

Empowering local and regional authorities to design clean **EN**ergy **TR**ansition plans through **C**apacity and **K**nowledge building actions

The **ENTRACK** taxonomy of social energy policies: Lessons for policy efficiency and multi-scale action

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The following brief outlines key policy lessons and suggests multi-scalar actions based on the results of a comprehensive taxonomy and analysis of social energy policies from the European Union (EU) level down to the municipal level.

Key challenges include limited reflection of local and regional perspectives in top level policy and complex policy development trajectories, potentially leading to the duplication and/or omission of policy goals and confusion of actor responsibilities.

➤ Delivering a just and inclusive energy transition is a foundation of European policies dedicated to achieving carbon neutrality by 2050.^[1]

➤ Consequently, energy and climate policies must address social issues, giving rise to a set of multi-scalar policies bridging both the social and energy policy domains, or the social energy policy domain.

➤ The ENTRACK project taxonomy (project research report) mapped the social energy policy landscapes of five project case studies: the European Union (setting the policy context for EU Member States), Portugal (PT), Spain (ES), Italy (IT), and Greece (GR) (the ENTRACK pilots in Mediterranean rural areas). The resulting policy maps (shown in Figure 1)^[2] suggest a top-down approach to social energy policy development, revealing several distinct policy categories within the social energy policy landscape.

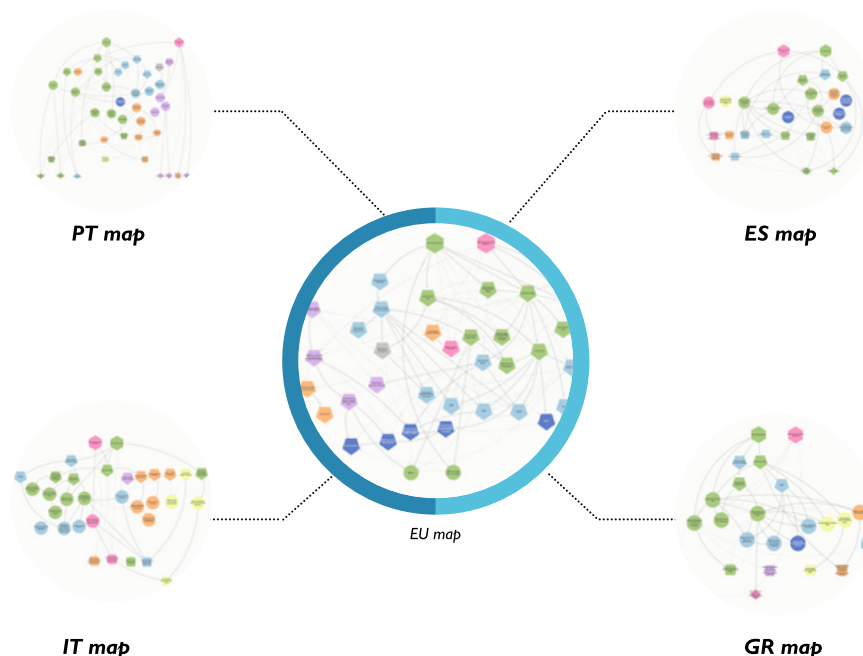
[1] European Commission (EC). (2019). Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions. The European Green Deal. 11th December 2019. (COM/2019/ 640 final)

[2] Castro, C. Mahoney, K., Lopes, R., Gouveia, J. P. (2024a). Taxonomy of social energy plans, strategies and policies from EU level down to municipal level. ENTRACK Consortium. September 2024. Available at: https://entrack-project.eu/wp-content/uploads/2024/10/ENTRACK-Deliverable-2.1_Final.pdf

These policies may address social energy issues but have different core scopes (e.g., REPower EU is categorized as an energy policy). The taxonomy also explored policy interrelations, where policy goals, targets, and objectives were often highly related or even overlapped. These overlaps were not always intentional, implying that a more structured approach to policy design would improve efficacy.

Figure 1: Social energy policy maps resulting from the ENTRACK taxonomy

Click on the corresponding map to view in greater detail via external link



Key findings - Results of the ENTRACK social energy taxonomy

- The **origins of all 165 policies identified** could be traced back to two key international agreements, the **Paris Agreement** and the **UN 2030 Agenda**. This reflected a **predominantly top-down approach to social energy policy development**, where the influences of regional and local scale policies on international, EU, and national scale policies were unclear. Overall, the ratio of social energy policies was low compared to policies falling into other categories.
- **The structure of each policy landscape was distinct**, indicating policy interests and potential policy gaps for each case. For example, in the Spanish case, no specific social policies were identified in the social energy policy mapping exercise. In the Italian case, a lack of dedicated social energy policies was detected.
- Two policy relationship types were revealed: **Parallel relationships**- policies with related goals and scopes but which are not the cause or effect of one another, and **Direct relationships**- policies with a direct cause/effect relationship, i.e., where one or more policies are the “result” of one or more previous policies.

The following table shows the range of policy categories through which social energy issues are addressed and the frequency of the policy categories and relationship types in each case:

Table 1: Frequency of policy categories and relationship types per case

	Number of policies per case study					Notes
Policy category	EU	PT	ES	IT	GR	
Sustainable development	2	1	3	3	2	
Energy	10	8	5	7	6	
Environment & climate change	14	15	11	11	8	* Most frequently occurring policy category in all cases
Social/Energy	5	1	3	0	1	* Generally low frequency in all cases
Transport	0	1	1	4	3	
Economy & territorial cohesion	4	8	4	7	2	
Social	4	7	0	1	1	* Low frequency in ES, IT and GR
Amended	1	1	0	0	0	
	Number of relationships per case study					Notes
Relationship type	EU	PT	ES	IT	GR	
Parallel	32	46	16	16	9	* High frequency in PT and EU
Direct	55	48	40	34	34	* Frequency consistently higher than parallel relationships in all cases



Policy Implications

- **International agreements set the pathway for social energy policy development** in the ENTRACK case studies. However, the apparently **top-down approach to social energy planning** implies limited reflection of local and regional values. This approach is **counterproductive for fostering public participation and leadership among citizens and local agents** in activities like renovation and renewable energy communities. Participation barriers for local agents were also identified in ethnographic research activities which followed on from the taxonomy.^[3]
- Numerous **parallel relationships can indicate a comprehensive approach**, but excessive overlap is **inefficient for resource prioritisation and risks confusion/duplication of objectives and responsibilities**. Unstructured policy interdependencies risk creating additional bureaucracy, a recognised barrier to citizen participation.^[4,5]
- Each policy landscape is unique, and there is **no right or wrong policy or relationship structure**. Despite this, the taxonomy highlights potential policy gaps in each ENTRACK case studies. For example, a high number of parallel relationships suggests potential policy inefficiencies; low frequencies of dedicated social/energy policies combined with a low number of social policies may indicate a technocratic approach to energy transitions.

Recommendations: Insights from the Taxonomy

The ENTRACK taxonomy highlights the importance of context setting through international agreements but reveals limited reflection of policy influences from the “bottom-up”. The taxonomy also exposes potential sources of resource inefficiency, barriers to participation in energy transitions, and policy gaps in the ENTRACK case studies.

[3] Calzolari, F. (2025). Policy Brief: Insights from Mediterranean rural communities to shape inclusive, effective energy efficiency strategies-Insights from Mediterranean rural communities to shape inclusive, effective energy efficiency strategies. ENTRACK Policy Brief.

[4] Koncaloviv, D., Nikolic, J., Dzokic, A., Momcilovic, P., Zivkovic, C. (2023). Energy cooperatives and just transition in Southeastern Europe. Energy, Sustainability and Society. 13:21. pp. 2-

[5] Reitmeier L, Smolenska A and Dikau S (2025) Coordinating the net zero transition: a practical framework for policymakers. London: Centre for Economic Transition Expertise (CETEx), London School of Economics and Political Science



Actionable Steps

01

Reflect the influences of local and regional policies and citizen perspectives in national and EU-level policies

This approach ensures that citizens and smaller-scale actors feel represented by directly acknowledging their influences in national and EU policies, thereby incentivizing greater participation in energy transition activities.

02

Build on the policy categorisation results to identify potential gaps in national policy approaches

The frequency of a specific policy category is not definitively positive or negative; however, Italy, Greece, and Spain all presented low numbers of both social and social/energy policies. Thus, the categorisation results highlight potential gaps in incorporating social issues in energy transition policies in these countries.

03

Retain oversight of policy interrelations

Review how different issues, goals, and targets are addressed across the policy landscapes, exploring whether policy overlaps are intentional (the direct and parallel framing is a useful departure point) or are leading to policy duplications and confusion of actor responsibilities. This is particularly relevant for the EU and Portugal due to a high ratio of parallel relationships in each case.

Next Steps / Call to Action

EU and national-level policy actors should collaborate more closely with local and regional actors to document bottom-up influences on larger-scale policies. Enhancing the representativeness of larger-scale policies is fundamental for realizing an inclusive energy transition and overcoming perceptions of exclusion. Actors at all governance scales should reflect on instances of policy overlap to avoid inefficient resource allocation. Finally, drawing on the policy categorisation results, policy actors in each ENTRACK case study should review the policy coverage of each category to pinpoint potential strengths and weaknesses in their current energy transition trajectories. In response to these challenges, the ENTRACK partners will continue to explore topical policy issues with local agents in each of the ENTRACK pilots through regular meetings of the Municipal-Region Partnerships (MRPs), bringing together local and regional stakeholders to support the co-design of social energy policies.



ABOUT ENTRACK

ENTRACK is an EU-funded project under the LIFE programme, providing technical support for clean energy transition plans and strategies in municipalities and regions. It aims to accelerate the shift toward climate neutrality by strengthening the energy policy capacities of eight small to medium-sized rural municipalities in the Mediterranean.

The role of local and regional authorities is pivotal to energy transition, as real implementation must occur at the local level. These institutional bodies should act as facilitators and enablers of change.

In this context, ENTRACK supports local authorities in co-designing social energy policies that address the specific and real needs of citizens, with particular attention to vulnerable groups. The project equips regional and municipal policy actors with scientific-technical knowledge, capacity, and a methodological framework to develop and implement inclusive energy strategies, engaging citizens throughout the process and integrating their input into local agendas.

Project information:

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