



D10.4 Project Synergies Report

WP10 – Communication and Dissemination Activities

INSULAE

Maximizing the impact of innovative energy approaches in the EU islands

Grant agreement: 824433

From 01/04/2019 to 31/03/2023

Prepared by: RINA-C

Date: 20/07/2020

This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 824433

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	Document:	D10.4 Project synergies report		
	Author:	RINA Consulting SpA	Version:	V0
	Reference:	D10.4	Date:	31/7/20

DELIVERABLE FACTSHEET

Document Name: Analysis of the regulatory, gender, socio-economic and environmental aspects of the lighthouse islands

Responsible Partner: RINA Consulting SpA

WP: WP10 – Communication and Dissemination Activities

Task: T10.3 Interaction and exploitation of synergies with BRIDGE and other projects/initiatives

Deliverable n°: D10.4

Dissemination level	
X	PU = Public
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Version: v0

Version Date: 20/07/2020

Diffusion list

Approvals

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Documents history

Revision	Date	Main modification	Author
1	20/07/2020	First Draft to PC and WP Leader	RINA-C

	Document:	D10.4 Project synergies report		
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30/07/2020

Final report after WP and PC RINA-C
comments

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EXECUTIVE SUMMARY

In the framework of WP10, this deliverable is the outcome of Task 10.3.

The main goal of this document is to set the basis of the collaborations with the BRIDGE initiative and other relevant EU funded projects like the EU tender “Strengthening the cooperation on climate action among islands within and beyond the EU through the creation of an island identity within the Global Covenant of Mayors” (the so called “Island Secretariat” or “Clean Energy for EU Islands initiative”).

Furthermore INSULAE interacted with other EU funded projects having the same goal of decarbonising energy systems on EU islands in order to create common dissemination opportunities, share knowledge and take advantage of common R&D goals.

This report is therefore the wrap up of all these activities and how such analysis is collocated in a larger EU Island framework, referring as much as possible to publicly available documents.

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1 INTRODUCTION

As stated in the GA, INSULAE has the goal to duly interact (thanks to the proactive commitment of all partners) and promote project outcomes at most relevant international and national forums, as well as in specific workshops organized in different locations across Europe such as the events of the Clean Energy for EU islands initiative.

Since the project start, all project partners have been encouraged by CIRCE as coordinator, by DAFNI as WP10 leader and by RINA-C as T10.3 leader to contribute to this objective also with the purpose of collecting insights and guidelines for the development of INSULAE technological/business/social innovation to boost energy transition on EU islands both from a technological and a policy level.

The aim of this type of “EU policy oriented stakeholders interaction” (strongly connected to activities related to “Clean Energy for EU Islands initiative” – CHAPTER 2) is to disseminate the project results, mobilize stakeholders and establish deep ties with relevant platforms, networks, associations and other related projects.

Among them BRIDGE initiative has been recognized as one of the most important R&D sharing platforms where INSULAE would be able to collect and share know-how, participate in EU policy build-up and to network with sister projects and relevant EU R&D and business actors active in the framework of smart grids and clean energy, thus giving the possibility for INSULAE to collect “know-how” to be transferred from the mainland to islands and vice-versa (CHAPTER 3).

To do so INSULAE partners (Starting from those already involved in BRIDGE Like CIRCE, CERTH, UNIZAG FSB and RINA-C) proactively participated in BRIDGE initiative Working Groups and Task Forces.

The interaction with sister projects (CHAPTER 4) has to be exploited to increase the outreach of potential stakeholders, organize joint events, exchange knowledge, experience and best practices, and stimulate discussions among key players, the scientific and industrial community.

Engaging local citizens, business and institutional stakeholders, this activity tried to find a common red ribbon among EU Islands in order to set a roadmap towards a harmonization / homogenisation of EU current fragmented technological, policy and legislative framework.

In this regard, capitalizing on the preliminary assessment conducted during the proposal preparation and in WP2 activities, legislations and regulatory aspects of the project Lighthouse and Follower islands has been deeply analysed, under RINA-C coordination and was shared during February 2020 at the latest BRIDGE Initiative Event.

Such activities have also been presented to relevant EU Island related associations (CHAPTER 5) which established a connection with INSULAE for specific project purposes and activities.

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This report is a wrap up of all these activities, serving as the starting point of a continuous monitoring and promotion of project synergies, that will be further developed during the project thanks to the proactive commitment of the whole consortium.

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2 INTERACTION WITH EU CLEAN ENERGY FOR EU ISLANDS FORUM/SECRETARIAT

In May 2017 the European Commission, together with 14 Member States, signed the "Political Declaration on Clean Energy For EU Islands" under the Maltese Presidency.

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 the European Commission explicitly recognised in its Communication on "Clean Energy for All Europeans", reassuring its commitment to ensure that the energy concerns of island inhabitants 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 for exchange of best practice for islands' stakeholders and provides dedicated capacity building and advisory services.

The Clean Energy for EU Islands Secretariat was created to facilitate the clean energy transition on EU islands from the bottom up. It is built on the vision that in order to assure the best environment for change, and to benefit all members of the island communities, a balanced collaboration between public and private stakeholders is essential. For this reason, the Secretariat is using the quadruple helix approach, helping citizens, local authorities, local businesses and academic institutions work together to advance the clean energy transition on their island.

The key topics (all addressed by INSULAE project too) covered by the Clean Energy for EU Islands Secretariat are:

- Energy Production
- Energy Efficiency
- Heating and Cooling
- Transport to and From the Island
- Transport on the Island

The EU Islands Secretariat will support Europe's island communities by providing

- direct support on the development of island Clean Energy Transition Agendas
- guidance on the development of island Clean Energy Transition Agendas
- access to support documentation for developing clean energy transition agendas and for the financing of decarbonization plans
- support on the identification of individual projects (QuickScans)

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- assistance on project preparation (technical & financial due diligence)
- access to networking events such as Clean Island Forums and Technical Fairs
- capacity-building workshops and webinars
- access to an online collaborative platform and peer-to-peer support

The Clean Energy for EU Islands provides project-related support to islands in two main ways:

- Support for the development of Clean Energy Transition Agendas (CETAs)

The Secretariat is working with the 20 pioneering islands, spread over 10 European countries, on the development of their Clean Energy Transition Agendas (CETAs).

Building on the lessons learnt with the pilot islands - who published their CETAs in November 2019 - the pioneering islands are currently developing their strategic plans to start (or to continue) with the clean energy transition while involving the main stakeholders on the island. The Secretariat is collaborating with all pioneering islands by steering the writing process and providing methodological and technical guidance

- Project-specific support

Thirty islands have been selected by the EU Islands Secretariat for Project Specific Support. The chosen projects range from identification to pre-development phases and over topics like solar and wind power, renewable energy potential, buildings, grids, financing, etc. The Secretariat is closely working with these islands to provide technical and financial assistance so as to bring these specific projects closer to the final development phase.

2.1 INSULAE Islands project supported by the EU Clean Energy for EU Islands forum

It is relevant to highlight that the INSULAE Islands of Menorca, Marie Galante and the Cres-Losinj archipelago (where the island of Unije is located and that is one of the CE4EUI Pioneer island) are involved in such CE4EUI (Clean Energy For EU Island) initiative projects.

Furthermore the CE4EUI secretariat promoted an event organized in Madeira (another INSULAE island) in May 2020 with EEM support and then postponed due to COVID-19 situation: the 5th International Hybrid Power Systems Workshop¹ which was scheduled to take place from 19 – 20 May 2020 and that has been postponed to March 2021.

¹ <https://hybridpowersystems.org/>

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2.1.1 Menorca (Category: Financing)

Menorca had turned to the Clean Energy for EU Islands Secretariat for support on developing a financing concept for a citizen-owned solar power plant on the island, in the city of Es Castell – a concept supported by the municipality. A first call with the transition team in Menorca helped establish the next steps for advancing the project. The Menorca team then went on to determine the percentage of citizen participation with the municipality. The result: the municipality decided to provide the terrain for the plant, and to open the project up for 100% citizen ownership. Moving forward, this campaign will be supported with a local NGO who will be able to advise on and drive the campaign in the local language together with the transition team.

The conversations with the Menorca team organically touched upon broader ways to support islands in identifying relevant financing sources, including EU-funding.

It is also relevant to highlight that in June 2020, Menorca published new guidelines for decarbonising the island's energy system.

The document has been widely promoted on CE4EUI secretariat website and it contains the proposed guidelines for decarbonising Menorca's energy system. They were drawn up based on a comprehensive vision of Menorca's energy sources, infrastructure and usage, with the aim of drastically reducing greenhouse gas emissions. Through these proposals, the authors hope to transform the island's energy system from its current configuration to one based on renewable energy, in line with the EU 2030 energy and climate targets and, crucially, with Menorca's commitments as a Biosphere Reserve.

The frames of reference for this process are the EU Roadmap 2030 and the Climate Change and Energy Transition Act (LCCTE, Ley de Cambio Climático y Transición Energética) of the Regional Government of the Balearic Islands (GOIB, Govern de les Illes Balears). A detailed analysis of Menorca's current energy system, carried out as part of the Strategic Energy Guidelines for Menorca (DEM-e, Directrices Estratégicas de Menorca en materia de energía) process, served as the basis for the guidelines presented here. The guidelines were then drawn up in collaboration with different stakeholders from Menorca's energy system, including local government, public and private-sector companies, universities, and organisations and experts from different sectors of the economy.

2.1.2 Marie Galante (Category: Solar Power)

Thanks to the support of CE4EUI initiative, Marie-Galante wants to engage in the clean energy transition and green growth, and is currently carrying out an ambitious "Demonstrateur Industriel pour la Ville Durable" project, under a programme launched by the French government in 2015. In fact, it was the only overseas project to win the 2016 call for projects launched by the government. The innovative project is further supported by European funds.

Marie-Galante's project is based on a dual transition, looking at both energetic and digital aspects. This transition will allow for sustainable agriculture, habitat and tourism and will offer a model for

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energy efficiency. It will promote the development of innovative local businesses, greater social cohesion and job creation.

The project designed by Marie-Galante Ile Durable and presented in the framework of CE4EUI aims at the island's energy autonomy through a 100% renewable, local and economically competitive energy mix. It responds to the guidelines set for the French overseas departments by the Law on the Energy Transition for Green Growth.

Promoting sustainable agriculture through the energy transition

In Marie-Galante, French renewable energy provider CNR is developing a model of 100% renewable energy autonomy, while exporting the excess electricity produced during the day to Guadeloupe. It is based on agrivoltaic projects (solar photovoltaic production associated with agriculture without agricultural land consumption) and electricity storage, that complement the renewable electricity generation already present in the territory.

Combining energy production and agricultural production has the double advantage of not consuming agricultural land for conventional photovoltaic projects, and to provide farmers with modern infrastructure to boost agriculture (greenhouses, irrigation, shelters, fences, renovated access roads). The energy production project will also make Marie-Galante the first French island autonomous in energy, and develop and energize diversification agriculture.

Challenges and solutions ahead

Marie-Galante Ile Durable is an ambitious project with many different actors. The innovative character of a project of this scale requires ongoing communication and regular exchange with the local population. Many events like bicycle tours are organized to present and discuss climate change and the need for a change in the island's energy model. Marie-Galante Ile Durable is committed to ensuring that local stakeholders are invested in and informed about the project.

2.1.3 Cres-Losinj (Category: RES Potential – CE4EUI Pioneer Island)

The Cres-Losinj archipelago, situated in the Kvarner Gulf in Croatia, is the largest archipelago in the Adriatic Sea. In ancient times, the islands of Cres and Lošinj were actually one big island. But as the small strip of land between the two islands was the fastest way to cross this region by ship, the channel of Osor was excavated during the Roman period in order to shorten the path to the open sea. Today, a bridge connects the two islands to form one unit.

A diverse group uniting around the clean energy transition

The archipelago consists of seven islands - Cres, Lošinj, Unije (INSULAE Lighthouse Island), Ilovik, Susak, Vele Srakane, Male Srakane - and numerous uninhabited islets and reefs. Taken together, the archipelago counts 36 islands, islets and reefs.

Energy demand on the islands is currently covered through connection with the mainland grid. The inhabited islands of the archipelago are interconnected through medium voltage subsea cables (like Unije). Losinj and Cres are connected to the island of Krk with a high voltage (110 kV) and a medium

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voltage (35 kV) subsea cable. Krk is connected to the Croatian mainland with a 110 kV cable and a bridge.

However, with the local population and visitors increasing, it has become a challenge for the islands in the archipelago to satisfy their energy demand via the current connections.

How to meet rising energy demand in the archipelago

The whole archipelago has a great, yet unused potential for renewable energy. Some first steps have been taken by some actors, like the demonstration activities to be performed in Unije.

The stakeholders of Cres-Lošinj have not yet formulated a detailed vision for their clean energy transition. The Clean Energy for EU Islands Secretariat worked with the local community over the late 2019 and early 2020 to support the islands in their undertaking, and they developed together a Clean Energy Transition Agenda presented in CE4EUI Hvar/Split Forum in November 2019

Regarding project-specific support provided by the EU Islands Secretariat, Cres Losinj requested a prefeasibility study on a biogas plant construction (Available on CE4EUI website).

2.2 INSULAE Participation to CE4EUI Hvar/Split Forum

From 20-22 November 2019, more than 140 representatives from EU island communities) and other island stakeholders (among them representatives from RINA-C, UNIZAG FSB, DAF and REA as INSULAE Partners) gathered in Split and Hvar, Croatia, to exchange experiences on the clean energy transition, discuss transition models and learn about clean energy technologies for islands.



Fig.1 – Day 1 of Hvar/Split Forum (courtesy of CE4EUI Secretariat)

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The Forum kicked off with a high-level event in Split, where Director General for Energy Ditte Juul-Jørgensen, Croatia's Minister for Environment and Energy Tomislav Čorić, and Croatian State Secretary for Energy Ivo Milatić all emphasized the importance of islands and local communities for Europe's energy transition, and expressed their commitment to continuing the support for islands in the long term.

Minister for Energy and Water management of Malta Joe Mizzi highlighted the innovation potential on islands, and Deputy Head of Government of the Åland islands Camilla Gunell emphasized the importance of learning from each other to advance the transition. MEP and Chair of the SEARICA Intergroup in the European Parliament Tonino Picula announced new funding dedicated to EU islands, which was recently approved by the Parliament.

Several high-level panels followed, highlighting the need for financing as well as good policies at all governance levels, technological solutions available, as well as the unprecedented support from the European Commission and the public.

During the second day of the event in Hvar, the six pilot islands of the Clean Energy for EU Islands Secretariat (among them Cres-Losinj archipelago where INSULAE Unije island is involved) presented their transition agendas realized thanks to CE4EUI support.



Fig.2 – Day 2 of Hvar/Split Forum – Presentation of Cres-Losinj CETA (courtesy of CE4EUI Secretariat)

The third day saw interactive sessions with a focus on the support that different Supporting Organisations can provide to the islands throughout the various phases of their energy transition, as well as on the Self-Assessment Matrix which the islands may use to monitor their progress in it. The round tables particularly focused on topics such as decarbonisation commitments, developing vision, energy transition pathways, financing concepts, as well as multi-level governance and community engagement, where INSULAE project had the opportunity to present its preliminary WP2 activities as well as the initial activities performed in Unije.

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Fig.3 – Day 3 of Hvar/Split Forum Interactive sessions with DAFNI and UNIZAG FSB representatives at working tables *(courtesy of CE4EUI Secretariat)*

The Forum further featured a technology fair, where a number of technology providers - including ABO Wind AG, Sabella, Flexen, Planair SA, Volitalia, EUNICE Energy Group and Hydrogen de France - presented their clean energy solutions for islands.

It is relevant to highlight that INSULAE has been duly disseminated and promoted during the event not only during working-group sessions, but also via posters and leaflets brought by RINA-C.

2.3 Next Steps

Taking advantage of existing collaborations with CE4EUI secretariat, previously described, as well as of the interactions that relevant partners like DAFNI, RINA-C, REA have with it, INSULAE established an official interaction with the Secretariat via its project Coordinator (CIRCE) aiming to become an official supporter of the initiative and to officially participate to CE4EUI community. The cooperation with the secretariat will continue through various channels including invitation to the Secretariat in all future INSULAE public events, frequent news and activities posting in the CE4EUI online community and INSULAE representation in all upcoming CE4EUI forums.

Apart from the CE4EUI secretariat, project partners under DAFNI's coordination will exploit synergies with other relevant island initiatives within and beyond the EU including FEDARENE Islands' college, CPMR's Islands Commission, the European Small Islands Federation (ESIN) and the Smart Islands Initiative. The aim of this approach is to increase the outreach of the project by organising joint events, exchanging experience and best practices, and to stimulate discussions among key players of the island communities.

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3 INTERACTION WITH BRIDGE INITIATIVE

BRIDGE is a European Commission initiative which unites Horizon 2020 Smart Grid, Energy Storage, Islands, and Digitalisation Projects to create a structured view of cross-cutting issues which are encountered in the demonstration projects and may constitute an obstacle to innovation.

The BRIDGE process fosters continuous knowledge sharing amongst projects thus allowing them to deliver conclusions and recommendations about the future exploitation of the project results, with a single voice, through four different Working Groups representing the main areas of interest

- Digitalisation
- Business Models
- Regulations
- Customer Engagement

These four permanent Working Groups are in charge of preparing reports and formulating recommendations for the European Commission on various themes linked to the future of the energy sector. Two topics are being studied in the present period too: Cybersecurity and TSO-DSO cooperation.

Besides that, three Task Forces have been launched after the 2019 BRIDGE General Assembly, to work on specific topics: Energy Communities, Replicability/Scalability Analysis and Joint Communication.

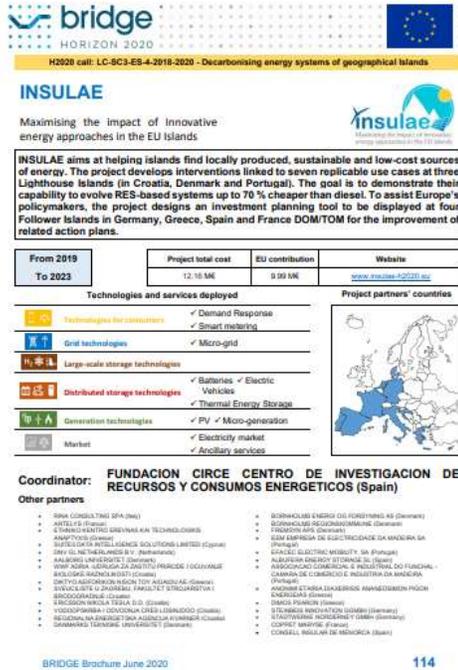
Thanks to the proactive participation of INSULAE partners such as RINA-C, CERTH and CIRCE, INSULAE is duly represented in the current WGs: a) Business Models, b) Customer Engagement and the project is represented in Energy Communities TF too.

Further to this, as do all BRIDGE projects, INSULAE participates in the BRIDGE R&I Challenges and Roadmap Definition, for the identification and definition of future EU R&I objectives and priorities in the framework of Smart Grid, Energy Storage, Islands, and Energy Digitalisation.

3.1 INSULAE in the BRIDGE official documents

As reported in the GA, since M6, INSULAE joined the BRIDGE Initiative and it has been included in the projects section on BRIDGE Website (<https://www.h2020-bridge.eu/participant-projects/page/5/>) as well as in BRIDGE Brochure in its early 2020 updated version.

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INSULAE
Maximising the impact of innovative energy approaches in the EU islands

INSULAE aims at helping islands find locally produced, sustainable and low-cost sources of energy. The project develops interventions linked to seven replicable use cases at three Lighthouse Islands (in Croatia, Denmark and Portugal). The goal is to demonstrate their capability to evolve RES-based systems up to 70 % cheaper than diesel. To assist Europe's policymakers, the project designs an investment planning tool to be displayed at four Follower Islands in Germany, Greece, Spain and France DOM/TOM for the improvement of related action plans.

From 2019 To 2023	Project total cost	EU contribution	Website
	12.16 M€	9.99 M€	www.insulae-project.eu

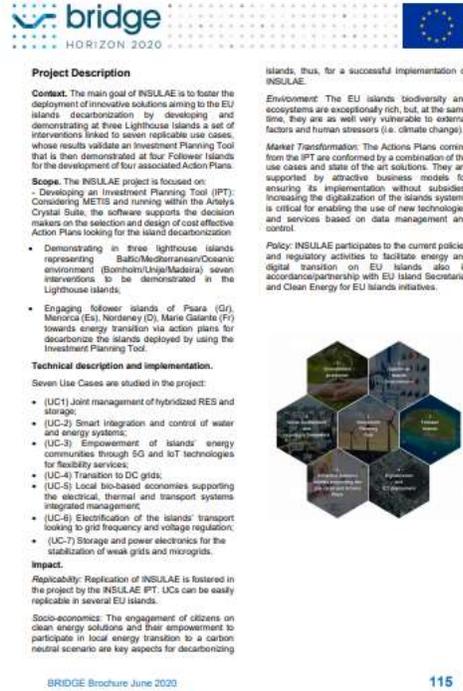
Technologies and services deployed

Technologies for customers	Project partners' countries
<ul style="list-style-type: none"> ✓ Demand Response ✓ Smart metering 	
<ul style="list-style-type: none"> ✓ Micro-grid 	
<ul style="list-style-type: none"> large-scale storage technologies 	
<ul style="list-style-type: none"> distributed storage technologies 	
<ul style="list-style-type: none"> Batteries Electric Vehicles Thermal Energy Storage 	
<ul style="list-style-type: none"> Generation technologies 	
<ul style="list-style-type: none"> Market 	
<ul style="list-style-type: none"> ✓ PV ✓ Micro-generation 	
<ul style="list-style-type: none"> Electricity market Ancillary services 	

Coordinator: FUNDACION CIRCE CENTRO DE INVESTIGACION DE RECURSOS Y CONSUMOS ENERGETICOS (Spain)

Other partners:

- BINA CONSULTING SPA (Italy)
- HITELOS Energy
- 2 ENERGY ENTERPRISES AND TECHNOLOGIES
- ANEPTOS (Greece)
- BATELORIS INTELLIGENT SOLUTIONS LIMITED (Spain)
- DEW DELTA ENERGY S.r.l. (Italy)
- ALBAURIS UNIVERSITE' (Greece)
- IRIE ARIAS CONSULTING AND THE FINANCE TECHNOLOGY
- INSULAE PROJECT PARTNERS (Spain)
- UNIV. ASSOCIATION HIGH TECH AERONAUTIC (Greece)
- SVELETSKI (CROATIA) PROJECT STAKEHOLDERS
- BIOCOPARMA S.p.A. (Greece)
- ERICSON WIKKA TECLA S.O. (Greece)
- VIOOPARMA I DEONOLIA ORES LOGISTICO (Greece)
- REGIONAL ENERGY DATA ANALYTICS (Greece)
- DIMARIS TENDERS UNIVERSITET (Denmark)
- BOHVALLES ENERGI OLF FORSYNING AS (Denmark)
- GONIMOLIS RECONSTRUCTION (Denmark)
- FRANTON A/S (Denmark)
- EEM EMPRESA DE ELECTRICIDAD SA (Denmark)
- ENERCE ELECTRIC WEBSITE SA (Portugal)
- ALBAURIS ENERGY STORAGE SL (Spain)
- INNOVACION COMERCIAL E INNOVACION LOGISTICA
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- FACTORYS PRODUCTION (Greece)
- CORNET ENERGY (France)
- CONSELL REGULADOR DE ENERGIA (Spain)



Project Description

Context: The main goal of INSULAE is to foster the deployment of innovative solutions aiming to the EU islands decarbonization by developing and demonstrating at three Lighthouse Islands a set of interventions linked to seven replicable use cases, whose results validate an Investment Planning Tool that is then demonstrated at four Follower Islands for the development of four associated Action Plans.

Scope: The INSULAE project is focused on:

- Developing an Investment Planning Tool (IPT);
- Considering METIS and running within the Analysis Crystal Suite, the software supports the decision makers on the selection and design of cost effective Action Plans looking for the island decarbonization

- Demonstrating in three lighthouse islands representing Baltic/Mediterranean/Oceanic environment (Baltic/Unije/Madeira) seven interventions to be demonstrated in the Lighthouse Islands.
- Engaging follower islands of Pisara (Gr), Menorca (Es), Nordney (D), Marie Galante (Fr) towards energy transition via action plans for decarbonize the islands deployed by using the Investment Planning Tool.

Technical description and implementation.

Seven Use Cases are studied in the project:

- (UC-1) Joint management of hybridized RES and storage;
- (UC-2) Smart Integration and control of water and energy systems;
- (UC-3) Empowerment of islands energy communities through SG and IoT technologies for flexibility services;
- (UC-4) Transition to DC grids;
- (UC-5) Local bio-based economies supporting the electrical, thermal and transport systems integrated management;
- (UC-6) Electrification of the islands' transport looking to grid frequency and voltage regulation;
- (UC-7) Storage and power electronics for the stabilization of weak grids and microgrids.

Impact:

Replicability: Replication of INSULAE is fostered in the project by the INSULAE IPT. UCs can be easily replicable in several EU islands.

Socio-economics: The engagement of citizens on clean energy solutions and their empowerment to participate in local energy transition to a carbon neutral scenario are key aspects for decarbonizing islands, thus, for a successful implementation of INSULAE.

Environment: The EU islands biodiversity and ecosystems are exceptionally rich, but, at the same time, they are as well very vulnerable to external factors and human stressors (i.e. climate change).

Market Transformation: The Actions Plans coming from the IPT are conformed by a combination of the use cases and state of the art solutions. They are supported by attractive business models for ensuring its implementation without subsidies, increasing the digitalization of the islands systems is critical for enabling the use of new technologies and services based on data management and control.

Policy: INSULAE participates to the current policies and regulatory activities to facilitate energy and digital transition on EU islands also in accordance/partnership with EU Island Secretariat and Clean Energy for EU Islands initiatives.



Fig.4 – INSULAE in BRIDGE Brochure

3.2 INSULAE Participating in BRIDGE official events

On 11-12th February 2020, INSULAE was officially presented by RINA-C during the annual BRIDGE General Assembly.

Mr Stefano Barberis presented the project via the “two slides” format having the opportunity to present in which WGs/TFs INSULAE could provide relevant inputs.



Fig.5 – INSULAE Presentation during BRIDGE February 2020 General Assembly by Mr Stefano Barberis (RINA Consulting)

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INSULAE

Maximising the impact of Innovative energy approaches in the EU Islands



The main goal of INSULAE is to foster the **deployment of innovative solutions aiming to the EU islands decarbonization** by developing and demonstrating at **three Lighthouse Islands** a set of interventions linked to **seven replicable use cases**, whose results will validate an **Investment Planning Tool** that will be then demonstrated at **four Follower Islands** for the development of four associated Action Plans. The INSULAE IPT will be beneficial **promotion of Local Energy Communities in EU Islands** which will also take advantage of **advanced smart solutions for energy and non-energy services on islands**.




<http://insulae-h2020.eu/>



INSULAE

Link with current work in BRIDGE




1. Data management
2. **Business Models**
3. **Regulation**
4. **Customer Engagement**

A1. Cybersecurity
A2. TSO-DSO Cooperation

TF1. Energy Communities
TF2. Replicability/Scalability (INSULAE IPT)
TF3. Joint Communication (new TF/Action on islands?)



<http://insulae-h2020.eu/>



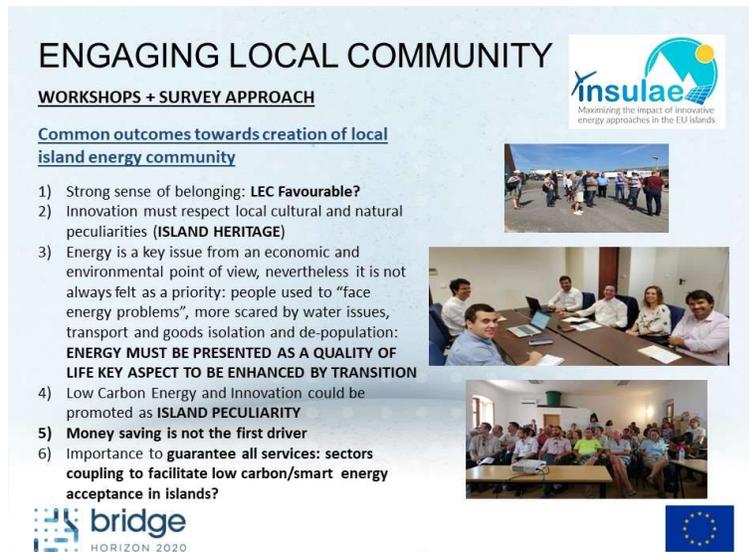
Fig.6 – Slides used to present INSUALAE during BRIDGE February 2020 General Assembly

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3.3 INSULAE actively participating in BRIDGE WGs and TFs

During BRIDGE February 2020 General Assembly, INSULAE made official its involvement in “Customer Engagement” WG and “Energy Communities” TF and it has been invited to present during “Parallel Session 2 - Consumer and Citizen Engagement” its objectives and activities with a specific introduction (introduced in the plenary session via the slide presented in Figure 6) guided by RINA-C (Mr Stefano Barberis) presenting the activities performed in M1-M6 related to Bornholm, Madeira, Unije local islanders engagement towards the creation of local energy communities and the setup of INSULAE Lighthouse islands and demonstration activities.

Such presentation has been appreciated as it presented the Energy Communities topic according to “an island perspective” in which energy bills and energy independency drivers as well as sense of belonging to a local community are stronger drivers if compared to mainland to setup energy communities.



ENGAGING LOCAL COMMUNITY

WORKSHOPS + SURVEY APPROACH

Common outcomes towards creation of local island energy community

- 1) Strong sense of belonging: **LEC Favourable?**
- 2) Innovation must respect local cultural and natural peculiarities (**ISLAND HERITAGE**)
- 3) Energy is a key issue from an economic and environmental point of view, nevertheless it is not always felt as a priority: people used to “face energy problems”, more scared by water issues, transport and goods isolation and de-population: **ENERGY MUST BE PRESENTED AS A QUALITY OF LIFE KEY ASPECT TO BE ENHANCED BY TRANSITION**
- 4) Low Carbon Energy and Innovation could be promoted as **ISLAND PECULIARITY**
- 5) **Money saving is not the first driver**
- 6) Importance to **guarantee all services: sectors coupling to facilitate low carbon/smart energy acceptance in islands?**

INSULAE logo: Maximizing the impact of innovative energy approaches in the EU Islands

bridge HORIZON 2020 logo

European Union flag

Fig.7 – INSULAE introductory slide to present dedicated session on “Engaging Islanders Communities” towards the creation of island energy communities

After February 2020 BRIDGE General Assembly, RINA-C on behalf of INSULAE consortium interacted with BRIDGE team both to prepare all the official documents for the presentation of INSULAE on project promotional material and to follow WGs/TFs activities as follow:

- following the preparatory activities of the webinar “CEER – Community of European Energy Regulators - meets BRIDGE Task Force Energy Communities” held on 28th April on the Energy Community topic
- answering to May/June survey on R&I challenges/objectives for the future of EU Energy 2030 Roadmap

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3.4 Next Steps

Taking advantage of current participation of CIRCE, CERTH and RINA-C in BRIDGE WGs and TFs and capitalizing the relations setup with other BRIDGE projects, INSULAE established an official interaction with BRIDGE under RINA-C coordination and will participate to next physical events, webinars and virtual interactions (e.g. Working groups held some Web meetings in Spring-Summer 2020).

The cooperation with BRIDGE will continue through various channels including invitation to BRIDGE TF/WG members to relevant INSULAE public events, frequent updates of the BRIDGE documents containing INSULAE news and information as it will be required by BRIDGE coordination team.

The aim of this approach is to increase the outreach of the project by organising joint events, exchanging experience and best practices, and to stimulate discussions among key players of the smart grids communities all around EU, also presenting the “islanders’ “ perspective which is more and more relevant in BRIDGE considering the large number of “island projects” participating to BRIDGE.

4 INTERACTION WITH H2020 SISTER PROJECTS

As described in T10.3, INSULAE consortium is committed to create synergies with other on-going funded R&D projects (both Nationally and EU funded) which are focused on energy transition on islands.

The goal of such interaction is to:

- share knowledge for mutual benefit particularly on horizontal topics like regulation, business models, socio-economic assessment etc.
- collect insights/lessons learnt for the design and deployment of demonstration activities
- organize joint events to facilitate project dissemination and island stakeholders networking

4.1 INSULAE H2020 SISTER PROJECTS

Decarbonization of energy systems on islands is currently a “hot topic” for EC and several projects and initiatives have been recently funded and setup, thus creating an “island community” of EU R&D stakeholders

INSULAE has been funded in the framework of ES-4-2018 Call of Proposals where two more projects (GIFT, REACT) were funded as well.

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Thanks to the strong commitment of project partners like DAFNI, CIRCE, CERTH, RINA-C, UNIZAG FSB to the island energy transition topic, INSULAE had the opportunity to setup some synergies with other EU funded projects presented here below.

It is relevant to highlight that many of these projects are part of the BRIDGE Initiative, thus enabling the potential creation of a dedicated “Island Energy Transition” TF in the near future.

4.1.1 SMILE



Fig.8 – SMILE logo

The development of Smart grids are an important prerequisite for the transition towards a clean, affordable and reliable energy system. Through Smart grids, peak demand can be reduced and the energy grid can be stabilized. Therefore, the development of market ready technologies that facilitate this transition are important. The Smart Islands Energy System (SMILE) project will demonstrate nine different smart grid technologies on three different islands. The end goal of the project is to foster the market introduction of these nine technologies.

PROJECT WEBSITE: <http://www.h2020smile.eu/>

POINT OF CONTACT WITH INSULAE: promotion of PV+Battery solutions (Samsø/Unije), Madeira as Lighthouse in both projects (*RINA-C, ACIF-CCIM, EEM, CERTH, DAFNI as project partners*)

POINT OF DIFFERENCE WITH INSULAE: EVs and low carbon heating solutions studied more deeply and with higher grid interaction

TOPICS OF MUTUAL INTEREST: energy communities creation, regulation, DR schemes

4.1.2 REACT



Fig.9 – REACT logo

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REACT will deliver a scalable and adaptable cloud-based ICT platform for planning and management of RES and storage enabled infrastructures supporting a holistic cooperative energy management strategy at the community level in geographical islands.

PROJECT WEBSITE: <http://www.react2020.eu/>

POINT OF CONTACT WITH INSULAE: promotion of RES also via specific RES assessment tools, Power-to-X solutions for maximisation of RES production

POINT OF DIFFERENCE WITH INSULAE: strong focus on digital and ICT aspects, PV + Heat pump solutions via DR, specific activities on EVs

TOPICS OF MUTUAL INTEREST: energy communities creation, regulation, DR schemes, RES installation, RES assessment via tools

4.1.3 GIFT



Fig.10 – GIFT logo

GIFT is an innovative project that aims to decarbonise the energy mix of European islands through holistic energy management, trading and innovative storage solutions.

PROJECT WEBSITE: <https://www.gift-h2020.eu/>

POINT OF CONTACT WITH INSULAE: multi-vector/Power-to-X solutions as key enabling technology for maximisation of RES self-consumption

POINT OF DIFFERENCE WITH INSULAE: very focused on Energy management systems with specific EMS for transport (also ferry), local industrial loads and Power-to-X solutions

TOPICS OF MUTUAL INTEREST: energy communities creation, DR schemes

4.1.4 NESOI



Fig.11 – NESOI logo

NESOI mainstreams green energy investments to EU islands to give them the opportunity to implement energy technologies and innovative approaches in a cost-competitive way. Starting with

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a broad survey gathering EU islands’ needs, NESOI develops transparent technical, social, economic and environmental criteria to select, via two competitive calls, energy transition projects for customised direct support. Selected islands benefit from specific project structuring Technical Assistance provided directly by NESOI’s professionals. It is supplemented by local contractors financed thanks to NESOI’s cascade mechanism. Moreover, other capacity building information and toolkits are provided via a digital platform and training workshops.

PROJECT WEBSITE: <https://www.nesoi.eu/>

POINT OF CONTACT WITH INSULAE: promotion of RES and sustainable financing schemes also involving the local community (*RINA-C, CIRCE, CERTH as project partners*)

POINT OF DIFFERENCE WITH INSULAE: different type of project

TOPICS OF MUTUAL INTEREST: energy communities creation, regulation, RES promotion, low carbon technology promotion

4.2 ISLAND WORKSHOP AT SUSTAINABLE PLACES ‘19



Fig.12 – Sustainable Places’19 Final Picture

During Sustainable Places’19 Conference (<https://www.sustainableplaces.eu/previous/sp2019/>) held in Cagliari on June 5th-7th 2019, a special session organized thanks to R2M Solutions and following RINA-C’s suggestion.

The workshop/Session (9-12.30) was titled “FINANCING Clean ENERGY ON ISLANDS / Buildings energy renovation on islands and in the coastal regions” and the goal was discussing the challenge of investing in clean energy transition on islands in the context of the EU policy initiative “The Clean Energy for EU Islands” and its support tools. Special focus was given to the very important role of local authorities as enablers for the success of these innovative financial tools.

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“The Clean Energy for EU Islands” has been presented as well by Mr Feilim O’Connor (European Commission, DG Energy, Unit C2 New energy technologies, innovation and clean coal) while Mr Kostas Komninos from DAFNI further than just presenting INSULAE, presented the activities of the “Pact of Islands” too.

SMILE project was presented by Mr Stefano Barberis (RINA Consulting – Fig.13) while REACT Project by Mr Raymond Sterling (R2M Solution – Fig.14).



Fig.12 – Mr Stefano Barberis presenting SMILE in SP’19



Fig.13 – Mr Raymond Sterling (R2M Solution) presenting REACT in SP’19

NESOI Coordinator (Andrea Martinez from SINLOC) was present at the event as well even if in that period the project was under Grant Agreement Preparation Phase.

4.3 12th International Conference on “Energy and Climate Change”

The 12th International Conference on “*Energy and Climate Change*” took place at the National and Kapodistrian University of Athens (NKUA) on **9-11 October 2019**, in Athens-Greece. It was set under

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the auspices of the **Black Sea Economic Cooperation Organization (BSEC)** and the **United Nations Academic Impact (UNAI)**.

The third part of the conference was shaped as a “**Brokerage session**” that brought together scientists, policy makers and market stakeholders also coming from other H2020 projects and facilitated them to present their activities (projects and programs), discuss about funding opportunities, mainly in the context of Horizon 2020 calls and finally to increase the cross-interaction on innovative ideas and cooperation on common importance topics. Petros Markopoulos presented INSULAE project together with SMILE on behalf of DAFNI.



Fig.14 – Petros Markopoulos (DAFNI) presenting INSULAE in the Brokerage Event

4.4 NEXT STEPS

INSULAE aims to further promote H2020 funded project interaction and as said it is interested to evaluate the creation of an “Island WG/TF” in next BRIDGE initiative activities.

Furthermore it is relevant to highlight that further “Energy transition on islands” projects have been funded under ES-4-2020 call of proposal (some of them involving INSULAE Project partners too), thus opening new opportunities of collaboration with further EU funded projects.

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5 CONCLUSIONS

In the framework of INSULAE Dissemination, Promotion and Communication activities and aligned with Dissemination and Communication strategy described in D10.1, this report presents how INSULAE will interact with relevant EU existing and forthcoming initiatives related to low carbon energy transition on islands and the promotion of islands as living labs for low carbon technologies to be replicated on the mainland.

The two most relevant initiatives intercepted so far in this framework are the “Clean Energy for EU Islands (CE4EUI)” Secretariat (and its activities) and the “BRIDGE” Initiative.

In the first year of the project, INSULAE had the opportunity to get acquainted to the activities and working groups of both such initiatives: the project thus had the opportunity to understand where it can provide its most relevant inputs and which are the most relevant common points of interest, namely aspects related to the setup and promotion of local renewable energy solutions and energy communities at a technical, economic, regulatory, business models level.

Participating to CE4EUI and BRIDGE events and taking advantage of consortium partners’ network, INSULAE Had the opportunity to setup collaboration with further on going H2020 projects.

D10.4 presented how INSULAE consortium setup such relevant synergies and connections towards mutual benefit knowledge sharing and the achievement of project objectives.

In the next months INSULAE will further participate in previously mentioned initiatives working groups, continuously monitoring the status of advancements of sister projects (with a particular attention to new ES-4-2020 funded projects and to NESOI – Island Facility Platform encouraging INSULAE Islands to participate to forthcoming NESOI “open calls for funding”) and looking for potential connection with other relevant EU Islands associations and key EU stakeholders in the framework of island energy transition (e.g. SMILO, ESIN, CPMR, CNR-IIA) starting from the INSULAE partners’ network.