



THIS DOCUMENT WAS COMPILED BY IMEAS PROJECT PARTNER:

Fondazione per l'Ambiente, Teobaldo Fenoglio ONLUS

Via Maria Vittoria 38, 10123, Torino (+39) 3468910600 lavinia.difrancesco@fondazioneambiente.org



IMEAS PROJECT LEAD PARTNER:

Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA)

Strada per Crescentino 42, 13040 Saluggia, Italy (+39) 0161 483410, +39 06 30487031 roberta.roberto@enea.it





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ABSTRACT



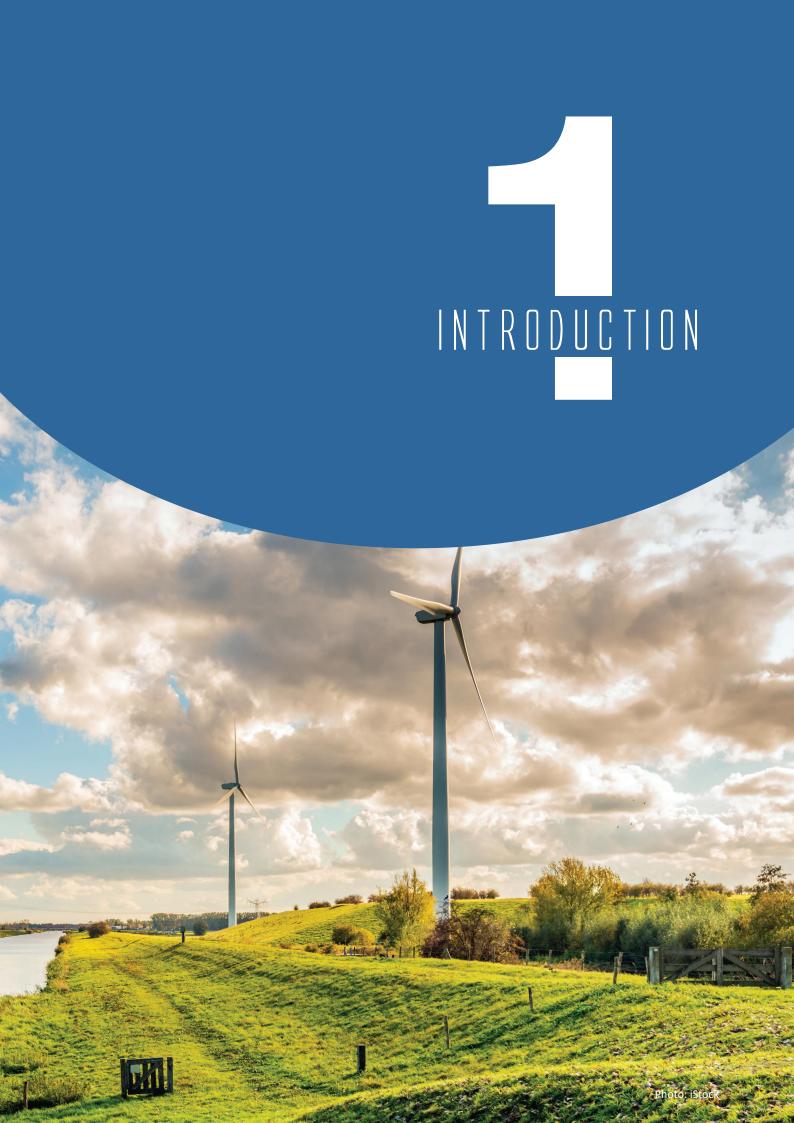
This publication, created by Fondazione per l'Ambiente T. Fenoglio Onlus, aims to be a guide to drive policy makers, research bodies, private and public organizations, to understand the joint mechanisms that occur among actors in a multi-level dimension of governance, to implement actions and policies related to the energy transition.

In times of large opportunities made possible by advanced and cheaper technology solutions, the innovation stream is usually blocked by non-technological problems such as missing incentive alignments and poor information flow amongst actors.

In fact, these actors cannot make a difference if policies or strategies are fragmented at different institutional levels of implementation or if the objectives are not harmonized - or even missing - at some levels and in case of lack of communication among actors.

The document describes the engagement and stakeholder analysis methodology developed and used in the IMEAS project, starting from low-carbon real initiatives identified and developed within the Alpine Space by each organization involved in the partnership.





The transition to a low-carbon society implies a thorough rearrangement of political and economic strategies both at European and at national level of the member states.

In the EU context, in the last years several measures have been explored to achieve the climate and energy targets set on the share of renewables concerning the energy consumption, the energy savings and the cut in greenhouse gas emissions. In order to achieve the de-carbonization targets within 2030, all territories should develop, together with new energy planning strategies, a wider and integrated vision about environmental strategies that comprehends several aspects such as *increasing forestation and reforestation in developing countries* [1], preservation of biodiversity, improvement of the water and air quality, conservation of the soil, etc.

A key factor for the successful implementation of measures deriving from energy and climate planning is to trigger the interaction of different organisations and sectors (e.g. the political level, civil society, business and other actors pursuing a common goal), together with the necessary technical professional resources and then to manage this

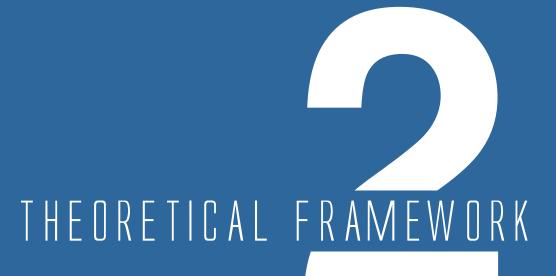
complex cooperation system in the most effective way.

As widely recognized in literature, the difficulties in implementing such strategies are related to the fragmentation of policies and the difficulties in engaging the stakeholders into a complex and integrated process rather than the lack of technologies [2, 3, 4, 5, 6, 7].

The engagement and participation of stakeholders is a decisive element for an effective energy and climate planning and for the implementation of goal-oriented measures. When administrative divisions (i.e. municipalities, regions, etc) decide to develop a new energy strategy they need to conceptualize a well-structured process to involve, primarily, local stakeholders from different silos¹ such as citizens, businesses, associations, utilities and public administration from the beginning. An active stakeholder involvement can foster a sense of ownership to achieve the goals of energy and climate planning, thus enabling long-term commitment on behalf of the affected stakeholders.

¹ The term "silo" has been introduced in the IMEAS Position Paper [11] to describe groups of stakeholders with a similar societal mission, working in the same policy arena.







This document describes the methodology used in the IMEAS project, concerning stakeholders' engagement and stakeholders' analysis.

The reader will find a detailed description of these two tools, in order to develop the knowledge and abilities necessary to face a new activity, initiative or project that requires the presence of stakeholders coming from different sectors and that operate at different levels of governance.

In each activity linked to the energy and climate planning processes, specific actors with technical expertise and diversity of experience are involved to enable a policy or a project that can help to accelerate the clean energy transition at the territorial level.

In an organization, the approach to stakeholder engagement is changing over time, and it is based on the type of actors it involves, or with whom it wants to collaborate for specific actions or projects. In order to plan strategies that can lead to important changes for the energy transition, each organization must have a multidimensional vision, completely integrated in its governance and organizational strategy, which constantly involves public, non-profit, private organizations and research bodies.

MAPPING STAKEHOLDERS - For stakeholders' engagement -

The determination of clusters of stakeholders with similar interests, capacities and/or relevance for the issuecan provide a better

appreciation of potential conflicts, and also show possible gaps in the stakeholder selection.

A useful tool for mapping stakeholders is an influence-interest matrix [18]:

	Low influence	High influence
Low stake	 Small local entrepreneurs Technology and industry Research institutions - NGOs 	 Regional/local media Citizens National umbrella organisations Professional and trade organisations City traders
High stake	Small forerunner companies - Small fleet owners	 (Big) forerunner companies Public transport companies Local/regional administrators Regional development agencies Local and regional politicians

GUIDEMAPS (2004a) has classified various stakeholder consultation techniques according to their usefulness in different situations [18]. The choice of the technique used depends on

available time, resources and expertise, the target group characteristics' and the nature of the subject.

Classifications • generally applicable • partially applicable	1 Letters	2 Posters, notices and signs	3 Leaflets and brochures	4 Fact sheets	5 Newsletters	6 Technical reports	7 Telephone techniques	8 Radio shows & TV shows	9 Internet techniques	10 Web-based forums	11 Questionnaire surveys	12 Key person interviews	13 Exhibitions	14 Information centres	15 Information sessions/briefings	16 Public meetings	17 Topical events	18 Community visits	19 Focus groups	20 Workshops	21 Citizen juries	22 Technical working parties	23 Stakeholder conferences	24 Transport visioning events	25 Weekend events	26 Planning for Real®	27 Open-space events
Who to engage																											
Wider audience	0	•	•	0	•		•	•	•	0	•		•	•		•	0			0			0			•	0
Targeted audience	•	0	•	•	0	•	•	0		•	•	•			•	0	•	•	•	•	•	•	•	•	•	0	•
When to engage																											
Problem definition	•	•	•	•	•	•	•	•	•	•	•	•	•	0	•	0	0	•	•	•	•	•	0	•	•	•	•
Option generation				0				0		•	0	•		0	0	0	0	•	•	•	•	•	•	•	•	•	•
Option assessment	0	•	•	•	•	•	•	•	•	•	•	•	•	•	0	•	•	0	•	•	•	•	0	0	•	•	0
Formal decision making	0			0		•				0		•			0						0	•					
Implementation plan	0	•	•	•	•	•		0	•				•	•	•	0	0	0		0		0			0		
Monitoring and evaluation						•	•			0	•	•							0			0			0		
Type of project																											
Strategy	0	0	•	0	•	•	•	•	•	•	•	•	•	•	•	•	0		•	•	•	•	•	•	•		•
Scheme	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	0	•	•	0	•	•	•
Duration of engagement																											
Restricted	•	•	•	•	•	•	•	•	•	•	•	•	•	0	•	•	•	•	•	•	•	•	•	•	•	•	•
Continuous		0			0		•		•	•				•								0					

Generally there is always a promoter that drives the creation of a network of actors to reach the target. Once identified the set of stakeholders to collaborate with, each one can choose if and how to participate in short what contribution to give and to what extent. It is important to inform and persuade involved actors and their networks regarding the outset of the energy and climate planning process, in order to gain their support for the implementation measures.

Through the analysis of the stakeholders, it is possible to trace the path that led to a particular result: a new energy policy, a project that made possible to raise awareness among public and private bodies on new paths on mobility, energy efficiency initiatives for small and large scale, etc.. Moreover it is possible to draw a picture that describes the evolution of the project, from the beginning to the end, identifying all the aspects (type of relationships, obstacles, point of strength and weakness, etc.) that have allowed its success or its failure.

MAPPING STAKEHOLDERS - for stakeholders' analysis

We identify the stakeholders according to the following questions:

- Name: Name of the actor/institution/ function/ player considered relevant for the case study
- Role in the project:

Promoter/Coordinator/Developer/Consultant/DataProvider/Facilitator/direct-indirect Beneficiary/Financier (according to the definition contained in the Glossary).

- Governance level, according to the following definitions:
 - European Union
 - Country Level

- Groups of Regions (NUTS1)
- Regions/aut. Regions/aut. Provinces (NUTS2)
- Provinces (NUTS3)
- Group of Municipalities (LAU1)
- Municipalities (LAU2)
- Legal Status: private, public, public/private
- SILO: The term "silo" has been introduced in the IMEAS Position Paper [11] to group stakeholders with a similar societal mission, working in the same policy arena.

The mapping and classification of stakeholders, is considered to be the focal point of both instruments (stakeholders' engagement and stakeholders' analysis), for a new project and can be useful to verify the success or failure of an initiative.

Mapping the stakeholders according to their motivation allows for a better understanding of their potential influence on the process.

When the stakeholders of a specific context region are analysed, it is helpful to map them according to their belonging and motivation. Are they hypotetical or professional stakeholders and are they involved in the process as individual actors or are they organized in networks? This distinction for example has an effect on the role ascribed to the stakeholder in the process of energy and climate planning.

The report wants to give suggestions concerning the entire IMEAS approach that allows to identify and summarize the priorities for intervention and, at the same time, to identify the areas of greatest interest in terms of economic, environmental and social impacts, so that both instruments (stakeholders' engagement and stakeholders' analysis) become strategic at 360 degrees.

In the next chapters, the aspects related to the two instruments are analysed in detail.

2.1

THEORY BEHIND MULTIDIMENSIONAL AND MULTI-ACTOR LOW CARBON INITIATIVE

IMEAS follows an evidence-based path approach aiming to improve the planning capacity and the definition of policies supported by a strong stakeholders' network governance. An evidence-based path requires to understand what is already happening on the territories, extracting lessons learned, highlighting barriers and successful implementations, thanks to a multidimensional assessment of relations.

Governance has been aptly described as the art of problem solving and, in terms of public sector, this takes place within a context that is governed by policy, legislation, organizational design, organizational culture and the external environment shaped by economic, social, political and cultural considerations [8]. Theories of Governance encompass a broad conceptual framework that continues to evolve and as underlined in the IMEAS position paper [11], the theories that best align with the IMEAS approach are the **Multi-Level Governance** and the **Network Governance** approaches.

For example, the **multi-level governance (MLG) approach** is traditionally the first attempt to govern the complexity and generate a systemic approach, and it has been identified from the EU as able to face the low-carbon energy transition. While the first and traditional MLG² approach emphasizes a hierarchical and vertical structure among actors, other definitions of MLG underline the complexity of the relationships among actors involved in the decision making process.

To stress the importance of the relationships among actors, Khan refers to **Network governance**, as the "governance based on mutual interactions between a variety of independent actors, each with their own motives, who come together to solve a common problem" [9].

² The EU Committee of the Regions defines MLG as a coordinated action by the European Union, the Member States and regional and local authorities according to the principles of subsidiarity, proportionality and partnership, taking the form of operational and institutional cooperation in the drawing up and implementation of the European Union's policies.

Network governance is playing an increasingly important role in climate policies, and in low carbon transitions, in fact it usually "refers to a shift from traditional hierarchical governance forms where the state is the regulator, to looser forms of governance where private actors such as business and NGOs increasingly participate in policy making" [9].

Both MLG, with its broader definition, and Network Governance stress the importance of the connections among the actors involved in the process and the difficulties for the policy makers to create a collaborative process among actors with different aims and societal missions.

2.2 STAKEHOLDER ENGAGEMENT³

Active stakeholder involvement is an integral part of energy and climate planning and thus also firmly anchored in all instruments used for promoting a low carbon society and reducing pollution and greenhouse gas emissions. The decision of the actors that are potentially involved to take part or not to action/project is fundamental. In fact it can beat the basis of the success of the action itself and also a source of innovation and new collaborations.

Stakeholder engagement is a tool that can contribute both to the strategic and operational improvement of new energy policies; furthermore, it can help to understand expectations and interests of stakeholders, as well as their information needs.

The degree of involvement can varydepending on the specific function and on the role the stakeholders play in a specific initiative, and it can even change over the course of the implementation process. Some practises of stakeholder involvement may relate primarily to provide information on the planning and implementation process. Despite the form of stakeholder participation, in order to adequately manage expectations it is important that the aims of the process as well as the role of the stakeholders are clearly defined and communicated since the beginning of the process..

In order to do that, an organization that aims to engage stakeholders should document:

- which approach has been adopted in order to identify them
- which inputs (know-how, tools, goods, etc.) are they carrying
- which are their societal expectations
- on which bases they are involved
- how they have been influencing the activities, the reports and, more in general, the results.

Conflicting views and expectations among different stakeholders involved in a project are quite common. Organizations should, in this sense, be able to explain how these conflicts have been balanced in the decision making process and describe them in their final reports.

A systematic stakeholder engagement that has been properly carried on, is likely to result in an ongoing learning process within the organization, as well as in increased accountability and trust between the organization and its stakeholders, as well as among other stakeholders themselves. The explanation of how the trust has been built in the final report strengthens its credibility.

The role of stakeholders accrues when climate protection goals are defined and when a programme of activities, with measures including flagship projects is elaborated.

At this stage the stakeholder involvement needs to be firmly institutionalized in order to provide a successful implementation of the projects since it requires their active participation.

³ The information contained in this chapter was taken from the Guideline "Practical advice on how to involve local stakeholders in energy and climate planning" and "Integrating SEAPs / SECAPs with energy plans on higher governance levels", product by IMEAS project as Deliverable D.T3.3.2 and D.3.3.4 respectively. For more details, see the guide themself.

2.2.1 How to implement a healthy collaboration between stakeholders

Experiences in many communities demonstrate that having an energy team⁴ at the local or regional level is one of the most effective ways to trigger long-term activities, so it is important to implement measures in order to reach an agreement upon the goals of energy and climate planning.

Organizations typically undertake different types of stakeholder engagement as part of their regular activities. The engagement process can provide useful inputs for decisions that are going to be adopted and it should be described in the report in order to be properly understood by all the stakeholders.

The process of stakeholder involvement is defined in three steps as summarized in **Figure 1**.

The three stages below depict the collaborative process of stakeholder involvement in energy and climate planning or in other subsectors, providing a general framework. However, each stakeholder involvement process will need adaptation to the specific circumstances.

Stage 1: Initiating the collaborative process

Identify the regional authorities needs

Identify key stakeholders and level of participation

Develop a common vision and objective

Stage 2: Developing the MLG integration model

Define the coordination and governance processes

Develop the engagement strategy

Define responsibilities and decision-making process

Define the evaluation process

Stage 3: Implementing the MLG model

Mobilize stakeholders and formalize their commitment

Engage stakeholders throughout the entire process

Evaluate and improve the MLG model

Figure 1 - The collaborative process of stakeholder involvement

Stage 1 initiates the governance process within the territorial authority (e.g. regional authority) and with all the territory's stakeholders.

An important phase is to put in place a multi-level and cross-sectorial cooperation in sustainable energy planning at regional level, because it can help to achieve both acceptability of the sustainable energy policy between different stakeholders and an agreement on more ambitious climate protection goals. Furthermore the sharing of experiences and knowledge allows the formulation and gathering of

Information campaigns or/and the creation of a network of advisers/observers can be adopted/implemented to support Working Group (WG) in order to explore and identify the needs of different groups of actors in defying a common vision of the goals and results to be achieved.

ideas and outside expertise that can help the vari-

Before the beginning a participatory phase, it is important to identify the types of stakeholders and the role they might play in the design and implementation of the project whose success will be guaranteed by a collaborative approach.

Mechanisms for coordination and regulation are necessary because multi-level cooperation is not self-regulating; different players do not participate

rity) ous organizations to define a shared plan.

Information campaigns or/and the creation

evel network of advisers/observers can be adopted

⁴ Energy team is an institutionalized and consistent structure responsible for the development of a climate protection concept in the city, municipality, region. The energy team acts as a "driver" for energy policy and as "development center" working on climate protection measures across the entire process.

on equal footing. Their participation depends on their skills, their ability to influence their environment, their legal responsibilities and their expectations. In this regard, governance differs from governing.

Stage 2 deepens the analysis of the stakeholder engagement process and governance mechanisms in order to define appropriate and effective 1) Governance structures as well as stakeholder responsibilities and participation, 2) Decision-making processes and 3) Operational methods.

The stakeholder's engagement strategy will follow a "no one fits all" approach and uses different formats and techniques. This depends on common vision and objectives, on the expectations and profiles of the stakeholders engaged, and on the invested resources. In the box "MAP-PING STAKEHOLDERS _ from engagement point of view", some techniques used to engage stakeholders are listed.

Once that the stakeholders are identified it is necessary to define the responsibilities of each participant and the decision making process that will be implemented.

Within the network, stakeholders with more experience or influence will take more responsibilities for providing easy-to-understand information about the project and the governance agreement.

The collaborative processes can take a variety of forms, from the simpler to the more complex ones. In most cases, one entity coordinates the process: a steering committee or some other specific group.

Supervision and coordination of the entire process can either be assigned to the operational steering committee, if it has been formed, or to a dedicated agency or unit.

A political steering committee can be formed to engage elected officials throughout the process, which will facilitate the implementation of decisions, and to create thematic or territorial working groups.

Stage 3 establishes the beginning of the implementation of the previous stages (Stage 1 and Stage 2). When starting the implementation phase, it is important to baseline all the players (new stakeholders and /or new organizations and/

or new representatives), emphasizing the collaborative approach, get their approval and formalizing their engagement.

In most of the collaborative processes, stakeholder participation has been formalised in resolution, multi-party agreement, participation charter, etc.

In order to give the possibility to all stakeholders to contribute to the collaborative process, a "learning phase" may be necessary. Stakeholders need to fully understand the context of the process, the issues involved, and the work that has already been done. The learning phase may be necessary also when specific skills or knowledge are required in order to understand and to address practical issues.

Governance processes must be examined as a whole and must be open to be modified during time. This evaluation may be an external one, a peer evaluation, or a self-assessment. The rating of the governance framework should include the following elements:

- Lessons learnt
- The relevance of the governance framework (compared to other MLG processes or standard approaches)
- Its strategic positioning
- Its effectiveness: expected outcomes in terms of expectations and objectives
- Its efficiency with respect to dedicated resources and means (relationship between results and financial resources, expertise, organization, etc.)
- Its acceptance at internal and external levels
- Identification of actions

Evaluation of the process must be continuous and participatory.

2.2.2 How to motivate stakeholders to participate in the process of energy and climate planning and implementation

Energy and climate planning requires the cooperation of multiple stakeholders. It is important to take into account visions, needs and requirements of local actors as well as to be able to match them with the local climate policy.

Different methods can be applied to motivate the different stakeholders and enlist their participation in the process of energy and climate planning and implementation. These methods range from public relations to innovative workshop formats and are described in the following sections.

Moreover in the field of energy and climate planning, the efficiency of public relations activity can be more effective, if the following questions are considered since the beginning:

1. Specifying the target group: Which target groups do we want to reach? Who are the stakeholders?

- 1. Analysis of the stakeholders' needs: What do the members of the target group react to? It is important to consider that people may have both private and group interests.
- 1. Creating a target-oriented message: Which key message will we use to reach stakeholders? The message should respond to stakeholders' needs and a clear, memorable and constant message is required, as well as a set of 3 to 5 statements concerning the initiative.

The goal of any action of communication is to motivate stakeholders to act. The most commonly practiced method is the AID (Attract Inform Develop) diagram. This diagram describes three steps that need to be separated during the process of communication strategy creation:

ATTRACT



INFORM



DEVELOP

ATTRACT – Advert the stakeholders to the subject!

Public relations activities related to energy planning must compete with a lot of other offers - even from the field of environmental protection and sustainable development.

INFORM – Present the chances and abilities to act!

The activities and materials that permit to know better about advantages, costs and limitations of energy and climate planning are a measure that aims to direct stakeholders from their state of awareness of the subject to the state of action.

DEVELOP – Initiate action!

Each target group must be supported by technical trainings, market research, joint business plan creation, or the collection of background information via the Internet.



Table 1 illustrates the steps of the AID approach and exemplifies this target-group oriented communication.

Table 1 - Examples of activity classification in accordance with the AID diagram										
Attract	Inform	Develop								
Information transmitted via E-mail to a chosen target group	Information stall in installation enterprise	Visits by professionals, who will investigate any special arrangement that can be made								
An eye-catching poster with a clearly printed, easy to remember hotline number	Interviews, handled by e.g. call- centres and taking the existence of websites into account.	A tool used to calculate and check one's own situation in relation to RE, made available on an Internet webpage								
Presentation made during the annual meeting of the regional chamber of crafts	A brochure describing examples of successful facilities using RE installations	Training courses for installers								
Solar award contest	Reports on awards granted	Visits in facilities housing model RE installations								
Informational seminar for mayors and enterprises, opened by a renowned politician	Informational packages for housekeepers and public facilities managers	Text modules for tender procedures								

2.2.3 Modality of sharing knowledge

Concerning the stakeholder involvement, it is always important to organize sharing events able to involve network partners in the process of climate and energy planning. Such events can be public or

private meetings, where it is possible to establish public relations aimed at gathering a group of people and motivating them to cooperate. The most suitable organizational forms are:

ONLINE INVOLVMENT

May provide a valuable insight in the local actors' and stakeholders' perceptions and views

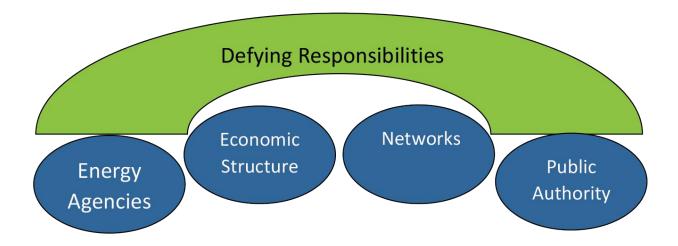
EVENT & WORKSHOPS

To initiate and continue any cooperation as well as to develop implement any chosen concept

CAPACITY BUILDING FOR PROFESSIONAL

Local proffesionals, with experience and qualifications, consult the local stakeholders, the politics, and the governance level and give guidance to the citizenship.

In order to effectively involve the stakeholders in the process of climate and energy planning the procedure of the involvement itself has to be organized. This requires the definition and the allocation of responsibilities, the creation of networks, and the acknowledgement of the diverse stakeholders' priorities.



For a broadly-based energy transition and climate mitigation approach, it is easier to divide the responsibilities between many actors. One organization has to be in charge of collecting and processing all the information. **Professional energy agencies** are equipped with skills and qualifications that can facilitate and support the process of the energy and climate planning, the implementation of the defined activities and the capacity building. Furthermore, the involvement of the energy agencies can foster the energy team's networking activities from the local onto the regional level.

Economic actors have to be addressed separately to respect individual needs and requirements. Generally these actors are often organized in economic associations or are members of chambers, such as the Chamber of Industry and Commerce. In economic terms saving energy means saving money. Economic actors can either be invited to join energy efficiency networks or to take part in efficiency

programs initiated by the municipality in order to exploit these saving potentials.

The so-called Learning Energy Efficiency Networks (LEEN) connect large scale corporations that have a high energy demand on a local scale with aim of lesson learning, exchange of know-how and experiences. The objectives of such networks are learning from each other and discussing pressing and relevant issues in terms of energy, efficiency, and the use of renewable resources.

Public authorities can offer consultancy to the economic actors aiming at saving energy and reducing costs, by implementing energy efficiency measures and by the promotion of renewable energies. The participants, that can be companies and other organizations, profit from an in-depth investigation that identifies possible energy saving measures and from the associated network built up in the course of the programme.

2.3

STAKEHOLDERS' ANALYSIS – IMEAS STAKEHOLDERS' NETWORK MODEL

Stakeholders' analysis⁵ is a methodology that allows exploring the context of relationships within which an organization plays its strategy to achieve the prefixed goals. This type of analysis is preliminary to the development of any strategy, because it helps to visualize the level of satisfaction of the

main stakeholders, that is the key to the success of public and non-profit organizations, as well as to profit-making companies.

One of the main outcomes of the IMEAS project is the IMEAS Stakeholders' Network Model (ISNM), a socio-political model for displaying integrated low carbon energy initiatives in the Alpine Space Regions. This instrument is free and available on the following site https://fondazioneambiente-isn-mtool.shinyapps.io/IMEAS/.

^{5 &}quot;A Stakeholders' analysis is a process of systematically gathering and analysing qualitative information to determine whose interests should be taken into account when developing and/or implementing a policy or program" (Schmeer, 2000).

The IMEAS Stakeholders' Network Model is meant to be used to describe the networks of public and private actors involved in the low carbon transition process. Within the ISNM, networks of stakeholders, both private and public, the relations among them and the incentives behind their decisions are analysed and visualised.. The model describes networks of stakeholders and gives guidance to align their incentives and therefore to promote cooperative processes.

For the implementation of the ISNM, the core method that has been used is the traditional approach of the Stakeholders analysis and the data collection scheme coming from the FIELD analysis.

The FIELD - Framework of Incentives to Empower Local Decision-makers — "is a multidisciplinary methodology for the analysis of local actors to support the collection of data and information in a structured way" (Asquer et al, 2017). The methodology, "originally aimed at analysing local services and infrastructures, generally provided and regulated at the municipal or metropolitan level", is extended here and adapted to analyse the low-carbon transition initiatives, mapping the stakeholders, the incentives, the information assets that characterize them, and the information flows between them. The detailed approach is reported in the Deliverable D.T2.2.1 of the IMEAS Project.

2.3.1 Substructure of the analysis

The main aspect from which each stakeholders' analysis begins is the identification of real initiatives that can be considered interesting on aspects related to their evolution and their impact on the territory.

The flower represented in **Figure 2** summarizes the main steps of the approach followed to conduct the Stakeholders' analysis. The approach offers a description of the grade of the main players involved, their relationship, the incentive system that drives their choices and identifies some possible obstacles to the implementation of the low carbon initiatives, in order to build an internationally comparative survey on the aspects over described.



Figure 2 - Stakeholders' analysis approach

It is worth noticing that the core step to begin the analysis consists in collecting data from different organizations (public or private). It is important to collect cases that have a multidimensional and multi-actor character.

The collection of each real case must be done according to a predefined procedure that brings out all the aspects considered fundamental to allow an external observer to understand the important aspects that led to the evolution of the initiative (whether it is a project, a new political strategy concerning energy planning, etc.). It is suggested, at least at the beginning, to drive and help the contributors in the process of filling out the format, through tutoring activities both written and face-to face. The information and data that are going to be put in the format must be punctual and not generic in order to make a comparative analysis with other cases.

After mapping the actors involved in the initiatives, according to the procedures explained in the box "Mapping of Stakeholder – from an analysis point of view", the so-called key stakeholders must be identified. The Key Stakeholder are those actors without whose support and participation the targeted results of a programme normally cannot be achieved, or who may even be able to inhibit the continuation of the programme, in this case they are called veto players.

⁶ Definition according to PED Network Basic Tools, Tool 1: Stakeholder analysis, Federal Department of Foreign Affairs FDFA

Each involved stakeholder brings a series of motivations that allow him/her to be involved in a given process, such as legislative obligations, the need of financial support for the development of new technologies, the collection of data etc. Another key point of the analysis is the identification of those reasons that according to the FIELD methodology, are called **incentives**. The incentives are the driving forces behind individuals' and organized groups' behaviours and depend on a combination of: individual personal motivations, opportunities and constraints arising from the individual's principal economic and political relationships⁷.

Among stakeholders, a series of **relationships** are established. Thanks to them the exchange of ideas occurs, so relationships among stakeholders become a crucial aspect that has to be investigated. In the IMEAS approach the relationships are categorized following the listed definition:

- Typology of the relationship: Appointment/ Election/Strong political influence/Regulation/Rule of law/Assignment/ Economic/ Business relationship/Ownership/Cooperation/Advocacy/Engagement (according to the definition contained in the Glossary);
- Robustness of the relationship: a relation can be strong or weak. A strong relation is defined when there is a consolidated bond between actors and a good relationship of confidence that facilitates communication. Contrarily, it is weak when the relation is young and needs maturation and further knowledge among the players;
- Optionality of the relationship: a relation can be mandatory or voluntary. The relationship is mandatory when there is a legal bond that forces two actors to talk to each other. It is voluntary when the bond is spontaneous;
- Dimensionality of the relationship: this type of relationship highlights the connections between the actors considering:

A) Their level of governance: when the link connects two players at the same governance level there is a horizontal bond. When the link connects two players at different governance levels there is a vertical bond;

- B) Their trans-sectoral level: when the link connects actors belonging to different silos irrespective of their levels;
- C) Their national or transnational level: when the link connects actors whose silos are located in different countries irrespective of their levels and sectors;
- D) Multi-dimensional link: horizontal, vertical, trans-sectoral and/or transnational links between more players.

The final goal of the stakeholders' analysis is to collect hints to provide **solutions** to remove some **obstacles** encountered during the planning and implementation of the low carbon initiatives. This part of the analysis intends to provide categories of problems and to understand if similar solutions are found among the collected initiatives.

The repetitiveness of the obstacles could drive the search for innovative solutions in order to definitively eliminate the problem encountered. If different solutions to the same problem did not give good results, it is obviously necessary to look for a change in order to formulate new suggestions. A list of keywords was developed for a general classification.

For a full account of how each initiative has taken off and how it has evolved, a narrative part, mainly related to describing the "shadow" aspects, the details of the implementation, has been added to the analysis.

The additional information requested concerns the background of the case (legislative/regulatory/collaborative framework behind the initiative) and the specific details, linked to the process that pushed the collaborative process between players (typology of collaboration, who financed the initiative, the problems occurred, the ongoing collaboration among the involved stakeholders). The cases were mainly collected by the project partners, the observers and the IMEAS Community.

A deep analysis was carried out during the first year of the IMEAS project aiming at describing and categorizing the different cases concerning activities, linked to the energy and climate planning processes in the regions of the Alpine Space.

Each contributor is required to analyse its individual case in great detail. In short, the analysis of the initiative is not easy to retrace, especially for long-term initiatives characterized by the participation of different actors.

⁷ DfID 2009, "Political Economy Analysis How to Note", A Practice Paper, Department for International Development, London.

OTHER ELEMENTS OF ANALYSIS



According to Jänicke's study [12], sustainable development as well as climate governance, need a global approach, but need the support and contribution of intermediate levels of governance as well, since each level of governance has its own "responsibilities, challenges and opportunities". Therefore, it is extremely important that different types of successful interactions are activated among stakeholders.

In fact in addition to the FIELD methodology, the IMEAS project has used the Multi-Level Governance approach adopted in the case of climate governance in order to implement the stakeholders analysis.

According to the definition of MLG given during the UN summit Rio de Janeiro in 1992 [14], the MLG is "a system of goal-orientated multi-level and multi-sectoral global governance which aimed to mobilize a broad swathe of actors to pursue sustainability" [15],[16]. "It is a governance model which is not restricted to government actors, but aims to include a broad variety of business and civil society actors across all levels" [17]. Following this broad definition, it is possible to model these complex dynamics according to their relations among different sectors at different governance levels.

According to the IMEAS categorization, providing examples of winning relationships among actors involved in a low-carbon process (e.g. peer to peer learning, cooperation etc.) Jänicke [12] classifies the interactions as follows:

- 1. Horizontal interactions: peer to peer learning (lesson-drawing), competition, cooperation (networking) e.g. among networks of cities/provinces/states.
- Vertical interaction: the up-scaling of best practices via higher level policies and policy support for the lower levels.
- 3. Multi-sectoral multi-stakeholder relationships: relationships among all relevant inter-

est groups are generally described as "multibenefits" [13] and "co-benefits".

Another interesting aspect that comes out from the literature review is the description of the mechanisms that can lead to strategic actions reinforcing low-carbon processes.

The so called "Polycentric Approach" [16], characterized by "a broad variety of actors, dimensions and levels" can in fact be considered a real opportunity to develop a long term ambitious climate policy.

The following categorization provided in part by Jolland and Ellis [18] and in part by FA, is proposed in order to better structure and compare the outcomes of similar cases:

- Local energy and environmental planning including sectorial planning (mobility planning, etc.)
- Implementation of direct measures (e.g. buildings refurbishments, data platform implementation etc.) [18]
- Implementation of indirect actions (e.g. building capacity, disseminating information, technical board, promotion of actions supporting multidimensional connections etc.) [18]
- Promotion of policies/strategies by active civil society.

The stakeholder analysis tool (ISNM), developed within the IMEAS project, can therefore be considered a tool that takes into account the polycentric approach, as it focuses on all kinds of networks at all levels of multi-level game.

The tool, as already mentioned, makes possible to visualize the main characteristics (silo and level of governance) of the stakeholders involved in an initiative and to highlight the main relationships and difficulties that emerged during its implementation.

This instrument allows searching by similarity exploiting the key words that have been assigned to each case during the analysis phase.

OVERVIEW AND CLASSIFICATION OF REAL INITIATIVES



The IMEAS project tested the FIELD and the MLG methodologies with a polycentric approach, collecting initiatives from all over the Alpine Space.

These initiatives cover a large variety of low-carbon strategies: energy planning activities, procedures to implement new laws, specific actions related to the implementation of new technologies and tools.

The classification of the initiatives was carried out starting from the division of the collected cases in the four categories provided in part by Jolland and Ellis [18] and in part by FA. **Figure 3** shows the categorizations of cases divided by country.

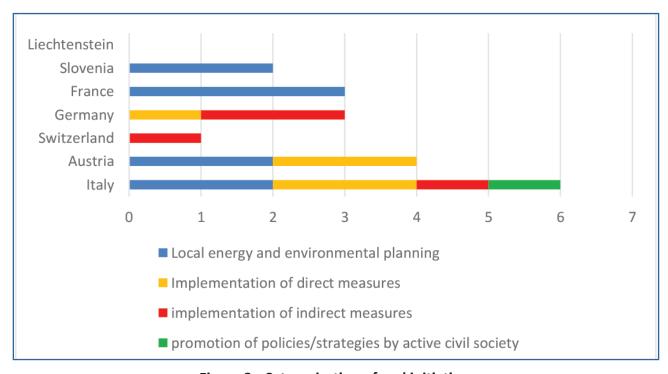


Figure 3 - Categorization of real initiatives

The main analysis of the case study takes place through the ISNM tool: a first comparison on similarities is based on keywords associated to each initiative, moreover each case is described through the relationships between the stakeholders involved, their level of governance, the role of each stakeholder within the case and the difficulties and solutions emerged.

So the comparison strategy, that helps policy makers to define a favourable framework for cooperative low carbon integrated energy planning is based on three aspects:

- 1. How and why stakeholders were involved;
- 2. Which were the main relationships between stakeholders and their role in the initiative;
- 3. Problems encountered and proposed solutions.

The first comparison, allows to highlight which was the best way to involve the different stakeholders and at which level. The second comparison is related to the type of relationship that has been established between the various stakeholders and which of those has brought better results. Finally, the last comparison focuses on the obstacles that arose at the birth and during the course of the initiative and the solutions that have been found.

The categorization of the cases will allow underlining the most connoting aspects of the grouped projects.

Before reporting the details of the analysis carried out, the key results that emerged during the analysis are shown in the boxes below.

Key results 1

The main stakeholders involved belong to a network of already identified and known actors. In the case of new projects, the choice of the stakeholders involved fell on those who had a specific technical competence in the sector.

Key results 2

The initiatives have been implemented mainly on a voluntary basis. Only in the case of energy planning initiatives and therefore the implementation of new environmental and energy strategies, there was a legislative obligation. Most of the voluntary projects have been realized thanks to an external financing.

Key results 3

During the project implementation phase, the main problems and solutions highlighted are related to:

- 1. the poor quality of data and the difficulty in their sharing → Standardization of data format and increase the collaboration between stakeholders
- 2. the difficulty to continue an initiative when the financing finished → Where possible reinvesting the savings generated in future actions, otherwise no solution.

Local energy and environmental planning

In this category we compared 8 cases realized in Slovenia, France, Austria and Italy. Below are represented the results of the stakeholder analysis conducted. The outputs of this group, on one side implement new environmental and energy strategies, on the other side underlines how such initiatives have served to strengthen collaborations between existing stakeholders and to increase the network of collaboration between territories.

Figure 4 - Characterization of the initiatives observed, according to the obligatory nature of the initiative, the financing and the typology of the interconnected relations among the various stakeholders

Characterization of the observed initiatives

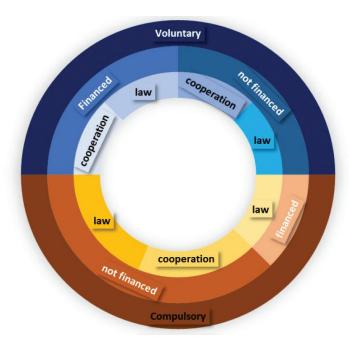


Figure 4 shows three different information: the outer ring tells us if the initiative has been made to comply with legal obligations or has been carried out on a voluntary basis, the central ring illustrates

if the initiative was implemented thanks to funding or not, the internal ring instead shows the main relationships among the stakeholders who participated in the initiative.

What emerges from the analysis is that the initiatives, half of which are voluntary and half with legal requirements, have been carried out mainly thanks to cooperation between stakeholders. Another aspect to note is that the cases carried out without mandatory obligation have not necessarily

been financed by external entities, while the majority of projects carried out voluntarily was externally funded.

In **Figure 5** are represented the results of the analysis conducted to bring out the motivations/ reasons that led to the choice of the involvement of certain stakeholders. It is clear that, independently from the Country, the reasons that led to the choice of the stakeholders are mainly related to their influence in that specific initiative.

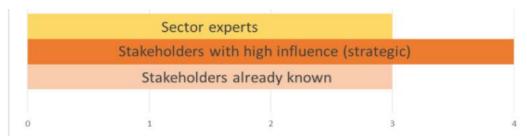
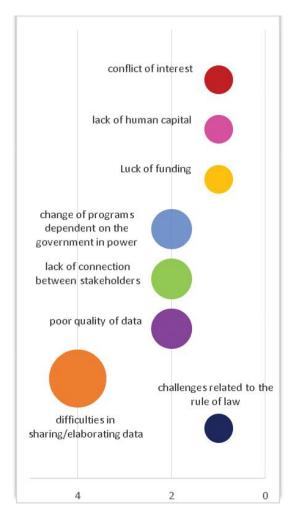


Figure 5 - Reasons that allowed the involvement of stakeholders

In **Figure 6** the obstacles that various stakeholders have encountered during the implementation of the new initiative are represented. The figure shows that

some problems are common among several stakeholders (larger circles) and how depending on the stakeholders different solutions have been found.



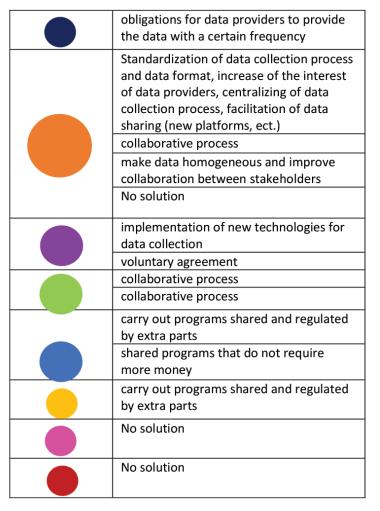


Figure 6 – Obstacles and solutions highlighted by stakeholders during the implementation of the initiatives

Data recovery and processing were the main problems stakeholders encountered and for most of the designers/developers, the homogenization of data coming from different sources is necessary.

Figure 7 shows the main roles covered by the stakeholders during the project, grouped by governance level (NUTS). The number of circles corresponds to the number of stakeholders (1 circle = 1 stakeholders and so on). The interesting part that

emerges is that the role of coordinator is assumed at lower levels of governance, i.e. more local, while the development part of the project is carried out at all levels but mainly at country level. The role of the promoters, is assumed mainly at regional and provincial level; this depends on the fact that many analysed projects have been realized after the fulfilment of new national law.

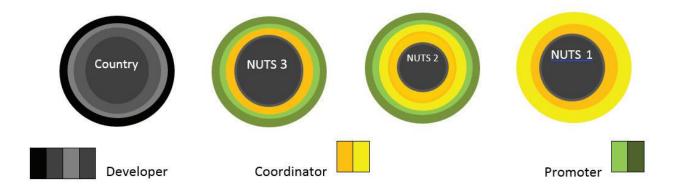


Figure 7 – Role of stakeholders according to their Territorial Units for Statistics

(The number of circles corresponds to the number of stakeholders (1 circle = 1 stakeholders and so on)).

Implementation of direct measures

In this category we compared 5 cases realized in Germany, Austria and Italy. Also in this case the project outputs are similar. In fact, speaking of direct measures, we define concrete instruments or systems that work directly on energy efficiency. The main output emerged is the creation of tools that quantify the energy consumption of public buildings, as required by European and local standards, in order to plan concrete renovations to improve the energy performance of buildings.

Below are represented the results of the stake-holder analysis conducted. In this group of initiatives, it is immediately evident, as shown in **Figure 8**, the voluntary nature of the projects, realized exclusively with financing, mainly public. In some cases funds came from European calls, while others had a direct assignment from Municipalities, as they get higher funding if they construct or retrofit energy-efficient and use materials which have low impacts on nature and indoor air, in their public buildings.

It is in fact noted that the main relationship that emerges between stakeholders is the economic one, in line with the fact that the projects were mainly carried out only after funds were assigned.

Characterization of the observed initiatives

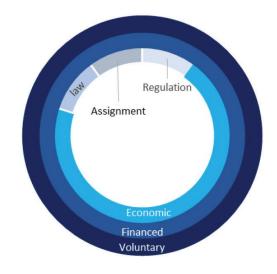


Figure 8 – characterization of the initiatives observed, according to the obligatory nature of the initiative, and the relations among the various stakeholders

Certainly there is a part of achieving energy goals required by the European Union, which is why these initiatives have been implemented.

In general, the initiatives were participated by stakeholders who knew each other for previous works

made together, there was even the direct assignment of the task that required specific technical skills to be able to finalize the planned actions (Figure 9).

Most problems, as shown in Figure 10, are related to lack of funds and lack of skills to manage the installed technologies and tools. Obviously, the

Stakeholders involvment



Figure 9 - Reasons that allowed the involvement of stakeholders

financing of projects implies that at the expiry of the contribution, the project, if not sustainable, instantly ends, making the search for new funds necessary in order to continue, improve and manage the tools implemented.



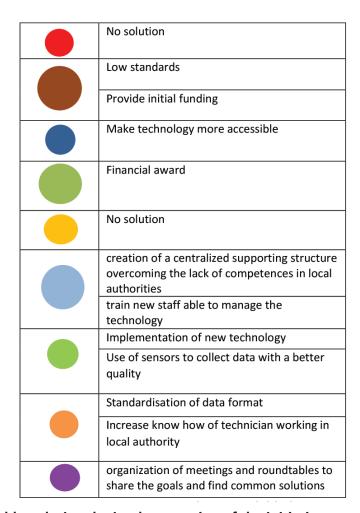


Figure 10 – Solutions highlighted by stakeholders during the implementation of the initiatives

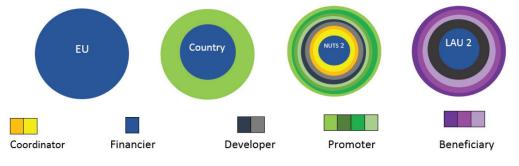


Figure 11 - Role of stakeholders according to their Territorial Units for Statistics (The number of circles corresponds to the number of stakeholders (1 circle = 1 stakeholders and so on)).

In **Figure 11**, we note that the stakeholders who promoted and developed initiatives belonged to local and provincial levels, while most of the funding came from higher governance levels (Europe, Country).

Implementation of indirect measures

In this category we compared 4 cases realized in Germany, Switzerland and Italy. Below are represented the results of the stakeholder analysis conducted.

The main outputs of these cases were the creation of professional figures (energy managers, climate managers, etc.) or awareness campaigns on the energy issue, in support of the municipalities.

In fact, as **Figure 12** shows, a "new" assignment relation appears, linked to the presence of consulting centers, that are professional figures who have been entrusted with the work of implementing actions that lead to the required result.

Furthermore in this group all the initiatives were realized on voluntary bases, half financed and half not.

Characterization of the observed initiatives

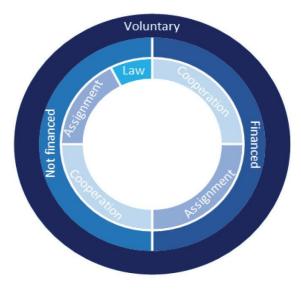


Figure 12 - characterization of the initiatives observed, according to the obligatory nature of the initiative, the financing and the typology of the interconnected relations among the various stakeholders

In **Figure 13** the main reasons that led to the involvement of the stakeholders are presented. The incentives were mainly two:

- start designing the initiative with stakeholders who already knew each other;
- involve, in the implementation of project actions, at least those who wanted to be involved.



Figure 13 - Reasons that allowed the involvement of stakeholders

As shown in **Figure 14**, one of the main obstacles encountered by several actors is the difficul-

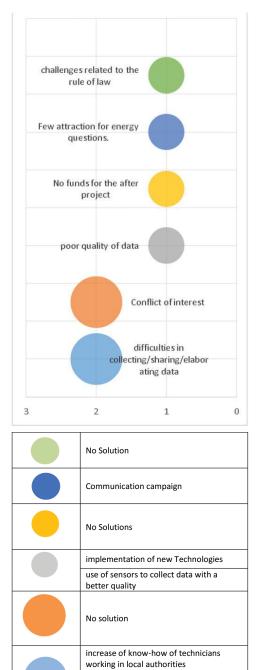


Figure 14 - Obstacles and solutions highlighted by stakeholders during the implementation of the initiatives

Promotion of data collection

standardization of data format in billing implementation of new Technologies

ty in collecting data and managing them, a problem also caused by the heterogeneity of data formats. Moreover, the problem of conflicts of interest is noteworthy: since these projects are mainly linked to the local administrations, once

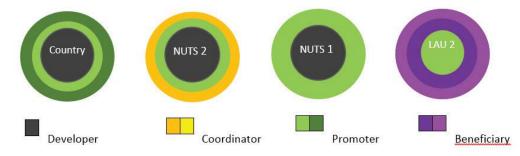


Figure 15 - Role of stakeholders according to their Territorial Units for Statistics

the electoral mandate is over, if the new elections choose opposition candidates, all the cards in play are put back on the table, mainly cutting the activities carried out by the old administration.

The lack of solutions to the problems encountered in these cases considered, is evident. Indeed, it is difficult to find concrete solutions that can actually overcome obstacles linked to lack of funding or to legal ruling.

In this kind of category, stakeholders come into play locally (LAU2) (**Figure 15**). It is interesting to notice how some of the initiatives have been promoted from lower levels, in fact this could be, in part, due to the voluntary nature of the initiatives.

Promotion of policies/ strategies by active civil society

In this category we analysed only a single case, realized in Italy. **Table 2** reports the result of the stakeholder analysis conducted.

Italy		Country				
Country	Key Actor (Level of Governance)					
Promoter, Beneficiary	Key actor (Role)					
Cooperation	Main Relations					
Horizontal, Tran-sectoria	MLG relation					
Voluntary		Optionality				
Not		Financed				
Stakeholders interested	in the initiative	How stakeholders were involved?				
Different Regulation for sectors;	Stakeholders coming from different sectors	Obstacles				
National regulation;	Cooperation between stakeholders	Solutions				
yes		Completed				
Platform, Consortium		Main output				

Table 2 - Summary data for stakeholder analysis

This is the only case in which a series of trade associations have collaborated to allow different laws, for the various sectors of experience, to be uniformed at national level.

The initiative took place entirely on a voluntary basis involving mainly national associations, hav-

ing a common purpose, that is to join different actors to get economic advantages thanks to the bio-methane support scheme, with the exception of Legambiente, and environmental association who pursues environmental benefit.





The following section summarize the main aspects to be consider for the involvement and analysis of the stakeholders in order to start a project or any type of initiative. These **recommendations elaborated in the IMEAS project**, are based on the experience concerning low-carbon energy action plans and initiatives realized around Alpine Space by IMEAS partners and **can be used to address readers with different levels of expertise and interest.**

Any type of initiative or project necessarily requires the involvement of several actors who collaborate to develop actions and policies strategies, that can lead to new energy paradigms. The right choice of actors, in recent years is considered increasingly crucial.

Stakeholders' analysis plays an important role both in the choice of the partners to be involved and in the understanding of the dynamics that emerge during the implementation of the actions representative of the project (new relationships, new networks of stakeholders, problems arising during the project, etc.).

Recommendation 1 – Use the stakeholders' analysis as a support tool to start a project

The Stakeholders' analysis should be used as base to evaluate the main aspects that characterise an initiative; it can give indications for not repeating the same mistakes rather than strengthening successes.

Although the cases analysed are not numerous, we note some recurrences in terms of approaching stakeholders and types of relationships that are established between actors.

Recommendation 2 – Enhance the network of stakeholders with whom it has already worked

In all cases analysed, a winning value for the success of the initiative was to work in an already established and validated network of stakeholders. Actually, most of the reports characterized by a cooperation relationship underline precisely this aspect: it is trust in the partner that allows to elaborate more complex and articulated projects.

The lack of a network of stakeholders was considered a problem for the development of a project and as a solution was proposed to start collaborative processes between actors in order to strengthen confidence.

Another important aspect emerged in IMEAS project was the creation of technical skills within the public institutions.

Recommendation 3 - Create a technical reference figure within the public Institutions

A technical reference impartial figure, which does not change with the administration changing, would allow a vision in the planning of activities and strategies on sustainable energy and climate protection. This implies on the one hand the possibility of evidently continuing actions even when the external financing finished (for example in case of voluntary project developed thanks to EU call) on the other hand also the possibility of overcoming the conflicts of interest that are created when the municipal councils change.

To support the involvement of stakeholders in cooperative mechanism of energy planning a collaborative working at difference Level of Governance will help to achieve more results if the different approaches, levels and sectors enter in better synergies.

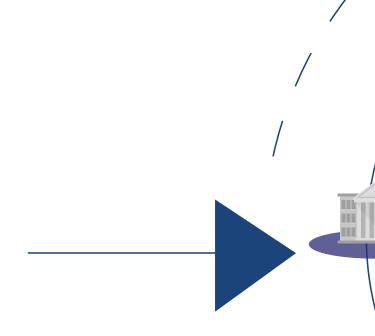
Recommendation 4 – Implement Multi-Level Governance process

Stakeholders from different levels (state, region, municipality, district) must cooperate effectively for supporting programmes and coordinate actions in sustainable energy and climate protection measures in order to have repercussion over a much wider area than is possible.

Energy and climate planning can only be effective as regards the implementation of projects if professional officers and institutions coordinate the process in the long run.

Recommendation 5 - Setting up a Regional Energy Team

This professional figure helps to institutionalize a long-term structure for supervising progress and continuous adaptation in term of energy planning, professionalizing and supporting the process team for safeguarding the effectiveness of the innovative processes.







6.1 GENERAL

Low-carbon initiative: The low carbon initiatives of interest to IMEAS are not exclusively best practices, but encompass all initiatives interesting for describing both problems and mechanisms of success of integration among different silos and different governance levels (e.g. energy planning strategies, specific actions, characterized by the coexistence of stakeholders from different domains and different governance levels).

Sector: the term "sector" has a different significance for different stakeholders. Here it is understood in a broad sense that includes the traditional economic and energy sectors (i.e. building, manufacturing, transport, etc.)

Mechanisms that trigger integration: mechanisms/actions that allowed the development of the initiative/project.

Obstacles to integration and solutions: Limits that occurred within the implementation of the initiative and which solutions were found.

Silos: set of **actors** with a similar societal mission, working in the same policy arena.

6.2

STAKEHOLDERS' ATTRIBUTES

Stakeholder: any entity with a declared or conceivable interest or stake in a policy concern. The range of stakeholders relevant for analysis varies according to the complexity of the reform area targeted and the type of proposed reform. Stakeholders can be of any form, size and capacity. They can be individuals, organizations, or unorganized groups. Within the IMEAS Stakeholders Network Model, stakeholders are categorized into four groups depending on what is interesting for the initiative:

Actor: a group of people (both organized and unorganized) or a legal entity, public or private, established by political processes which have legislative, judicial or executive authority over other institutional units within a given area. Within the IMEAS Stakeholders' Network Model, the actor is the first level of the stakeholders' grouping

Institution: it can be any type of organized corporation or society that pursues a particular purpose in a systematic manner, following certain rules and procedures. It may be private and designed for the profit of the individuals composing it, or public and non-profit. Within the IMEAS Stakeholders' Network Model, the Insti-

tution is the second level of the stakeholders' grouping

Function: the role that an individual or a group of people play inside an Institution. Within the IMEAS Stakeholders' Network Model, a function is the third level of the stakeholders' grouping

Player: an individual that plays a role in the IMEAS Stakeholders' Network Model. Within the ISNM, a player is the fourth level of the stakeholders' grouping

Key Stakeholder: are those actors without whose support and participation the targeted results of a programme normally cannot be achieved, or who may even be able to veto the programme, in which case they are termed veto players³.

Stakeholder's role

Promoter: who promotes the initiative at political level, or who provides general indications based on what is established at European level;

Coordinator: who plans / coordinates / establishes roles / creates the work team and interacts with the stakeholders;

⁸ Definition according to PED Network Basic Tools, Tool 1: Stakeholder analysis, Federal Department of Foreign Affairs FDFA

Developer: who develops / implements a service / product / tool (eg data collection, implementation of planning actions, data processing, tool development, etc.);

Consultant: who provides specialized advice, competence and knowledge regarding project issues;

Data provider: Usually are research institutes, industry, associations and sometimes different consultancy companies which are paid to supply data (on energy consumption etc.), not necessarily being the data owner;

Beneficiary

- Direct: A person, group of persons or organisation which receives directly of the benefit of the initiative/project outputs;
- Indirect: A person, group of persons or organisation which has no direct contact with the iniziative or project, but which is affected by it via direct beneficiaries;

Financier: Organization public or private that dispenses money to finance and allow the implementation and realization of the initiative/project;

Facilitator: Someone who helps stakeholders to bring a common outcome by providing indirect or unobtrusive assistance, guidance or supervision.

6.3

LINKS'/RELATIONS' ATTRIBUTES OF THE STAKEHOLDERS' NETWORK MODEL

Governance level: Normative structure of one organization that represents the capability of the interaction in a global political economy.

Horizontal link: link at the same institutional⁹ (governance) level within one and the same silo

Vertical link: link at different institutional levels within the same silo

Trans-sectorial link: link between actors belonging to different silos, whatever their levels are

Transnational link: link between actors from silos located in different countries, whatever their levels are

Multi-dimensional link: horizontal, vertical, trans-sectorial and transnational links

Multi-dimensional approach: approach that promotes the creation of multi-dimensional links

Cross-sectorial/Trans-sectorial: initiative/approach involving more than one sector or silo

Appointment: when a person or an institution is responsible for appointing a person to a specific role in another institution,

9 Institutional here is conceptualized in a broad sense relating to an organization (either public or private, or a public-private partnership - PPP) and generally referring to the geographical scope of the organization/public body.

Assignment: when a player assigns a service to an operator through, for example, concession, public tender, or direct assignments

Regulation: when an authority prescribe rules concerning the quality of service (rates, costs, prices, sanctions etc.)

Business: when there is a monetary competition between several actors

Economic: when the relationship is based on an economic exchanges

Law: when the relationships between multiple subjects is disciplined by law

Ownership: when an institutional organization owns a multi-utility

Cooperation: when there is a voluntary exchange of information between two stakeholders

Advocacy/influence: when someone gives a public support for or recommendation of a particular cause or policy

Engagement: interaction between community members for an emotional attachment to an initiative







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