exercising influence, developing competences and becoming different (through experiences and interactions with others, actors get transformed). An example of someone who exercised transformative agency thanks to is involvement in different organisations and contexts is Frank Pieter Boon. After completing a Master thesis entitled "Local is Beautiful - The emergence and development of local renewable energy organisations", Frank Pieter Boon cofounded the wind cooperative Zuiderlicht in 2013. After obtaining practical experience with the implementation of solar roofs projects, he created and taught a course on cooperative development of solar roofs, followed by the development of new solar roofs. He is currently involved in the creation of the first cooperative wind farm in Amsterdam North, together with four other energy collectives. He is part of the project team to obtain an environmental permit for the wind turbines. He supervised RES sessions and helped build an Amsterdam network of leaders in the energy transition (community building with energy breakfasts).⁵ As an energy citizen and energy expert, he is *contributing to and part of a broader institutional change process through the "webs of influence" he was part of and the*

⁵ Based on <https://www.linkedin.com/in/frank-pieter-boon-70829551/?originalSubdomain=nl>

agency that he exercised in those webs. Collective empowerment occurs via cooperation with like-minded people, the identification and exploitation of win-win options and the creation of an enabling environment for energy citizen activities.



2 Methodology

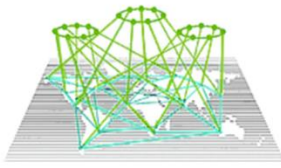
2.1 Use of 3D framework in the workshops

The source of knowledge of this report are five workshops with practitioners, scientists and policy makers about transformative agency. In four workshops (in Berlin, Dublin, Latvia and Eindhoven), we applied the 3D framework of Tim Strasser, who moderated the discussions (except for Latvia).

The way that the 3D framework was applied slightly changed after the first workshop in Eindhoven, in response to feedback from workshop participants. All three workshops started with a mapping of participants (based on which roles they play in the energy transition), a brief presentation introducing the Energy PROSPECTS project the typology energy citizenship, a short presentation explaining the 3D framework, and a 10-minute silent brainstorm where participants were invited to write short initial responses to the questions about transformative agency on sticky notes and place them on flipcharts for each of the three dimensions. In the first workshop (Eindhoven), the discussion questions focused on transformative aims, (non)successes experienced by ENCI initiatives, and conditions of (non)success, related to each of the three dimensions. After the silent brainstorm, we invited participants into three breakout groups to discuss the responses on the sticky notes and capture key observations from their discussions, which were then shared in the plenary. In the two following workshops, the use of breakout groups was discarded, due to low numbers of participants (5-7). We also stopped using the distinction between the transformative impact and capacity, as we found it more appropriate to reduce the conceptual complexity of the 3D framework for non-academic workshop participants. We also slightly modified the discussion questions (see Figure 6), to make clearer what should be discussed and to adapt to the fact that only a few participants represented ENCI initiatives. Hence, we simplified the approach by only focusing on strategies and challenges of *widening, deepening, and lengthening* citizen engagement in a just and sustainable energy transition. We also opted for a more selective focus by articulating discussion questions related to (and slightly adapting the terminology of) three transformative capacities for each of the three dimensions, instead of including all the capacities from the 3D model. We chose to focus on those capacities that seemed most relevant and generative of meaningful discussions in the context of energy citizenship.



Discussion questions about transformative agency in 3 Dimensions



Widening

1. How can civic engagement in the energy transition continue to **grow**? How can ENCI initiatives be scaled out?
2. How can the energy transition become **more inclusive** of more diverse population groups?
3. How can **synergies** among different forms of ENCI be strengthened?



Deepening

1. How can ENCI become **more transformative**? (Addressing justice issues, holistic sustainability, radical system change)
2. How can **cross-sector cooperation** improve? (Private, public, civil society, science)
3. Which **power relations** need to be changed and how?



Lengthening

1. How can the **continuity** of ENCI initiatives be increased (e.g. via models of ownership, financing, partnership)?
2. How can the **resilience** of ENCI initiatives be strengthened, to better adapt to changing context conditions?
3. In what way is a **professionalisation** of bottom-up initiatives desirable / possible (beyond voluntary engagement)?

Figure 7: Discussion questions about transformative agency in 3 Dimensions

We analysed the reports from each of the three workshops that applied the 3D framework by organising the results from the discussions under the headings of the three discussion questions for each of the three dimensions. We clustered the insights from all three workshops under common themes in an integrated manner. Some contributions were moved to another dimension (widening / deepening / lengthening), in situations where participant contributions from a discussion focused on one dimension (e.g. about widening) were found to be more related to another dimension (e.g. deepening).



Picture: Participants in action at the Eindhoven workshop on transformative agency (courtesy of Tim Strasser)

2.2 Limitations

The strong reliance on workshops also comes with limitations. As they provide a snapshot in time, they did not allow for longitudinal analysis of transformative agency, through for instance people from ENCI initiatives gaining positions of power in government, business and systems of governance, and people from those domains getting directly or indirectly involved in EnCi activities. The diffusion and translation of ENCI values in business and government was not studied, because the focus on citizen-based activities. The dark side was not a prominent conversation topic at the workshops and thus only weakly examined. Recommendations from the workshops were not subjected to further analysis in terms of their desirability and efficacy.

The more agnostic cases of ENCI were less represented and discussed at the workshops. Energy cooperatives and scientists were overrepresented at the workshops. Policy makers and protest-ENCIs were underrepresented. The findings reflect the workshop outcomes and viewpoints of those who were present. Nonetheless, the workshops produced important issues on how the agency of ENCI actors can be enhanced. The participants found the 3D framework useful for thinking and shared direct experiences with dealing with power and issues of resourcing. We are very grateful for their contributions. We hope this deliverable does justice to the high-quality of the contributions provided.



3 Results

3.1 Partnerships as an enabling factor for agency

This section presents the findings about intermediation, partnerships with government and commercial parties and ideas for benefitting more from partnerships (through intermediation and integrated thinking). Since intermediation is not an explicit aspect of the 3D framework, we discuss the findings on this separately, together with findings about (psychological) empowerment.

The importance of Intermediation

Intermediaries and platforms play an important role in bridging differences between ENCI actors and non-ENCI actors according to the literature and participants at the workshops. They help to find congruency. Intermediation is often done by ENCI actors who know the organisations they deal with well, either because they have worked for them or because they obtained intermediation experience. Project developers are skilled in intermediation, but may do so in ways that are advantageous for themselves: "Developers are clever guys who are adept at putting the costs and risks on others, while pocketing the benefits. You have to force them to be transparent, be able to look in the books with them."

In the Netherlands, energy citizenship organisations are well-networked. They are part of other networks and have good contacts with municipalities. Some collaborate with scientists (such as Loenen Energy). This increases their agency in terms of knowledge and wherewithal. This is also the case in Ireland, especially for the Aran Island energy cooperative: After 2017, collaboration with academic partners in EU-funded projects became a key factor of the case, as this enabled the creation of paid positions. These positions not only enabled capacity building, but also a continued commitment to the further development of the case.

Intermediation helps to find agreement between many parties, but can take a lot of time. In the A16 wind turbine project in Brabant, the province worked together with local parties and ENPULS (the social branch of Enexis, which no longer exists). All kinds of process managers sat on this and all kinds of people were given the opportunity to be intermediaries. This had the following consequences: it took a very long time (years), and it made the process extra complex. An unexpected, major problem arose when revenues were millions higher due to the energy crisis caused by the war in Ukraine. A fight broke out over those millions. Energy coaches and intermediaries spent months dealing with the issue. The first time they were talking about this issue with an audience of citizens they were booed but at the end they were applauded by the public. The national government was deliberately kept out of it (as this was believed to complicate the process).

Intermediation can also be done by members of ENCI themselves, especially those who have been administrators or civil servants at the municipality or employees at professional organisations. There is inequality in access to resources: "You have to speak the language of



institutions to get money". Initiatives in Rotterdam-Zuid (a neighbourhood with many immigrants) are less successful than initiatives in Rotterdam-Alexander (a middle-class district). This was referred to as "institutional racism" by a participant: "When people of a different race (origin) are at a structural disadvantage, it is institutional".

In Ameland (a Dutch Island), a freelance energy consultant (Jakob Dijkstra) played an active role in the realisation of a local energy system called "Energierotonde Ballumerbocht". He had worked for years for the municipality as an energy expert and now works as a self-employed person with strong motivations for realising sustainable energy. Energy storage is essential in large-scale solar power generation. It is being actively pursued. Ameland is involved in an experiment with hydrogen storage, has a community battery and a biomass digester. With the help of an energy traffic circle calculation tool which was used in several sessions, Dijkstra obtained buy in from commercial parties by running realistic scenarios based on energy data and discussions on costs and revenues. The economic case of energy options and infra-issues was jointly investigated, rather than individually on the basis of presumptions. For commercial actors, a positive business case is essential for their involvement. Dijkstra understood this and made sure that everyone was going to benefit from the cooperation. In a presentation about his work, he said that he will not work for a commercial company, "because they are only interested in selling their own product." He is an example of a professional who is combining values of energy citizenship with earning an income.

In the Eindhoven workshop there was no consensus about the question whether more intermediaries are needed. It was said that the initiatives possess a lot of knowledge already, but an important agency issue is: *how do you mobilise it?* In the case of Weert (NL), the energy cooperative Weert Energie has been given a building in the centre of Weert (at a top location) for providing energy advice to citizens. At this location, advisory services are provided by trained volunteers (often retired professionals) and students from higher education institutes.

ENCI intermediaries can also play a core role in enabling alternative to the dominant models and in challenging power relations with governments. The Mietshäuser Syndikat (Tenement Housing Syndicate) is a cooperative, non-commercial joint venture in Germany that helps communities acquire long-term affordable living space via a legal, collective property arrangement that enables the buildings to be out of the speculative real estate market. In 2014, the German Federal government launched a legislative initiative on small investor protection (*Gesetzesinitiative der Bundesregierung zum Kleinanlegerschutz*), following the sensational bankruptcy of the wind energy company Prokon AG, which used to promise its investors returns of up to 8%. The intended legislation aim was to protect small investors from unfair investment providers. The concrete draft law was a cause for concern for the Mietshäuser Syndikat (and initiatives like LaVidaVerde in Berlin, among many others) since such a law would have had serious consequences for such small, solidarity-based projects. Indeed, the law in its initial form would result in putting small house projects on an equal footing with large, professional providers of asset investments that collect many millions of euros. Correspondingly high legal hurdles - and associated high costs - would be imposed on little projects in order to be allowed to accept direct loans. Many other initiatives outside the Tenement Housing Syndicate, such as small energy cooperatives, free schools and village shops, would also have been affected by the law. The considerable additional costs that would arise for their house project would have induced a significant rent increase. Some of them would then no longer be able to afford to live in our house, of which goal of creating living space with socially acceptable rents with the financial support of friends, acquaintances,



relatives and interested parties would thus be acutely threatened. In 2015, the active lobbying of the Action Alliance “wir sind nicht Prokon” led by the Mietshäuser Syndikat resulted in the abandon of the initial legislation proposal and a revised Small Investor Protection Act was passed in the Bundestag in April 2015,

At the Berlin workshop, the model of intermediation provided by the Mietshäuser Syndikat was also underlined, highlighting its capacity to act as an ambassador of change through snow-ball effect: “I have always been impressed in this context by how the Mietshäusersyndikat knowledge transfer works. Namely, projects that have been successfully implemented automatically become advisors and then pass on this knowledge to new initiatives that are starting from scratch. So, it's basically: If you're part of the Mietshäuser Syndikat, you also make this voluntary commitment, let's say, to become an advisor. [...] Wouldn't it be an idea for the people who have received counselling there to pass on the knowledge in their environment, so that it works like a snowball system.” Furthermore, as a core actor of translocal mobilisation towards toward the establishment of non-profit-oriented, collaborative, and self-managed housing models, the Mietshäuser Syndikat has contributed to scale out an alternative model through more than 170 housing communities in Germany, and to transfer its legal model in Austria, France, Netherlands, and Czech Republic. However, “these mechanisms are not strong enough to compensate unequal relations of power and resources—among other in view of local pre-conditions” (Hölzl 2022). Participants in the Berlin workshop noted also the importance (and lack) of intermediary spaces. The representative of the German Environment Agency underlined their key role “in the context of real labs or whatever, to possibly approach this by really trying to enter into a dialogue at eye level with actors from these different perspectives. These spaces are always missing. At the moment we are calling them intermediary spaces, which means that the term intermediary, which you have also examined in the project, needs to be detached a little from the idea that these are actors or structures. Perhaps we also need spaces in order to enter into this dialogue, and I see the municipal level as quite decisive. Because this is where the actors know each other best and can perhaps look each other in the eye and talk honestly”. Similarly, joint support structures to face difficulties (such as the corona-crisis) could be very beneficial.

A proper institutional home

Working with commercial parties requires not only agreements on ownership and the distribution of costs and revenues but also a proper institutional home for such projects. For a wind energy generation project with Eneco, Weert Energie created a separate corporation, New Energy Weert which has two shareholders: Weert Energie and Eneco Wind both for 50 percent. In the deal with Eneco Wind, it was agreed and stipulated (in the articles of incorporation of the new BV) that part of the net proceeds from wind energy operations may only be used to realise energy projects in the region. That control over the spending of funds was negotiated with Eneco in which the parties agreed that 60 percent of the control lies with Weert Energie and 40 percent with Eneco.





The Eindhoven workshop, showing Peter Ramaekers from Weert Energy drawing the institutional structure of New Energy Weert

Successful projects owe a lot to special circumstance. The following conditions were mentioned as facilitating factors for the Weert Energy case by a participant:

“You were in a good position to do this: you have a good relationship with Municipality, so you are already at the table and don't have to participate in a tender. If you do not have such a position, it is much more difficult to realise a new project, especially with a lack of good locations. Ultimately, who has The Right To Develop? Energy cooperatives do not have an exclusive right. A good relationship with the municipality is not enough, lobby work is often needed. You are also dependent on commercial parties for project development, implementation and financing. In the case of Weert Energie, the €1 million in pre-financing for the wind project could be raised through the operation of the solar meadow and cooperation with a commercial party. So the stage of generation [their assets as collateral] play a role”.

Collective energy citizenship initiatives are subject to institutional evolution. One example of this in Spain is: “We started with a renewable energy cooperative in which the market allowed us to do things to a certain extent, being led by them, and it was easier in that cooperative model dedicated only to generation, but with the expansion of volunteers and new activities, we moved to the legal form of an association with a Governing Council, of which I am a member”.

Two citizen cooperatives present at the Eindhoven workshop (Weert Energie and Landelijk Samenwerkingsverband Actieve Bewoners – LSA) cooperate with education institutes: “In Weert we have a deal with the technasium, to involve students from year 4 and 5 from the HAVO⁶ and VWO⁷ in interesting social projects around energy and sustainability. Not only technical issues but also other aspects”. LSA involves students in neighbourhood (business) initiatives about energy conservation and labour reintegration (repair activities, ...).

Such projects are beneficial to students in applying and acquiring knowledge but also benefit the neighbourhood. More than paid professionals, they are able to interact with groups and

⁶ Hoger algemeen voortgezet onderwijs (HAVO) means "higher general continued education" in Dutch.

⁷ Voorbereidend wetenschappelijk onderwijs (VWO) means "preparatory scientific education" in Dutch.

people that are difficult to reach by government (people with debts and multiple problems who have become distrustful of government and people wanting something from them).

Projective agency

An important conclusion that surfaced from the Eindhoven workshop is the need for a programmatic and strategic approach involving businesses, government, civil society organisations to realise complex projects that involve new infra. Opportunities are missed because:

- Complex projects require a lot of considerations and decisions, including infrastructure and grid access.
- They involve dominant system parties (such as network operators) who can demand quite high payments for their services or simply deny their cooperation because of other projects being more important (profitable) to them.
- What is missing are parties that can direct a process with many actors and interests in an even and fair way.

Likewise, possibilities for dealing with multiple problems are not being taken advantage of. Energy cooperatives could play a role in the creation of neighbourhood energy plans. Housing renovation projects are mainly looked at from a housing point of view, neglecting the possibility of creating local energy systems that make the energy system more resilient and democratic.

3.2 Enhancing transformative agency in 3 Dimensions

This section presents the results of using the 3D model to discuss strategies and challenges for 'widening, deepening, and lengthening' citizen engagement in a just, democratic, and sustainable energy transition.

3.2.1 Widening

This section focuses on 'widening' of ENCI, in terms of how civic engagement can grow or be 'scaled out', and how engagement in the energy transition can become more inclusive.

How civic engagement in the energy transition can grow and be 'scaled out'

The Russian invasion of Ukraine has prompted many people to become more autonomous with their energy supply (in Germany), for instance through building their own solar panel systems on their roofs, or setting up energy cooperatives. These people often seek for peer-to-peer advice from established ENCI initiatives. However, *"Initiatives cannot afford to advise as many groups as are currently in need. A funded coaching, counselling, and networking centre with people who can take care of it full-time is needed. [As initiatives] we cannot afford to advise so many groups on a voluntary basis in addition to our everyday life"* (Berlin). Such a coaching and networking centre should also focus on networking and peer learning at a



European level to support synergies among different approaches and contextual understanding of what works in different national contexts. A participant from the Dublin workshop similarly suggested the creation of a county level office, or an officer, that functions like “the Enterprise Office, but for climate issues.” The goal here is to ensure that communities have readily available knowledge resources and practical support, preventing them from “reinventing the wheel.” Mentoring using an approach of “meeting people where they are” was highlighted as a vital component, to ensure that appropriate support can be offered that is attuned to differences in levels of expertise, needs and context conditions. Overall, these workshop participants suggested that better structural support is needed at different levels of governmental institutions to facilitate knowledge transfer and support the growth of ENCI initiatives.

However, other workshop participants were more critical of positioning such support within public institutions. Handing over responsibilities to local authorities without proper resources was not seen as a solution (Dublin). Oftentimes city councils develop concepts (for instance, for a decarbonisation zone), but have insufficient financial resources. Beyond financial limitations, it was also pointed out that citizen-led organisations often “know more or better what needs to be done and how it can be achieved” than state agencies or local authorities (Dublin). However, participants also criticised a certain ‘progress anxiety’ among public institutions and the ‘powers that be’, a reluctance to resource and trust citizen-led initiatives to “get it done.” This reluctance to fund and resource citizen-led initiatives can slow down the expansion of the role of citizens in the energy transition.

The discussions in Dublin also highlighted the need for addressing policy gaps in the energy transition, particularly concerning small-scale generation projects in the range of 50-500 kilowatts. Participants noted the need to address these gaps in governmental ‘auctions’ for community projects (in the Irish context).

How the energy transition can become more inclusive of more diverse population groups

A workshop participant in Berlin raised the question “Who is actually excluded from engaging in the energy transition? Doesn’t everyone have the same opportunity to do so? Even those affected by poverty or with lower levels of education can participate, since craftsmen are needed with different levels of education, and they can earn a lot of money.” Despite this more optimistic assessment about equal opportunities for an inclusive energy transition, other participants raised a number of significant inclusivity challenges and barriers: “When we don’t just look at the opportunities, but who actually does engage, we see that many population groups are under-represented or difficult to reach.” The following explores some of the conditions that were suggested for enabling and motivating more diverse and marginalised population groups to engage in the energy transition, especially in terms of lower income and education levels. These communities often face the most significant challenges and vulnerabilities, such as energy poverty and living cost increases due to rising energy costs.

The discussions underscored the need to move beyond treating the energy transition as a middle-class concept. Low-income communities who are grappling with survival needs are largely not included in the energy transition, or actively resist measures such as installation of heat pumps in social housing, which increases their monthly electricity bill. At the same time, it is important to acknowledge that the negative implications of using non-renewable energy



sources disproportionately affect vulnerable communities in terms of their financial, health, and potentially also mental well-being. But the people involved may see this differently. In France, yellow jersey protesters felt disproportionately harmed by energy transition policies, which were seen as elitist. One suggestion focused on public education to raise awareness among marginalised communities that they in fact stand to benefit the most from the energy transition, for instance in terms of improved health from lower air pollution levels (e.g., resulting from electric mobility). Especially children (of parents living in poverty) would gain substantially from cleaner air and reduced health risks (like asthma). However, more structural changes are needed, beyond mere awareness-raising approaches, to address some of the structural exclusion mechanisms.

One participant from the Dublin workshop suggested developing an inter-agency model for advancing a truly just transition, whereby multiple public agencies and councils work more closely together with community organisations. It is important to consider that in the absence of social tariffs supporting vulnerable communities, “the system is stacked against them, so if you try to get them involved, they need to feel that the system is not stacked against them.” Partnerships between public agency and community organisations that “have trust on the ground” can be important to address “a huge credibility gap, a trust issue, with the delivery agency.”

A further obstacle to inclusivity is the often highly technical language and terminology in discourses (and public consultation documents) related to the energy transition. This can be a barrier especially for people who have literacy issues, or who don't speak English as their native language: “you are completely out of the conversation. You're not even entering it, because you don't want to look stupid, when you don't understand what people are talking about” (Dublin). The need for more basic and relatable language and narratives was emphasised, as well as creating more opportunities for low threshold community conversations. The energy transition needs to be made meaningful from the perspective of the citizen, taking into account their circumstances and perceptions of what makes it more or less desirable: “People only feel involved if something actually makes sense in their eyes, and not at the expense of things that are also important” (Berlin).

Even the term “energy citizenship” can be problematic if it becomes elitist, leaves behind, or even punishes non-citizens and people with lower status, privileges, and resources to enact energy citizenship. This can alienate and disempower people and reduce their self-esteem, for instance, by being perceived as ‘lower class energy citizens’ or ‘not being good at making their voice heard’ (Dublin).

The topic of social polarisation surfaced in multiple discussions, as a significant number of people actively oppose measures advancing the energy transition towards more renewables. This often stems from concerns about undesirable consequences, distrust in the government, aversion to experts or certain cultural groups, such as “the higher educated green-left voter who is materially better off than they are” (Eindhoven), or concerns with subsidies that benefit the rich. The potential for social media to deepen cultural divisions were also discussed. Building trust, strengthening community organisations that can engage more directly with citizens, and creating “safe spaces for open conversations without hidden agendas” emerged as strategies to address these challenges. Another idea to “de-polarise the conversation” was to strengthen literacy and confidence of people to find relevant information and form their own opinions, instead of “being drawn into a very positive or very negative opinion about



technologies of the future, climate change, and our energy choices.” Latvia, like other countries, aims to minimise social polarisation in the context of energy citizenship and energy poverty as a broader issue. Ensuring that the benefits of the energy transition are broadly accessible and that energy projects do not disproportionately impact specific communities should be a priority.

3.2.2 Deepening

This section focuses on ‘deepening’ of ENCI, in terms of how civic engagement can become more transformative, how cross-sector cooperation can be improved, and how power relations can be changed.

How ENCI can become more transformative through greater deepening

A key aspect of deepening transformative energy citizenship, discussed in Berlin, was the transformative aspect of self-construction groups. It was suggested that involving individuals in the construction of their own energy solutions, such as solar roofs, is a more powerful approach than simply hiring professionals to do the installation. It was acknowledged that while technical expertise and certificates are often necessary, a hybrid model was suggested that combines professional and volunteer capacities. This approach allows people to actively participate in installation and maintenance (also a ‘lengthening’ aspect), fostering a deeper connection with and sense of ownership of their energy sources. This also has a ‘widening’ quality as people proudly share their self-construction stories with others and thereby can inspire them to follow their example.

Another theme was the empowerment of communities in local decision-making and income generation through community ownership over the energy grid. Historically (at least in the Irish context), the grid has been imposed upon communities as passive consumers, while decentral electricity generation can be a tool for enabling citizens to act as ‘prosumers’ with more influence over how their grid is designed and how the profits from feeding energy into the grid are used. The value proposition of fair grid capacity, the opportunity to participate in and benefit from generating their own electricity can significantly transform people’s perceptions of and relation to the infrastructure that affects their lives daily. An example of how local communities can benefit directly from energy initiatives was presented in Dublin, namely the Renewable Electricity Support Scheme (RESS), which mandates that renewable electricity generation projects establish Community Benefit Funds. These funds contribute to the economic, environmental, social, and cultural well-being of local communities: “*The Fund will be aligned to incentivise investment in local renewable energy, energy efficiency measures and climate action initiatives. The community benefit funds under RESS-1 will deliver approximately €4.5million a year to sustainable community initiatives targeted at those communities living in close proximity to the RESS-1 Projects.*”⁸) This approach channels significant levels of funding into sustainable community initiatives that align with the goals of the local population.

A core focus in deepening transformative energy citizenship was the importance to make social justice and inclusivity a foundational aspect of the energy transition. This included considerations of unequal opportunities for females (and other genders) in a male-dominated energy sector, migrant communities, and people living in areas of deprivation. Participants (in

⁸ <https://www.gov.ie/en/publication/36d8d2-renewable-electricity-support-scheme/>



Dublin) suggested “bringing a just transition lens to everything you’re doing” so your activities are not only focused on the energy transition, but simultaneously address pre-existing societal inequalities. The discussions about gender disparities in the energy sector highlighted that policy-making and decision-making boards were largely dominated by men and that women’s perspectives needed to be better represented in these discussions, beyond common forms of tokenism. The workshop participants advocated for a mindset shift with regards to how gender-related issues are addressed, particularly in developed countries (where many people believe that gender inequalities have been overcome), and promote equal participation in energy-related decisions. One female participant shared a story about being part of a government-initiated energy security group in response to the energy emergency in 2022, where all men were involved in designing energy policy, while a separate energy emergency group consisted only of females: “So it was like, men are the ones designing energy policy and making all decisions, and when it doesn’t work, then the women have to manage the consequences that those designing the system didn’t think about from the start.” This example illustrates how persistent gender inequalities play an important role in constraining the transformative agency of women, as representation in high-level decision-making remains largely male dominated.

At the Berlin and Dublin workshops, participants made three specific suggestions for fundamental systemic changes in the energy system: 1. Redefining energy as a public service, 2. Redistributing income from the energy business, and 3. Shifting the profit-maximising paradigm to a sufficiency paradigm. The issue of energy needs and ability of people to meet their energy needs was discussed at the workshops in Spain and Ireland too, with participants arguing that energy should be regarded as a public service that addresses a basic need and right for all. The design and delivery of this public service should consider fairness and inclusion of all voices, in a way that is often lacking in conventional energy programmes, where “the retailers run the show from their own perspective” (Dublin). Regarding the second issue (redistributing income), a different way of thinking is needed to manage and redistribute income from the highly profitable energy sector, in a way that supports people at the grassroots level (especially those in precarious situations) to meet basic needs and benefit from the tipping point in rapidly falling prices of renewables. Regarding the third “system failure”, people noted “a fundamental system design error” where increases in consumption are linked to profit-maximisation, instead of sufficiency, income generation and cost savings. This systemic shift should further encourage people to see themselves as part of the energy system by feeding surplus energy into it, instead of “opting out” by going off-grid through autonomous local energy systems. This would also involve a shift from individual to collective forms of accountability and incentive structures: “This involves broadening the perspective of people to see themselves as part of the energy transition, as opposed to a mindset of ‘In my own home, my little castle, I generate my own energy and can consume as much energy as I like’” (Berlin).

Participants also noted the challenges of departmental silos and the lack of joined-up thinking within governmental institutions. “Departments work in siloes, and within departments there are siloes. We need to work in a strategic and systematic way, not firefighting once we’re forced to, in the face of climate breakdown” (Dublin). Often, there is a rush to achieve CO2 reduction goals, though it is essential to consider diverse outcomes and success metrics, related to various budgets and political priorities around health, clean air, national wellbeing, climate adaptation, etc.



Lastly, participants highlighted the need to address misguided subsidies that support big corporations and create equal opportunities in the energy market for smaller, community-owned decentral energy projects.

How cross-sector cooperation can improve

In exploring how cross-sector cooperation can improve to advance systemic changes, the workshops emphasised a shift in relationships between citizens, government, and various stakeholders. The discussions also touched upon the importance of addressing problems using an integral approach, promoting trust, and rewarding innovation.

Workshop participants advocated for a fundamental change in role relationships between citizens and government. A partnership model was suggested, in which the government seeks to understand and support the initiatives proposed by citizens rather than merely offering subsidies that lead energy citizenship initiatives to apply for funding based on policy goals that are defined in a top-down manner. A key point was the importance of municipal officials taking the time to listen to the needs and goals of citizens and to channel funds to the kind of initiatives they seek to implement. The question of what communities want to achieve should be considered in an integral way in each region-specific context, taking into account concerns related to health, lower energy bills, or extreme weather conditions. Furthermore, governmental organisations should reduce bureaucratic barriers that communities face when trying to understand and apply for funding, where disconnected public agencies offer funding with different rules and timelines, which should be better aligned. Another suggestion for improved public-civic partnerships was for governments to guarantee a certain amount of kilowatt hours at a fixed rate (e.g., for heating costs), which would help share risks with citizens (for instance, risks related to retrofitting buildings with heat pumps). So, if prices rise and the state helps to bear the cost, instead of the citizen, this would help build trust in investing into energy alternatives.

To implement partnership approaches that empower civic initiatives, participants highlighted the need for cultivating trust between public officials and citizens. This entails allowing citizen initiatives to experiment with new approaches and make mistakes along the way, instead of pressuring them to meet unrealistic standards. “It’s a mindset. And I would say that the question that gets asked is what could possibly go wrong, rather than how do we make this work?” (Dublin). Trust was recognised as a fundamental factor that cannot be regulated by permits or subsidies; it must be nurtured through genuine cooperation (Eindhoven).

Intermediary spaces are needed as a condition for creating more trusting relationships for cooperating across public, private and civic sectors in a more integrated manner. Besides intermediary actors, intermediary spaces are needed that allow for honest, eye-level conversations and developing mutual understanding. Beyond new strategies, what is needed is a space for cooperation that focuses on serving the common good and building on existing efforts in communities, instead of competition or other dynamics where different actors work against each other. The energy transition calls for more sector coupling, which involves addressing sustainability issues in domains that are often treated separately, such as mobility and land consumption. However, the current siloed structures and resources are not adequate for this level of collaboration among a large number of stakeholders. Living labs were recognised as opportune frameworks that enable discussions that may not occur in traditional settings due to a lack of an appropriate space (Berlin).



How power relations can be changed

In exploring how power relations can be changed, it was recognised that power is a sensitive and complex issue that needs to be more actively addressed in energy projects and living labs. Several key aspects related to power relations were discussed.

Power imbalances in the energy sector are evident in several ways. Geo-political events, such as the Ukraine crisis, demonstrated how “big players” could manipulate energy supplies and increase prices to generate additional profits at the expense of citizens who were in urgent need of energy reserves. Participants criticised a lack of equity in the system that is needed to support people to meet their basic needs. Another concern was that policies that encourage electrification (of transport) and decarbonisation, may reduce people’s choices regarding different energy sources or fuels that are more affordable as prices shift, or that are more appropriate to their specific needs (e.g., in remote areas). Power inequalities also influence the compensation for feeding energy back into the grid. Individuals and communities who feed energy into the grid receive different rates than conventional energy providers, which can be perceived as being less empowered in the energy system. At the Eindhoven workshop, the power of project developers was mentioned: “Developers are clever guys who are adept at putting the costs and risks on others, and pocketing the benefits. You have to force them to be transparent, be able to look in the books with them”.

Overall, the participants emphasised the importance of building shared understandings across diverse stakeholders (at different levels) that more transformative ways of thinking and acting are needed: “So, I think we just have to think big about it, and why shouldn't we do local productions again or with students building things on flat roofs? So, I think we just have to be much, much courageous and really question everything, and then something will happen.” (Berlin).

The inequality in power relations was mentioned by a policy official at the Eindhoven workshop:

"What amazes me is that, as a policy officer, I decide where the budget goes, that at the end of the day I can say to a citizen initiative, 'You either get the money or you don't.' As a result, a small group of 3% gets to work with the money. If you can get a different ratio in that by really going to a partnership, then the accountability on my side and trying to get as much money as possible on the resident's side disappears. Then it no longer becomes an opportunity to get money but really a partnership. So that there can be more deepening relationships between government and citizens."

In the discussion on power relations and hegemony at the Berlin workshop, participants showed a relative consensus on the viewpoint that if more and more people work in the renewable energy sector and get involved themselves, this has far-reaching social consequences, which also involves a large set of power relations. There is for instance a power component involved when big corporations have a lot of money to greenwash their lack of engagement and many municipalities and public utilities have received tax money from corporations. Meanwhile volunteer initiatives are struggling. There is also the fact that the solar panels used in Europe are mainly produced in China, where human rights for workers (e.g., from the Uighur people) are neglected and which results in dependency from China. As strongly stated by the representative of Solocal energy association, linking such issues with more general view on power relation within the energy system: “This is not my version of energy transition.” Solocal Energy’s representative argues for a more transformative approach that gives more place to emergent grassroots actors: “There is need for a transformation, while big players who professionally promote the energy transition are needed, perspectives from below are also important and they can become big players as well eventually.”



Opportunities for participating in public decision making exist in all EU countries, but they are often of a consulting nature. Latvian legislation incorporates a strong foundation for civil society participation in the decision-making process at all levels, stating a range of instruments and methods of it - working groups and consultative advisory councils, public consultations, discussion groups, forums, public opinion polls, entrust/delegation of the implementation of certain public administration tasks to private persons, including NGOs. Governmental regulation obliges all websites of public authorities to have the section “Public participation”. Although the policymaking process is formally accessible, it typically exhibits a passive disposition and frequently lacks proactive involvement. In numerous instances, these procedures maintain a formal structure and tend to overlook genuine public participation. Often, institutions display limited readiness and capability to partake in substantial public discussions or to address people's apprehensions adequately. A notable predicament stems from the constricting time constraints imposed on the submission of legislative proposals, rendering comprehensive preparation a challenging endeavour.

In the energy transition, local and regional governments have taken a more active role. In The Netherlands, they are being tasked by the national government to achieve certain renewable energy generation targets and been given money to employ energy transition experts. In Latvia, five planning regions are responsible for long-term sustainable regional development planning and coordination among local governments and other public administration bodies. Workshop participants acknowledged the increasing importance of these regional governments in coordinating and planning the energy sector at the regional level. Regional governments are expected to have the capacity and proximity to communities necessary to develop mutually beneficial energy solutions and support local community development. They are also responsible for sustainable regional energy policies. However, a challenge for Latvian municipalities is their capacity to provide advisory, consultation, and capacity-building services on energy efficiency and renewable energy to residents. The recent administrative-territorial reform, which created larger municipalities, is expected to enhance municipalities' ability to provide such support to their residents.

The government may have an unduly big influence on energy decisions, by favouring certain projects over others. According to energy expert Annelies Huygen (who did not attend the workshop), the desirable goal is not natural gas-free neighbourhoods, but low-energy neighbourhoods. For low-energy, you have to consider all options in a forward-looking way: insulation, electricity, heat and cooling, and investigate how local sources, such as solar panels, solar heat collectors and local residual heat or geothermal energy can be utilised. A heat grid based on a single heat source (industrial heat or heat from burning waste) only looks at one issue: the supply of heat. If you are connected to a heat grid you are (made) dependent on a monopolist or a waste plant. She expects that in the future smart, integrated energy systems allow people to share, store and use the energy they generate themselves. Of course, not everyone will benefit equally from this.

The re-appropriation of translocal bottom-up initiatives can also contribute to their wider dissemination, as underlined by the positive energy territories (TEPOS is the acronym for stands for “Territoire à Energie Positive” in French) movement in France, The TEPOS network was launched in 2011 by the CLER, a French NGO active in energy transition. This label aimed at acknowledging rural territories that had initiated their roadmap towards energy autonomy (or 100% renewables), ie targeting to cover annually the local energy consumption by local renewable energy production. As pointed in Nadai and al. (2015), “TEPOS territories also



adopt specific approaches dealing with economic, social, environmental and democratic issues”. They approach energy issues with political, strategic and systemic commitment aimed at local development. The CLER had developed also relationship with the French national government, since it was engaged in 2007 in the “Grenelle de l’Environnement” and, in 2013, in the national debate about the energy transition. The TEPOS initiative was copied and pasted in 2014 with the Ministry of the Environment creating the Territoires à Energie Positive for Green Growth (TEPCV), which were thought to be new players in an innovative energy transition policy approach, with the legal set purpose of ‘achieving a balance between consumption and production of energy at the local level [and promoting] energy efficiency and targeting the deployment of renewable energies in its energy supply’. The CLER-TEPOS activist network was clearly the source of inspiration of the law, even if it was only mentioned in peripheral documents (and not in the law). Though contributing to spread the idea of positive energy territories, the governmental appropriation of the concept lost meanwhile the strong political commitment towards a democratic and sustainable energy transition of the initial TEPOS. In a Tribune in *Le Monde*⁷ in 2016, the CLER criticised to quantitative approach of the Ministry and the little attention devoted to the harmonious territorial development with regard to energy transition, underlining the losses in terms of quality of the transition process alongside its spreading.

Another way in which governments have a great influence on the energy transition is via subsidy schemes for energy projects and the permitting system. In the Netherlands, and probably also in other countries, the subsidy system disadvantages big (complex) projects. At the Eindhoven workshop, the example was given of a biogas network of 10/12 farmers whose gas goes to a paper mill after reprocessing. The barriers to this project are numerous: “The combination of electricity with gas and biomass makes it complex. Not only technically but also in terms of subsidy pots. The business cases are interdependent. You need direction in large projects. And that is lacking. The grid companies are not going to regulate this. The paper industry doesn't do it either, they look at what's cheapest for them. The government can't do this either. Neither do people who come from universities and colleges. Consultants who can do this are scarce.”

3.2.3 Lengthening

This section focuses on ‘lengthening’ of ENCI, in terms of how civic engagement can become more sustained in the long-run, and how it can professionalise in appropriate ways.

How the continuity of ENCI initiatives can be increased

The discussions in the workshops identified several elements that can help increase the continuity of energy citizenship initiatives, which are key to their success in the long run.

One important continuity aspect is the need for longer periods of office terms. Extending the term for elected officials from 4 to 8 years would enable longer-term planning and reduce the constant need to reset or adjust plans of citizen initiatives in response to changing regulations that typically come with each new officeholder, which means that initiatives “actually need to start from scratch every four years” (Eindhoven). People in energy cooperatives “get mad and frustrated, because new schemes are introduced all the time,” which means they tend to constantly react to changing subsidy schemes.



Reliable sources of long-term funding were repeatedly raised as foundational for keeping sustainable energy communities and other energy citizen initiatives going and growing over a sustained period. These resources could be provided through local development companies or local government. Such resourcing models need to ensure that the citizen efforts are not just short-term project-based or temporary contracts focused on 2-3 years, but part of a long-term commitment of over 20 years. Community energy initiatives need access to core funding, instead of “keeping your heads above water with projects, which creates a huge waste of potential of people’s intelligence” and the possibility to evolve a project as they learn over time (Dublin). This requires “real partnership approaches with funders” who are more open for projects to experiment and learn instead of delivering on fixed predetermined outcomes. Participants at the workshop in Spain also noted that significant financial resources (especially for initial capital investment in the installation of renewable energy sources) are that support from the public administration, above all, is important.

Participants also emphasised the need to rethink the financing of citizen engagement. There can be a risk in professionalisation of citizen initiatives and the need to align with funding criteria, which can result in losing the original motivation behind initiatives and the freedom to act on one’s own terms as a community (Berlin). It was suggested that it is crucial that public authorities preserve the freedom of citizen initiatives and that they recognise and resource the initiatives that are already present in a community. Alternative financing models, such as crowdfunding, were recognised as having great potential (Berlin). These models include both direct monetary contributions and social participation, creating a sense of shared ownership that can help avoid “not in my backyard” sentiments and other forms of opposition.

Instead of top-down projects (led by governments and local councils), participants (Dublin) suggested to equip communities with the funding to develop their own renewable electricity projects. Communities could then use the income from those projects as a long-term funding source to enable smaller ongoing initiatives to address climate challenges. The Community benefit fund⁹ in Ireland (also mentioned above under 3.2.2) is going to result in a transfer of about €4 billion over the next 30 years to communities. In turn, larger scale electricity generation projects should have a fund for helping communities.

Another participant criticised Irish state-aid programs that support community initiatives via match-funding schemes where the community needs to come up with 40 percent of the funding themselves to access the other 60 percent of government money, as this is unrealistic for most community initiatives. The need for a more trusting funding culture was expressed, to enable communities secure financial resources for long term investments. Another way that government can help ensure the feasibility and sustainability of energy projects is through proper compensation for the initial investments made by community energy initiatives and the interest on loans they take on.

It was noted that trends in the current employment market make it difficult for the public sector to hire contract staff to deliver on climate action plans, “because no one’s taking up public sector contracts unless it’s permanent... that’s from engineers to community facilitation, it’s all across the board” (Dublin). To address this, a suggestion was made that if governments should take the climate emergency more serious and commit to the fact that “we’re going to be at this

⁹ <https://www.seai.ie/community-energy/community-benefit-funds/>



for the next 20 years” and invest the resources to hire the necessary staff on permanent contracts.

The political environment is very dynamic with frequent changes in government. Thus, ensuring that energy initiatives remain effective despite changes in political leadership or policies is a significant challenge. Achieving political resilience is essential for maintaining the course of the energy transition (in Latvia). Currently, initiatives are very much dependent on EU funding, so it seems significant in all cases that initiatives/projects work to diversify their funding sources and attract investments for infrastructure developments, grants, and any other public funding either from national or local sources to sustain activities without being dependent on one source of funding and therefore vulnerable to discontinuity if that source stopped.

Professionalisation of bottom-up initiatives

The discussions in the workshops touched upon the professionalisation of bottom-up energy citizenship initiatives, emphasising both the potential and the challenges of this process.

Discussions revolved around a tension between volunteer work that is common in citizen energy initiatives and professionalisation that is needed where only volunteer-based work faces limitations, without losing the original ethos and community-based character of those initiatives. As mentioned under Section 3.2.2, a hybrid model that combines professional expertise with the involvement of community members was suggested as an alternative approach to simply hiring professionals for any installation tasks (Berlin). This model acknowledges the need for technical expertise, such as the construction of solar plants, without excluding the active participation of citizens. The idea is to find a middle ground where professionals and volunteers work together, allowing people to engage in energy projects without requiring professional certification. A Dublin participant proposed a “human library” approach, whereby a pool of professionals could be called upon by various citizen initiatives to support them build their technical expertise when and where needed: “that way they get the professional skills, but they’re still the decision makers” (Dublin). Alternatively, initiatives could receive budgets they can use to hire professionals where needed. An example of this is the project development fund for energy cooperatives in Limburg (NL) which allow them to hire experts and pay members for project development work. Identifying roles within initiatives that require professional expertise was considered crucial. Roles such as community engagement and energy awareness were mentioned as candidates for professionalisation. There should be more support for those people who want to go beyond their voluntary engagement and make this kind of work their job.

Initiatives often possess a high level of expertise, and their potential should be recognised more. Public authorities often call upon professional consulting firms for advice, which costs thousands of Euros, while professionalism and expertise can also be found in energy cooperatives. Hence, the use of public money could be more efficient and supportive of citizen initiatives if their expertise was better recognised and resourced.

Acknowledging the human element was highlighted as crucial for the success of community energy initiatives. Volunteers often find it challenging to maintain their continued commitment alongside their regular jobs. Motivation, awareness, and understanding of energy issues also vary among citizens. Therefore, initiatives should be structured to accommodate diverse levels of motivation and engagement. Energy citizenship initiatives should also receive structural support and assistance with administrative tasks like applying for bank accounts, insurance,



and legal support, as these can be a heavy burden for volunteers to manage. It was also noted that volunteer roles should be duly recognised and rewarded.

Initiatives require funding, not solely focused on innovation, but also for continuous development of what has been identified to work well. The emphasis on funding innovation should shift to a more comprehensive approach that equally acknowledges and learns from existing successful practices that can be scaled up.

The creation of an enabling environment

In the Netherlands, REScoop, the network of energy cooperatives, was instrumental in the creation of a soft law which stipulates that new local energy generation projects should be co-owned by the community. Locally there is scope to deviate from this goal for local project-related reasons. The 50% local ownership rule has greatly improved the agency of energy cooperatives: it made them the preferred partner for private project developers.

In the Dutch provinces of Limburg, Utrecht and South Holland, regional authorities created a development fund for energy cooperatives which significantly lowers the barriers for new projects. From this fund, loans are made available for project initiatives that only have to be repaid if they are successful. With financial support from the fund, it is possible to pay for project development activities of members (who invoice the cooperative for specific services rendered). This gives energy cooperatives much more clout (vigour).

Another remarkable development is the creation of a public energy company in Parkstad, a mining area in Limburg, where 5/6 municipalities have signed a covenant with local energy corporations to supply renewable energy which is sold to residents in Parkstad on a “cost price plus” basis. Unlike the energy utilities in the past, the new public energy company does not have electricity-generating assets.

3.3 Empowerment

Empowerment was not discussed directly in the workshops, but featured prominently in discussions. Empowerment is not a purely psychological issue but depends on the organisational context that people are in (which may be empowering) and the external context as perceived by the actor as enabling or restraining. Social support networks (e.g., unions of cooperatives) can facilitate the take-off of smaller initiatives, and support local development that links people to the territory.

In Latvia, community renewable energy initiatives are very much dependent on EU funding. In the Netherlands, many national and regional subsidy schemes are available. One participant at the Eindhoven workshop deplored the dependency on government subsidies, leading them to react to available subsidy schemes rather than developing ideas for what they really want to do, irrespective of government schemes. He also deplored the constant changes in policy instruments: “we get mad and frustrated with that, because new schemes are introduced all the time.” This is an example of disempowerment.

Participants at the Spain workshop attributed great importance to create synergies between institutions so that the action is stronger, more effective, and useful within the purpose that is the generation of renewable energies: “With renewable energies I generate the product when



there are resources, not when I need the product, so I will have to self-plan. Throughout the year there are going to be times when I'm going to have an excess of production and times when I'm going to have a stop. So that energy I will have to store (like the seasonal storage of the northern countries) to produce in the summer and consume in the winter. That is, I do not think that here we have to reach these tessituras, but we do have to do a weekly intra-daily management, being able to store it, sell it or try to generate interactions with the rest of the communities”.

The importance of living with less was mentioned in the workshops in Spain and Germany, but such matters are not purely individual matters. Another issue to give more attention too is what technologies and new structures allow the inclusion of energy communities (citizens in general) in the decarbonisation of the energy system.

The energy sector is characterised by the presence of a diversity of actors, with differentiated functions and roles within the system, some of them with a direct action on the energy system (entities dedicated to the generation and distribution of energy, e.g. GoiEner, Nosa Enerxía in Spain, or to the regeneration and rehabilitation of spaces to protect and recover biodiversity, e.g. UrbanByNature), and others with a mediating role (public and private institutions providing resources, information and aid, e.g. Unión Renovables, REDS, INEGA, City Council in Spain and technological and research centres). All of them play a complementary role in transformative action, from their field of knowledge and possibility of action: training of students and future professionals in the sector, dissemination and citizen awareness activities, research projects linked to the improvement of renewable energies or the study of possible future scenarios, or support for local initiatives.

In the Netherlands, several initiatives involve students in the projects, who are empowered to obtain a context-rich, people-centred understanding of energy topics which helps them to act as change agents.

Technical expertise is important, especially for technical projects, but other types of knowledge are important too. This includes knowledge about: “What subsidies are there, which ones can be stacked? What knowledge and opportunities are relevant to my district? Knowledge also requires trust. In general, energy cooperatives are trusted more than people from business and government.

Keeping citizens motivated and well-resourced is an ongoing effort. Latvia, like other countries, aims to minimise social polarisation in the context of energy citizenship and energy poverty as a broader issue. Ensuring that the benefits of the energy transition are broadly accessible and that energy projects do not disproportionately impact specific communities should be a priority. Democratisation requires informed citizens. That knowledge must be obtainable. Providing knowledge is quickly perceived as pedantic and is also often not an answer to a question (or a concern). In general, it is better to start from knowledge needs (Eindhoven workshop).

There is inequality in access to resources: You have to speak the language of institutions to get money. Initiatives in Rotterdam-Zuid (a neighbourhood with many immigrants) are less successful than initiatives in Rotterdam-Alexander. This was referred to as “institutional racism”, because people of a different race (origin) are at a structural disadvantage. The involvement of people who have worked for municipalities and those who as professionals have acquired experience with project development (winning grants) helps EnCi initiatives to speak the language of dominant institutions, but those people often do not live in poor neighbourhoods, so they have to be found.



The Empowerment Toolkit, collective initiatives, help people to ‘do the talk’ (next to ‘doing the walk’). This shows that science is also involved in issues of ENCI empowerment. Indirectly, the EU by funding EnergyPROSPECTS is also involved in empowerment of ENCI, but the link is relatively weak. Empowerment is mostly done by the initiatives themselves (with the help of network leaders (Strasser et al. 2022)).

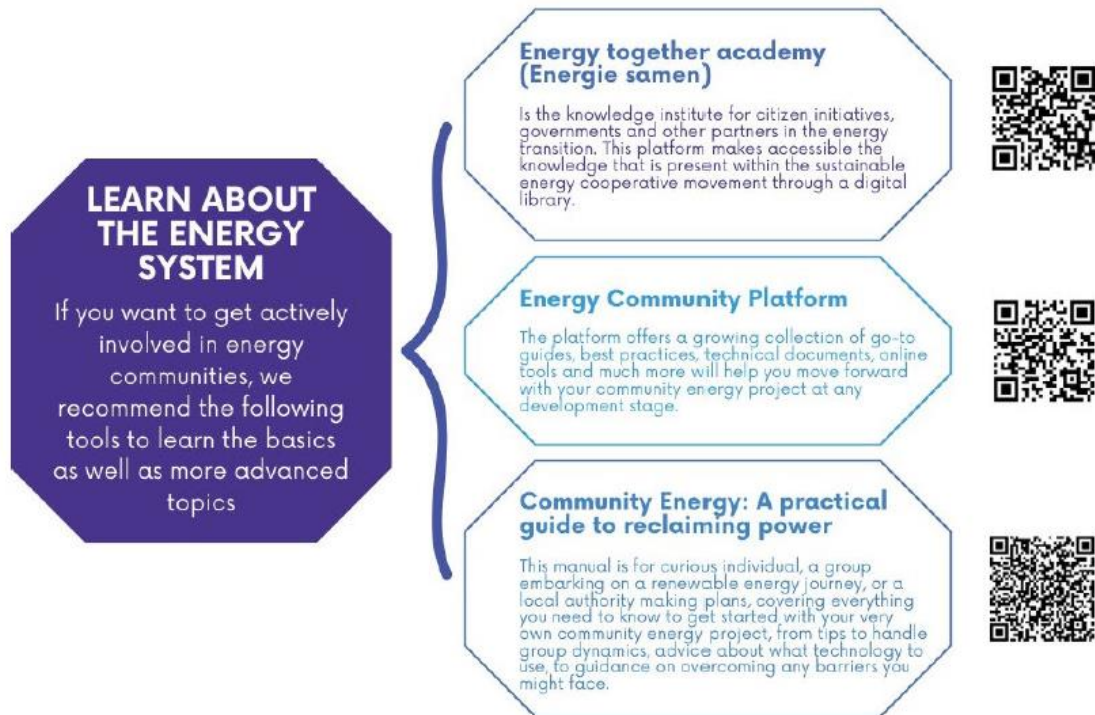


Figure 8: Learn about the energy system - Empowerment Toolkit¹⁰

Finding an institutional home for energy citizenship initiatives is part of empowerment and transformative agency. It is not unusual for a cooperative to work with different organisational forms. For example, Weert Energie is a cooperative with members and a council, for doing project with commercial parties and trading, the cooperative has created several Limited Liability organisations (BVs) that ‘hang under’ the cooperative. For example, the solar field activity with a battery is in a BV of Weert Energie. The wind turbine project is in a BV with Eneco.

We also learned about successful initiatives with aligning different institutional logics. Weert Energie realised a solar park on landfill land for which a commercial party had already obtained a permit, but had to deal with the city council’s requirement that the renewable energy generating project had to be implemented cooperatively. A negotiation process was started with Weert Energie where it was ultimately agreed that the initiative was taken over by the cooperative, for 100%. However, to gain permission the cooperative had to pay a fee for it (as a compensation for the development costs and foregone revenues). The payment of this fee led to huge discussion in the membership council of Weert Energie, with many members not

¹⁰ Source: Empowerment Toolkit developed for EnergyPROSPECTS by the UDC team.

agreeing with it. Within the initiatives, sometimes difficult decisions are made, involving issues of fairness and justice.

The transformative capacity of energy citizenship involves an active exercise of social interaction where the adjustments are not merely of a technical nature, but constitute “substantial mutations in the modes of social organisation, in the patterns of consumption and production currently in force” for which the “participation and acquiescence of citizens” is essential (Agenda 2030, cited in Alonso, 2017, p. 14). It is achieved thanks to a collaborative governance process that incorporates heterogeneous actors when building a consensus around the objectives and priorities of public policies (Ayuso, 2017; Conejero & Segura, 2020).

Non-governmental organisations and community-based groups play a vital role in bridging the gap between government and citizens. They can act as advocates, educators, and facilitators, helping citizens navigate the complexities of energy projects and policies. Differences between money-oriented parties and energy cooperatives will continue to exist, but over time the organisations may adopt certain values and principles from each other.

4 Conclusions

The workshops brought out important differences between ENCI actors, governments and business. The key difference is summarised in the statement: “This is not my version of energy transition.” Much more than government and business, ENCI actors champion different ownership structures, more attention to ecological sustainability and energy justice.

Transformative agency depends on many factors resources, empowerment, forward-thinking, attention to justice and intermediation by ENCI themselves and others. The (transformative) agency of ENCI actors is dependent on their ability to obtain funding (from members and external funders), benefit from ICT (and co-shape it), their ability to combine institutional logics and engage in work leading to institutional change (which in turn depend on their ability to lobby for specific institutional arrangements). It is enhanced by the presence of intermediaries and well-crafted strategies for achieving political and social change.

In exploring how cross-sector cooperation can improve to advance systemic changes, the workshops emphasised a shift in relationships between citizens, government, and various stakeholders. The discussions also touched upon the importance of addressing problems using an integral approach, promoting trust, and rewarding innovation.

Workshop participants advocated for a fundamental change in role relationships between citizens and government. A partnership model was suggested, in which the government seeks to understand and support the initiatives proposed by citizens rather than merely offering subsidies that lead energy citizenship initiatives to apply for funding based on policy goals that are defined in a top-down manner. In Hungary, a partnership model is not really possible under the present government. Partnerships are not the only model and if it used ENCI actors want to avoid mission drift. Partnerships with science were relatively prominent in the Netherlands. They consisted of smart grid projects with (neighbourhood) batteries, allowing the community to engage in energy trading. In many ENCI projects, technology aspects were not an important component.



Initiatives often possess a high level of expertise, and their potential should be recognised. Public authorities often call upon professional consulting firms for advice, which costs thousands of Euros, while professionalism and expertise can also be found in energy cooperatives (Eindhoven workshop). Hence, the use of public money could be used differently and perhaps more efficiently if the expertise of ENCI initiatives was better recognised and rewarded. Especially in countries suffering from anti-democratic processes and governments (for example, Hungary), bottom-up ENCI initiatives and organisations closer to citizens have a very important role to play. In those countries national sourcing from government is often a problem, because funding is often temporary. People frequently seek peer-to-peer advice from established ENCI initiatives. But such demands often exceed the capacity of those initiatives. A funded coaching, counselling, and networking centre could offer a solution to this problem. Such a centre should ensure that communities have readily available knowledge resources and practical support, preventing them from “reinventing the wheel.” The need for this is abated by the creation of platforms created by energy initiatives themselves, which is generally worthwhile as it facilitates not only the exchange of “how-to-do-things” knowledge but also discussions on strategic issues.

The discussions underscored the need to move beyond treating the energy transition as a middle-class concept. Low-income communities are largely not included in the energy transition, or actively resist measures such as installation of heat pumps in social housing, which increases their monthly electricity bill, unless this is actively prevented. A further obstacle to inclusivity is the often highly technical language and terminology in discourses and public consultation documents related to the energy transition. The energy transition needs to be made meaningful from the perspective of the citizen (which requires attention to the different perspectives of high-income and low-income groups), taking into account their circumstances and perceptions of what makes it more or less desirable.

Not only the technical language, but also the term ‘energy citizenship’ can alienate and disempower people and reduce their self-esteem, for instance, by being perceived as ‘lower class energy citizens’ or ‘not being good at making their voice heard’. The term “energy citizenship” can be problematic if it becomes elitist, leaves behind, or even punishes non-citizens and people with lower status, privileges, and resources to enact energy citizenship.

An important *widening* issue is to expand the membership (of energy cooperatives) towards low-income people, females, young people and people with a migrant background. Young people are active in Fridays for Future and Extinction Rebellion but less active in energy cooperatives.

A core focus in *deepening* transformative energy citizenship was the importance to make social justice and inclusivity a foundational aspect of the energy transition. This included considerations of unequal opportunities for females (and other genders) in a male-dominated energy sector, migrant communities, and people living in areas of deprivation.

Three specific suggestions were raised for fundamental systemic changes in the energy system: 1. Redefining energy as a public service; 2. Redistributing income from the energy business; and 3. Shifting the profit-maximising paradigm to a sufficiency paradigm. Presently, the energy transition benefits higher-income people more via subsidies for solar PV and electric cars. Criticisms of the negative distributional consequences led policy makers to pay more attention to limit those, via programmes for energy renovation of social houses that help renters to benefit from a lower energy bill. Some energy cooperatives engage in energy trading



and using the revenues for this for local sustainability action with special attention to the needs of low-income people and people who are not energy literate.

Building trust, strengthening community organisations that can engage more directly with citizens, and creating “safe spaces for open conversations without hidden agendas” emerged as strategies to address these challenges. Another idea to “de-polarise the conversation” was to strengthen literacy and confidence of people to find relevant information and form their own opinions, instead of “being drawn into a very positive or very negative opinions about technologies of the future, climate change, and our energy choices.” Nuclear energy is an example of a topic where people hold very different ideas. The development of small modular reactors suffers from the experiences with large nuclear power plants. Participants also noted the importance of being critical about particular energy system options, especially those pushed by big interests or government. Electric cars and e-scooter systems rely on batteries whose production is ecologically harmful. Wind power and solar PV fields require careful siting. Involvement of the public in those sittings may lead to better decisions (in terms of limiting negative effects for the well-being of humans and ecology).

Participation is strongly ‘directed’ from above: “you are invited, or you are allowed to participate” (Eindhoven). Latvian legislation incorporates a strong foundation for civil society participation in the decision-making process but this is not made much use of by citizen organisations, perhaps because an active involvement is not welcomed and of little influence on policymaking. There is a strong wish amongst ENCI for more direct and influential participation in energy-related decisions. The discussions touched upon the difficulty of challenging deeply entrenched business relations and dependencies with countries like Russia and China, which make it difficult to address concerns about unethical labour practices and environmental impacts of producing solar panels. Transformative change requires many steps and actions. High ambitions should not be at the expensive of concrete action. This is reflected in the quote: “So we just have to think big about it, to be much, much courageous and really question everything, and then something will happen.” (Berlin workshop).

Government involvement in the energy transition was critically assessed. Participants noting the challenges of departmental silos and the lack of joined-up thinking within governmental institutions. The energy transition calls for more sector coupling, which involves addressing sustainability issues in domains that are often treated separately, such as mobility and land consumption. However, the current siloed structures and resources are not adequate for this level of collaboration among a large number of stakeholders. Living labs were recognised as opportune frameworks that enable discussions that may not occur in traditional settings due to a lack of an appropriate space. Also, the frequent changes in elected government officials brings a challenge for energy initiatives to react to changes in political leadership, policies and funding schemes.

Devolution of government tasks to civil society actors comes with demands for accountability. Aspects of accountability were not discussed much and deserve more attention. Strong accountability demands will favour commercial actors over ENCI actors who are less inclined to engage in formal accountability actions. Cooperation with corporations offers a possible solution to this.

Participants emphasised the need to rethink the financing of citizen engagement. It was suggested that it is crucial that public authorities preserve the freedom of citizen initiatives and that they recognise and resource the initiatives that are already present in a community.



Alternative financing models, such as crowdfunding, were recognised as having great potential. These models include both direct monetary contributions and social participation, creating a sense of shared ownership that can help avoid "not in my backyard" sentiments and other forms of opposition.

Participants in the Eindhoven and Berlin workshops suggested to equip communities with the funding to develop their own renewable electricity projects. Communities could use the income from those projects as a long-term funding source to enable smaller ongoing initiatives to address climate challenges. The Community Benefit Fund in Ireland appears a good approach for this.

Initiatives require funding not solely focused on innovation, but also for continuous development of what has been identified to work well. The emphasis on funding innovation should shift to a more comprehensive approach that equally acknowledges and learns from existing successful practices that can be scaled up.

Goals of responsibility for sustainable energy are increasingly adopted by consultants, businesses and local authorities displaying aspects of energy citizenship. However, this issue was less discussed at the workshop.

The policy goal in The Netherlands of 50% ownership of generation locally (citizens and businesses) by 2030 and requirement for consultation strongly stimulate collaborative projects of energy cooperative and commercial parties. Other examples of disruptive institutional change are the Citizen's Fund in and the creation of Positive Energy Territories in France. Th Another disruptive change is to widen the scope of energy projects towards "value creation for society & local community." This is oftentimes not fully explored by energy initiatives. Strategic thinking about this and collaborative relations with other actors may help them to go further in this direction. There is a need to train people into multi-value creation thinking.

The workshops in five countries brought out important national differences. Ireland, Germany and The Netherlands have an active citizenry and an active resourcing of these (from government). In Latvia, citizenship action is a relatively recent phenomenon which is strongly dependent on EU funding. In all contexts, regional authorities are getting more actively involved in the energy transition, but we also observed regional differences (for example, between the Autonomous Communities in Spain and the rest of Spain). A description of relevant differences in the national context for ENCI actions is provided in D5.1 (Debourdeau et al. 2022).

The overall conclusion is that transformative agency of ENCI actors depends on meso factors (networks of ENCI actors, platforms of interaction with other actors, collaborative projects with business, government and science), micro strategies (involving capacity building and critical thinking) and a host of macro factors (government programmes, soft laws on co-ownership of local energy, citizen rights, etc.). In general, transformative change in the form of more democratic and equitable relations is hard won, never totally transformative, and subject to government reappropriations.



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Appendix A. Dates and Participants at the five Transformative Agency Workshops

In chronological order the following workshops were held:

Workshop in The Netherlands

Date: June 10, 2023, from 12:00 – 17:00

Location: Student Hotel, Eindhoven, The Netherlands

Participants

- Eise Spiker (Loenen Energy Fund Secretary)
- Geert Claessens (Chairman Reindonk Energy)
- Peter Ramaekers (co-founder of WeertEnergie)
- Mies van der Loo (active member Weert Energie)
- Joey Reedijk (Program manager Energy transition Drechtsteden)
- Joeri van de Riet (National Association of Active Residents - LSA)
- Alex Peters (president of energy cooperative EMEC)
- Joey ten Cate (policy officer Province of South Holland)
- Geert Verbong (Emeritus Professor of System Innovation & Sustainability Transitions Eindhoven University of Technology)
- Wendy Broers (lecturer and energy system researcher Zuyd University of Applied Sciences & Maastricht University)
- Tim Strasser (moderator, transformative agency expert)
- René Kemp (EnergyPROSPECTS researcher, Maastricht University)
- Souhaila HamHam (note taker)

The workshop was organised by Marianna Markantoni, René Kemp and Tim Strasser



Workshop in Germany

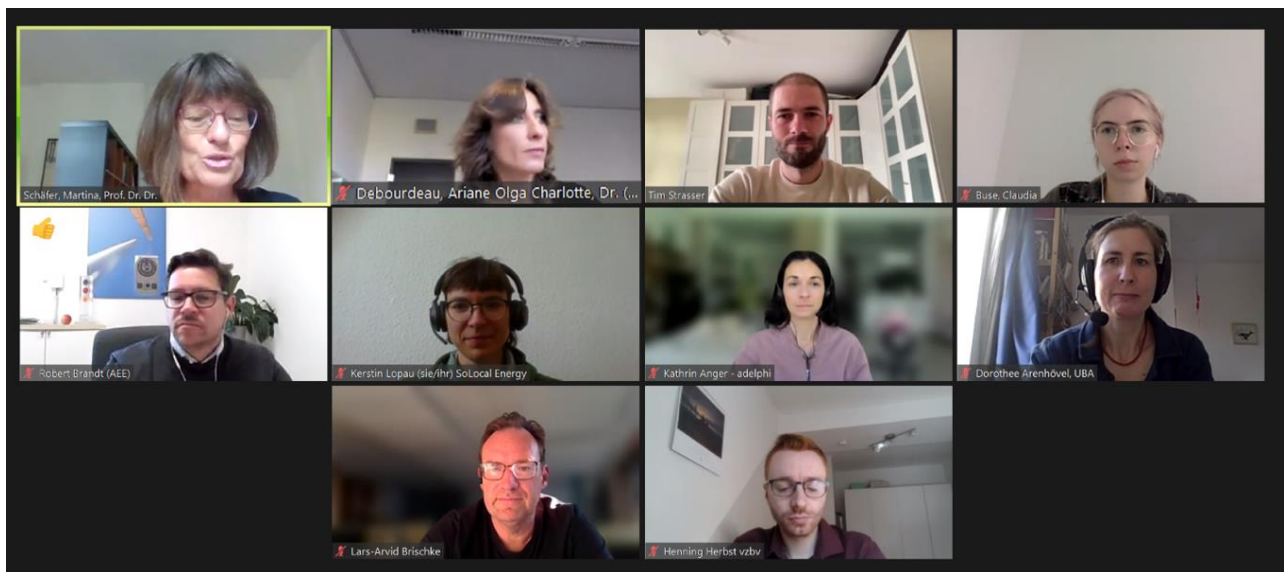
Date: September 1, 2023, 9:00-13:00

Location: online, ZTG Berlin

Participants:

- Dorothee Arenhövel, UBA
- Henning Herbst, VZBV
- Kathrin Anger, Adelphi
- Kerstin Lopau, SoLocal Energy
- Lars-Arvid Brischke, IFEU (Heidelberg)
- Robert Brandt, AEE Berlin
- Beate Petersen, KN-W, BUND, BBEn

The workshop was organised by Ariane Debourdeau, Martina Schäfer and Tim Strasser.



Workshop in Ireland

Date: 20 September 2023, 14h00 – 16h45

Location: National University of Ireland, Merrion Square, Dublin

Participants

- Brian Barrett, Galway City Council
- John Doody, Energy Institute (University College Dublin)
- Máirtín Ó Méalóid, Energy **Communities Tipperary Cooperative**
- Ruth Buggie, Sustainable Energy Authority of Ireland (SEAI)
- Ruth O'Reilly, Sustainable Energy Authority of Ireland (SEAI)

The workshop was organised by Benjamin Schmid, Frances Fahy, Rebecca Corless (all University of Galway) and Tim Strasser (Maastricht University).



Workshop in Latvia

Date: 27 Sept 2023

Location: LU DAC JRīga

Participants

- Kirill Goncharov, Office of Building Preservation and Energy Savings, Team Leader
- Krista Pētersone, NGO Green Liberty
- Vineta Kleinberga, Riga Stradins University, Researcher
- Ance Rusova, University of Latvia, Ph.D. student
- Erika Lagzdina, University of Latvia, lead expert
- Rasa Ikstena, University of Latvia, expert
- Jānis Brizga, University of Latvia, lead researcher
- Ivars Kudrenickis, Physical Energy Institute, Prof., lead researcher
- Raimonds Ernsteins, University of Latvia, Prof.
- Judīte Dipane, Ministry of Environmental Protection and Regional Development, senior expert
- Liene Voroncova, Ministry of Environmental Protection and Regional Development, expert

The workshop was organised by Ērika Lagzdiņa, Jānis Brizga, Rasa Ikstena



Workshop in Spain

Date: 2 October 2023, 9h30 – 11h30

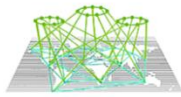
Location: Faculty of Educational Sciences, University of A Coruña, A Coruña, Spain

Participants

- Antonio Prieto, A Coruña City Council. Secretary of the Consensus Association and coordinator of the Spanish Hub of UrbanByNature.
- Armando José Yáñez. Researcher and teacher. Polytechnic School of Engineering of Ferrol. University of A Coruña (UDC).
- Cecilia Lopez. Project manager and member of the Spanish Network for Sustainable Development (REDS).
- Diego Quiñoy. Urban Ecosystems and Industry Researcher. Technological Centre Energy Lab.
- Jorge Martinez. Volunteer and Board of Directors. GoiEner Elkarteia Cooperative.
- Jose Eiras. Treasurer and coordinator of the marketing strategy and the customer service area of Nosa Enerxía Sociedad Cooperativa Gallega.
- María González, A Coruña City Council. Secretary of the Consensus Vice-president of the Spanish Hub of UrbanByNature.
- Pablo Alvarez. Technical staff of the Federation of renewable union cooperatives
- Rosa Núñez. Head of the technical unit for project modification and progress. Galician Energy Institute (INEGA)

The workshop was organised by Luisa Losada, Adina Dumitru, Eva Peralbo, Manuel Peralbo and Nuria Rebollo (all University of A Coruña), with support from René Kemp and Tim Strasser (Maastricht University) and Karin Thalberg (Institute Jacques Delors).





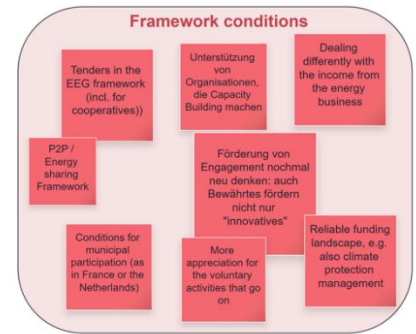
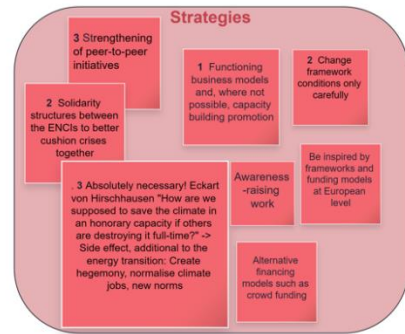
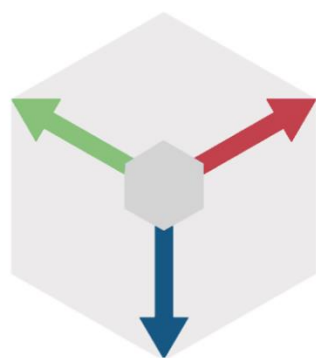
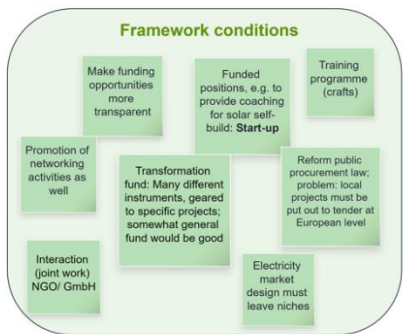
WIDENING wide-spread and coherent influence

1. How can civic engagement in the energy transition continue to grow / how can ENCI initiatives be better scaled?
2. How can the energy transition be made more inclusive to include more social groups?
3. How can different forms of energy citizenship better interact in a complementary way?



LENGTHENING persistent and evolving reproduction

1. How can the continuity of ENCI initiatives be designed and maintained in the long term (e.g. ownership / financing / partnership models)?
2. How can the resilience of ENCI initiatives be strengthened to better deal with changing framework conditions?
3. To what extent is further professionalisation of citizens' initiatives desirable / possible (e.g. beyond voluntary engagement)?



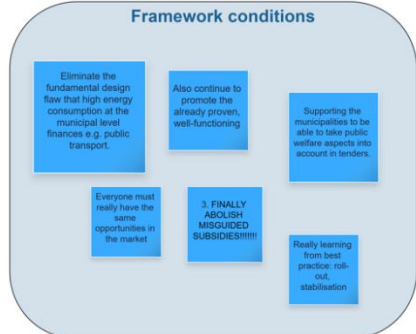
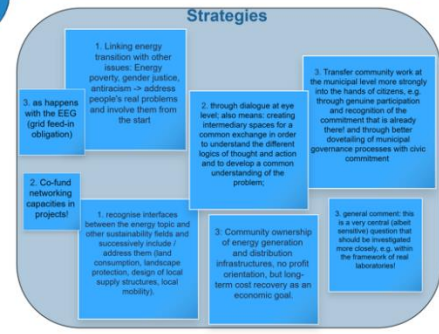
Notes • Example of the Tenement House Syndicate: People who have been advised act as advisors themselves (support from the foundation).

Notes • strengthening bottom-up movements rather transformative, otherwise strong profit orientation: "other economies", e.g. where do the solar plants come from?
• Professionalisation does not always make sense: voluntary work is often a useful complement to the main job.



DEEPENING structural and cultural embeddedness

1. How can ENCI be made more transformative (inclusion of equity, holistic sustainability, radical systemic change)?
2. How can cross-sectoral cooperation succeed better (economy, public, civil society, science)?
3. What power relations need to be changed and how can this be achieved?



Notes • Questions of power are central, also to be dealt with in research projects, also in real laboratories. Intermediary spaces could play an important role: Municipal level could offer options here.

Whiteboard of the Berlin Workshop (online)

