



Integrated multi-vector management system for Energy isLANDs

Deliverable n°:	D8.4
Deliverable name:	First Dissemination and Communication Report
Version:	1.0
Release date:	31/03/2020
Dissemination level:	Public
Status:	Approved
Author:	GECO – Ioana Badea & Bonnie Murphy



This project has received funding from the European Union's Horizon 2020 Research and Innovation programme under Grant Agreement No 824388.

The information and views set out in this deliverable are those of the author(s) and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.

Document history:

Version	Date of issue	Content and changes	Edited by
0.1	20/03/2020	First draft version	Ioana Badea, Bonnie Murphy, Thomas Mikkelsen
0.2	23/03/2020	Review by assigned reviewers	Andreea Baias (CREESC)
0.2	27/03/2020	Review by assigned reviewers	Bjørn Axel Gran (IFE)
1.0	27/03/2020	Peer-reviewed version	Ioana Badea, Bonnie Murphy, Thomas Mikkelsen

Peer reviewed by:

Partner	Reviewer
IFE	Bjørn Axel Gran
CREESC	Andreea Baias

Deliverable beneficiaries:

WP / Task
WP2
WP8
WP6

Table of contents

Executive summary	7
1 Introduction	8
1.1 Dissemination and Communication Objectives and Strategy	9
2 Dissemination and Communication Activities and Tools	11
2.1 Dissemination and Communication Activities	11
2.1.1 Workshop and Conferences	11
2.1.2 Stakeholder Innovation Group	15
2.1.3 Liaison with other EU Projects and Programme Meetings	16
2.1.4 Local Meetings	18
2.1.5 Scientific Dissemination Plan and Scientific Papers	19
2.1.6 Reports and Other Documents	21
2.2 Dissemination and Communication Tools	24
2.2.1 Stylebook	24
2.2.2 Website	25
2.2.3 Social Networks and Digital Channels	26
2.2.4 Newsletters	27
2.2.5 Press Releases	27
2.2.6 Product Sheets	28
2.2.7 Project Video	31
2.2.8 Flyer	33
2.2.9 Conference Posters	33
2.2.10 Webinars	33
3 Update on Effectiveness of Dissemination and Communication Activities	33

3.1	Update on communication and engagement KPIs	34
3.2	KPI Analysis	35
4	Conclusion	37
5	Appendix	38
5.1	5.1 E-LAND Newsletter N° 1	38
5.2	E-LAND Flyer	39
List of tables		
	Table 1: Stakeholder Identification	10
	Table 2: Reports on Event Participation M1-M16	11
	Table 3: Intended Participation on Future Events	14
	Table 4: BRIDGE working groups	16
	Table 5: Local Meetings	18
	Table 6: Reporting on peer-reviewed scientific articles M6-M16	19
	Table 7: Description of pending and planned papers for 2020	20
	Table 8: Table of public deliverables	22
	Table 9: Reports on other articles and press releases M6-M16 and planned articles	23
	Table 10: Other Press Releases	28
	Table 11: Project dissemination targets	34
	Table 12: Project dissemination target to date	34
	Table 13: Dissemination KPI's	36
List of figures		
	Figure 1: Visual Roadmap of the Communication and Dissemination Plan	8
	Figure 2: Impact process	9

Figure 3: Isidoros Kokos from ICOM presenting E-LAND in BRIDGE GA 2020	17
Figure 4: E-LAND Logo Design	25
Figure 5: E-LAND social media strategy	26
Figure 6: Project Video Timeline	32

Abbreviations and Acronyms

Acronym	Description
BMI	Business Model Innovator
BYPL	BSES Yamuna Power
CIM	Common Impact Model
DCE	Dissemination, Communication and Exploitation
DoA	Description of the Action
DPA	Data Pre-processing Application
DSO	Distribution System Operator
DV	Data Visualisation Module
ESCO	Energy Service Company
ES	Energy Scheduler
ESB	Enterprise Service Bus
EPA	Energy Planning Application
KPI	Key Performance Indicator
M	Month
MVS	Multi-Vector simulator
N°	Number
OF	Optimal Forecaster
SIG	Stakeholder Innovation Groups
TSO	Transmission System Operator
USP	Useful Selling Points
WP	Work Package

Executive summary

To ensure the E-LAND project can create a significant impact on the broad energy industry, society, and all stakeholders involved, a strategic communication and dissemination plan was introduced in D8.3. As part of that dissemination plan, a number of tools and tasks were proposed to support the goal of establishing a long-lasting connection between the project beneficiaries, other active participants in the pilots and other external stakeholders.

As the E-LAND project now enters into M16, this deliverable will report on the progress of this plan. This includes a brief update to the communication and dissemination strategy and summary of the communication and dissemination work completed to date for the following tasks and tools:

- Workshops and conferences
- Liaisons with other EU project and programme meetings
- Local meetings
- Scientific dissemination
- Reports and deliverables
- E-LAND stylebook
- E-LAND website
- Social networking and digital channels
- Newsletters
- Press releases
- Project video
- Flyer
- Conference posters
- Webinars

The proposed next steps for these measures will also be outlined; ensuring awareness and common knowledge about the E-LAND project continues to spread.

1 Introduction

The Dissemination, Communication and Exploitation (DCE) activities focus on three main objectives: E-LAND will transform the way energy is produced, stored and consumed in an Energy Island context. E-LAND brings coherent innovation across three planes: **technology**, **community** and **business**. The communication and dissemination activities are distributed year by year over the duration of the project. Year 1 is used for increasing knowledge and awareness of the E-LAND project. In year 2 the project is showcased and introduced to the external stakeholders. During years 3 and 4 the continuity of the project is ensured for the time after the funding period has ended and thus support the exploitation efforts to take the E-LAND toolbox methodologies to market, with a special focus on the activities in the pilots. The communication and dissemination activities split into the 4 years can be seen in the figure below.

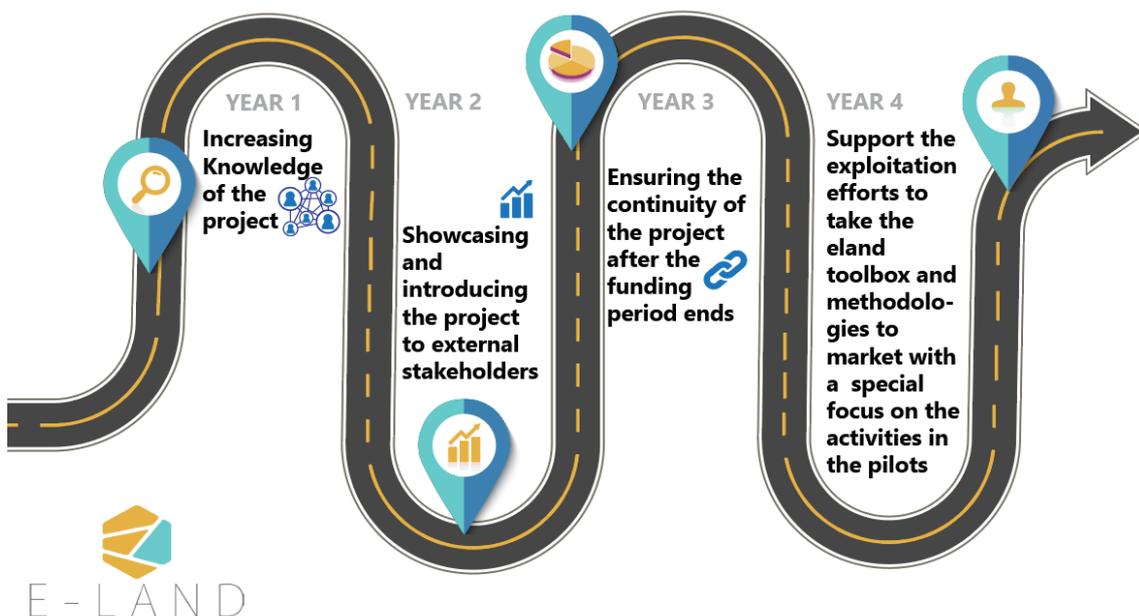


Figure 1: Visual Roadmap of the Communication and Dissemination Plan

This deliverable D8.4 *First Communication and Dissemination Report* reports on the unfolding and development of the communication and dissemination activities from M1 to M16 with future suggestions and predictions. These activities have been previously communicated in D8.1, D8.2 and D8.3. The list of activities reported has been analysed to track the goals of the project to date and adjustments have been made in order to meet the target goal at the end of the project.

1.1 Dissemination and Communication Objectives and Strategy

The primary goal of the E-LAND communication and dissemination strategy is to build dynamic, two-way activities that increase stakeholder and end-user awareness and acceptance. As it is described in D8.3, the proposed ‘impact process’ approach supports this objective by establishing steps to first identify key stakeholders, understand their needs and concerns, and then with these insights in place, create tailored content that can be delivered via strategic channels.



Figure 2: Impact process

Given this need to leverage stakeholder inputs, a special emphasis on the communication and dissemination strategy has been put in order to increase the level of engagement. To this end, the development of WP8 dissemination activities therefore requires a close synergy with the work being done in WP2. These collaborative efforts have so far focused on the mutually beneficially goals of:

1. Identifying target audiences within pilot communities and recruit E-LAND ‘ambassadors’ who may assist with the dissemination and further exploitation of project results.
2. Gaining access to existing networks with which E-Land can connect in order to build support.
3. Undertaking research into the current awareness, knowledge, and behaviour of the different target groups and using this also as a means of the exploitation of results.
4. Analysing the enablers and barriers for online and offline engagement connected to dissemination.

In relation to these points, the site visits conducted at each of the pilot sites (Norway, Spain, Romania, and India) and community analysis completed in WP2 have been used in WP8 to identify a number of potential stakeholders and work is now underway to support engaging milestones outlined in D2.3 related to creating targeted communication materials.

Table 1: Stakeholder Identification

Pilot location	Stakeholders identified in WP2
Norway	<p>Borg Havn IKS (BIKS)</p> <p>Andersen & Mørck (port operator)</p> <p>Glacio (cooling/refrigeration company at the port)</p> <p>Nexans (subsea cables company at the port)</p> <p>Denofa (Soy bean processing company at the port)</p> <p>Batteriretur (Battery recycling company at the port)</p> <p>Borregaard (lumber company at port – warehouse 14)</p> <p>Fredrikstad municipality</p> <p>Sarpsborg municipality</p> <p>Fredrikstad Fjernvarme (local district heating provider)</p> <p>Norgesnett (local DSO)</p> <p>Hafslund (regional grid owner)</p>
Spain	<p>Inycom</p> <p>Walqa Technology Park Management</p> <p>Workers in the Technology Park</p> <p>Aragon Regional Government</p> <p>Aragon Hydrogen Foundation</p> <p>Huesca City Council</p> <p>ENDESA (local DSO)</p>
Romania	<p>Valahia University of Targoviste (students, professors, administration)</p> <p>Valahia University of Targoviste: Institute of Multidisciplinary Research for Science and Tehnology (ICSTM)</p> <p>Schenider Electric</p> <p>Electrica (local DSO)</p> <p>Romanian Energy Regulatory Authority (ANRE)</p> <p>European Bank for Reconstruction and Development (EBRD)</p>

India	BYPL (local DSO) IFS Apartment society Anand Lok Apartment Society Askshardam Temple Delhi Electricity Regulatory Commission State Power Department Ministry of Science and Technology Solar installers/developers/vendors (Climate Connect Technologies, Panasonic, Pranat, Raychem RPG, Hero Future Energies)
--------------	---

2 Dissemination and Communication Activities and Tools

The following chapter provides an update on the communication and dissemination work completed between M6 and M16. This includes both summaries of both the activities conducted (e.g. workshops, conferences, papers, meetings) and the tools used to support the delivery of E-LAND messaging (e.g. stylebook, social media, flyers, videos).

2.1 Dissemination and Communication Activities

2.1.1 Workshop and Conferences

Reports of Event Participation M6-M16

Table 2: Reports on Event Participation M1-M16

Partner Name	Date	Event Type	Description	Event Name/ Media	Type of Audience
IFE	11-13 February 2019	Event participation	Future energysystems. Visit to companies/institutions in Stuttgart to learn about battery solutions, security and how this is solved	/www.smartinnovationnorway.com/category/nce-program	Direct Beneficiaries, Technology Related, Regulatory/advisory
SIN	12 – 13 March 2019	Event participation	Presentation of E-LAND in new project section	BRIDGE	Other EU projects
CREESC	May-June 2019	Major Stakeholder meetings	Energy distributor, National Regulatory Authority for Energy	-	Major stakeholders
UVTgv	8-11 May 2019	Conference	Poster: E-LAND - Integrated multi-vector management system for Energy isLANDs	9th International Conference of the Chemical Societies of the	Research community

				South-East European Countries	
UVTgv	15-May 2019	Conference	Presentation: E-LAND - Integrated multi-vector management system for Energy isLANDs Author: Andrei CECLAN	National Conference on “Energy efficiency, an essential condition for sustainable development”	Industry
SIN/UsG/Int racom/ CREESC	23-24 May 2019	Conference & workshop	Digital B2B & B2G Prosumer Business Models and internal stakeholder workshop	REM forum St-Gallen	Research community, Internal and external stakeholders
SIN/UdG	June 2019	Oral conference presentation	Multi-vector energy optimization tools for energy islands	Presentation and publication at 13th IEEE PowerTech 2019	Research community
IFE	3-June 2019	Event participation	Opening of IFE Cyber-lab and Digitalisation lab	www.ife.no	Minister of digitalization, research council, industry
IFE	11-June 2019	Event participation	Input to new Research program for greener and more efficient Air Traffic in Norway	www.www.forskningsradet.no	Industry and research in Norway
UVTgv	16-19 June 2019	Conference	Workshop on Applied Physics and Materials Science	International Balkan workshop	Research community
UVTgv	20–22 June 2019	Conference	Paper Title: MicroGrid operation of an IT infrastructure as an energy island Authors: Dorin Dacian LET, Ion Valentin GURGU, Ioan Alin BUCURICA, Ioana Daniela DULAMA, Andreea Mihaela LET, Giorgian Marius IONITA	International Conference “Contemporary Challenges for the Society in the Context of the Recent Economic and Social Changes”, -3rd Edition	Research community, regional stakeholders.
UVTgv	5-6 July 2019	Conference	Automatic Control and Applied Informatics for laboratory and industrial processes	-	Research community
SIN	01-October 2019	Conference	Panel participation in ISGT Europe conference by IEEE	IEEE PES Innovative Smart Grid Technologies Europe	Scientific community
UVTgv	9-11 October 2019	Conference	Presentation: Valahia University Campus as a pilot site in the context of H2020 project E-Land Author: Dorin Dacian Let	Electrical energy quality	WEC, Research community, Regulatory authorities in the field of energy, DSO, TSO, Energy retailers, Electrical companies, other stakeholders.
CREESC	31-October 2019	Event participation	GIVE B2B event - Shaping together a smarter greener future	Workshop	The Green ICT Development Project Partners, local experts from energy & IT industry in Cluj-Napoca

Inycom	November 2019	Conference	Presentation in Science week workshop "How we contribute from Walqa to reduce climatic change" at Walqa (Spanish demo site) https://twitter.com/elandh2020/status/1196352683613003777	Presentation/ Workshop	Industry
CREESC	11- November 2019	Conference & workshop	INVADE	Smart City Expo World Congress Barcelona	The INVADE Project Partners, international experts from energy sector and city management sector
UVTgv	28-29 November 2019	Conference	Paper Title: Assessment of a Data Center Microgrid with Storage and Photovoltaic Generation* Authors: Dorin Dacian LET, Ioan Alin BUCURICA, Ion Valentin GURGU, Laurentiu STANCU, Andreea Mihaela LET, Giorgian Marius IONITA	National Conference on New and Renewable Energy Sources, 18th Edition	Research community, DSO, RES developers, NGO's, ICPE-CA, CER, ENERO
UVTgv	22- January 2020	Workshop	Presentation: Best practices use case. RES integration and energy efficiency at university campus level Author: Dorin Dacian Let	Regional Workshop S3Unica Interreg Europe	Stakeholders, Alba local energy agency
SIN	06- February 2020	Event participation	Oral presentation at: Norwegian Minister of Research and Higher Education Delegation to India	Renewable Energy Seminar in India	Scientific Community, Industry
SIN, GECO, ICOM	11-12 February 2020	Event participation	Presented forthcoming opportunities for joint communication in Europe and in India and contributed to Consumer and Citizen Engagement	BRIDGE GA	Other EU projects
UVTgv	28- February 2020	Seminar	Presentation: Horizon 2020 RDI projects: E-LAND - Integrated multi-vector management system for Energy isLANDs Author: Dorin Dacian Let	Energy efficiency Seminar organised by Romanian society for energy auditors and managers	Research community, National Regulatory Authority in the Field of Energy, Financing representatives' other stakeholders.
SIN/ GECO	3-7 March 2020	Event participation	India Smart Utility Week where the project was showcased	https://en.smartinnovationnorway.com/news/smart-innovation-norway-presents-eu-projects-at-india-smart-utility-week/	India's leading Electricity, Gas and Water Utilities, Policy Makers, Regulators, Investors and world's top-notch Smart Energy Experts and Researchers
SIN	10- March 2020	E-LAND presentation	exploitation of opportunities arising from E-LAND	Meeting presentation	Schneider Electric
SIN	10 - March 2020	E-LAND presentation	exploitation of opportunities arising from E-LAND	Meeting presentation	eSmart Systems

Intended Participation on Future Events

Table 3: Intended Participation on Future Events

Partner Name	Date	Event Type	Description	Media	Type of Audience
UdG	April 2020	Forum	E-LAND diffusion	Industrial Forum EPS XXI Edition	Research and Industry
CREESC	02-April 2020	International seminar	Innovative renewable energy solutions for Buildings in accordance to European Directive for nZEBs		local experts from energy & architecture sectors in Cluj-Napoca
CREESC, SIN, GECO, USG	02-Apr 2020	Webinar workshop	Business Model Innovation in Energy – The Confluence of Locality, Digitization and Sector Coupling	REM forum St-Gallen	Internal and external stakeholders
SIN	13-16 April 2020	Conference presentation	TBD	EnergyCon 2020	Direct Beneficiaries, Technology Related, Regulatory/advisory
BIKS	June 2020	Workshop	After the survey to our surroundings and other harbors are completed, we hope to be able to set up a workshop with one or a few interested parties. The content may be planning of energy production by help of RLI and MVS simulations	website / local media	small seminar at or close to BIKS premises. 3 - 5 participants not currently participating in Eland
IFE	21-26 June 2020 (could be postponed)	Conference	Presentation of three papers: "Risk Assessment in the E-LAND Project", "Addressing Cybersecurity in Energy Islands" and "Risk And security Practices: Experiences From The E-LAND Project".	ESREL2020	Research and Industry
GECO	22-26 June 2020	Event participation	Developing and coordinating the event for the EUSEW 2020 about internationalization of H2020 projects including ELAND's activities in India.	EUSEW 2020	
SIN/GECO/USG	September 2020	Conference & workshop	TBD	REM forum St-Gallen (postponed)	All
CREESC	October 2020	conference	Participation in technology meeting conference		
CREESC	November 2020	Major Stakeholder meetings	Energy distributor, National Regulatory Authority for Energy		Major stakeholders

2.1.2 Stakeholder Innovation Group

Activities have been carried out in task T7.2 – Stakeholder Innovation Group (SIG) creation and management – to gather a group of stakeholders external to the project that will assist in magnifying the impact of the E-LAND innovations. Based on the stakeholder analysis described in D7.1, a list of stakeholder types most likely to assist in enabling and aiding the uptake in E-LAND outcomes was shared to consortium partners who were then invited to nominate candidates amongst their contacts. This has the benefits of assembling a pool of candidates that is both varied in type and covering many countries, both in Europe and India. The stakeholder types initially listed included the following:

- DSOs, TSOs
- District heat providers, Gas providers, Electricity retailers
- Energy communities, Microgrid operators
- ESCOs
- Storage technology providers
- Municipalities, Governments
- Energy market regulators
- Associations in the energy sector

Once nominations were proposed by partners, a broad selection was made based on relevance of each nomination to the overall objective of the SIG. Invitations to each potential SIG member were extended, either directly by SIN (SIG manager) or through a contact person from the nominating partners. A landing page¹ was created on the project website to manage subscriptions of the SIG and inform stakeholders of the objectives, required interactions, implications for participating in the SIG. This page includes a link for registration of personal information together with a personal release of informed consent and procedure to withdraw consent and deletion of personal information.

There are currently 12 SIG members from 6 European countries which have accepted to participate and have expressed interest in interactions with the project. Stakeholders types include ESCOs, technology providers, energy companies, engineering companies, universities and associations in the energy sector.

¹ <https://elandh2020.eu/news/invitation-join-our-stakeholder-innovation-group/>

Further efforts are ongoing to recruit SIG members specifically from India to harness insights on the evolution of the E-LAND activities for the Indian market. Meanwhile, recruitment for the SIG will also continue in Europe, on an ad-hoc basis depending on the needs of the SIG and the relevancy of the stakeholders in question.

An in-person SIG workshop was planned in collaboration with the #REMforum at the University of St-Gallen. The scope of this workshop is to discuss the business model innovation in energy projects. The workshop will have two sessions, focusing on Universities as energy islands (I) and community engagement and business model innovation (II). However, this event will be held in an interactive webinar format instead of a face-to-face workshop due to growing concerns and restrictions in relation to the COVID-19 virus spread in Europe. The webinar will be held in April 2020.

2.1.3 Liaison with other EU Projects and Programme Meetings

E-LAND project is actively seeking collaboration with other EU projects to exchange knowledge, enhance exploitation of the project results and to discover joint activities. Since the project start, E-LAND has nominated representatives to each BRIDGE working groups:

Table 4: BRIDGE working groups

BRIDGE coordination	Regulations WG	Business models WG	Customer Engagement WG	Data Management WG
SIN: Heidi Tuiskula	SIN: Sanket Puranik	USG: Moritz Look	GECO: Thomas Mikkelsen	ICOM: Ilias Lamprinos

On March 12th to 13th 2019 E-LAND project participated in the BRIDGE coordination meeting in Brussels. Scientific coordinator Heidi Tuiskula presented E-LAND in the new projects section.

On February 11th and 12th 2020, E-LAND project participated in the BRIDGE GA with 3 representatives: Thomas Mikkelsen (GECO), Heidi Tuiskula (SIN) and Isidoros Kokos (ICOM). The project contributed actively to multiple sessions. Thomas Mikkelsen leading the BRIDGE joint communication presented forthcoming opportunities for joint communication in Europe and in India and contributed to *Consumer and Citizen Engagement* session together with Heidi Tuiskula.



Figure 3: Isidoros Kokos from ICOM presenting E-LAND in BRIDGE GA 2020

E-LAND project was represented in the *Data Management Working Group in Parallel Session 5: TSO-DSO Cooperation#2 – Data Management* by Isidoros Kokos from ICOM, sharing experiences from the mapping of the project’s business cases in the context of integrated Local Energy Systems, guided by the Harmonised Electricity Market Role Model.

Heidi Tuiskula presented E-LANDs energy community activities in a joint session for *CEER Meets BRIDGE Projects and Energy communities TF*.

In addition to participating in the meetings, E-LAND has been active in producing news to BRIDGE newsletter and contributing to questionnaires and other requests from BRIDGE or BRIDGE member projects.

In addition to Representing ELAND as Task force leader for Joint Communication efforts, GECCO has also been organizing and planning events across H2020 projects, coordinating BRIDGE communication activities with Intensys4You project, presenting and preparing for the BRIDGE GA2020.

To create concrete collaboration activities with other EU projects, SIN has invited prof. Andrej Gubina to present COMPILE project findings on energy communities and business models in the forthcoming (2.4.2020) E-LAND webinar for stakeholder Innovation Group.

2.1.4 Local Meetings

Local meetings serve as good touch points for sharing ideas and spreading relevant news. These include local events, site visits and local interactions. All local meetings that have been completed can be found in the table below.

Table 5: Local Meetings

Partner Name	Date	Name of the Meeting	Description	Type of Audience
CREESC	February 2019	UVTgv site visit	Partners meetings and site tour	Internal and external stakeholders
GECO, BIKS	April 2019	Borg Havn site visit	Stakeholder meetings and site tour	Internal and external stakeholders
GECO, INYCOM	April 2019	Walqa site visit	Stakeholder meetings and site tour	Internal and external stakeholders
GECO, UVTgv	May 2019	UVTgv site visit	Stakeholder meetings and site tour	Internal and external stakeholders
GECO, CREESC	May 2019	External stakeholders meeting	Meetings with ANRE (Romanian Energy Regulatory Authority) and EBRD	External stakeholders
GECO	September 2019	Dehli site visit	Stakeholder meetings and site tour	Internal and external stakeholders
UVTgv	16-20 September 2019	Summer School	2019 summer school	Internal stakeholders
Schneider Electric, INYCOM	15-16 October 2019	Walqa site visit	Stakeholder technical meetings and site tour	Internal stakeholders

CREESC	31-October 2019	Event participation	GIVE B2B event - Shaping together a smarter greener future	The Green ICT Development Project Partners, local experts from energy & IT industry in Cluj-Napoca
--------	-----------------	---------------------	--	--

2.1.5 Scientific Dissemination Plan and Scientific Papers

As stated in the proposal for the project, professional, well-documented publications, scientific papers and journal articles are vital in the process of communication and dissemination of information in order to build credibility within the E-LAND stakeholders. The project's aim is to have 15 scientific papers that are to be submitted to peer reviewed journals and must be relatable to the project. Moving forward it was decided on the formation of a scientific board that would be comprised of the scientific partners, in order to create a strategy on what to pursue for the future. This is considered helpful for coordinating paper writing efforts, brainstorm topics, identify paper topic synergies and establish timelines.

Further, in the next coming months a timeline will be established on what topics will be written and when they should be delivered.

Below there is a description of different articles published up to M16 and papers that are pending approval.

Reporting on the peer-reviewed, scientific articles M6-M16

Table 6: Reporting on peer-reviewed scientific articles M6-M16

Partners involved and publication date	Where was it published	Article title	Article description	Link
UVTgv 30-December 2019	Journal of Science and Arts	ASSESSMENT OF A DATA CENTER MICROGRID WITH STORAGE AND	Abstract: On-premises Data Centers have constant high energy demands, they represent an always-on load at buildings energy balance level. By separating such a load in behind a microgrid system with storage and photovoltaic generation, important CO2 reductions could be achieved.	http://www.josa.ro/docs/josa_2019_4/c_06_Let_1067-1076_10p.pdf

		PHOTOVOLTAIC GENERATION	This paper presents the results of such an implementation analyzed from a technical and economical point of view. The pilot installation is analyzed based on a 3-year data set, measurements consisting in: consumption, PV production, imported energy and storage operation. The pilot achieved for 2017 a 59.66% PV energy coverage from its total usage, thus a financial economy of estimated 3300 Euro from the energy bills. Based on the simulation results the Return of Investment is at the end of the operational lifetime of the installation considering no state incentives nor energy export sold back to the grid. A total of 22.4 T/year CO2 emissions are avoided	
--	--	-------------------------	---	--

Pending and planned papers for 2020

Table 7: Description of pending and planned papers for 2020

Partner Name	Type of paper	Date	Description	Media/ Event	Audience
RLI/SIN	Conference paper	15 -March 2020	Submitted conference paper: "Investment planning in multi-vector energy systems: Analysis of key performance indicators" (pending)	Conference presentation	Researchers, professionals in the field of electricity distribution
IFE	Conference paper	21-26 June 2020 (could be postponed)	Submitted conference paper: "Risk Assessment in the E-LAND Project" (accepted)	The 30 th European Safety and Reliability Conference	Research community
IFE	Conference paper	21-26 June 2020 (could be postponed)	Submitter conference paper: "Addressing Cybersecurity in Energy Islands" (accepted)	The 30 th European Safety and Reliability Conference	Research community
IFE	Conference paper	21-26 June 2020 (could be postponed)	Submitted conference paper: "Risk And security Practices: Experiences From The E-LAND Project" (pending approval)	The 30 th European Safety and Reliability Conference	Research community

UsG	Research paper	in preparation, draft paper available	Solving organizational problems with heuristics	target to European Management Journal status: revise and resubmit	Research community
UsG	Research paper	in preparation, draft paper available	How digitalization shapes business model innovation in the energy sector	under review	Research community
UsG	Research paper	in preparation, draft paper available	Innovation topics in in the energy sector	Energy Research & Social Science	Research community
UsG	Research paper	in preparation, draft paper available	Business model co-innovation	R&R in Journal of Product an Innovation Management	Research community
UsG/GECO	Research paper	in preparation, draft paper available	Managing Social Acceptance	tbd	Research community
UsG/SIN	Research paper	in preparation, concept in development	Patterns of BMI in E-Land	tbd	Research community
SIN/USG	Conference paper	15-17 September 2020	Theory, methodology and applications of Artificial Intelligence and Machine Learning in Industrial/Real World settings	International Conference on APplied Artificial Intelligence (ICAPAI 2020)	Researchers and practitioners from both academia and industry

2.1.6 Reports and Other Documents

The website created for the E-LAND project holds the public reports and documents delivered up to date together with a list of the future reports and documents that are to be delivered. Below there is a summarized version of the public reports and documents that have been submitted up to date together with the future documents to be submitted and the timeframe.

The documents and reports that have been already submitted and uploaded to the website can be seen highlighted in grey, as well as the current document that is highlighted in light red.

Online Documents: <https://elandh2020.eu/documents/>

Legend:  Deliverables that have been already delivered

 Current Deliverable

Table 8: Table of public deliverables

Work Package N°	Public Deliverable N°	Deliverable Name	Delivery Month
WP1	D1.7	Final Project Report	M42
WP2	D2.3	Communications strategy and engagement tools	M7
	D2.4	Sustained engagement plan and impact evaluation	M38
	D2.5	Final Common Impact Model	M42
WP3	D3.2	Functional and operational requirements	M8
WP4	D4.6	Visualisation software prototype	M24
	D4.7	Privacy, security and safety	M24
WP5	D5.1	Pilot and system specifications	M17
	D5.2	System communication plan	M20
	D5.3	Pilot and system implementation plan	M24
	D5.4	Pilot and system integration test plan and test report	M30
WP6	D6.2	Final Pilot Results	M41
	D6.3	Toolbox description and Replication guidelines	M42
WP7	D7.1	Market and stakeholder analysis	M12
	D7.2	Business model innovator framework	M36

	D7.4	Business models, exploitation plan and policy recommendations	M42
WP8	D8.4	First dissemination and communication report	M16
	D8.5	Second dissemination and communication report	M30
	D8.6	Dissemination and communication final report	M42

Reports on other articles and press releases M6-M16 and planned articles

Table 9: Reports on other articles and press releases M6-M16 and planned articles

Partner Name	Date	Description	Media	Audience
SIN	17- January 2019	Article on Successful E-LAND kickoff meeting in Girona	Website	all
SIN	28 -February 2019	Article on End-users are the key players in E-LAND	Website	all
SIN	29 - March 2019	Presenting the Technology Park pilot: "E-LAND can have a significant impact on the world"	Website	all
SIN	05 - April 2019	Presenting the University Campus pilot: "E-LAND fits like a glove to our goals"	Website	all
SIN	09-April 2019	Presenting the Industrial Harbor pilot: "Optimal energy consumption will result in reduced emissions of greenhouse gases"	Website	all
SIN	23-April 2019	WP2 leader visited pilot site Borg Havn in Norway: "Our goal is to understand the dynamics of the stakeholders and end-users"	Website	all
SIN	25-April 2019	Presenting the University Campus pilot: "E-LAND fits like a glove to our goals"	Website	all
BIKS	02-May 2019	Web publication on Site visit WP2 in Pilot Borg Havn	Website- www.Borg-Havn.no/ https://elandh2020.eu	all
SIN	June-July 2019	Unique local ELAND collaboration in Halden: Joining forces for sustainable communities (IFE & SIN)	Website	all
SIN	18-June 2019	Collected valuable input during the first E-LAND workshop	Website	all
SIN	28 – June 2019	Local collaboration in large EU project: "We have different strengths and are eager to create growth"	Website	all
SIN	August 2019	Presenting the ELAND partners	Website	all
CREESC	August 2019	CREESC engage important stakeholders in Romania	E-LAND Newsletter	all
Intracom Telecom	August 2019	ICT technicians design core elements for E-LAND ICT ecosystem	E-LAND Newsletter	all
Inycom	August 2019	Article "Speaking "the business language" is to condense energy data	E-LAND Newsletter	all

		into easy-to-read numbers and figures" for E-LAND newsletter		
SIN	August 2019	PORT OF BORG: The green, sustainable harbor	E-LAND Newsletter	all
GECO	August 2019	In theory Community Building is easy, in practice it is like digging for gold	E-LAND Newsletter	all
UVTgv	November 2019	Romanian DSO puts spotlight on E-LAND	E-LAND Newsletter	all
SIN	November 2019	Ships' zero emission in pilot Port of Borg will benefit E-LAND	E-LAND Newsletter	all
GECO	November 2019	Pilot in India – a virtual energy island	E-LAND Newsletter	all
GECO	November 2019	Blockchain in the Energy sector – playing the angles in E-LAND	E-LAND Newsletter	all
SIN	March 2020	Smart Innovation Norway presents EU projects at ISUW 2020: "We are establishing connections with Indian stakeholders to work on joint EU proposals"	Website	all
Inycom	May 2020	Article about "living lab" in Inycom office at Walqa	E-LAND Newsletter / Inycom website (in Spanish)	all
BIKS	June 2020	Wind power may be used as an energy source in industrial areas. BIKS have received governmental funding for a conceptual development of this within the harbor area.	Website- www.Borg-Havn.no/ https://elandh2020.eu . Local newspaper.	all
BIKS	September 2020	BIKS plan for more energy, storage and usage: projects underway for ship-shore power, solar production and storage	Website- www.Borg-Havn.no/ https://elandh2020.eu . Local newspaper.	all
BIKS	December 2020	How are the preparations at BIKS doing? Status for the preparations previously presented, together with the Scada system underway	Website- www.Borg-Havn.no/ https://elandh2020.eu . Local newspaper.	all
UsG	concept in development	E-Land prosumer survey	tbd	Industry

2.2 Dissemination and Communication Tools

2.2.1 Stylebook

As part of the Marketing Tool Kit, a stylebook has been created and implemented in M3 (see D8.1). The stylebook's purpose is to create a unified look and message across all mediums of communication and to provide the best results in the dissemination of communication.

The Stylebook includes guidelines for logos, colours, fonts, website, templates and pictures to be used in connection to communication materials about the E-LAND project. The Stylebook has been used since its implementation with satisfactory results.

LOGO

The E-LAND logo is built up of a simple fontset combined with a simple recognizable hexagon element. The hexagon element is often combined with new technology. It has been split into four sections which depicts the four countries containing the pilot sites. It has also been made more organic to get a more human aspect to the project.

ORIGINAL



GREY



NEGATIVE



Figure 4: E-LAND Logo Design

2.2.2 Website

In M3 the E-LAND website was created by SIN to establish an online presence for the project. In the months since its launch, the website has been further developed to include descriptions of the pilot sites, press releases, and communication activities related to the kick-off meeting in Girona and the analysis of the pilot sites in WP2. The website also hosts all the public deliverables surrounding the project and it's further used as a subscription platform for the eNewsletter.

Looking ahead, the focus of the website will now turn to developing a community platform that will act as a hub for stakeholders to networking and knowledge sharing. The community platform will target the pilot communities with the goal of attracting potential customers through increasing the impact of external collaboration with the help of tailored information and visualizations from the pilot.

E-LAND website: <https://elandh2020.eu/>

2.2.3 Social Networks and Digital Channels

The social media profiles play an important role in ensuring the visibility of the E-LAND project and its results, for a broader audience. Further, to create awareness about the E-LAND project and to ensure dissemination of communication as well as development of trustful relationships with the stakeholder community, several social networks and digital channels have been set in place.

The primary function of these Social Media channels is the dissemination of information in relation to the E-LAND project and the partnering EU Projects. For this, a Social Media strategy on data collection and dissemination has been established and it involves all social media channels (LinkedIn, Twitter, YouTube and Facebook) and it can be seen below in the Figure 5.



Figure 5: E-LAND social media strategy

This strategy was set up in a way that all the content surrounding the project would be communicated and disseminated successfully on social media. The project contact liaisons main function is to make sure to transmit important information to the communication team to ensure the proper dissemination. In this way there is a certainty that information won't get lost on the way. This is tightly connected to Product Updates & Milestones where it is ensured that every mentionable update and milestone is communicated to the stakeholders. The Events,

Workshops and Conferences are a very important place to communicate both during and after an event has taken place. The Community Engagement has as a purpose making sure that all the activities mentioned previously would be followed up with comments and interactions to make sure that the stakeholders stay engaged and that the events, updates or milestones won't be forgotten after they take place.

Once more, the Social Media strategy has as its main objective the collection and dissemination of activities surrounding the project and the partner projects where E-LAND is participating, communication of updates and milestones as well as a direct channel of information between the heads of project and the stakeholders. Moving forward, these efforts will be culminated with interaction and engagement via the social networks to ensure the engagement and participation of all internal and external stakeholders.

2.2.4 Newsletters

The project e-newsletter has been set up to be sent using an online marketing tool with the intended audience stakeholders who could have an interest in learning more about energy islands (e.g. local authorities, energy providers, prosumers, urban planners, energy planners, policy makers, companies in the field of energy, IT data).

Two newsletters have been sent in M8 and M11, with a focus on Community Building and the Pilots, respectively (see appendix 5.1). A third newsletter is planned to be released in April, will have a special focus on first E-LAND webinar: *Business model innovation in energy – the confluence of locality, digitization, and sector coupling*.

Moving forward, the aim of the future newsletters is to continue to highlight events, news, and updated on the project and use them to disseminate the project to a larger number of recipients at an EU level and international level.

2.2.5 Press Releases

As stated in the DoA, several press releases are planned to be distributed in order to inform and engage relevant stakeholders and selected media of project activities, achievements, results and outcomes during and after the project at national, EU and worldwide levels. The first press-release is aimed to be aligned with the beginning of the piloting expected in M19.

To reach the distribution goal, the press-releases will be shared with pilot countries and relevant partners where they would translate them and share them with relevant outlets.

Other Press Releases

Table 10: Other Press Releases

Partner Name	Date	Description	Description	Media	Audience
CREESC	March 2020	Sustainable energy islands – research for innovative solutions in the E-LAND project	Energy community magazine	Energy community magazine	All
CREESC	April 2020	Sustainable energy islands – research for innovative solutions in the E-LAND project	Energy community website	Energy community website	All
CREESC	August 2020	web publication	Publication of E-LAND project progress update	website	All
CREESC	December 2020	Press release	E-LAND project output	national magazine	All

2.2.6 Product Sheets

During the WP2 engagement work, a need was identified for a communication tool to clearly and simply communicate the ‘useful selling points’ (USPs) of the E-LAND toolbox to business and other non-technical stakeholders. In response to this, work is now underway to produce product sheets for each of the following tools:

- Multi-vector simulator (MVS)
- Energy Planning Application (EPA)
- Data Visualisation Module (DV)
- Energy Scheduler (ES)
- Optimal Forecaster (OF)
- Data Pre-processing Application (DPA)
- Enterprise Service Bus (ESB)

- Energy Management of LES
- Business Model Innovator (BMI)
- Common Impact Model (CIM)

The tool product sheets succinctly describe the key benefits and features of the tool along with any requirements (e.g. resources, costs, expertise, etc.) for use and will be added to the E-LAND website and made available on at physical meetings, workshops, and events to share with stakeholders. A tentative product sheet can be seen below.

Multi-Vector Simulator: Planning the energy supply system of the future

The Multi-Vector Simulator (MVS) performs these pre-feasibility studies by providing the analytical backbone to the Energy Planning Application (EPA), which will serve the user as an interface: Provided with the projects specific input data, it can evaluate the performance of the current as well as potential future system configurations. Along the way, it calculates the technical as well as economic performance of the system and, where necessary, determines the asset capacities that ensure least-cost energy supply. It includes not only power generation components but also storage alongside electricity, gas, and heat vectors.



KEY FEATURES	KEY BENEFITS	REASONS TO GET ENGAGED
--------------	--------------	------------------------



Evaluation of the current energy system's operation and **performance**, to determine its costs, efficiency and renewable share.



Planning the integration of emerging technologies helping to **meet sustainability goals** and decrease adverse climate effects, e.g. through high renewable energy shares or electric mobility.



Planning future investments into power generation or storage assets to **achieve least-cost supply** of electricity and heat.



Avoiding costs: Internalizing the pre-feasibility analysis the decision process within a company to invest into future supply options is sped up, while costs otherwise necessary to pay for an external review are skipped.



Low-effort and low-cost pre-feasibility analysis of investment options for complex sector-coupled energy systems and determination of CO2 reduction potential and possible renewable share of your own energy island.



Quick pre-feasibility analysis: Provided with the system parameters, potential **investment options** can be explored with low effort.



FUNDED BY THE E.U.

Reiner Lemoine Institut gGmbH
Rudower Chaussee 12 | 12489 Berlin
Telefon: +49 (0)30 1208 434 0

WWW.Reiner-Lemoine-Institut.DE



Effective Technologies for business success:



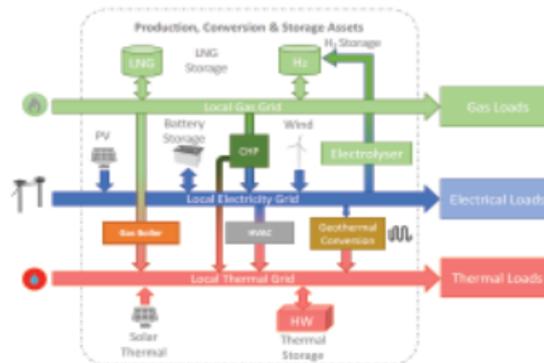
Investment decisions towards an energy-island

Requirements

- Energy planning expert
- Data describing the local energy system: Demand profiles, current generation capacities, and energy supply costs
- Data describing future potential investments: Asset type, technical parameters or expected performance data, investment and operation costs

The Multi-Vector Simulator

The Multi-Vector simulator (MVS) allows the evaluation of local sector-coupled energy systems that include the energy carriers electricity, heat and/or gas. It automatically sets up the energy system from a choice of components and then performs a capacity and/or dispatch optimization as well as cost and performance evaluation. The tool is to be provided as an open-source application. It is programmed with python utilizing the open energy modeling framework (oemof). A graphical user interface is provided with the Energy Planning Application (EPA).



FUNDED BY THE E.U.

Reiner Lemoine Institut gGmbH |
Rudower Chaussee 12 | 12489 Berlin | WWW.Reiner-Lemoine-Institut.DE



2.2.7 Project Video

Work is now underway for the production of an E-LAND product video. It has been decided that the extensive lifetime of the project would be best reflected in three shorter videos, which will ultimately lead to a final longer 3-in-1 video. Therefore, a modular approach to production will be applied, splitting the work into three modular videos:

- Module 1: Project teaser
- Module 2: Pilot show and tell
- Module 3: Project results, outlook, and impact

The first module will be planned for approximately for first 18 months of the project, the second for the middle of the project, and the third aligning with the end of the project. The proposed process timeline for this Video Project is as it shows:

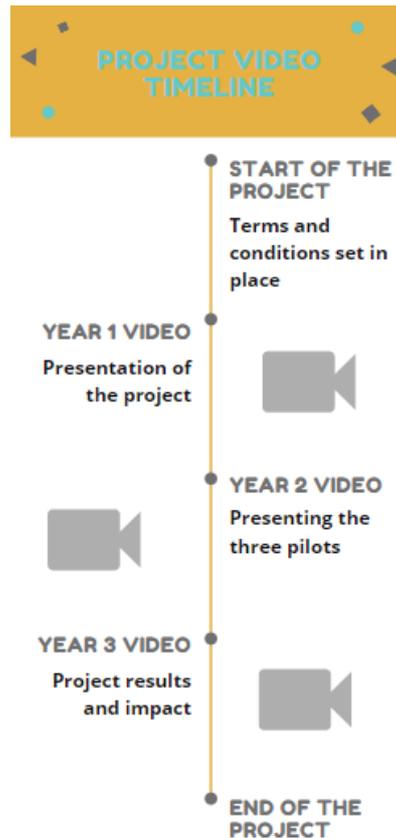


Figure 6: Project Video Timeline

The scope of video 1 together with a first version of the video 1 manuscript has been drafted. The scope of video is to describe the projects objectives in an audio-visual format with the goal of raising awareness of energy islands and the opportunities they bring to society. This will be done by highlighting the advantages of these islands such as increased access to clean energy and reduced CO2 consumption. The key target audience would be a local enthusiast involved in the local society with a passion for the environment.

2.2.8 Flyer

One flyer has been designed (see appendix 5.2) to explain the project and its purpose, with the idea of distributing it amongst consortium members and relevant stakeholders. One first flyer has been presented in M14 at the India Smart Utility Event, in New Delhi. It has a general theme explaining the goals of the main concept and the goal of the project. Moving forward, a similar flyer will be designed for Europe.

2.2.9 Conference Posters

The E-LAND poster was presented at the 9th International Conference of the Chemical Societies of the South-Eastern European Countries that took place 08th - 11th of May 2019 in the city of Târgoviște, Romania. The purpose of the conference posters is to help disseminate preliminary results and plans as well as create awareness of the project. It is expected that the poster will be presented further at future conferences.

2.2.10 Webinars

Due to the ongoing COVID19 situation, the REMforum pre-conference workshop originally planned for April 2, 2020 has now been move to a webinar format. This webinar entitled *Business model innovation in energy – the confluence of locality, digitization, and sector coupling* will target both members of the SIG as well as other industry and scientific researcher stakeholders.

3 Update on Effectiveness of Dissemination and Communication Activities

As it was presented and described in Deliverable D8.3 Dissemination Plan, several measurable targets have been put forward to ensure the quality of the dissemination work. The time frame of the goals is to be met by the end of the project. The following table provides an update on the status of these targets, as of M16.

3.1 Update on communication and engagement KPIs

Table 11: Project dissemination targets

Target description	Target goal
Number of stakeholders engaged in collaboration actions	30
Percentage of community members involved (bringing together stakeholders from different areas to collaborate)	70 %
Number of stakeholders reached	200
Number of people reached through social media	2000

Table 12: Project dissemination target to date

Target description	Target goal by M14
Number of stakeholders engaged in collaboration actions	96
Percentage of community members involved (bringing together stakeholders from different areas to collaborate)	88 %
Number of stakeholders reached	1166
Number of people reached through social media	969

On the update of communication and engagement with the stakeholder it can be observed above that until M14 the number of stakeholders engaged in collaboration actions has reached and passed the entire project goal. This number was reached by calculating the number of stakeholders that were met and interacted with during site visits.

The percentage of community members was calculated by comparing the number of stakeholders described in D8.3 to the number that were engaged in some by M14. This percentage has almost reached the entire goal; indicating that the community engagement has been so far effective.

The number of stakeholders reached was calculated by summing up all the numbers from all the communication channels used to reach the stakeholders (N° of unique users on the website, N° of eNewsletter subscribers, N° of Twitter followers, N° of Facebook subscribers, N° of LinkedIn subscribers, and the N° of stakeholders engaged in collaboration actions). The result of the number of people reached through social media comes from summing up the subscribers of LinkedIn and Facebook together with the number of engagements from Twitter (retweet, like, link click).

3.2 KPI Analysis

The table below has been developed and presented in D8.3 for following up on the dissemination efforts. The table lists the dissemination and communication activities and breaks them down in specific KPI's.

The table quantifies the KPIs of M1 to M14. It should be noted that the data for the Project Website and eNewsletter may be inaccurate due to an error in installing an analytics tool on the website, which resulted in the inability to collect data in the first 9 months period from the launching of the website.

Table 13: Dissemination KPI's

Dissemination activities	KPI	Status period
Project website	N° of sessions	1,165
	N° of unique users	770
	N° of pageviews	3,110
eNewsletter	N° of newsletter subscriptions through the website	69
	N° of eNewsletters sent	2
	N° of subscribers (outside consortium)	11
	Open-rate	49,35%
Events	N° of events with the E-Land active presence	5
	N° of events with E-Land presentations	3
Technical publications	N° of press releases and or articles published in the local, national or EU level journals	28
	N° of scientific papers published in international conferences and journals	1
	Estimated numbers of readers of the article and/or media releases	-
Interaction with H2020 projects / initiatives	N° of project synergies developed	1
	N° of joint workshops	6
Twitter community	N° of followers	75
	N° of tweets published	30
	Total N° of tweet impressions	197.189
	N° of engagements (retweet, like, link click)	813
Facebook community	N° of subscribers	81

Dissemination activities	KPI	Status period
	N° of post published	29
	N° of posts reached	6827
LinkedIn community	N° of subscribers	75
	N° of news published	18
YouTube community	N° of views	-
	N° of videos published	-
Stakeholder involvement	Percentage of community members involved	88%
	N° of stakeholders engaged in collaboration actions	96
	N° of stakeholders reached	1166

4 Conclusion

The focus of this report has been to analyze the progress and success of the activities implemented since M6. The results show the progress of the dissemination and communication activities is on track with the goals established for the overall project. The number of stakeholders reached and engaged have passed half of the goal before even reaching the middle of the project. E-LAND has participated and has been presented at several events and has managed to develop collaboration with other EU projects, such as BRIDGE. Regarding the scientific dissemination, a scientific board will be put together for a better overview and flow of deliverables in the future.

5 Appendix

5.1 5.1 E-LAND Newsletter N° 1



E-LAND means Energy isLAND

Taking advantage of all the opportunities within digitalization and renewable energy to make self-sufficient sustainable energy islands.

In the Energy Industry, the term energy island means a defined area with structural boundaries, e.g. a region, city or institutions. The four demonstration sites clearly illustrate this: An Industrial Harbor in Norway, a Technology Park in Spain, a University Campus in Romania and a Metropolitan in India.

The overall goal of the EU Horizon 2020 project E-LAND is to contribute to the transition to a low-carbon, energy-efficient and climate-resilient economy and develop a more decentralized and open energy system based on smart IT solutions. In addition, E-LAND wants to innovate business models in energy provision. The project has a unique approach to community engagement to ensure sustainability.



Blockchain in the Energy sector – playing the angles in E-LAND

Analysing appropriate business models, blockchain has potential.

[>> Read the article](#)



Romanian DSO puts spotlight on E-LAND

The Romanian pilot is in the initial engagement phase focusing on enrolling important stakeholders.

[>> Read the Article](#)



Ships' zero emission in pilot Port of Borg will benefit E-LAND

Ships using electricity from renewable energy.

[>> Read the Article](#)



Pilot in India – a virtual energy island

In September 2019, the leader of work package two visited BSES, one of four DSOs supplying New Delhi.

[>> Read the Article](#)

[View more news here ...](#)



This project has received funding from the European Union's Horizon 2020 Research and Innovation programme under Grant Agreement No 824388.

5.2 E-LAND Flyer

The flyer features a background image of a snowy mountain landscape at night with a small village illuminated by warm lights. At the top, the E-LAND logo is displayed, consisting of a stylized white and grey geometric shape above the text 'E-LAND'. Below the logo, the text 'Novel solutions for decarbonised energy islands' is centered. The main headline reads 'Efficient, reliable and sustainable delivery of energy is critical to the health and wellbeing of all people.' This is followed by a paragraph explaining the decarbonization of the energy sector and the challenges for existing networks in isolated areas. A section titled 'FOUR PILOTS IN FOUR DIFFERENT COUNTRIES' is highlighted in orange. Below this, two paragraphs describe the project's goal and main concept. The website 'elandh2020.eu' is listed at the bottom, along with the European Union logo and a funding acknowledgment.