IANOS

SUSTAINABLE SOLUTIONS

for islands' decarbonisation

IANOS Collaboration with other initiatives

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Project Coordinator	João Gonçalo Maciel (EDP) - JoaoGoncalo.Maciel@edp.com

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Executive Summary

This deliverable D9.7 (“IANOS collaboration with other initiatives”) reports on the collaboration between the consortium members and other projects belonging in Local Energy Communities (LEC) initiatives active at EU level. The deliverable intends to provide evidence of the participation of IANOS project to the different initiatives and meetings. During the first phase of the project (M1-M12), the IANOS Consortium exploited these different initiatives: collaboration with BRIDGE Working Groups (WG), participation in the Clean Energy for EU islands forum – the European Commission’s main event on clean energy transition on European islands, holding different thematic webinars to explore the potential for synergies among the principal H2020 funded projects in the framework of clean energy transition on islands.

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Notations, abbreviations, and acronyms

KER	Key Exploitable Result
LEC	Local Energy Community
SGAM	Smart Grid Architecture Model
SRA TF	Scalability & Replicability Analysis Task Force
WG	Working Group

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1 Introduction

1.1 Objectives and Scope

The goal of D9.7 is to describe IANOS collaboration actions with different projects and initiatives at EU level. In particular, BRIDGE (all 4 working groups) activities are addressed to enhance cross initiatives collaboration and fertilization. A questionnaire has been sent to IANOS representatives involved in BRIDGE initiative to report on activities and meetings attended.

In addition, the connection with the Clean Energy for EU Secretariat has been established to gain visibility and to learn from other projects. Finally, several webinars have been scheduled to find synergies and share experiences on island energy transition projects under the H2020 program.

1.2 Relation to other activities

D9.7 is housed under Task 9.4, titled “Collaboration with BRIDGE, NESOI, Clean energy for EU islands secretariat”. T9.4 is an ongoing process that spans the project's lifetime from start (M1) to end (M48). The activities of this task are particularly relevant for Task 9.3 titled “Replication potential across EU and cooperation with relevant project/initiatives” in order to identify best practices and lessons learnt with different projects around EU to stimulate the replication of IANOS solution towards other islands.

1.3 Structure of the deliverable

Chapter 2 – Connection with BRIDGE activities

Chapter 2 describes how IANOS is collaborating with BRIDGE activities, reporting the meetings attended, the contributions to BRIDGE working groups, the interactions with other BRIDGE projects and lessons learnt from BRIDGE initiative in the first period of the project (M1-M12).

Chapter 3 – Connection with Clean Energy for EU islands

Chapter 3 introduces to the Clean Energy for EU islands Secretariat and describes how the Secretariat is supporting islands for the development of the clean energy transition. In

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addition, this chapter reports on the participation of IANOS in the Clean Energy for EU island forum, the European Commission's main event on clean energy transition on European islands.

Chapter 4 – Synergies with other projects under H2020 program

Chapter 4 lists the webinars and workshops held by IANOS project in collaboration with other projects under the H2020 program.

Chapter 5 – Conclusions and next steps

Chapter 5 reports the summary of the document and explains the steps for the next deliverables related to T9.4.

2 Connection with BRIDGE activities

2.1 Introduction to the BRIDGE h2020 initiative

BRIDGE is a European Commission initiative established in November 2015 as a cooperation group for Horizon 2020 Smart Grid, Energy Storage, Islands, and Digitalisation Projects. The aim of Bridge is to share knowledge, experience, and best practice, and to allow projects to speak to the European Commission with one voice. Participation in Bridge also increases the profile of projects and provides dissemination opportunities.

BRIDGE operates through its 4 WG: Data Management, Business Models, Regulations, Consumer and Citizen Engagement.

Data Management

The Data Management WG aims to cover a wide range of aspects ranging from the technical means for exchanging and processing data between interested stakeholders to the definition of rules for exchange, including security issues and responsibility distribution in data handling. Accordingly, the WG has identified 3 areas of collaboration around which mutual exchange of views and discussions have been set: Communication Infrastructure, embracing the technical and non-technical aspects of the communication infrastructure needed to exchange data and the related requirements; Cybersecurity and Data Privacy, entailing data integrity, customer privacy and protection; Data Handling, including the framework for data exchange and related roles and responsibilities, together with the technical issues supporting the exchange of data in a secure and interoperable manner, and the data analytics techniques for data processing.

Business Models

The Working Group on Business Models aims at:

- Defining common language and frameworks around business model description and valuation
- Identifying and evaluating existing and new or innovative business models from the project demonstrations or use cases

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- The development of a simulation tool allowing for the comparison of the profitability of different business models applicable to smart grids and energy storage solutions is being developed and tested by the Working Group members.

The Business Models WG has been inactive since mid-2019, as the main activities were completed. Some of the outstanding topics were addressed by specific newly established Task Forces. However, business model definition and investigation are posed as a requirement in H2020 calls. With the growing number of new BRIDGE projects addressing the business-, economic- and general value-oriented aspects of the services and activities pursued, virtually all BRIDGE projects work on these issues. Reactivation of the BM WG could leverage on work already done in BRIDGE projects and focus on common business models challenges and synergies among BRIDGE projects. A strong Business Model WG could efficiently support their efforts and serve to create additional value to the decision makers on all levels.

Regulations

The BRIDGE Regulation WG was established at the origin of the BRIDGE initiative with the objective of fostering knowledge sharing among H2020 projects affected or addressing by different Regulation aspects in the Energy domain.

The Regulation WG, as the entire BRIDGE initiative, structures its activities on a yearly basis. In the last years, different topics have been addressed, resulting in most cases on specific reports that can be shared not only within the BRIDGE community, but with a larger audience. Past year, the Regulation working group has focused its efforts on topics related to market design, more in particular on Products and Services, Coordination Models and Market Integration. In order to continue the work, four tracks are defined for 2021 that will focus on several integration/harmonization aspects of market design:

- Harmonization at the level of products and services, including the role of energy communities as service provider.
- Cross-border and regional cooperation.
- Integration of market -based and non-market-based flexibility mechanisms.
- Coordinated flexibility markets for system services.

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Consumer and Citizen Engagement

The BRIDGE working group on consumer and citizen engagement (WG4) has been established at the origin of the BRIDGE group with the following objectives:

- Segmenting, analysis of cultural, geographical, and social dimensions
- Value systems - Understanding Consumers
- Drivers for Engagement
- Effectiveness of Engagement Activities
- Identification of what triggers behavioural changes (e.g., via incentives)
- The Regulatory Innovation to Empower Consumers

The workplan for 2021-2022 will focus mainly on two objectives:

- Promote knowledge exchange and best practice sharing around consumer engagement throughout the BRIDGE initiative.
- Analyse barriers and propose solutions for BRIDGE projects to build community-based engagement strategies and processes.

2.2 IANOS representatives involved in BRIDGE

IANOS project has been registered as a member of BRIDGE initiative and participates in all the working groups. *Table 1* shows the list of identified key persons in the project who are directly involved to follow the BRIDGE activities for the different working groups.

Table 1 IANOS contacts list involved in BRIDGE activities

Last name	First name	Mail contact	Organisation	Working group / Task force
Maciel	Joao	joaogoncalo.maciel@edp.com	EDP	Coordinator
Marinho	Nuno	nuno.marinho@edp.pt	EDP	Coordination team
Peccianti	Francesco	francesco.peccianti@rina.org	RINA	Communications
Marinho	Nuno	nuno.marinho@edp.pt	EDP	WG Regulation
Ziu	Denisa	denisa.ziu@eng.it	ENG	WG Regulation
Croce	Vincenzo	vincenzo.croce@eng.it	ENG	WG Regulation

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Vollmer	Johannes	johannes.vollmer@eref-europe.org	EREF	WG Regulation
Nikolopoulos	Nikolaos	n.nikolopoulos@certh.gr	CERTH	WG Data Management
Tagkoulis	Nikolaos	n.tagkoulis@certh.gr	CERTH	WG Data Management
Jansen	Jeroen	jeroen.jansen@neroa.nl	NEROA	WG Data Management
Landeck	Jorge	jlandeck@vps.energy	VPS	WG Data Management
Costa	José Miguel	josemiguel.costa@edp.com	EDP	WG Consumer and Citizen Engagement
Ziu	Denisa	denisa.ziu@eng.it	ENG	WG Consumer and Citizen Engagement
Croce	Vincenzo	vincenzo.croce@eng.it	ENG	WG Consumer and Citizen Engagement
García	Moisés Antón	manton.etraid@grupoetra.com	ETRA	WG Business Models
Marinho	Nuno	nuno.marinho@edp.pt	EDP	WG Business Models

2.3 BRIDGE meetings attended

2.3.1 BRIDGE General Assembly March 2021

On 2-4 March 2021, the BRIDGE General Assembly 2021 took place online, organised by the European Commission. The objective of the BRIDGE annual meetings is to create a better understanding of the BRIDGE projects, learn more about projects results and help to establish closer cooperation for European best practice standards. By bringing together different actors with their different experiences, the final scope of the BRIDGE General Assembly is to identify concrete actions to be implemented by strengthening the collaboration between projects.

IANOS Project Coordinator – Nuno Marinho presented the project to the BRIDGE General Assembly 2021. The presentation introduced the main objectives of the project and the

areas of interest that coincide with the current work in BRIDGE, with particular reference to the different WGs.

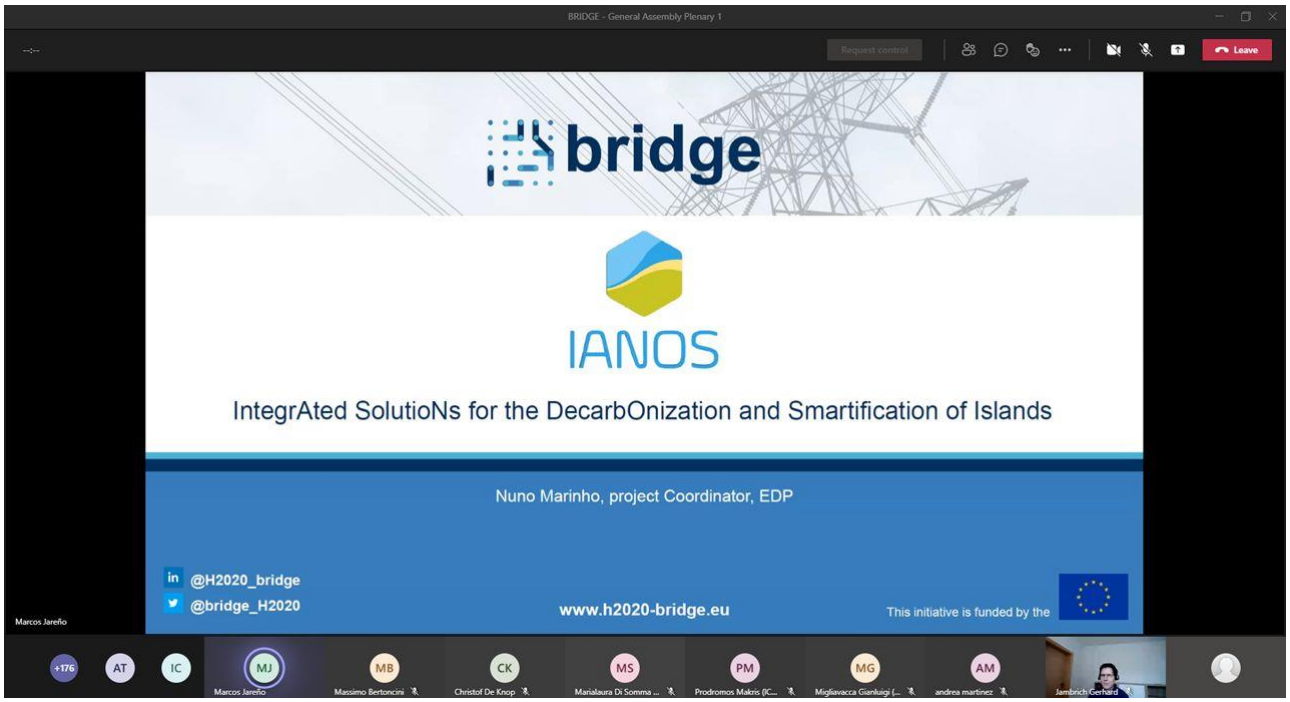

Figure 1 Bridge General Assembly 2021

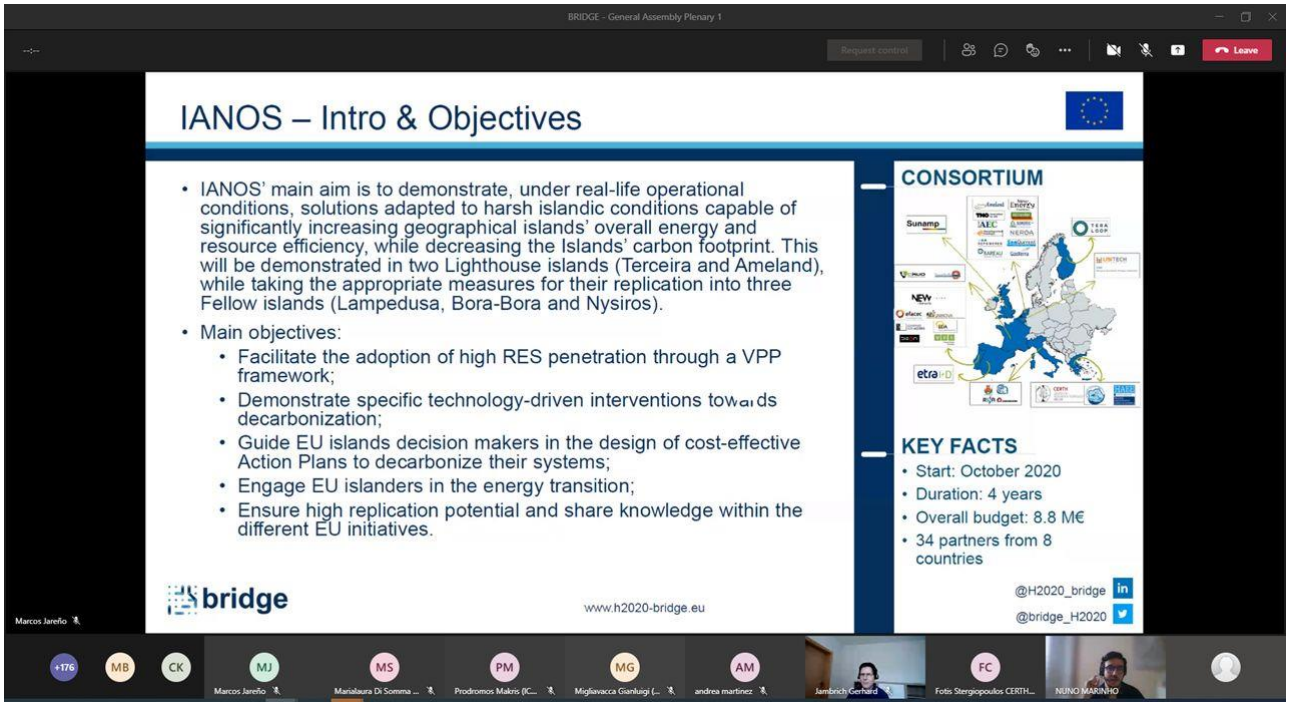

Figure 2 Project Coordinator Nuno Marinho presented IANOS at the H2020 BRIDGE General Assembly

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2.3.2 BRIDGE Working Groups meetings

Table 2 lists all the WGs meetings attended from persons who represented IANOS during this year of BRIDGE activities.

Table 2 BRIDGE meetings attended by IANOS members

Meeting	Attendees	Date
SRA TF as member of the WG Data Management	Nikos NIkolopoulos	09/03/2021
WG Consumer Citizen Engagement kick-off	José Miguel Costa	15/04/2021
SRA TF as member of the WG Data Management	Nikos Nikolopoulos	17/05/2021
WG Data Management	Nikos NIkolopoulos	21/05/2021
SRA TF as member of the WG Data Management	Nikos Nikolopoulos	31/05/2021
SRA TF as member of the WG Data Management	Nikos Nikolopoulos	03/06/2021
WG Consumer and Citizen Engagement - Subgroup Meeting Strategies of Engagement and Group Building	Johannes Vollmer	09/06/21
SRA TF as member of the WG Data Management	Nikos Nikolopoulos, Vivi Giourka	15/06/2021
BRIDGE Regulation WG kick-off	Nuno Marinho	16/06/2021
WG Consumer and Citizen Engagement Meeting	Johannes Vollmer	24/06/21
WG Consumer and Citizen Engagement - Subgroup Meeting Strategies of Engagement and Group Building	Johannes Vollmer	15/07/21
WG Consumer and Citizen Engagement Meeting	Johannes Vollmer	21/09/21
Launch of the Business Model WG (To be expected at Aug/Sep)	-	To be announced

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2.4 Contributions to BRIDGE

Data Management WG

IANOS from its very first beginning has supported the Scalability & Replicability Analysis Task Force (SRA TF), under the coordination of FOSS. IANOS contributed to the methodology defined for SRA during its early stages, having provided a consolidated list of Key Exploitable Results (KERs) organized under pre-defined categories (e.g., software, hardware ones), while for each one of them some relevant metrics.

IANOS and SMILE, through CERTH participation in both projects have as well supported multiple information gathering from all SG projects dealing with the multiple lists of KPIs (each one adopts) and a list of potential KERs, each one offers. These both lists have contributed to the development of SRA TF, with CERTH on behalf of these two projects, undertaking the screening of a list of around 10 projects, from available online data repositories (e.g., Deliverables from CORDIS or each one of the projects).

IANOS also made the very first exercise for all projects participating in SRA TF, of mapping IANOS KERs, according to the SGAM. CERTH also provided the outcome of this exercise (being discussed with all IANOS partners) as an example for all projects to follow, supporting and providing information and necessary clarifications to SRA TF members.

Finally, under the coordination of FOSS and CLERENS, CERTH has prepared two detailed text documents, i) one related to review of relevant methodologies, similar to SRA and ii) another one related to how one Holistic Assessment Toolkit being currently developed by CERTH (as part of SCC projects) to support methodologically SRA TF methodology development and shared that with key members for review and ideas exchange. This will be used for the preparation of SRA TF report to EC.

Business Models WG

Business Models WG is being reactivated during this present working year. Consequently, the WG is looking for gathering the different projects' participating views so that to establish future tracks and topics in order to define in detail the next actions to be taken.

For IANOS, the topics that have been identified for future participation are the following:

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Topic 1: Value Analysis Methodology definition: the relationship of Use Cases, Business Models, Services, Actors, and value chain segments.
Topic 2: Investigation of the types and characters of the data value chains in BRIDGE projects.
TOPIC 3 Design of BM to better include data value chain observability (to be addressed in 2022).

Consumer and Citizen Engagement WG - Subgroup Meeting Strategies of Engagement and Group Building

IANOS and its main activities have been introduced to the Subgroup partners who work on strategies of engagement and group building. This work stream is in particular relevant to IANOS WP8, which is on Energy Cooperatives and Stakeholder Engagement. EREF, in cooperation with the WP8 partners, will be contributing to developing a community, and leading the work on designing a community engagement toolbox that will be used to support the islands' decarbonisation strategies. The WP8 deliverables, in particular the Community engagement strategy and best practice report (September '21), the Engagement Toolbox for Geographical Islands (April '22), as well as the National / Regional Policy Advisory Papers and National Stakeholder Workshops (2023 & 2024) will shared among the BRIDGE partners and can contribute to achieving one of the WG Consumer and Engagement main objectives, which is to promote knowledge exchange and best practice sharing around consumer engagement. In concrete, the WP8 output can feed into the subgroup deliverables (strategies of engagement and group building), such as the Group Building Handbook and the policy recommendations each subgroup is meant to deliver.
Ahead of the next subgroup meeting on 15/9, EREF will contribute to the requests made by the subgroup coordinator (TILOS). This includes 1) bringing examples of successful engagement processes to the next meeting, 2) carry out desk research of existing guides / handbooks on existing on engagement strategies, 3) submit a short project description 4) formulate potential questions addressing BRIDGE projects so they can contribute to the Group Building handbook.

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2.5 Interactions with other BRIDGE projects

IANOS will collaborate with different projects. In particular, IANOS will work closely with SMILE project, as some partners are common (i.e., RINA-C, CERTH, NEC), and previous experience from SMILE is well received by IANOS Consortium.

In relation to Consumer and Citizen Engagement WG, possible synergies will unfold in further course of the IANOS implementation. Yet, from the 3 meetings attended so far, it became apprehensive that a substantial number of projects are challenged by engaging with citizens themselves. Whereas there's longstanding experience and proven track records in stakeholder engagement (such as authorities, NGOs, academia, private and public sector entities etc), reaching and involving citizens (and not so much their various forms of representations) in project activities seems to be a much harder task to fulfil. Throughout the exchange with partners involved in BRIDGE, EREF hopes to detect potential synergies in citizen engagement that could be achieved by grouping suitable actions across the project represented.

With reference to Business Models WG, no synergies between projects have been created yet, since the Kick-Off meeting of the WG has not been launched. Nevertheless, one of the major intentions of this WG is to generate synergies between the projects so that the business, economic and value-oriented aspects are gathered among the 75 projects that have raised interest in the Business Models WG parallel session at the BRIDGE General Assembly performed in March 2021.

2.6 Lessons learnt from BRIDGE

Data Management WG

IANOS was motivated by SRA TF exercise and tried to map all relevant advancements expected (including hardware-oriented, software-oriented and services offerings) according to the SGAM. This proved to facilitate the organization of the project on a high level, while also supports the addressing of interoperability aspects and the requirements, which are required by each technology provider per KER. Given that also the D1.2 "Technical and Innovation Management Plans", which aims at providing a short but very insightful

description of all IANOS expected advancements, follows this structure. Figure 3 shows the mapping of SGAM layers to key exploitable results and innovative elements of IANOS.

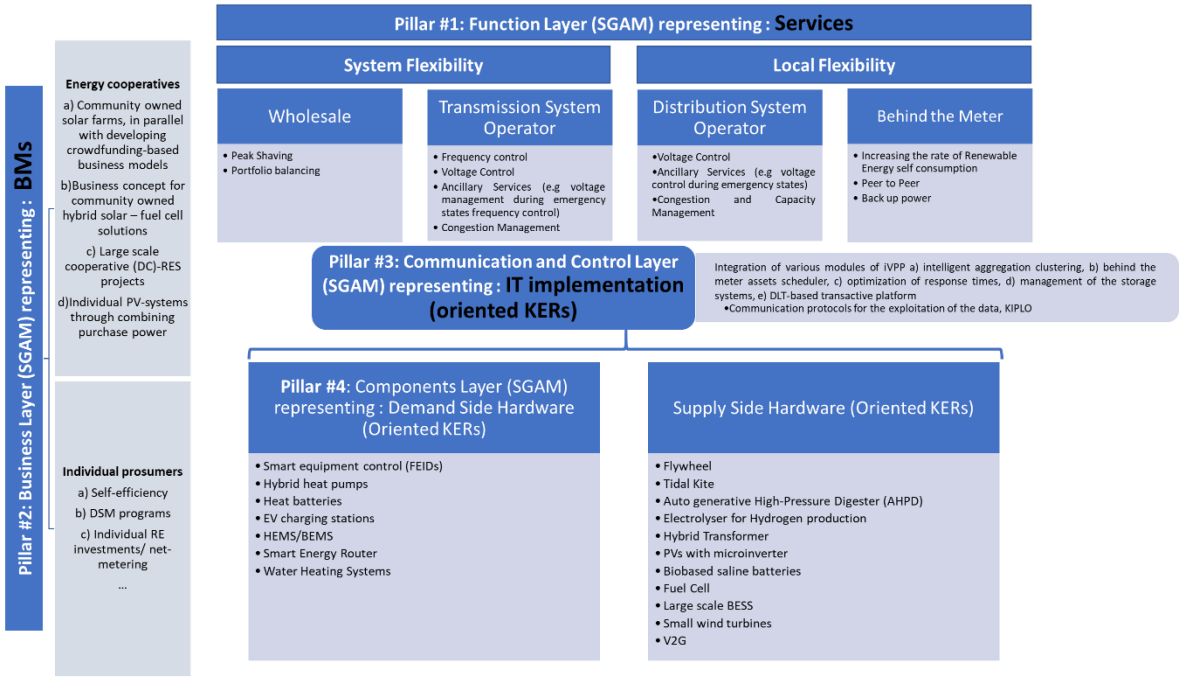

Figure 3 Mapping of SGAM layers to IANOS KERs and IEs

Moreover, IANOS was beneficiated from BRIDGE to structure the selected KPIs, according to the approach SRA TF selected. This selection of SRA TF was also based on ideas and lessons learnt from SMILE project.

Consumer and Citizen Engagement WG

At this stage of the process, it would be still early to describe the lessons learnt from the BRIDGE initiative (IANOS only started in October 2020, with WP8 kicking off in April 2021). In any case it will be helpful to learn about engagement strategies developed and applied in other projects, in particular as the COVID-19 pandemic does not allow for much personal interaction. For EREF, learning about digital formats of engagement will be very valuable in implementing the tasks carried out under WP8.

Business Models WG

Officially, the work to be performed at this WG has not started. The Kick-Off meeting is expected to be carried out in the next few weeks. Nevertheless, from the Work Plan

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presented to the participants in the Business Models WG, it is expected that synergies are stablished between the projects so that business, economic, and general value-oriented aspects of the services are shared among the projects. Additionally, it is expected that this WG can create and focus on common Business Model challenges in order to create value to the decision makers at all levels.

3 Connection with Clean Energy for EU islands

3.1 Introduction to Clean Energy for EU islands Secretariat

In May 2017 the European Commission, together with 14 Member States, signed the "Political Declaration on Clean Energy for EU Islands" [1]. This Declaration was born out of the recognition that islands and island regions face a particular set of energy challenges and opportunities due to their specific geographic and climatic conditions. The opportunities have the potential to make Europe's island communities innovation leaders in the clean energy transition for Europe and beyond - a fact that the European Commission explicitly acknowledged in its Communication on Clean Energy for All Europeans [2], reaffirming its commitment to ensuring that the energy concerns of islanders are at the forefront of the energy transition and related policy developments.

In cooperation with the European Parliament, the Commission in 2018 set up a Secretariat to deliver the objectives of the Clean Energy for EU Islands Initiative. The Secretariat acts as a platform of exchange of best practice for islands' stakeholders and provides dedicated capacity building and advisory services. It has been created to facilitate the clean energy transition on EU islands from the bottom up. It is built on the vision that to ensure the best environment for change, and to benefit all members of island communities, a balanced collaboration between public and private actors is essential. For this reason, the Secretariat is using the quadruple helix approach, helping citizens, local authorities, local businesses, and academic institutions to work together to advance the clean energy transition on their island.

Between 2018 and 2020, the Secretariat acted as a pilot project supporting the EU-wide community of islands in their efforts to transition to sustainable energy and reduce energy consumption. Following the signature of the Memorandum of Split in 2020, the second phase of the Secretariat has been launched in the beginning of 2021 and will run for two years. The second phase will build on the results of the pilot years to create a pipeline of bankable clean energy projects on islands in the EU.

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Objectives of Secretariat in Phase II

In Phase II, the objective of the Clean Energy for EU islands Secretariat is threefold.

I. To empower island communities to move from clean energy vision to clean energy action.
II. To support a bottom-up approach to decentralised energy transition that relies on proven solutions through transition processes that happen collectively and locally.
III. To match bottom-up initiatives with expert support that has a real impact on projects that are happening on the ground.

The Secretariat implements solutions to support the energy transition of all islands in the EU:

- Through the Clean energy for EU islands pledge, islands can sign up for the initiative and show the rest of the EU Island community their ambitions.
- Workshops are organised as energy academies that engage island communities to act at the local level and take up an active role in energy transition projects on their island.
- Tailored technical assistance helps islands to tackle energy issues in a multidisciplinary way and supports them to coherently overcome technical, social, financial, juridical and policy barriers. Support is given to transition agendas, but also to action plans and individual projects.
- The Islands Marketplace facilitates financing to energy projects on islands by matching island communities with investors and technology providers.
- Stakeholders from different levels of governance are brought together in an Islands Think Tank to discuss legal and regulatory barriers for clean energy on islands. This leads to concrete solutions that overcome the existing barriers.
- The EU islands website disseminates the success stories and challenges of islands to the EU community and builds a European network of island stakeholders.
- The Clean energy for EU islands forum increases the visibility of the initiative and matches island needs with available solutions.

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3.2 Guidelines for clean energy transition of islands

On 7 November 2019, the Clean Energy for EU Islands has released a handbook setting out how island communities can facilitate a shift to clean energy. The aim of the Islands Transition Handbook [3] is to provide a methodological framework for island communities to develop a Clean Energy Transition Agenda. The Handbook serves as a starting point to find inspiration and contacts in the EU island community to kick-start, re-start or further boost the decarbonisation of islands.

Central to this Islands Transition Handbook is the Clean Energy Transition Agenda, a strategic roadmap for clean energy transition for islands. Developing a Transition Agenda is a process requires broad engagement and involvement from the island community and frontrunning public authorities, moving in the same direction to decarbonise the island's energy system.

Figure 4 represents the clean energy transition as a circular process. The arrows provide an overview, going from an initial agreement between local island organisations and the public authority, through a dialogue process, leading from implementation and monitoring towards full decarbonisation. The Islands Transition Handbook concentrates on the initial stages of the process – the transition strategy – with the focus on committing to decarbonisation, understanding the island dynamics, visioning, and exploring transition pathways.

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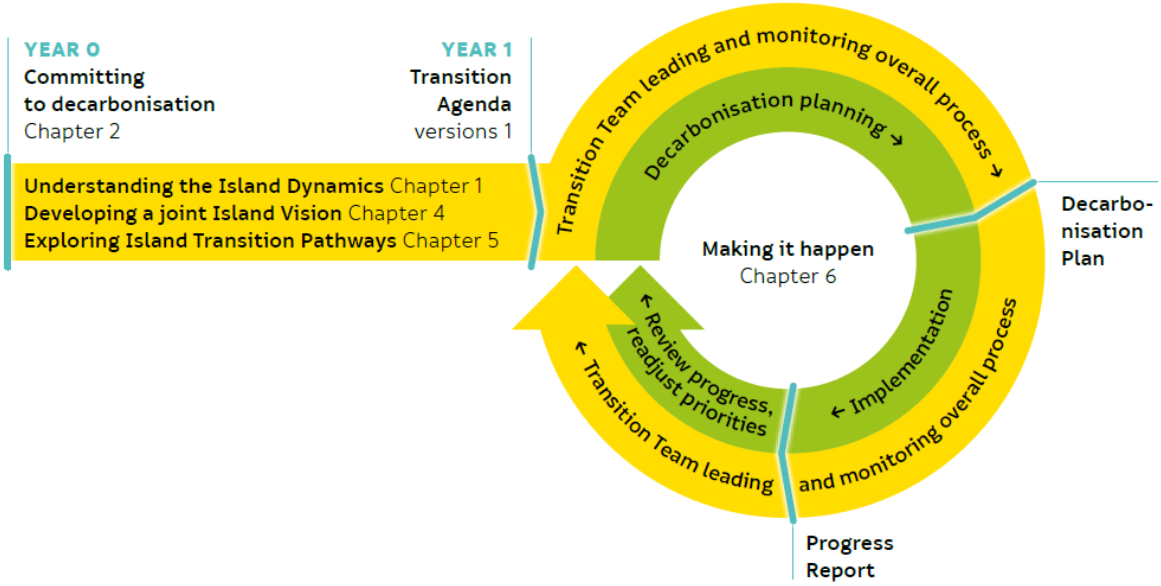

Figure 4 The clean energy transition process

Committing to decarbonisation

A good team is characterised by a broad range of stakeholders that match the islands general dynamic. It should be a collection of organisations that have the human resources to ensure a strategic dialogue that leads to a strong Clean Energy Transition Agenda. The key stakeholder groups include public authorities, civil society organisation and educational institutes. Local business associations and private businesses on the island are a vital part of the local socioeconomic ecosystem which will also be affected by the transition.

To ensure a good start the Clean Energy for EU Islands Pledge [4] is designed to support the commitments between the different stakeholders involved in the island-wide Clean Energy Transition Agenda. When the pledge document has been signed it must be registered on the Clean Energy for EU Islands website. Signing the pledge shows that the organisations involved are committed enough to broadcast this to the EU island community and the European Commission.

Understanding the island dynamics

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As an essential step in the Clean Energy Transition Agenda, the island dynamics are explored to identify and analyse the barriers and opportunities that exist. The analysis includes a description of the current energy system that acts as a baseline for the future and allows to determine the key sectors that influence the clean energy transition. The island stakeholders are mapped to identify those who are key to the process. The position of the transition process in the regulatory context, including national, regional, and local targets, is investigated. This results in a catalogue that acts as a useful reference to shape the island's transition pathways. The Handbook gives guidance on an appropriate scope for the analysis, possible sources of data, how to interpret it, and how to estimate it whenever it is not available. In order to acknowledge the special needs and challenges of islands, the energy system description is classified according to the following sectors:

- Electricity generation and consumption;
- Transport on the island;
- Transport to and from the island;
- Heating and cooling.

Exploring island transition pathways

Island Transition Pathways describe strategies, barriers to overcome, important actors, and essential actions for the island's clean energy transition. The starting point is the island-wide vision on clean energy elaborated by the island stakeholders. The transition pathways describe possible storylines, including goals and interventions, in the short-, mid- and long-term to make the bridge between the island's envisioned clean energy future and the present. The pathways help to overcome technical, financial, legal, cultural, historical, and social barriers to the island's clean energy transition by mobilising all stakeholders. Developing the transition pathways is an important step to connect the vision of the clean energy island to tangible and concrete ideas of how this future can be achieved. It brings the strategic discussion on the vision down to an operational and pragmatic level and leads to an overview of the different possible ways to the island's complete decarbonisation.

Parallel to developing the transition pathways, transition pillars can be built. Whereas the pathways integrate the different perspectives from across sectors and energy vectors, the transition pillars explore and investigate individual opportunities in a single area. The Islands

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Transition Handbook provides several tools to develop the pillars, including SWOT analysis, the Transition canvas, and a technology assessment.

Once it is agreed that the strategic dialogue has led to clear outcomes, publishing the agenda can serve as an important milestone in the transition process. The publication of the agenda is an opportunity to bring together the entire island community and relevant mainland stakeholders. Making the Transition Agenda

available online provides access to it for the island stakeholders and any other EU islands wanting to learn from your island's transition process.

Making it happen

The Islands Transition Handbook gives advice and practical tools on how to continue the clean energy transition after the Clean Energy Transition Agenda has been published. It provides references to guides, programmes and platforms that help island stakeholders to develop a decarbonisation plan, financing concept and individual clean energy projects. Different financing opportunities exist for clean energy transition projects, depending on the technology, the involved stakeholders, and other project-specific factors.

Monitoring the transition

Monitoring is an important part of the learning process. The Clean Energy for EU Islands Secretariat develop transition indicators that cover nine areas of the clean energy transition. By means of a self-assessment matrix, an island self-assesses the transition process on the island in order to identify the strengths and weaknesses of the ongoing activities. The indicators are shown in Figure 5.

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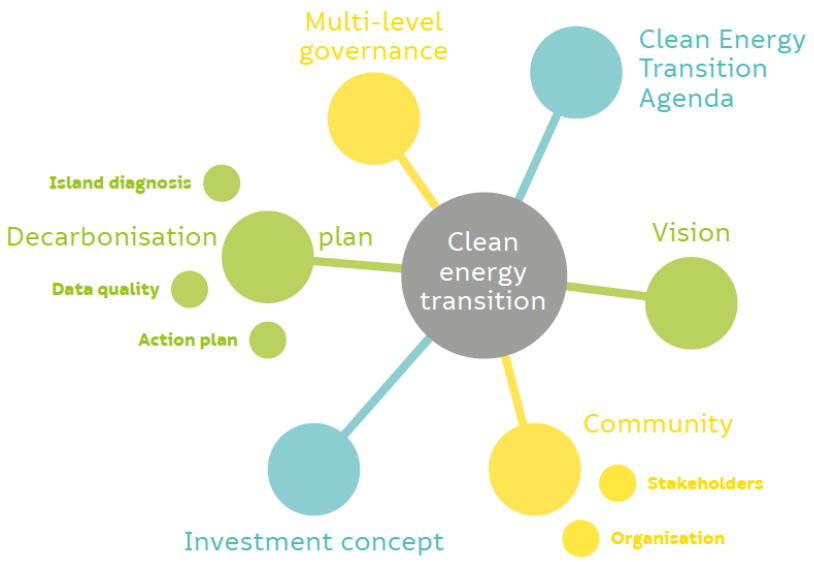

Figure 5 The transition indicators for clean energy transition

3.3 Clean Energy for EU islands forum 20th and 21st May 2021

On 20-21 May 2021, the 6th forum of the Clean Energy for EU islands initiative, the European Commission's main event on clean energy transition on European islands, took place with around 270 participants and more than 50 speakers. The two-day event acted as a knowledge hub for the clean energy transition of European islands. It provided participants with a platform to gain visibility for their initiatives, to get technical assistance for designing, preparing, and implementing their decarbonisation plans and to get assistance on project funding.

IANOS project took the great opportunity to participate during the initiative as an exhibitor. Figure 6 and Figure 7 show the IANOS virtual booth during the event. By participating in the forum, IANOS had the change to reach a wide audience within the clean energy sector, to present the project in the island context, to get in direct contact with interested persons and use the networking opportunities, and to gain visibility within the EU islands community.

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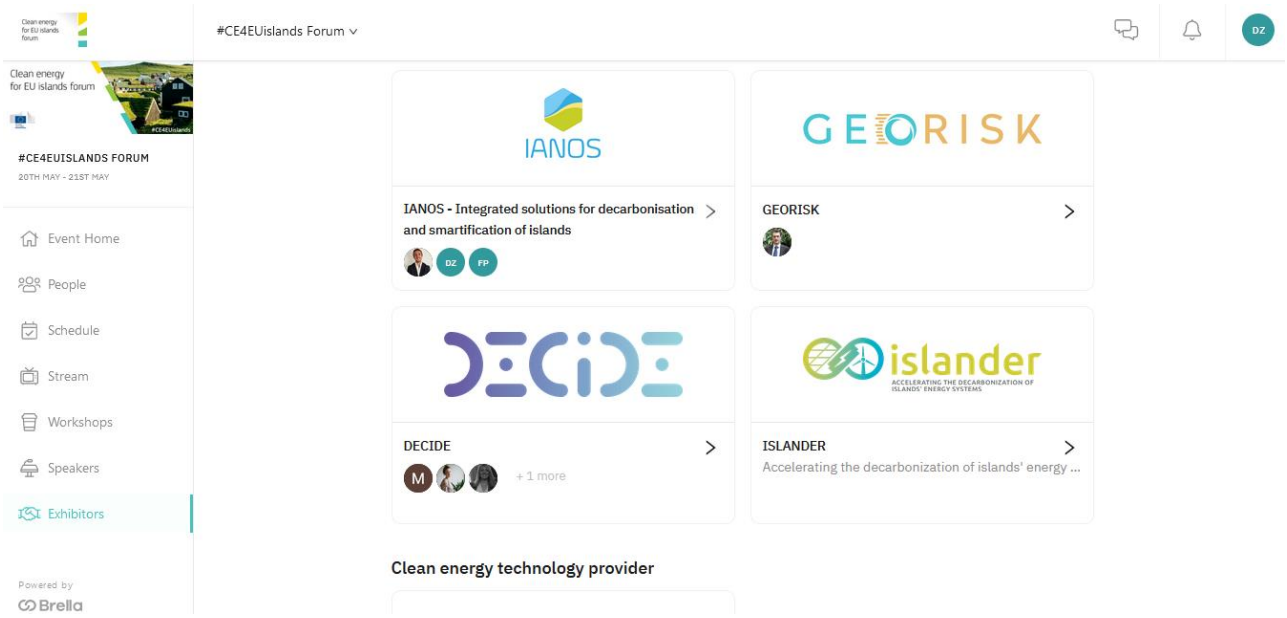

Figure 6 IANOS in the Clean Energy for EU islands forum event

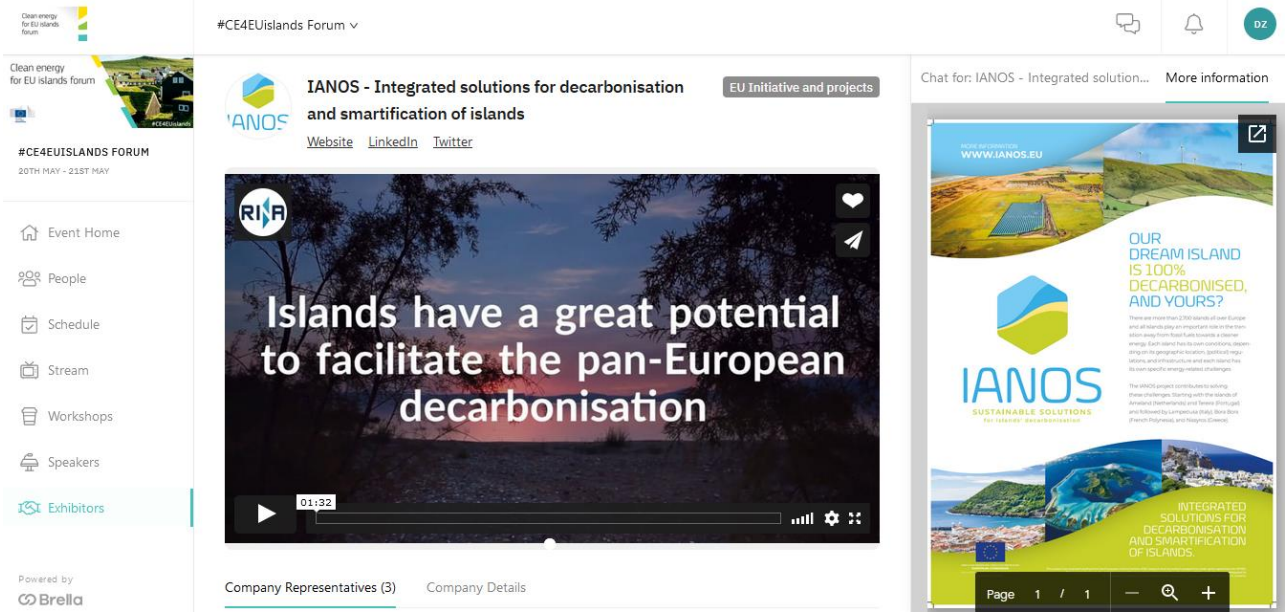

Figure 7 IANOS exhibitor booth during the Clean Energy for EU islands forum

<u>Key Lessons learnt from Clean Energy for EU islands forum</u>

- To put the clean energy vision into action it is needed policy, technology and finance world working together in supporting communities and implementing the clean energy transition

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- We should phase out coal by 2030, the latest. It is important to stop petrol subsidies and innovate and decarbonise ferries.
- Strategic planning and coordination need to look through all the initiatives and create real impact. Member states need to make the clean energy transition happen on the ground. The impact of the transition needs to create jobs, access to cheap energy, and habitability.
- The link between project implementation and communities and renewable citizen energy communities is crucial. When you have a plan that stretches over the next 10 years, you really need to have citizen on board.
- There are important policy issues concerning finance. Renewables must be cheap, lives cannot become dearer on the islands, we cannot get to net zero when it becomes an expensive exercise.

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4 Synergies with other projects under H2020 program

4.1 Webinar - From waste to grid: re-using resources to achieve energy independence on islands

On 3 June 2021 IANOS project in collaboration with ROBINSON project [5] organized a webinar in the framework of the EU Green Week called "*From waste to grid: re-using resources to achieve energy independence on islands".* In this webinar, representatives from the two Horizon 2020 funded projects illustrated how, thanks to innovative technologies, they will help islands re-use their waste and unused resources to improve their carbon footprint and energy security. More specifically, the speakers have presented two technologies developed in the projects:

- IANOS: the bio-technology called Autogenerative High Pressure Digestion (AHPD), which will convert sewage, swill and other organic waste into green Natural Gas (CH4), and it can be used directly or injected at a later moment in the grid.
- ROBINSON: AD+BES technology that will allow Eigerøy, but also other islands, to repurpose their industrial biological waste to produce biomethane, so diminishing CO2 emissions while increasing energy security;

Figure 8 and Figure 9 shows two different moments when two representatives of IANOS present the project during the webinar.

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Figure 8 Nikolaos Nikolopoulos from CERTH is presenting IANOS project during the webinar 'From waste to grid' in the framework the EU Green Week 2021

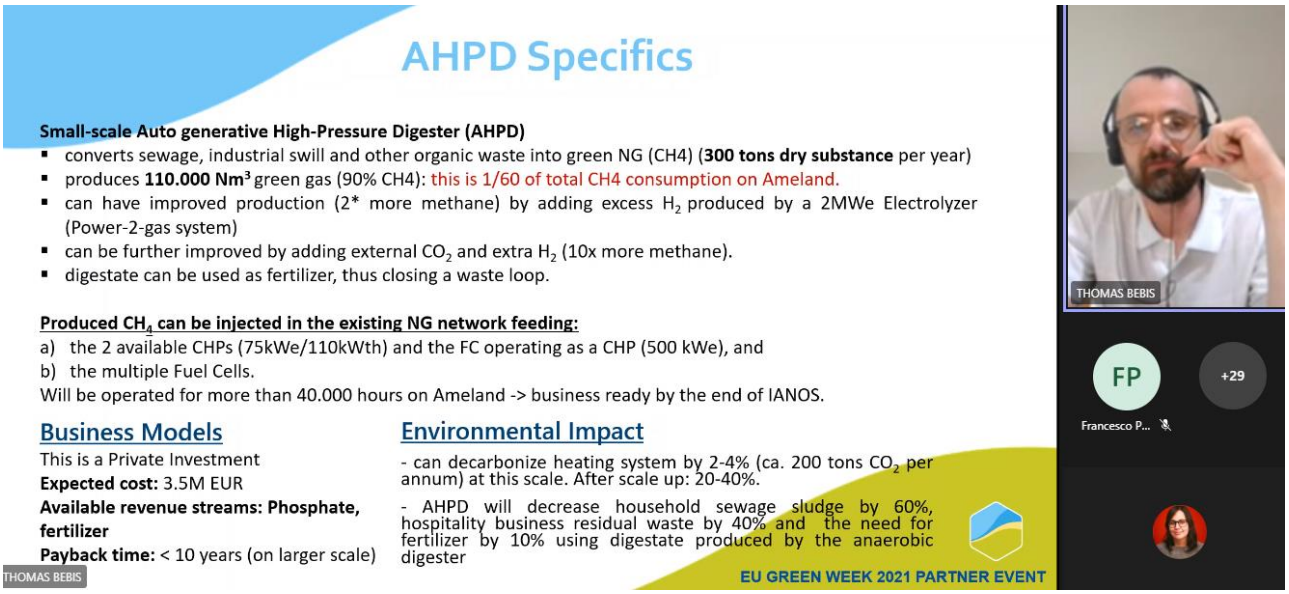

Figure 9 Thomas Bebis from CERTH is presenting the AHPD technology during the webinar 'From waste to grid' in the framework of EU Green Week 2021

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4.2 Upcoming activities

In September 2021 a series of thematic webinars have been scheduled to face the impact of the islands decarbonisation through the point of view of the main protagonists in the field. 4 events will be held grouping different projects that are being funded by the EU's Horizon 2020 research and innovation program, including IANOS projcet. The events aim to present the point of view of the principal H2020 funded projects in the framework of clean energy transition on islands, thus consolidating their collaborative approaches, meditating towards new perspectives, and exploring the potential for synergies. Hence, this workshop will involve projects with more than 160 partners from all over Europe and approximately 80 million of Euros of funding.

In addition to IANOS, the projects involved are:

- GIFT [6] - Geographical Island flexibility, GA n°824410
- INSULAE [7] - Maximizing the impact of innovative energy approaches in the EU islands, GA n°824433
- ISLANDER [8] - Accelerating the decarbonisation of islands' energy systems, GA n°957669
- MAESHA [9] - Demonstration of smart and flexible solutions for a decarbonised energy future in Mayotte and other European islands, GA n°957843
- REACT [10] - Renewable energy for self-sustainable island communities, GA n°824395
- ROBINSON [5] - Smart integration of local energy sources and innovative storage for flexible, secure, and cost-efficient energy supply on industrialized islands, GA n°957752
- SMILE [11] - Smart Island energy system, GA n°731249

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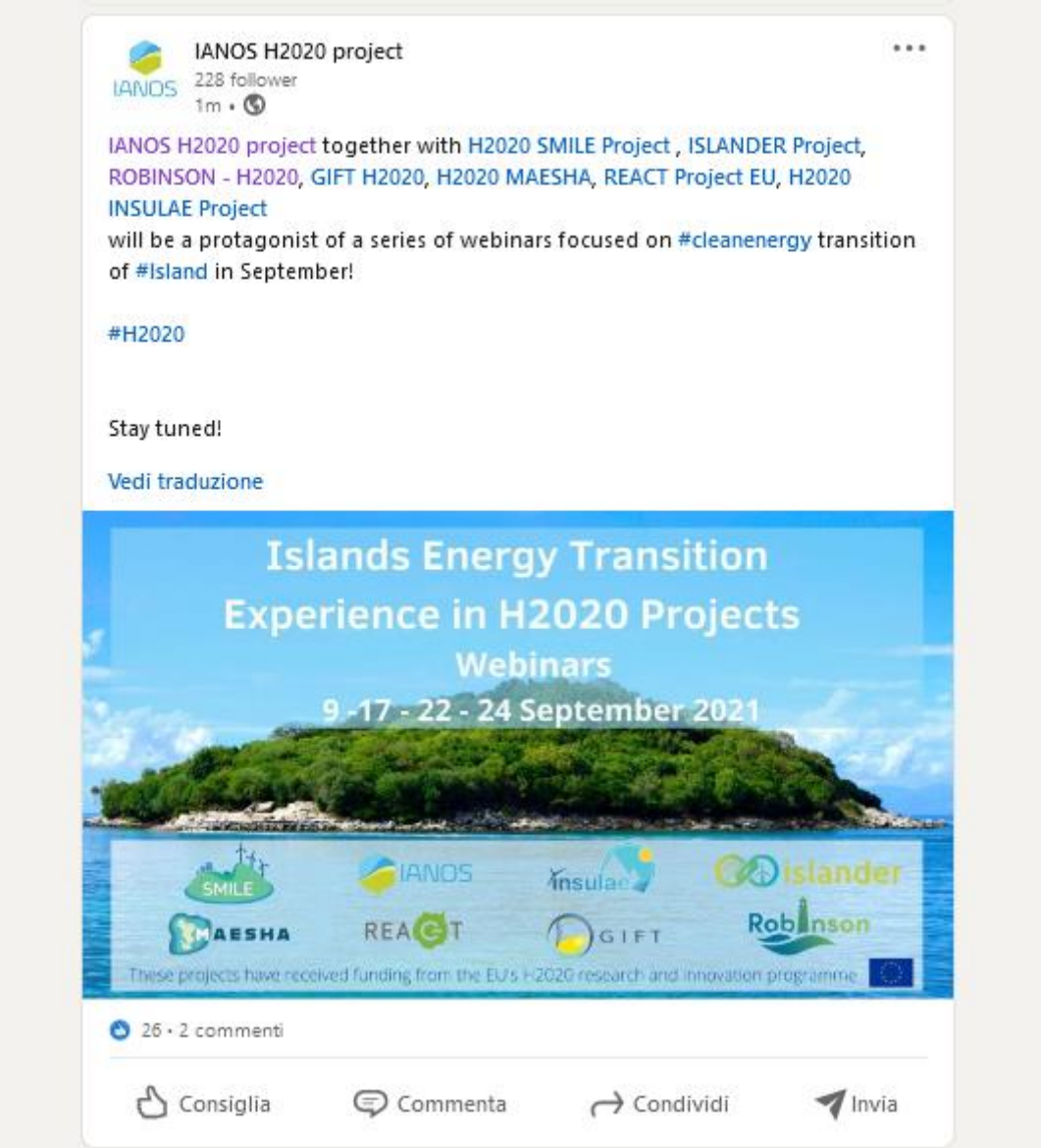

Figure 10 Islands Energy Transition Experience events launched in the social media channel of IANOS project

The 4 webinars have been scheduled as follow:

- **9/9/2021 10:30 -12:30 CEST**

  "Islands energy transition experience in H2020 projects – Chapter 1: demand-side-management, flexibility and energy management"

- **17/9/2021 10:30 -12:30 CEST**

"Islands energy transition experience in H2020 projects – Chapter 2: renewables and energy storage technologies"

- **22/9/2021 10:30 -12:30 CEST**
  "Islands energy transition experience in H2020 projects – Chapter 3: sector coupling"
- **24/9/2021 14:30 -16:30 CEST**
  "Islands energy transition experience in H2020 projects – Chapter 4: regulatory framework and energy communities"

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5 Conclusions and next steps

In this deliverable we reported the initial steps for cooperation between IANOS Consortium and other projects and initiatives across Europe. Three types of collaboration were identified: collaboration with Bridge initiative (all 4 WGs), connection with Clean Energy for EU islands initiative, participation in webinars to find synergies with other projects. Particular attention on this initial phase of the project has been given to Bridge activities. IANOS is registered to BRIDGE and a list of key persons for the different WGs has been identified. Meetings attended, contributions to BRIDGE, interactions with other BRIDGE projects and lessons learnt from BRIDGE activities have been collected through a questionnaire sent to the IANOS representatives directly involved in the activities.

Three additional official versions of this document are already planned for M24, M36, and M48. In the next versions of the document, additional collaboration with other projects and initiatives will be reported.

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