



## **StoRES**

# Promotion of higher penetration of Distributed PV through storage for all

Priority Axis 2: Fostering low-carbon strategies and energy efficiency in specific MED territories: cities, islands and remote areas

2.2: To increase the share of renewable local energy sources in energy mix strategies and plans in specific MED territories

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## 3 Contents

| 1 | Do  | ocument Info  | 2  |
|---|-----|---|----|
| 2 | Do  | ocument History   | 2  |
| 3 | Co  | ontents   | 3  |
| 4 | Pr  | oject summary   | 4  |
| 5 |     | troduction  |    |
| 6 |     | akeholder mapping process   |    |
| ( | 5.1 | Geographical classification of the stakeholders                     |    |
| ( | 5.2 | Identification of the working area of the stakeholders              | 7  |
| ( | 5.3 | Stakeholder engagement method                                       | 9  |
| 7 | Co  | ontents of the training courses                                     | 10 |
| - | 7.1 | General contents  | 10 |
| - | 7.2 | Specific topics following the categories of stakeholders identified | 11 |
| 8 | Co  | onclusions  | 12 |
| 9 | An  | ınex  | 13 |
| ( | 9.1 | Stakeholders in Cyprus  | 13 |
| ( | 9.2 | Stakeholders in France  | 14 |
| ( | 9.3 | Stakeholders in Greece  | 15 |
| ( | 9.4 | Stakeholders in Italy   | 17 |
| ( | 9.5 | Stakeholders in Portugal  | 18 |
| ( | 9.6 | Stakeholders in Slovenia  | 19 |
| ( | 9.7 | Stakeholders in Spain   | 21 |

## 4 Project summary

The project addresses the development of an optimal policy for the effective integration of Renewable Energy Sources (RES) and Energy Storage Systems (ESS). The primary challenge is to achieve increased penetration of RES and predominantly photovoltaics (PV), in the energy mix of islands and rural areas in the Mediterranean (MED) region without compromising grid stability. The main objective of StoRES is to boost self-consumption in the MED region with the integration of optimal storage solutions. Testing coupled PV-ESS solutions in different pilot sites and taking into account local particularities for optimization, current barriers concerning grid reliability with higher RES deployment will be eliminated. In addition to this, the development and integration of the proposed solution at both residential and community levels and applying different policy scenarios will lift the barriers related to the grid integration of ESS and extend the practical knowledge about this technology. It is expected that all the shortcomings regarding the intermittent nature of PV energy for increased penetration into the energy mix will be addressed whilst maintaining smooth operation of the grid.

The project started on 1<sup>st</sup> of November 2016 and is expected to be completed within 36 months.

Deliverable 4.5.1 Page 4 of 21

#### 5 Introduction

The stakeholders' selection is an important project activity, as a good choice will determine the wide dissemination of the results obtained and, most of all, the application of the outcomes of the project.

The stakeholders' selection is based on the content, the expected results and the effects of the project, as well as the available resources, the objectives of the engagement, and the willingness or the ability of the stakeholders to engage and be involved to the project.

Moreover, a deep knowledge of the stakeholders (e.g., their activity, their interest and possible involvement and influence in the project) allows defining the best strategy to increase their interest in the project and involve them in the application of the main outcomes.

Their identification is a collaborative process of research, debate, and discussion that draws from multiple perspectives to determine a key list of stakeholders across the entire stakeholder spectrum.

The objective of the identification of the stakeholders during the StoRES project is reaching the relevant stakeholders (at least 20 stakeholders per country) that belong to different contexts from each country. A lot of interest is related to local authorities, since they are responsible for designing and implementing policies.

Once the stakeholders are identified, the best activity to involve them in the project will be defined. In particular, training courses will be organised. Through the trainings, stakeholders will be engaged with the proposed solution and convinced to adopt main guidelines and suggestions, leading to the next activity. The trainings will be organized in each participating country and coincide with other planned activities. Certificates of attendance will be provided by the project consortium. The contents, procedures, and quality assurance of the trainings will be common in all countries and agreed beforehand.

The deliverable report is organised as follows. In the first chapter, the selection and the classification of the stakeholders useful for the StoRES project is described. Then the contents of the training courses, conceived taking into account the heterogeneity of the stakeholders, are proposed. Finally, in the Annex, the list of the stakeholders identified in each country is reported.

Deliverable 4.5.1 Page 5 of 21

## 6 Stakeholder mapping process

The stakeholder mapping process aims at identifying which stakeholders need to be engaged in order to achieve the highest impact for the project. Stakeholders can be classified considering different aspects.

A first classification could be made considering where the stakeholders are situated and at what level their activity can impact in a country (that is their operating area).

A further classification could be done considering the stakeholders' activity and interests. Since the StoRES project involves different aspects, not only technical but also economical, behavioural and environmental features, different stakeholders, with different knowledge are recognised.

Finally, even if the results that will be obtained during the project should be stimulating for all the stakeholders, their interest could be different, and they need to be involved at different time and with different strategies. Thus, a third classification, considering the influence and the interest of the stakeholders in the ongoing project is developed.

In the following section the possible classification of the stakeholders is described.

#### 6.1 Geographical classification of the stakeholders

Since the StoRES project involves different countries from the wide MED region, in order to guarantee an appropriate representation and a wide dissemination of the knowledge achieved during the project, 20 stakeholders from each country will be selected.

An initial classification of the stakeholders could be done by taking into account their action area. With the aim of disseminating widely the results obtained, the stakeholders identified should belong and act either at national or at local level.

Thus, a first classification could be made considering:

- National stakeholders,
- Local stakeholders

#### 6.1.1 National stakeholders

The stakeholders belonging to this category are capable to change the national regulatory framework, allowing a higher ESS penetration in the power system with a top-down approach.

This stakeholder category includes not only policymakers (e.g. Ministry of Economic Development, Ministry of the Environment, etc.) but also utilities that act in a wide technical area, such as Distributed System Operators (DSOs), Regulatory Authorities or association of categories (e.g. Association of Solar PV community, independent consumer organisation, etc.).

These stakeholders could foster the following actions:

Deliverable 4.5.1 Page 6 of 21

- Dissemination and promotion of the project's results to other Ministries and regions and encourage them to adopt the proposed methodology,
- Promote the adoption of the proposed methodology at European level,
- · Mainstreaming adaptation into the relevant sectoral policies,
- Integration of the implementation of the adaptation measures to the national funds.

#### 6.1.2 Local authorities

The stakeholders belonging to this category are responsible for designing and implementing policies, benefiting from capacity building, and transferring of learning outcomes. This will empower them to contribute to eliminate obstacles that limit higher penetration of RES in the MED.

Entities like regions, neighbouring municipalities and relevant local and regional departments (e.g. Department of region for Information Education for Sustainability), but also professional association (e.g. Engineers Professional Association) belong to this category. This stakeholder category could promote the following actions:

- Decision making on the small-scale green infrastructure measures to be implemented,
- Dissemination and promotion of the project results to other provinces and encouraging them to adopt the proposed methodology,
- Mainstreaming adaptation into the relevant sectoral policies,
- Joint implementation of certain adaptation measures in the case of neighbouring municipalities,
- Adopting the proposed methodology,
- Provide the necessary information for recording the existing situation in the partner municipalities,
- Decision making on the future frames which be examined with respect to climate change.

#### 6.2 Identification of the working area of the stakeholders

As stated before, the previous classification allows identifying the operating area of the stakeholders. In order to determine which stakeholders are more suitable to contribute and which will be affected by the project, and therefore critical to be involved, it is important to identify their interests and roles in relation to the project and to prioritise them according to their importance to, and influence over, the project.

The stakeholders could be categorised into:

- 1. Citizens (and consumer organisations)
- 2. Policymakers (at local and national levels)
- 3. DSOs and Regulatory Authorities
- 4. Companies involved in the field of design and construction of environmental technologies and projects or providing consulting services

Deliverable 4.5.1 Page 7 of 21

5. Academic bodies, research institutes in the fields of environment, energy, engineering, etc.

All the necessary details of the identified stakeholder groups, reasons to involve them and reasons why they might be willing to engage in the project are summarised in Table 1.

Table 1. Reasons to involve the stakeholders and interest to be involved

| STAKEHOLDER<br>GROUP                        | REASON TO INVOLVE   | INTEREST/BENEFIT   |
|---|---|--|
| Citizens                                    | <ul> <li>Raise of awareness</li> <li>Exercising pressure on<br/>governments and companies</li> <li>Adoption of project<br/>outcomes</li> </ul>  | <ul><li>Economic benefits</li><li>Reduction of electricity costs</li><li>Protection from<br/>environmental degradation</li></ul>   |
| Policymakers<br>(local authorities):        | <ul> <li>Implementation and replication of project outputs</li> <li>Promote wider adoption and replication of the project outcomes</li> <li>Foster dissemination results</li> <li>Liaison with other entities</li> <li>Involvement of citizens</li> </ul> | <ul> <li>Increasing awareness</li> <li>Enhancing sustainability</li> <li>Funding opportunities</li> <li>Minimise financial risk of non-accounted factors</li> </ul>  |
| Policymakers:<br>(national<br>authorities): | <ul> <li>Implementation and replication of project outputs</li> <li>Foster dissemination results</li> <li>Involvement of citizens</li> </ul>  | <ul> <li>Opportunity to develop better policies based upon the project's outcomes</li> <li>Minimise financial risk of non-accounted factors</li> <li>Funding opportunities</li> <li>Protection from environmental degradation</li> </ul> |
| DSOs  | <ul> <li>Foster research</li> <li>Networking</li> <li>Sharing expertise</li> <li>Implementation and replication of the project's outputs</li> <li>Interest on results</li> </ul>  | <ul> <li>Opportunity to develop better policies based upon the project's outcomes</li> <li>Minimise financial risk of non-accounted factors</li> <li>Funding opportunities</li> </ul>  |
| Academic bodies                             | <ul> <li>Foster research</li> <li>Networking</li> <li>Sharing expertise</li> <li>Implementation and replication of the project's outputs</li> <li>Interest on results</li> </ul>  | New research opportunities     Networking     Potential collaboration  |
| Manufacturers                               | Foster dissemination of results   | Experience and best practices on the issues  |

Deliverable 4.5.1 Page 8 of 21

#### 6.3 Stakeholder engagement method

The literature on stakeholder analysis suggests a further classification, that considers the stakeholders' level of interest and level of influence on the project. The classification could be represented through a diagram, as it can be seen in Figure 1, characterized by four "boxes". Each of the four boxes represents the "level" of engagement, ranging from the lowest level ("inform"), through the middle levels ("consult" and "involve") to the highest level ("collaborate").

Table 1 can be a useful instrument for the selection of the engagement process of the stakeholders.

Figure 1 shows the possible classification of the stakeholders identified during this activity, starting from the aspects described in Table 1.

It is important to keep in mind that this classification is not strict, due to the fact that the interest or influence of a stakeholder may change as the project progresses. Therefore, there is a need to continuously reassess and identify the stakeholders and their level of engagement at different stages of the project.

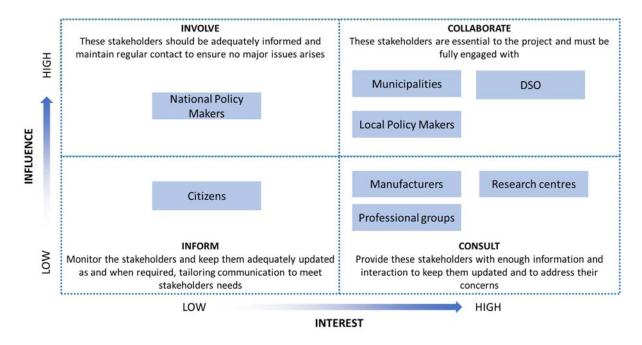


Figure 1. Stakeholder influence against the stakeholder interest

Deliverable 4.5.1 Page 9 of 21

## 7 Contents of the training courses

Once the stakeholders have been identified, it is possible to define the topics that will be covered in the training course.

The creation of the mapping table has allowed recognising heterogeneous stakeholders with different background and aims. This difference underlines the need of different contents that have to be covered during the training courses.

In order to take into account all these differences, the organisation of different training courses focused on the main interest of the stakeholders could be considered.

However, this does not imply that the training courses should be devoted only to one aspect, but the level of detail on the different topics has to be appropriate to the audience (e.g. business vs technical).

Thus, it is possible to identify two types of contents: common contents, which would be described in all the training courses, and specific contents, that will be discussed considering the audience.

#### 7.1 General contents

In the following section, the contents of the training courses that could be interesting for all the stakeholders involved are summarised.

#### 7.1.1 General context

- Description of the operating context;
- State-of-the-Art about (more emphasis should be placed on the topic of main interest for the audience):
  - o Regulatory aspects at European and National levels;
  - o Grid-connected energy storage:
    - Roles of storage in the electricity grid,
    - Essential elements life cycle phases and planning,
    - Business models,
    - Risks in energy storage.

#### 7.1.2 Description of the StoRES project

Main objectives

(Description of the aim of the project, expected outcomes);

· Partners and activities

(Brief presentation of the partners involved and their activities during the project);

Pilots

Deliverable 4.5.1 Page 10 of 21

(Description of the pilot characteristics).

#### 7.1.3 Study cases

It is possible to describe the most interesting study cases and present the initial results obtained:

- Project development,
- Project financing.

## 7.1.4 Project outcomes

The lesson learnt from the project can be described.

#### 7.1.5 General barriers and solutions adopted (adoptable)

Finally, the issues raised during the project and solutions adopted have to be described (more emphasis should be placed on the topic of main interest for the audience):

- Investment barriers and financial hurdles,
- · Lack of public perception and awareness,
- Lack of Demand Side policy,
- Policy incoherence, lack of legislation, standardization and public procurement schemes,
- Lack of cooperation.

#### 7.1.6 Open discussion of stakeholders about the lessons learnt

An open discussion among the stakeholders about the lessons learnt should be proposed.

#### 7.1.7 How to get involved

Finally possible collaboration, resources and forthcoming opportunities have to be presented.

#### 7.1.8 Evaluation of training

A final questionnaire in order to evaluate the effectiveness of the training course, can be proposed.

## 7.2 Specific topics following the categories of stakeholders identified

As stated above, each identified category is characterized by a very different background and aims. In order to increase the interest of the stakeholders in the project and persuade them to apply its outcomes, it is important to organise training courses that could be focused on their interest, not trivial as well as excessively difficult, capable to increase their knowledge in the sector.

In the following sections the main topics that could be analysed during the training courses are described.

Deliverable 4.5.1 Page 11 of 21

#### 7.2.1 Technical aspects

DSOs, equipment manufacturers, and trade associations and professional groups are mostly interested in technical and economic issues. Also people belonging to research institutes are interested in these fields. The lesson should not be extremely theoretical but focused on practical aspects.

During the presentation of the project, more details on the pilots and on technical aspects should be provided. For instance, the impact on the assets (e.g. contingencies if any), the benefits obtained, the greatest difficulties found and the support that they should provide in order to avoid them.

Also, comparison of the technical rules among the countries should be an interesting topic.

Finally, costs and revenues should be described in order to validate the strategy developed.

#### 7.2.2 Regulatory aspects

Stakeholders interested on this topic are governmental bodies at local and national levels. Suggestions about regulatory and financial aspects that should be promoted in order to foster ESS at domestic and at neighbourhood/community level have to be discussed.

Moreover, since the policymaker can promote a wider adoption and replication of the project outcomes, costs and revenues should be described in order to validate the strategy developed.

#### 8 Conclusions

This report provides a description of the activities related to the preparation of the training for the stakeholders. Starting from their classification based on their operating context (national or local) and their working area (e.g. research, legislation, technical, etc.), the possible methods for their engagement in the project and the contents of the training courses are proposed. A list of the stakeholders identified in each country, considering all these aspects, is provided.

Deliverable 4.5.1 Page 12 of 21

#### 9 Annex

In the following section, the stakeholders identified for each country are summarised.

For each stakeholder, its activity, its level of relationship and potential interest on the StoRES project are described. Moreover each stakeholder is identified by:

- **ASS** if the stakeholder is a trade association;
- CONS if the stakeholder is a consumer organisation;
- **DSO** if the stakeholder is a Distribution System Operator;
- **GOV** if the stakeholder is a governmental body (e.g. Province, Authority);
- MAN if the stakeholder is a manufacturer (e.g. Sonnen, Varta);
- REG if the stakeholder is a Regulator;
- **RES** if the stakeholder is a Research Institute.

For each stakeholder, its level of relationship and its level of interest is identified, using a scale from 1 (minimum level) to 5 (maximum level).

### 9.1 Stakeholders in Cyprus

Table 2 summarises the stakeholders identified in Cyprus at national and local level.

Table 2. Cypriot stakeholders

|  | NATIONAL STAKEHOL                     | DERS     |                       |                   |
|--|---------------------------------------|----------|-----------------------|-------------------|
| Stakeholder  | Details                               | Category | Level of relationship | Level of interest |
| Cyprus Energy Regulatory<br>Authority (CERA)                             | Cyprus Regulatory Authority of energy | REG      | 5                     | 5                 |
| Ministry of Energy,<br>Commerce and Industry<br>(MECI) – Energy Service  | Cypriot Ministry of energy            | GOV      | 5                     | 5                 |
| Ministry of Agriculture,<br>Rural Development and<br>Environment (MARDE) | Cypriot Ministry of environment       | GOV      | 3                     | 3                 |
| TSO - Cyprus   | Transmission System Operator          | TSO      | 5                     | 5                 |
| DSO - Cyprus   | Distribution System Operator          | DSO      | 5                     | 5                 |
| Electricity Authority of Cyprus (EAC)                                    | Market operator                       | GOV      | 5                     | 5                 |
| House of Representatives - Energy Committee                              | Parliament committee for energy       | GOV      | 4                     | 3                 |
|  | LOCAL STAKEHOLD                       | ERS      |                       |                   |
| Stakeholder  | Details                               | Category | Level of relationship | Level of interest |
| Cyprus Energy Agency<br>(CEA)  | Organization for renewables           | ASS      | 4                     | 3                 |
| Association of Renewable<br>Energy Companies of<br>Cyprus                | Association of companies              | ASS      | 4                     | 4                 |

Deliverable 4.5.1 Page 13 of 21

| Cyprus Association of<br>Renewable Energy<br>Enterprises (SEAPEK)            | Association of enterpirses        | ASS | 4 | 4 |
|--|-----------------------------------|-----|---|---|
| Cyprus Scientific and<br>Technical Chamber                                   | Scientific chamber                | ASS | 4 | 3 |
| Association of Mechanical<br>& Electrical and Energy<br>Consulting Engineers | Professional association          | ASS | 4 | 3 |
| Federation of Employers and Industrialists of Cyprus                         | Professional association          | ASS | 4 | 3 |
| Federation of Environmental Organizations of Cyprus                          | Association of organizations      | ASS | 3 | 3 |
| Union of Cyprus<br>Municipalities  | Union of municipalities           | ASS | 4 | 4 |
| Union of Cyprus<br>Communities   | Union of communities              | ASS | 3 | 3 |
| Cyprus Consumer<br>Association   | Independant consumer organisation | ASS | 3 | 3 |
| Cyprus Association of<br>Energy Saving Companies<br>(PASEEXE)                | Association of companies          | ASS | 4 | 3 |
| Cyprus Electrical Engineers Association                                      | Professional association          | ASS | 4 | 3 |
| Cyprus Wind Energy<br>Association  | Association of wind energy        | ASS | 3 | 3 |
| Cyprus Standardization Organization (CSO)                                    | Certification Authority           | ASS | 4 | 3 |

### 9.2 Stakeholders in France

Table 3 summarises the stakeholders identified in France at national and local level.

Table 3. French stakeholders

| NATIONAL STAKEHOLDERS                 |   |           |                       |                      |
|---------------------------------------|---|-----------|-----------------------|----------------------|
| Stakeholder                           | Details   | Category  | Level of relationship | Level of<br>Interest |
| INES                                  | National institute on solar energy  | RES       | 5                     | 5                    |
| CRE                                   | National regulator on energy  | REG       | 5                     | 3                    |
| Enerplan                              | National trade-union on solar energy  | MAN / ASS | 3                     | 3                    |
| Enedis                                | National distribution service operator                                      | DSO       | 5                     | 3                    |
| ATEE                                  | Technical association for energy and environment – working group on Storage | ASS       | 4                     | 3                    |
| ADEME                                 | National agency on energy   | ASS       | 4                     | 4                    |
| SOLARWATT, Fronius,<br>Solaredge, SMA | Storage manufacturer  | MAN       | 5                     | 4                    |
|                                       | LOCAL STAKEHOLDER   | RS        |                       |                      |
| Stakeholder                           | Details   | Category  | Level of relationship | Level of<br>Interest |
| Territoire Energie<br>Drome           | Local DSO in Drome district   | DSO       | 3                     | 4                    |
| AURA Digital Solaire                  | Regional union of companies of the solar sector                             | MAN / ASS | 3                     | 3                    |

Deliverable 4.5.1 Page 14 of 21

| Local energy agencies                                  | Give advices to citizes and municipalities on energy topics     | ASS  | 3 | 2 |
|--|---|------|---|---|
| Regional council                                       | Energy department of the regional council                       | GOV  | 3 | 2 |
| GPPP   | Grouping of small PV producers                                  | ASS  | 3 | 2 |
| Local energy communities                               | Involve citizens in energy production at a local sccale         | ASS  | 3 | 2 |
| PV installers  | Sell and install PV systems using self-consumption              | CONS | 5 | 4 |
| Regional "TEPOS"                                       | All the territories which are involved in an energy action plan | GOV  | 3 | 3 |
| Tenerrdis  | Regional cluster on innovation and energy transition            | CONS | 3 | 3 |
| PV design offices                                      | Regional engineering companies which design PV solutions        | CONS | 3 | 3 |
| Cluster Eco Energies                                   | Regional cluster on energy efficiency                           | CONS | 3 | 2 |
| Grenoble INP   | University specialized in smart-grid issues                     | RES  | 4 | 3 |
| Monitoring solution<br>developers (RTONE,<br>Monabee,) | Develop and sell EMS to monitor and control PV production       | CONS | 3 | 3 |

## 9.3 Stakeholders in Greece

Table 4 summarises the stakeholders identified in Greece at national and local level.

Table 4. Greek stakeholders

| NATIONAL STAKEHOLDERS   |  |          |                       |                      |
|---|--|----------|-----------------------|----------------------|
| Stakeholder   | Details  | Category | Level of relationship | Level of<br>Interest |
| RAE (Regulatory<br>Authority for Energy)                      | Regulatory Authority for Energy  | AUT      | 4                     | 4                    |
| HEDNO   | DSO  | DSO      | 5                     | 4                    |
| ADMIE   | Independent Power Transmission<br>Operator   | ADM      | 4                     | 4                    |
| LAGIE   | Operator of Electricity Market   | OPR      | 4                     | 3                    |
| CRES  | Greek organisation for<br>Renewable Energy Sources<br>(RES), Rational Use of Energy<br>(RUE) and Energy Saving (ES)  | GOV      | 5                     | 4                    |
| HELAPCO (Hellenic<br>Association of<br>Photovoltaic Companies | representing the major PV companies active in the production, trading, installation and maintenance of photovoltaic systems in Greece, represents the domestic market in international meetings and fora | ASS      | 5                     | 4                    |
| SPEF (Photovoltaic<br>Energy Producers<br>Association)        | Members of PV companies with PV installations above 20 kWp   | ASS      | 5                     | 4                    |
| SPIEF MND   | Energy producers association of no interconnected islands  | ASS      | 5                     | 4                    |
| CERTH (Centre of<br>Research & Technology<br>Hellas)          | Research institute   | RES      | 3                     | 3                    |

Deliverable 4.5.1 Page 15 of 21

| Ministry of Environment                     | Greek ministry of environment  | GOV  | 5 | 4 |
|---|--|------|---|---|
| and Energy                                  | and energy   |      |   |   |
| ELETAEN                                     | Greek Wind Energy Association  | ASS  | 5 | 4 |
| SEMICOM GP Hellas SA                        | Battery producer   | MAN  | 5 | 5 |
| Sunlight Reliable Battery<br>Solutions      | Battery producer   | MAN  | 5 | 5 |
| TSMEDE (Engineers professional association) | Professional association   | ASS  | 5 | 5 |
| ЕЕТЕМ                                       | Professional and Scientific Association of Engineers (Technological Direction) | ASS  | 4 | 3 |
| Fronius                                     | PV panel and inverter manufacturer   | MAN  | 5 | 5 |
| SMA   | PV panel and inverter manufacturer   | MAN  | 5 | 5 |
| Kostal                                      | PV panel and inverter manufacturer   | MAN  | 5 | 5 |
| KEN   | Provider of integrated electricity services                                    | CONS | 4 | 3 |
| Watt and Volt                               | Provider of integrated electricity services                                    | CONS | 4 | 3 |
| HERON                                       | Provider of integrated electricity services                                    | CONS | 4 | 3 |
| Elpedison                                   | Provider of integrated electricity services                                    | CONS | 4 | 3 |
| Protergia                                   | Provider of integrated electricity services                                    | CONS | 4 | 3 |
| NRG   | Provider of integrated electricity services                                    | CONS | 4 | 3 |
| Volterra                                    | Provider of integrated electricity services                                    | CONS | 4 | 3 |
| Green                                       | Provider of integrated electricity services                                    | CONS | 4 | 3 |
| Volton                                      | Provider of integrated electricity services                                    | CONS | 4 | 3 |
|   | LOCAL STAKEHOLDER  | RS   |   |   |

| Stakeholder  | Details  | Category | Level of relationship | Level of<br>Interest |
|--|--|----------|-----------------------|----------------------|
| Technological Research<br>Centre of Western<br>Macedonia                         | Supervised by the Greek Ministry of Education, Research and Religious Affairs                      | RES      | 5                     | 5                    |
| Hellenic Association of PV energy producers                                      | Members of PV owners (mainly in<br>northern Greece) with PV<br>installations between 20-100<br>kWp | ASS      | 5                     | 5                    |
| TCCI (local chamber of commerce and industry)                                    | Thessaloniki chamber of commerse and industry  | ASS      | 4                     | 3                    |
| CCWM (local chamber of commerce)   | Western Macedonia Commerce<br>Chamber  | ASS      | 4                     | 3                    |
| ACCI (local chamber of commerce and industry)                                    | Athens chamber of commerse and industry  | ASS      | 4                     | 3                    |
| SPEFWM (Photovoltaic<br>Energy Producers<br>Association of Western<br>Macedonia) | Part of SPEF   | ASS      | 5                     | 5                    |
| Municipality of Kozani   | Part of Western Macedonia region   | GOV      | 5                     | 5                    |
| SYFANET  | Pharmacy warehouse association   | ASS      | 5                     | 4                    |

Deliverable 4.5.1 Page 16 of 21

| Technical Chamber of      | Member of National Technical     | ASS | 4 | 5 |
|---------------------------|----------------------------------|-----|---|---|
| Kozani (TEE WM)           | Chamber                          |     | · |   |
|                           | The region hosts the majority of |     |   |   |
| Region of Western         | the energy industry and thus     | GOV |   | 4 |
| Macedonia                 | renewbale energy sources are     | GOV | 4 | 4 |
|                           | highly promoted                  |     |   |   |
| SHERDM                    | Electrical project constructors' | ASS | 4 | 4 |
| SHERDM                    | Association                      | ASS | 4 | 4 |
| Municipalities of Central | Belongs to Centran Macedonia     |     |   |   |
| and Western Macedonia     | and Western Macedonia            | GOV | 4 | 3 |
| and Western Macedonia     | Prefectures                      |     |   |   |

## 9.4 Stakeholders in Italy

Table 5 summarises the stakeholders identified in Italy at national and local level.

Table 5. Italian stakeholders

| NATIONAL STAKEHOLDERS  |   |          |                       |                      |
|--|---|----------|-----------------------|----------------------|
| Stakeholder  | Details   | Category | Level of relationship | Level of<br>Interest |
| ARERA (Autorità di<br>regolazione per energia<br>reti e ambiente)            | Italian Regulatory Authority<br>for Energy, Networks and<br>Environment                                       | AUT      | 4                     | 4                    |
| E-Distribuzione  | DSO   | DSO      | 5                     | 5                    |
| GSE (Gestore Servizi<br>Energetici)  | Energy Services Operator  | GOV      | 4                     | 3                    |
| Altroconsumo   | Independant consumer organisation   | CONS     | 5                     | 3                    |
| Ministry for Economic Development (Ministero dello Sviluppo Economico, MISE) | Italian Ministry for Economic<br>Development  | GOV      | 5                     | 3                    |
| ANCIM - Italian Small Island Association                                     | Italian Small Island<br>Association   | ASS      | 4                     | 3                    |
| Ministry of the<br>Environment   | Italian ministry of the<br>Environment  | GOV      | 5                     | 4                    |
| ANEV   | Italian Wind Energy<br>Association  | ASS      | 4                     | 4                    |
| Italia Solare  | The Association of the Italian Solar PV Community   | ASS      | 5                     | 5                    |
| Enea   | Research institute  | RES      | 4                     | 3                    |
| Sonnen Italia  | Energy Storage systems producer   | MAN      | 5                     | 4                    |
| Varta Italia   | Energy Storage systems producer   | MAN      | 5                     | 4                    |
| ANIE Rinnovabili   | Italian Electrical engineering and electronic Industry  | ASS      | 4                     | 4                    |
| ClimateHouse energy efficiency certification                                 | Certification Authority   | GOV      | 5                     | 3                    |
| AEIT   | Italian Association of<br>Electrical, Electronics,<br>Automation, Information and<br>Communication Technology | ASS      | 4                     | 4                    |

Deliverable 4.5.1 Page 17 of 21

| LOCAL STAKEHOLDERS  |   |          |                       |                      |
|---|---|----------|-----------------------|----------------------|
| Stakeholder   | Details   | Category | Level of relationship | Level of<br>Interest |
| Unione dei comuni della<br>Marmilla   | Association of the Municipalities of the Marmilla area    | ASS      | 5                     | 5                    |
| Departement of Energy   | Province of Oristano                                      | GOV      | 4                     | 4                    |
| INFEAS System<br>(Information Education<br>for Sustainability)  | Autonomous Region of<br>Sardinia /Province of<br>Oristano | GOV      | 4                     | 4                    |
| Engineers professional association  | Professional association                                  | ASS      | 4                     | 3                    |
| Industrial expert professional association  | Professional association                                  | ASS      | 4                     | 3                    |
| Sardegna Ricerche   | Research institute  | RES      | 4                     | 4                    |
| LAORE (Department for<br>the multifunctionality of<br>agricultural enterprises,<br>rural development &<br>agrifood chain) | Autonomous Region of<br>Sardinia                          | GOV      | 4                     | 4                    |

## 9.5 Stakeholders in Portugal

Table 6 summarises the stakeholders identified in Portugal at national and local level.

Table 6. Portuguese stakeholders

| NATIONAL STAKEHOLDERS                                   |  |          |                       |                      |
|---|--|----------|-----------------------|----------------------|
| Stakeholder   | Details  | Category | Level of relationship | Level of<br>Interest |
| ERSE - Regulatory Entity<br>for Energy Services         | Regulatory Entity for Energy, as well the operations activity of the electric mobility network.  | REG      | 4                     | 3                    |
| General Direction of<br>Energy and Geology<br>(DGEG)    | Body of the Portuguese Public Administration whose mission is to contribute to the design, promotion and evaluation of policies on energy and geological resources.  | GOV      | 4                     | 3                    |
| Ministry of the<br>Environment and Energy<br>Transition | The role of the Government of the Environment and Energy Transition is to formulate, conduct, execute and evaluate policies on the environment, urban planning, cities, transport, climate, nature conservation and energy with a view to sustainable development and social and territorial cohesion. | GOV      | 4                     | 2                    |
| REN - National Energy<br>Networks                       | TSO  | TSO      | 4                     | 3                    |
| EDP Distribution  | DSO  | DSO      | 5                     | 4                    |
| АРЕ   | Portuguese Energy<br>Association   | ASS      | 4                     | 4                    |

Deliverable 4.5.1 Page 18 of 21

|   | I   | 1                 |                       |                      |
|---|---|-------------------|-----------------------|----------------------|
| APREN   | Portuguese Renewable<br>Energies Association  | ASS               | 4                     | 4                    |
| ADENE   | National Energy Agency  | ASS               | 4                     | 4                    |
| IPES  | Portuguese Institute of Solar<br>Energy   | ASS               | 4                     | 3                    |
| APIGCEE   | Portuguese Association of<br>Large Electric Power<br>Consumers  | ASS               | 4                     | 3                    |
| MOBI.E  | National network of electric mobility   | ASS               | 4                     | 3                    |
| DECO  | Organization that represents and defends the Portuguese consumers   | CONS              | 4                     | 3                    |
| APISOLAR  | Portuguese Solar Industry Association   | ASS               | 4                     | 4                    |
| APIGCEE   | Portuguese Association of<br>Large Electric Power<br>Consumers  | REG               | 4                     | 3                    |
|   | LOCAL STAKEHOLD   | ERS               |                       |                      |
| Stakeholder   | Details   | Category          | Level of relationship | Level of<br>Interest |
| AMAL – Inter municipality<br>Community of Algarve         | Association of the Municipalities of the Algarve  | ASS               | 4                     | 4                    |
| CCDR Algarve  | Algarve Regional  |                   |                       |                      |
|   | Coordination and Development Commission   | GOV               | 4                     | 4                    |
| AREAL   |   | GOV               | 5                     | 5                    |
|   | Development Commission Regional Energy and Environment Agency of  |                   |                       | •                    |
| AREAL University of Algarve                               | Development Commission Regional Energy and Environment Agency of Algarve Higher Institute of  | ASS               | 5                     | 5                    |
| AREAL University of Algarve (UAlg)                        | Development Commission Regional Energy and Environment Agency of Algarve Higher Institute of Engineering (ISE) Division of Entrepreneurship   | ASS<br>RES        | 5                     | 5                    |
| AREAL University of Algarve (UAlg) CRIA (UAlg)            | Development Commission Regional Energy and Environment Agency of Algarve Higher Institute of Engineering (ISE) Division of Entrepreneurship and Technology Transfer Alcoutim Solar Energy             | ASS<br>RES<br>RES | 5 4 3                 | 5 5 3                |
| AREAL University of Algarve (UAlg) CRIA (UAlg) ENERCOUTIM | Development Commission Regional Energy and Environment Agency of Algarve Higher Institute of Engineering (ISE) Division of Entrepreneurship and Technology Transfer Alcoutim Solar Energy Association | ASS RES RES       | 5<br>4<br>3<br>4      | 5<br>5<br>3<br>5     |

## 9.6 Stakeholders in Slovenia

Table 7 summarises the stakeholders identified in Slovenia at national and local level.

Table 7. Slovenian stakeholders

| NATIONAL STAKEHOLDERS      |                                      |          |                       |                      |  |
|----------------------------|--------------------------------------|----------|-----------------------|----------------------|--|
| Stakeholder                | Details                              | Category | Level of relationship | Level of<br>Interest |  |
| SODO                       | Slovenian System operator            | REG/DSO  | 5                     | 5                    |  |
| Ministry of Infrastructure | Slovenian ministry of infrastructure | GOV      | 4                     | 3                    |  |
| Elektro Maribor d.d.       | DSO                                  | DSO      | 5                     | 4                    |  |
| PETROL d.d.                | Energy company                       | OTHER    | 5                     | 4                    |  |

Deliverable 4.5.1 Page 19 of 21

| Eko sklad j.s.             | Eco Fund, Slovenian             | GOV  | 5 | 5 |
|----------------------------|---------------------------------|------|---|---|
| ERO SKIGG J.S.             | Environmental Public Fund       | 307  |   | 5 |
|                            | Manufacturer of photovoltaic    |      |   |   |
| BISOL                      | modules and mounting            | MAN  | 3 | 5 |
|                            | systems                         |      |   |   |
| ZSFV Slovensko združenje   | Slovenian photovoltaic          | ASS  | 2 | 5 |
| fotovoltaike               | association                     | A33  | 2 | 5 |
| Svetovalci mreže ENSVET    | Energy Advisory Network         | GOV  | 5 | 4 |
| Institute of Energy        | Research institute              | RES  | 5 | 5 |
| Technology                 | Research histitute              | KL3  | 5 | 5 |
| Agencija za energijo       | Energy agency                   | GOV  | 3 | 3 |
| Slovensko združenje za     | Slovenian energy association    | ASS  | 3 | 4 |
| energetiko                 | Sloverilari erlergy association | ASS  | 3 | 4 |
| Društvo za trajnostno      | Sustainable energy group        | ASS  | 2 | 5 |
| energijo                   | Sustainable energy group        | A33  |   | 5 |
| Gospodarsko interesno      | Economic interest group for     | ASS  | 3 | 3 |
| združenje vetrne energije  | wind power                      | A33  | 3 | 3 |
| Portal Energija            | Web portal about energy         | CONS | 3 | 4 |
| Portal Trajnostna energija | Web portal about OVE            | CONS | 3 | 4 |
| Portal Energetika.Net      | Web portal about energy         | CONS | 5 | 4 |
| Portal Energetika.Net      | Web portal about energy         |      | 5 | 4 |

#### LOCAL STAKEHOLDERS

| Stakeholder  | Details  | Category | Level of relationship | Level of<br>Interest |
|--|--|----------|-----------------------|----------------------|
| ENERGAP  | Energy agency  | GOV      | 5                     | 5                    |
| LEA Sp. Podravje                                     | Energy agency  | GOV      | 5                     | 5                    |
| Zeleni razvojni preboj<br>d.o.o.                     | Private company, technical consultant  | MAN      | 5                     | 5                    |
| NP Power, Niko Leben s.p.                            | Private company, technical consultant  | MAN      | 5                     | 5                    |
| MRA - Maribor<br>Development Agency                  | public non-profit institution,<br>responsible for the<br>coordination of regional<br>development activities in the<br>Podravska region | GOV      | 4                     | 5                    |
| Development Information<br>Centre Slovenska Bistrica | Local development agency   | GOV      | 5                     | 4                    |
| Pomurski razvojni inštitut                           | Research institute   | RES      | 3                     | 3                    |
| Stroj, raziskovalni inštitut                         | Research institute   | RES      | 3                     | 3                    |
| Municipality of Slovenska<br>Bistrica                | Municipality in the Eastern<br>Slovenian region  | GOV      | 5                     | 3                    |
| Municipality of Makole                               | Municipality in the Eastern<br>Slovenian region  | GOV      | 4                     | 3                    |
| Municipality of Rače-Fram                            | Municipality in the Eastern<br>Slovenian region  | GOV      | 4                     | 3                    |

Deliverable 4.5.1 Page 20 of 21

## 9.7 Stakeholders in Spain

Table 8 summarises the stakeholders identified in Spain at national and local level.

Table 8. Spanish stakeholders

| NATIONAL STAKEHOLDERS   |  |          |                       |                      |  |
|---|--|----------|-----------------------|----------------------|--|
| Stakeholder   | Details                                    | Category | Level of relationship | Level of<br>Interest |  |
| Association of Spanish<br>Agencies for Energy<br>Management                       | Professional Association                   | ASS      | 3                     | 3                    |  |
| Ministry of Energy<br>Transition  | Government of Spain                        | GOV      | 3                     | 5                    |  |
| Ministry of Agriculture,<br>Food and Environment                                  | Government of Spain                        | GOV      | 3                     | 5                    |  |
| Institute for the<br>Diversification and Saving<br>of Energy (IDAE)               | Government of Spain                        | GOV      | 3                     | 4                    |  |
| Association of Renewable<br>Energy Companies-APPA                                 | Professional Association                   | ASS      | 3                     | 5                    |  |
| AEPIBAL - ASSOCIACIÓN<br>EMPRESARIAL DE PILAS,<br>BATTERIES AND ENERGY<br>STORAGE | Professional Association                   | ASS      | 1                     | 4                    |  |
|   | LOCAL STAKEHOLD                            | ERS      |                       |                      |  |
| Stakeholder   | Details                                    | Category | Level of relationship | Level of<br>Interest |  |
| Aragón Energy Cluster   | Professional Association                   | ASS      | 5                     | 5                    |  |
| Regional Ministry of<br>economy Employment and<br>Industry                        | Government of Aragón                       | GOV      | 5                     | 5                    |  |
| Regional Ministry of rural<br>development and<br>sustainability                   | Government of Aragón                       | GOV      | 5                     | 5                    |  |
| Technological Istitute of<br>Aragón   | Research Institution                       | RES      | 5                     | 3                    |  |
| Center for Energy<br>Resources and<br>Consumption Research (<br>CIRCE)            | Research Institution                       | RES      | 5                     | 5                    |  |
| Provincial Council of<br>Zaragoza   | Province of Zaragoza                       | GOV      | 4                     | 3                    |  |
| Provincial Council of<br>Huesca   | Province of Huesca                         | GOV      | 4                     | 3                    |  |
| Provincial Council of Teruel  | Province of Teruel                         | GOV      | 4                     | 3                    |  |
| Council of Cariñena   | Province of Cariñena                       | GOV      | 4                     | 3                    |  |
| College of Property<br>Administrators of Aragón                                   | Porofessional Association                  | ASS      | 4                     | 4                    |  |
| Energy Efficiency Cluster of<br>Aragón EFENAR                                     | Porofessional Association                  | ASS      | 3                     | 3                    |  |
| Aragón Energética   | Professional Association                   | ASS      | 5                     | 4                    |  |
| Andalucian Federation of<br>Muncipalities and<br>Provinces                        | Association of MunicIpalities of Andalucia | ASS      | 5                     | 4                    |  |
| Aragonese Federation of<br>Municipalities, Counties<br>and Provinces,             | Association of Municipalities of Aragón    | ASS      | 4                     | 2                    |  |

Deliverable 4.5.1 Page 21 of 21