

Capacity Building Manual and Progress Report

Lead Author: New Energy Coalition Martijn de Vries, Thomas G.B. Nielsen, Shubhra Chaudry

Reviewers: BORA, EREF



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Chapter 1. Objective of the task

Building the capacity for stakeholders to engage in the energy transition is essential for organising inclusive projects that everyone within an island community can benefit from. By engaging citizens and other relevant stakeholders in local projects, their priorities will be included in the planning and make for more sustainable, long-lasting, and beneficial undertakings. The negative effects of climate change, sky-rocketing energy prices, and shortages of supply in commodities are becoming increasingly threatening issues to communities living on islands. Local and decentralised energy production can help alleviate these threats and engaging stakeholders in this process will accelerate the implementation of such projects. This deliverable will address how trainings in capacity building may help the geographical islands within the IANOS project.

1.1.Task description in the Grant Agreement

The description of T8.3 of the IANOS project under the Grant Agreement is as follows:

IANOS will facilitate capacity building through training sessions on LH and Fellow islands and other central locations. Sessions will contain both technical and non-technical aspects. The following activities are envisioned:

- a) two (2) training sessions (one per LH) on current best practices;
- b) three (3) training sessions (one per Fellow) on current best practices and the plans of the LH islands;
- c) Two (2) training sessions on a central location in Europe, aimed at EU islands with ambitions to decarbonize, using the best practices developed in the LHs.

1.2. Interpretation of the Task description

From this description it can be concluded that the aim of this task is to build capacity on both the Lighthouse and Fellow islands in order to allow those islands





to better involve citizens in decision-making processes aimed at decarbonisation on the islands. The capacity building will be attained through training sessions, and it has been decided to organize one training session per IANOS island.

To prevent this target description from leading to different interpretations, it is good to further define some terms from this description in the light of this task.

What is meant by 'Capacity building'?

A general description of capacity building is *the improvement in an individual's or organisation's capability to produce, perform or deploy.* This description also applies to Task 8.3, whereby it should be noted that this task specifically concerns the improvement of the capacity of an organisation or entity on an island to enable citizen engagement in decision making processes. Most people do not feel equipped to influence or engage in decisions regarding the source of their energy supply. Building capacity in stakeholders and/or citizens will allow these to take part in major decisions regarding the energy supply and help shape the decarbonisation of their island. Currently, there is a need to improve this capacity on the participating Lighthouse islands (Ameland and Terceira) and Fellow islands (Bora Bora, Lampedusa and Nisyros), for example because citizen or stakeholder engagement does not take place or only takes place to a limited extent.

What is meant by 'Training Session'?

By a Training session is meant *a period of teaching, education, instruction or professional development*. One training session will take place on each Lighthouse and Fellow Island during the duration of the project. The length of the training provided in the context of T8.3 is not specified and will therefore be tailored to the specific need and the available amount of time and budget that the partners have in this task.

The training sessions should help the target group on the islands to increase their capacity to involve citizens in decision-making regarding energy sustainability.





What is meant by 'Best Practices'?

It is described in the GA that the training courses all deal with Best Practices of the Lighthouse islands of Ameland and Terceira. What is meant by Best Practice is not specified, however in a general sense Best Practices refer to a standard or set of guidelines that are known to yield good results when followed. In light of the objective of WP8 and Task 8.3 in particular, it is therefore assumed that the Best Practices must be seen as methods/approaches that have been applied on the LH islands to involve stakeholders on the islands in decision-making processes in the energy transition and which have led to good results.

However, because the success of a Best Practice is partly determined by the local context, circumstances and factors, a broader and more general approach is chosen, aimed at overarching success factors that play a role in the process of involving stakeholders in decision-making regarding energy transition. The Best Practices of the LH islands will be used as examples of these success factors. But given the individual characteristics of each island, the needs and priorities of each island will be taken into consideration for determining each island's best practise, as described in IANOS deliverables D8.1.1 'Designing a Community Engagement Strategy' and D8.2.1 'Community Engagement toolbox'.

What is meant by 'Target group'?

In general terms, "target audience" refers to a group of people who hope to influence a policy or campaign in some way. More specifically for Task 8.3, it refers to the group of people the training is aimed at on the different islands, for whom the training is intended. Although the training focuses on citizen engagement, it does not directly target citizens (and other stakeholders) on islands as participants. The target group consists of parties that are able to enable citizens and other stakeholders to become involved in decision-making on the islands, specifically regarding energy transition. Other stakeholders include, but are not limited to, local businesses and industries, governmental institutions, community groups and cooperatives, universities, and existing decarbonisation projects on the islands. The training should give them insight into the possibilities (in the form of knowledge and instruments) to actually involve citizens and other stakeholders.





Identifying and mapping the right target group for training on the islands is part of this task.

In order to train and build capacity for decarbonization initiatives on the lighthouse, fellow, and other islands, it is essential to specify the target groups of stakeholders at whom the training sessions are aimed. A characteristic of the stakeholders groups identified to receive training is that they play an important role in allowing citizens to be involved in the decision making processes.

Identification of target groups can have several advantages: 1) It can help in specifying an appealing value proposition of the trainings in order to encourage active participation in the sessions. 2) It can streamline the design and delivery of training sessions. 3) It can help in delivering training sessions that match the specific needs of the target group and, therefore, improve their outcome efficacy.

1.3. Participating partners

The project partners who contribute to the execution of this task are: NEC (also task leader, 11 PM), EDP (2 PM), RGA (3PM), HANZE(1PM), LAMP(2PM), BORA(2PM), NIS(2PM). LH island Ameland is therefore not formally represented (not with the municipality, nor with the Ameland Energy Cooperative) in this task. However, there is close coordination between NEC and HANZE with AME and AEC, as well as with the European Renewable Energies Federation (EREF).





Chapter 2. Approach

2.1. Introduction

This chapter describes how the execution of the task is organised. In Chapter 2.2. the activities to be performed are described with an explanation of the two Trajectories followed to achieve the Task Objectives. The next chapter briefly explains the intended training locations, after which chapter 2.4 shows the planning of the task on the basis of a planning table.

2.2. Implementation of the task: 2 trajectories

For the implementation of Task 8.3, the task leader has developed an approach on the basis of which the objective of the task can be achieved. As part of this approach, multiple activities/steps have been defined that will largely be taken sequentially by the task partners.

For the substantive execution of the task, activities are carried out by the task partners in two parallel stages or trajectories:

- The first trajectory focuses on the development of the training itself and aims to develop and shape them in accordance with the objectives of the Task.
- 2. The second trajectory is aimed at obtaining, collecting and developing the necessary knowledge by trainers of New Energy Coalition who will provide the training.

These two trajectories come together when there is insight into the substantive training needs and form of the islands on the one hand, and the training content knowledge that has been developed at New Energy Coalition on the other hand.

The planned steps are shown graphically below, in which they are divided into two different trajectories. The trajectories and the individual steps are explained below.





Approach Task 8.3 IANOS



Trajectory 1: Development of training course

The trajectory starts with identifying the objectives and needs per island specifically regarding stakeholder involvement in decision-making processes regarding energy transition on the islands. A start was made with this at the start of WP8 through presentations on this subject by the IANOS islands themselves.





Second the relevant stakeholders per island will be identified. This not only involves mapping these parties, but also gaining insight into their role, involvement, influence, needs and wishes with regard to energy sustainability.

In the next step, the participants in the training sessions are identified and mapped per island. It is important that these are participants who (can) play a role in involving stakeholders in decision-making processes regarding energy transition on the individual islands. It is also the people who must be involved in securing the knowledge from the training in order to actually use it on the islands.

The content of the training is then coordinated per island. The basic principle is that fixed training modules are offered, but that there are opportunities to emphasize the specific needs of the islands (fine tuning per island by the training provider).

It is important that the knowledge that is shared in the training also lasts and is used for the process of increasing the involvement of stakeholders in decisionmaking in the energy transition. Therefore, in coordination with the Task partners, the islands will draw up a strategy aimed at further rolling out the training content.

In the next step the training itself is provided. The training is provided on the basis of the train-the-trainer principle, which means that trainers from or organized by NEC will train the group of selected training participants on the islands. The aim of the training is to provide the participants with insights and tools on the basis of which they can shape the process of stakeholder involvement in decision-making regarding energy sustainability. The training courses are given in English, which means that the participants must be fluent in this language.

Finally, at the end of the training with the island partners, the training is evaluated. What went well/less well and why, what needs more attention, and what lessons have been learned from the training? It is important to do this evaluation as soon as possible after the training, because that is when the experiences and results





are most clearly visible to the participants and the trainers. The results of the evaluation will be used in the implementation of the following training courses. The evaluation results and lessons learned are also shared with the general public by the trainers located in the island, as far as non-confidential information is concerned.

Trajectory 2: Knowledge development trainers

In order to be able to provide the training courses for the IANOS islands, the level of knowledge on the subject of 'Stakeholder engagement in decision making processes' within the organization providing the training courses must be up to standard. Since NEC is the party in the lead for providing these training courses, NEC trainers will gather the relevant knowledge for this.

Based on the objective of this Task (involving stakeholders, including citizens, in decision-making processes on islands regarding energy transition), the following activities will be undertaken to obtain the necessary knowledge:

- Knowledge gathering based on research on community participation processes specifically in relation to energy and sustainability issues. Practical knowledge, experiences and scientific insights gained from other (EU) projects related to this theme will be used. Special attention is paid to island projects carried out in the context of the H2020 program and collected in the BRIDGE collaboration group. This is supported by best practices referenced to in the D8.2.1 'Community Engagement toolbox' by EREF.
- Knowledge development through education and training. The NEC trainers will follow one or more training courses aimed at stakeholder engagement in the energy transition. In this context, the possibilities for knowledge sharing through training programs with the Energi Akademiet on Samsø (DK) are being explored. NEC has worked closely with the Energi Akademiet in the H2020 project SMILE, which also worked to strengthen the participating islands in the field of stakeholder participation.





2.3. Training locations

For the physical organization of the training courses, the GA explicitly describes where these should be organized, i.e. on the islands themselves. The intention is that the training courses will be provided physically on the islands by NEC. An exception will be made for Bora Bora. Due to the distance, required travel time, and limited financial resources, the training will be provided here remotely.

In addition to training on the islands, it has been indicated that 2 training courses should be organized at a central location in Europe. The exact locations have yet to be decided. Possible locations are a central location in the EU on the mainland and a location on an island with clear ambitions to decarbonize. A decision on this will be made in the course of 2023.











2.4. Planning

The schedule for the execution of Task 8.3 is shown graphically above. The steps defined within Trajectory 1 are reflected here per island. This is also described for the training courses that will be provided at central locations in Europe. For the activities in Trajectory 2, the activities are shown at the bottom of the image.





Chapter 3. Analysis of best practices

3.1. Introduction

In this chapter a description is given of the work performed and the insights and results obtained with regard to the first step of Trajectory 1: analysis of best practices, including the lessons that can be learned from the studied practices. By utilizing lessons learned from former successful island energy projects, the islands of Terceira, Nisyros, Lampedusa, and Bora Bora can get a head start in their own energy transition. In this section, the IANOS lighthouse island of Ameland and the Danish island of Samsø are described. Samsø was a part of the SMILE island project of which IANOS is a follow-up project. Not all things that work on northern European islands such as Ameland and Samsø will per se work on the fellow islands of the IANOS project or on Terceira. However, these case studies can be useful as inspiration and positive examples of how energy cooperatives and citizen engagement can lead to successful energy transitions on islands.

3.2. Best practice Samsø (DK)

This section has been largely based on the article "How does a pioneer community energy project succeed in practice? The case of the Samsø Renewable Energy Island" written by Karl Sperling in 2017. Details have been added from an online meeting between Søren Hermansen and New Energy Coalition on the 6th of September 2022.

The Danish Island of Samsø is located in the Kattegat Ocean and houses a population of roughly 4.000 inhabitants. Back in 1996, the island faced an aging population since the younger generation was leaving the island for larger Danish cities. Furthermore, one of the largest local businesses and employers, the local slaughterhouse, had recently closed down. These things contributed to the urgency for Samsø to rethink itself[1]. Coinciding with these critical events, the island had applied and won a grant from the Danish Ministry of Environment and Energy, freeing up funds to facilitate a transition into becoming self-sustaining on





renewable energy [2]. Within 10 years, the island had managed become fully selfsupplied with renewable electricity from 10 offshore and 11 onshore wind turbines and a local solar field, energy efficiency improvements in people's homes and renewable heating from biomass and solar-thermal district heating networks. The vast majority of these projects being owned, serviced, and profited from by local actors. How did this come to be and what can we learn from this?

From the beginning, a masterplan was developed on how the island should make the best use of the large sums of money marked for its transition into a clean local energy supply. This masterplan had a focus on involving local actors as the drivers of the transition. Given the financial difficulties that the island faced back in '96, the selling point of this project would be to provide new employment possibilities and increase the economic growth. With the help of extensive stimulating schemes from the Danish government, incentives for establishing wind energy, home energy improvements, and district heating networks made these initiatives highly feasible and profitable for Samsø to develop. These initiatives were also supported by the province of Aarhus, the local university of Danish Technological Institute, and the Danish Wind Turbine Owners Association. Among others, assistance from these external parties proved vital for realising the transition.

Although the Master plan was only formulated by a small group of initiators of the Samsø Energy Company (SEC) from the island, efforts were made to include the rest of Samsø's inhabitants in this plan. Before the formal funding agreement with the Danish ministry was even made, the plan had already been presented to the locals and made publicly available at the local library. The plan made rough propositions of how a project could look like, while stating ways for locals to participate in the transition and leaving space for corrections and amendments. It was, thus, flexible and concrete at the same time. The plan was formulated by local experts that had an interest and knowledge in the field of the innovations being planned on the island. Once the plan existed and had been presented to the Samsings (name for inhabitants of Samsø), it was largely stored away and not looked at again. The plan was used for formulating the future goals but the means with which to reach these were still unclear at this point. The question of "what do





we do?" was answered by this report, but a far more important question would subsequently lead the plans on Samsø, namely, the question of "why should we do it?". This question refers to the needs and concerns that reside in the public, and how renewable energy projects can work as instruments to accommodate these. Using the "why?" question as the guide for engaging the local population helped in increasing the relevance of the project to the individual Samsing. Once it was clear that their priorities were put first on the agenda, the locals saw the relevance of the projects and found a reason to support it.

Navigating the locals' needs and concerns for such an ambitious project made a figure of authority with local knowledge and status an essential part of the puzzle. A Samsing named Søren Hermansen became this figure. By knowing who in the community may have concerns about the developments, he pre-emptively anticipated resistance from these locals and consulted these actors to "clear away" their worries before these grew out of proportion. For example, a local blacksmith that made his living off servicing people's oil fuelled boilers saw his trade threatened by the new district heating and heat pump solutions. Søren personally sought contact with this worried professional and made sure that he would be retrained in servicing the new technologies and thus remove the threat of his obsoleteness. In this way, Søren managed to think people into the plans and thus ease their worries of any impressions that the transition would have negative impacts on their lives. Moreover, this strategy ensured an increase in local employability and island self-sufficiency.

Taking a personal responsibility and siding with the locals was essential in clearing away the Samsings' concerns. Multiple sessions with the local communities on the island were, therefore, organized in order to understand and consider the concerns that may arise. The plans were presented in a way where the technical aspects were explained by those responsible for these, while Søren would ask the questions that may be on the locals' mind. He was able to do this because of his intricate understanding of and his personal relationship with the local context. Because of this knowledge, Søren and the SEC were able to identify the informal leaders of the community. The blacksmith mentioned above had a high social





status in the community which made others listen to and follow this individual's advice. Once having agreed with the blacksmith that the project would be a good idea, a large number of other citizens were also convinced of this. As described in Søren's own words, if all informal leaders are not present at a community event, the decisions made at such an event will not be valid. Identifying these leaders and their needs and priorities is thus essential for realising local projects.

Not only were the informal leaders invited to have a say but to also profit from the projects on Samsø. All citizens were invited to share their opinions at a multitude of community events. In order to attract more locals, these events were often combined with other local activities or traditions that attracted locals in a festive way. Furthermore, if valid concerns arose about the specifics of the innovations, these would be taken into considerations and changes would be made to the plans to account for them. For example, one landowner did not appreciate wind turbines in front of their premises being visible from their house. This concern was taken into consideration of the turbines were changed to fit the landowner's needs.

Not only were locals able to have a say in the planning, they were also offered to profit from these projects. Shares and obligations were offered to anyone wishing to invest. Many of the turbines thus became community co-owned by locals and the farmers that owned the land on which they were erected. Furthermore, additional benefits and arguments for constructing projects were integrated in the planning. For example, when installing the district heating network, plans were made for servicing or renewing the existing water or sewerage pipes as an added benefit. Thus, all the way through, the SEC used the renewable energy innovations on Samsø as not a goal in themselves, but a means to solve other incumbent needs in the community and have the benefits that green energy provides as an added bonus.



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3.3. Best practice Ameland (NL)

On the 6th of October 2022, Martijn de Vries and Thomas G.B. Nielsen visited Ameland for a conversation with Johan Kiewit on the development of a local energy cooperative. This section is based on that conversation.

Inspired by the energy cooperative on Samsø, Johan Kiewit has established Ameland's own energy cooperative named Amelander Energie Coöperatie (AEC). Johan, who is born and raised on Ameland, has spent the past 17 years setting up a cooperative that today provides clean energy produced by a local 6 MW solar field. Placed on a local airplane runway for hobby pilots, the solar field provides enough green electricity to supply 1.900 households [3]. Considering that the island has around 1.800 households [4], the AEC can claim to provide all its citizens with green, locally produced electricity. The AEC has become so popular that a third of the island's population (1200 of 3750 inhabitants) buys their energy from the cooperative, and more than three hundred locals hold membership. However, the road to these impressive statistics has not been straight.

It took around 4 years after having visited Samsø, before the AEC was providing the citizens of Ameland with green energy. Initially, this was not from locally produced energy. Back then, the cooperative was partnered with GreenChoice [5], an energy provider that targets energy cooperatives by delivering green energy by investing in renewable energy projects and carbon offset initiatives. The agreement with GreenChoice was that they paid the AEC a price for every community member that they recruited to sign up to the energy cooperative. This price was equivalent to the difference between what GreenChoice paid for the energy they provided, and what the AEC sold this energy for to Ameland's inhabitants. The money that AEC earned from this would then have to be invested in sustainable developments in Ameland. Johan Kiewit and his fellow cooperative members set out to recruit as many local inhabitants as possible. By assigning local home technicians and bus drivers as ambassadors of the AEC, the word of the cooperative spread quickly. The agreement was that when a technician came to a person's home to service their appliances, they would promote the AEC as an alternative to the person's current provider. This strategy was so successful that





within just 3 years, they managed to recruit enough members to gather €300.000 that could be invested in making Ameland more sustainable.

Parallel to the development of the AEC, the Mayor of Ameland at that time, Albert de Hoop, was investigating the potential for building a solar field on the island. Back then, the municipality of Ameland was a shareholder of Eneco, a large-scale energy production company and provider in the Netherlands. The mayor took up contact with Eneco and started planning a solar field. This field was planned to consist of 23.000 solar panels spread over 10 hectares and producing 6 MWp of electricity. The price for this project would be \in 7 million. The municipality of Ameland, Eneco, the Province of Friesland, and AEC, using the funds collected in cooperation with GreenChoice, all invested \in 300.000 in the solar field. On top of this, funds were applied for by a regional subsidy scheme called Waddenfonds that supports sustainable and ecological project in the Wadden Sea area [6]. This resulted in a \in 3,5 million funding for the project. The remaining funds were provided as a bank loan. In 2016, the solar field was built and providing electricity to the locals. It was the first of its kind in the Netherlands.

The loan was partly paid off by financial participation schemes from the public of Ameland. According to Johan Kiewit, the most effective way to get local citizens onboard energy projects in their area was to offer them to financially participate. Therefore, after the solar field was up and running, the AEC offered the public to buy shares in the project. That meant that members of the public were offered an obligation in the solar field that would provide them with a 4% financial return. This ended up raising an additional €300.000 for the AEC. Reflecting on this, Johan Kiewit thinks that this process could have been organized better. Specifically, that financial participation schemes can be organized so that people from a wider spectrum of financial groups can participate in sustainable projects. This is exactly what the AEC is planning for their next project.

In cooperation with the local water authority, a new solar field and battery storage installation is being built on an industrial terrain next to the wastewater treatment plant of the island. The construction of this installation has already begun, and the





plan is to have the solar field up and running be the second quarter of 2023. The battery installation is meant to take pressure off of the local electricity grid and to store energy for the less sunny days. The project is being undertaken as a joint venture between the AEC, the municipality of Ameland, and the local wastewater treatment plant. The capacity will be slightly smaller than the first project and provide 4 MWp of electricity. However, the financial participation planned by the AEC will become more inclusive. Instead of only offering obligations as a way to financially participate, the energy cooperative will offer tokens to invest in individual solar panels on the solar field. In this way, households can avoid the high investment and installation barrier of installing solar panels on their private homes. Instead, citizens can buy a token solar panel on the solar field and in that way officially own a solar panel. This token is insured by providing each panel with an ID that matches the owner's purchase ID.

The rationale for citizens to join Ameland's energy cooperative is manyfold, according to Johan Kiewit. As described earlier, the AEC offers financial incentives to become a member. The projects organised by AEC aim to make the island selfsufficient on green energy. In this way, the cooperative will also make the Amelanders immune to the unstable and rising energy prices. AEC offer its members stable and slightly lower-than-normal energy prices. But this is not the only argument. Although some energy providers offer cheaper energy than the AEC, those energy providers do not offer the same relationship with the island that the AEC does. This leads to the second rationale of joining the energy cooperative, namely the local relationship to one's energy provider. Johan Kiewit has, in his own words, "stuck his neck out" and takes responsibility for any complaints, comments, and concerns there may arise from local citizens. He invites anyone to his home for a conversation about the AEC and the local solar field. By doing this, Johan creates a personal and well-known contact person that his fellow Amelanders can turn to. Furthermore, the Amelanders can walk directly up to the source of their energy and observe the solar panels in person. This personal relationship to people's energy provider is a unique one that is not offered by other commercially oriented energy providers.



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On top of providing a stable and cheap energy supply and a local relationship to the energy provider, Johan and the AEC also offer people a chance to have their voices heard and considered in the planning of new projects. This is the third rationale for becoming a member of the cooperative. The AEC takes its decision on new projects based on democratically engaging with the public where anyone from the island has a say in the decision-making process. In Johan's own words: "If the locals do not wish to have a certain project built on Ameland, then we will not build it". By inviting anyone from the island to discussion evenings, the islanders can get informed, express their opinions, and if one is an AEC member, one can have a legitimate voice and a vote in the implementation of future projects on Ameland. The legitimacy and transparency of this type of engagement processes builds a sense of trust and ownership in the community of the projects that are implemented on the island. As Johan describes it, if someone is an opponent of a project being planned on Ameland and wants to object, then that person should join the cooperative to have their voice heard. In that way, critical as well as supporting perspectives are considered in the planning of local projects, making the engagement strategy more inclusive.

A last and rather essential reason to join the energy cooperative is for local citizens to take part in green projects that help mitigate the negative effects of climate change. Ameland is, as many of the islands and coastal regions in the Wadden Sea, vulnerable to the rising sea levels. Strong tidal fluctuations fully retract the water from the coasts twice per day, providing a unique coastal nature reserve where every year millions of migrating birds flock to feed and rest. This in turn attracts thousands of tourists and researchers to observe and enjoy this natural hotspot on Ameland. If the sea levels rise, the tidal fluctuations will no longer retract the water sufficiently for birds to feed here [7]. Protecting the nature reserve and people's homes from floodings caused by an increase in extreme weather event are, thus, yet another rationale for citizens to get involved in the AEC and co-decide in establishing climate mitigating energy projects on Ameland.



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3.4. Lessons learned from Ameland and Samsø

The AEC and SEC provide good examples citizen engagement processes through the establishment of local energy cooperatives. This type of citizen engagement facilitated a bottom-up sustainable transition of Ameland's and Samsø's energy supply. In our perspective, five factors have contributed to this transition: Community-centred planning, rationale to get engaged, the presence of local frontrunners, support from local stakeholders, and governmental funding. It must be mentioned, however, that these factors are identified as drivers of successful citizen engagement in northern European cultural and societal contexts. Similar approaches may or may not be equally effective in southern European or other differing cultures.

Since the beginning, energy-related projects on Samsø and Ameland have had a prime focus of increasing the well-being of the island and its inhabitants, and have practiced what can be described as community-centred planning. May it be reducing the individual islander's energy bill, mitigating climate change, securing a stable supply of energy, or allowing anyone to profit from local projects regardless of social-economic status. Furthermore, the individual citizen has been allowed to fully take part in the planning of these projects and thus decide the types of projects that will be established on the island and how these can benefit the citizens. This provides citizens with a rightful feeling that the projects are established by them and for them, providing ownership and pride when projects succeed. The success of the AEC projects subsequently inspired a new regime within energy production and consumption from which more than 50 energy cooperatives were established around the Netherlands. Samsø has become the centre point for international recognition and the SEC has spurred into an Energy Academy that provides consultation and courses on their model. These results are, without a doubt, an enhancer of the pride experienced by the Amerlanders and the Samsings.

Not everything about the projects on Ameland and Samsø have been met with support. Many of the plans have initially been met with scepticism and resistance. However, by making scepticism yet another reason to join the energy





cooperatives, the AEC and SEC increased the rationale for local citizens to get involved in their energy cooperatives. By opening the floor to sceptic perspectives and involving anyone from the island, whether in favour or not, the criticisms have formed the projects into what they are today. By making plans easily comprehensible and open for input and by taking decisions in a democratic manner, the cooperatives have been able to engage a broad and largely representative part of the population of their islands.

By making themselves and their fellow founding cooperative members fully responsible for the projects, Johan Kiewit and Søren Hermansen have made themselves frontrunners of the cooperative. Themselves and their ambassadors have thus risked taking the blame for any failures that may occur. However, sacrificing one's reputation in the local setting may be a necessity in realizing risky innovative projects. On the other hand, once projects like these succeed, this success can also be attributed to their hard work and dedication to the cause. This seems a necessary risk to take in order to realize daunting energy endeavours in local and tight-knit communities.

None of the initiatives described above could not have been realized without involvement of economic stakeholders from the islands as well as funding from the national or local governments. All communities have some industries that are at the core of the local economy. Getting major financial stakeholders on board a project can, in most cases, get projects off the ground. Even more funding opportunities often derive from governmental subsidies schemes earmarked for sustainable development projects. However, as well as financial support, these two groups must also be convinced that an island energy transition is a good idea which all starts with formulating a Master Plan and asking the question of "why should we develop renewable energy on our island?".



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Chapter 4. The Goals for Decarbonization and Needs for Stakeholder Engagement on the Islands

4.1. Introduction

This chapter describes the work performed and the insights gained with regard to the 2nd activity from Trajectory 1: Analysis of the goals and needs of the IANOS islands with regard to stakeholder participation in decision-making processes.

4.2. Goals and needs of Terceira

Coals: With the ambitious goal of becoming a reference island for all EU volcanic islands as a renewable energy island, Terceira has engaged itself in an array of national and international projects. These aim to increase economic, social growth while promoting an environmentally friendly energy sector. With plans to implement geothermal energy, a solar PV plant, a battery storage facility, and smart metering infrastructure, Terceira aim to become 67% powered by renewable energy by 2024. A high focus on electric cars and charging stations are bringing the volcanic island's mobility sector to the forefront of its development.

Needs:

- 1. The IANOS partners on Terceira have expressed that the awareness of energy efficiency measures and their impact on climate change goals and people's energy bills is limited among stakeholders on the island. This concerns schools, industry, companies, and the tourism sector. Thus, in order to get these stakeholders and the broad public onboard a renewable energy transition on Terceira, it is important to raise their awareness on the urgency and potential of such a transition.
- 2. Many stakeholders on the island seem to have intentions of participating in the local transition but may lack a connection to each other and a common direction. A need to create a network between the stakeholders could help





accommodate their needs and raise awareness on the importance of developing renewable energy as a community. For example, involving the academic community could help increase awareness on climate goals and what the individual could do to save energy or produce their own clean energy.

- 3. There already exist energy cooperatives in Portugal. These may be highly valuable for inspiring Terceira to establishing a similar community on the island. Connecting stakeholders in the island with this existing Portuguese energy cooperatives has been expressed as a need from the island partners.
- 4. The local government has also expressed a wish to form a formal stakeholder and citizen engagement strategy, something that is yet to be undertaken.

Background information on Terceira regarding decarbonization initiatives and stakeholder involvement

The following information is based on IANOS Deliverable 8.2.1., a questionnaire from Task 8.2 and meetings between the local Azores government, EREF, and New Energy Coalition. In particular a meeting organised on the 6th of September 2022 provided most of the information below.

Terceira is currently involved in no less than 11 energy related projects, ranging from green mobility to energy efficiency, to smart grids, to geothermal energy, and to the potential of establishing energy cooperatives [8]. The New Energy Coalition has been in contact with the Terceira project partner in order to probe how the capacity building trainings and workshops of WP8 and specifically Task 8.2 & 8.3 can accommodate needs for community engagement.

There are already very lucrative community-focused projects that are put in place by the local government. As part of the national resilience and recovery plan, a 100% subsidising scheme is available for families and industries to implement private solar PV installations. Given that the island is not interconnected with other islands or the mainland, storage of the produced energy is essential. That is why, on top of the subsidies for solar PV panels, there is an additional subsidising scheme for battery





installations that subsidises 85% of the cost price. There are plans to implement solar PV panels on specific dwellings around the island. Furthermore, incentive schemes have also been launched for acquisition of electrical vehicles and charging stations as well as for energy efficiency home improvements to tackle energy poverty and promote the electrification of Terceira.

The technological opportunities available on Terceira, as described above, are manyfold and invites community focused energy production, consumption, and sharing initiatives. Given the nature of smart grids, grid balancing, and energysharing initiatives from self-production, establishing local energy communities would be a lucrative prospect. Furthermore, the projects regarding electric mobility and vehicle-to-grid initiatives underline the potential of cooperative car-sharing initiatives and/or shared charging stations in local communities. Energy efficiency projects are also made more lucrative and feasible when undertaken by a community or housing cooperative. There is, therefore, a great potential of engaging the public in cooperatively taking advantage of the initiatives.

Some groundwork for community engagement processes have already been undertaken on Terceira. For example, extensive information events have taken place in local schools, informing students of how implementing energy efficiency can save energy and impact the climate. Informing about energy efficiency is also the purpose of the Life project [9], where trainings are organised on different islands of the Azores. Below is an overview of the citizen engagement initiatives that have taken place or is currently taking place on Terceira, provided by the Regional Secretariat for Tourism, Mobility and Infrastructures, and the Regional Directorate for Energy:

- Rota da Energia ('Energy Route') a partnership between the Regional Directorate for Energy and the Portuguese Energy Agency. The Energy Route includes in-person and/or distance information and training sessions, bringing knowledge to people, instigating the desire to know more about the world of energy and helping people better understand the role of citizens in building a more sustainable world. [10]
- Dissemination of energy efficiency tips. [11]
- Campaigns to promote energy efficiency have taken place, directed at schools, the industry, companies and tourism entities, contributing towards an increase in energy performance across the various sectors in the Azores. [12]





- The cycle of conferences Encontros com a Eficiência Energética ('Meetings with Energy Efficiency') is a set of awareness-raising actions that are carried out with the goal of informing, discussing and disseminating the best practices regarding energy efficiency. [13]
- The phone line Linha Poupa Energia ('Save Energy Line') was created in partnership with DECO as a support system to advise citizens on energy matters.
 [14]
- A number of energy efficiency manuals are now available to different sectors in the archipelago, namely: agro-industrial, public administration, residential, hospitality and fishery. [15]

The above-mentioned events form a great basis for organising more extensive engagement processes such as forming local energy cooperatives. The local government has expressed an interest in forming a strategy for engaging the public, something that is yet to be undertaken. A questionnaire has been distributed to local municipalities on the island probing their interest and ambitions to involve the public in climate mitigating and adaptive measures. The result of this questionnaire is still awaiting. The input of this questionnaire can inform the direction of the local governments and can be used to streamline a strategy of engaging the citizens more extensively. A great potential is residing in the decarbonisation projects taking place on Terceira. Based on the engagement plans from the local governments, a streamlined masterplan could be formulated providing a common vision for engaging the citizens in decarbonising Terceira.





4.3. Goals and needs of Bora Bora

Coals: The remotest island among the IANOS islands, Bora Bora has set the overall ambition to implement a carbon-free energy sector and 100% electric mobility by 2050, including for boat transport. An intermediate target to be achieved by 2030 has been set. The Solar and Sea Water Experiment for Energy Transition (SWEET) project, which has been integrated into IANOS, aims to increase the share of photovoltaic (PV) energy from 0.4% currently to 10% by 2024 with PHASE 1 of the project, and to 100% by 2030 with PHASE 2 of the project:

- The first phase consists of the implementation of greenhouses with photovoltaic panels (PV) on top, fishponds with photovoltaic panels on top, and electricity storage. The two solar technologies will allow to optimize the utilization of scarcely available land by producing on the same land both agricultural produce and green electricity.

- In the second phase, the SWEET project will include the implementation of green hydrogen and storage, Ocean Thermal Energy Conversion (OTEC) to reduce intermittency of renewable energy, charging stations for electric boats and vehicles, "Deep" water bottling unit, local cosmetics from pure millennial water, sea water air conditioning (SWAC) to supply resorts with clean heating and cooling systems, temperate solar greenhouses and fishponds, etc.







Figure 1 The phased approach to renewable energy in Bora Bora under the SWEET Project

In terms of citizen engagements, there is great interest and potential among local residents to engage in the island's decarbonisation process and conservation of natural resources. The citizens are interested in the development of renewable energy solutions for heating and cooling, transport, agriculture and tourism. The option to establish a local energy community has been discussed among citizens and community stakeholders, including several IANOS partners.

Needs: While Bora Bora has set ambitious decarbonisation targets and enjoys the interest of the public, there are several areas where its stakeholder engagement capabilities can be strengthened and supported.

1. Durably fostering public commitment to the decarbonization process of the island has been identified as an important area of focus. This involves enabling the citizens to envision a future where their energy needs are independent of fossil sources and are met through sustainable and renewable energies. In order to foster the participation and support of the public, the local government needs to scale up their outreach and communication activities. Communication tools such as leaflets, public





meetings, websites etc. can be used to inform and involve the public in the energy transition process.

- 2. Apart from getting informed, citizens, both public and private, also need to bring about actual behavioural changes so they shift to using renewable fuels for electricity and mobility (on land and in the sea).
- 3. The tourism sector is a particularly important stakeholder group for Bora Bora. This group needs to be involved in the participatory process to rapidly switch to sustainable mobility solutions (like using solar or hydrogen powered cars and boats in resorts, lagoons etc.)



Figure 2 Solar-powered boat for marine transport in Bora Bora

Background information on Bora Bora regarding decarbonization initiatives and stakeholder involvement

The following information is based on IANOS Deliverable 8.2.1., a questionnaire from Task 8.2 and a meeting between the local contact partner on Bora Bora, EREF and the New Energy Coalition.

As described in the goals and needs of Bora Bora, different renewable energy projects are being funded and undertaken, such as solar PV projects, Ocean Thermal Energy (OTEC), onshore thermal energy, pyrolysis energy production from waste, acoustic buoy of CO2 levels measurement, and hydrogen developments. An array of factors has been indicated as important to take into consideration for developing renewable energy on Bora Bora. These include, but are not limited to, the beauty and tranquillity of the island, a safe and affordable water, food, and energy supply, reduction of noise





from local mobility, and management of waste. The island is an intimate community, and most information is exchanged through either local or social media, press conferences, or simply by word of mouth.

The above projects are still in the early development phases and although it has been indicated that there is great support and interest from local citizens, special care should be taken to involve local citizens before the plans are concrete or construction start. In the T8.2 questionnaire, the island partners indicate that once the abovementioned projects are launched, citizen engagement processes will take place. However, this order of proceedings is risky, given that it leaves limited decisionmaking power to the public. Furthermore, the engagement processes indicated are surveys and polls, which may be insufficient if the public wish to exercise influence on the plans.

Interestingly, local associations have been formed by the island's residents that focus on sharing ideas and being informed on urbanisation projects, renewable energy, and the sustainable use of the lands owned by locals. The surrounding islets of Bora Bora have also formed community groups focussing on securing safe drinking water, now being supplied through rain and wastewater collection. The goal of this association is to establish a drinking water connection, as well as electricity and telephone connection between the islands. This is named the Motu Tevairoa Residents Association. Furthermore, the mayor has initiated a working group that will investigate the feasibility of OTEC and hydrogen developments.

It is yet unknown how extensively the community groups have been involved in the decarbonisation of Bora Bora, and the further work on T8.3 will focus on this topic.





4.4. Goals and needs of Lampedusa

Coals: Lampedusa aims to reduce CO₂ emissions by 63% by 2030. The municipality has approved the Sustainable Energy and Climate Action Plan (SECAP) of Lampedusa and Linosa in 2018, which includes, among other goals, the aim to conduct energy audits of municipal buildings (2018-2030), implement PV systems in public and private sectors (2018-2030) and revamp public lighting (2019-2025). Furthermore, Lampedusa has signed the Clean Energy for EU Islands pledge, formalizing the commitments between stakeholders involved in the transition to clean energy systems on EU islands. This commitment is based on an approach that aims to actively engage all relevant stakeholders on an island, incl. citizens, local businesses, schools and universities. This approach is meant to secure support from the entire community and thus accelerate the transition process (see IANOS Deliverable 8.2.1 "Community Engagement Toolbox" pp. 7-9).

However, the current level of involvement and engagement of local residents and stakeholders in the decarbonisation process was found to be low and offers a meaningful yet untapped potential.

Needs: Stakeholder engagement and support is essential for Lampedusa to achieve it decarbonization goals and objectives. The following needs have been identified for stakeholder engagement which can serve as the focal point for capacity building training sessions for the island.

- The island considers it necessary to strengthen the knowledge and the administrative capacity of local governments on the importance and urgency to adopt an integrated approach to developing climate change mitigation and adaptation strategies.
- 2. They recognize the importance of promoting a participatory approach of involving and collaborating with the local administrators and social and economic stakeholders (like representatives from agriculture, tourism, etc.) in planning process.
- 3. Furthermore, it is also critical to build the capacity of local governments so that they can ensure that national incentives for renewable energy (like the





Ecobonus and Sisma bonus) will be consistently available for the island stakeholders working on decarbonization projects over the coming years.

4. The island considers it essential to provide clear and understandable information to the citizens about the advantages of the consumption of self-produced or shared renewable energy and the various innovations that can make this possible. Citizens must also be informed about the various decarbonization pathways that are possible for the island. Therefore, effective outreach to various stakeholders through the most appropriate channels (digital, physical, face-to-face etc.) and building participatory processes to involve citizens and stakeholders in the transition process are identified as critical needs.

Background information on Lampedusa regarding decarbonization initiatives and stakeholder involvement

The following information is based on IANOS Deliverable 8.2.1., a questionnaire from Task 8.2 and meetings between the CNR-IIA, the local IANOS contact person on Lampedusa, EREF, and the New Energy Coalition.

As mentioned above, Lampedusa has expressed extensive goals and needs to decarbonise and to promote citizen and stakeholder engagement processes. In the recent election, the local government has changed, and the attention of the new administration has understandably been fully occupied with establishing itself. The new administration has, however, expressed interest and ambition in organising citizen engagement processes as part of the island's decarbonisation plans.

Similar to Terceira, there are several ongoing projects underway that make citizen engagement a priority. These projects form a fruitful basis to engage citizens in the establishment of energy cooperatives. One of these projects is the SmartIsland-Lampedusa project. The purpose is to establish smartgrids and smart communities on Lampedusa. This project is led by Exalto Energy and Innovation Srl. and the goals of the project has already been informed to the citizens. However, to the best of our knowledge, formal engagement or participation processes have yet to be initiated for citizens to take part in the smart communities. Another project is the BLoRin, with which solar panels and battery solutions will be integrated into a blockchain interface. This project will involve energy sharing systems that could be utilised by a





local energy cooperative. Lastly, the island has signed a pledge by the Clean Energy for EU Islands Secretariat, in which it commits to engaging relevant stakeholders and citizens in its energy transition.

Despite of the goals and solid basis for involving citizens in its decarbonisation process, limited engagement events have taken place on the island. One stakeholder engagement event has, however, been organised in which industrial actors active on Lampedusa and citizens were invited to receive information on visions and goals of decarbonising Lampedusa. Stakeholders such as the local and regional government, hotel cooperative, local port officials, and other stakeholders and citizens were invited. This event ran over multiple days and the stakeholders were presented with an overview of existing subsidy schemes, best-practice cases, and feasibility studies of developing renewable energy on Lampedusa. The turnout at this event was, however, limited and the event was by some of the stakeholders criticised for not providing enough concrete strategies and plans. Below a picture of this event is added.



Pictures from the two-day conference to inform citizens about the decarbonization pathways for Lampedusa under the 'Smart Islands' project (April 2019)

Most work within Task 8.3 on Lampedusa has consisted of identifying the relevant stakeholders on Lampedusa together with CNR-IIA, as described in the section above. Coinciding with the newly established local government, a new IANOS contact person was established on Lampedusa providing a unique insight into the local context. This will be highly valuable for the next steps on Lampedusa.




4.5. Goals and needs of Nisyros

Goals: Nisyros has expressed an interest in developing renewable energy projects by utilizing the yet unexploited potential for several renewable energies, such as low enthalpy geothermal, solar and wind power. The island also intends to set up an energy cooperative, but to the best of our knowledge, have yet to formulate specific goals on this.

Needs: The general public and employees at the local government are among the most important stakeholder groups that need to be engaged and supported to drive and implement decarbonisation on Nisyros.

- 1. The vast majority of the Nisyrian citizens are not informed about the need and urgency of decarbonization. This lack of knowledge among specific groups of citizens creates social resistance and impedes renewable energy developments on the island. Therefore, outreach to members of the island communities is essential. This can be done through communication materials in various formats that can be used to inform the general public via appropriate channels. For instance, digital flyers can be posted on social media, Municipality website and VisioNisyros website to inform the public about decarbonization projects.
- 2. Smart tools need to be developed in order to foster the active support and participation of the citizens of Nisyros in the decarbonization process. This can be in the form of web applications that may already exist or may have to be developed. These tools can further assist in making enhancing the effectiveness of workshops that the Municipality intends to offer to increase participation of citizens, share knowledge with them and development their skills.
- 3. Long-term support and participation of the citizens can also be ensured by targeting the youth of the island. The low level of education and unemployment in the youth of the island is an issue identified by the Municipality of Nisyros. This could be addressed by offering them education (at school level) and training programs (at higher level) that build their skillset, leading to employment opportunities in the development and delivery of decarbonization projects. This, in turn, makes the youth not only





active participants but also partners of the island's energy transition. Therefore, the Municipality of Nisyros could be benefit from training to develop appropriate education programs targeted at the youth of the island.

4. Lastly, the civil servants and employees of the Municipality of Nisyros could benefit from capacity building so that they can not only develop and facilitate decarbonization projects but also actively pursue participatory processes. This capacity building can take the form of formal trainings for the civil servants to understand the regulatory provisions of national and European Union (EU) laws. This can be offered through remote learning, webinars, teleconferences as well the dissemination of information packages to the Municipality employees.

Background information on Nisyros regarding decarbonization initiatives and stakeholder involvement

The following information is based on IANOS Deliverable 8.2.1., a questionnaire from Task 8.2 and a meeting between the HAEE, EREF and the New Energy Coalition.

Nisyros is dependent on very expensive imports of polluting fossil fuels. Given the rising energy prices and unstable supply, this has become a big concern of the safety of supply on the island. Gladly, a good basis for involving the citizens exists for increasing self-consumption on the island. Projects such as NESOI (New Energy Solutions Optimised for Islands) is funding and investigating local production of solar and wind energy. Also, a very large-scale wind project named the AIGAIO, plan to interconnect Nisyros and the island of Kos and to produce a whopping 582MW of energy from 138 wind turbines placed on uninhabited neighbouring islets. Furthermore, in a Memorandum of Cooperation (MoC) between the local municipality and the Centre of Research and Technology Hellas (CERTH). This MoC aims to promote a local circular economy, to exploit local renewable resources, promote a blue economy, and protect biodiversity. An additional element of the MoC is promoting energy communities on the island. A specific goal of this initiatives is to counteract the expensive energy imports.





A few events have taken place on Nisyros that have had the goal to engage local stakeholders. In 2018, a conference on the development of Nisyros Island was organised. Among others, the use of renewable energy sources such as geothermal energy for water desalinisation has been discussed. This conference was coorganised by the local authority. More environmental activities have been organized by both the LAVA company and "Diavatis", the Cultural Association of Nisyros. It is, however, unclear what the outcome has been of these engagement events and how extensive these were.

Beyond the events already having taken place, the ongoing or upcoming projects may benefit from engaging citizens on Nisyros. The extensiveness of projects like the AIGAIO may be intrusive to the connectedness or livelihood of inhabitants on the Greek island. If such projects are planned and undertaken before inclusively involving the locals, it may face resistance. Furthermore, the protection of biodiversity and construction of renewable energy projects though the MoC is something that may inhibit inhabitants to exploit certain areas of the island. Locals should be involved in these undertakings as early in the planning phase as possible.

The New Energy Coalition in Task 8.3 has had a difficult time establishing contact with partners located on the island and has, therefore, only gathered limited information on the current status of citizen engagement initiatives on Nisyros. However, contact was recently made with a local partner which is promising for the further cooperation on this task.





Chapter 5. Identification of target groups

5.1. Introduction

A next step in Trajectory I concerns the identification of the stakeholders who can play a role in the decision-making processes regarding decarbonisation on the islands. The work carried out in this context and the results obtained so far are described in this chapter.

Building on the research done in Task 8.1 and 8.2 of IANOS and the resulting recommendations, several stakeholder groups have been identified as the target groups for the capacity building training workshops that will be delivered. These target groups are described in Chapter 5.2. The target groups that have been identified are described on the basis of general characteristics.

Based on this first identification, a more detailed specification of the target groups per island is made. A start has been made with this specification, the results of which are presented in chapter 5.3.

5.2. Identification of target groups

Please note: the following representation of identified target groups has been established based on an overall analysis of stakeholder groups present on islands. Since the training sessions are intended to be tailored to the goals, needs and context of the islands, some target groups may be present on all islands while others may be present only on some islands.

Informal Leaders and frontrunner citizens of the island

These pioneering citizens of the islands who are already somewhat involved, or at least have shown their interest in getting involved in the subject of renewable energy, sustainability or decarbonization represent a crucial target group. This group comprises of concerned citizens who possess the capability to influence the perceptions of other citizens and to garner their support for initiatives or





projects on the islands. Such prominent citizens may not necessarily be formally recognised as leaders but may have become leaders of their communities informally by virtue of their values and activities in the past.

Representatives of Local Businesses and Industries

The representatives of local businesses and industries are identified as another target group since they contribute to the local economy and offer employment to the islanders. Industries like tourism, services, agriculture, and fisheries are central to the economies of many islands. While tourism can lead to great variations in the energy demand of the islands, agriculture and fisheries can be impacted by any clean energy projects planned on the island. Therefore, having representation of these industries in the training sessions can be of importance. Further, businesses such as energy suppliers and housing corporations could also be participants in the training sessions. Energy suppliers on most islands are predominantly supplying fossil-fuelled energy and they can benefit from the training by realising the public support and importance of shifting their businesses to higher shares of renewable energy. Furthermore, housing corporations hold great influence in implementing large-scale energy efficiency improvements or rooftop solar projects. These businesses can support the planning and execution of clean energy projects on the islands while improving their brand image as sustainable companies.

Local and national governmental institutions

National and local governments hold great weight and decision-making power when it comes to defining the goals and strategies to decarbonize the islands and are often the initiators of publicly funded projects and initiatives to meet these goals. (for instance, see D8.2 Chapter 1 for an inventory of decarbonization initiatives on IANOS Fellow Islands). Competent authorities at municipal, regional and national levels must be included in the capacity building trainings. Such authorities stand to benefit from these trainings so that they can develop new support schemes or adopt existing ones or remove other hurdles to the planning and execution of renewable energy projects within their jurisdictions. Representatives from other governmental institutions such as permitting





authorities, urban planners, energy transmission and distribution companies and regulators are also an important group of actors who can speed up the planning and implementation of initiatives on the islands.

Community groups

A community is regarded as a group of citizens that are socially connected in one way or another, that share norms, opinions, identities, family ties or have other things that bond them (See IANOS Deliverable 8.1.1 "Designing a community engagement strategy", p. 23). Islands, due to their separation from the mainland, are home to islander communities with a shared identity. These communities can take several forms and can be informal like a community of fishermen, or special interest groups (like hobbyist bird watchers, foragers, surfers) or can be formal like a renewable energy community. Having representation of such community groups during the training sessions improves the outreach potential of the training since it can be easy to influence the community by training several of its members. It is important to mention here that if the island has an existing community energy initiative (like an energy cooperative, renewable energy community), its members should be part of the capacity-building sessions. Currently, this holds true only for Ameland among the islands participating in IANOS.

Civil Society Organizations

Civil Society Organizations such as environmental Non-Governmental Organizations (NGOs) often have great interest and influence over the implementation of projects. They also possess expertise in outreach activities that can either build social acceptance or resistance to initiatives. Therefore, their presence in the training sessions could enable knowledge exchange on how to effectively inform and garner the support of local citizens for the projects or initiatives being planned on the islands.





5.3. Identifications of stakeholders on IANOS islands

The tables below indicate the stakeholders from the islands that have been identified so far (M24). The contents of these are more extensive for some of the islands than they are for others. These are in progress identifications and thus, they are far from complete.

Terceira

Stakeholder name	Role on Terceira
Municipality of Angra do Heroísmo	Government
Portal de Energia	Private companies and partners
Linha Poupa Energia, DECO	Energy efficiency Helpline
Regulatory Authority for Energy Services (ERSE)	Energy Authority
ECO.AP Açores	Programme for Energy Efficiency in Public Administration

Bora Bora

Stakeholder name	Role on Bora Bora
French Polynesia Government	
Municipality of Bora Bora	Government and public administrations
French state institutions (ADEME, AFD)	
Electricité de Tahiti (EDT)	Local energy company
LE CRIOBE	Educational institutions
University of French Polynesia	
Motu Tevairoa Residents Association	Community groups
Polynésienne des Eaux	
Cluster Marine	Local businesses
French Tech (innovations)	Local businesses
Banks	
Bora Bora Radio	Local media
La vai na noa Bora Bora	Spiritual or environmental groups
Polynesienne des Eaux	Water management





Lampedusa

Stakeholder name	Role on Lampedusa
Administration of Lampedusa Government	
Agrigento Province District	Government
Sicilian Assembly Region	
Federalberghi Pelagie	Key stakeholder of hotels in the region
Beach resort confederation	Management of all beach stands, cafés,
	etc.
Port of Lampedusa	Port and shipping authority
SELIS	Local energy company
Politencnico Palermo	University
CNA	Pelagie Islands tourist consortium
Lampedusa Times	Local newspaper
Pelagie island Marine Protected area	Nature reserve
Exalto and Innovation SRL	Smart Island developers

Nisyros

Stakeholder name	Role on Nisyros
Municipality of Nisyros	Government
Kos-Kalymnos autonomous micro-grid Independent Power Transmission Operator (ADMIE) ENTSO-E - European association for the cooperation of transmission system operators	TSOs
LAVA	Pumice stone quarry on Yali island operated by Nisyros municipality
NISYRIO	Non-profit organization that is active in the island





AIGAIO Eunice Energy Group	Formal decarbonization groups
Center for Research and Technology Hellas (CERTH) DAFNI Network	Organizations on or affiliated with activities on Nisyros
Diavatis	Cultural association





Chapter 6. Conclusion and Next Steps

6.1. Conclusion

This report described the progress made within Task 8.3 named 'Capacity Building through Training Sessions for LHs, Fellows, and EU Islands', within the Work Package 8 regarding energy cooperatives and stakeholders' engagement. In the first chapter of this report, the individual components of Task 8.3 task description were defined, and these descriptions were operationalised into working concepts. In the second chapter, a concrete plan of approaching the training sessions within T8.3 was described and a timeline of realising these trainings were provided. The plan was described as two separate, yet connected, trajectories. Trajectory 1 constitutes the steps taken towards realising the trainings on the islands. Trajectory 2 constitutes the means with which the trainers from the New Energy Coalition will gather the knowledge to provide the trainings. The third chapter provided a description of best practices in community engagement, with examples from LH island Ameland and the SMILE island project participant Samsø. The fourth chapter listed the goals that IANOS islands Terceira, Bora Bora, Lampedusa, and Nisyros have expressed in terms of decarbonising their islands. Furthermore, their expressed needs of engaging their community in this process were described as well as background information on community engagement initiatives and decarbonisation projects already undertaken on the islands. The fifth and final chapter provided an overview of the stakeholders that are relevant to engage on each IANOS island and a description of the categories that these stakeholders belong to.

6.2. Next steps

In the months to come, New Energy Coalition will progress on the steps described in both Trajectory 1 and 2. As part of Trajectory 2, the next step will be acquiring knowledge by investigating other European projects such as the BRIDGE and SMILE project. Secondly, and in relation to the latter mentioned project, the trainers from New Energy Coalition will follow trainings provided by the SMILE





participating island of Samsø, specifically Energi Akademiet Samsø. The lessons learned hereof will become a part of the content of the train-the-trainer sessions that are being planned on each FI and Terceira. Alongside this progression on Trajectory 2, the work will continue of identifying the relevant stakeholders on each island as well as identifying which stakeholders are essential to include in the train-the-trainer training sessions. This will be supported by continuous correspondence with project partners related to activities on or around the islands. Furthermore, within the Trajectory 1 proceedings, steps are being taken to produce a questionnaire for each island. This questionnaire could work as input for local trainers about probing the preferences of local stakeholders to engaging in local decarbonisation projects. Further proceedings of the Task 8.3 will follow in Deliverable 8.9.





Chapter 7. References

- S. J. A. N. S. J. J. L. M. & J. P. Hermansen, "Samsø, a Renewable Energy Island:
 10 years of development and evaluation (10 year report) -- Samsø,
 Vedvarende Energi-Ø: 10 års Udvikling og Evaluering (10årsrapport," 2007.
- [2] K. Sperling, "How does a pioneer community energy project succeed in practice? The case of the Samsø Renewable Energy Island.," 2016.
- [3] Ameland Energie, "Ameland Energie Zonnepark," [Online]. Available: https://www.amelandenergie.nl/files/zonnepark.html . [Accessed 2022].
- [4] Allecijfers, "Statistieken gemeente Ameland," [Online]. Available: https://allecijfers.nl/gemeente/ameland/. [Accessed 2022].
- [5] GreenChoice, "GreenChoice," [Online]. Available: https://www.greenchoice.nl/. [Accessed 2022].
- [6] Waddenfonds, "Het Waddenfonds," [Online]. Available: https://waddenfonds.nl/. [Accessed 2022].
- [7] Waddenvereniging, "Klimaatverandering waddengebied," [Online].
 Available: https://www.waddenvereniging.nl/onswerk/klimaatverandering .
 [Accessed 2022].
- [8] Governo dos Açores, "Portal da Energia Projectos," [Online]. Available: https://portaldaenergia.azores.gov.pt/portal/Politicaenergetica/Projetos?portalid=0?portalid=0?portalid=0. [Accessed 2022].
- [9] Life IP Climaz, "Life IP Climaz," [Online]. Available: https://www.lifeipclimaz.eu/. [Accessed 2022].
- [10] Adene, "Rota da energia," [Online]. Available: https://rotadaenergia.adene.pt/.
- [11] Governo dos Açores, "Dicas de Eficiência Energética," [Online]. Available: Dicas (azores.gov.pt).
- [12] Governo dos Açores, "Portal da Energia Eficiência Energética," [Online]. Available: https://portaldaenergia.azores.gov.pt/portal/Eficiencia-Energetica/Campanhas-EEA. [Accessed 2022].





- [13] Governo dos Açores, "Portal da Energia Encontros de Eficiência Energética," [Online]. Available: https://portaldaenergia.azores.gov.pt/portal/Eficiencia-Energetica/Encontros-Eficiencia-Energetica?portalid=0. [Accessed 2022].
- [14] Governo dos Açores, "Portal da Energia Poupa Energia," [Online]. Available: https://portaldaenergia.azores.gov.pt/portal/Eficiencia-Energetica/Poupa-Energia. [Accessed 2022].
- [15] Governo dos Açores, "Portal da Energia Manuais," [Online]. Available: https://portaldaenergia.azores.gov.pt/portal/Eficiencia-Energetica/Manuais. [Accessed 2022].

