LOCATEE

LOCAL AUTHORITIES TACKLING ENERGY POVERTY IN PRIVATE
MULTI-APARTMENT BUILDINGS

D2.2 Stakeholders Engagement Strategies for Pilots

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Habitat for Humanity International (NHFHI)

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About LOCATEE

LOCATEE aims to support local municipalities in addressing energy poverty through the renovation of private multi-apartment buildings for vulnerable residents. LOCATEE will achieve this goal by providing a toolkit for identifying energy-vulnerable households, matching tailored interventions to their needs, and integrating energy poverty alleviation activities into long-term strategies of municipalities such as Sustainable Energy and Climate Action Plans. LOCATEE will use administrative data to create household and building typologies to identify priority intervention locations. This process will help authorities and social partners address local energy poverty through coordinated solutions, including contact points and focus groups with housing entities, to facilitate knowledge exchange on renovation programs and targeted solutions.

The evidence based and collaborative approach will be implemented in three pilot municipalities in Central, Southern and Southeastern Europe: Piraeus (Greece), Rumia (Poland), and Torres Vedras (Portugal) and, while ensuring scaling up the LOCATEE framework to more municipalities and regions across Europe.

WHO WE ARE

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2	Technoeconomics of Energy Systems laboratory – University of Piraeus Research Center	TEESlab - UPRC	EL	
3	Universidade NOVA de Lisboa	NOVA	PT	
4	Institute for European Energy and Climate Policy	IEECP	NL	
5	Gmina Miejska Rumia	COR	PL	
6	Municipality of Piraeus	MOP	EL	
7	Municipio De Torres Vedras	COTV	PT	
8	Austrian Energy Agency	AEA	AT	
9	Nadacia Habitat for Humanity International	NHFHI	SK	
10	EURACTIV Media Network	EURACTIV	BE	

Executive Summary

Deliverable **D2.2 Stakeholder Engagement Strategies for Pilots** sets out the strategic and operational framework for engaging key actors involved in addressing energy poverty in the LOCATEE pilot municipalities of Piraeus (Greece), Rumia (Poland), and Torres Vedras (Portugal). It outlines the importance, objectives, and expected outcomes of stakeholder engagement and explains how these activities support the wider project goals and work across WP2–WP7.

The deliverable presents the methodological approach used to identify, map, and prioritize stakeholders, with detailed outputs provided in the annexes. It also introduces the **Consolidated Stakeholder Engagement Plan**, delivered as a separate Excel workbook, which translates the strategy into concrete engagement activities specifying who to engage, how, when, and for what purpose. A monitoring and evaluation section highlights key indicators for tracking progress and ensuring that engagement activities contribute effectively to developing inclusive, practical, and scalable solutions for reducing energy poverty.

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List of acronyms

CSOs - Civil Society Organizations

MABs - Multi-Apartment Buildings

NGOs - Non-Governmental Organizations

SECAPs - Sustainable Energy and Climate Action Plans

WP - Work Package

1 Introduction

Stakeholder engagement is a critical element in achieving the LOCATEE project's overarching goal of addressing energy poverty through the renovation of private multi-apartment buildings for vulnerable households. LOCATEE aims to support municipalities in tackling energy poverty through the development of toolkit for identifying energy-vulnerable households, matching tailored interventions to their needs, and integrating energy poverty alleviation activities into long-term strategies of municipalities such as Sustainable Energy and Climate Action Plans (SECAPs).

Achieving this goal requires the active participation of a wide network of actors – municipal and public authorities, housing associations and buildings owners, utility companies and energy agencies, civil society organizations and residents themselves – whose knowledge, responsibilities, and cooperation determine the project's success.

Because the project's impact depends on collaboration across institutional, social and market actors, understanding who these stakeholders are, what roles they play, and how to engage them effectively is a fundamental step.

Under LOCATEE Task 2.2, a structured stakeholder engagement framework was developed for the three pilot municipalities. This framework includes the systematic identification, mapping, and prioritization of relevant stakeholders, followed by the planning of concrete engagement activities for each group. Deliverable 2.2 presents the methodological approach used for each step of this framework, which forms the basis for the consolidated stakeholder engagement plan. The accompanying Annexes provide detailed documentation of the pilot-level work carried out by municipalities, including the full lists, mappings, and prioritizations of stakeholders.

1.1 Importance and Purpose of Stakeholder Engagement in LOCATEE

Effective stakeholder engagement is critical for LOCATEE's success as it ensures the project's solutions are both practical, inclusive, sustainable and importantly – aligned with the realities on the ground. Because the project relies on local data, decision-making structures and community insights, its success depends on the active involvement of all actors who influence or are affected by energy poverty interventions.

Engaging municipalities, utility companies, housing associations, civil society organizations, and vulnerable households provides access to critical knowledge about local contexts, governance systems, building stock characteristics, and the lived experience of energy-poor residents. These insights enable LOCATEE to design solutions that are feasible, locally adapted, and socially equitable, avoiding generic approaches that could fail to respond to real needs.

The purpose of the stakeholder engagement strategies for pilots is therefore to ensure that LOCATEE cooperates with the right actors at the right time on the right matters, using appropriate engagement methods tailored to actors' influence, expertise, and interests. The D2.2 thus provides a structured approach for:

- **Identifying all relevant stakeholders** and understanding their roles, responsibilities, and potential contributions.
- **Mapping and prioritizing stakeholders** based on their level of power and interest in the project.
- **Planning targeted engagement activities** with timeline, clear objectives and monitoring and building upon their outcomes.

Stakeholder Engagement objectives and Expected Outcomes

The LOCATEE stakeholder engagement approach and activities aim to:

- **Strengthen municipal capacities and partnerships** by providing tools, training, and ongoing partner support that enable authorities to identify vulnerable households, manage renovations, and coordinate local actions effectively.
- **Ensure inclusivity** by understanding households needs and engaging them and community organizations.
- **Co-create tailored solutions** by collaborating with municipal, social and market actors to design and test interventions suited to each pilots' regulatory, financial and social conditions.
- **Foster collaboration and trust** through transparent communication and participatory processes that promote trust, shared ownership and long-term commitment.
- **Support scalability and integration** by documenting lessons learned and helping municipalities embed engagement approached into long-term energy and climate policies.

Stakeholder engagement is expected to deliver direclty or indirectly:

- **Stronger cross-sector collaboration and better coordinated action** among key local actors.
- **Enhanced municipal capacity** to design, implement, and manage energy poverty interventions.
- **Locally tailored, scalable solutions** to address energy poverty co-created with stakeholders.
- **Greater stakeholder commitment and ownership**, supporting long-term sustainability.
- **Reduced energy poverty** and improved living conditions for vulnerable households through better targeted and socially responsive interventions.

1.2   Linkages with Other Work Packages

Stakeholder engagement is embedded across the LOCATEE project and is particularly important for the implementation of WP2, WP3, WP4, WP5, WP6, and WP7. The work carried out under Task 2.2 and D2.2 directly informs and supports the following activities:

- **WP2 – Setting up the ground for regional and local strategies development**
    - Stakeholder engagement framework developed in D2.2 underpins Task 2.3, where municipalities and partners co-create the LOCATEE toolkit and local strategies.
- **WP3 – Defining requirements and functionalities of the LOCATEE toolkit**
    - Stakeholder input helps define the data needs, functional requirements, and operational priorities of the toolkit to ensure it reflects municipal and sectoral needs as well as possibilities.
- **WP4 – Design and Development of the LOCATEE toolkit:**

- o Continuous engagement with municipalities, utilities, energy providers, and NGOs ensures that the toolkit is relevant, technically robust, and grounded in local realities, including access to data, integration opportunities, and best practices from existing initiatives.
- **WP5 - Set-Up and Implementation of Strategies to Alleviate Energy Poverty:**
  - o The strategies developed in D2.2 directly support Task 5.1, aligning stakeholder engagement with capacity-building efforts so that local guidelines and implementation pathways are practical and context-specific.
- **WP6 - Communication and Dissemination:**
  - o D2.2 provides the foundation for stakeholder-focused dissemination activities, including Task 6.4 (national and local stakeholder involvement) and Task 6.5 (high-level knowledge exchange), ensuring targeted outreach and meaningful dialogue.
- **WP7 - Sustainability, Replication, and Exploitation of Project Results:**
  - o The engagement frameworks and networks developed under task 2.2 and D2.2 feed into Task 7.1 and Task 7.3, supporting the replication of the LOCATEE methodology in additional municipalities and ensuring the long-term sustainability of project results.

2 Methodological Approach to Stakeholder Engagement Framework and Strategies Development

The development of stakeholder engagement strategies followed a structured, multi-step process designed to ensure that all relevant actors are identified, understood, and strategically engaged across the three pilot municipalities. This approach integrates contextual analysis, stakeholder mapping, and prioritization, forming the basis for targeted and effective engagement planning.

2.1 Pilot Profiles

The process began with the creation of Pilot Profiles, summarizing key socio-economic, demographic, and policy contexts for each municipality. These profiles provide an overview of the local energy poverty situation, existing challenges, and the status of climate and energy frameworks - particularly concerning multi-apartment buildings (MABs).

Understanding these contextual factors was essential to identifying the stakeholders who influence or are affected by energy poverty and expected alleviation measures. The pilot profiles helped clarify local governance structures, policy priorities, and community dynamics, all of which inform stakeholder roles, interests, and potential engagement pathways. The consolidated findings are presented in *Annex A: Pilot Profiles*, offering a comparative overview that informs subsequent stages of stakeholder analysis.

2.2 Stakeholder Identification and Mapping

Building on the contextual insights from the pilot profiles, the next step involved stakeholder identification and mapping. This process aimed to ensure that all individuals, institutions, and networks influencing – or affected by – the LOCATEE project were recognized and appropriately engaged. The initial identification took place during the LOCATEE Kick-Off Meeting, where municipal representatives and research partners collaborated to define broad stakeholder groups and suggest specific actors from their local contexts during the workshop. Stakeholders were assessed according to their influence, impact, expertise, and interest in the core matters that LOCATEE aims to address – energy poverty and multi-apartment building renovations. The results are summarized in *Annex B: Overview of Stakeholder Groups*, which outlines the main categories of stakeholders (e.g., municipal authorities, social organizations, housing associations, energy agencies, private sector actors, and citizens) and their relevance to different LOCATEE work packages.

A more detailed mapping was then carried out for each pilot, analyzing individual stakeholders' roles, responsibilities, incentives, and potential contributions to the project's goals. These detailed mappings are presented in:

- Annex C: Piraeus – Detailed Stakeholder Mapping
- Annex D: Rumia – Detailed Stakeholder Mapping
- Annex E: Torres Vedras – Detailed Stakeholder Mapping

Together, these annexes provide a comprehensive overview of the local stakeholder landscapes, highlighting the unique social, institutional, and market dynamics of each municipality.

2.3   Stakeholder Categorization and Prioritization

Following identification and mapping, stakeholders were categorized and prioritized using the Power–Interest Matrix. This tool helps determine the appropriate level and form of engagement for each stakeholder based on two key dimensions: power (influence) over project outcomes, and interest in the project's objectives and results.

This categorization enables the LOCATEE team to focus efforts where they can have the greatest impact:

- **High Power, High Interest:** Key players requiring close collaboration.
- **High Power, Low Interest**: Influential observers to be kept satisfied.
- **Low Power, High Interest:** Supportive partners to be regularly informed and motivated.
- **Low Power, Low Interest:** Peripheral stakeholders requiring minimal engagement.

The results of this analysis for each pilot municipality are presented in:

- Annex F: Stakeholder Categorization and Prioritization – Piraeus;
- Annex G: Stakeholder Categorization and Prioritization – Rumia;
- Annex H: Stakeholder Categorization and Prioritization – Torres Vedras;

These annexes provide visual and analytical summaries of the stakeholder distribution across the four quadrants of the matrix, guiding how engagement activities will be tailored to each pilot's specific context.

In summary, the methodological approach to developing stakeholder engagement strategies involves, first, understanding the context through the Pilot Profiles (Annex A); then identifying and mapping stakeholders and their motivations (Annexes B–E); and finally, categorizing and prioritizing stakeholders to guide engagement planning (Annexes F–H). Together, these steps ensure that stakeholder engagement is grounded in local realities, strategically targeted, and adaptable across the three pilot municipalities. The annexes collectively provide the analytical foundation of the engagement strategy, supporting transparent, inclusive, and effective collaboration throughout the project lifecycle.

3 Consolidated Stakeholder Engagement Plan

The Consolidated Stakeholder Engagement Plan is the core operational component of the stakeholder engagement strategies for the LOCATEE pilots developed under Task 2.2 and documented in this Deliverable (D2.2). While D2.2 presents the methodological approach and the overall framework guiding stakeholder engagement, the consolidated plan translates this strategy into concrete, actionable activities. It specifies the engagement required with each stakeholder, when it should take place, and who is responsible for carrying it out.

Structured as an Excel workbook, the plan lists each stakeholder, assigns their category within the power-interest matrix, links them to relevant work packages and tasks, identifies the appropriate engagement methods, defines engagement frequency and timelines, and assigns responsibilities among project partners. The full operational plan is provided as a separate Excel file, enabling municipalities and partners to update, manage, and monitor engagement activities throughout project implementation.

When preparing this consolidated plan, the pilot municipalities-together with their research partners - also had the opportunity to revisit and refine the stakeholder lists initially developed during the first draft of D2.2. After carrying out the first rounds of local workshops, consultations, and pilot-related activities, they gained a clearer understanding of which stakeholders are truly relevant, what their needs and expectations are, and how they can contribute to LOCATEE. As a result, some stakeholders were confirmed as essential, new ones were added, and others were reassessed as less relevant. These reflections are captured in the consolidated plan, including notes indicating why certain actors are no longer considered relevant or active in the engagement process (as recorded in the Excel file where applicable).

The full operational plan is presented in the accompanying Excel file: LOCATEE_D2.2_Stakeholder Engagement Strategies for Pilots_Consolidated Engagement Plan_Final_24102025.xlsx

This plan contains the complete list of stakeholders for each pilot municipality, along with:

- Stakeholder name

- Category (power–interest matrix)

- Related WP / Task / Deliverable

- Engagement method

- Engagement frequency

- Engagement objectives

- Timeline (start–end)

- Responsible partner

The Excel format allows municipalities and partners to update, filter, and monitor engagement activities throughout the project's lifecycle. This consolidated plan, together with the methodological framework described in D2.2, forms the basis for systematic and effective stakeholder engagement across all LOCATEE pilots.

3.1 Engagement methods

Stakeholders are engaged using approaches tailored to their influence, interest, and relevance to the project, as defined through the Power-Interest Matrix. The engagement methods guide both the selection of appropriate communication approaches and the design of specific engagement activities for each stakeholder. Concrete engagement activities outlined in the Consolidated Engagement Plan were informed by the following engagement methods:

Table 1: Stakeholders Engagement Methods by Power-Interest Matrix.

Stakeholder Category	Characteristics	Engagement Methods	Examples of Use
Key Players	**High Power, High Interest** Strong influence and high engagement level; crucial to project success	• Collaborative Engagement (e.g., advisory boards, steering committees) • Frequent Updates and Feedback Loops (e.g., monthly meetings) • Consultations	• Regular advisory board meetings to discuss project progress • Monthly consultations to review compliance and alignment
Influential Observers	**High Power, Low Interest** High influence but lower day-to-day interest; maintain their support	• Periodic Briefings (e.g., quarterly reports) • Targeted Updates (e.g., major milestones) • One-on-One Meetings (as needed)	• Quarterly briefings on key project developments • Individual meetings for critical updates or policy shifts
Supportive Partners	**Low Power, High Interest** Limited influence but highly engaged; strong community advocates	• Informational Sessions (e.g., community workshops) • Surveys and Public Forums • Community Engagement Campaigns	• Conducting public forums to gather community input • Organizing workshops for stakeholder feedback once a year
Peripheral Stakeholders	**Low Power, Low Interest** Minimal influence and low engagement level; keep informed as a courtesy	• Basic Awareness Communication (e.g., newsletters) • Occasional Updates on Key Milestones • Public Announcements	• Sending quarterly newsletters with key milestones • Issuing a public announcement when major goals are met

4 Monitoring and Evaluation

The Monitoring and Evaluation section is designed to track the progress and effectiveness of stakeholder engagement activities throughout the project. To ensure alignment with the project's goals and deliverables, in this section, specific project indicators that require stakeholder engagement are highlighted. These indicators will serve as benchmarks to measure the success of engagement strategies and inform ongoing adjustments. More precisely, they will be reflected in the Consolidated Stakeholder Engagement Plan in the added column "Outcomes". The final version of D2.2 will specify the process of tracking the progress on these activities.

4.1   Key Indicators for Stakeholder Engagement

The following measurable outcomes have been identified as critical to monitoring stakeholder engagement activities.

- 81 F2F/online meetings with private multi-family housing entities
- 9 group meetings with the targeted audience (EP people, multi-family building owners)
- 3 plenipotentiaries focused on multi-family buildings
- 30 established contacts/partnerships between municipality

4.2   Pilots' Role in Monitoring

Municipalities are integral to achieving these outcomes. The activities listed above will be divided equally between each pilot municipality. Furthermore, specific tasks have been outlined for municipalities (detailed below), which align with the indicators above. These tasks will ensure that municipalities are actively contributing to data collection and engagement activities.

Immediate Actions

1. Compile Multi-Family Housing Entities List
   - Develop a list of all multi-family housing entities in the municipality.

2. Administrative Data Sharing Procedures concerned multi-family buildings
   - Recognize and align administrative data sharing procedures within the municipality.
   - Discuss these procedures with research partners:
     - Rumia with IBS.
     - Torres Vedras with NOVA.
     - Piraeus with UPRC.

Later Objectives

3. Establish an Official Contact Point
   - Designate an official contact point for multi-family housing entities under LOCATEE.

4. Host Annual Roundtables
   - Organize one roundtable annually to discuss:
   - Available financial offers for energy efficiency.

- Analytical and policy work on housing.
- Local building-specific issues, e.g., solid fuel heating and air pollution in Rumia.

5. Engage and Cooperate with Entities
   - Set up direct communication and cooperation with at least 10 multi-family housing entities.
   -

Conduct regular meetings with strategically-important entities
   - Providing ad hoc consultations and information within the local contact points for multi-family housing entities and residents.

Annex A: Consolidated pilots' profiles.

	Pilot Piraeus	Pilot Rumia	Pilot Torres Vedras
Location	Located in the municipality of Piraeus, Greece.	Located in the municipality of Rumia, Poland.	Located in the municipality of Torres Vedras, Portugal.
Demographic Overview	**Population**: 163,572.	**Population**: 53,316.	**Population**: 83,072
	Age distribution: 0-19 years: 17% 20-49 years: 39.6% 50-69 years: 27% 70+ years: 16.3% Source: Hellenic Statistical Authority (2021)	**Age distribution:** Under 17 years: 20% (10,366) Working age: 57% (31,621) Post-working age: 23% (11,329) Source: Central Statistical Office of Poland (2023)	**Age distribution:** 0-14 years: 13.2% 15-64 years: 64% 65+ years: 22.8% Population growth of 4.3% (2011-2021). **Source:** (Statistics Portugal, 2021)
	Additional Details: Census data reveals consistent population decline since 1991 (182,671), which decreased to 175,697 in 2001 and further dropped to 163,688 by 2011. 2021 census: 163,572 inhabitants.	**Additional Details:** Net migration trends have been positive across multiple years: 2019 (+269), 2020 (+296), 2021 (+457), 2022 (+472), 2023 (+597). Birth rate: Difference between the number of live births and the number of deaths in a given period 2017 - 254, 2018 - 149, 2019 - 20, 2020 - 7 , 2021 - (-49) , 2022 - (-2), 2023 - 25	**Additional Details:** Population density: 204 inhabitants/km² (entire municipality); 445 inhabitants/km² in central areas.
Socio-Economic Overview	Data on household income and income distribution not available for municipality.	**Average monthly gross salary:** €1,469.88 (PLN 6,276.9)	**Net annual income (Portugal):** €21,537 / household (2019).

	Poverty rate (regional level): ~ 20,7% (Population at risk of poverty in Attica Region) Source: Hellenic Statistical Authority (2023)	Data on poverty rate unavailable. 2,892 housing allowances issued (2022) 861 persons using the social welfare environment (2022)	**Poverty rate (national):** according to EU-SILC, 17% (0.6 percentage points (p.p.) more than in the previous year (16.4% in 2022).
Housing Overview	**Total number of buildings:** non-available	**Total number of buildings**: non-available	**Total number of buildings**: 33,274
	Types of buildings: 95% multi-family buildings (numbering 72,782 multi-family structures; typically apartment buildings of varying heights, reflecting urban density) 5% Single-family homes (numbering 3,697; found in less dense or older neighborhoods) Source: Hellenic Statistical Authority (2011)	**Types of buildings:** 11,137 buildings 1,072 multi-family buildings (9,6% of all)	**Types of buildings:** 90.7% single-family buildings 1990 buildings with 2 to 4 households (6%), 681 buildings with 5 to 9 households (2%) 409 buildings with 10 or more households (1.2%).
	Overall condition of buildings: Aging Infrastructure: A significant proportion of residential buildings were constructed before 1980, requiring updates for energy efficiency and earthquake resistance. Following the economic crisis, there was a notable downturn in real estate investments, with reduced construction activity and maintenance. However,	**Overall condition of buildings:** Single-family buildings mostly date back to the 50s-80s of the 20th century, i.e. the time when people built basically from "what was at hand" and it was assumed that several generations of one family would live in the building.	**Overall condition of buildings:** 3% new constructions less than 10 years old; 48% are over 40 years old, of which 10% correspond to buildings over 75 years old.

	recent years have shown signs of recovery, driven by renewed demand and investment in urban development projects. The introduction of incentives for energy upgrades and urban revitalization programs has contributed positively, though unevenly across neighborhoods. In Piraeus, disparities exist, with older districts exhibiting more signs of wear compared to areas undergoing redevelopment, particularly around port-adjacent zones benefiting from tourism and business growth. This duality reflects broader challenges in addressing urban aging while supporting economic renewal.		
	Energy efficiency of buildings: In 2023, energy efficiency certifications in Piraeus revealed that only 1.6% of buildings achieved the highest ratings (0.3% A+ and 1.3% A). Mid-level ratings included 1.4% in B+ and 2.9% in B. Lower efficiency categories were dominant: 10.7% were rated C, 13.5% D, 14.9% E, 18.2% F, and a significant 37.4% G, the lowest category. These percentages highlight a critical need for energy efficiency improvements. Most residential	**Energy efficiency of buildings:** 4,262 buildings/premises with an energy certificate low energy standard of old single-family buildings Single-family buildings are often oversized for current residents, particularly those aged 60+ who cannot afford sufficient, ongoing heating of the building, not to mention any investments.	**Energy efficiency of buildings:** According to the building energy certification database, 16 357 certificates have been issued since 2014. Of the total number of certificates issued, 18.6% fall into classes A+ and A, while 22.9% fall into energy classes E and F. In 2023, 1,665 certificates were issued, of which 1,503 were for residential buildings and 162 for service buildings. Source: Energy Certification of Buildings (2024) **Renovation:**

	buildings lack modern insulation or energy-saving systems, contributing to high energy consumption and costs. Government programs like "Exoikonomo" aim to improve these metrics by subsidizing upgrades for better energy performance. Source: Environment Energy Construction and Mining Inspection Body (2023)		No data per municipality or city at the time. National rate of renovation is on average 0.01%/year.
	Heating and cooling (information for broader Piraeus area including other municipalities): electric (64.57%), solar (14.54%), oil-based (13.35%) - popularity is decreasing due to cost and environmental concerns natural gas (3.76%) biomass systems (0.09%) These trends suggest a shift towards more sustainable energy, driven by both economic factors and incentive programs promoting solar and energy-efficient upgrades. However, reliance on electricity still presents challenges related to grid demand and energy costs.	**Heating**: - municipal heating network - 504 - gas boiler - 8311 - solid fuel boiler with feeder - 570 - solid fuel boiler - 1963 - oil boiler - 71 - fireplace/traditional stove - 2198 - electric heating - 1040 - tiled stove - 324 - heat pump - 222 - kitchen stem - 109 Source: (Central Register of Emissions of Buildings, n.d.)	**Heating**: 11.8% of citizens use open fireplace; 9.8% use a fireplace with heat recovery; 11.4% use mobile systems such as electric or gas heaters; 44.8% use stationary heating such as radiators or stoves; 9.0% do not use any heating equipment.

	Source: Hellenic Statistical Authority (2021b)		
	Housing affordability: Housing affordability in the municipality of Piraeus has become increasingly challenging due to rising rental and property prices. As of 2024, the average rental cost is approximately €10 per square meter, For property purchases, the average price in central Piraeus is €2,471 per square meter, driven by factors such as increased demand from infrastructure developments and short-term rental activities. Suburban areas have also seen significant price hikes, with a 23.6% rise in sale prices over the past year. These trends suggest that affordability pressures are intensifying, particularly for lower-income households seeking to rent or buy homes in the area. Sources: Oikonomikos Tachidromos (2024); Spitogatos (2024)	**Housing affordability:** Real estate prices in Rumia have risen sharply since the beginning of the decade. By the end of 2024, the average price had reached 9,700 PLN per square meter for apartments on both the primary and secondary markets (Trojmiasto.pl). The trend is explained not only by overall real estate price growth and inflation but also by intensive developer activity on the city's outskirts—especially near the border with Reda—where somewhat higher-quality multi-family buildings are being built.	**Housing affordability:** Average monthly rent for rented conventional dwellings is 353,28 € (2021) reflecting a 14.3% increase compared to the previous year.
	Ownership versus rental rates in the municipality: In the municipality of Piraeus, the majority of residential units are owner-occupied, with approximately 72% of	**Ownership versus rental rates in the municipality:** no data available at this stage. According to the data from a survey (2024) conducted in the largest housing cooperative in Rumia, 11% of apartments there were rented.	**Ownership versus rental rates in the municipality:** The majority of dwellings in the municipality are owner-occupied. Data from 2011 shows that 78% of all dwellings are occupied by an owner or co-owner. On the other hand, it is in the city that

	households owning their homes, while 28% are rented. This ownership rate aligns closely with broader trends in Greece, where homeownership is culturally significant and historically high. However, in recent years, the rental market has grown due to economic pressures and increased demand for flexibility in urban centers like Piraeus. This shift reflects broader housing challenges, including affordability issues and the rise of short-term rental platforms Source: Hellenic Statistical Authority (2021c)		there are fewer owner-occupied or co-occupied dwellings and, therefore, where the rental market has greater expression. The rental market is practically non-existent in the municipality, but there is a growing demand in the city which, due to the reduced supply, means that high prices can be charged, making this regime unattractive when compared to the monthly instalments in the case of a bank loan.
Energy Poverty Situation	Data on share of household income spent on housing-related expenses unavailable.	Data on share of household income spent on housing-related expenses unavailable.	**Share of household income spent on all housing-related expenses:** Value of average monthly expenses due to the acquisition of own housing in classic family housing of habitual residence owned by the occupants is 373,37 € (2021)
	Data on no. of energy-poor residents/households unavailable.	Data on no. of energy-poor residents/households unavailable.	According to the National Survey on living conditions from 2023 – for "inability to keep home adequately warm", and "inability to keep home comfortably cool in the summer", the estimated range is 20.8%-38.3%. Energy Poverty Vulnerability Index for Torres Vedras of 9.3 and 11.3 (out of 20) in the winter and summer respectively, placing it the #223 and #146

		position in 308 municipalities (Gouveia et al. (2019)).
Overdue energy bills data unavailable.	Overdue energy bills data unavailable. Available data (2023): 351 families received poverty aid (540 people) the total number of families supported by the Social Welfare Centre: 813 (of which 446 receive financial assistance) Electrical/shielding allowance – 98,500 issued (1000/1500 households) **Additional Details:** Gas allowances totaled PLN 57,603.47 in 2023.	**Overdue energy bills:** No data at municipal or city level. The national indicator is 3.8%. This is often justified by hidden energy poverty, as people restrict their consumption to substandard levels in an effort to avoid arrears.
Key Challenges	The municipality of Piraeus faces several challenges in implementing climate and energy policies and addressing energy poverty: Infrastructure limitations: Piraeus, as a major port city with many older buildings, especially multi-family apartment buildings, struggles with outdated infrastructure that is not energy efficient. Retrofitting these buildings to meet modern energy	The strategic goal is to improve the quality of life in Rumia by reducing energy and fuel consumption, lowering pollutant emissions (including greenhouse gases), improving energy efficiency, and increasing the use of renewable energy sources in sectors under municipal influence. The city also seeks to enable other entities to transition to a low-emission economy. Achieving climate neutrality by 2030 requires reducing greenhouse gas	Torres Vedras faces several challenges related to energy poverty and climate policies. A big issue is the lack of detailed local data, making it hard to measure energy poverty and target solutions effectively. Many homes in the area are old and poorly insulated, leading to high-energy bills and uncomfortable living conditions, especially in winter. Financial struggles limit both the town's ability to invest in renewable energy and homeowners' ability to make energy-saving improvements. The municipality has little power to intervene in privately owned buildings, leaving much of the housing stock unchanged.

	standards is both costly and logistically complex.

Financial constraints: Although there are national and EU funding programs for energy efficiency improvements, financial limitations at the local level can hinder the municipality's ability to invest in large-scale green projects. Such kind of projects are mainly funded by national initiatives.

Community awareness: Many residents may lack awareness of energy efficiency programs, subsidies, or renewable energy options, hindering the uptake of energy-saving measures. Public engagement campaigns and education on climate-related issues are crucial to overcoming this barrier.

Urban density: The high population density in Piraeus, particularly in multi-family apartment buildings, can make it more difficult to implement widespread energy-saving initiatives, such as collective solar energy solutions or large-scale retrofitting projects. | emissions across all sectors to net zero. Key actions include:

Reducing heat losses in buildings through deep thermal modernization.

Demolishing old buildings where upgrading is economically unfeasible.

Constructing new, low- or net-zero energy buildings.

Expanding renewable energy use and smart energy systems (e.g., grids, management, storage).

Developing local ecological heat and electricity sources.

Promoting alternative and sustainable transport.

Encouraging civic energy initiatives (e.g., clusters, cooperatives) through stakeholder collaboration.

Adopting hydrogen technologies for transport and energy.

Expanding offshore wind energy in the Baltic Sea and establishing the Pomeranian Competence Centre for Offshore Renewable Energy in Rumia.

Advancing a circular economy.

The transformation requires a comprehensive, collaborative approach, integrating national and international | Complicated rules for approving renewable energy projects and overlapping responsibilities between local and national authorities cause delays. Many residents are also unaware of energy-saving tips or available support programs. Rising energy prices add to the problem. Solving these issues will require better data, clear policies, financial support and stronger community engagement. |

		partnerships while monitoring factors influencing implementation. Key enablers include increased digitalization of city services and access to innovative low- and zero-emission technologies to replace fossil fuel-based systems. Financing will be critical, relying on the municipal budget for public projects and diversified funding for private property. Mechanisms such as public-private partnerships (PPP/ESCO/EPC), green bonds, and grants from national and EU funds will be essential to address the scale of the changes required.	
Current Climate/Energy Policy Frameworks	**Existing local policies addressing energy poverty in municipality:** Policy 1: Focused on ad-hoc support for vulnerable social groups through the Social Innovation Hub, which serves as the focal point for assisting vulnerable populations. Policy 2: Implementation of the Sustainable Energy and Climate Action Plan (SECAP) 2018 – Climate Piraeus, focusing broadly on sustainability and climate goals. Policy 3: Aimed at the energy upgrade of public buildings to improve their energy performance. Gaps: There is currently no targeted policy to address energy efficiency and	**Existing local policies addressing energy poverty in municipality:** Rumia has a strong focus on environmental protection, with 11% of all municipal expenditures in 2023, amounting to PLN 32,399,516, allocated to initiatives within this area. The city is actively working towards climate neutrality and energy self-sufficiency by 2050, aligning with the European Green Deal. Preparations for a climate and energy transformation plan are currently underway.	**Existing local policies addressing energy poverty in municipality:** The **Local Housing Strategy** is a 10-year plan addressing housing needs, prioritizing access to adequate housing. The **1st Right Program** rehabilitates substandard buildings for vulnerable households. The **Co-financing Program** supports repairs in degraded homes for socio-economically vulnerable residents. The **Municipal Social Housing Program** expands public housing and provides subsidized rental schemes. The **Rental Support Program** offers financial aid to low-income tenants, including single-parent

energy poverty issues at the municipal level.		families, individuals with chronic illnesses, and isolated elderly residents. The **Municipal Climate Action Plan** focuses on energy efficiency in housing by promoting retrofitting, insulation, renewable energy systems, and energy-efficient technologies, aiming to reduce energy costs for vulnerable populations. A partnership with the **Just a Change Association** facilitates rapid rehabilitation of dilapidated homes through volunteer efforts, with technical and financial support from the municipality.
National-level policies addressing energy poverty and how they are being implemented at the municipality level: **Social Solidarity Income (SSI)**: Provides financial support to vulnerable households to cover basic needs, including energy costs. **Energy Efficiency at Household Level Program**: Subsidizes energy-saving measures such as insulation and the purchase of efficient appliances. **Thermal Insulation Subsidy Program**: Reduces heating costs by improving the energy performance of residential buildings. **Municipal Role**: The Municipality facilitates access to these national programs by offering application assistance and support services for	**National-level policies addressing energy poverty and how they are being implemented at the municipality level:** The National Economy Bank (BGK) manages a thermal modernization premium/grant program, which provides financial assistance to housing communities and cooperatives undertaking thermal modernization projects from other private banks. These funds serve as loan repayments for investors completing such projects, however, the fund was suspended in early Autumn 2025, due to exhaustion of funds. The Provincial Fund for Environmental Protection and Water Management in Gdańsk runs the "Warm Apartment" program, offering co-financing for thermal modernisation activities in multi-family buildings; however, in 2025,	**National-level policies addressing energy poverty and how they are being implemented at the municipality level:** Portugal's national policies are guided by: **Long-Term National Strategy to Combat Energy Poverty (2023-2050)**: Addresses housing energy efficiency and ensures universal access to essential energy services. **National Energy and Climate Plan (PNEC 2030)**: Emphasizes a fair energy transition and adoption of renewable energy. **Long-Term Strategy for the Renovation of Buildings (ELPRE)**: Focuses on building renovations to enhance energy performance and meet decarbonization goals. Key national measures include efficiency vouchers for low-income families (e.g., the **"Vale Eficiência"**

eligible residents, ensuring vulnerable households can benefit from financial help for energy needs, including electricity and heating.	implementation of the programme was suspended at the state levelIn Rumia, this program was used by 5 residential premises in the past year.	**program**, offering subsidies up to €3600), energy audits, and financial incentives for renewable energy integration and electrification.
Municipal budget allocated to energy / energy poverty / relevant environmental initiatives: There is no specific budget line dedicated to energy efficiency or energy poverty initiatives in the municipal budget. Current allocations fall under broader categories like sustainability, climate action, and urban development. Detailed budget information will be available in early 2025 when the municipal budget is approved.	**Municipal budget allocated to energy / energy poverty / relevant environmental initiatives:** The municipality of Rumia allocated PLN 32,399,516 in 2023 for environmental protection-related expenditures, representing 11% of the total municipal budget. This allocation reflects Rumia's commitment to addressing environmental and energy challenges.	At the municipal level, the strategies outlined above are implemented through integration into local planning instruments and housing programs, focusing on retrofitting homes, improving insulation, and fostering renewable energy communities for self-consumption and reduced energy costs. **Municipal budget allocated to energy / energy poverty / relevant environmental initiatives:** Approximately 6% of the total municipal budget is allocated to energy and environmental issues, including expenditure on municipal services and human resources. Specific values require detailed budget analysis.
Existing Financial Models Available to Support Energy-Efficient Upgrades of Multi-Apartment Buildings: Access to national programs, as mentioned above:	**Existing Financial Models Available to Support Energy-Efficient Upgrades of Multi-Apartment Buildings:** Thermal Modernization Premium/Grant: Piloted by the National Economy Bank, as previously noted, this program supports housing communities and cooperatives undertaking thermal modernization.	**Existing financial models available to support energy-efficient upgrades of multi-apartment buildings:** The **"Vale Eficiência" program**, as mentioned above, provides 100% non-refundable subsidies

	Energy Efficiency at Household Level Program: Subsidies for energy-saving measures. **Thermal Insulation Subsidy Program**: Funding for heating cost reduction through building energy performance improvements. The Municipality assists eligible residents in accessing these national programs through application support and guidance.	"Warm Apartment" Program: Offered by the Provincial Fund for Environmental Protection and Water Management in Gdańsk, as mentioned above, this initiative enables co-financing for multi-family building modernization projects.	up to €3600 to beneficiaries of the social tariff based on low-income criteria. The **Co-financing Program**, described above, offers financial support for repairing degraded housing for socio-economically vulnerable residents.

Annex B: Overview of stakeholder groups.

Stakeholder Groups Needed	Objective of Engagement	Relevance to WP/Task/Deliverable
Private multi-family housing decisionmakers • Building owners and property managers	• Awareness and Education • Participation in Incentive Programs	WP2; WP5
Municipalities / Local government	• Policy Support and Alignment • Resource Allocation • Permitting and Regulatory Assistance • Public Communication and Trust-Building	WP2; WP3; WP4; WP5, WP6
People in energy poverty	• Feedback and Participation • Behavioral Change Promotion • Education on Benefits	WP3; WP4
Media	• Public Awareness • Community Impact • Transparency and Accountability	WP6
Secondary target audience		
Utility companies and energy providers	• Data Sharing and Analysis	WP3; WP4
Energy service companies and contractors (companies that specialize in EE solutions)	• Technology and Innovation Integration in the LOCATEE solutions	WP3; WP4
Social NGOs	• Community Outreach and Education • Advocacy	WP2

	• Public Support and Awareness • Monitoring and Accountability	
Socially disadvantaged households	• Feedback and Participation • Behavioral Change Promotion • Education on Benefits	WP2
Universities / Research Institutions	• Data Collection • Impact Analysis • Support for Policy and Standards Development •	WP3, WP4
Environmental agencies • National and regional government agencies (departments / ministries responsible for housing / energy)	• Technical Standards and Guidelines • Information on Funding and Grant Provision • Policy Support and Alignment	WP2
Local media	• Public Awareness • Community Impact • Transparency and Accountability	WP6
Non-Governmental Organizations / community organizations; e.g.: • Climate advocacy groups	• Community Outreach and Education • Advocacy • Public Support and Awareness • Monitoring and Accountability	WP2

Financial institutions / funding agencies	• Information on financing solutions, subsidy / incentive programs • Investment	WP5
Key local influencers	• Awareness raising	WP6

Annex C: Detailed stakeholders mapping - Piraeus.

Stakeholder Name	Type	Roles and Responsibilities	Incentives and Interests
ENERGY PROVIDERS			
Public Power Corporation	Semipublic institution	Manage electricity supply and grid infrastructure; ensure energy reliability and compliance with regulations.	Promote energy efficiency and grid stability; support the transition to renewable energy sources.
Fysiko Aerio S.A.	Private (Energy) Company	Manage electricity supply and grid infrastructure; ensure energy reliability and compliance with regulations.	Promote energy efficiency and grid stability; support the transition to renewable energy sources.
Volterra	Private (Energy) Company	Manage electricity supply and grid infrastructure; ensure energy reliability and compliance with regulations.	Promote energy efficiency and grid stability; support the transition to renewable energy sources.
Heron	Private (Energy) Company	Manage electricity supply and grid infrastructure; ensure energy reliability and compliance with regulations.	Promote energy efficiency and grid stability; support the transition to renewable energy sources.
Elpedison	Private (Energy) Company	Manage electricity supply and grid infrastructure; ensure energy reliability and compliance with regulations.	Promote energy efficiency and grid stability; support the transition to renewable energy sources.
Protergia	Private (Energy) Company	Manage electricity supply and grid infrastructure; ensure energy reliability and	Promote energy efficiency and grid stability; support the transition to

		compliance with regulations.	renewable energy sources.
Solar Energy	Private (Energy) Company	Manage electricity supply and grid infrastructure; ensure energy reliability and compliance with regulations.	Promote energy efficiency and grid stability; support the transition to renewable energy sources.
WATT+VOLT	Private (Energy) Company	Manage electricity supply and grid infrastructure; ensure energy reliability and compliance with regulations.	Promote energy efficiency and grid stability; support the transition to renewable energy sources.
Zenith (ZeniΘ)	Private (Energy) Company	Manage electricity supply and grid infrastructure; ensure energy reliability and compliance with regulations.	Promote energy efficiency and grid stability; support the transition to renewable energy sources.
We Energy	Private (Energy) Company	Manage electricity supply and grid infrastructure; ensure energy reliability and compliance with regulations.	Promote energy efficiency and grid stability; support the transition to renewable energy sources.
NRG	Private (Energy) Company	Manage electricity supply and grid infrastructure; ensure energy reliability and compliance with regulations.	Promote energy efficiency and grid stability; support the transition to renewable energy sources.
PUBLIC AUTHORITIES/ INSTITUTES			
Regional Authority of Attica	Public Institutions	Oversee regional development, implement policies, and provide funding for local projects.	Foster sustainable development, support regional economic growth, and reduce energy poverty.

Greek Ministry of Environment & Energy	Public Institutions	Develop national policies on environment, energy efficiency, and renewable energy; provide guidance and funding to local municipalities.	Promote national energy transition goals; ensure compliance with EU directives; reduce energy poverty.
Greek Ministry of Social Cohesion and Family	Public Institutions	Design and implement social welfare policies; address social disparities, including housing and energy-related challenges for vulnerable groups.	Improve social equity; ensure access to affordable housing and energy resources for disadvantaged populations.
Hellenic Statistical Authority (ELSTAT)	Public Institutions	Collect, analyze, and disseminate statistical data on demographics, energy usage, and housing; provide data to inform policy and decision-making.	Support data-driven policy development; contribute to transparent monitoring and reporting of energy and housing conditions.
Environment and Climate Change Directorate of the Municipality of Piraeus	Public Institutions	Develop and implement environmental policies; oversee municipal climate change mitigation and adaptation initiatives.	Promote sustainable urban development; enhance environmental quality and resilience to climate change.
Directorate for Planning and Sustainable Development of the Municipality of Piraeus	Public Institutions	Plan and manage sustainable urban development projects; ensure compliance with planning and energy efficiency standards.	Foster sustainable growth and development; improve infrastructure to support energy-efficient urban living.
MoP (KODEP)	Public Institutions (Municipality)	Offer social support programs to vulnerable groups; coordinate public service delivery	Promote equitable resource distribution;

		in urban areas of Piraeus.	support efforts to alleviate energy poverty.
Citizens' Services Directorate	Public Institutions	Provide public-facing services and facilitate communication between citizens and municipal authorities.	Enhance service accessibility and quality; address citizen concerns related to housing and energy issues.
Environmental, Building, Energy and Mining Inspectorate	Public Institutions	Monitor and enforce compliance with environmental, building, and energy regulations; oversee the implementation of national standards.	Ensure regulatory compliance; promote sustainable and energy-efficient practices in building and infrastructure projects.
COMMUNITY GROUPS			
(5) Districts Ambassadors	Community Group, under the auspices of the Municipality	Act as liaisons between local communities and municipal authorities; communicate public needs and feedback.	Promote community empowerment; enhance living conditions through participatory development projects.
Open Care Center for the Elderly	Community Group - Municipal infrastructure	Provides social and healthcare services to elderly residents; ensures their well-being and access to affordable living conditions.	Advocate for energy-efficient solutions to reduce costs for elderly populations; improve housing comfort and accessibility.
Hellenic Property Federation (POMIDA)	Association	Represent property owners in local and national discussions; advocate for their interests in housing policies and regulations.	Support energy-efficient upgrades to increase property value and reduce long-term maintenance costs.
Property Private Owners Association	Community Group	Own residential properties; make decisions regarding maintenance,	Improve property value and reduce energy costs; ensure compliance with

		upgrades, and energy-efficient renovations.	regulations; maintain or enhance living conditions.
LOCAL MEDIA			
Channel 1 (Municipality Radio)	Public Institutions	Broadcast information and public awareness campaigns; support community outreach efforts.	Provide relevant and impactful content to the community; build public trust and transparency in municipal initiatives.
Local press	Private Companies	Report on local events, policies, and projects; act as a bridge between public entities and residents.	Gain readership by highlighting impactful and meaningful stories; contribute to community engagement.
NGOs			
Migration NGO (METAdrasi)	NGOs	Finds homes for migrants and recognized refugees.	Enhance quality of life for migrants by promoting access to affordable and energy-efficient housing solutions.
REAL ESTATE & HOUSING COMPANIES			
Housing management companies	Private Sector	Manage multi-family buildings and residential complexes; oversee maintenance, energy consumption, and tenant satisfaction.	Increase operational efficiency and reduce costs; enhance tenant satisfaction and retention; adopt innovations that increase property marketability.
Local Construction Companies	Private Company	Execute building projects, including retrofits and energy-efficient renovations; ensure compliance with safety and efficiency standards.	Secure contracts for renovation projects; enhance reputation through expertise in sustainable and energy-efficient construction practices.
UPSTREET	Private Company	Manage Airbnb apartments on behalf of private property	Maximize rental income and property value; enhance tenant/guest

		owners; oversee property maintenance, rental management, and guest satisfaction.	experience; adopt sustainable practices to attract eco-conscious clients.
mint	Private Company	Manage Airbnb apartments on behalf of private property owners; oversee property maintenance, rental management, and guest satisfaction.	Maximize rental income and property value; enhance tenant/guest experience; adopt sustainable practices to attract eco-conscious clients.
Crucial Hospitality	Private Company	Manage Airbnb apartments on behalf of private property owners; oversee property maintenance, rental management, and guest satisfaction.	Maximize rental income and property value; enhance tenant/guest experience; adopt sustainable practices to attract eco-conscious clients.
Local Real Estate Companies	Private Sector	Facilitate buying, selling, and renting properties; provide market insights on housing trends.	Support energy-efficient upgrades to enhance property value and market appeal.
THINK-TANKS			
Institute for Zero Energy Buildings	Non-for-profit/ Think tank	Advocates for sustainable building practices and energy-efficient technologies; provides expertise on energy efficiency standards.	Promotes sustainable construction practices; raises awareness and drives adoption of energy-efficient innovations.

Annex D: Detailed stakeholders mapping - Rumia.

Stakeholder Name	Type	Roles and Responsibilities	Incentives and Interests
Municipal Police (Straz Miejska w Rumi)	Public institution	Control of legal regulations (e.g., local anti-smog requirements for individual heating).	Increasing the number of people who obey the law, protecting the environment.
SIM (Social Housing Initiative)	Public institution	Social Housing Initiative - purchase residential premises and residential and non-residential buildings for the purpose of expansion, as a result of which residential premises will be created, carry out renovations and modernization of facilities intended to meet housing needs on a rental basis.	Increasing social well-being, environmental protection, effective management of municipal property.
Urban Engineering	Public institution	Responsible for technical implementation of investments related to air protection in the city.	Increasing social well-being, environmental protection, effective management of municipal property.
Regional Authorities Marshal Office	Public institution	It gives us regulatory powers, strategic documents, local law acts, e.g. the Anti-Smog Resolution.	Improving community well-being, protecting the environment.
Local authorities	Public institution	The scope of activities of the commune includes all public matters of local importance, not reserved by law to other entities, including the improvement of the well-being of residents	Improving community well-being, protecting the environment.

		and environmental protection.	
Social Welfare Institutions	Public institution	The mission of the Municipal Social Welfare Center in Rumia is to counteract marginalization, social exclusion, as well as to support the improvement of the quality of life of the residents of the Rumia Municipality.	Improving community well-being, protecting the environment.
WFOSiGW Gdansk (Regional Fund for Environment and Water Protection)	Public institution	It offers grants and loans for the implementation of tasks related to environmental protection.	Improving community well-being, protecting the environment.
Housing Cooperative	Private sector	They know the needs of the residents; carry out renovations and modernization; manage housing resources in terms of providing heat and electricity; communicate with the inhabitants.	Improving community well-being, protecting the environment.
Sweep Associations	NGOs	They have information about the needs of residents, installed stoves and boilers, etc.	Improving community well-being, protecting the environment.
Local media (press, radio, tv)	Private sector	Popularization of the topic of energy poverty - publicizing the topic, reaching a larger group of residents. Education.	Improving community well-being, protecting the environment.

Inhabitants, house owners	Individuals	Reducing energy poverty, improving living conditions, fulfillment of obligations arising from legal regulations.	Improving community well-being, protecting the environment, economic factor.
Energy Service Providers (Distribution and Retail)	Private sector	Increasing the number of recipients of individual media, reducing the number of households in debt, reducing the demand for electricity, gas, district heating, modernization of transmission systems.	Improving community well-being, protecting the environment, economic factor.
Housing cooperative Janowo	Private sector	Purchase residential premises and residential and non-residential buildings for the purpose of expansion, as a result of which residential premises will be created, carry out renovations and modernization of facilities intended to meet housing needs on a rental basis.	Improving community well-being, protecting the environment.
Climate Activists	Individuals	Fulfilling obligations arising from legal regulations, education, and awareness rising.	Improving community well-being, protecting the environment.

Annex E: Detailed stakeholders mapping - Torres Vedras.

Stakeholder Name	Type	Roles and Responsibilities	Incentives and Interests
Municipality of Torres Vedras	Local government	Local governance, urban planning, public service provision, regulatory functions.	Improving community welfare, ensuring sustainable urban development.
Municipal Assembly	Local government	Legislative body overseeing municipal policies and decisions.	Enhancing democratic governance, aligning with local policy goals.
Parish Councils	Local government	Managing local community services, small-scale infrastructure.	Supporting local development and addressing residents' concerns.
Torres Vedras Holy House of Mercy	Private Social Solidarity NGO	Providing social services and healthcare to vulnerable populations.	Enhancing community welfare, supporting disadvantaged groups.
Institute of Social Security	Public Institution	Administering social welfare programs, unemployment benefits.	Reducing poverty, ensuring social safety nets.
Employment and Vocational Training Institute	Public Institution	Providing vocational training and employment services.	Enhancing workforce skills, reducing unemployment.
Torres Vedras Local Council for Social Action	Public Institution – collaborative network	Collaborative platform to implement and support social policies.	Promoting social inclusion, cohesion and welfare.
Integrated Social Care Centre	Social Services	Delivering integrated social and healthcare services.	Improving quality of life for vulnerable groups.
Local Support Centre for the Integration of Migrants	Social Services	Supporting the social and economic integration of migrants.	Promoting social inclusion and multicultural integration.

Boavista Olheiros Neighborhood Community Intervention Centre	Community Initiative	Facilitating local development projects and community support services.	Empowering local residents, improving community welfare.
West Integrated Response Centre (CRI-West)	Public Institution	Providing addiction prevention and rehabilitation services.	Reducing substance abuse, improving public health.
Private Owners	Private Sector	Owning and managing private properties.	Protecting property value, maximizing rental income.
Neighborhood Associations	Community Group	Representing residents' interests, organizing community activities.	Improving quality of life and advocating for local infrastructure.
Residential Condominium Management Service Companies	Private Sector	Managing residential buildings, ensuring maintenance and service provision.	Ensuring property maintenance, enhancing tenant satisfaction.
Real Estate Agencies	Private Sector	Facilitating property sales, rentals, and acquisitions.	Maximizing property sales, commissions, and market visibility.
Construction Companies	Private Sector	Providing construction and infrastructure development.	Expanding business opportunities, increasing construction projects.
Energy Services Companies (ESCOs)	Private Sector	Delivering energy solutions, reducing energy consumption.	Reducing operational costs, enhancing sustainability and energy efficiency.
Electricity Transmission, Distribution, and Supply System Operators	Private Sector	Managing electricity infrastructure, ensuring reliable energy supply.	Ensuring grid reliability, expanding electricity market.
Gas Transmission, Distribution, and Commercialization System Operators	Private Sector	Managing gas infrastructure, ensuring supply and distribution.	Expanding market presence, ensuring energy security.

Local and Regional Communication and Information Agencies	Media	Disseminating information, promoting public awareness.	Enhancing audience engagement, promoting regional news and events.
Sustainable West - Western Regional Energy and Environment Agency	Public Agency	Promoting sustainable energy use and environmental protection.	Advancing regional sustainability goals, supporting renewable energy projects.
Intermunicipal Community of the West	Regional Authority	Coordinating regional development strategies.	Promoting regional growth, enhancing infrastructure and public services.
Directorate-General for Energy and Geology (DGEG)	Public Institution	Regulating energy markets, ensuring compliance with geological and energy policies.	Advancing national energy security, promoting renewable energy, supporting public energy policy.
Energy Agency - ADENE	Private law association, non-profit and of Public Utility	Promoting energy efficiency, implementing national energy policies.	Reducing energy consumption, promoting sustainable energy solutions, supporting public policy.
National Civil Engineering Laboratory (LNEC)	Public Research Institution	Conducting research in civil engineering, infrastructure development.	Advancing scientific knowledge, improving national infrastructure.
National Institute of Energy and Geology	Public Research Institution	Conduct research, knowledge transfer in energy and geology.	Advancing scientific knowledge, supporting public policy, support companies.
Institute of Housing and Urban Rehabilitation	Public Institution	Managing social housing programs, urban rehabilitation initiatives.	Enhancing housing quality, promoting social inclusion.

National Institute of Statistics	Public Institution	Collecting and publishing statistical data on various sectors.	Providing reliable data for policy-making and public use.
Association of Energy and Environment Agencies (RNAE)	Association	Coordinating energy and environment initiatives among agencies.	Advancing sustainability, supporting energy efficiency across regions.
Energy Services Regulatory Authority (ERSE)	Public Institution	Regulating energy services, ensuring fair pricing and consumer protection.	Regulating and promoting fair energy markets, protecting consumers.
ZERO	Environmental Non-Governmental Association	Sustainability and Climate change mitigation and adaptation advocacy and awareness.	Promote climate change awareness, resource use efficiency, biodiversity protection, collective well-being.
Coopérnico	Renewable energy cooperative	Promoting decentralized renewable energy projects; energy retailer.	Create social value, local sustainable development, promote decentralized renewable energy paradigm.
Just a Change	Association	Promoting home renovations for vulnerable people.	Combat economic and energy poverty through voluntary work.
EU Energy Poverty Advisor Hub	EU-level Organization	Central platform on energy poverty expertise in the EU. One of the main aims is to provide support to local governments in their efforts to mitigate energy poverty.	EPAH aims to drive change at the regional level, capacitating local governments and organizations and providing direct support towards a just energy transition and energy poverty mitigation. It also aims to increase knowledge for multilevel actors regarding diagnosis, planning, and action.

Climate Alliance	EU-level Organization	European city network of over 2000 members across more than 25 countries dedicated to fair and comprehensive climate action, including energy poverty mitigation.	CA works on energy poverty, developing similar methodologies and uniting different partners and stakeholders with experience in this field.
Covenant of Mayors (CoM)	EU-level Organization	European Commission initiative bringing together thousands of local governments that want to secure a better future for their citizens. The signatories commit to 3 pillars: reducing GHG emissions by 55% by 2030; strengthening resilience; and alleviating energy poverty.	Provide local governments with a framework for their local energy and climate action. The CoM sets mid- and long-term targets, consistent with the EU objectives; engage citizens, businesses and governments to develop a local climate pact which will help us reach those objectives; develop, implement and report an action plan to reach targets; network with fellow Mayors and local leaders.

Annex F: Stakeholders Categorization and Prioritization - Piraeus.

Stakeholder Name	Category	Power (High/Low)	Interest (High/Low)	Matrix Position
ENERGY PROVIDERS				
Public Power Corporation	Semi-public corporation	Low	Low	**Peripheral stakeholder**
Fysiko Aerio S.A.	Private (Energy) Company	Low	Low	**Peripheral stakeholder**
Volterra	Private (Energy) Company	Low	Low	**Peripheral stakeholder**
HPΩN (Iron)	Private (Energy) Company	Low	Low	**Peripheral stakeholder**
Elpedison	Private (Energy) Company	Low	Low	**Peripheral stakeholder**
Protergia	Private (Energy) Company	Low	Low	**Peripheral stakeholder**
Solar Energy	Private (Energy) Company	Low	Low	**Peripheral stakeholder**
WATT+VOLT	Private (Energy) Company	Low	Low	**Peripheral stakeholder**
Zenith (ZeniΘ)	Private (Energy) Company	Low	Low	**Peripheral stakeholder**
We Energy	Private (Energy) Company	Low	Low	**Peripheral stakeholder**
NRG	Private (Energy) Company	Low	Low	**Peripheral stakeholder**
PUBLIC AUTHORITIES/ INSTITUTES				
Regional Authority of Attica	Public Institutions	High	Low	**Influential Observers**
Greek Ministry of Environment & Energy	Public Institutions	High	Low	**Influential Observers**
Greek Ministry of Social Cohesion and Family	Public Institutions	Low	Low	**Peripheral stakeholder**
Hellenic Statistical Authority (ELSTAT)	Public Institutions	Low	Low	**Peripheral stakeholder**

Environment and Climate Change Directorate of the Municipality of Piraeus	Public Institutions	Low	High	**Supportive Partners**
Directorate for Planning and Sustainable Development of the Municipality of Piraeus	Public Institutions	High	High	**Key Players**
MoP (KODEP)	Public Institutions (Municipality)	High	High	**Key Players**
Citizens' Services Directorate	Public Institution	High	High	**Key Players**
Environmental, Building, Energy and Mining Inspectorate	Public Institutions	High	High	**Key Player**
COMMUNITY GROUPS				
(5) Districts Ambassadors	Community Group, under the auspicies of the Municipality	High	High	**Key Player**
Open Care Center for the Elderly	Community Group - Municipal infrastructure	High	High	**Key Player**
Hellenic Property Federation (POMIDA)	Association	High	Low	**Influential Observers**
Property Private Owners Association	Community Group	High	High	**Key Player**
LOCAL MEDIA				
Channel 1 (Municipality Radio)	Public Institutions	High	High	**Key Player**
Local Press	Private Companies	High	High	**Key Player**
NGOs				
Migration NGO (METAdrasi)	NGOs	Low	Low	**Peripheral Stakeholder**
REAL ESTATE & HOUSING COMPANIES				
Housing management companies	Private Sector	Low	Low	**Peripheral Stakeholder**

Local Construction Companies	Private Company	Low	High	**Supportive Partner**
UPSTREET	Private Company	Low	Low	**Peripheral stakeholder**
mint	Private Company	Low	Low	**Peripheral stakeholder**
Crucial Hospitality	Private Company	Low	Low	**Peripheral stakeholder**
Local Real Estate Companies	Private Sector	Low	High	**Supportive stakeholder**
THINK-TANKS				
Institute for Zero Energy Buildings	Non-for-profit/ Think tank	Low	High	**Supportive Partner**

Annex G: Stakeholders Categorization and Prioritization - Rumia.

Stakeholder Name	Category	Power (High/Low)	Interest (High/Low)	Matrix Position
Local Authorities	Public Institution	High	High	**Key Player**
Janowo Housing Cooperative	Private Sector	High	High	**Key Player**
Inhabitants, House Owners	Individuals	High	High	**Key Player**
SIM (Social Housing Initiative)	Public Institution	High	High	**Key Player**
Other housing Cooperatives	Private sector	High	High	**Key Player**
Municipal Police (Straz Miejska v Rumi)	Public Institution	High	Low	**Influential Observer**
Social Welfare Institutions	Public Institution	High	Low	**Influential Observer**
Real estate managers	Private Sector	High	Low	**Influential Observer**
WFOSiGW Gdansk (Regional Fund for Environment and Water Protection)	Public Institution	Low	High	**Supportive Partner**
Regional Authorities Marshal Office	Public Institution	Low	High	**Supportive Partner**
Climate Activists	Individuals	Low	High	**Supportive Partner**
Local Media (press, radio, tv)	Private Sector	Low	High	**Supportive Partner**

Sweep Associations	NGOs	Low	Low	**Peripheral Stakeholder**
Energy Service Providers (Distribution and Retail)	Private Sector	Low	Low	**Peripheral Stakeholder**

Annex H: Stakeholders Categorization and Prioritization - Torres Vedras.

Stakeholder Name	Category	Power (High/Low)	Interest (High/Low)	Matrix Position
Municipality of Torres Vedras	Local government	High	High	**Key Player**
Municipal Assembly	Local government	High	Low	**Influential Observer**
Parish Councils	Local government	Low	High	**Supportive Partner**
Torres Vedras Holy House of Mercy	Private Social Solidarity NGO	Low	Low	**Peripheral Stakeholder**
Institute of Social Security	Public Institution	Low	Low	**Peripheral Stakeholder**
Employment and Vocational Training Institute	Public Institution	Low	Low	**Peripheral Stakeholder**
Torres Vedras Local Council for Social Action	Public Institution – collaborative network	High	High	**Key Player**
Integrated Social Care Center	Social Services	Low	High	**Supportive Partner**
Local Support Center for the Integration of Migrants	Social Services	Low	High	**Supportive Partner**
Boavista Olheiros Neighborhood Community Intervention Centre	Community Initiative	Low	High	**Supportive Partner**
West Integrated Response Centre (CRI-West)	Public Institution	Low	Low	**Peripheral Stakeholder**

Private Owners	Private Sector	High	High	**Key Player**
Neighborhood Associations	Community Group	Low	High	**Supportive Partner**
Residential Condominium Management Service Companies	Private Sector	Low	Low	**Peripheral Stakeholder**
Real Estate Agencies	Private Sector	Low	Low	**Peripheral Stakeholder**
Construction Companies	Private Sector	Low	Low	**Peripheral Stakeholder**
Energy Services Companies (ESCOs)	Private Sector	Low	Low	**Peripheral Stakeholder**
Electricity Transmission, Distribution, and Supply System Operators	Private Sector	High	Low	**Influential Observer**
Gas Transmission, Distribution, and Commercialization System Operators	Private Sector	High	Low	**Influential Observer**
Local and Regional Communication and Information Agencies	Media	Low	Low	**Peripheral Stakeholder**
Sustainable West - Western Regional Energy and Environment Agency	Public Agency	High	High	**Key Player**

Intermunicipal Community of the West	Regional Authority	High	High	**Key Player**
Directorate-General for Energy and Geology (DGEG)	Public Institution	Low	High	**Supportive Partner**
Energy Agency - ADENE	Private law association, non-profit and of Public Utility	Low	High	**Supportive Partner**
National Civil Engineering Laboratory (LNEC)	Public Research Institution	Low	High	**Supportive Partner**
National Institute of Energy and Geology	Public Research Institution	Low	Low	**Peripheral Stakeholder**
Institute of Housing and Urban Rehabilitation	Public Institution	Low	High	**Supportive Partner**
National Institute of Statistics	Public Institution	Low	Low	**Peripheral Stakeholder**
Association of Energy and Environment Agencies (RNAE)	Association	Low	High	**Supportive Partner**
ZERO	Environmental NGO	Low	High	**Supportive Partner**
Coopérnico	Energy Cooperative	Low	Low	**Peripheral Stakeholder**
Just a Change	Association	Low	Low	**Peripheral Stakeholder**

Energy Services Regulatory Authority (ERSE)	Public Institution	Low	Low	**Peripheral Stakeholder**
EU Energy Poverty Advisor Hub (EPAH)	EU-level Organization	Low	Low	**Peripheral Stakeholder**
Climate Alliance	EU-level Organization	Low	Low	**Peripheral Stakeholder**
Covenant of Mayors	EU-level Organization	Low	Low	**Peripheral Stakeholder**

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