ENERGee Watch

# M: 23 | D5.1 Replication and Exploitation Plan

**WP5**

**July 2022**

The ENERGee Watch project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under grant agreement no. 892089.

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## Preface

The overall aim of ENERGee WATCH is to launch an easy and replicable peer-to-peer learning programme to enable regional and local authorities to timely and accurately define, monitor and verify their sustainable actions. The learning will focus on regional/provincial authorities and their agencies that are responsible for collecting and overseeing the monitoring of mitigation and adaptation measure indicators in order to empower them to make use of best practices. The learning programme is structured in four (4) courses: i) data collection, ii) monitoring & verification, iii) indicators for adaptation to climate change, iv) data display, dissemination and validation by final users. ENERGee Watch will launch 4 courses per year (one per each topic, twelve in total) with a total of 72 participating mentees. The learning program will entail tools, such as mentoring, site visits, tailored guidebooks and guided practice exchange will enable the proper matching of peer groups, and proper knowledge replication.

| No | Participant Name | Short Name | Country Code | Logo |
|---|---|---|---|---|
| 1 | Institute for European Energy and Climate Policy (IEECP) | NETHERLANDS | NL | |
| 2 | European Federation of Agencies and Regions for Energy and Environment (FEDARENE) | BELGIUM | BE | |
| 3 | Technoeconomics of Energy and Environmental Systems Laboratory – University of Piraeus (UPRC – TEESlab) | GREECE | GR | |
| 4 | Auvergne-Rhône Alpes Energy Environment (AURA-EE) | FRANCE | FR | |
| 5 | Energy Agency of Savinjska, Šaleška and Koroška region (KSSENA) | SLOVENIA | SI | |
| 6 | Ile de France Regional Energy and Climate Agency (IAU IDF) | FRANCE | FR | |
| 7 | 3 Counties Energy agency (3 CEA) | IRELAND | IE | |
| 8 | Energy Agency of Plovdiv (EAP) | BULGARIA | BG | |
| 9 | Alba Local Energy Agency (ALEA) | ROMANIA | RO | |
| 10 | Cyprus Energy Agency (CEA) | CYPRUS | CY | |



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# Executive Summary

The overall aim of ENERGee Watch is to enable peer-to-peer learning for regional and local authorities and their energy agencies in order to precisely define, monitor and verify their sustainable energy and climate actions. Public authorities have varying levels of knowledge, skills, and capacity for sustainable energy solutions. As such, it is important to meet the diverse needs of different public authorities and to strengthen collaboration and engagement among them.

One of the key elements of the ENERGee Watch learning programme is to empower participants to learn from their peers and then to apply that learning in their own municipality or region, replicating the successful elements of the project/s they have been learning from, putting in place actions to address their specific challenges, and implementing various monitoring, reporting and verification processes

This Deliverable presents the Replication and Exploitation Plan developed, which is the output of the learning programme for participants. It is designed to provide guidelines for participants on the way to engage with external stakeholders when replicating their experience from the learning programme, their learning objectives, and the expertise of their mentor.

This Deliverable presents the methodology for developing the Replication and Exploitation Plan and highlights the approach that was followed using the Power-Interest Matrix as a stakeholder mapping technique. Finally, the specific activities and actions that form the Replication and Exploitation Plan are described in detail alongside a timeline of said activities.

| List of Abbreviations/Acronyms | |
|---|---|
| MRV | Monitoring, Reporting and Verification |
| SECAP | Sustainable Energy and Climate Action Plan |
| SA | Stakeholder Analysis |



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# 1 Introduction

Public authorities have varying levels of knowledge, skills, and capacity for sustainable energy solutions; from planning to financing and successful implementation (Salvia et al., 2021). As such, it is important to meet the diverse needs of different public authorities and to strengthen collaboration and engagement among them. Also, the policies for monitoring and verification are often formed on a national level and cities oftentimes do not have the capacity for setting up proper Monitoring, Reporting and Verification (MRV) practices and do not properly monitor the impact of their policies and implemented actions (Marques et al., 2016).

The overall aim of ENERGee Watch is to enable peer-to-peer learning for regional and local authorities and their energy agencies in order to precisely define, monitor and verify their sustainable energy and climate actions. The learning programme's main target are associations and networks of cities and regions and the learning process will be focused on how different sustainable energy and climate mitigation projects have been monitored and evaluated.

The Replication and Exploitation Plan, developed for ENERGee Watch will allow for the exploration of what worked well in each mentee's experience in the Learning Programme, to draw out replicable elements, working alongside and assessing the technical knowledge and expertise every stakeholder has to offer on the various MRV processes. Most importantly, it will serve as a source of ideas and inspiration for improvements against which the replication plan will be developed for everyone participating in the programme.

The plan will be addressed to local and regional authority employees and energy agencies staff members involved with the planning and implementation of MRV processes on the projects and programmes related to the local and regional' Sustainable Energy and Climate Action Plans (SECAPs), especially those who wish to lay groundwork for setting up data collection, monitoring and visualisation processes.

Finally, the Replication and Exploitation Plan will also serve as a roadmap to the learning programme providing clear guidelines on when, how and to whom to replicate the learning programme, and what potential options can be found in relation to the best practices and lessons learned identified. This will guarantee the establishment of relevant peer to peer learning programmes to other cities and regions, and will provide the necessary set up in order to run the new programmes in a cost-effective and structured manner.

The Replication and Exploitation Plan, first, involves a phase of stakeholder analysis, where a list of identified relevant stakeholders are evaluated by the ENERGee Watch participants based on their perceived levels of power and interest on a sustainable energy project. After the analysis, the knowledge gained and the best practices will be used to set up replication activities such as national events and webinars, where the most crucial stakeholders can be engaged with. The steps of the replication plan are detailed in Fig. 1.

The remainder of this deliverable is structured as follows:

- **Section 2** presents the methodological steps that are followed for the development of the Replication Plan for ENERGee Watch.
- **Section 3** provides a detailed overview of the stakeholder identification process and the resulting list of relevant stakeholders.



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- In **Section 4**, the stakeholder assessment process is described in further detail, using the online survey that was created and the power-interest matrix method targeted at categorising the stakeholders in groups, based on their perceived influence over a sustainable energy project.
- Then, in **Section 5**, the results from the survey are presented their implications are discussed.
- **Section 6** details the replication activities that are planned to be implemented based on the results from the previous steps.
- Finally, in **Section 7**, a brief discussion recapping the process of developing the Replication and Exploitation Plan, summarizes limitations, and indicates next steps for the work under WP5.



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# 2 Methods

The methodology developed is based on the stages of the learning programme to develop a short Replication and Exploitation Plan to support mentees in best utilising what they have learned to monitor, report and verify a sustainable energy project implemented in their region. It is designed to enhance the engagement with the stakeholders that are identified and evaluated through the Stakeholders Analysis (SA) process, along with other best practices and lessons learned throughout the learning programme.

The approach of SA is very useful when trying to comprehensively understand the relevant stakeholders' needs and objectives (Aly et al., 2019; Grimble & Wellard, 1997; Reed et al., 2009). SA provides an excellent foundation for developing a decision support tool (Bryson, 2004; Grimble & Wellard, 1997; Reed et al., 2009), because SA manages to identify key stakeholders and their interconnections, influence and objectives concerning decision-making (Aly et al., 2019).

The basic outline of the plan consists of two phases. First, the process of identifying the relevant stakeholders in the literature is carried out. Secondly, the process of the stakeholders' assessment takes place through an online survey and the power-Interest matrix method. All this, will, of course, facilitate the stakeholder engagement that will take place during the national events and the EU-level webinars that are planned to be organised later on, specifically in the last year of the project's lifetime. In parallel, a process of enabling the partners of the ENERGee Watch project to form and implement their own regional replication plan took place, by gathering information related to the partners' needs and facilitating the implementation of their envisioned activities.

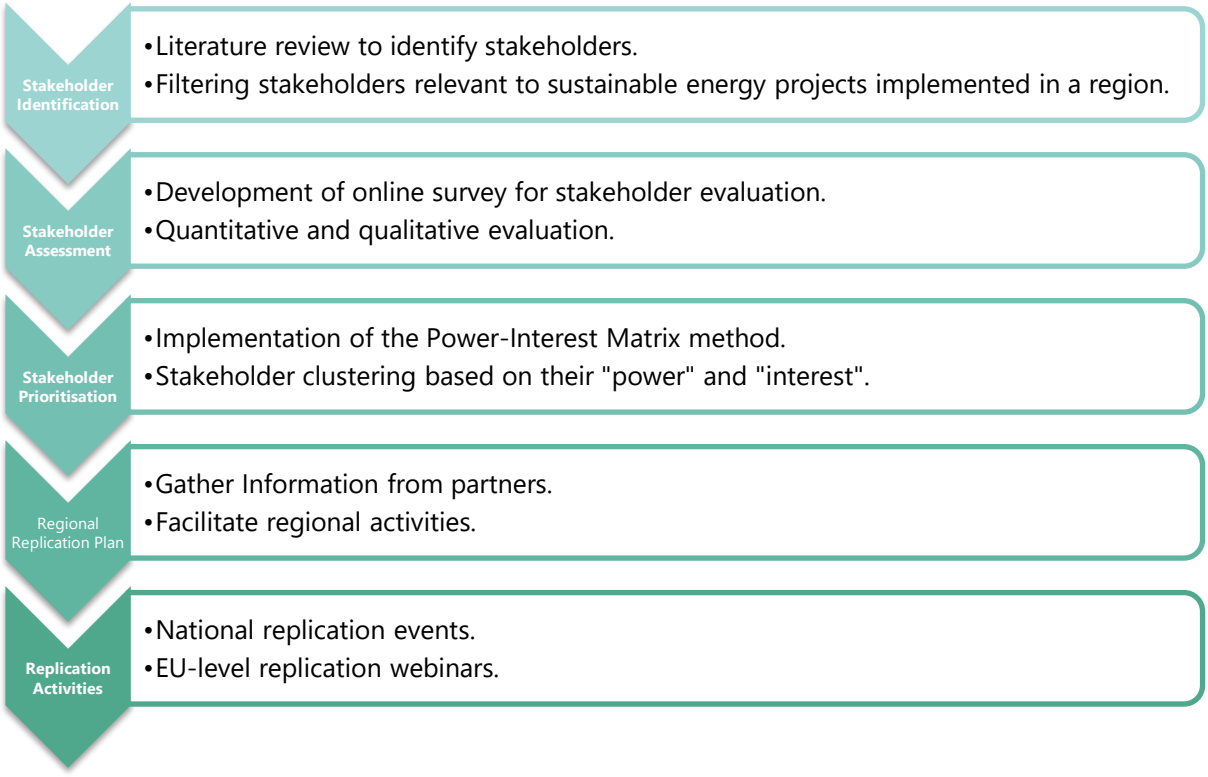


**Fig. 1 The steps of the Replication Plan**



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# 3 Stakeholder Identification

The first, and most vital, step of any SA is understanding who the stakeholders are (Aly et al., 2019; Grimble & Wellard, 1997; Reed et al., 2009). According to literature, a Stakeholder is defined as any individual or group who affects or is affected by operations of a company (Reed et al., 2009). For our study, a stakeholder is identified as anyone who can influence or be influenced by a sustainable energy project implemented in a given region. In order to identify all the interested parties, it is essential to take into consideration all people and/or groups of people who may affect and/or can affect and/or may have an interest in a sustainable energy project.

For this analysis, the initial list of identified stakeholders was produced by a desk research carried out by the authors. Based on the role each stakeholder plays in a sustainable energy project, the initial list of stakeholders that were identified in the literature is presented below:

- **Network of organisations:** This stakeholder super group plays a key role in any sustainable energy project by having political influence on both national and European level (Peter Andreasen & Sovacool, 2014).
- **Energy agencies:** This stakeholder category has a high impact on developing sustainable energy projects and producing and exchanging knowledge (Peter Andreasen & Sovacool, 2014).
- **Academia/R&D:** As a stakeholder group, research and academia plays a role in developing new technologies that can be implemented in sustainable energy projects (Jaegersberg & Ure, 2011; Peter Andreasen & Sovacool, 2014).
- **Utilities:** This stakeholder group can have a high impact by being a large player in any national energy system (Peter Andreasen & Sovacool, 2014).
- **DSOs/TSOs:** This particular stakeholder group, as a key player of the energy system, can greatly affect and be affected by sustainable energy projects implemented in a region, both positively and negatively. For example, these kind of projects can be implemented in regions where the energy network is not sufficient and facilitate the energy distribution (Ruggiero et al., 2014).
- **Energy producers:** This stakeholder group can potentially have a great effect and be greatly affected by sustainable energy projects, since these projects can have an impact on the energy prices (Ruggiero et al., 2014).
- **ESCOs:** This type of stakeholder group has long been recognised as an important component of any energy system as it provides solutions for sustainable project development and implementation services and in obtaining private-sector financing for energy efficiency and "clean energy" investments and related energy services (Hopper et al., 2007).
- **Governmental Institutions:** This type of stakeholders include all the national, regional and local authorities that are relevant to the development and implementation of sustainable energy projects. This stakeholder group can have an impact on the development of sustainable energy projects by providing funding for the implementation of said projects (Ruggiero et al., 2014).
- **Private sector:** In this stakeholder group both large commercial enterprises and local businesses are included. The private sector can be both supportive and hindering in the development of sustainable energy projects and it depends on whether the project development is seen as an business opportunity or a competitive force (Ruggiero et al., 2014).



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- **Observatories:** This type of stakeholder group contributes strongly towards building a representation of the regional impact on climate change and a framework for identifying areas of responsibilities and priorities for action, by providing data and improving knowledge about the region's situation on climate change (energy and information related to GHG).
- **NGOs:** This stakeholder group can be useful to engage with by providing a powerful alliance which helps establishing a dialog and motivating cooperative behaviour amongst the parties and can facilitate knowledge transfer (Matos & Silvestre, 2013).
- **General public:** The general population is a stakeholder group greatly affected by the energy system. For example, the development of regional sustainable energy system projects can affect the land use of a region, thus land owners can be affected by the conflict of interest caused by the expansion of renewables (Díaz et al., 2017). On the other hand, farmers can be benefitted from sustainable energy projects by being included (as producers) in the lifecycle of a project, namely the biodiesel supply chain (Matos & Silvestre, 2013).
- **Media:** This stakeholder group can potentially have an impact on the development of sustainable energy projects by filling in the role of opinion makers (Bukarica & Robić, 2013), thus shaping the public's opinion on the matter of the project development and implementation

After careful consideration and cross validation of the various stakeholder groups identified in the literature, the final list of stakeholder groups that will be used in the online survey is:

**Table 1 Final list of Stakeholder groups used in the online survey**

| Stakeholder Groups Identified | |
|---|---|
| Distribution System Operators (DSOs) | Energy Agencies |
| Transmission System Operators (TSOs) | National Observatories |
| Utilities | Regional Observatories |
| Energy Producers | Non-Governmental Organisations (NGOs) |
| National Authorities (e.g., Ministries) | Energy Service Companies (ESCOs) |
| Regional Authorities | Academia/R&D |
| Local Authorities | Building Owners |
| Industry | Farmers/Landowners |
| Small and Medium Enterprises (SMEs) | General Public |
| Financing Institutions/Banks | |



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# 4 Stakeholder Assessment

The next phase of the replication plan is to assess the stakeholders that were previously identified. This process is subdivided into two steps.

### Step 1: Online Survey

After the initial list of stakeholder groups is collected, an online survey is created in the Veri Tool that is filled in each of the three learning cycles of ENERGee Watch to evaluate and cluster the stakeholder groups. The survey is comprised from a quantitative and a qualitative assessment of the various stakeholder groups.

The participants of the survey are first asked to assess two characteristics of each stakeholder group to the best of their knowledge, the "power" and "interest". For this survey, the terms of "power" and "interest" are defined, as follows: a) the **Stakeholder Power** is the ability of the said stakeholder to exercise their influence on a project related to the implementation of MRV processes to achieve desirable outcomes and b) the **Stakeholder Interest** is the impact of a project related to the implementation of MRV processes and its development on the said stakeholder group, both positive and negative. The method of conducting this survey is by using the Likert scale (1-5) for each of the two characteristics. The scores of each stakeholder group's characteristics are then further analysed using the Power-Interest Matrix method.

Moreover, the survey participants are then asked to share a positive and/or negative experience they may have with each stakeholder group. With this qualitative assessment, useful conclusions can be extracted concerning the best practices that can be replicated when engaging with stakeholders beyond the lifetime of ENERGee Watch.

### Step 2: Power-Interest Matrix

The method of the power-interest matrix is widely used in the research fields of renewable energy (Ahsan & Pedersen, 2018) and energy planning (Alvial-Palavicino et al., 2011; Aly et al., 2019; Tsoutsos et al., 2009). It is a popular SA method defined as a top-down method for dividing stakeholders into four groups based on their relative power and interest. The Power-Interest Matrix can lead to the identification of stakeholders who have less influence over and lower interest in the project and, in turn, can be less prioritised in the analysis of the problem. Each of the four clusters represent a level of engagement, ranging from the lowest level (**Inform**), through the middle levels (**Consult** and **Involve**) to the highest level (**Collaborate**) based on Fig. 2



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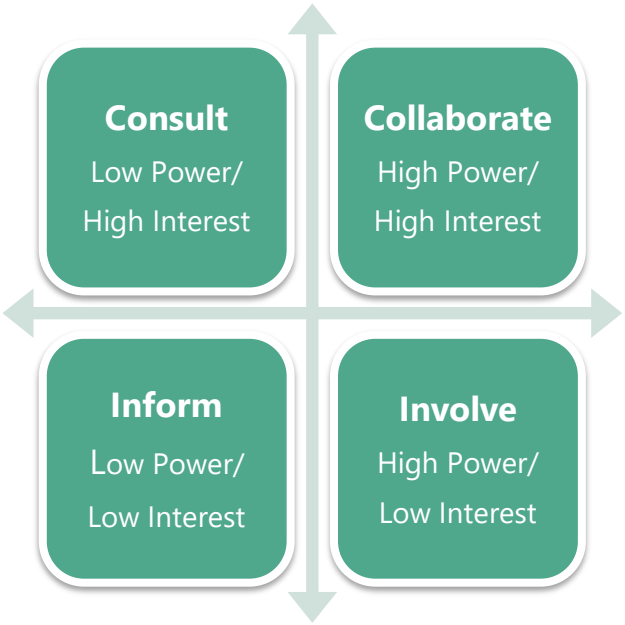


**Fig. 2 Groups of stakeholders as defined in the Power Interest Matrix**

The four individual clusters are further explained, concerning the stakeholders that are included in each one, below:

- **Collaborate** cluster: Stakeholders represented in this cluster are those with which it is likely to be most beneficial for the project to engage. They are identified as potential suppliers of relevant information and knowledge concerning MRV processes.
- **Involve** cluster: Stakeholders represented in this cluster are highly influential, but have little interest in the project or low capacity and or resources to engage. As a result, they may have significant influence over the success of ta sustainable energy project, but may be difficult to engage throughout the project process. To address this issue, particular efforts may be necessary to engage this group in the project and therefore the efforts should initiate as early as possible in the project process.
- **Consult** cluster: Stakeholders represented in this cluster are those that may have high interest but low power over a project and although by definition they could support the project, they lack the capacity to significantly contribute to the project and produce beneficial impact. Nevertheless, they may prove particularly useful by forming alliances with other more influential stakeholders. These are often the marginal stakeholders which are usually 'hard to reach', and that might require special attention to ensure their engagement and to empower them to equally engage in the project process with more influential stakeholders.
- **Inform** cluster: Stakeholders represented in this cluster are those who may have little interest in or power over project outcomes. In general, there is less need to consider them in much detail or to realize particular efforts to engage with them when the project resources are limited. Nonetheless, it is important to keep these stakeholders informed about the project's progress and important updates.



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# 5 Results

The online survey is carried out on the Veri Tool, the tool that is used to structure and implement the learning programme in the ENERGee Watch project.

The online survey is addressed to all the participants of ENERGee Watch, both mentees and mentors and structured around the stakeholder groups identified in the previous step. As shown in Fig. 3, for each stakeholder group the participants are asked to fill out four questions.

The two quantitative questions concern the assessment of the stakeholders' power and interest over a sustainable energy project, using a Likert scale with the addition of an "N/A" answer, hence the final scale of "1-6", with "2" denoting "Extremely Low" level, "6" denoting "Extremely High" level and "1" providing the "N/A" answer. The aim of these quantitative questions is to evaluate and prioritise the stakeholder groups based on their power and interest over a sustainable energy project, in order to better understand with which groups it is most beneficial to engage.

Moreover, there are two qualitative open questions, where the participants are asked to provide a positive and a negative experience the have had with the particular stakeholder group. These qualitative questions will further provide us with best practices concerning the process of engaging with stakeholders, giving useful advice on how to proceed with the stakeholder engagement process in future events.

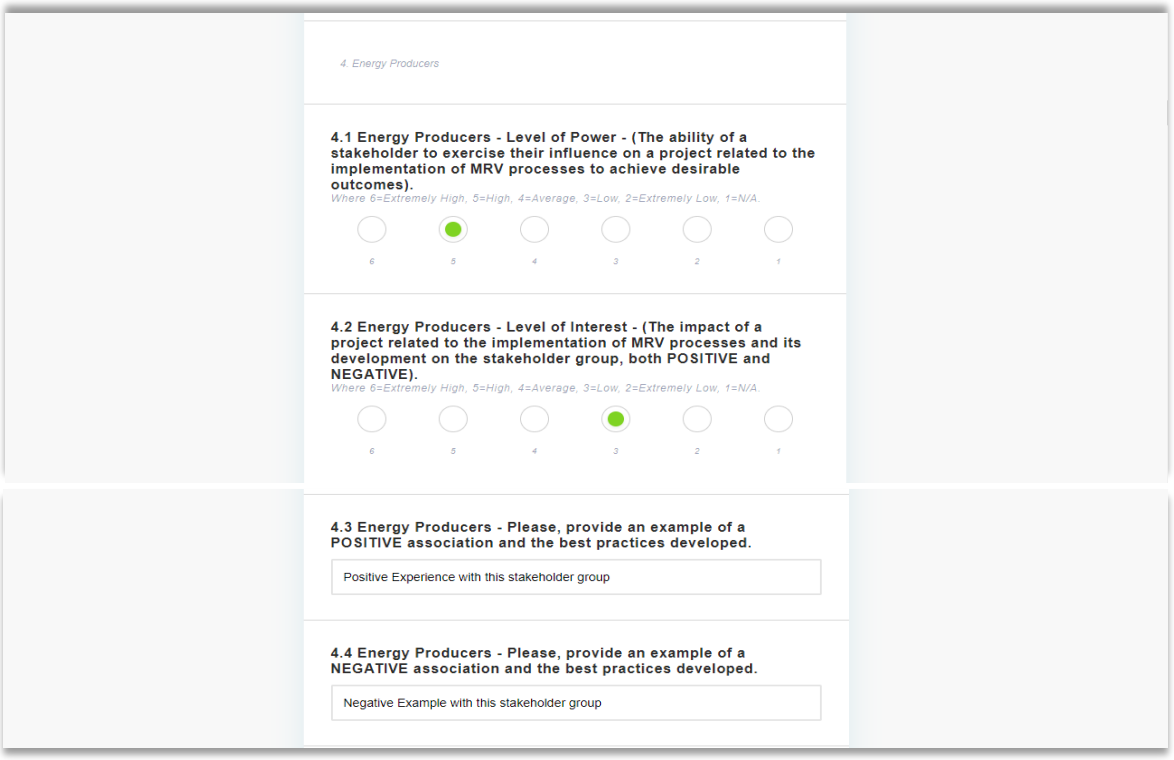


**Fig. 3 Example of the online survey as it is implemented on the Veri Tool**

## 5.1 Power-Interest Matrix

The survey is carried out during each learning cycle of the ENERGee Watch Learning Programme. Below



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the preliminary survey results of the first and second learning cycles are presented.

In general, there are 28 responses as of now. In some specific cases of stakeholder groups, the answers for the levels of power and interest were not provided, hence they were omitted in the calculation of the average levels of power and interest. Based on the remaining responses, the average level of power and interest for each stakeholder group is calculated and the final results are presented in the table below:

**Table 2 Average Levels of Power and Interest for each stakeholder group.**

| Stakeholder | Level of Power | Level of Interest | Stakeholder | Level of Power | Level of Interest |
|---|---|---|---|---|---|
| **DSOs** | 3.12 | 2.58 | **Energy Agencies** | 3.52 | 4.22 |
| **TSOs** | 2.96 | 2.40 | **National Observatories** | 3.17 | 3.65 |
| **Utilities** | 3.54 | 2.88 | **Regional Observatories** | 3.09 | 3.68 |
| **Energy Producers** | 3.37 | 3.12 | **NGOs** | 2.72 | 3.48 |
| **National Authorities** | 3.96 | 3.59 | **ESCOs** | 3.56 | 3.78 |
| **Regional Authorities** | 3.44 | 3.40 | **Academia/R&D** | 3.35 | 3.65 |
| **Local Authorities** | 3.29 | 3.75 | **Building Owners** | 2.81 | 2.63 |
| **Industry** | 3.26 | 2.74 | **Farmers/ Landowners** | 2.52 | 2.83 |
| **SMEs** | 2.67 | 2.37 | **Public** | 2.50 | 2.65 |
| **Financial Institutions/ Banks** | 3.11 | 2.65 | | | |

Below, in Fig. 4, the resulting average levels of power and interest for each stakeholder group are presented:



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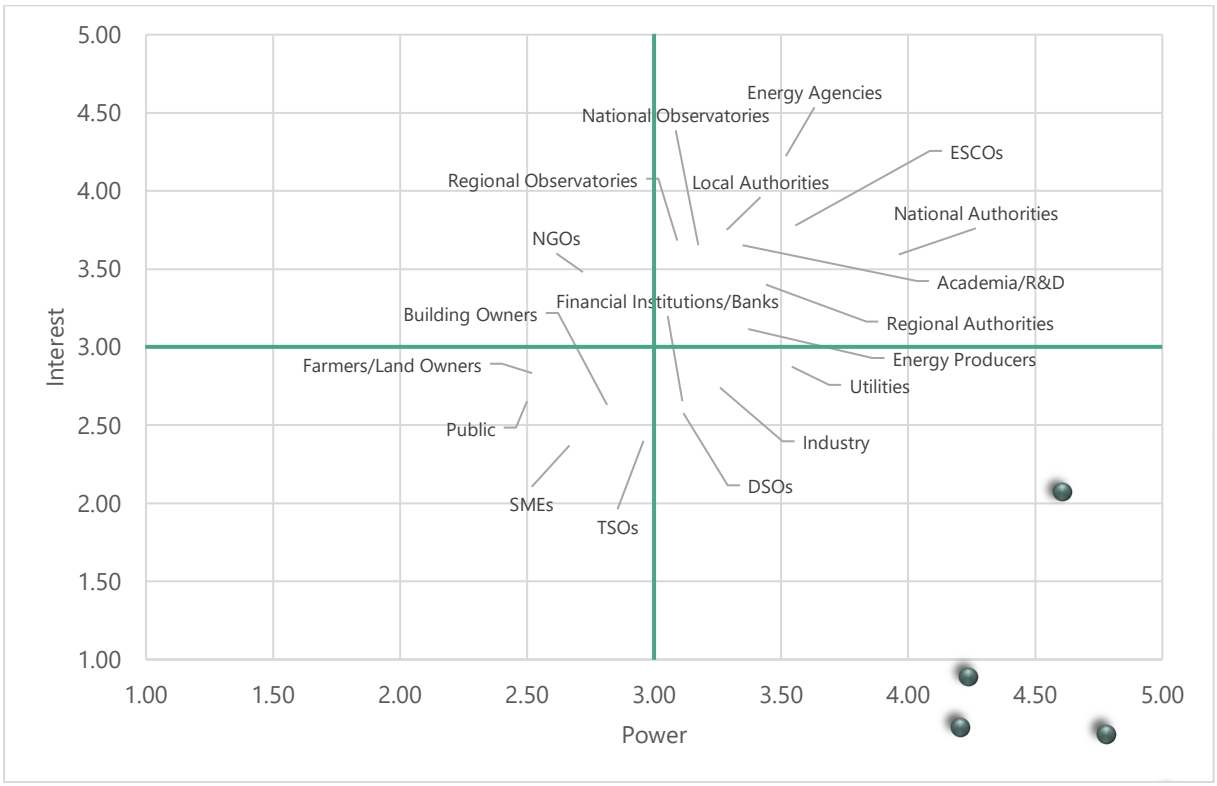


**Fig. 4 Average levels of power and interest for the various stakeholder groups.**

As it is evident from Fig. 4, the various stakeholder groups can be grouped together in the four groups analysed previously: **Collaborate, Involve, Consult** and **Inform**.

The various stakeholder groups are more or less evenly spread out across the four clusters with: nine (9) groups in the **Collaborate** cluster, one (1) group in the **Consult** cluster, four (4) in the **Involve** cluster and four (4) in the **Inform cluster**.

The four clusters with the included stakeholder groups are presented in Fig. 5, below:

| Collaborate | Consult | Involve | Inform |
|---|---|---|---|
| • National Authorities<br>• Regional Authorities<br>• Local Authorities<br>• Energy Agencies<br>• ESCOs<br>• Energy Producers<br>• National Observatories<br>• Regional Observatories<br>• Academia/R&D | • NGOs | • Utitlities<br>• DSOs<br>• Industry<br>• Financial Institutions/Banks | • SMEs<br>• Building Owners<br>• Farmers/Landowners<br>• Public<br>• TSOs |

**Fig. 5 The resulting clusters and the stakeholder groups that are included.**

For each of the stakeholder groups various methods of engagement are proposed below, based on the



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stakeholder's role, in general, and the results of the Power-Interest Matrix. These methods include both passive, such as Information Material and Social Media outreach, and active measures, such as Workshops and Interviews.

**Table 3 Engagement techniques proposed for the various stakeholder groups.**

| Engagement Technique | Information material | Website | Project events | Social Media | Press releases | Workshops | Interviews |
|---|---|---|---|---|---|---|---|
| Distribution System Operators (DSOs) | X | X | | X | X | | X |
| Transmission System Operators (TSOs) | X | X | | X | X | | |
| Utilities | X | X | | X | X | | X |
| Energy Producers | X | X | X | X | X | X | X |
| National Authorities (e.g., Ministries) | X | X | X | X | X | X | X |
| Regional Authorities | X | X | X | X | X | X | X |
| Local Authorities | X | X | X | X | X | X | X |
| Industry | X | X | | X | X | | X |
| Small and Medium Enterprises (SMEs) | X | X | | X | X | | |
| Financing Institutions/Banks | X | X | | X | X | | X |
| Energy Agencies | X | X | X | X | X | X | X |
| National Observatories | X | X | X | X | X | X | X |
| Regional Observatories | X | X | X | X | X | X | X |



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| Engagement Technique | Information material | Website | Project events | Social Media | Press releases | Workshops | Interviews |
|---|---|---|---|---|---|---|---|
| Non-Governmental Organisations (NGOs) | X | X | X | X | X | | |
| Energy Service Companies (ESCOs) | X | X | X | X | X | X | X |
| Academia/R&D | X | X | X | X | X | X | X |
| Building Owners | X | X | | X | X | | |
| Farmers/Landowners | X | X | | X | X | | |
| General Public | X | X | | X | X | | |

## 5.2 Stakeholder Engagement Experiences

As far as the qualitative questions are concerned, the responses that are gathered improve our understanding of how the participants have interacted with any of the aforementioned stakeholder groups in the past, and what have the participants have gained from said interaction.

Indicatively, some quotes from the participants regarding a positive and a negative experience they had with each stakeholder group, are presented in the table below:



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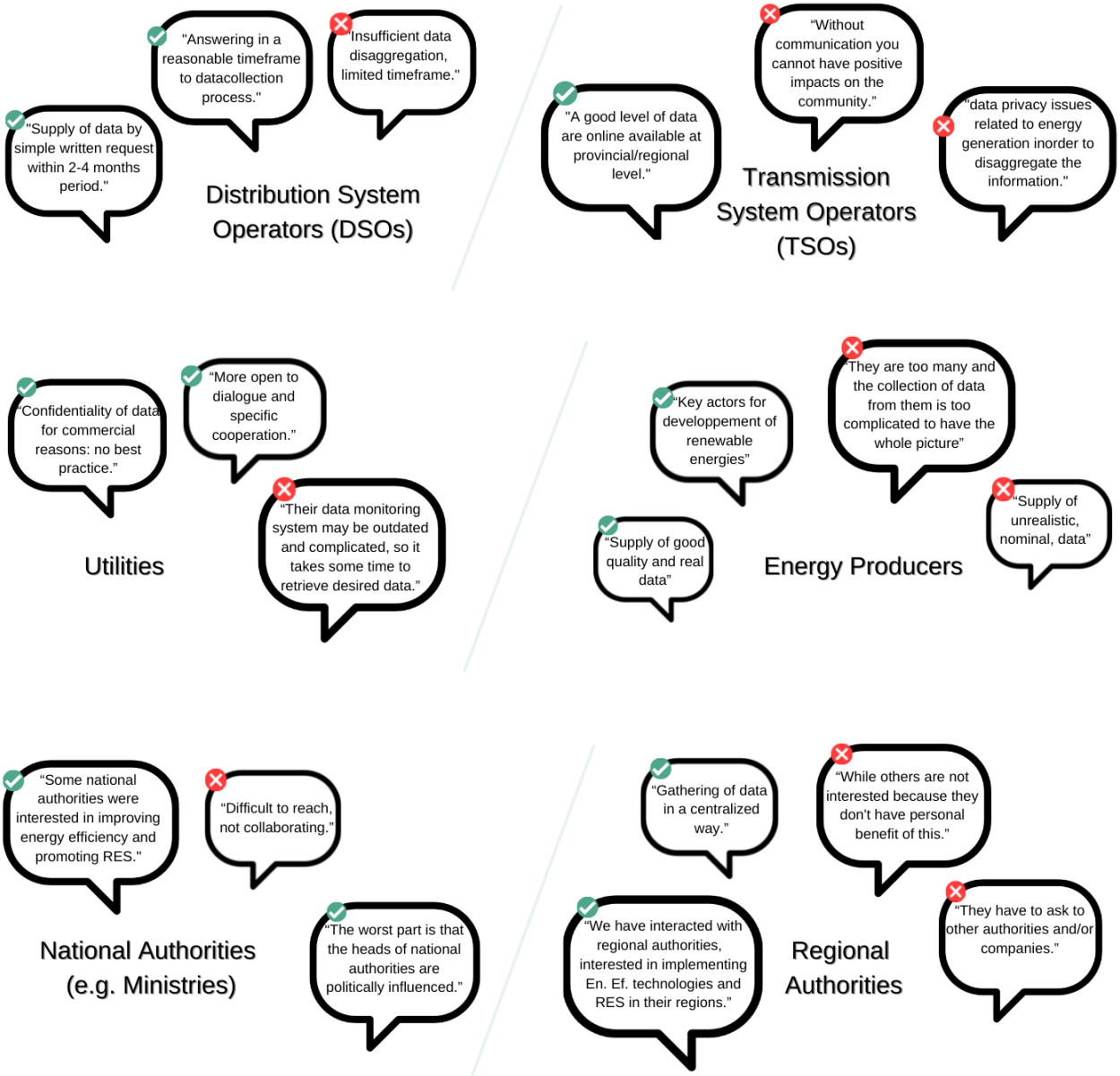




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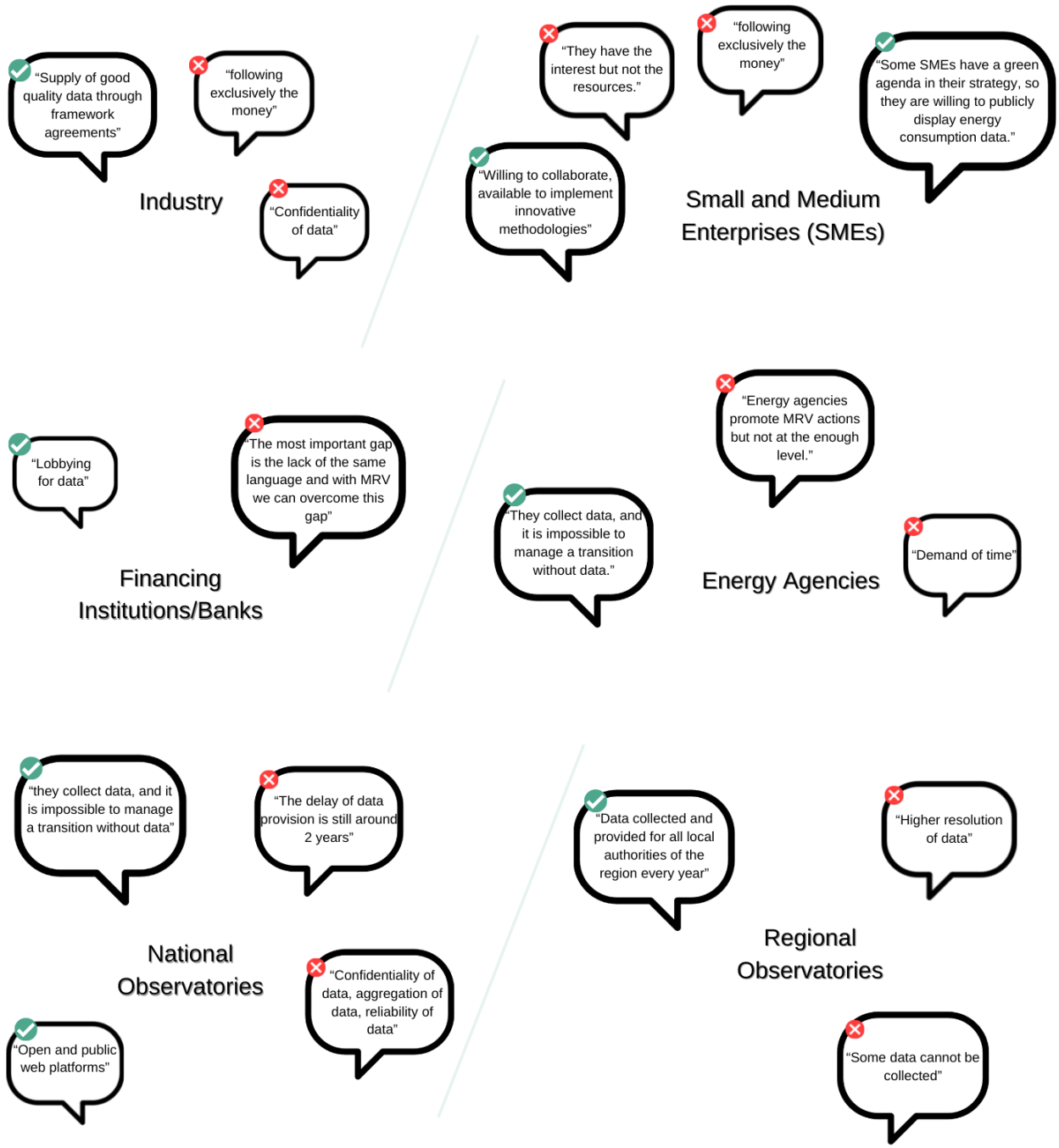




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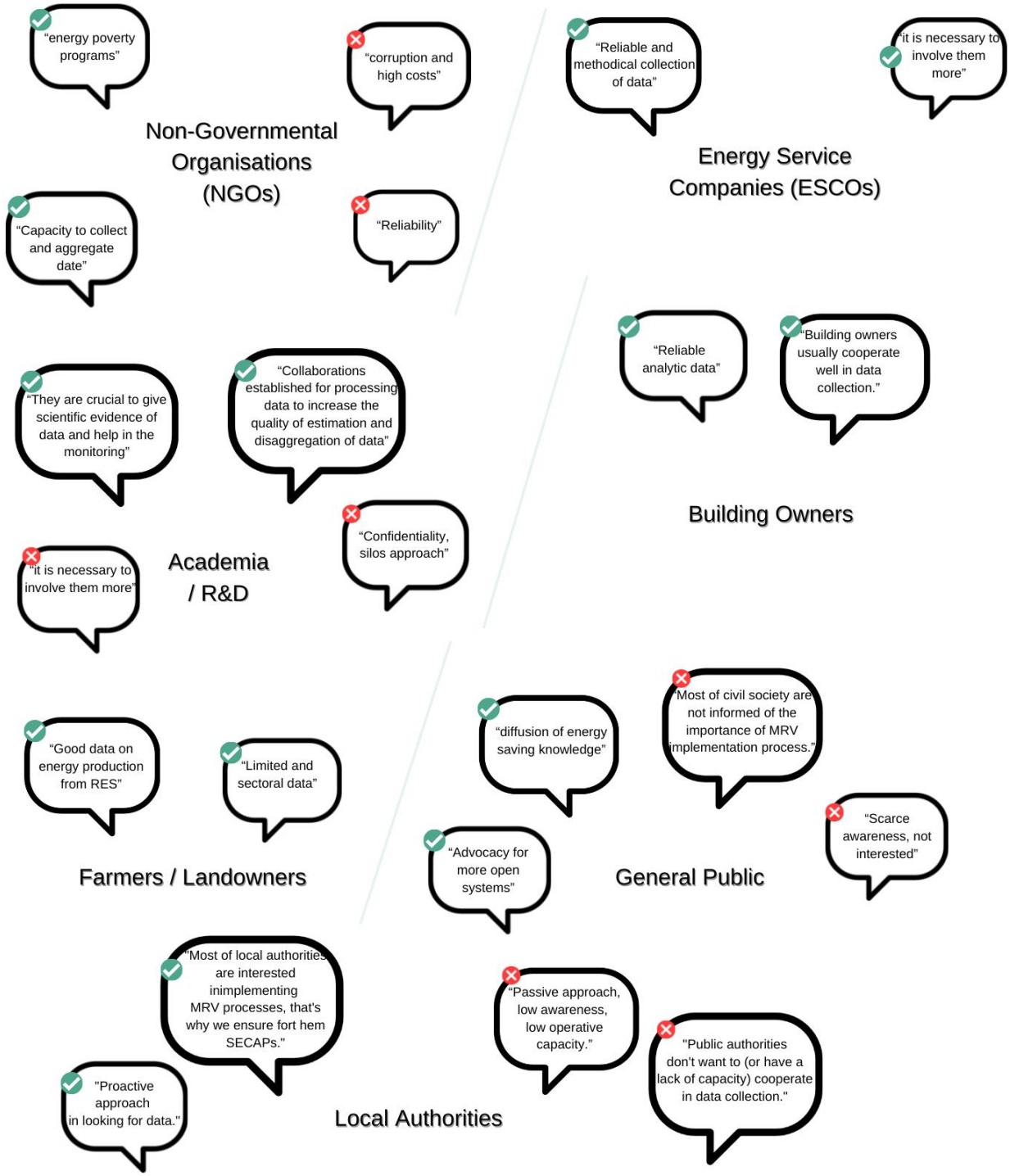


**Fig. 6 Quotes provided regarding previous experiences with the stakeholder groups.**

Based on the quotes presented in Figure 5, the majority of the participants are concerned with the energy data that the various stakeholder groups possess, both the quantity and the quality. It is noted that through their experience with the various stakeholder groups, such as DSOs/TSOs, energy producers, utilities, industry, energy agencies and observatories, the participants find useful the abundance of energy data, but also cumbersome to acquire these data, mainly due privacy reasons, conflicts of interest and administrative processes.



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Moreover, it is evident that some stakeholder groups, such as academia/R&D and the general public, need to be more involved in the implementation of various sustainable energy projects, due to the added value they can provide to the project, may it be through their technical expertise or the facilitation of the diffusion of the project's results.



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# 6 Replication and Exploitation Plan and Timeline of Activities

## 6.1 Timeline of Proposed Activities

In order to ensure that ENERGee Watch's results and outcomes are best diffused and ready to be replicated, a series of activities and material is planned to be created. All these activities and material comprise the Replication and Exploitation Plan for ENERGee Watch. An overview of the planned activities and material are presented in Fig. 7 below:

| EnergeeWatch project | February | March | April | May | June | July | August | Septemb | October | Novemb | Decemb | January | February | March | April | May | June | July | August |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2022 | | | | | | | | | | | 2023 | | | | | | | |
| **Replication - coordination between T5.1 and T5.2 and other WPs** | | | | | | | | | | | | | | | | | | | |
| LC2 is over (M24) | | | | | | | | | | | | | | | | | | | |
| LC 3 is over (M28) | | | | | | | | | | | | | | | | | | | |
| **Open call (T5.1) - regional agencies & authorities to express interest** | | | | | | | | | | | | | | | | | | | |
| preparation of call | | | | | | | | | | | | | | | | | | | |
| issuing of the call by the partners | | | | | | | | | | | | | | | | | | | |
| results of the call and summary of all replicators | | | | | | | | | | | | | | | | | | | |
| **National webinars** | | | | | | | | | | | | | | | | | | | |
| EAP: concept for the national events, preliminary/framework agenda, etc. | | | | | | | | | | | | | | | | | | | |
| EAP: registry/calendar for national events and its targets (excel-like) | | | | | | | | | | | | | | | | | | | |
| EAP: internal meeting on preparing the national events | | | | | | | | | | x | | | | | | | | | |
| Partners planning and preparation of national events - When? How (i.e. COVID)? Who? Online/offline? 7 events - BG, FR(2x), SI, IE, CY, RO, EL | | | | | | | | | | | | | | | | | | | |
| Partners: Implementation of national events | | | | | | | | | | | | | | | | | | | |
| Partners: Reporting on national events | | | | | | | | | | | | | | | | | | | |
| EAP: issue D5.3 Report on exploitation and replication activities, EAP (M36) | | | | | | | | | | | | | | | | | | | |
| **Learning Cycle Fiches** | | | | | | | | | | | | | | | | | | | |
| UPRC: concept for the fiches for the 4 Learning modules. See DoW description below | | | | | | | | | | | | | | | | | | | |
| UPRC+EAP: discuss and finalise the fiche concept (template) | | | | x | | | | | | | | | | | | | | | |
| Module leaders: provide input (LC1+LC2) | | | | | | | | | | | | | | | | | | | |
| UPRC: preparing the project fiches | | | | | | | | | | | | | | | | | | | |
| UPRC: Issue D5.2 Project fiches for each learning module, UPRC, M24 | | | | | | | | | | | | | | | | | | | |
| UPRC: update the fiches (if needed) with the module leaders | | | | | | | | | | | | | | | | | | | |
| **EU webinars** | | | | | | | | | | | | | | | | | | | |
| EAP: preparatory discussion with Coordinator on the 4 webinars | | | | | | | | | | | x | | | | | | | | |
| EAP: registry/calendar for EU webinars (excel-like) | | | | | | | | | | | | | | | | | | | |
| EAP: preliminary agenda and themes for the 4 webinars | | | | | | | | | | | | | | | | | | | |
| EAP+module leaders: discussion+finalisation of the webinars | | | | | | | | | | | | | x | | | | | | |
| EAP+module leaders: prepration of materials for the Webinars | | | | | | | | | | | | | | | | | | | |
| FEDARENE???: invitation to participants, link to meeting, etc. | | | | | | | | | | | | | | | | | | | |
| All: realisation of 4 webinars | | | | | | | | | | | | | | | 2 w | 2 w | | | |
| EAP: 4 evaluation reports (topics addressed, lessons learnt, level of progress achieved as a result of the exchanges, etc....) | | | | | | | | | | | | | | | | | | | |
| EAP: issue D5.3 Report on exploitation and replication activities, EAP (M36) | | | | | | | | | | | | | | | | | | | |
| T5.3 Recommendations & lessons learned | | | | | | | | | | | | | | | | | D5.4 | | |
| | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |

**Fig. 7 Timeline of replication and exploitation activities.**

The main activities and material that fall under the Replication and Exploitation Plan are:

- An **open call** for regional agencies & authorities to express interest for the replication events that will later take place (promoted through peer-to-peer communication, in workshops and other events, social media, etc.). An analysis/selection of regional/local energy stakeholders in different regions, as institutions, administrative authorities, energy agencies, clusters of medium and small enterprises (as identified in the previous step), who are interested in data collection and monitoring processes and are interested in adapting the practices and further develop them. The selection of interested parties will be based on criteria such as commitment, potential impact and replication potential.



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- The creation of **project fiches** based on mentees' information and experience to facilitate the learning exchange during the replication events. The fiches will contain (i) information about each regional organization, such as size, services provided, etc. (ii) best monitoring and verification developed and implemented by project partners per module and (iii) the barriers and the difficulties the regions faced while adapting the best or less successful practices.
- The **national** and **EU- level replication events** that will take place in the final year of ENERGee Watch. At national/regional level, energy agencies partners will have the possibility to work with their peers and/or municipalities to provide direct coaching and aim at replicating the ENERGee Watch (or part of) learning programme bringing their own experiences and best practices developed during the implementation of the learning programme. Moreover, at EU- level, the objective is to have constructive exchanges with other cities, regions, agencies and ensure the exploitation and further dissemination of ENERGee-Watch best practices and lessons learnt. The recruitment of participants will be done through the open call but will also allow the consortium to create opportunities for organisations that could not commit to the full programme, dropped out at some point or could not be selected in the learning programme.

## 6.2 Upscaling the Stakeholders Analysis Results

### 6.2.1 Open call

The first step towards the implementation of the Replication and Exploitation Plan will be the organisation of an open call for regional agencies & authorities to express interest for participation in both the national replication and European replication events. In particular, for the EU-level webinars there will be a more standard registration process in order to ensure that we offer our content to The open call is expected to start in October 2022 (M26) and end by November 2022 (M27) in order to align with Learning Cycle 3 activities. The open call will be disseminated mainly through the network of contacts of the partners and through the regular social media channels (e.g. LinkedIn, Twitter, etc.), with posts promoting the goals and objectives of the replication webinars and the overall aim of ENERGee Watch.

As part of the preparation for the open call, a process for selecting the applicants will be employed in order to ensure that the best-fit applicants are chosen for the events. During this process, the insights gained from the Stakeholder Analysis will be used to form criteria for the selection process. The overall aim is to have at least 25 eligible participants per EU-level webinar. Other relevant criteria that will enable the evaluation of the potential replicators are the country/region they operate in, their potential impact (e.g., their estimated GHG emissions and the expected reduction, their final energy consumption. All these criteria will ensure that the ENERGee Watch programme achieves its maximum replication potential, and is diffused in areas where the impact is substantial.

### 6.2.2 National Events and EU Webinars

For the last year of ENERGee Watch a series of replication events are planned to take place on national



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and EU level.

The first set of replication events will be national events held in each partner country with the aim of replicating the learning programme and disseminating the best practices at national/regional level . The second set of events are the Replication Webinars that will take place on EU level will be more focused on disseminating and diffusing best practices and lessons learnt during ENERGee Watch to other regions. More specifically, the EU Webinars are planned for Months 32 and 33 of the project, while the National events are left to the discretion of each partner as to when and how will they be organised.

With the collection of best practices and lessons learned throughout the project's lifetime, the EU events aim to bring together local and regional authorities across different regions of Europe and enhance knowledge transfer among non-participating regions, thus ensuring ENERGee Watch's legacy. Additionally, the replication events will provide, in return, best practices that can be used in the future.

The results of the previously conducted Stakeholder Analysis will be the cornerstone of these events, where it is essential to invite and engage with the most crucial players. With the stakeholder prioritisation groups that will be created from the power-interest matrix, it will be readily apparent which stakeholder groups are most crucial to engage with.

Finally, in order to assess the success of our Replication and Exploitation Plan, each project partner who will choose to organise said events in their region or the responsible organisation for the EU webinars will be asked to fill out a small table with the type of stakeholder that was invited to the event, some relevant information about the stakeholder and some best practices or lessons learnt from the experience. All this information will, of course, feed back into the Best Practices and Lessons Learnt database that will always be updated throughout ENERGee Watch's lifecycle. An example of this small table can be seen below:

**Table 4 Example of the table that the replication event organisers will be asked to fill out concerning the stakeholder engagement.**

<table>
<tr><th colspan="2">Organiser Info</th></tr>
<tr><td>Name:<br>Position/Role:</td><td>Email:<br>Telephone:</td></tr>
<tr><td colspan="2">Did you invite any member of the following stakeholder groups to the event that you organised? If so, please circle one or more answers. If not, please circle "N/A"</td></tr>
<tr><td colspan="2">• Distribution System Operators (DSOs)<br>• Industry<br>• Energy Service Companies (ESCOs)<br>• Transmission System Operators (TSOs)<br>• SMEs<br>• Academia/R&D<br>• Utilities<br>• Energy Agencies<br>• Farmers/Landowners<br>• National Authorities (e.g. Ministries)<br>• National Observatories<br>• Public<br>• Regional Authorities<br>• Regional Observatories<br>• Local Authorities</td></tr>
</table>



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| | |
|---|---|
| • Financing Institutions/Banks<br>• Building Owners<br>• Energy Producers | • Non-Governmental Organisations(NGOs)<br>• N/A |
| To the best of your knowledge can you provide the general info for each of the stakeholders you invited? | |
| Stakeholder 1:<br>Name:<br>Stakeholder Group: | Contact Info: |
| Stakeholder 2:<br>Name:<br>Stakeholder Group: | Contact Info: |
| … | … |
| Could you share a positive and/or negative experience from the engagement with the aforementioned stakeholder during the event? | |
| Stakeholder 1 Experience: | |
| Stakeholder 2 Experience: | |
| … | |

## 6.3 Regional Replication Plans

In order to best exploit the Learning Programme and general outcomes of ENERGee Watch, the partners were asked to fill out a preliminary regional replication plan specific to their needs and regions. To this end, a template was created to collect the relevant information in homogenous and harmonised manner. The template is presented below in Table 4.

**Table 4 Template for the collection of the partners' regional replication plans.**

| **Regional Replication Plan** | |
|---|---|
| Name:<br>Position/Role:<br>Organisation: | Email:<br>Telephone: |
| What do you hope to gain from the ENERGee Watch project as far as your region is concerned? | |



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| |
|---|
| |
| How do you plan to replicate the ENERGee Watch project in your region? Please provide a basic outline of actions, activities and good practices that you plan to implement to replicate the project's methodology in your region. |
| |
| How do you plan to replicate the ENERGee Watch results from the learning programme (e.g. shared knowledge from the courses, good practices developed, etc.) in your region? |
| |
| Is there any specific tool (e.g. web-tool, model, etc.) presented during the learning course that you plan to include in your regional replication plan? Please provide the necessary data/information for the tool (e.g. documentation, source code, promotional material, etc.) |



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| |
|---|
| |
| Regarding the national replication events that are planned for the late stages of ENERGee Watch, which of the following stakeholder groups do you plan to invite and engage with at these events? |
| • Distribution System Operators (DSOs)<br>• Industry<br>• Energy Service Companies (ESCOs)<br>• Transmission System Operators (TSOs)<br>• SMEs<br>• Academia/R&D<br>• Utilities<br>• Financing Institutions/Banks<br>• Building Owners<br>• Energy Producers<br>• Energy Agencies<br>• Farmers/Landowners<br>• National Authorities (e.g. Ministries)<br>• National Observatories<br>• Public<br>• Regional Authorities<br>• Regional Observatories<br>• Local Authorities<br>• Non-Governmental Organisations(NGOs)<br>• N/A |
| Regarding the national replication events, which actions do you aim at replicating in the national event and how (e.g., interactive presentations, focus groups, etc.) |
| |
| Please, provide any other comments you feel are necessary, regarding replication activities in your region. |



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With this template, we were able to gather the relevant information concerning the partners' needs and how they envisage to replicate ENERGee Watch in their region. In particular, we were able to gather information about what are their general objectives and goals, what activities/events they are planning, specific tools they want to upscale and/or replicate, etc.

More specifically, regarding the partners' goals and the general direction they envisage taking in exploiting the learning programme's results and outcomes, a common theme amongst the mentors was the goal to enable their region to develop more effective, well-grounded and evidence-based SECAPs, with better data management and monitoring systems in place, while also enhancing the local stakeholder engagement. Moreover, the mentors highlighted the importance of the personal communication and exchange of practical experience, that will enable the development of high quality SECAPs and provide tailored training material addressing the challenges/barriers of the local authorities, such as practical templates and examples. This personal communication is envisaged to take place not only in the EU- level webinars, but more importantly in the National Replication events that will be organised in each partner's region.

The learning programme was also an opportunity to test different tools and methods, which can help participants acquire the different concepts related to adaptation. The feedback we have received on the more interactive modules are thus helpful in selecting the methods, which will be replicated at a regional level. Furthermore, the partners, expressed their desire to see some of the tools that they have in their arsenal being diffused and expanded in different regions and contexts. Examples of these tools include the card game **"Climate at stake"** which provides a way to identify the main stakes and to reflect on a strategy and actions in order to cope with the identified stakes, an excel-based tool, developed by the Cyprus Energy Agency, called **LOCAL ENERGY BALANCES** for the calculation of local (Municipalities and Communities) Energy Balances in Cyprus (in toe) and energy modelling and forecasting, the **Climate Adapt tool** developed by the European Commission[1], and finally the TerriSTORY tool[2] (Fig. 8), developed by AURA-EE, which enables the dynamic visualisation of territorial energy, climate and economic data and definition of future trajectories, identifying potential and measuring impacts.

[1] https://climate-adapt.eea.europa.eu
[2] www.TerriSTORY.fr



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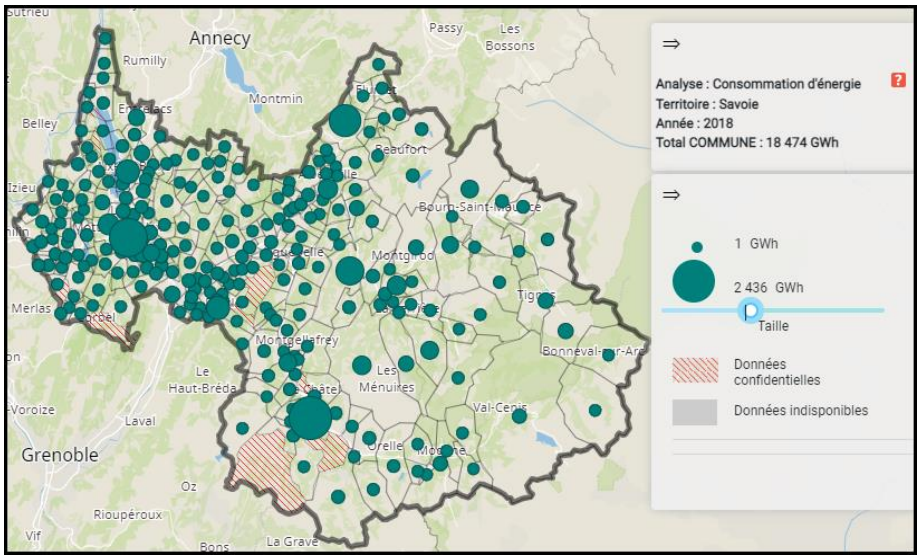


**Fig. 8 Example of the TerriSTORY layout, currently with French territories.**

## 6.4 Best Practices and Lessons Learned

Throughout the whole implementation of the ENERGee Watch Learning Programme, the collection of best practices and lessons learned from the mentees will be carried out in various stages of the learning programme. The best practices and lessons learned will concern various aspects of the mentees' experience with MRV processes and stakeholder engagement.

One key way of collecting these qualitative data is through the Stakeholder Assessment survey that will be carried out in each learning cycle. In the survey, the participants are asked to provide qualitative examples of previous engagements with the various stakeholder groups, whether positive or negative. From these qualitative data, useful conclusions can be extracted and a cohesive database of best practices and lessons learned can be created concerning the stakeholder engagement process. As a result, this database can be used to provide advice to other participants on how to approach and engage with various stakeholder groups from their region.

In addition, similar processes on best practices and lessons learned collection are established in other WPs of ENERGee Watch. Specifically, in WP4 the task T4.2 "Database of M&V best practices" concerns the collection and compilation of examples of best practices by monitoring the learning exchanges, as well as noticing common issues that the cities are dealing with.

All of the above will feed into a unified Best Practices & lessons Learned Database that will be prepared for T5.3 "Recommendations & lessons learned", during the last months of ENERGee Watch.



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# 7 Discussion

In developing a Replication and Exploitation Plan, it is important to consider the general goal of ENERGee Watch to facilitate peer-to-peer learning for regional and local authorities in order for them to precisely define, monitor and verify their sustainable energy and climate actions. Through the approach that was followed, we set out to best consider the needs and desires of all participants for their region, mentors and mentees alike.

Through the SA process that was implemented, useful insights were gathered concerning the stakeholder engagement activities that are envisaged to take place moving forward. The first step, which was the identification of relevant stakeholder groups through desk research yielded a comprehensive list of stakeholder groups, that were later ranked according to the power they exert on and the interest they have in a sustainable energy project. This ranking was based on the views and perspectives of both mentors and mentees, through the online survey that was carried out.

At his point it is important to acknowledge the fact that this survey is somewhat limited in scope, with only 28 participants so far, but the responses still bring valid points and insights to the stakeholder engagement processes that will enable the replication activities. In particular, the nuanced qualitative responses regarding past experiences with the various stakeholder groups highlight different details that should be considered during the replication activities, such as the national events and EU- level webinars.

Furthermore, a set of various replication activities alongside a timeline for their implementation were developed. In particular these activities entail the **open call** for the regional agencies & authorities, in parallel with other stakeholders, to express interest for the replication events that will later take place, the development of **project fiches** based on mentees' information and experience to facilitate the learning exchange during the replication events, and finally, the **national** and **EU-level replication events** that will take place in the final year of ENERGee Watch.

Moving forward, the next step for the work carried out under WP5 is, of course the implementation of all the activities mapped out in the Replication and Exploitation Plan, taking advantage of the SA results and insights, and making sure that we can collect further best practices and useful lessons at each step of the process, that can live on and empower future replicators beyond the end of ENERGee Watch.



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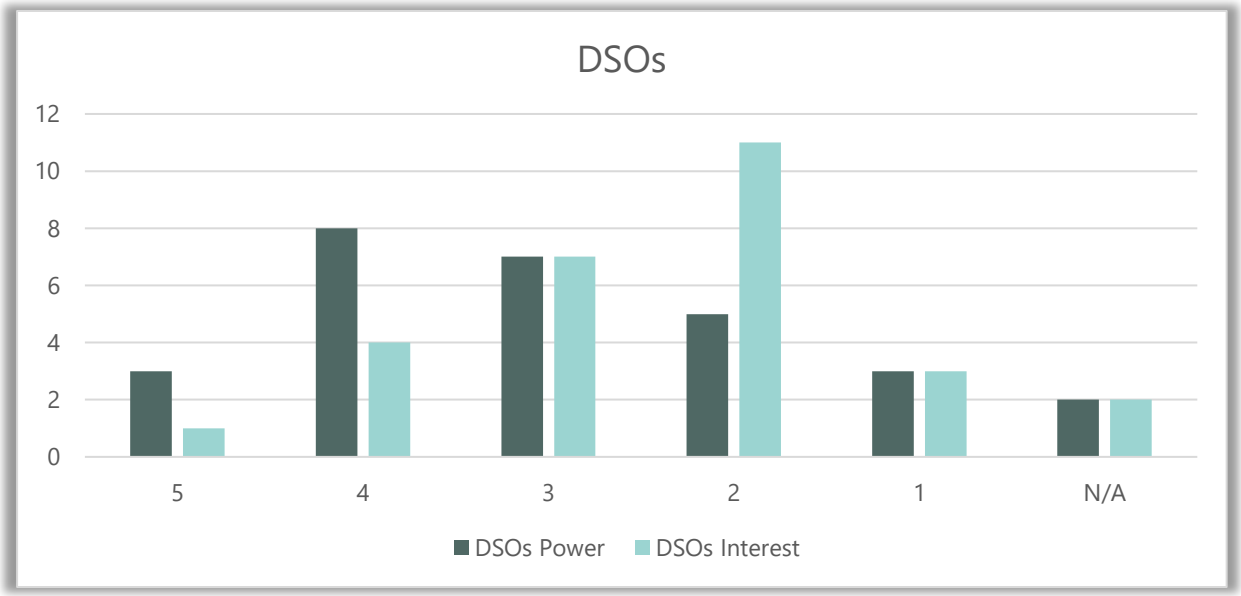
# Appendix A

## Survey Results

Below, the distribution of responses for the levels of power and interest for each stakeholder group are presented:







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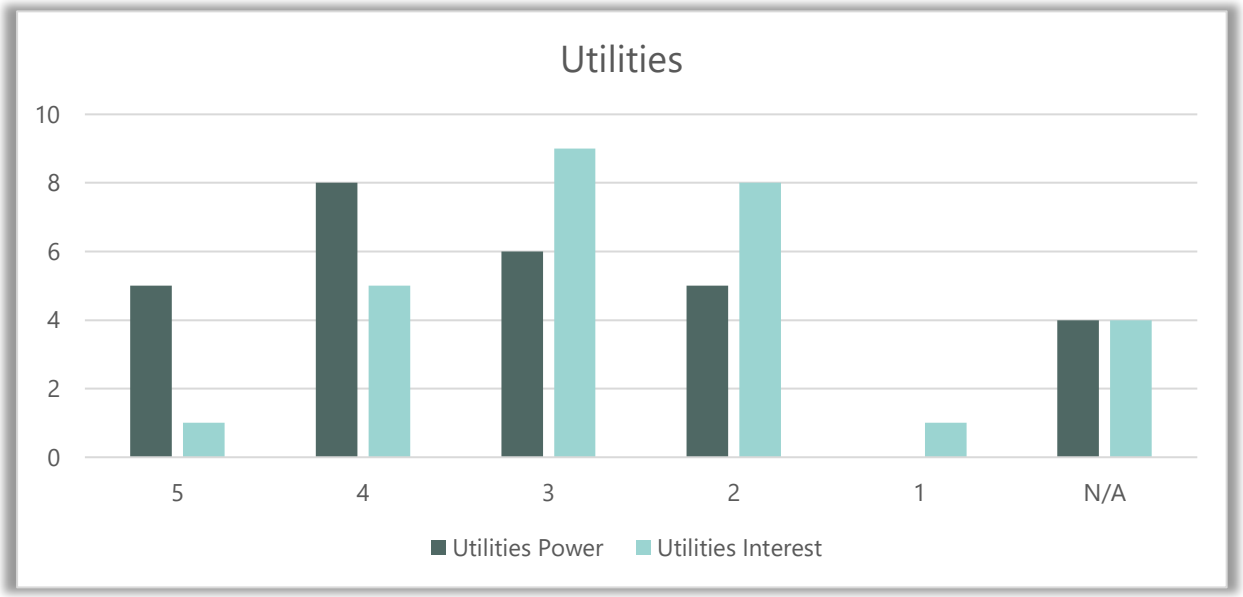


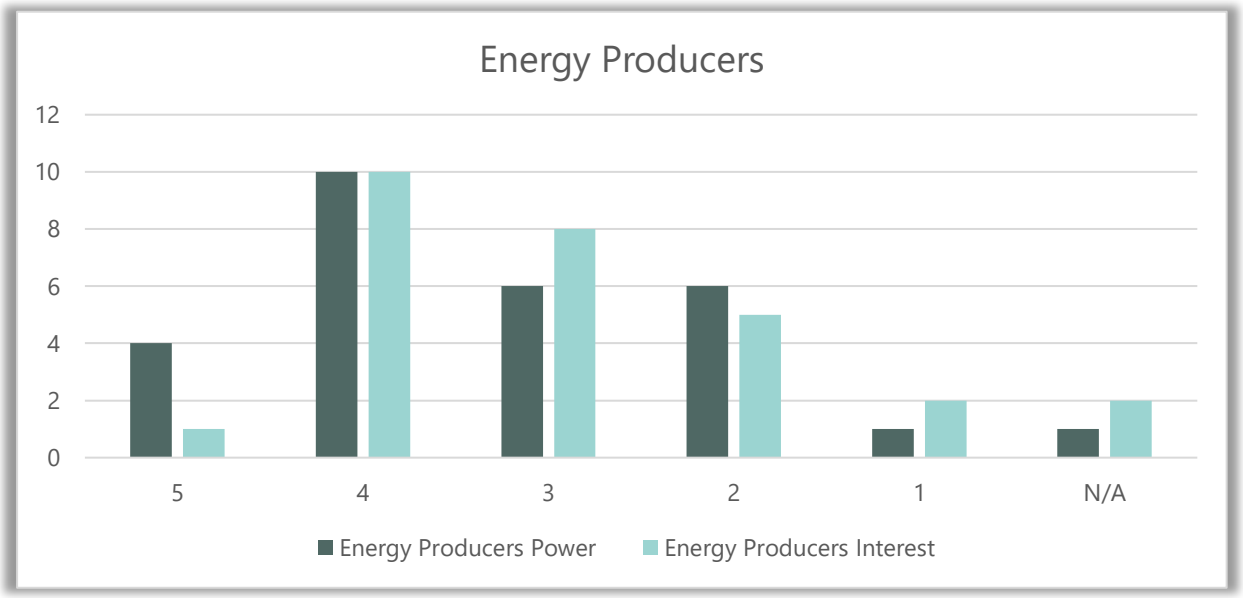




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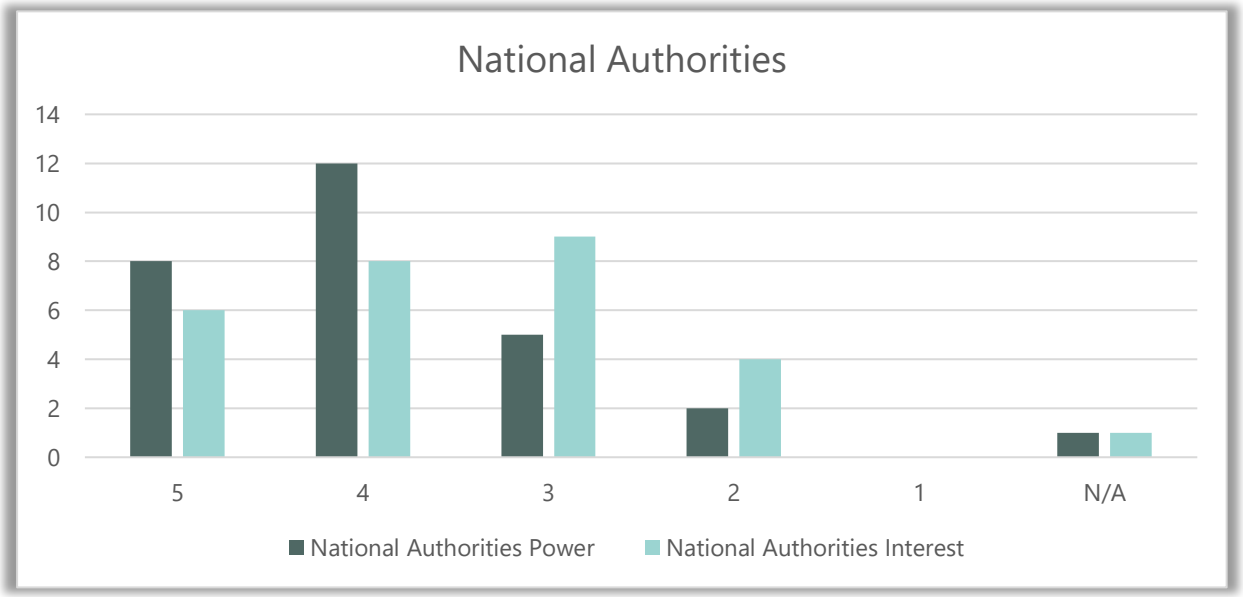


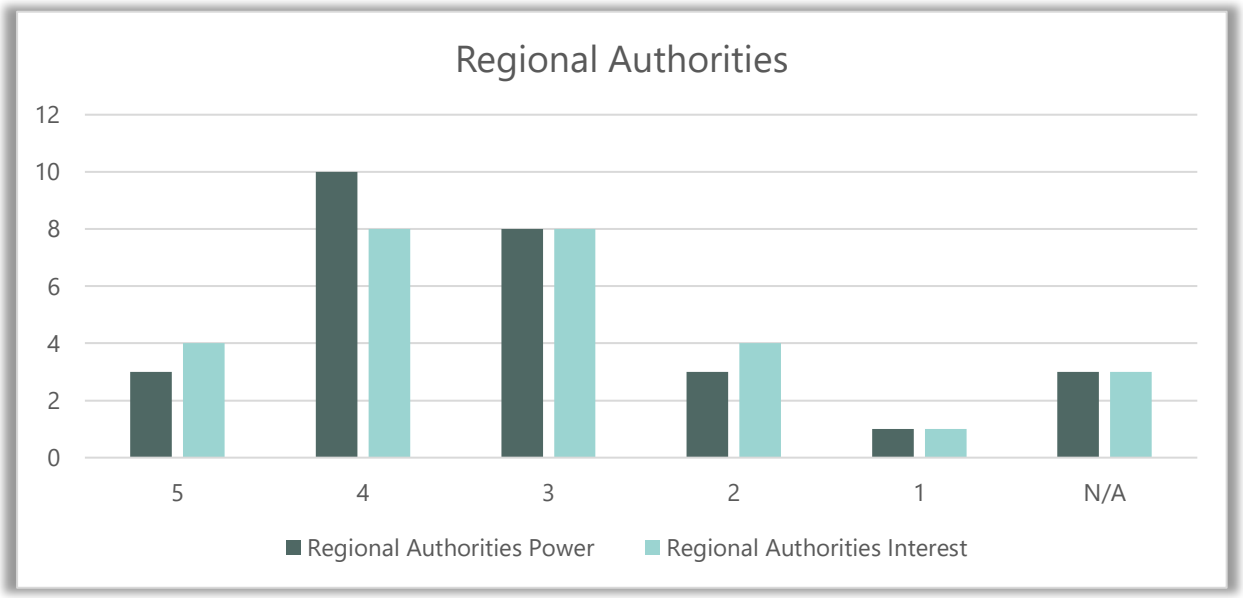




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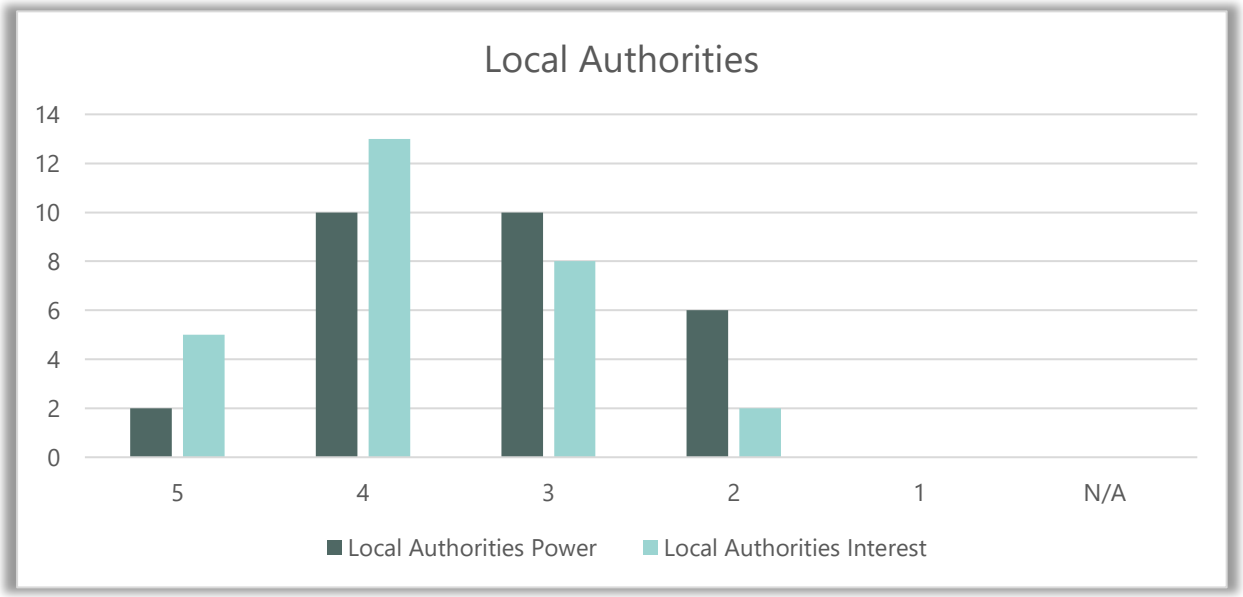


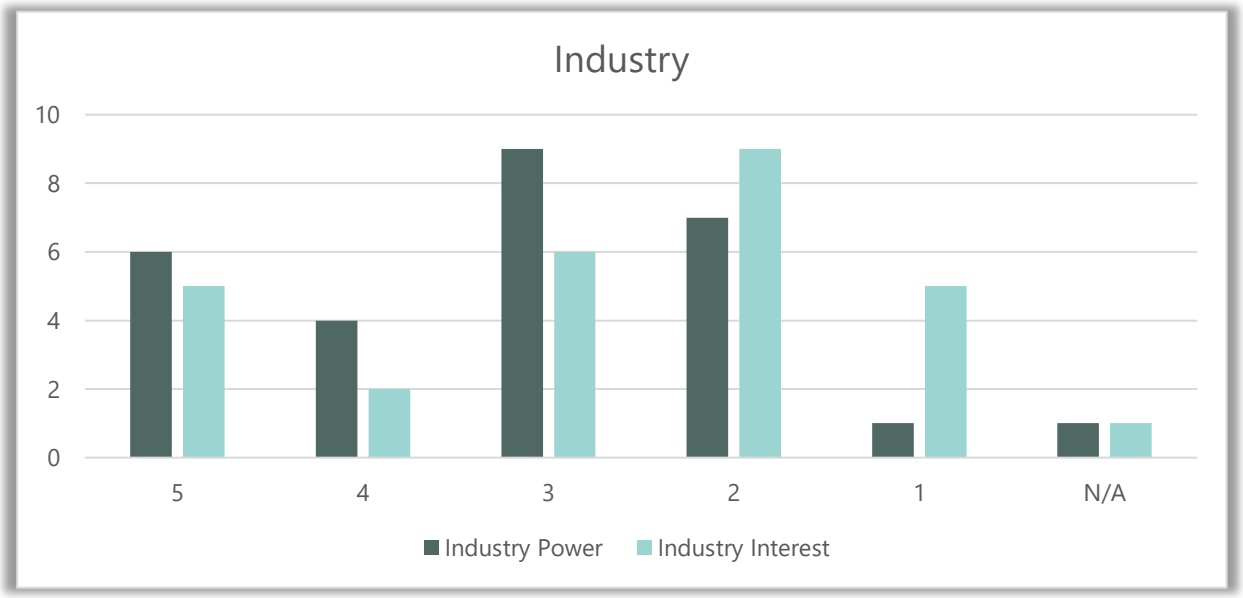




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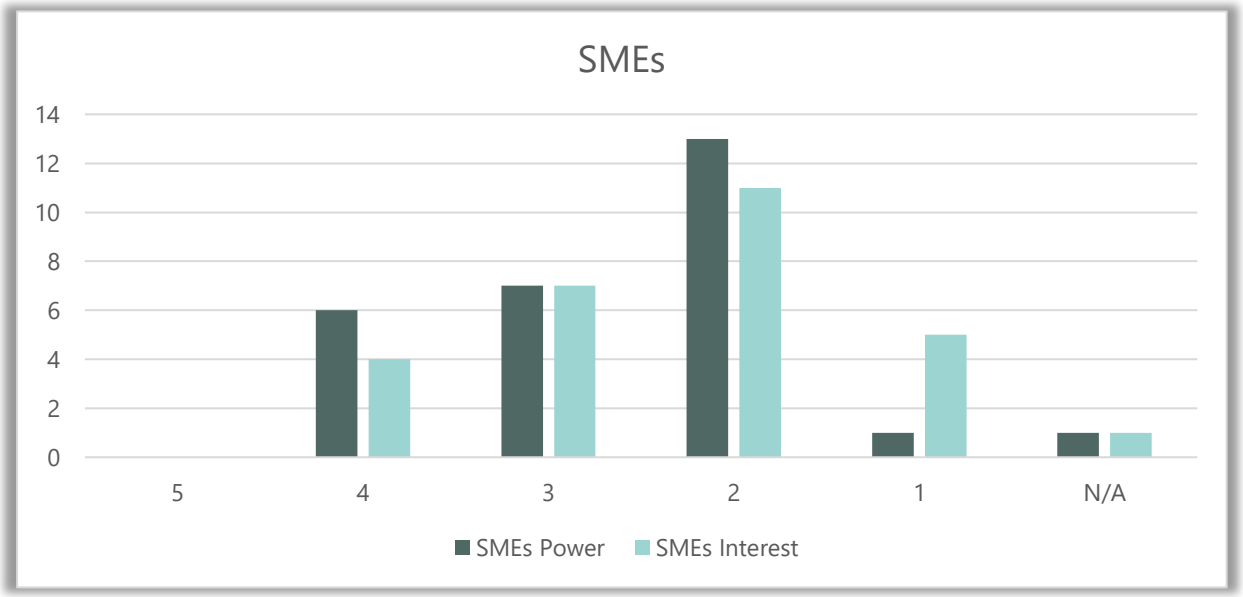


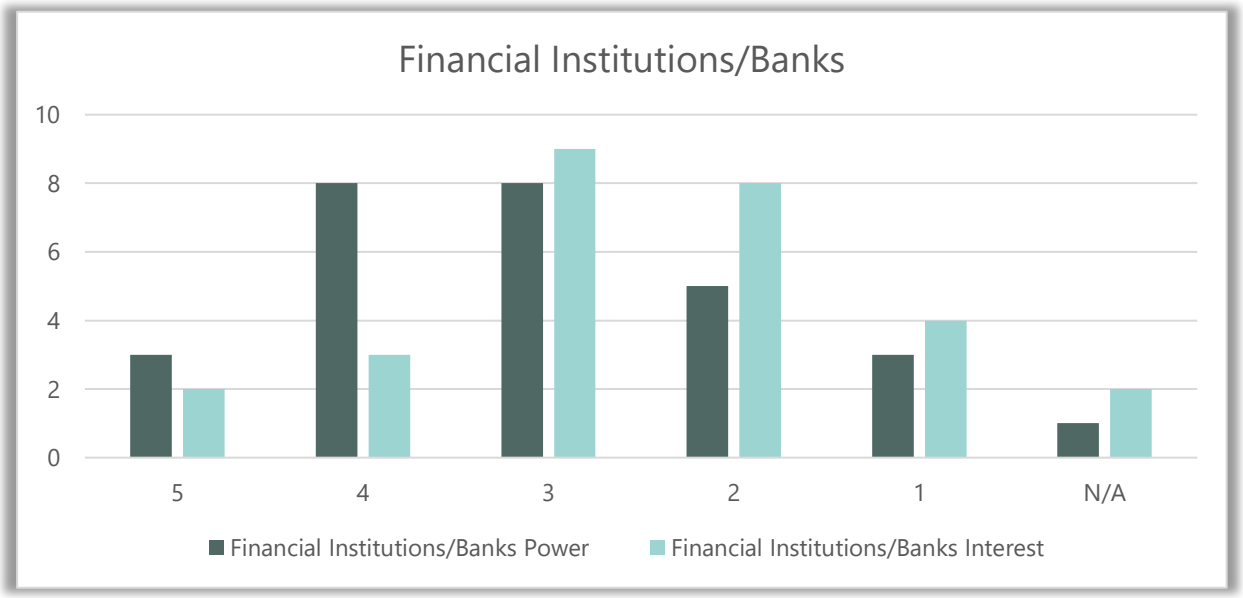




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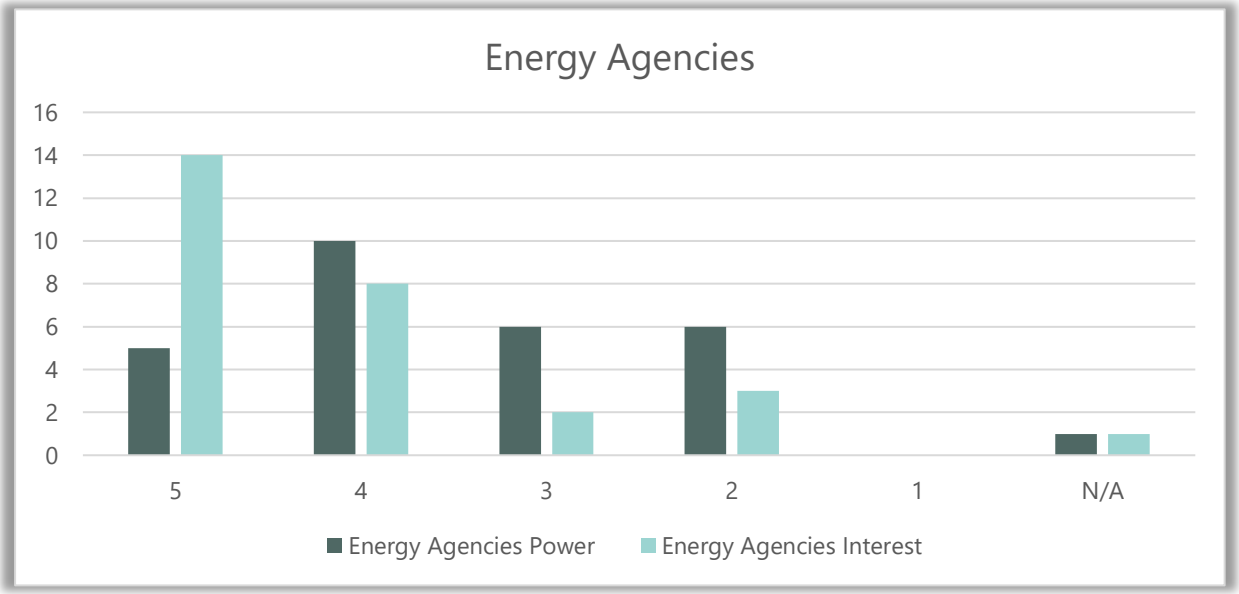


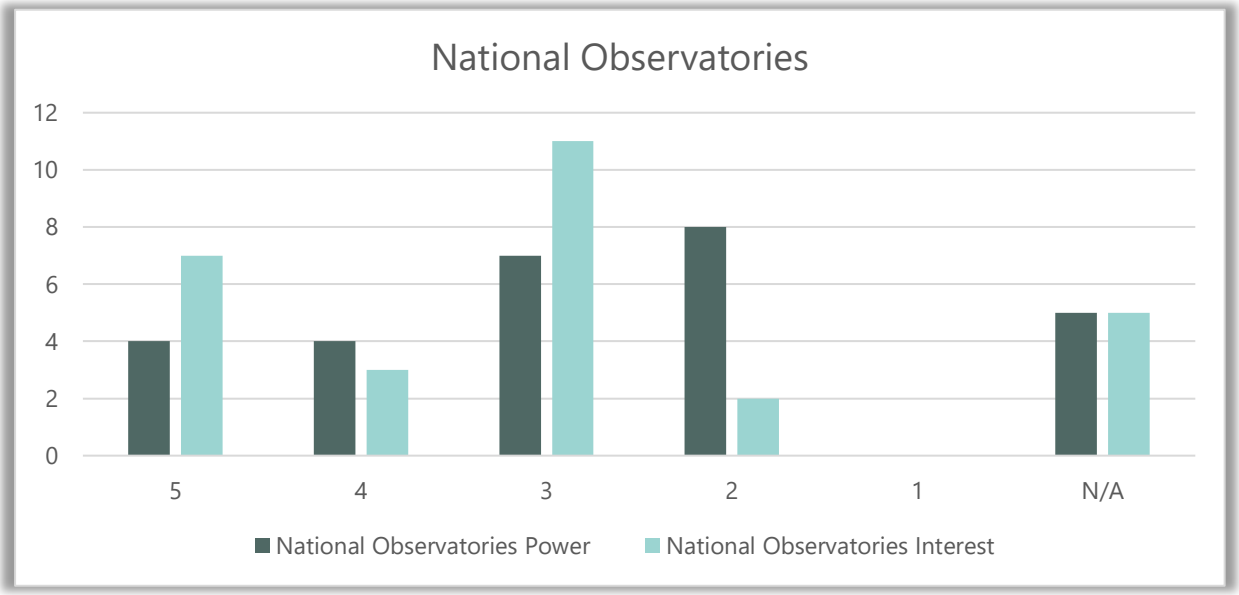




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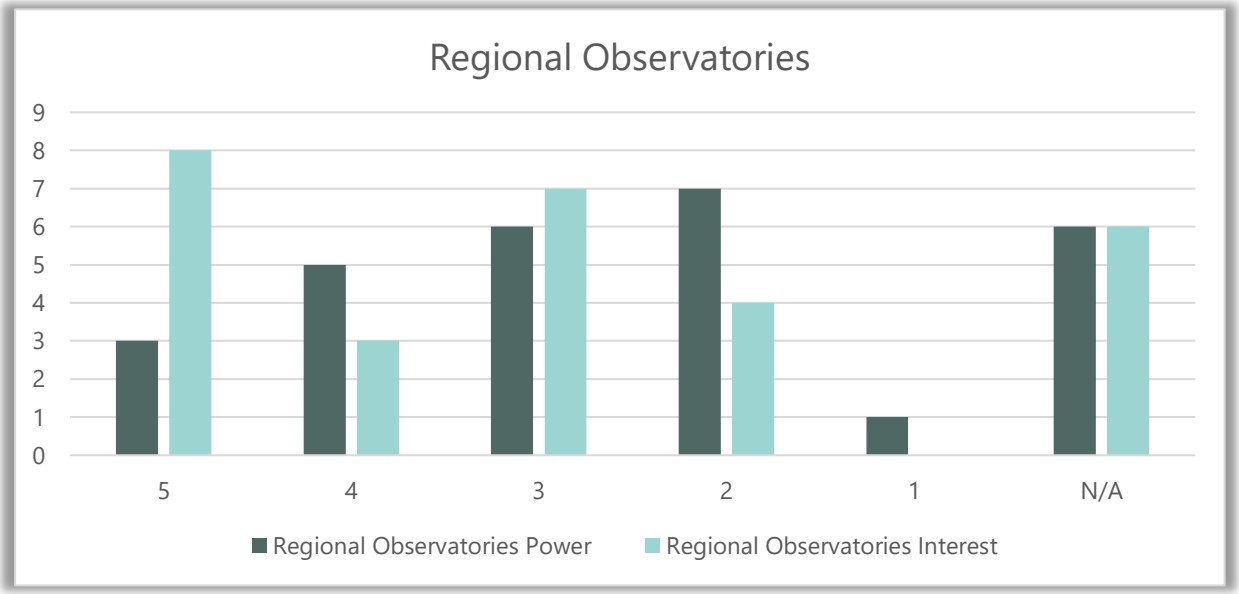


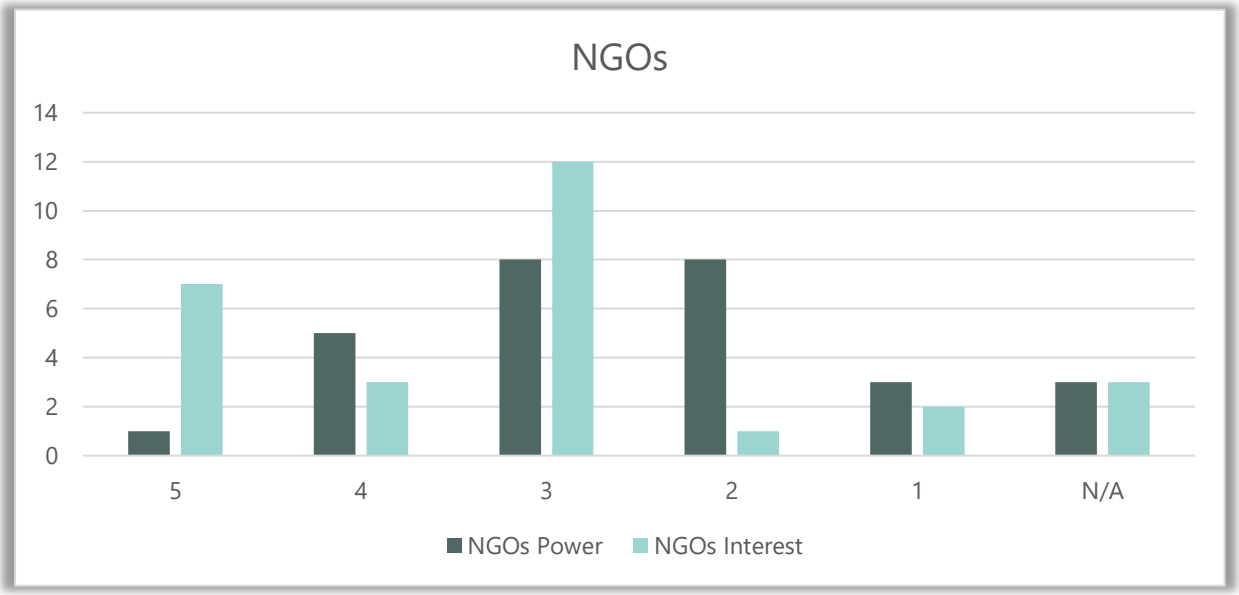




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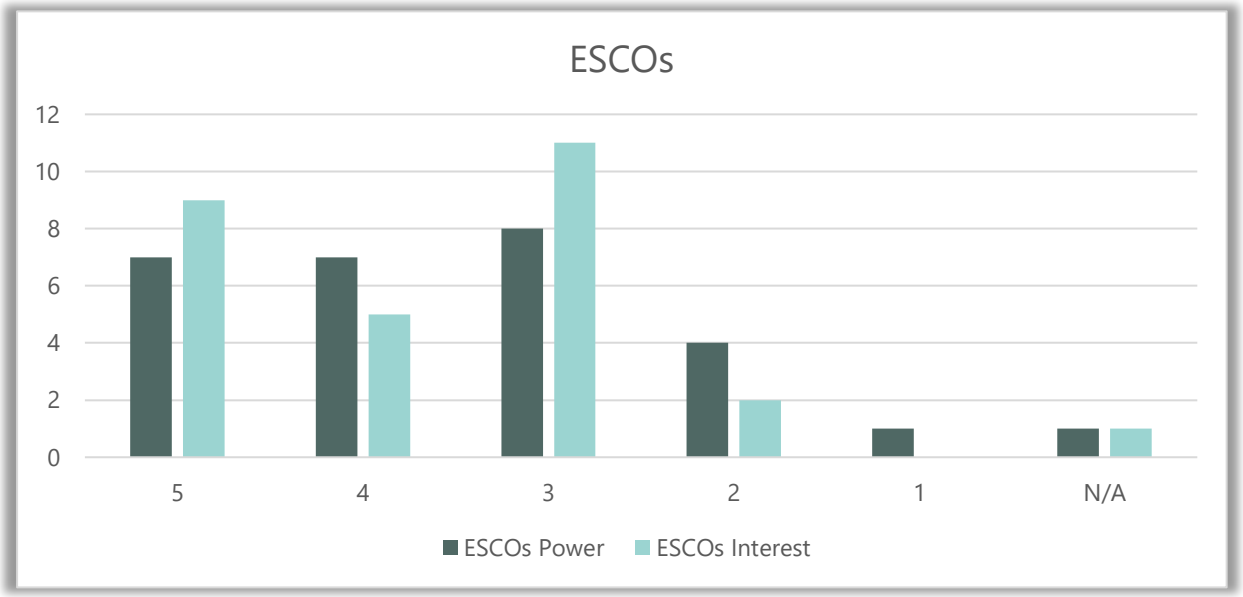


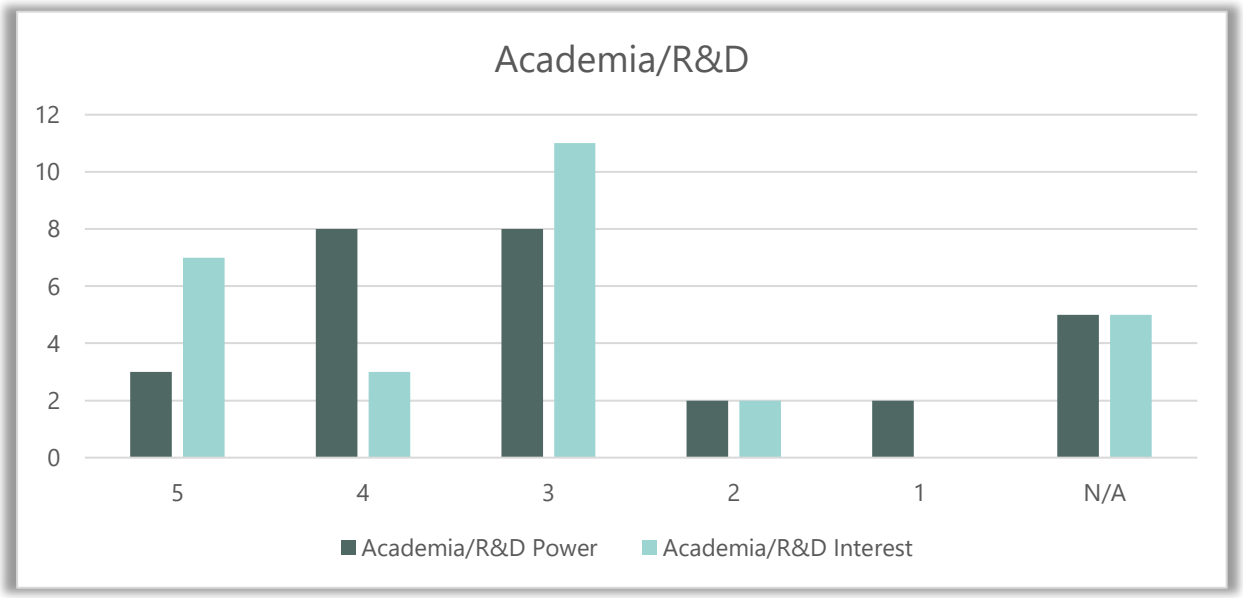




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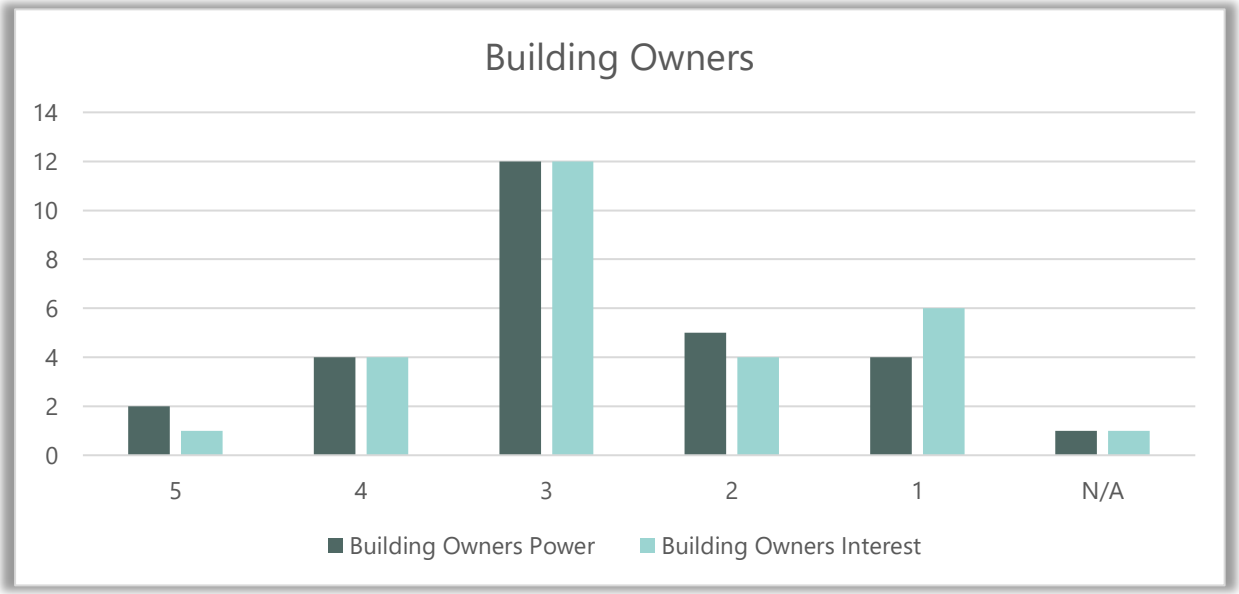


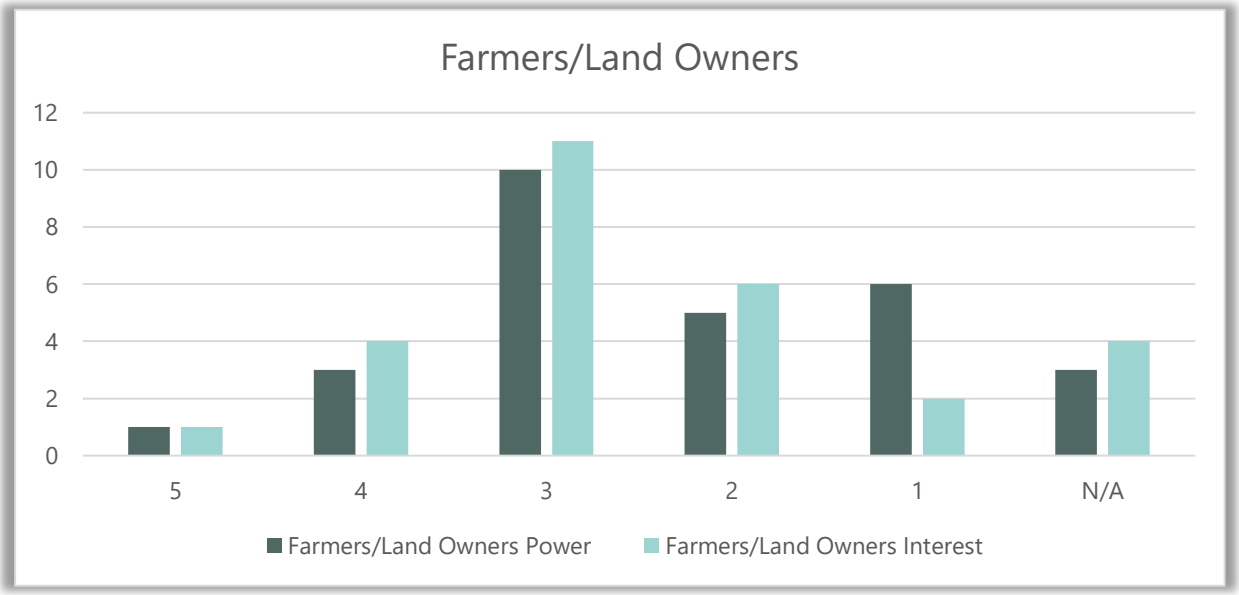




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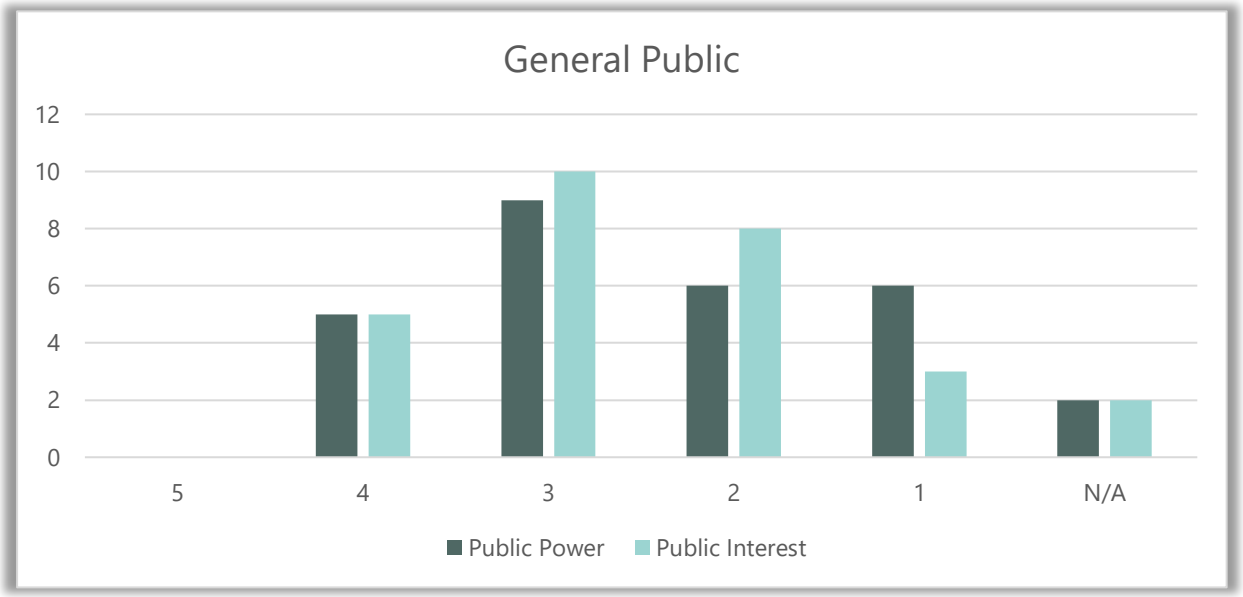




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