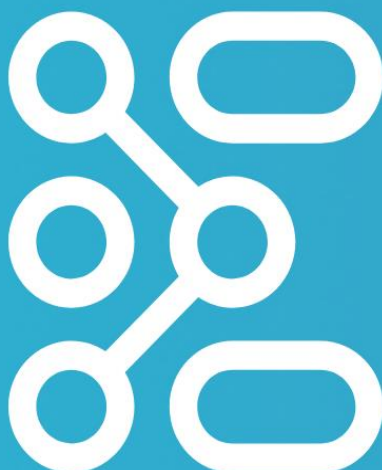




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ENTRACK

*Empowering local and regional authorities
to design clean energy transition plans*

Report on survey results and
documentation of the full survey database

November 2024

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v.1.0	18/11/2024	Giulia Viero, Giulia Fracassi (IEECP)	Final Version sent to Project Coordinator

List of Abbreviation and Acronyms

Abbreviation	Meaning
ACIPS	Ponte de Sor Commercial and Industrial Association, Portugal
ADRAL	Territorial Dynamisation and Hubs Department of the Alentejo Regional Development Agency, Portugal
AMEP	Association of Municipalities and Entities for Public Energy, Spain
CCDR Alentejo	Alentejo Regional Coordination and Development Commission, Portugal
CIMAA	Alto Alentejo Intermunicipal Community
CINEA	European Climate, Infrastructure, and Environment executive agency
CLDS	Local Social Development Contract
CoM	Covenant of Mayors
CoP	Community of Practice
CRIPS	Children's Recovery Center of Ponte de Sor, Portugal
EAPN	European Anti-Poverty Network
EU	European Union

ENTRACK	Empowering local and regional authorities to design clean energy transition plans
ECODES	Ecology and Development Foundation
EL	Greece
ES	Spain
GNR	Portugal National Republican Guard
ICAEN	Catalan Energy Institut, Spain
ICT	Office of Technologies, Informatics and Communications
IPP	Polytechnic Institute of Portalegre
IT	Italy
LRA(s)	Local Regional Authority(ies)
MRP	Municipality- Regions Partnerships
NECP(s)	National Energy and Climate Plans
NUTS (II)	Nomenclature of territorial units for statistics (II)
NZEB	Nearly Zero Energy Buildings
OTC	County Transition Office, Spain
PT	Portugal
RNAE	National Network of Energy Agencies, Portugal
SECAP(s)	Sustainable Energy and Climate Actions Plans

ENTRACK consortium

The ENTRACK consortium is consisted of the following organisations:

#	Role	Short name	Participant organisation name	Country
1	COO	AISFOR	AISFOR SRL	IT
1.1	AE	RETE	RETE ASSIST- ETS	IT
2	BEN	KILOWATT	KILOWATT SOC COOP	IT
3	BEN	Piano di Sorrento	COMUNE DI PIANO DI SORRENTO	IT
4	BEN	Vico Equense	COMUNE DI VICO EQUENSE	IT
5	BEN	ECOSERVEIS	ASOCIACION ECOSERVEIS	ES
6	BEN	ASSOCIACIO PER LA GESTIO DEL PROGRAMA LEADER RIPOLLES GES BISAURA	ASSOCIACIO PER LA GESTIO DEL PROGRAMA LEADER RIPOLLES GES BISAURA	ES
7	BEN	NOVA	UNIVERSIDADE NOVA DE LISBOA	PT
8	BEN	AREANATEJO	AREANATEJO - AGENCIA REGIONAL DE ENERGIA E AMBIENTE DO NORTE ALENTEJANO E TEJO	PT
9	BEN	MUNICIPALITY OF AVDERA	DIMOS AVDIRON	EL
10	BEN	TOPEIROS	DIMOS TOPEIROU	EL
11	BEN	E3-MODELLING AE	E3-MODELLING AE	EL
12	BEN	IEECP	INSTITUTE FOR EUROPEAN ENERGY AND CLIMATE POLICY STICHTING	NL

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Executive Summary

At the core of the ENTRACK project, the consortium aims to set up Municipality-Region Partnerships, which not only can enhance Member States' municipal energy independence to meet climate neutrality targets, but also contribute to the employment of participatory, bottom-up approaches, to design just social energy policies. Developing such partnerships requires better understanding concerns and perceptions on energy plans of different stakeholders beyond solely policy actors at local level. With this report, ENTRACK presents the results of semi-structured interviews implemented in 8 rural small-medium sized Mediterranean municipalities, with multiple stakeholders from the public and private sectors, academia and civil society.

IEECP conducted a qualitative and thematic analysis of 80 semi-structured interviews with stakeholders from 8 rural Mediterranean areas municipalities in Greece, Italy, Spain and Portugal. Interviews were held in the local language by representative project partners from each region between May and early October 2024. Results were subsequently translated in English by partners. The Excel documents with the analysis and interview transcripts are available for internal use only to consortium partners via the project internal folder.

Interviewees had highly diverse knowledge on the current energy plans landscape, reflecting which stakeholders' groups are involved, or are even aware of current policies and initiatives. Nevertheless, we found similar nuances of energy planning in practice, across all four countries. The report henceforth contributes to unveiling what tools and methodologies are used or could potentially be used by institutional actors when developing energy solutions to address unique (societal) challenges in each region. Additionally, the consortium will ask all interviews for their prolonged engagement and willingness to participate in the co-design of MRPs but also the Community of Practice (CoP) as well as other ENTRACK activities, to explain in greater detail potential commonalities but also discrepancies among interviews perspectives and triangulate reflections of/with other participants across the ENTRACK project next steps.

This report constitutes the first investigation into how energy planning is exercised at the local and regional levels. Its preparatory activities strive to benefit and shape Municipality-Region Partnerships dialogues. Companion reports within ENTRACK will dive deeper into related, but separate themes, understanding the reasoning and processes behind energy planning also from the citizens perspective.

1 Introduction

Rural areas across Europe hold significant potential to become thriving hubs for empowered local communities. In her speech, President of the European Commission - Ursula Von der Leyen - emphasised that “*rural areas are the fabric of our society and heartbeat of our economy*”.¹ Additionally, recent EU frameworks underline the **pivotal role of local and regional authorities in the implementation of sustainable energy actions**, as acknowledged by the Covenant of Mayors (CoM)² and the formal commitment to executing Sustainable Energy and Climate Actions Plans (SECAPs)³ across Europe. The role of local institutional bodies acting as facilitators and enablers of this transition is further recognized by Member States through the development of National Energy and Climate Plans (NECPs).⁴

1.1 The EU vision for rural areas

To ensure that rural areas continue fulfilling their vital role in the nexus society-energy transition, the European Commission has outlined a long-term vision for the EU's rural areas extending to 2040.⁵ This vision highlights key areas of action aimed at building stronger, more connected, resilient, and prosperous rural communities. To achieve these objectives, authorities and organisations are invited to join the flagship initiative of the Rural Pact Community, which received endorsement at the Rural Pact Conference held on 16 June 2022.⁶

Within the initiative, rural areas are urged to endorse the vision's ten shared goals⁷, among all and within the scope of this report, we mention:

*II. Engaged in **multi-level and place-based governance**, developing integrated strategies using collaborative and **participatory approaches**, benefitting from tailor-made policy mixes and interdependencies between urban and rural areas;*

*III. Providers of food security, **economic opportunities**, goods and services for wider society, such as bio-based materials and energy but also local, community-based high-quality products, **renewable energy**, retaining a fair share of the value generated;*

*V. **Inclusive communities** of inter-generational solidarity fairness and renewal, open to newcomers and fostering equal opportunities for all.*

Within the European Green Deal targets, the renewable energy rollout targets for 2030 were recently raised to a minimum of 42.5%, nearly doubling the existing share of renewables across the EU.⁸ To

¹ https://rural-vision.europa.eu/index_en

² <https://eu-mayors.ec.europa.eu/en/home>

³ <https://com-east.eu/en/faq-3/itemlist/category/226-sustainable-energy-action-plan-seap-sustainable-energy-and-climate-action-plan-secap/>

⁴ https://ec.europa.eu/info/energy-climate-change-environment/implementation-eu-countries/energy-and-climate-governance-and-reporting/national-energy-and-climate-plans_en

⁵ https://rural-vision.europa.eu/rural-vision_en

⁶ https://ruralpact.rural-vision.europa.eu/index_en

⁷ https://rural-vision.europa.eu/rural-vision/shared-goals_en

⁸ European Green Deal: EU agrees stronger legislation to accelerate the rollout of renewable energy. https://ec.europa.eu/commission/presscorner/detail/en/ip_23_2061

this extent, rural communities, including remote and mountainous areas, have untapped potential to produce more renewable energy and contribute to regional economic development.

However, it is important to recognize that **challenges** such as lack of skilled personnel, low prosperity, limited awareness of how decisions are prioritised, and which stakeholders' groups are involved in the policy-making processes are hindering their potential role in fostering energy transition. Several studies highlight that the financing of sustainable energy and climate initiatives by local and regional authorities (LRAs) is primarily constrained by insufficient internal capacity⁹ and expertise to identify the most suitable and cost-effective financing instrument and related implementation strategy, especially in small municipalities.¹⁰

To address these challenges, and within the wider context of energy system decarbonisation taking into account its social and human dimension of a just and fair transition, ENTRACK aims to contribute to the speeding up of the transition to climate neutrality by increasing the energy policy capacities of eight Mediterranean small-medium sized rural municipalities, by offering technical support to LRAs on clean energy transition plans and strategies.

1.2 Focus on the regional and local context

As reported by the European Network for Rural Development, the focus is on setting-up of renewable energy communities and other local initiatives to foster energy transition and community inclusion.¹¹ However, local policymakers, especially in rural communities, are often faced with the challenges of limited adequate knowledge and technical capacity to undertake socially just energy planning processes. Not only does this report aim to understand in which areas these challenges are most prominent and visible – based on stakeholders' perceptions at various governance levels, but it also unveils other obstacles, such as infrastructure issues for the decentralisation of energy production (possibly in the context of local energy communities), lack of financial resources, limited awareness programmes including the community overall and so forth.

In this report, the ENTRACK consortium supports the collection of evidence from 8 rural municipalities from 4 piloting areas in Greece, Italy, Spain and Portugal, on the social and energy planning landscape of these areas, and it puts forward specific recommendations to address current challenges, such as insufficient capacity of administrative staff and inadequate legislation, as well as to stimulate social energy planning initiatives and dialogue in rural municipalities. The goal of the project is to set-up local multi-actor territorial groups in the 4 regional Mediterranean piloting areas (Greece, Italy, Spain and Portugal) - defined as **Municipality-Region Partnerships** (MRPs). Through the

⁹ JRC Publications Repository - Covenant of Mayors: 2021 assessment.
<https://publications.jrc.ec.europa.eu/repository/handle/JRC128104>

¹⁰ Central and Eastern European Sustainable Energy Union – Policy recommendations for CEE municipalities. <https://eu-mayors.ec.europa.eu/sites/default/files/2024-01/Policy%20recommendations%20for%20CEE%20municipalities.pdf>

¹¹ European Commission. Smart Villages and Renewable Energy Communities.
https://ec.europa.eu/enrd/sites/default/files/enrd_publications/smart_villages-capacity_tools-renewable_energy_communities-v08.pdf

employment of participatory, bottom-up approaches, policy actors at local level will co-design just social energy policies, gaining inputs from citizens' active participation.

Developing such partnerships requires better understanding concerns and perceptions on energy plans of different stakeholders beyond solely policy actors at local level - on top of identifying potential synergies with other topics, e.g., energy poverty mitigation, renovation of buildings, job creation. This report constitutes the first investigation into how energy planning is exercised at the local and regional levels. Further, its preparatory activities strive to benefit and shape territorial MRPs dialogues, aiming to co-design social energy policy responding to **specific and real needs of citizens, especially those in a vulnerable situation**.

More specifically, this report is divided into five chapters and two Appendices. Chapter 1 provides an overview of the EU and local policy context, whereas Chapter 2 focuses on the methodology used for the semi-structured interviews and thematic analysis, including the ENTRACK questionnaire overview. Chapter 3 illustrates and summarises the results, which are discussed in Chapter 4 alongside with implications for future research spanning from the current report findings. Main conclusions are summarised in Chapter 5. Appendix I includes the interview guidelines.

1.3 The ENTRACK Project

ENTRACK is an EU project funded under the LIFE programme for technical support to clean energy transition plans and strategies in municipalities and regions. It aims to contribute to the speeding up of the transition to climate neutrality by increasing the energy policy capacities of eight Mediterranean small-medium sized rural municipalities.

ENTRACK fits into the wider context of the energy system decarbonisation considering its social and human dimension of a just and fair transition.

Through the employment of participatory, bottom-up approaches, policy actors at local level will design just social energy policies, gaining inputs from citizens' active participation.

It aims to support 2 local authorities in each of the 4 Mediterranean countries (Greece, Italy, Spain and Portugal), selected within rural areas, to co-design social energy policy responding to specific and real needs of citizens, especially those in a vulnerable situation.

Throughout the design and implementation of energy transition plans, the municipalities will be supported by modelling tools for impact assessment.

More specifically, ENTRACK specific objectives are to:

- Increase capacity of policymakers at regional and local level, through the creation and running of Municipality–Region Partnerships (MRPs), the definition of a replicable ENTRACK methodology to enable local policy actors to co-design social energy policies within the MRP's frame, and one ready-to-use policy guidance ENTRACK kit with tools to support the effective co-design of social energy strategies
- Ensure multi-level governance alignment and harmonisation of energy policies, producing a taxonomy of social energy policies operating at different governance levels and an integrated set of activities to support the multi-actor (and multi-governance level) collaboration

- Contribute to achieving European / national targets regarding sustainable energy, providing policymakers with up-to-date knowledge regarding energy plans design, monitoring the impact of the pilots on KPIs related to energy, and contributing to establish synergies with other topics, e.g., energy poverty mitigation, renovation of buildings, job creation.

1.4 Intended Readership

This document is aimed at a wide audience, including policymakers, researchers, and stakeholders involved in the energy transition and social sectors. It provides valuable insights for actors working across different levels of governance on the co-design and implementation of social energy policies. It is also relevant to civil society organisations, private sector representatives, academic institutions, and public authorities engaged in creating participatory, inclusive, and equitable energy policies that consider the needs, concerns and priorities of all stakeholders, and especially of more isolated, rural areas and/or most vulnerable groups.

1.5 Relation with other ENTRACK deliverables

This report complements previous work (*Taxonomy of social energy plans, strategies and policies from the EU level down to the municipal level*) on identifying which local rural energy plans, strategies, and policies employed by and available to regional and local levels. Its analysis intertwines with the *Stakeholder matrix and pathways of engagement* performed by NOVA.¹² In fact, stakeholders were mapped across several engagement pathways, one of them being interviews, based on their interest and influence. As stakeholders' engagement progressed through the interview process in each country, as well as the initial MRP meetings, their level of interest/influence was re-evaluated (hence dynamic process). This report is deeply intertwined with previous activities on stakeholder analysis, as interview results (20 respondents per country) supported the refinement of insights into governance structures and stakeholder dynamics – ensuring the relevance of previously drafted *pathways of involvement*. Finally, Chapter 2 below provides more details on how stakeholders were selected and added, also based on snowballing techniques – reinforcing outcomes from the work performed by both IEECP and NOVA with ad-hoc partners' contributions and joint endeavour from the entire consortium.

Results will be used in the work by KILOWATT on *Understanding the reasoning and processes behind energy planning*, in conjunction with the in-depth analysis of citizens perceptions, needs and priorities concerning energy planning. Inputs from this report will inform activities around *MRP creation and running*, gaining feedback from the participating stakeholder groups on this first investigation of their local contexts.

¹² All published ENTRACK reports can be found on <https://entrack-project.eu/public-deliverables/>

2 Methodology

NOVA and IEECP with contribution from project partners have designed a 12-questions questionnaire on participants' knowledge and perceptions of energy planning and involvement (or not) into the planning process. **Semi-structured interviews** were chosen over other interview formats to ensure that essential questions were answered by participants while allowing follow-up questions to be asked if important topics emerged. They were also preferable to focus groups as we expected them to be easier to organise for a target population that is small and geographically dispersed.

Based on the questionnaire, each regional partner conducted the stakeholders' interviews (online format). These were finalised between **May and early October 2024**. Results were aggregated into one Excel file per country.

IEECP has conducted a thematic qualitative analysis of semi-structured interviews, by:

- listing key themes, and counting the number of times each theme is mentioned across all interviews whilst adding new ones (quantifying themes)
- use Google Sheets tool to input themes and their corresponding counts into a spreadsheet, aggregating results (anonymisation).

The **questionnaire** is divided into 3 categories: planning (7 questions), stakeholders (4 questions), and participation (1 question). The 12 questions are aimed to understand the interviewees' i) perceptions and priorities in relation to current energy policies and/or initiatives, ii) the main stakeholders involved in social and energy planning as well as iii) their experience with participatory methods and factors of success. Moreover, in some cases, interviews served the purpose of presenting the project to potential stakeholders interested in joining MRPs. It should be noted that not all questions were answered by all the interviewees, based on their level of knowledge and background. The questionnaire overview is available in Table 1 at the end of this Chapter.

Overall, stakeholders were asked about the following themes:

- What are the **needs, priorities and challenges** of the areas covered by the ENTRACK project in relation to the social dimensions of energy planning in rural areas?
- What are the policy interventions and initiatives already in place, and what are examples of **resources and support** needed to overcome challenges in the areas covered by ENTRACK?
- Which stakeholders' groups are (not-)involved in the policy-making process, and what interventions are needed targeting vulnerable groups specifically?
- Regarding **Participation**, stakeholders were asked how experienced they were with participatory methods or engagement in the co-design of public policies.

Participants were identified using the consortium's existing network by local project partners (see Figure 1). Subsequently, interviewees were also asked to recommend other actors who may qualify for participation (using a convenience and snowball sampling methods for recruitment). Local partners followed-up on non-responses, and a total of 80 prospects agreed to participate.

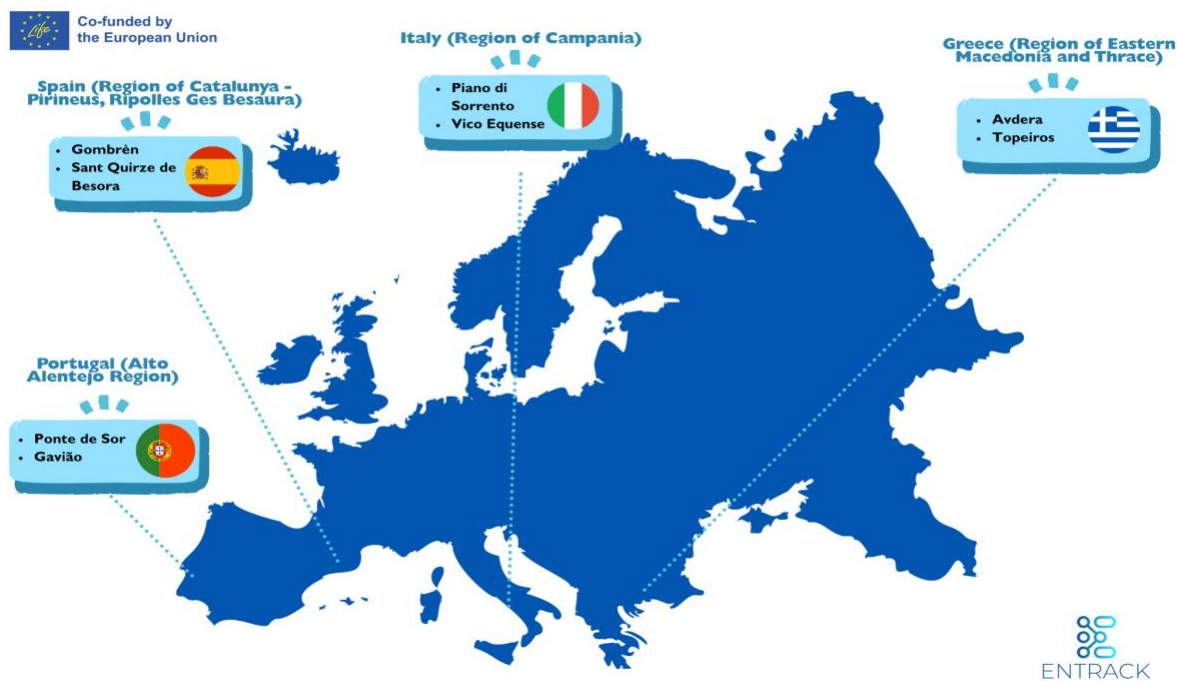


Figure 1 - Map of ENTRACK piloting rural Mediterranean areas

Additionally, the consortium will ask all interviews for their **prolonged engagement** and willingness to participate in the co-design of MRPs but also the Community of Practice (CoP) as well as other ENTRACK activities, to explain in greater detail potential commonalities but also discrepancies among interviews perspectives and triangulate reflections of/with other participants across the ENTRACK project next steps.

The study required interview guidelines. Given that all stakeholders would be asked the same set of questions, albeit with more in-depth clarifications during the interview, all interviewers followed streamlined instructions before, during and after the online meeting with participants. The final version of the guidelines is available in Appendix I.

It was essential for our analysis to link each interviewee with their stakeholder group, their affiliation as well as their role within it. Therefore, a stringent level of data control was chosen because some interviewees may be identifiable from their transcripts and/or statements. To protect interviewees' identity, relevant data is presented in an aggregated manner and all interviews' recordings, transcripts and/or translated summaries are stored in the ENTRACK online data repository as sensitive data.

The online 'Interview' folder contains 4 files:

- ENTRACK_Interview_Aggregated_GREECE (spreadsheets);
- ENTRACK_Interview_Aggregated_ITALY (spreadsheets);
- ENTRACK_Interview_Aggregated_SPAIN (spreadsheets);
- ENTRACK_Interview_Aggregated_PORTUGAL (spreadsheets).

Spreadsheet data is available under the terms of the LIFE22-CET-ENTRACK Grant Agreement (101120704).

Topic	#	Questions	Key talking points
Planning	1	What is your role or involvement in the social/energy planning process?	Role/Involvement: Understand the stakeholder's position within the social/energy planning process to gauge their perspective and influence.
	2	How are vulnerable groups considered and included in energy policies in your region/community? What do you understand by social issues and which social issues are being considered?	Social issues
	3	What policies/informal initiatives related to energy and social issues are in place in the territory? Are there others already thought to be implemented?	Policies/Initiatives
	4	How do you perceive the current energy policies/initiatives in your municipality/region?	Perception of Policies
	5	What are the key priorities or concerns you have regarding social/energy planning or policy implementation?	Priorities/Concerns
	6	What about the main challenges or obstacles you encounter regarding social/energy planning or policy implementation?	Challenges: Explore the main obstacles or challenges faced in implementing social/energy policies/initiatives to address potential barriers.
	7	What resources or support is needed to address these challenges effectively? Specifically, what needs are not covered and why?	Resources/Support
Stakeholders	8	What are the local/regional agents responsible for energy and social topics within your organisation or community?	Responsible Agents
	9	What are, in your opinion, the main stakeholders that should be involved in this project? (Why?)	Main Stakeholders: Determine the stakeholders considered most important to involve in the project and understand the rationale behind their selection.
	10	What do you know about vulnerability to energy poverty in your country? Which vulnerable groups and energy-poor people do you identify in your community/region and what mechanisms do you think would be most effective in reaching them?	
	11	Based on your experience, could you identify a list of local actors actively involved in energy-related initiatives within your community (eg. private companies, public organisations, community groups, or individuals)? This input is very valuable for identifying key actors on the ground who will act as "climate explorers" in the Entrack project.	Climate Explorers: Identify potential candidates to serve as Climate Explorers and understand their suitability for the role within the community or region.
Participation	12	How experienced are you with participatory methods or engagement in the co-design of public policies? If you've had any previous experience, could you share any insights or lessons learned from those experiences? If you have no experience in this type of method, what benefits do you think co-designing can have for social energy plans?	Experience with Participation: Assess the stakeholder's experience with participatory methods and engagement in co-designing public policies to understand their level of expertise and insights gained.

Table I – ENTRACK Questionnaire overview for semi-structured interviews

3 Interview results and discussion

This chapter presents the results from semi-structured interviews that considered the definition of the **social energy planning** suggested by the ENTRACK project, for further discussion in subsequent Municipality-Region Partnerships. The report considered that the social dimension of rural areas is a broad concept, but it is best reflected in social priorities, social concerns, and participation of vulnerable groups. The **evidence collected reflects the geographic, historical, and social features of each rural area**.

The project partners in each piloting area were responsible for conducting at least 20 interviews for the data gathering essential to the analysis. Table 1 below provides an overview of where interviews were conducted. Section 3.1 illustrates which stakeholder groups were interviewed by project partners, whereas sections 3.2 to 3.4 present the thematic analysis results in each piloting area.

Country (regional scope)	Local scope	Cumulative municipalities area (km2)	Cumulative no. of inhabitants	No. of semi-structured interviews
Greece (Region of Eastern Macedonia and Thrace) ¹³	Topeiros municipality	664.54	27.700	20
	Avdera municipality			
Italy (Region of Campania)	Piano di Sorrento municipality	36.72 ¹⁴	32.849 ¹⁵	20
	Vico Equense municipality			
Spain (Region of Catalunya- Pirineus, Ripolles Ges Besaura) ¹⁶	Gombrèn	51,36	2.311	20
	Sant Quirze de Besora			
Portugal (Alto Alentejo Region)	Ponte de Sor municipality	1.135 ¹⁷	18.531 ¹⁸	20
	Gavião municipality			
Total				80

Table 2 - Overview of participating regions and municipalities per country and interviews

¹³ According to the 2021 Population and Housing Census, published by the Hellenic Statistical Authority (ELSTAT).

¹⁴ According to the geographical statistics for Italian municipalities provided by ISTAT. Available at <https://www.istat.it/en/data/databases/>

¹⁵ According to the *Elenco Comuni Italiani*, available on the website of the Dipartimento per gli Affari Interni e Territoriali. Available at https://dait.interno.gov.it/territorio-e-autonomie-locali/sut/elenco_codici_comuni.php

¹⁶ According to *Censos 2021: Resultados definitivos*, published by Instituto Nacional de Estadística (INE). Available at https://censos.ine.pt/xportal/xmain?xpgid=censos21_dados_finais&xpid=CENSOS21&xlang=pt

¹⁷ According to data from the Transparência Portal for municipalities in Portugal. Available at <https://portalautarquico.dgal.gov.pt/pt-PT/servicos-ao-publico/portal-de-transparencia-municipal/>

¹⁸ According to the 2023 population estimates from the *Instituto Nacional de Estatística (INE)*. Available at https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_main

This introductory section presented an overview of municipalities areas in inhabitants in all eight municipalities. Next, sub-chapters 3.1 to 3.4 below present an in-depth analysis based on each country, having collected information from 2 municipalities/areas per country. Sub-chapter 3.5 will provide a cross-cutting comparative analysis of all areas, aggregated per country, followed by a discussion on the thematic analysis highlights. In alignment with the *stakeholder matrix* categories (e.g. Quadruple Helix Groups), each sub-chapter starts with an overview of stakeholders' groups and roles where semi-structured interviews were conducted, see for instance Table 3 below. This is to gain a better understanding of the current social energy planning landscape.

3.1 GREECE

At the start of the semi-structured interview, participants were asked about their **role/involvement within the social/energy planning process**, to gauge their perspective and influence.

Quadruple Helix Groups	Roles
Public sector	Technician local-regional liaison
	Secretary General
	Representative Social Policy Officer
	Social workers, civil servants
	Financial services office
	Geothermal office
	Volunteer at the Environmental Office
	Office of Technologies, Informatics and Communications
	Recycling Office
Private sector/industry	Social counsellor
	Project manager
Academia	n/a
Citizens (including associations / citizens groups / NGOs / Social services)	n/a
	Civil Servant at municipal community
	Coordinator municipal volunteer

Table 3 - Stakeholders' groups and roles in the Municipalities of Avdera and of Topeiros, Greece

3.1.1 Results: Planning

Identified existing policies and initiatives

Question 3 supports identifying existing and planned policies/initiatives related to energy and social issues to understand the current landscape. The below list will be taken as a reference during the co-design activities in MRPs, in addition to the publicly available in the Greek policy map.¹⁹

Overall, 12% of respondents have no knowledge (thus provided no answer) on social energy policies, whilst 35% stated that no social energy policies are in place yet. No informal initiatives were identified, and the rest is categorised as follows.

¹⁹ [GR-policies-table.pdf \(entrack-project.eu\)](#)

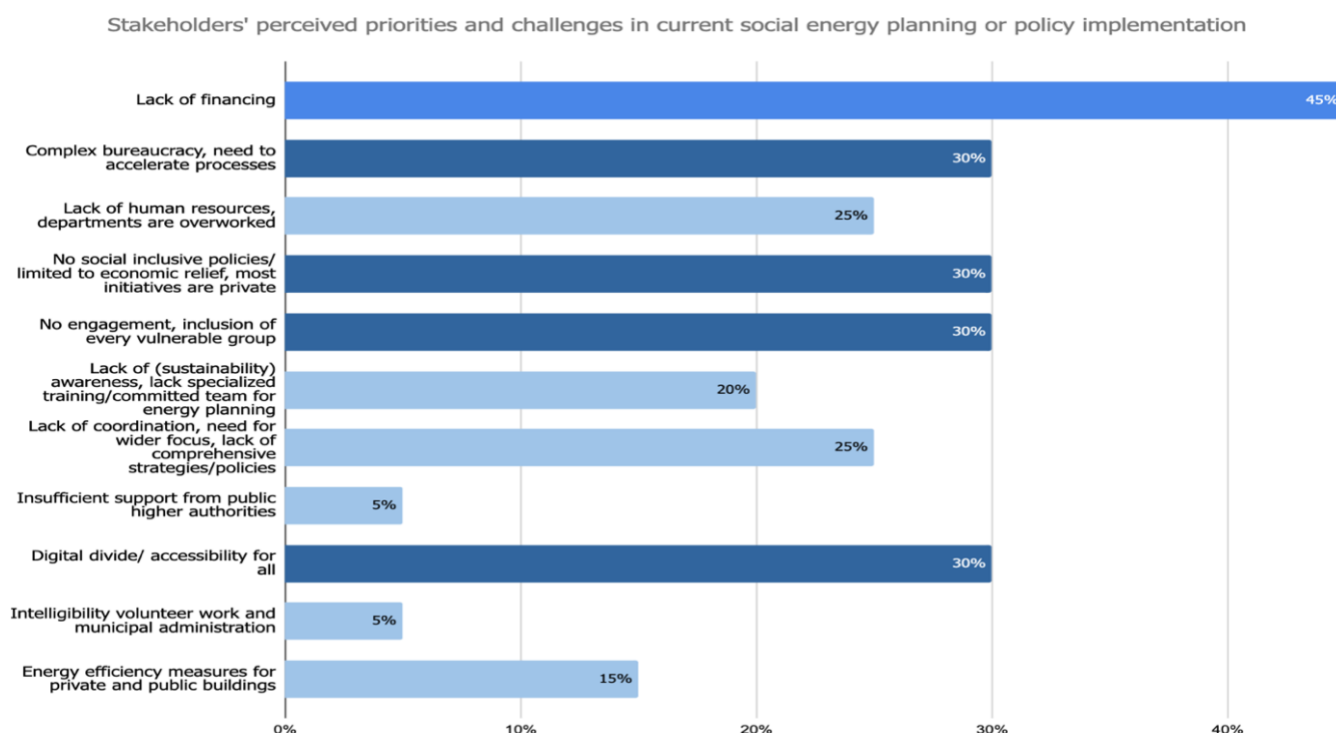
Regional level
Regional Photovoltaic station
Social electricity tariff
Elektra program
Financial aid through vouchers, subsidies
Local level
Help at home (Social Inclusion programme)
Awareness programmes on low energy use
Community solar power program (to be implemented)
Informal initiatives
None identified

Table 4 - Greek identified existing policies and initiatives

Overall, there are already national and regional funding programmes (in the form of vouchers and other types of short-term subsidies etc.), that support long term national policies targeted to energy efficiency and energy poverty reduction.

Identified perceptions, priorities, challenges in current energy policies/initiatives

This section helps in gaining insights into the stakeholder's perception of key priorities and challenges/obstacles regarding social/energy planning, resulting in a better understanding of areas of focus for the upcoming ENTRACK MRPs meetings. Results are shown in Figure 2 below. It is important



to note that in most cases if not all, priorities and challenges collected across the semi-structured interviews were overlapping. Hence, the two categories and related questions have been merged below in Figure 2.

To address potential challenges/obstacles, the following suggestions and/or focus areas were provided by Greek interviewees, complementary to the results of Question 7 (below):

- Coordination between private and public bodies;
- Inclusion of every vulnerable group;
- Financing from regions or the EU;
- Energy efficiency measures for private and public buildings;
- Align policy and practice.

Identified resources or support needed

In relation to the previous section, Question 7 aims to determine the resources/support needed to overcome challenges and effectively implement social/energy plans and highlight the needs not covered. Results are illustrated in Figure 3. In line with the interviewees' responses in questions 4 to 6, where 40% indicated 'lack of funding' as the most perceived challenge in the implementation of current policies/initiatives, they mention stronger financial resources are needed. This is potentially addressed to the challenge 'lack of human resources, departments are overworked'. In Figure 3, nearly 36% of respondents mentioned stronger financial support and approximately 14% point at increased (administrative) support from governmental bodies. These responses are in line with the aforementioned challenge 'insufficient support from public higher authorities. Also, improved communication between stakeholders (approximately 11%) stands in response to 'no engagement nor inclusion of all vulnerable groups' above. Finally, energy courses in compulsory education, training for local staff (approximately 11%) can potentially address the above 'digital divide/ accessibility to all' priority/challenge. Overall, identified resources or support are in line with the above priorities and challenges, and will be utilised as a stepping stone for the MRPs activities.

Resources and/or support needed to address stakeholders' perceived priorities/challenges effectively

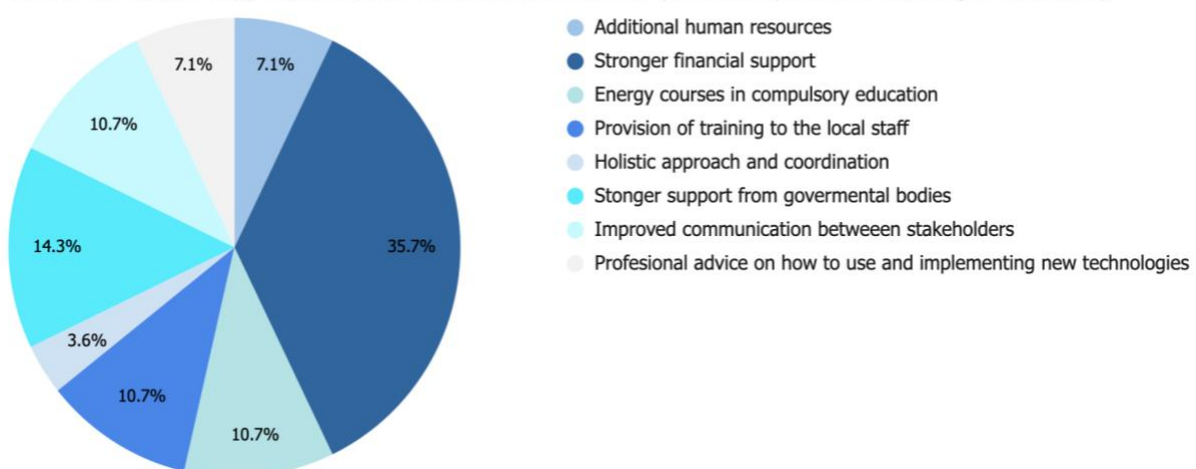


Figure 3 - Percentage of responses ranking resources and/or support needed to address stakeholders' perceived priorities/challenges effectively, Greece

3.1.2 Results: Stakeholders

This section presents 3 categories of stakeholders: (current) responsible agents for energy and social topics within the stakeholder's organisation or community, main stakeholders to be involved in the planning, and vulnerable groups identified by interviewees.

Responsible Agents

Question 8 supports identifying the key individuals or entities responsible for energy and social topics within the stakeholder's organisation or community, namely:

- Public Power Corporation;
- Municipality of Avdera;
- Geothermal office of Municipality of Avdera;
- Energy Unit;
- Energy community of Region of Eastern Macedonia and Thrace;
- Social Service Department of Municipality of Avdera.
- Environmental Office of the Municipality of Avdera;

Compared to the ENTRACK *Stakeholder matrix and pathways of engagement* report for all countries²⁰ and *interactive policy map* for Greece, available [here](#), the results stemming from this thematic analysis confirm the major stakeholders categories. As a matter of fact, each policy map has a corresponding table in Deliverable 2.1 – already publicly available – which describes each policy at all levels of governance, always referring to the agents who were involved in its development and implementation.

Main stakeholders

Question 9 aims to determine the stakeholders considered most important to involve in the project and understand the rationale behind their selection, as illustrated in Table 5.

Main stakeholder groups	Rationale for involvement
Private organisations	Financial ability, advocating for universal energy efficiency from businesses, consumers, investors
Private energy companies	They are the distributors and have adequate knowledge
Local businesses	For better coordination industry - municipality
Energy experts	Knowledge
Investors	Same as 'private organisations'
Members of Energy Communities, neighbourhood associations aiding the weaker members of society	Ensure implementation is socially just, benefiting those who are most in need
Residents	For widespread support and compliance
Community Leaders	For widespread support and compliance
Social NGOs	Ensure implementation is socially just
Energy suppliers	Ensure implementation is socially just
Regional government members, Federal organisations	In charge of energy subsidies and other short-term and/or long-term policies and initiatives

²⁰ Available on the ENTRACK project website on <https://entrack-project.eu/entrack-activities/>

Volunteers	For widespread support and compliance
Social agencies	Ensure implementation is socially just, benefiting those who are most in need

Table 5 - Greek main stakeholders

Vulnerable groups

The objective of Question 10 is to identify potential vulnerable groups, based on interviewees' knowledge and perception. The results are analysed in Figure 4 in conjunction with Question 2 - which explores how vulnerable groups are incorporated into energy policies.

Identified vulnerable groups and energy-poor people in the Greek regions



Figure 4 - Percentage of responses identifying identified vulnerable people, per category, Greece

The elderly segment (approximately 34%) and low-income families (approximately 29%) are the most mentioned categories. Followed by migrants (approximately 10% of respondents). The nexus energy - poverty/debt/unemployment has been highlighted as one of the most prominent priorities for social energy planning, similarly to low or single-income families. Furthermore, people with disabilities are one of the most vulnerable categories as they may experience restricted mobility during power outages, thus limited access to essential services.

This is also proven by the interviewees' responses to Question 2 (*How are vulnerable groups considered and included in energy policies in your region/community? What do you understand by social issues and which social issues are being considered?*), hinting at no incorporation of these groups into current policies, or limited due to bureaucracy and the process of policy formation. Some short-term initiatives emerged, i.e. **subsidies** for heating and electricity and **recycling initiatives** that decrease waste management expenses and encourage energy conservation, targeting low-income households.

Climate Explorers

Question 11 aims to identify potential candidates to serve as Climate Explorers and understand their suitability for the role within the community or region. In other words, candidates are those figures considered within the ENTRACK ethnographic research as 'guides', whether as local actors already involved in specific entities or individuals that could be associated with the role of climate researchers. Based on results in Figure 5, the thematic analysis identified students (approximately 22%), NGO

members (13%) and students (nearly 9%) to be the most active candidates for the Climate Explorers activities.

Identified local actors actively involved in energy-related initiatives within Greek communities

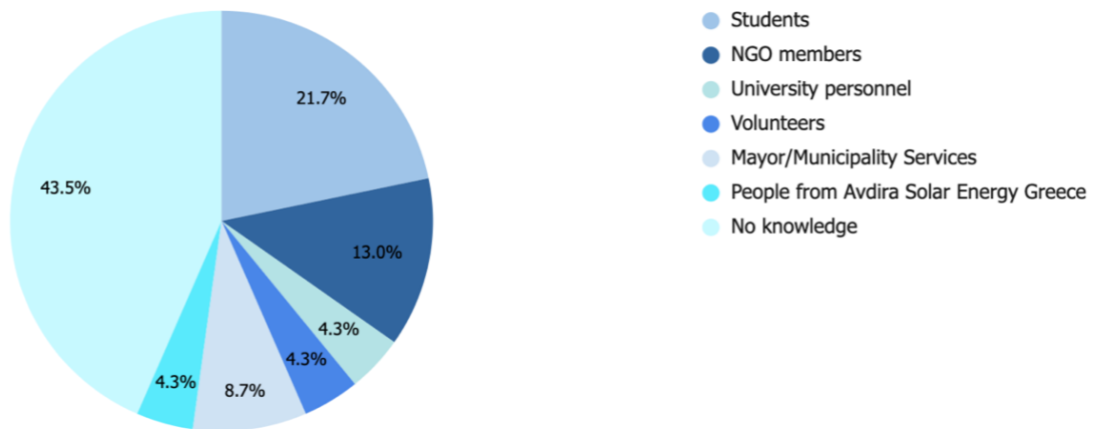


Figure 5 - Percentage of responses identifying local actors currently involved in energy-related initiatives - distributed per category, Greece

We ought to mention that approximately 43% of respondents had no knowledge on how to address this question: this may be related to the fact that 'climate researcher' is not a figure that is collectively imagined, or simply to the fact that in some contexts there were no subjects to refer to. Overall, it is interesting to note that the most suitable categories are young people, students, NGOs and those belonging to the 'voluntary' sector. In this case, this is due to the inability to perform a paid research activity on the topic. Another explanation stems from the fact that Climate Explorers' actions may be perceived as educational or learning-focused, hence the above categories.

3.1.3 Results: Participation

Experience with participation

Question 12 is targeted to assess the stakeholder's experience with participatory methods and engagement in co-designing public policies to understand their level of expertise and insights gained.

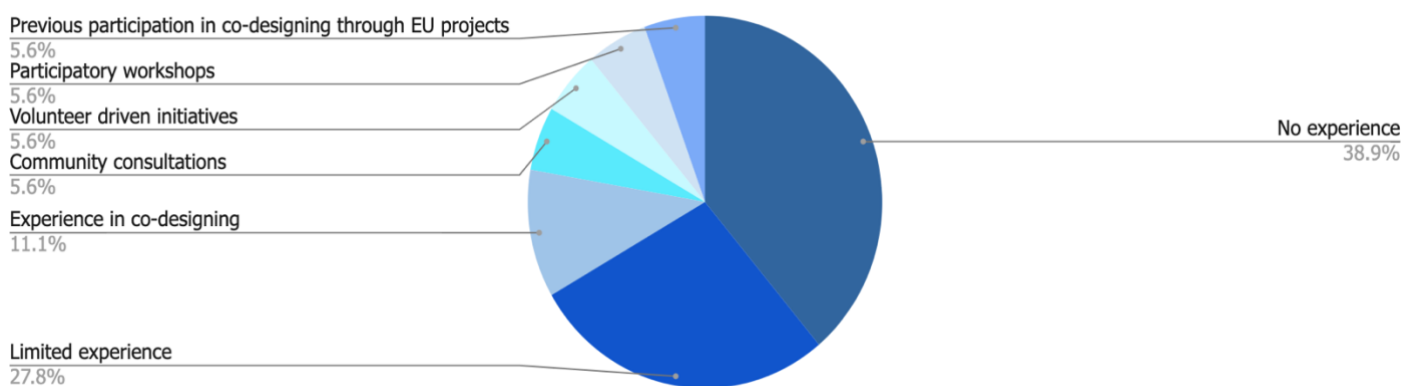


Figure 6 - Percentage of responses each experience in participatory methods and co-design of public policies - distributed per category, Greece

Based on participants' experiences as per Figure 6, with nearly a notable 39% of respondents having no experience and nearly 28% having limited experience, three main insights and lessons learned emerged from the semi-structured interviews. Below we provide quotes from interviewees summarising these insights:

- “An energy plan will only be effective if the private, public, and social sectors work together in **collaboration**”;
- “I believe one crucial takeaway is the need to establish **clear communication** and set **realistic expectations** and of course to mobilise the private sector [...] and set realistic expectations”;
- “I have participated in community outreach and consultations [...]. Solutions are motivated by the **demands and interests** of the people by incorporating **the community** in the process of designing energy policies”.



Topeiros Municipality, EL



Avdera Municipality, EL

3.2 ITALY

At the start of the semi-structured interview, participants were asked about their **role/involvement within the social/energy planning process**, to gauge their perspective and influence.

Quadruple Helix Groups	Roles
Public sector	City Alderman
	City Councilor
	Public Work Officer
	Social Worker
Private sector/industry	Research Center Officer
	Engineers Association Member
	President of a Local Business Association
	Hotel Manager
Academia	Confcommercio Representative
Citizens (including associations / citizens groups / NGOs / Social services)	n/a
	Director of National Coordination Association
	Policy Advisor
	NGO Employee
	President of a Sport Association
	Youth Forum Coordinator

Table 6 - Stakeholders' groups and roles in Vico Equense and Piano di Sorrento Municipalities, Italy

3.2.1 Results: Planning

Identified existing policies and initiatives

Question 3 aims to identify existing and planned policies and initiatives related to energy and social issues, providing insight into the current Italian landscape. The respondents highlighted the following initiatives:

National level
ES-PA project, Energia e Sostenibilità per la Pubblica Amministrazione
RETE ASSIST, Domestic Energy Tutors
Local level
Peninsula Social Plan
Energy Communities
Incentive for thermal equipment replacement
Small projects funded by the EU
Informal initiatives
Support desks and consultancy for citizens

Table 7 - Italian identified existing policies and initiatives

Identified perceptions and priorities in current energy policies

Starting from the perceived adequacy of the energy policies and initiatives currently in place, Questions 4, 5 and 6 aim to showcase the needs, priorities, and concerns expressed by respondents, along with some suggested improvements they provided. Results are shown in Figure 7 below. It is important to note that in most cases if not all, priorities and challenges collected across the semi-structured interviews were overlapping. Hence, the two categories and related questions have been merged below.

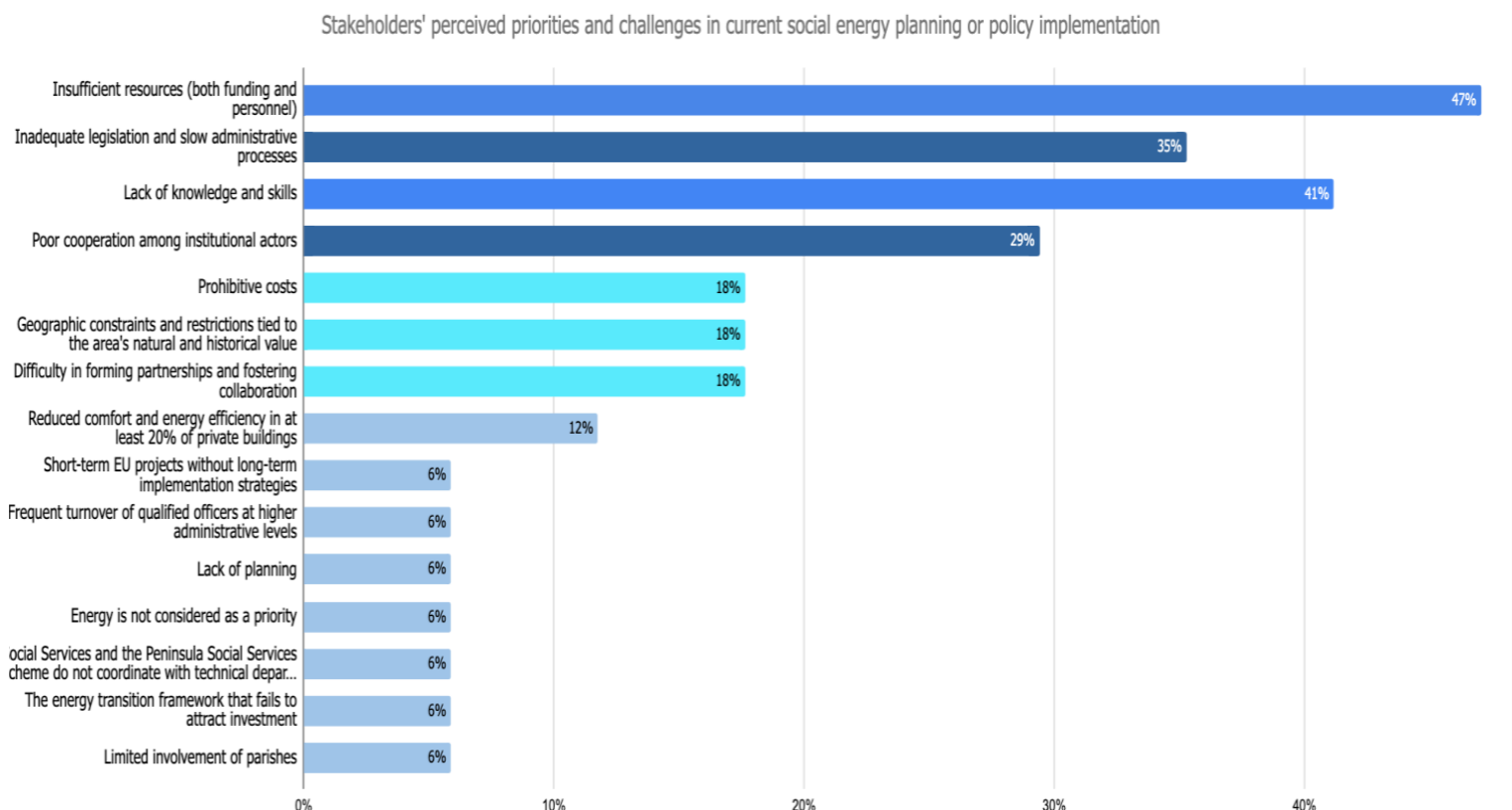


Figure 7 - Percentage of responses on perceived priorities and challenges in current social energy planning or policy implementation, Italy

The respondents commonly perceive, as will be further analysed in sub-chapter 3.5, that current policies are ineffective and lack a long-term vision. Supporting this view, none of the respondents indicated that the policies are adequate. This perception is a major concern for 47% participants, who, as shown in Figure 7, cite **insufficient resources** as a top priority in the field. Furthermore, 41% of participants emphasised **lack of knowledge and skills** (of designated personnel and/or institutional actors) while 35% expressed frustration with the **poor legislation and lengthy, slow administrative processes**, being unresponsive to local needs. Other recurrent concerns include poor cooperation among actors such as officers at higher administrative levels, which disrupts progress, prohibitive costs as well as the short-term focus of many EU-supported projects. Lastly, participants pointed out that Italy's geographical configuration as a peninsula poses practical challenges, particularly regarding accessibility to amenities and services.

Based on respondents' suggestions, the path forward should include the following key actions:

- Expanding educational and training opportunities;
- Reducing overall energy consumption;
- Increasing local renewable energy production and promoting energy communities;
- Ensuring a fairer distribution of bonuses and lowering costs to include vulnerable individuals, with a focus on managing this kind of support at the local level;
- Encouraging the construction of Nearly Zero Energy Buildings (NZEB);
- Implementing policies that address collective needs and build public consensus, with an emphasis on increasing citizen participation;
- Broadening the criteria for defining vulnerability to ensure greater inclusivity;
- Developing integrated planning centred on energy efficiency;
- Incorporating social considerations into Sustainable Energy and Climate Action Plans (SECAPs).

Identified resources or support needed

To overcome the challenges mentioned in the previous section, respondents in Question 7 identified the support they need to effectively implement social energy plans. Consistent with the previous findings, 32% emphasised the need for more staff with relevant expertise, with one suggesting the creation of a dedicated department or office focused solely on energy planning at the regional and local levels. Improved funding was also highlighted as essential to enable implementation, provide support to families, and establish incentive programs (25% of respondents). The need for staff training and public education was consistently noted, aligning with the challenges mentioned earlier. Additionally, respondents stressed the importance of policies that bridge the gap between social needs and technological dimensions. They also called for clear, neutral information, the involvement of informed, multidisciplinary policy actors, and coherent policies, as referenced in earlier responses. Results are illustrated in Figure 8 below.

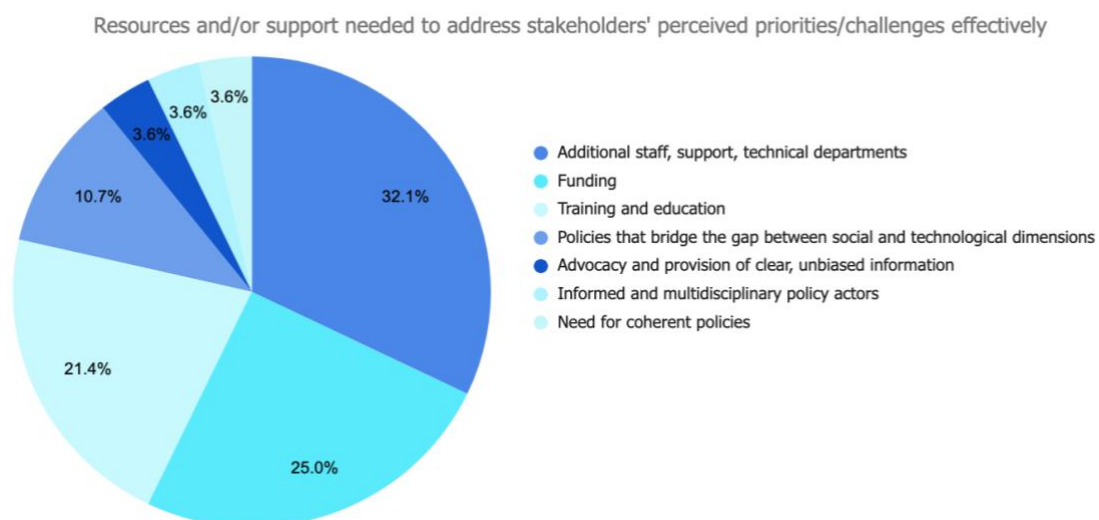


Figure 8 - Percentage of responses ranking resources and/or support needed to address stakeholders' perceived priorities/challenges effectively, Italy

3.2.2 Results: Stakeholders

This section presents 3 categories of stakeholders: (current) responsible agents for energy and social topics within the stakeholder's organisation or community, main stakeholders to be involved in the planning, and vulnerable groups identified by interviewees.

Responsible Agents

In Question 8, respondents identified the key entities responsible for addressing energy and social issues within their community, including:

- Social Services and the Peninsula Social Services Organisation;
- Campania Region;
- Municipalities;
- Technical departments within cities, such as city planning;
- Metropolitan City of Naples;
- ENEA Campania;
- E-Distribuzione SPA.

It is also noteworthy that 24% of respondents did not provide an answer.

Compared to the ENTRACK *Stakeholder matrix and pathways of engagement* report for all countries²¹, and *interactive policy map* for Italy, available [here](#), the results stemming from this thematic analysis can be used to better understand the social energy planning landscape from the granular interactions and dynamics at the community and municipality levels. Whereas the interactive policy map mainly presents policies and initiatives at the international, EU, national levels, regional and local policies (e.g. SECAPs) without reference to responsible agents. The three outputs are therefore complementary and will be utilised as initial steps in the upcoming activities.

Main stakeholders

Building on Question 8, participants highlighted the stakeholders they considered most important to involve in the project.

Main stakeholder groups	Rationale for involvement
Municipalities and Regions	Administrative levels with regional planning responsibilities, coordinate efforts beyond the municipal level.
Transport Companies	Crucial for addressing the mobility challenges faced by vulnerable groups
Private and Local Enterprises	Substantial part of the economy, making it important to understand their needs and contributions, also large companies play a major role by managing many activities in the area
Social Workers, Third Sector Associations, Social Cooperatives	Representing the interests of end users, particularly vulnerable populations

²¹ Available on the ENTRACK project website on <https://entrack-project.eu/entrack-activities/>

Associations (Trade, Vulnerable Populations, National, Environmental)	Provide widespread support through representation and advocacy
Water management Companies	Important for the nexus energy - water - health
Local Schools	Foster widespread education
Parishes	Provide widespread support
Independent Experts	Have the technical expertise and knowledge on the territory, can provide unbiased recommendations to citizens
Energy distributors	Have the technical expertise

Table 8 - Italian main stakeholders

Vulnerable groups

Question 10, along with Question 2, identify the vulnerable groups in the pilot area and assess the extent to which their needs are integrated into energy policies. As shown in Figure 9, the respondents highlighted specific vulnerable groups, though a significant number indicated they lacked sufficient information (nearly 31% of respondents), and others did not provide a clear answer (approximately 15%). Among those who did respond, **people living below the energy poverty threshold** emerged as the primary concern, mirroring the findings in the Spanish case (approximately 15%). The other categories are equally distributed in terms of percentage of responses and can be viewed in the following Figure 9.

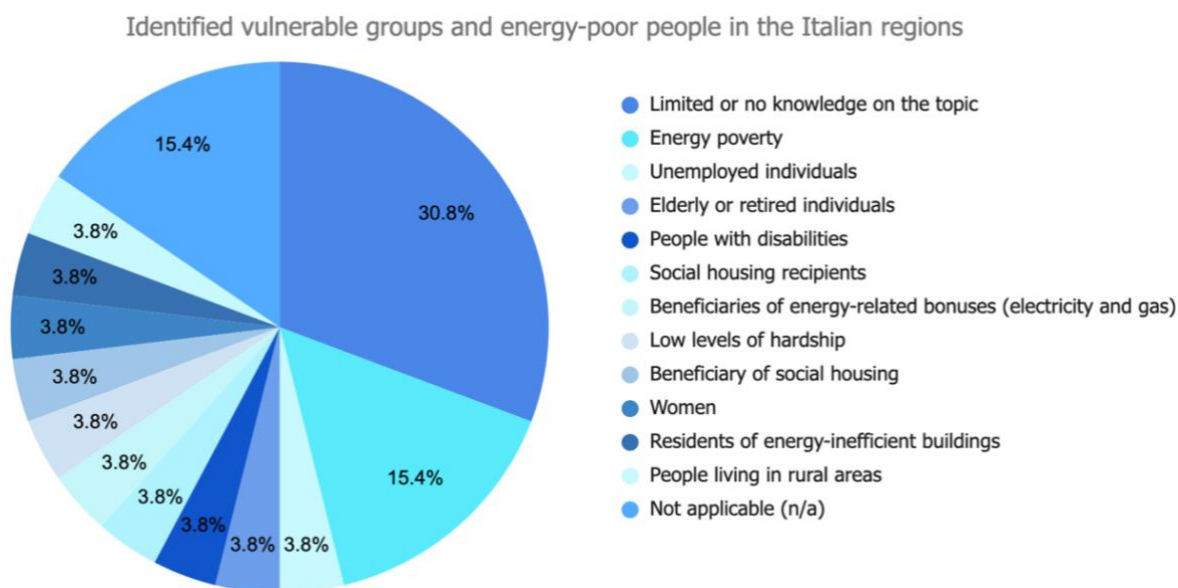


Figure 9 - Percentage of responses identifying vulnerable people, per category, Italy

Additionally, most of the respondents reported that there are **no provisions for including vulnerable groups in energy policies**. A few noted that support is mainly limited to subsidies or bonuses, while even fewer mentioned that some initial efforts are being made at the national policy level.

Respondents also proposed several ideas for a better **outreach strategy to vulnerable** individuals or groups, including leveraging public housing and social cooperatives, increasing awareness in

education activities, conducting local surveys and leveraging existing or potential (informal) initiatives to address practical needs.

Climate Explorers

Question 11 aims to identify potential candidates to serve as Climate Explorers. As shown in Figure 10, public transport companies were identified as key actors to be involved, consistent with the results of Question 8. Additionally, youth forums and organisations were also proposed, along with private companies, municipalities, regions, experts, and associations of accommodation facilities, though to a lesser extent.

Identified local actors actively involved in energy-related initiatives within Italian communities

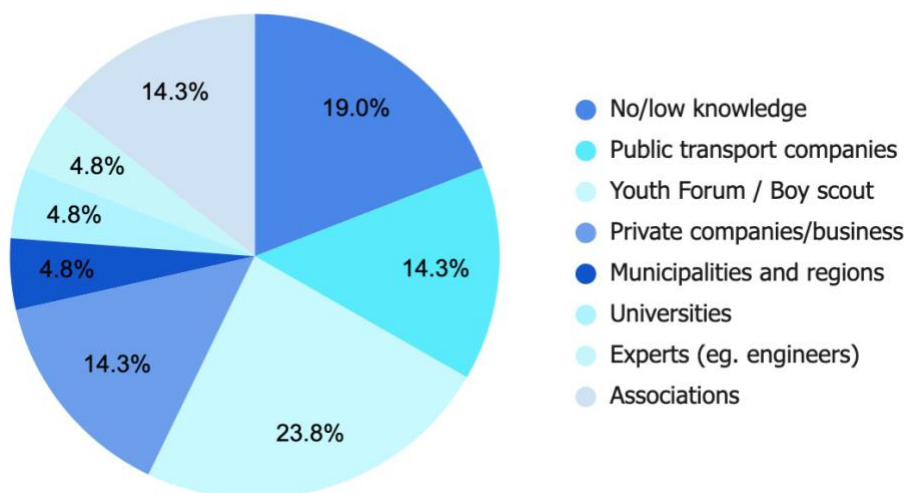


Figure 10 - Percentage of responses identifying local actors currently involved in energy-related initiatives - distributed per category, Italy

Similarly to the Greek case above, it is worth noting that about 19% of respondents had no answer to this question. This may be since the role of a "climate researcher" is not a commonly understood concept, or simply because, in certain contexts, interviewees had no relevant individuals to refer to. Interestingly, the groups best suited for this role appear to be young people and voluntary associations (Scouts), based on nearly 24% of responses.

This is likely the case as Climate Explorers' activities is seen as educational, making them appealing to or a particular fit for these groups. Contrary to the Greek case above, a new category has been identified for Italy, i.e. public transport companies (approximately 14% of responses). This can be linked to the work of ENTRACK project partner KILOWATT, highlighting this in their practical recommendations: improve public transportation and energy infrastructure.

This refers to the fact that several interviews conducted within the ENTRACK ethnographic research and this report, mentioned that sub-adequate public transportation and energy infrastructure - particularly in more isolated rural areas - is a major barrier to sustainable energy practices. Addressing these issues is essential not only for environmental benefits, but also to avoid isolating vulnerable communities. Without these advancements, the burden of adopting sustainable practices disproportionately affects individuals, especially those with limited resources.

3.2.3 Results: Participation

Experience with participation

In conclusion, Question 12 evaluates stakeholders' experiences with participatory methods and their involvement in co-designing public policies. Figure 11 illustrates the varying levels of expertise among the respondents in this area.

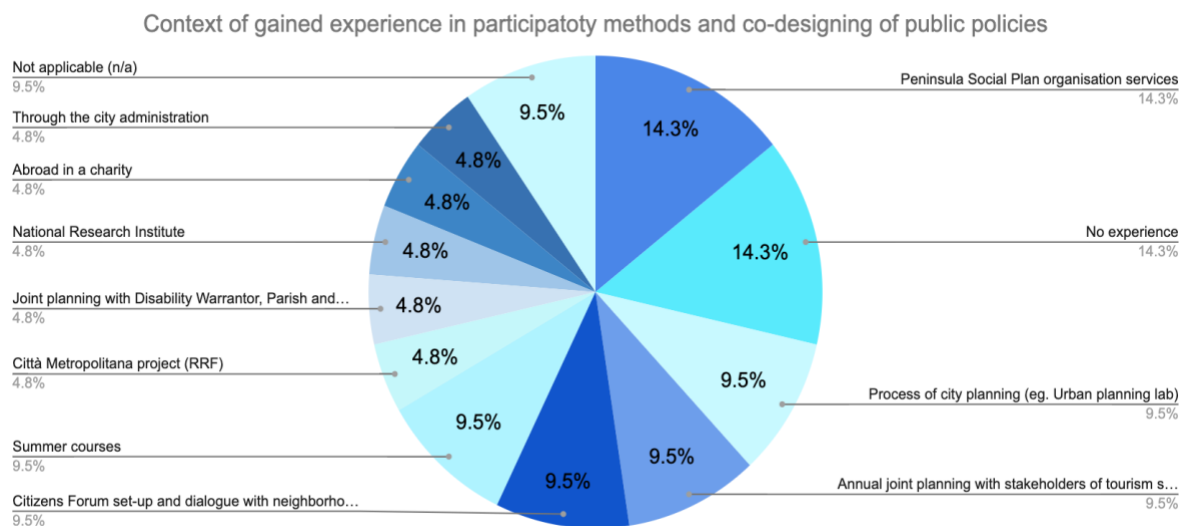


Figure 11 - Percentage of responses each experience in participatory methods and co-design of public policies - distributed per category, Italy

Four participants also shared valuable insights and lessons from their experiences. Key takeaways included:

- Holding open public meetings to gather diverse input so that “the **new designs serve the people that live there**”;
- Engaging a trained facilitator, preferably within the administration, skilled in managing energy matters;
- Ensuring immediate feedback loops between end users and decision-makers because in “**co-design you have immediate feedback with end users**”, so we must try to gather input from everyone”;
- The necessity of having representatives who can advocate for societal groups at both local and higher governance levels is essential, as noted by one participant: “For policies at a higher level than municipal, you often have **“representatives” who are not always able to cover/represent a varied group** in their work, while at the municipal level it is easier to do so”;
- Equipping cities with the right tools to ensure continuity and credibility, backed by the technical expertise of professionals in each specialised area.



Vico Equense Municipality, IT



Piano di Sorrento Municipality, IT

3.3 SPAIN

At the start of the semi-structured interview, participants were asked about their **role/involvement within the social/energy planning process**, to gauge their perspective and influence.

Quadruple Helix Groups	Roles
Public sector	Mayor
	Development Agency of Ripollès Technician
	Barcelona Council Officer
	Technician at Local Energy Agency from Osona
	Regional Energy Transition Officer (Girona Council Officer)
	County Transition Office (OTC) Technician
	Energy Technician at Development Agency of Ripollès
	Energy Transition Technician in a Local Consortium
Private sector/industry	Energy Technician at Provincial Council
	Technician at the Catalan Institute of Energy
Academia	n/a
Citizens (including associations / citizens groups / NGOs / Social services)	n/a
	Energy Cooperative Members
	Energy Responsible, Association of Micro Villages of Catalonia
	Energy Sovereignty Network Member
	Director at ECODES Foundation
	Technicians of a Local Association (LEADER Ges Bisaura)
	Technicians of a Regional Association (ARCA)
	Member of the Association of Municipalities and Entities for Public Energy (AMEP)

Table 9 - Stakeholders' groups and roles in Gombrèn and Sant Quirze de Besora Municipalities, Spain

3.3.1 Results: Planning

Identified existing policies and initiatives

Question 3 aimed to identify existing and planned policies or initiatives related to energy and social issues in the area. The table below highlights both formal and some informal initiatives currently in place. Notably, only one respondent reported having no knowledge of these matters.

National level
CAEs, Energy Savings Certificates
Energètica's initiatives, Energy Public Company
Social Bonus for reducing electricity bills
Specific policies: prohibition of cuts until December 31st
Regional level
PROENCAT, Energy Perspective for Catalonia
Energy and Climate Plan, Catalonia (currently a work in progress)
Catalan Climate Change Strategy
PLATER, Sectoral Territorial Plan for the implementation of renewable energies in Catalonia
Energy Prospecting in Catalonia
OCTE, Supramunicipal Energy Transition Offices
Provincial level

Projects to provide informed technicians
Landscape impact study
PAESC, Sustainable Energy and Climate Action Plan
Local level
Energy Communities and Cooperatives
Subsidies (related to energy efficiency, photovoltaics)
Tax rebates on IBI and ICI for individuals utilising renewable energy sources
Guidelines such as the EPAH methodology
Informal initiatives
Trainings for citizens and educational projects in schools
Assistance from Social Services in applying for social bonuses
Support provided by Development Agency to companies, councils and individuals

Table 10 - Spanish identified existing policies and initiatives

Identified perceptions and priorities in current energy policies

To explore the needs and perceptions of energy plans among respondents and their communities, Questions 4, 5 and 6 were designed to gather insights into stakeholders' views on the effectiveness and adequacy of current policies, as well as their key priorities, concerns and challenges regarding social energy planning. It is important to note that in the majority of cases if not all, priorities and challenges collected across the semi-structured interviews were overlapping. Hence, the two categories and related questions have been merged below.

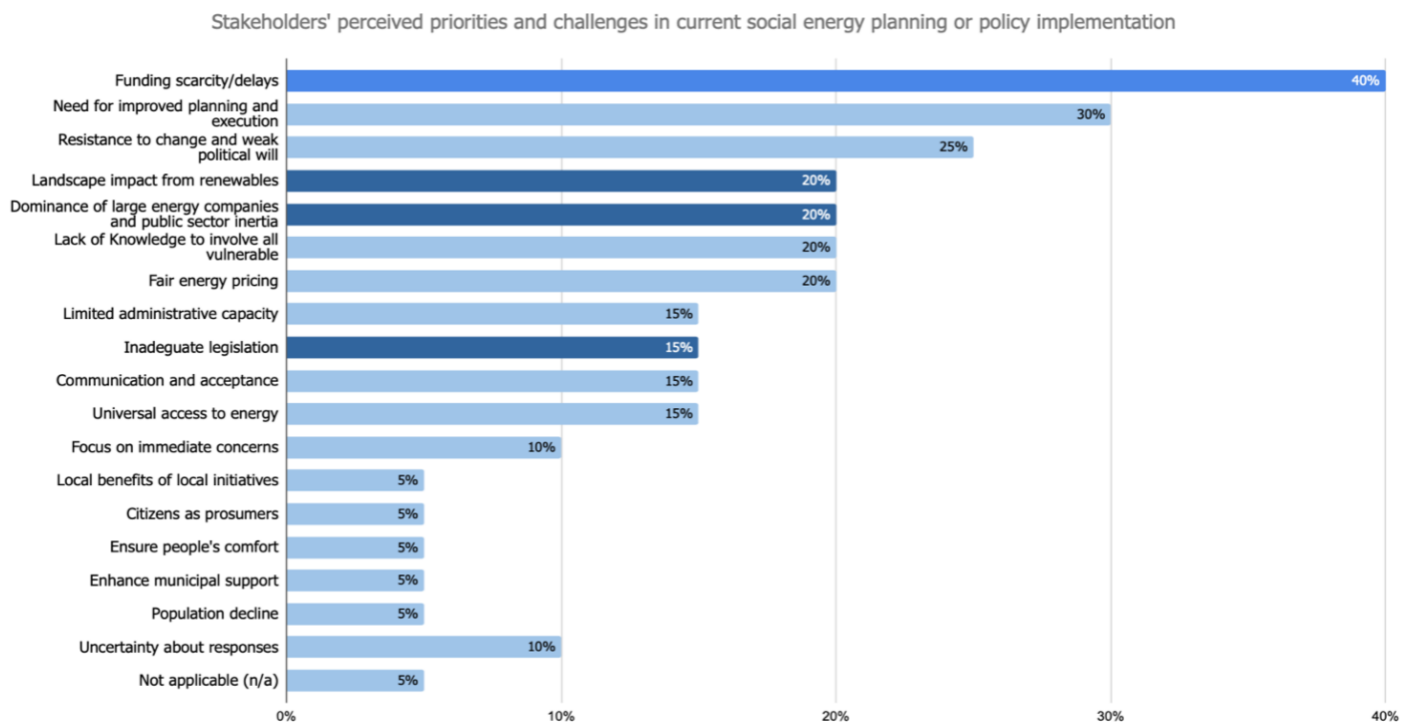


Figure 12 - Percentage of responses on perceived priorities and challenges in current social energy planning or policy implementation, Spain

As will be seen in sub-chapter 3.5, none of the respondents believe the current energy policies are effective. Figure 12 presents stakeholders' current challenges and priorities that, if addressed, could enhance social energy planning. Interestingly, many of the expressed needs focus on the desire for **increased attention to citizens** through their involvement and empowerment and emphasising the importance of fair pricing, the need for enhanced understanding of vulnerable groups to ensure their inclusion, and the advocacy for a bottom-up approach that values people's voices. Moreover, the most reported challenge is economic, specifically related to **scarce funding and delays** in receiving financial support. Concerns regarding the material aspects of energy were also raised, including damage to the landscape and the need to balance energy installations with other sectors, such as agriculture. Finally, the presence of an oligopoly of large energy companies, which centralises essential knowledge and resources, was frequently cited as an obstacle.

Based on these perceptions, participants also put forth some suggestions to improve the current social energy planning landscape:

- Strengthening policies specifically designed to support vulnerable populations;
- Developing policies tailored to the local context;
- Providing aid that is targeted based on income levels;
- Improving consultations with social workers in the policy development process to foster integration between energy and social planning;
- Fostering better coordination between public and private sectors;
- Enhancing control systems to ensure the proper implementation of policies;
- Creating plans that align needs with available resources;
- Enhancing collaboration between stakeholders to improve effectiveness.

Identified resources or support needed

Question 7 seeks to identify the resources and support needed to overcome challenges and effectively implement social and energy plans. Consistent with the challenges outlined in the previous section, stakeholders identified **economic resources**, particularly in the form of subsidies or direct access to funding, as the most critical need. The need for **administrative support** was also mentioned by nearly 20% of respondents. Additionally, respondents highlighted the importance of improved communication and collaboration among municipalities, both horizontally (between municipalities) and vertically (from local to national levels), for sharing effective initiatives and plans. Enhanced support for municipalities, better planning, and increased public participation were also frequently mentioned, as can be seen in Figure 13.

Resources and/or support needed to address stakeholders' perceived priorities/challenges effectively

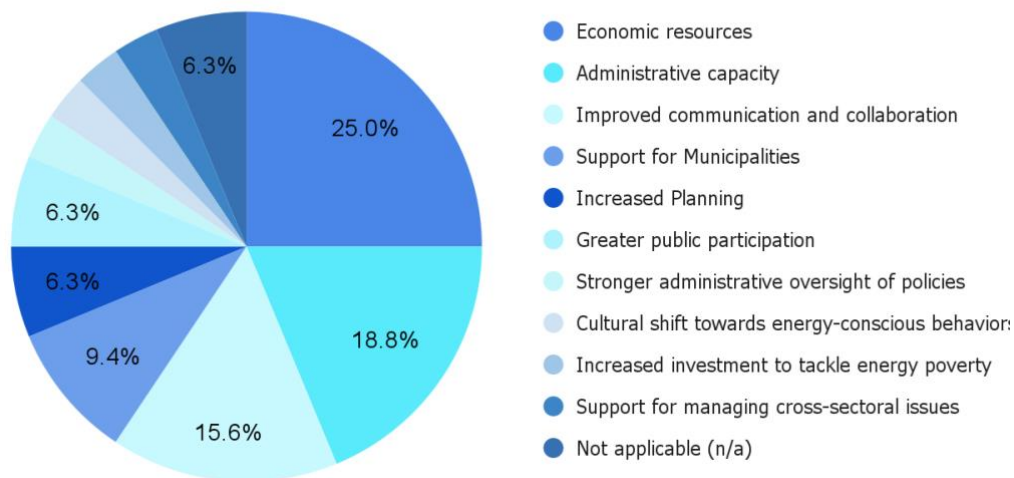


Figure 13 - Percentage of responses ranking resources and/or support needed to address stakeholders' perceived priorities/challenges effectively, Spain

3.3.2 Results: Stakeholders

This section presents 3 categories of stakeholders: (current) responsible agents for energy and social topics within the stakeholder's organisation or community, main stakeholders to be involved in the planning, and vulnerable groups identified by interviewees.

Responsible Agents

Question 8 seeks to identify the key agents responsible for energy and social planning in the participants' communities, specifically:

- County Councils;
- Energy communities and cooperatives;
- Energy companies;
- City Councils and associations of municipalities;
- Provincial Councils;
- Supramunicipal offices for energy transition;
- Local Action Groups;
- Social Welfare Department;
- Institutes (e.g., ICAEN);
- Technical associations;
- Local Energy Agency;
- Catalan Network for a Fair Energy Transition;
- Energy and Territory Alliance.

Compared to the ENTRACK *Stakeholder matrix and pathways of engagement* report for all countries²² and *interactive policy map* for Spain, available [here](#), the results stemming from this thematic analysis confirms the major multi-level actors categories (EU, national, regional, local, community-levels). The interactive policy map also presents an overview of policies at the international, NUTS II and III levels²³. Future complementary activities could focus on the dynamics of aforementioned informal activities (e.g., social services support for social bonuses application, support provided by Development Agency to companies, councils and individuals) in social energy planning, as added value to the interactive policy map.

Main stakeholders

Question 9 aims to identify the stakeholders deemed most important for involvement in the project and to understand the rationale behind their selection. The responses indicated some consistency with the findings from Question 8.

Main stakeholder groups	Rationale for involvement
Municipal Council and Entities	Engage local authorities directly in the process and provide necessary support
Energy focused Networks and Clusters	Offer knowledge and support
Provincial Council	Ensure direct involvement of authorities
Energy Companies	Play an important role in energy provision and management
County Council	Facilitate direct involvement of authorities
Regional Council	Utilise their technical services to draft projects and consolidate proposals
Supramunicipal Offices for energy transition	Integrate various entities, some of which are significant in the local context
Institutes (e.g. ICAEN)	Provide valuable expertise and knowledge
Local Action Groups and Associations	Represent many small municipalities, fostering local engagement.
As many stakeholders as possible	Encourage as many stakeholders as possible for collective change
Energy Communities and Cooperatives	Enhance community visibility and create networking opportunities for members
Social Welfare Department	Provide essential support for vulnerable populations
Foundations	Support relevant aligned projects and can offer additional resources
Technical associations	Contribute valuable knowledge and expertise.
Volunteering associations	Such as Creu Roja, providing support

Table 11 - Spanish main stakeholders

²² Available on the ENTRACK project website on <https://entrack-project.eu/entrack-activities/>

²³ Nomenclature of territorial units for statistics (NUTS). Where NUTS 2 refers to basic regions (for regional policies).

Vulnerable groups

Question 10 helps identify vulnerable groups in the pilot area and explores the extent to which their needs are incorporated into current energy policies and initiatives. 55% of respondents identified **individuals living below the energy poverty threshold** as the primary vulnerable group. People living in precarious situations, such as homelessness, inadequate housing, and those lacking proper heating or cooling systems were also defined as vulnerable by 45% of interviewees, as well as low-income households (35%). Elderly individuals, migrants, people struggling to pay bills, and recipients of social vouchers were also mentioned, though less frequently, along with other categories shown in Figure 14.

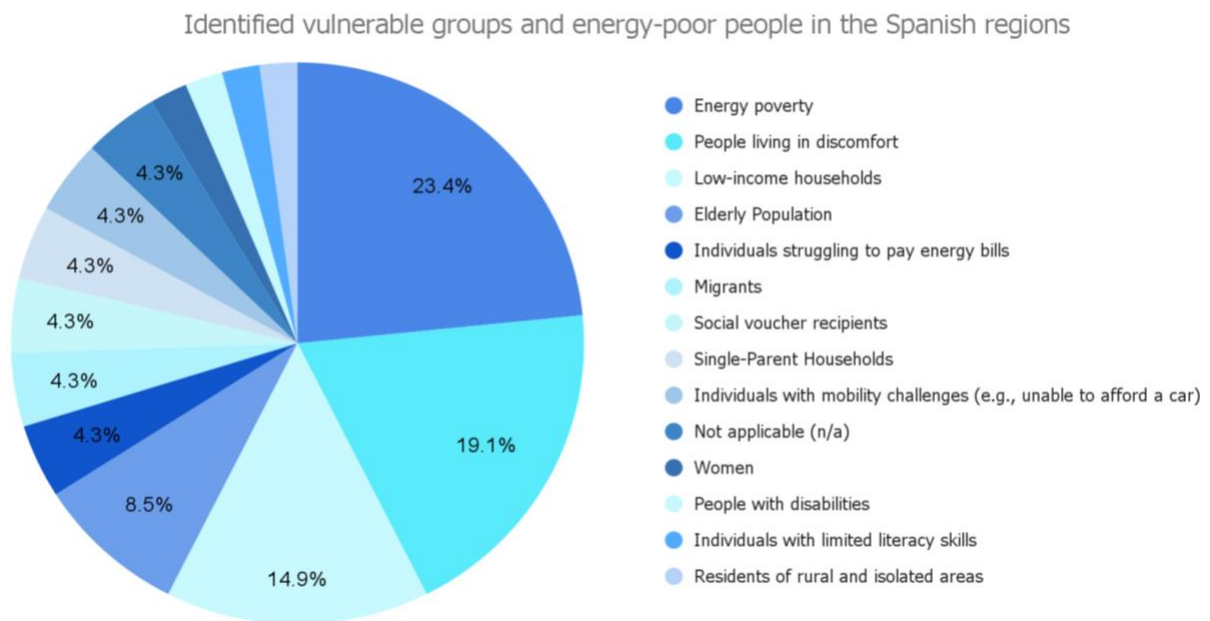


Figure 14 - Percentage of responses identifying identified vulnerable people, per category, Spain

According to the respondents, the **current attention to vulnerable groups is considered unsatisfactory**. Specifically, 30% of interviewees noted that vulnerable groups are only involved through Energy Communities or Cooperatives. Additionally, 25% pointed to limited support measures, such as social vouchers or training programs for technicians and users on vulnerability-related topics. However, 15% acknowledged that there are ongoing considerations and efforts to make policies and initiatives more inclusive.

To address this gap in inclusivity, the respondents suggested **reinstating initiatives that were previously in place**, such as the *Oficina d'Atenció Energètica* (2017-2020) and the Energy Attention Office in Ripollès, which were **later discontinued due to budget cuts**. They also emphasised the importance of supporting associations that assist vulnerable individuals and proposed increasing the involvement of these groups in energy communities. Meanwhile, 5% of respondents suggested enhancing direct subsidies and social tariffs, improving energy efficiency, renovating municipal housing, and expanding education and counselling services for vulnerable populations.

Climate Explorers

Question 11 aims to identify potential candidates to serve as Climate Explorers. As Figure 15 shows, 45% of respondents indicated that municipalities and regions are actively involved actors. Public and private consortia, along with private companies, were frequently mentioned by 25% of respondents. Additionally, local action groups, OCTER, and energy communities were identified by 20%. Finally, educational entities and private foundations were named by 15% and 5%, respectively.

Identified local actors actively involved in energy-related initiatives within Spanish communities

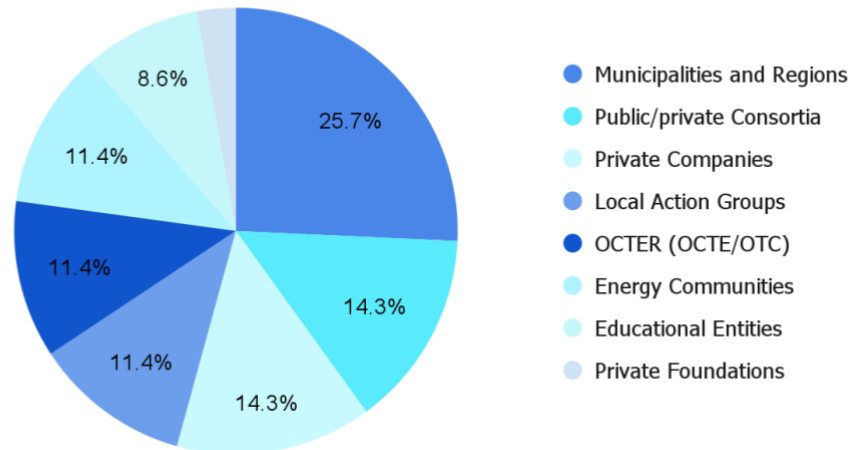


Figure 15 - Percentage of responses identifying local actors currently involved in energy-related initiatives - distributed per category, Spain

Contrary to the Greek and Italian cases above (focusing on young people, students and voluntary associations), potential candidates for the Climate Explorer' role are identified within municipalities and regions (nearly 26%), public-private consortia (about 14%), and private companies (about 14%). This may reflect the need for local governments and community organisations to take on greater responsibility in energy policy, training and capacity-building. Beyond technical expertise, it is also crucial to empower these leaders with skills in active listening and responsiveness to the genuine needs of their communities, ensuring that local policy initiatives are not only effective but also reflect the experiences and priorities of the people they aim to support. As a matter of fact, Climate Explorers candidates were identified also in energy communities and local action groups (both accounting for about 11% of responses).

3.3.3 Results: Participation

Experience with participation

In conclusion, Question 12 evaluates stakeholders' experiences with participatory methods and their involvement in co-designing public policies. Figure 16 illustrates the varying levels of expertise among the respondents in this area.

Experience gained in participatory methods and co-designing of public policies

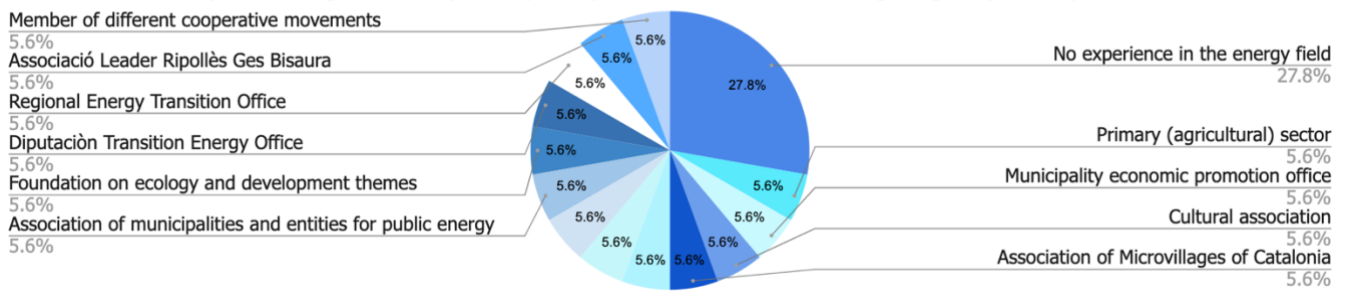


Figure 16 - Percentage of responses each experience in participatory methods and co-design of public policies - distributed per category, Spain

Participants also shared insights and lessons learned from these experiences. A significant reported takeaway is the necessity for **decentralised debates at the territorial level**, with diverse groups representing various sectors and areas of expertise, as noted by 30% of respondents. Additionally, there is a strong call for **adopting bottom-up strategies**, which are essential for incorporating citizen validation and input. Furthermore, 20% of respondents emphasised the importance of **focusing on specific, actionable steps** and the **presence of external experts**, particularly during the initial phases of the process.



Gombren Municipality, ES



Sant Quirze de Besora Municipality, ES

3.4 PORTUGAL

At the start of the semi-structured interview, participants were asked about their **role/involvement within the social/energy planning process**, to gauge their perspective and influence.

Quadruple Groups	Helix	Roles
Public sector		(Regional level) Vice-president and Head of Energy at the Alentejo Regional Coordination and Development Commission
		Chairman of Gavião Local Social Action Council
		President of the National Network of Energy Agencies (RNAE)
		President of the Interior Energy Agency (Enerarea)
		Senior Technician in the Energy Division of Ponte de Sor Municipal Council
		Chairman of Foros de Arrão Parish Council
		Head of the Social Action Division of Ponte de Sor Municipal Council
		First Executive Secretary of the Alto Alentejo Intermunicipal Community
		Technical Director of the North Alentejo and Tagus Regional Energy and Environment Agency
Private sector/industry		Senior Technician in the Energy Division and in the Geography and Regional Planning Division of Gavião
		General Director of Ponte de Sor Commercial and Industrial Association
Academia		Coordinator of the Territorial Dynamisation and Hubs Department of the Alentejo Regional Development Agency
		Professor at the Polytechnic Institute of Portalegre
		Director Gavião Vertical School Cluster
		Senior University
Citizens (including associations / citizens groups / NGOs / Social services)		Director of Ponte de Sor School Cluster
		Director Portalegre District Center of the Social Security Institute
		Chairman of the board of Children's Recovery Center of Ponte de Sor (CRIPS)
		Member of District Office of the European Anti-Poverty Network
		Founder of the Digital and Intangible Archive of Comenda
		Chairman of Ponte de Sor Local Social Action Council

Table 12 - Stakeholders' groups and roles in Ponte de Sor and Gavião municipalities, Portugal

3.4.1 Results: Planning

Identified existing policies and initiatives

Question 3 supports identifying existing and planned policies/initiatives related to energy and social issues to understand the current landscape. The below list will be taken as a reference during the co-design activities in MRPs, in addition to the publicly available in the Portuguese policy map²⁴.

The added value of the semi-structured interviews is the **emergence of informal social energy initiatives**, for instance, in health centres in response to the elderly's circumstances - which will be further explored, starting from the venues mentioned by the interviewees. Policies and (informal) initiatives are categorised as follows:

²⁴ [PT-policies-table.pdf \(entrack-project.eu\)](#)

National level
Large PV project
Protocol with the Water Service (senior citizens' card for 230-240 users, for timely water bills payment)
Climate change resilience project, where energy is also an issue
"Espaço Energia", "Loja Cidadão", or "Loja da Poupança Energética", which are one-stop-shops
Social Green Mobility - Electric Vehicles Program, under NRRP ²⁵
Regional level
Endesa Generation (Just Transition Fund)
European Commission Funding and Tendering programmes
Housing Strategy until 2026
"Social Radar" programme
Future possibility of a mini hydrogen power station to fuel hydrogen aeroplanes
Gavião's Local Housing Strategy
Energy strategic plan based on AREANATEjo - CIMAA collaboration
EAPN's Energy Poverty Working Group
Local level
Monitoring of municipal and social economy buildings (including, restructuring, improve EEM measures and thermal comfort)
Efficiency Voucher within "Vale Eficiência" Programme
Escolhas programme
Social Action Plan, a Social Charter, and a Social Diagnosis
Debates within Local Social Action Councils, working directly with vulnerable groups in municipalities/regions
Training recipients, all of whom are vulnerable publics, in relation to food waste under People 2030 Program (Thematic Program Demography, Qualifications and Inclusion)
Local Social Development Contracts (CLDS) - 5th Generation" Program [People 2030 Program (Demography, Qualifications and Inclusion Thematic Program)]
Local renewable energy communities (CER)
Informal initiatives
Actions taken within health entities, health centres, nursing homes, in response to the elderly's circumstances
School Cluster initiatives
Responses to needs such as medication, food and housing conditions provided by community centres, home support or even Elderly House Cares responses
Digital and Intangible Archive of Comenda

Table 13 - Portuguese identified existing policies and initiatives

²⁵ National recovery and resilience plan

Identified perceptions, priorities, challenges in current energy policies/initiatives

Questions 4, 5 and 6 help in gaining insights into the stakeholder's perception of key priorities and challenges/obstacles regarding social/energy planning, resulting in a better understanding of areas of focus for the upcoming ENTRACK MRPs meetings. Results are shown in Figure 17 below. It is important to note that in the majority of cases if not all, priorities and challenges collected across the semi-structured interviews were overlapping. Hence, the two categories and related questions have been merged below,

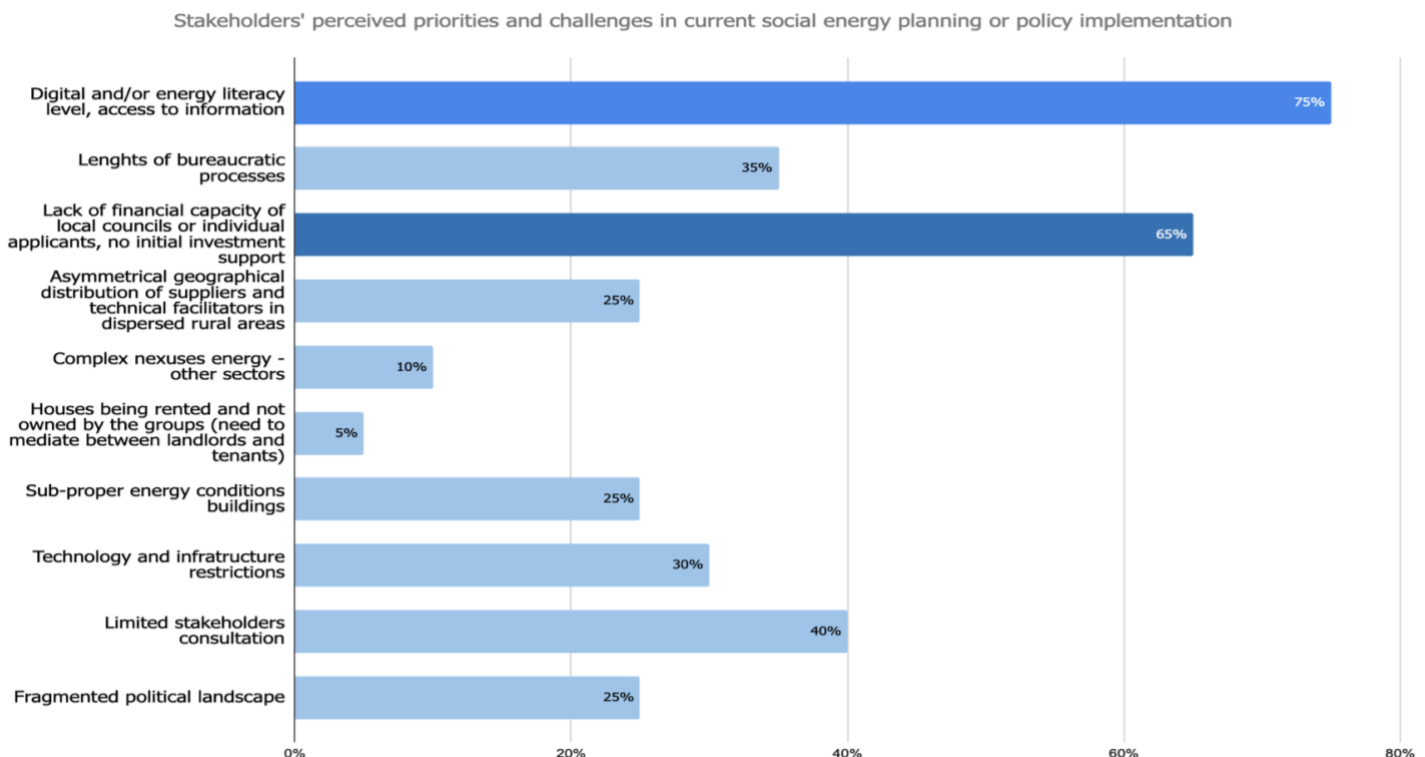


Figure 17 - Percentage of responses on perceived priorities and challenges in current social energy planning or policy implementation, Portugal

The Figure 17 highlights 2 main barriers: 75% of respondents indicate **digital and energy literacy** as well as access to information practices as crucial. Upon an in-depth look at responses, this category includes awareness of good energy practices, supporting structures, informative material availability, efforts by public institutions to overcome mistrust due to limited understanding of long-term benefits.

Secondly, 45% of interviewees claim there is a 'lack of **financial capacity of local councils or individual applicants, no initial investment support**', including accessibility to incentives to implement measures, especially where municipalities are experiencing a growing number of inhabitants and/or, ageing population, and increasing different needs. Other challenges and priorities include:

- Lengths of **bureaucratic processes**, for funding applications/access as well as complex bureaucracy hindering renewable energy communities' creation;

- **Complex nexuses** energy - other sectors, including interconnections of energy poverty with food, housing, health poverty, and energy efficiency with water management and national infrastructure;
- **Sub-proper** energy conditions **buildings**, e.g. solidarity institutions, day-care centres and residential buildings requiring energy efficiency improvements;
- **Technology and infrastructure** restrictions, e.g. application restrictions (standards for historical sites) or the infrastructure itself restricted capacity to absorb energy supply (for PV projects, or even for the diversification of energy sources);
- Limited **stakeholders' consultation** to inform especially vulnerable groups of energy efficiency long-term savings and profitability or large energy projects;
- Fragmented **political landscape**, referred to the limited coordination between local councils and national policies, and the need for foresights planning.

To address potential challenges/obstacles, the following suggestions and/or focus areas were provided by Portuguese interviewees, complementary to the results of Question 7 (below):

- Carry out a **survey** of both social and energy needs, in order to get to know the reality of the municipality, so as to be able to plan/act in accordance with the actual needs of the population;
- **Train-the-trainer** and other capacity building for institutions to inform the public
- More **support/awareness-raising actions** for communities and monitoring, including support from Senior University;
- **Representation** of vulnerable groups and/or unheard voices;
- **Simplification of application processes** for energy efficiency measures, and of bureaucracy hindering renewable energy communities' creation;
- **(Financial) incentives** for recycling, support for sustainable mobility and the efficient management of resources;
- Strategy not formalised on paper, need for a **streamlined process** that reflects the community's needs;
- Involvement of **businesses** where specialised companies are needed the most (**low-density areas**);
- Better understanding of **infrastructure capacity** for PV projects and of environmental concerns.

Identified resources or support needed

Question 7 aims to determine the resources/support needed to overcome challenges and effectively implement social/energy plans and highlight the needs not covered. There might be subsidies, but they are struggling to meet criteria, or some initiatives might be coming late or slow process and so forth as illustrated in Figure 18.

Resources and/or support needed to address stakeholders' perceived priorities/challenges effectively

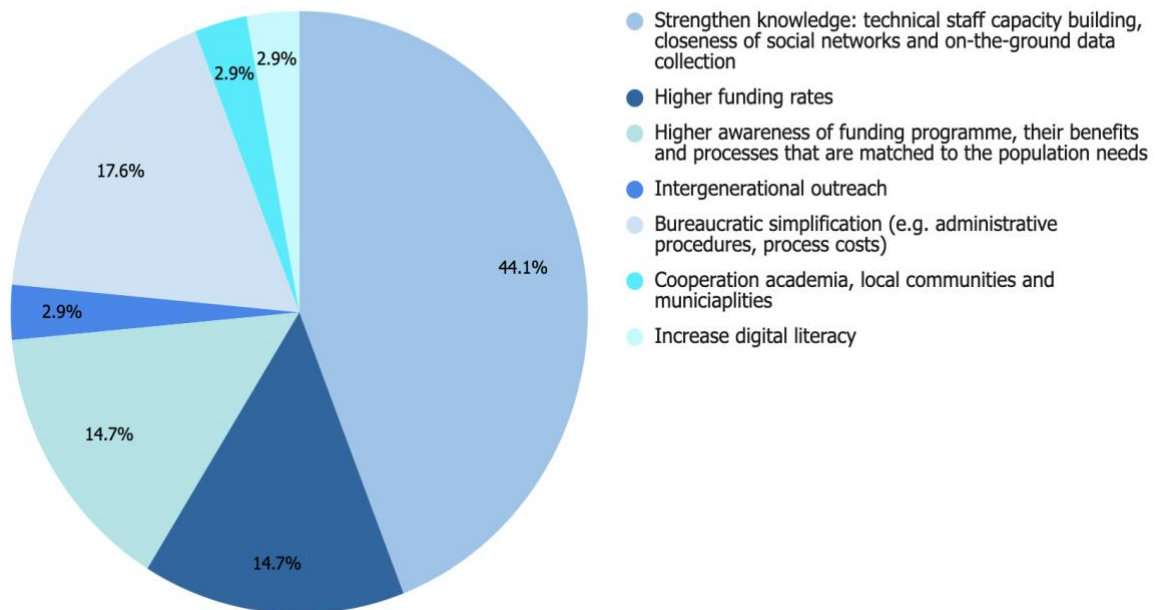


Figure 18 - Percentage of responses ranking resources and/or support needed to address stakeholders' perceived priorities/challenges effectively, Portugal

Consistent with the challenges outlined in the above section (questions 4 to 6), stakeholders identified **strengthening knowledge** as priority (approximately 41% of respondents), particularly in the form of municipal structures for identifying and surveying needs (including various local/regional stakeholders who can actively involve the whole community, or Energy Agencies and other technical staff with hands-on expertise who can support local councils, communities or individuals in preparation of applications for subsidies. It also includes training various entities with closeness to the communities to provide support and advice in various areas, e.g. energy, social, school and civil protection. This is in response to challenges specific to dispersed, isolated rural areas, with lack of suppliers and technical facilitators. Further, respondents highlighted the importance of **simplified bureaucratic processes** (nearly 18%), in response to the priorities on digital literacy and access to energy-related benefits information.

3.4.2 Results: Stakeholders

Responsible Agents

Question 8 supports identifying the key individuals or entities responsible for energy and social topics within the stakeholder's organisation or community, namely the following in Table 14:

National level
National Network of Energy and Environment Agencies
Non-profit Governmental Organisations
Regional level
AREANATejo

District Office of the European Anti-Poverty Network (EAPN)
Alentejo Regional Coordination and Development Commission (CCDR)
Territorial Dynamisation and Hubs Department of the Alentejo Regional Development Agency (ADRAL)
Local level
Municipalities
Intermunicipal Community of Alto Alentejo (CIMAA)
ACIPS (local trade and industry association)
Social Action Division and social security
Local businesses or larger entities (municipal waste management companies like Rezi Alentejo, Empresa de Desenvolvimento Mineiro, Endesa Generation)
Urban Planning Division
Business Support Office
Associations and entities specialised in the areas (Local Council for Social Action)
Parish councils (Foros do Arão Parish Council)
Sports and cultural associations (Comenda Archive)
University and educational institutions (Polytechnic Institute of Portalegre - IPP), other school groups
Various nursing homes distributed throughout the villages and towns (Caminhar Association, AFATI (a day centre and home for the elderly), Santa Casa da Misericórdia)
Community Centre

Table 14 - Portuguese responsible agents

Main stakeholders

Question 9 aims to determine the stakeholders considered most important to involve in the project and understand the rationale behind their selection.

Main stakeholder groups	Rationale for involvement
Municipality of Gavião (Business Support Office) and local authorities/councils	There is a need for updating documents in force, e.g. with the goals/targets set in the Sustainable Development Goals, and in that sense the topic of energy poverty must be included in strategic documents at a social level
Parish Council, social solidarity organisations (easy to reach the elderly)	Understand their needs and obstacles in the content of existing programmes. Ensure implementation is socially just, benefiting those who are most in need
School Cluster (joint project in the areas of waste and recycling - students and grandparents)	For widespread support and compliance
Technicians in Local Social Action Council	Expertise on policy implementation
«Radar Social» Programme participants	Work with the community, creating multidisciplinary technical teams to implement pilot projects in mainland Portugal, lasting 27 months, according to the size of the population living in each municipality and the scope of the intervention, integrated into the Local Social Action Councils (CLAS) of the Social Network, of the Municipal Councils.
Private Social Solidarity Institutions in the municipality of Gavião (Centro	In previous years, SCMG produced an Energy Diagnosis Report and a Manual of Good Practices for Energy Efficiency, gaining a better insight

Social da Margem, Centro Social Biverense and Santa Casa da Misericórdia de Gavião)	into aspects related to energy use and/or contributing to characterising energy flows. Support in more feasibility studies to identify the solutions (technical and/or technological) to implement in the area of energy efficiency and/or renewable energies.
University and educational institutions (Portalegre Polytechnic University, Institute for Professional Training)	For widespread support and compliance
Citizens in vulnerable situations	Ensure implementation is socially just, benefiting those who are most in need
Suppliers, energy agencies and network operators	They are the distributors and have adequate knowledge
Social Solidarity Institutions (day centres) / Facilities that provide services, nursing homes	Understand their needs and obstacles in the content of existing programmes. Ensure implementation is socially just
Civil Protection and the National Republican Guard (GNR) ²⁶	For widespread support and compliance
Municipal Social Action Division & Urban Planning Division	In charge of other short-term and/or long-term policies and initiatives
Community centres in energy-related projects	Understand their needs and obstacles in the content of existing programmes
Ponte de Sor Commercial and Industrial Association, local companies	Understand their needs and obstacles in the content of existing programmes
AREANATEjo	For the on-the-ground knowledge basis and facilitation
Sport and cultural groups	For widespread support and compliance
NGOs	Ensure implementation is socially just

Table 15 - Portuguese main stakeholders

Compared to the ENTRACK *Stakeholder matrix and pathways of engagement* report for all countries²⁷ and *interactive policy map* for Portugal, available [here](#), the results stemming from this thematic analysis confirms the major multi-level actors categories (EU, national, regional, local). The interactive policy map also presents an overview of policies at the international, NUTS II and III levels²⁸. Future complementary activities could focus on the dynamics of informal activities (e.g., actions taken within health entities, health centres, nursing homes, in response to the elderly's circumstances) in social energy planning, as added value to the interactive policy map.

²⁶ <https://www.safecommunitiesportugal.com/find-information/police-in-portugal/gnr/>

²⁷ Available on the ENTRACK project website on <https://enttrack-project.eu/enttrack-activities/>

²⁸ Nomenclature of territorial units for statistics (NUTS). Where NUTS 2 refers to basic regions (for regional policies).

Vulnerable groups

The objective of Question 10 is to identify potential vulnerable groups, based on interviewees' knowledge and perception. The results are analysed in conjunction with Question 2 - which explores how vulnerable groups are incorporated into energy policies (see Figure 19).

Identified vulnerable groups and energy-poor people in the Portuguese regions



Figure 19 - Percentage of responses identifying identified vulnerable people, per category, Portugal

Based on the analysis of Question 2 responses, we may infer that the approach to PV energy projects tends to follow a top-down implementation, with limited genuine consideration or involvement of communities in the process. It seems that **communities are often not consulted** beforehand and are only informed about decisions regarding large-scale projects or smaller interventions after those decisions have already been made. Among the most effective mechanisms mentioned by interviewees to reach out to the above vulnerable groups, Table 16 presents the following, which emerged from the thematic analysis:

Outreach mechanisms
Technicians continuous work/contact with population
Adoption of multisectoral vision (concentration of services and entities), as energy poverty is associated with other types of social issues (housing, health, food, etc.)
Programs such as "Vale Eficiência" Programme to be more local and adapted to each territory
Helpline from Energy Agencies
Citizenship subject in schools with practical examples, and climate action and renewable energies should be part of the school curriculum
Evaluation of energy data (creating a systematised database to identify energy-poor dwellings) by e.g. Commercial and Industrial Associations
Improving energy literacy, including information on Efficiency Voucher and involving parish councils, which have deep insights into local needs
Providing accessible funding for energy-efficient renovations.

Table 16 - Portuguese outreach mechanisms

Climate Explorers

Question 11 aims to Identify potential candidates to serve as Climate Explorers and understand their suitability for the role within the community or region.

The thematic analysis identified municipalities and regions (29%) and private companies (nearly 26%) to be the most active candidates for the Climate Explorers activities. We ought to mention that approximately 13% of respondents indicated local action groups. These results vary significantly from the responses for e.g. Greece, where students and NGOs members were identified as potential Climate Explorers.

Identified local actors actively involved in energy-related initiatives within Portuguese communities

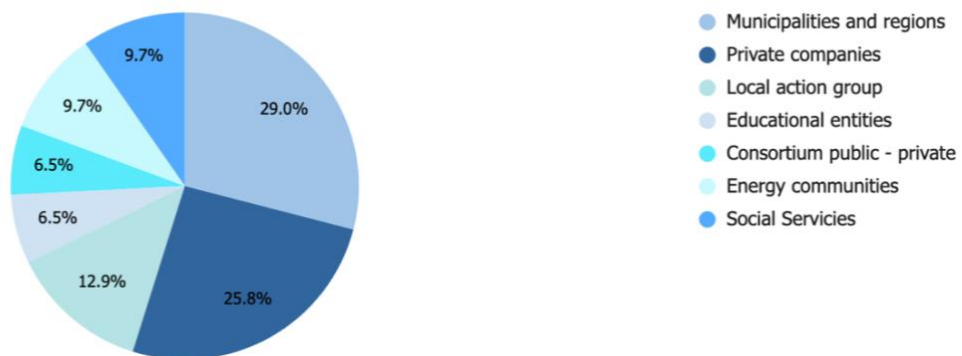


Figure 20 - Percentage of responses identifying local actors currently involved in energy-related initiatives - distributed per category, Portugal

This may be explained by the different stakeholder groups that were interviewed, however, further investigation will be carried out by KILOWATT, when selecting a group of “climate explorers” through a call for action in each rural piloting municipality, to provide an effective connection between them, citizens and local key actors (including local authorities).

3.4.3 Results: Participation

Experience with participation

Question 12 is targeted to assess the stakeholder's experience with participatory methods and engagement in co-designing public policies to understand their level of expertise and insights gained.

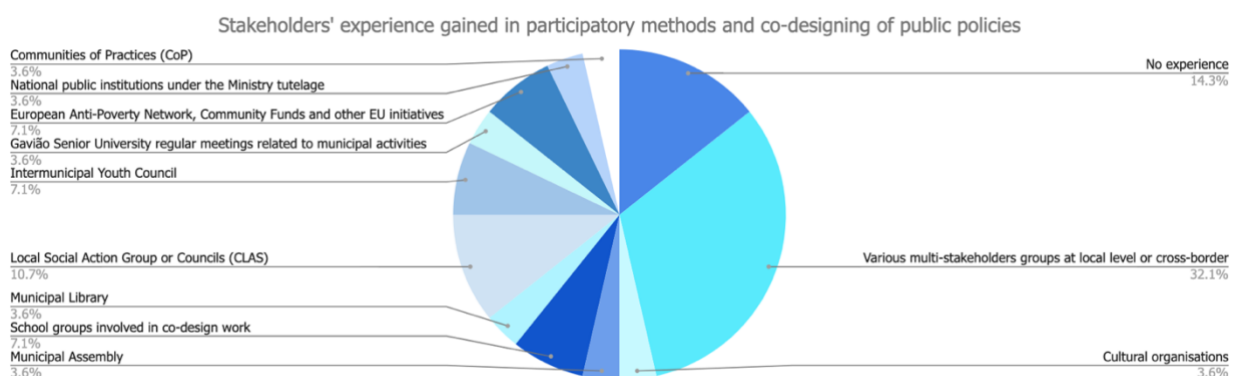


Figure 21 - Percentage of responses each experience in participatory methods and co-design of public policies - distributed per category, Portugal

The interviewees experience has been categorised into 13 groups, ranging from ‘no experience’ to ‘various multi-stakeholders’ groups at local level or cross-border’. The latter embeds most responses, including Alentejo Regional Coordination and Development Commission activities, local institutions exchanges, participatory budgeting initiatives across municipalities, door-to-door awareness raising activities and so forth.

Notably, the ‘European Anti-Poverty Network’ includes participatory forums and focus groups on various themes, with NGOs, grassroot groups, district (local councils), national (national councils) and European level involvement and outreach.²⁹ Whereas the category ‘National public institutions under the Ministry tutelage’ refers to the National Commission for the Promotion of the Rights and Protection of Children and Young People in Portugal³⁰ and other entities organising local actions (e.g. World Cafés).

Finally, when asked about insights and lesson learned, interviewees mentioned the following:

- Experiences exchange is highly beneficial for awareness raising
- Higher involvement on municipal councils in policy making is needed
- Trust is critical for engagement
- Grassroot initiatives capture local needs more effectively than top-tiered approaches
- Focus on tangible returns for the community.



Ponte do Sor Municipality, PT



Gavião Municipality, PT

²⁹ [What is EAPN?](#)

³⁰ [About us - Comissão Nacional de Promoção dos Direitos e Proteção das Crianças e Jovens \(cnpdpj.gov.pt\)](#)

3.5 Cross-Cutting Comparison at the Country Level

Upon providing an in-depth outlook into each of the four rural regions, the results of the thematic analysis are presented below in a cross-country comparison, by aggregating the needs and perspective of different stakeholders per Member State (Italy, Greece, Spain and Portugal).

Interviewees are hereby categorised based on the following criteria: **involved** in social energy planning, **not involved** and **marginal involvement** (see Figure 22), across all 4 countries. The latter category is intended as different from being involved in the decision-making process (e.g., financial administrators who approve the budget after the decision has been taken and, thus, are not necessarily involved in the social energy planning process except for their support role in implementing/translating the designed action into practice). For example, marginal involvement is applicable to financial services officers in charge of approving a policy budget.

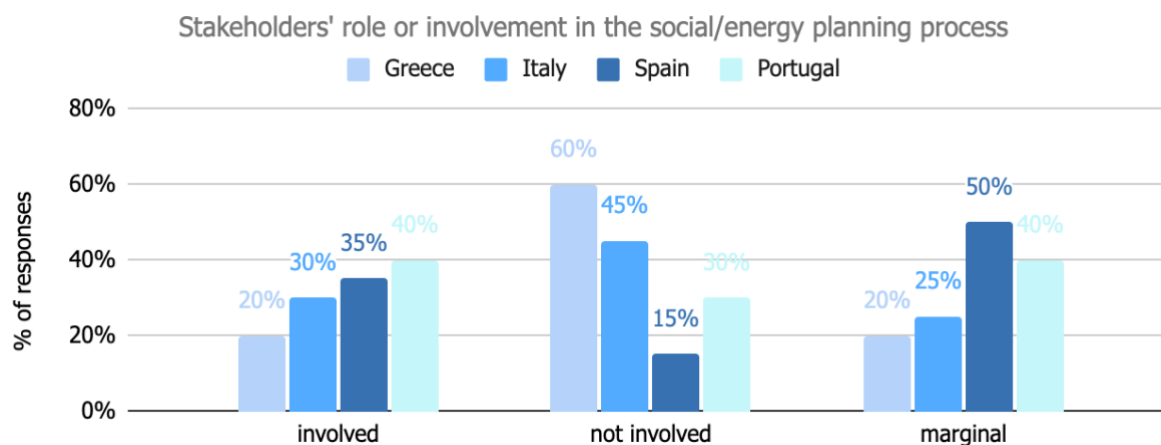


Figure 22 - Percentage of involved stakeholders in social energy planning policies in eight piloting municipalities, per country comparison

GREECE - Based on the role/involvement of interviewees from the Municipality of Avdera and of Topeiros, results from the analysis show that 35% of interviewees are not involved in the social energy planning process, 29% have a marginal role³¹ and 25% are involved. Of the ones who are involved, one works as a technician liaising local and regional authorities and three are representatives and/or civil servants at the municipal Social Policy Office. It must be noted that some stakeholders are indeed involved in the implementation process of policies, however, they are not in charge of taking decisions. They do however have a wide overview and understanding of the challenges and opportunities related to local and regional energy social policies.

ITALY - Specifically for Vico Equense and Piano di Sorrento Municipalities, 30% of participants reported active involvement, while 45% indicated no involvement. The remaining 25% are only marginally engaged. This group primarily supports municipalities and participates in multilevel

³¹ marginal involvement is intended as different from being involved in the decision-making process (e.g., financial administrators who approve the budget after the decision has been taken and, thus, are not necessarily involved in the social energy planning process except for their support role in implementing/translating the designed action into practice).

governance and advocacy efforts. Those marginally involved include Research Center Officers, the Director of a National Coordination Association, a Think Tank Policy Advisor), and a Non-Profit employee. Among the active actors, involvement tends to be either in energy planning or in social planning, with limited integration between the two. This lack of transversality in the planning phase may reflect the interviewees' affiliation, rather than being an actual representation of the local context. Therefore, further investigation will be necessary at the start of the MRPs activities.

SPAIN - Regarding the involvement of interviewees in the social energy planning process in Gombren and Sant Quirze de Besora, Spain, 35% of participants report active engagement in social energy planning, while 15% indicate they are not involved. Notably, the remaining 50% are only marginally engaged, as illustrated in Figure 22. This last group provides support to municipalities in planning, monitoring, and executing energy projects, as well as engaging in consultation, and citizen mobilisation efforts. Finally, the actors that are most involved in the planning process in the pilot area include a Mayor, a Barcelona Council Officer, an OTC Technician, a Technician from a Development Agency, a representative from the Association of Municipalities and Entities for Public Energy, and a member of the Network for Energy Sovereignty.

PORTUGAL - As for the role/involvement of interviewees from the Municipalities of Ponte de Sor and Gavião, results from the analysis show that 40% of interviewees have a marginal role, 40% are involved in the social energy planning process, and 30% are not involved. Of the ones who are involved, two are involved at the regional level in the Alentejo Regional Coordination and Development Commission and Territorial Dynamisation and Hubs Department of the Alentejo Regional Development Agency. Two interviewees from the European Anti-Poverty Network (EAPN) are included in this category (both included in one interview), albeit strictly at the EU level and through participation in projects, working groups, as well as the production of documents and organisation and implementation of Local Citizens Councils (with no active participation). One interviewee is also responsible for social issues within the small municipality, where social and energy issues are more easily connected given its size, whereas in other municipalities they are usually separated. Finally, the Digital and Intangible Archive of Comenda is regarded as an actively involved local community-led initiative, part of the energy transition and having a direct role in informal social energy planning, as it is developing a renewable energy community in a rural area.

Overall, by taking the medium value of the percentage dataset for all four countries shown in Figure 22, out of 80 respondents, 33% are involved in the social energy planning, 38% are not involved whilst 33% have a marginal role. Within the 'not involved' categories, we can list social workers, public officers from Municipal departments such as Geothermal and Recycling, civil servants and volunteers in municipal associations, members of commercial and industry associations, directors or members of school clusters as well as other education institutions, and specific to Portugal: Local Social Action Councils and the Social Security Institute district centres.

3.5.1 Identified perceptions, priorities, challenges in current energy policies/initiatives

This section starts with an overview of interviewees' perceptions of current social energy policies and/or initiatives in their municipality or region (based on Question 4). Figure 23 below illustrates responses aggregated per country.

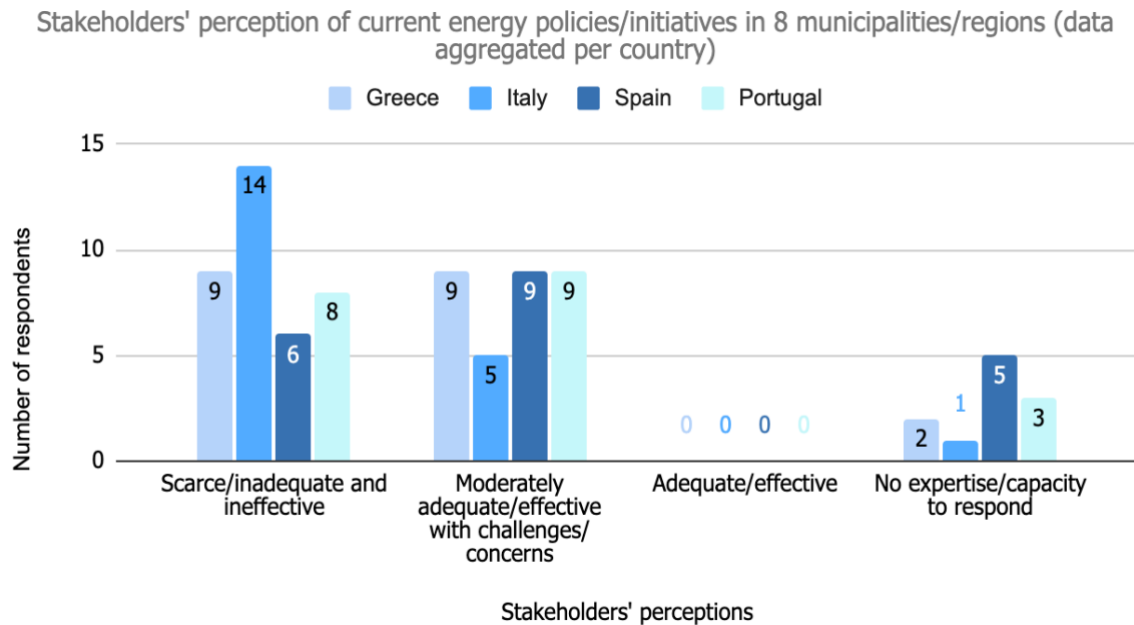


Figure 23 - Stakeholders' perception of current energy policies/initiatives, per country comparison

The results show that approximately 46% of respondents across all four countries consider current policies and/or initiatives scarce, inadequate and ineffective, followed by approximately 40% claiming that there are actions in place, amidst challenges and concerns to be addressed. The latter were analysed in previous sections per country. Nearly 14% of interviewees do not possess the knowledge/capacity to respond - which could be interpreted in line with chapter 3.1, where we presented which stakeholders' have an active, marginal or no role in social energy policy planning.

The **Word clouds** figure below further highlights the most frequently mentioned terms across all four countries, in terms of perceived priorities and challenges by interviewees.

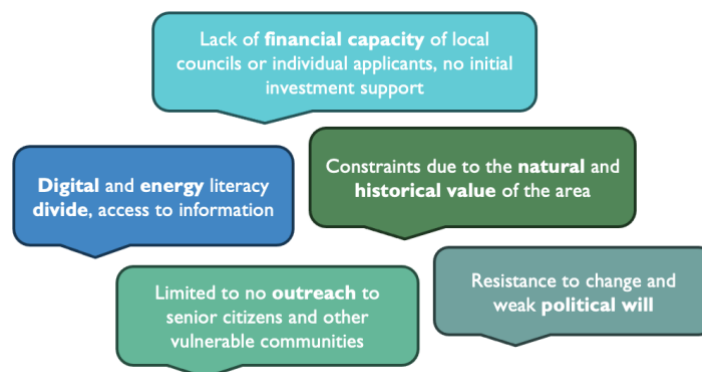


Figure 24 - Overall stakeholders' perception of current priorities and challenges in social energy policies/initiatives

Across all eight piloting areas where interviews were executed, the analysis highlighted five main key themes, common to each area: the **financial capacity** to kick-start project often linked to **prohibitive costs** of energy efficiency measures or other energy-related improvements for the population indoor comfort and well-being; the **intergenerational digital divide** across, which often affects senior citizens the most; thus, the limited outreach to the latter, alongside more remote,

isolated inhabitants. Finally, insufficient **political leadership** on the matters at hand and resistance to change; and **infrastructural challenges** such as historical and cultural value of buildings as well as **environmental** concerns. For instance, in Spain, interviewees mentioned challenges regarding large PV projects, potentially altering or disrupting the natural landscape as they require extensive land, potentially reducing available land for agriculture.

3.5.2 Identified resources or support needed

In response to major priorities and challenges, question 7 aims to determine the resources/support needed to overcome challenges and effectively implement social/energy plans and highlight the needs not covered.

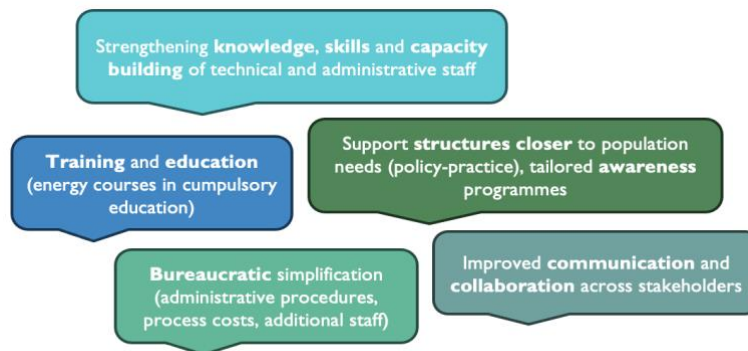


Figure 25 - Overall stakeholders' perception of resources and support needed in social energy policies/initiatives

The **Word clouds** figure above highlight the most frequently mentioned terms across all four countries, as a first attempt to illustrate the overall local landscape of social energy planning in rural piloting Mediterranean areas. To effectively address the priorities and challenges in the current planning social energy policies and/or initiatives, several key resources are essential. Highlights stemming from this analysis are explained in the Discussion chapter below.

4 Discussion and concluding remarks: the emergence of social energy plans and policies in rural Mediterranean areas

This chapter highlights previous results and discussions in each analysed country, providing suggestions for future research and strengths and limitations of the current study results. As previously mentioned, the objective of this report is to prepare the ground for the in four rural areas, and more specifically in eight piloting municipalities, with a preparatory analysis of:

- Existing social energy plans/strategies and initiatives;
- Understand the challenges, priorities and/or concerns in social energy planning processes;
- Unveil potential barriers for participation of certain groups, especially those identified as vulnerable based on the interviewees' knowledge;
- Provide suggestions on tools and methodologies and/or approaches that institutions can potentially use for co-designing to tackle those challenges and barriers.

Research findings on 80 semi-structured interviews across 8 piloting areas unveiled the current landscape of social energy policies and initiatives as well as key priorities and concerns. This report also identified factors that may facilitate co-design in each area. Overall, it advocates that effective social energy planning, specifically in growing municipalities and in more remote areas whose social composition is changing, is only feasible when policies and initiatives tackle a wide range of social concerns amidst more technical and energy infrastructure issues.

4.1 Highlights from the analysis in eight EU rural areas: Priorities and Challenges

As mentioned in Chapter 1, social dynamics in rural areas, their needs and concerns must not be overlooked in any policy process and/or initiative. A series of **current priorities and challenges** that were brought forward in this report, when combined with the following.

- In terms of priorities/concerns, **lack of funding** for implementing measures is a critical factor. Notably, future funding schemes that welcome more applications from vulnerable groups could look to attract more applicants from the private, residential sector - based on the success of e.g. PV installation and retrofit in public buildings;
- Our thematic analysis suggests that **vulnerable groups tend to not apply** if longer-terms benefits are not brought to their attention (lack of awareness-raising programmes), interventions are not fully aligned with their needs (**policy-practice mismatch, no ex-ante stakeholders' consultations**), and support for digital and energy literacy is not provided (current cumbersome (online) bureaucratic application processes);
- Identified barriers to social energy planning in many rural areas include no to limited levels of people's participation in activities and projects, **scarcity of volunteers and local leaders** (depending on the Mayors' will to act upon existing priorities), low participation of local councils, insufficient (technical) knowledge and/or capacity of administrative staff, and complex and lengthy applications, which make it difficult for rural people to access subsidies and other public benefits;
- The social (non) **inclusion of migrants** is also a pressing concern in some rural areas. Their limited knowledge of the local context and level of engagement with rural communities are

indicators for inadequate integration with the population. Some of the most problematic immigrant groups do not have legal residency status, but only access to jobs with low pay and poor working conditions. These impact their level of energy and digital literacy when it comes to bureaucracy-intense and demanding **(online) applications** for energy efficiency vouchers and other programmes;

- Finally, large solar installations require extensive land, which can visually impact scenic areas, affect local ecosystems, and potentially reduce available land for agriculture (as mentioned for Spain, Portugal). This raises issues about balancing renewable energy expansion with **environmental preservation**. Not only does the Italian case bring forth constraints due to the natural value of the landscape as its Spanish and Portuguese counterparts and the Peninsula geographic composition, but it also draws attention to the **aesthetic preservation** of its historical and cultural landmarks.

The next step within ENTRACK MRPs is to understand which stakeholder category (based on the involved, not involved, marginal division in sub-chapter 3.5) ought to be more or involved at all in the co-designing of social energy policies and initiatives.

4.2 Highlights from the analysis in eight EU rural areas: Resources and Support Needed

A total of 80 participants were interviewed on the current social and energy planning landscape in their area. Through the thematic analysis and comparison of most mentioned resources and support needed in all eight Mediterranean areas, this report highlights the following.

1. Simplification of Bureaucracy to Funding Application Processes

- Reducing the complexity of applying for renewable energy grants or subsidies makes it easier for local authorities, communities, and small businesses to access funding;
- Clear guidelines and support for applicants (both public authorities including small municipalities and individual citizens), which can increase participation in funding programs;
- Digitalization of administrative procedures can significantly cut down administrative burdens, however, this report also highlights the current digital divide in several piloting areas.

2. Training and Education for the Wider Community

- Need for tailored educational programs for all involved stakeholders (planners, policymakers, engineers and other technical staff, community members, students and the wider civil society) to build expertise in renewable energy technologies, energy efficiency, and sustainability.

3. Capacity Building of Local and Regional Authorities

- Local and regional authorities need resources to develop, enforce, and monitor energy policies that are locally relevant, reflecting the actual needs of the population, especially of identified

vulnerable groups. This may include training in regulatory frameworks, energy governance at various levels, and project readiness (financial, technical) preparation;

- Deepening knowledge in developing energy and climate plans for all employees so that everyone has the same level of knowledge in the field;
- Developing specialised training modules to build capacity in technical areas such as energy storage, smart grids, and data analytics is crucial for effective social energy planning. Nevertheless, the above points are often limited by departments that are overworked and the lack of technical and administrative staff, especially in smaller municipalities.

4. Closeness of Support Governing Structures to Citizens

- Creating support structures closer to the citizens fosters engagement and ensures that policies are responsive to local needs.
- Local councils or energy cooperatives can help bridge the gap between national energy strategies and community needs;
- Making energy data, planning resources, and advisory services available locally increases participation and transparency, ensuring challenges in social energy planning can be effectively tackled.

5. Improved Communication and Collaboration Among Stakeholders

- Collaboration between governments, private sectors, NGOs, energy experts, and citizens is crucial. Resources must support the creation of networks and platforms where these stakeholders can exchange knowledge and best practices;
- Including local communities early in the planning process enhances trust and ensures that solutions reflect the needs and realities of the population. For instance, as shown in sub-chapter 3.1.2, local needs include substandard housing, inadequate insulation etc. These needs must become a priority considering EU initiatives like the Renovation Wave and the Energy Performance of Buildings Directive, which provide favourable justifications for innovation in construction, demolition and renovation within the built environment. Yet, results from this analysis urge for more coordinated efforts to translate these policies into effective local action, which remains uneven across the EU and potentially hinders the impact of such actions and measures.
- Encouraging partnerships between public institutions and private companies to fund and develop sustainable energy projects, which would be an advancement compared to the current landscape in some rural areas where initiatives are mainly taken by the private sector (for instance in Greece);
- landscape in some rural areas where initiatives are mainly taken by the private sector (for instance in Greece).

Social energy planning involves integrating renewable energy solutions and sustainable practices, overcoming challenges of technological, infrastructural, socio-cultural and economic nature, in a way that aligns with the needs and capacities of local communities.

4.3 Suggestions for continued research at the local and community levels

Based on this first thematic investigation of stakeholders' perceptions and concerns regarding the nexus society-energy planning, this report strives to benefit and shape the design of **Municipality-Regional Partnerships**. Going forward, the project will focus on the debate around how vulnerable groups can be reached out to, how we can have a more in-depth understanding of the framing of local decision-making processes at various levels, and how we can **engage a wider audience into the debate**. Subsequent companion reports will address related, but separate, dimensions such as the citizens' engagement.

When it comes to the research into the social dimension of rural areas as part of the local planning, it would be beneficial to prioritise the following research topics:

- The role of certain stakeholders' categories (sport associations, businesses in the tertiary tourism industry such as hotels);
- Relevant tools that could be used to quantify the value of citizen participation in rural areas.
- Innovative ways for **cooperation** between stakeholders involved in aspects of the social economy, businesses, the public sector, and non-governmental organisations in rural areas;
- Appropriate training is provided to local and regional administrative staff. A similar effort is required within education modules in schools and within citizen communities;
- The emergence of (informal) **initiatives** in several rural areas, for instance in health institutions such as nursing homes in Portugal or citizens-led initiatives addressing social and energy issues in low-density rural areas, or social services support for social bonuses application in Spain. Grassroot initiatives alike are worth exploring as their ever-changing nature from e.g. preserving local heritage, can turn into a driving force to foster community cohesion and spearheading renewable energy communities' projects.

Overall, several interviewees highlighted the need for better framing of activities and actions to serve the territorial specific needs and priorities, including support structures (administrative, energy providers, suppliers) for provided social energy services with focus on more isolated territories; and deeper knowledge on challenges faced by diverse stakeholder groups to advise authorities on which projects to prioritise.

4.4 Additional sources

- In this regard, the Excel-based **SYNERGISE+** tool could be used to help decision-makers prioritise actions from Sustainable Energy and Climate Action Plans (SECAPs). The tool was developed within the European PROSPECT+ project³² to help align local goals and preferences with climate resilience objectives;
- In relation to Closeness of Support Governing Structures to Citizens above, observation and monitoring tools to quantify communities' actual needs and impacts of certain measures and interventions are needed, especially in the context of large PV or wind projects. In this regard, the EU Rural Observatory³³ can support in the endeavours of assessing the impacts of EU

³² [SYNERGISE+ | PROSPECT+ \(h2020prospect.eu\)](https://h2020prospect.eu)

³³ [Rural Observatory \(europa.eu\)](https://europa.eu)

policy initiatives and providing granular data, statics and evidence-based analyses on policy making processes in rural areas, enabling a more inclusive and sustainable energy transition;

- Decision support tools and factsheets with focus on short-term energy measures in several EU countries were developed within other EU-funded projects and are available for replication. For instance, the SocialWatt project Library³⁴ contains country-based Fact Sheets cross-cutting and policy recommendations, which were consulted to triangulate some interview results within the scope of this report. One highlight from the Greek factsheet energy poverty confirms it as a key priority for the MS, irrespective of the fact that the potential energy savings may be lower within the framework of Article 7 of the Energy Efficiency Directive (EED).³⁵ Aligned with our results, energy renovation of residential buildings is also claimed to be the sole feasible solution to tackle energy poverty on a long-term basis.³⁶

4.5 Strengths and limitations of the study results

The comparison across stakeholder groups within municipalities and regions within the same Member State and across them also allowed us to **triangulate assumptions**. Specifically, seeing how the same theme could be applied to diverse contexts across stakeholder groups allowed ideas to be corroborated from **multiple perspectives**. It also revealed context-bound nuances in the theme, although common enough to reach general conclusions to aid further investigations onto framing local and regional social energy planning processes. This was demonstrated for instance by answers to Question 5 in the 8 piloting areas. Senior technicians and municipal administration officers asserted that key priorities or concerns regarding social energy planning in piloting Portugal regions include - among all - lack of funding as well as limited digital and/or energy literacy level, which were claimed by same-governance-level interviewees in Spain. Furthermore, given that visualising qualitative data from (semi-structured) interviews may be challenging due to its non-numeric nature, graphs and other tools were used, such as WorldClouds, to effectively **convey insights** from this data.

On the other hand, a few factors limit our understanding of the social energy planning process in piloting areas. First and foremost, several interviewees had **limited to no experience** in both social and energy dimensions but were experts from either social support programmes or technical/energy efficiency interventions. In spite of such shortcoming, many did not feel limited by insufficient expertise, possibly because they were reflecting on their experience and made an attempt to identify suggestions and main concerns in regard to the social - energy nexus, based on their current knowledge of policy programmes or initiatives.

³⁴ [Library | SocialWatt](#)

³⁵ [Energy Efficiency Directive \(europa.eu\)](#)

³⁶ [Connecting Obligated Parties to Adopt Innovative Schemes towards Energy Poverty Alleviation \(socialwatt.eu\)](#)

5 Conclusions

Our thematic analysis of 80 interviews produced several themes regarding participants' perceptions of social energy planning and stakeholders' groups involved (or not) in the decisional processes. Vulnerable groups were also analysed. The themes describe how social energy planning is implemented in practice in each piloting region, stakeholders' knowledge of needs and priorities, potential challenges, and concerns, as well as opportunities to implement participatory approaches in the planning of policies and initiatives. Further work in setting-up Municipality-Region Partnerships (MRPs) should find this analysis helpful in developing the workflow and **prioritising certain thematic areas** throughout the MRPs experience.

The way forward for ENTRACK MRPs ought to focus on how to bring public administration closer to the rural citizens and how to accelerate the sharing of knowledge and good practices, hence, establishing a sustainable process for this. Further, based on the evidence gathered through the semi-structured interviews, this report lists opportunities to improve the social energy planning process, recommending piloting areas to pay more attention to awareness raising approaches, aligning population' needs with local priorities. Finally, the **anticipated benefits** of using semi-structured interviews to answer our questionnaire were also met. For example, if the consortium partner perceived an interviewee to be heavily focusing on the challenges of social energy planning, they could promptly invite them to mention potential opportunities for improvement, and vice versa. Last but not least, the report also gathers **suggestions for replicable participatory techniques and tools**, to co-develop social energy plans in rural areas, or schemes to develop more flexible housing conditions, depending on the area. ENTRACK companion reports on MRPs will discuss their process and the inclusion of vulnerable groups into the multi-level dialogue of social energy planning in greater detail.

Appendix 1: Checklist for interviewers

Guidelines – Before the interview

1. Review the interview materials

- Review the interview questions, notes, and key points outlined in the Excel document.
- Familiarise yourself with the objectives of the interview and the information you are seeking to gather from the interviewee.

2. Arrange interview logistics

- Schedule the interview at a mutually convenient time for both you and the interviewee.
- Ensure that you have access to a quiet and private location for the interview, free from distractions (even if it's through Zoom). If you would prefer to record the interview, test any recording equipment or technology that will be used during the interview to ensure it is functioning properly. Have backup recording methods available in case of technical issues with the primary recording device.

3. Review interviewee background

- Familiarise yourself with the background and role of the interviewee within the organisation or community.
- Consider any relevant information about the interviewee's expertise or perspective that may inform the interview process.

4. Prepare and send interview invitation

- Customise the email invitation template according to the stakeholder you are inviting.
- Translate the email into your own language and send the interview invitation to the selected interviewee.
- Follow up with the interviewee as needed to confirm their availability and finalise the interview details.
- Below, you'll find an example of an email body for inviting an interviewee.

Subject: Invitation to Participate in EU Project Interview

Dear [Interviewee's Name],

I hope this letter finds you well. My name is [...], and I am writing to invite you to an interview about understanding and addressing energy-related challenges in [insert name of municipality/region/country].

I'm from [...], and I'm part of the ENTRACK project, an EU project funded under the LIFE programme. This project aims to speed up the transition to climate neutrality by increasing the energy policy capacities of eight Mediterranean small-medium-sized rural municipalities (two of them: [insert name of your pilot municipalities]). Our mission is to facilitate the implementation of the energy transition in a just and fair manner thanks to the co-design of social energy policies.

As part of our project, we are interviewing key stakeholders like yourself to gather insights into existing energy policies, stakeholder engagement strategies, and opportunities to enhance social and energy planning processes.

The interview will cover topics such as the current state of energy and social policies and initiatives in your region, the involvement of stakeholders in decision-making processes, and strategies for effectively addressing the needs of vulnerable groups in energy planning.

The interview will be conducted at a time convenient for you and will last no more than 1 hour. Your responses will be kept confidential and will only be used for research purposes.

Please let us know your availability for the interview (preferably no later than [insert date]). If you have any questions or concerns, please feel free to contact me at [your email address] or [your phone number].

Thank you for considering this invitation. We look forward to hearing from you soon and having the opportunity to speak with you further.

Sincerely,

[Your Name]

[Adjust the email body as needed and translate it to your local language]

Guidelines – During the interview

1. Introduction for interviewees

- Begin each interview with a brief introduction of yourself and the project.
- Expose the general objectives of the interview (in the excel sheet).
- Assure the interviewee that their answers will only be shared internally with project team members for analysis and reporting purposes.

2. Recording and consent

- Inform the interviewee that the interview will be recorded for accuracy and reference purposes.
- Obtain verbal consent from the interviewee to record the conversation before proceeding (if the interviewee declines to be recorded, ensure that detailed notes are taken during the interview).

3. Interview process

- Explain that the interview will follow a semi-structured format, with a set of predetermined questions as well as opportunities for open discussion.
- Encourage the interviewee to provide honest and detailed responses to each question.
- Allow the interviewee to speak freely and express their opinions without interruption.

4. Feedback

- Offer the interviewee an opportunity to ask questions or provide feedback at the end of the interview.
- Thank the interviewee for their time and participation in the interview.

Guidelines – After the interview

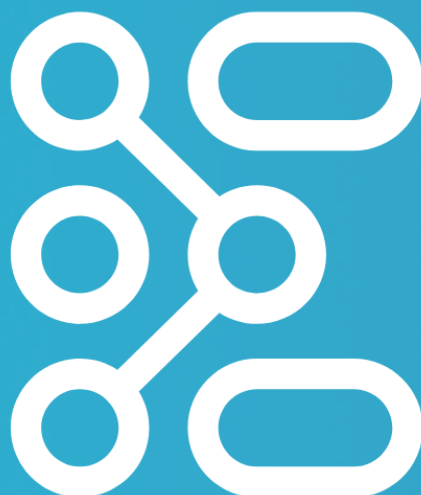
1. Complete Excel sheet

- After each interview, fill in the designated Excel sheet as soon as possible with the relevant information from the interview session (one Excel sheet for each interviewee).
- Record the main ideas (use concise and descriptive language to summarise them) provided by the interviewee in the “Responses” column.
- If applicable, note any particularly insightful or noteworthy quotes from the interview in the “Relevant quotes” column.
- Review the completed Excel sheet to ensure that all relevant information from the interview has been captured accurately.



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ENTRACK

*Empowering local and regional authorities
to design clean energy transition plans*

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