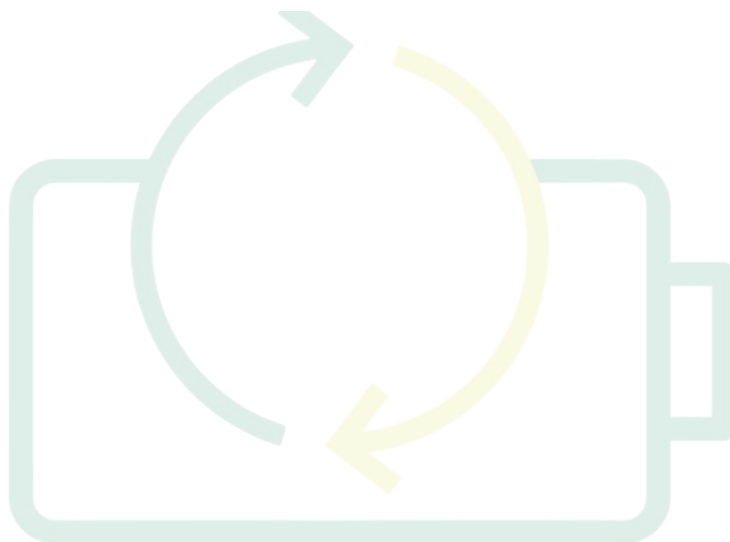


BATTERY 2 LIFE

D9.1 Dissemination and Communication Strategy





DOCUMENT CONTROL TABLE

Work Package	WP9
Task	T9.1
Author(s)	Maria Tsirigoti, ICCS
Dissemination Level	Public
Status	Final
Due Date of submission	30/06/2024
Actual Date of submission	28/06/2024
Document Date	26/06/2024
Version	v1.0
Project Name	BATTERY Management system and System design for stationary energy storage with 2nd LIFE batteries
Project Acronym & Number	Battery2Life 101137615
Project Website	www.battery2life-project.eu
Project Social Media	@battery2life_eu & BATTERY2LIFE Project

QUALITY CONTROL

	Name	Organisation	Date
Editor	Maria Tsirigoti	ICCS	05/06/2024
Reviewer 1	Dimitra	Spanoudaki	06/06/2024
Reviewer 2	Friederike L. Kühl	Etelätär Innovation	06/06/2024
Authorised by Quality Manager	E. Karfopoulos	ICCS	14/06/2024
Authorised by Project Coordinator	A. Amditis	ICCS	26/06/2024

DOCUMENT HISTORY

Version	Date	Modification	Partner
V.01	05/06/2024	First version of the document	Maria Tsirigoti (ICCS)



V.02	10/06/2024	Implementation of the reviewers' comments	Maria Tsirigoti (ICCS)
V1.0	27/06/2024	Final for submission	Maria Tsirigoti (ICCS)

LEGAL DISCLAIMER

BATTERY2LIFE is an EU project funded by the Horizon Europe programme (grant agreement No 101137615). 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. The information in this document is provided “as is”, and no guarantee or warranty is given that the information is fit for any specific purpose. 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. The BATTERY2LIFE Consortium members shall have no liability for damages of any kind including without limitation direct, special, indirect, or consequential damages that may result from the use of these materials subject to any liability which is mandatory due to applicable law. This project has received funding from the Swiss State Secretariat for Education, Research and Innovation (SERI).

Copyright © BATTERY2LIFE Consortium, 2024-2026



Contents	
Document control table	2
Quality Control.....	2
Document History	2
Legal Disclaimer	3
Table of Figures.....	6
List of Tables	7
List of Abbreviations and acronyms.....	8
Executive Summary.....	9
1 Introduction	10
1.1 Project introduction	10
1.2 Deliverable purpose	10
1.3 Addressing the BATTERY2LIFE description of action.....	10
1.4 Intended readership	11
1.5 Key Concepts definition	11
2 The BATTERY2LIFE Dissemination and Communication Plan.....	13
2.1 The BATTERY2LIFE approach.....	13
2.2 The BATTERY2LIFE dissemination and communication goals	13
2.3 Key audiences	14
2.4 Core messages	14
2.4.1 Project golden paragraph.....	14
2.4.2 Customised core messages	14
3 Dissemination and Communication Tools and Activities.....	16
3.1 Brand identity	16
3.1.1 Logo.....	16
3.1.2 Logo use, fonts and colours	17
3.2 Templates	17
3.3 Digital tools	17
3.3.1 Website	17
3.3.2 Social media	18
3.3.3 BATTERY2LIFE Zenodo community	20



3.3.4	Blog	21
3.3.5	Podcasts	21
3.3.6	Video	21
3.4	Promotional material	21
3.4.1	Brochure and roll-up banner.....	21
3.4.2	E-newsletters	22
3.4.3	BATTERY2LIFE general presentation	22
3.5	Press activities.....	22
3.5.1	Press releases, media articles, interviews.....	22
3.6	Events.....	23
3.6.1	External events.....	23
3.6.2	Project webinars	23
3.6.3	Project use cases	23
3.6.4	Final event.....	24
3.7	Networking & liaison activities	24
3.7.1	Joint workshops	26
3.7.2	Stakeholders group	26
3.8	Publications.....	27
3.8.1	Open science	27
4	Performance of the BATTERY2LIFE Dissemination and Communication Plan	29
4.1	Partner contributions.....	29
4.2	Dissemination and communication roadmap.....	30
4.3	Dissemination procedures	34
4.4	EU acknowledgement	34
4.4.1	State Secretariat for Education, Research and Innovation (SERI) acknowledgement	35
5	Monitoring Impact and Expected Results	36
5.1	BATTERY2LIFE monitoring tool	36
5.2	Key performance indicators	36
6	Conclusion.....	38
7	Annexes.....	39



Annex 1: Brand book.....	39
.....	40
Annex 2: Templates	41
Annex 3: Brochure and Roll up Banner	44
Annex 4: General Presentation	47
.....	47
Annex 5: Calendar of Events	49
Annex 6: Guidelines for Open Access to Scientific Publications	50
Annex 7: Dissemination Procedures	51
Annex 8: Monitoring Tool	52
Annex 9: Project Roadmap.....	54
8 References	55

TABLE OF FIGURES

Figure 1: The 5-step approach based on the Lasswell Communication Model	13
Figure 2: Final logo.....	16
Figure 3: The two logo versions that were not chosen.....	17
Figure 4: Project website home page	18
Figure 5: X (formerly twitter) project profile	19
Figure 6: LinkedIn project profile	20
Figure 7: Project Zenodo community.....	21
Figure 9: Partners individual dissemination and communication plans	29
Figure 10: Project KPIs	37
Figure 11: Agenda template	41
Figure 12: Meeting minutes template	42
Figure 13: PowerPoint template.....	43
Figure 14: Project brochure (cover)	44
Figure 15: Project brochure (inside)	45
Figure 16: Project roll-up banner	46
Figure 17: Calendar of events	49



Figure 18: Guidelines for open access	50
Figure 19: Dissemination procedures	51
Figure 20: Monitoring tool.....	53
Figure 21: Project's roadmap.....	54

LIST OF TABLES

Table 1: Core messages and key audiences	15
Table 2: Social media actions and hashtags.....	19
Table 3: List of press releases and press activities.....	23
Table 4: Project webinars	23
Table 5: Activity per pilot use case	24
Table 6: Activities for the final event.....	24
Table 7: Similar EU-funded projects	25
Table 8: Related associations and partnerships.....	26
Table 9: Possible network actions.....	26
Table 10: Short description of the dissemination and communication activities implementation	30
Table 11: Dissemination and communication roadmap combined with the project KPIs	34

LIST OF ABBREVIATIONS AND ACRONYMS

Abbreviation	Meaning
AIT	Austrian Institute of Technology (Consortium partner)
BMS	Battery Management System
D	Deliverable
EC	European Commission
EV	Electric Vehicle
GA	Grant Agreement
ICCS	Institute of Communication and Computer Systems (Consortium partner)
KOM	Kick off Meeting
PPC	Dimosia Epicheirisi Ilektrismou Anonymi Etaireia (Consortium partner)
SLG	Sunlight Group (Consortium partner)
T	Task
WP	Work Package



EXECUTIVE SUMMARY

The document D9.1 “Dissemination and Communication Strategy” is the main output of both T9.1 “Development of a full Dissemination and Communication Plan” and T9.3 “Clustering with European projects”. The current deliverable aims at presenting a thorough plan and guidance for efficiently disseminating and promoting the project’s objectives, actions and accomplishments to a wide audience of stakeholders.

The document will present the tools and channels that have already been used and will be used to communicate the project, it will identify the project’s target audiences and the key messages that should be used to engage each audience, the dissemination process to be followed by the consortium partners and it will serve a guide for all the dissemination and communication activities performed within the project.

The BATTERY2LIFE Dissemination and Communication Strategy is a living document that will be adapted according to the project’s phases and outcomes and will be updated after the first half of the project’s lifespan at M18 (in June 2025).

It is expected that each consortium partner will participate in the outlined activities to a varied extent, according to their respective roles and project plans.

This deliverable has used a standard methodology already developed in the preceding IRIS project (Grant Agreement number: 101021727), following EU recommendations. Ad hoc modifications were added to comply with the Grant Agreement conditions for BATTERY2LIFE (Grant Agreement number: 101137615).



1 INTRODUCTION

1.1 Project introduction

BATTERY2LIFE is a project, funded under the Horizon Europe framework programme that will facilitate the smooth transition of EV batteries to 2nd life use and boost the innovation of the European Battery Industry by providing enablers to implement open, adaptable smart Battery Management Systems (BMS) and improved system designs towards reliable reconfiguration of used batteries.

Two demonstrations that represent two promising and sustainable business cases, serving the two most common stationary applications have been carefully selected: The domestic and industrial (grid-scale) storage, with respect to their operational specificities and requirements.

The project's duration extends from January 2024 to December 2026.

1.2 Deliverable purpose

This document lays the foundation for a successful dissemination and communication plan and gives an outline and strategy to meet the dissemination and communication objectives of the project. It specifies the target audiences, how those audiences will be reached, which key messages will be used and the channels and means that will be employed.

The deliverable 9.1 Dissemination and Communication Strategy is a living document that is expected to evolve over time through the project's lifetime, taking into consideration the project's progress, the consortium's needs and the feedback given by the target audiences, through the monitoring and the evaluation of the activities. The official update will be published in from of D9.3 in M18 and the final version including all activities and reporting on the defined KPI targets under the subsequent WP10 in form of D10.1 in M36.

Finally, this deliverable is based on the principles outlined in the Horizon Europe guidance on how to communicate an EU-funded project presented on the [EC official website](#), entitled "[Communicating about your EU-funded project](#)" [1].

1.3 Addressing the BATTERY2LIFE description of action

The relation of this present document with the BATTERY2LIFE Grant Agreement (GA) requirements in WP9, is depicted in the table below:



BATTERY2LIFE GA requirements	Deliverable addressing the requirements	Description
Task 9.1 Development of a full Dissemination and Communication Plan Task 9.3 Clustering with European projects	D9.1 Dissemination and Communication Strategy	This deliverable is the outcome of Tasks 9.1 and 9.3 and will present the project's dissemination and communication plan for the effective promotion of the project and the engagement of the related stakeholders.

1.4 Intended readership

This document is a public deliverable; therefore, the intended readership comprises the BATTERY2LIFE consortium partners, the EC Project Officer and the general public. It will be of high interest for the consortium partners to use it as a reference for organising the project's dissemination and communication activities and for assisting in raising awareness of the project.

1.5 Key concepts definition

Dissemination and Communication are two key elements of an EU-funded project with major contribution to the project's success. The table below presents their objectives, similarities and differences, according to the Horizon Europe guidance on how to communicate an EU-funded project presented on the [EC official website](#), entitled "[Communicating about your EU-funded project](#)" [1].

	Dissemination	Communication
What	Make knowledge and results publicly available free-of-charge	Inform, promote and communicate activities and results
How	Publishing results in: <ul style="list-style-type: none"> ✓ Scientific magazines ✓ Scientific and/or targeted conferences ✓ Databases 	<ul style="list-style-type: none"> ✓ Having a well-designed strategy ✓ Conveying clear messages ✓ Using the right channels
When	<ul style="list-style-type: none"> ✓ Anytime, as soon as results become available ✓ Up to four years after the end of the project 	<ul style="list-style-type: none"> ✓ From the start until the end of the action
Why	<ul style="list-style-type: none"> ✓ Maximise the impact of the action ✓ Allow other researchers to go a step forward 	<ul style="list-style-type: none"> ✓ Engage with stakeholders ✓ Attract the best experts ✓ Raise awareness of how public money is spent



	<ul style="list-style-type: none"> ✓ Contribute to the advancement of world class knowledge ✓ Make scientific results a common good 	<ul style="list-style-type: none"> ✓ Show the success of European collaboration
	It's a legal obligation according to article 17 of the Horizon Europe Grant Agreement	
Audience	<ul style="list-style-type: none"> ✓ Scientists ✓ Industry ✓ Public authorities ✓ Policymakers ✓ Civil society 	<ul style="list-style-type: none"> ✓ Citizens ✓ Stakeholders ✓ The media

Table 1: Key concepts definition



2 THE BATTERY2LIFE DISSEMINATION AND COMMUNICATION PLAN

2.1 The BATTERY2LIFE approach

The BATTERY2LIFE Dissemination and Communication strategy is inspired from the Lasswell's model of communication [2], and the five simple questions: "Who", "Says What?", "In What Channel?", "To Whom?", and "With What Effect? ". The figure below shows briefly our approach and the steps we will follow.

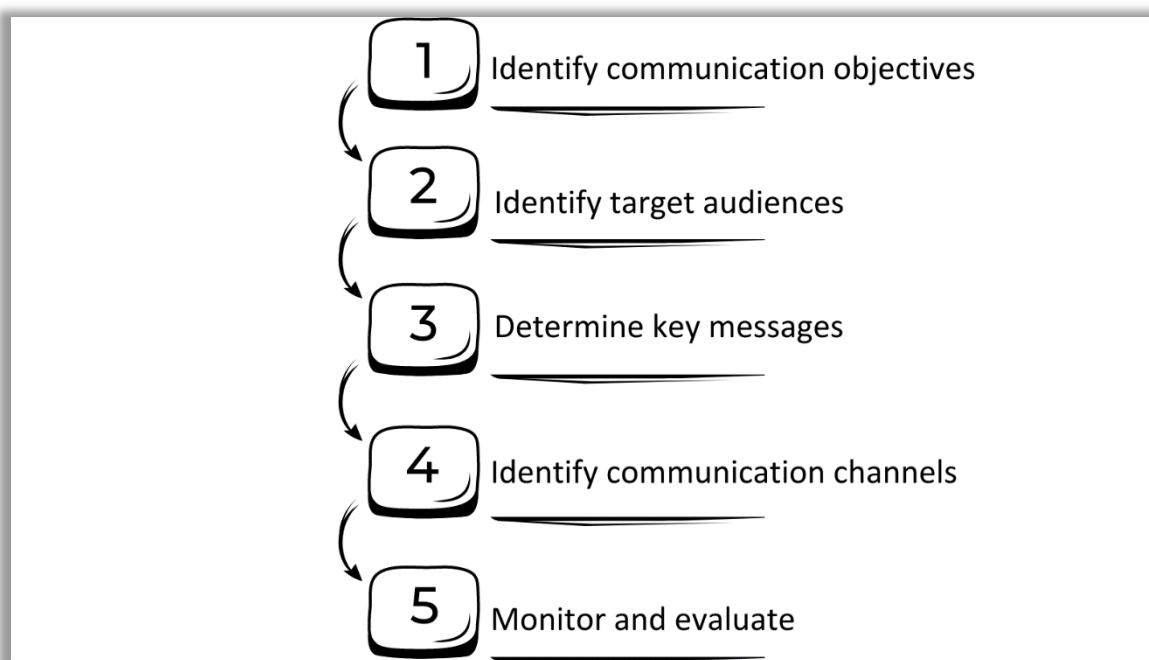


Figure 1: The 5-step approach based on the Lasswell Communication Model

2.2 The BATTERY2LIFE dissemination and communication goals

From the very beginning of the project, the BATTERY2LIFE consortium partners have been committed to different communication and dissemination activities targeting various audiences through different communication channels and tools to raise attention and awareness for the project. As mentioned above, the first step to a successful dissemination and communication plan is the identification of the dissemination and communication goals. These are mentioned in the project GA [3] and are also summarised below:

- Raise project awareness
- Engage the correct target audiences
- Carry the project results to the society



- Involve as many stakeholders as possible to the project advantages
- Liaise with other EU-funded projects and promote European collaboration
- Disseminate the project scientific results and get feedback from other scientists and relevant key expert communities

2.3 Key audiences

The second step to a successful strategy is to define the key target audiences, understand their unique characteristics and needs and try to engage them to the greatest extent. The audiences BATTERY2LIFE project targets to reach, have been identified first in the proposal and later in the [GA \[4\]](#) and they are also presented below:

- » **Battery manufacturers and suppliers** (European EV battery factories such as Samsung SDI in Hungary, LG Chem in Poland, Northvolt Ett in Sweden, CATL in Germany and more)
- » **1st & 2nd life batteries customers** (EV manufacturers, ESS customers, etc)
- » **Scientific & research community** (researchers in similar fields)
- » **Public bodies & policy makers** (EC, European Battery Alliance, etc)
- » **Relevant European projects and initiatives** (EU-funded projects and initiatives such as those presented in detail in [Section 3.7](#))
- » **Standardisation community** (ESOs-European Standardization Organisations {CEN, CENELEC, ETSI}, other standardization bodies)
- » **Media** (press, newspapers & magazines, online media sites)
- » **General public** (European citizens)

2.4 Core messages

The definition of the key messages that will target the project stakeholders, is the third step on our approach.

2.4.1 Project golden paragraph

The purpose of this paragraph is to grab the reader's attention and give a clear overview of the project even to non-technical audiences. All consortium partners can use it in different occasions (presentations, social media, website announcements, media articles).

BATTERY2LIFE aims to facilitate the smooth transition of batteries to 2nd life use and boost the innovation of the European Battery Industry by providing enablers to implement open, adaptable & smart Battery Management Systems (BMS) and improved system designs towards reliable reconfiguration of used Electric Vehicle (EV) batteries.

2.4.2 Customised core messages



Each target group needs to be approached keeping in mind that they may have a different view on the project results. Thus, we have tried to link customised key messages to the identified target audiences since the very beginning of the project. Most of the target audiences and core messages have been defined in the GA [5]. Below you can find a table presenting the link between the audiences (mentioned also in chapter 2.3) and the project core messages:

Core message	Key audience
BATTERY2LIFE will provide enablers for the cost-efficient integration of EV batteries in 2 nd life applications, increasing the global competitiveness of the European battery industry and unlocking new business streams.	Battery manufactures and suppliers
BATTERY2LIFE will ensure a safe, reliable and cost-efficient 2 nd life for used EV batteries.	1 st & 2 nd life batteries customers
BATTERY2LIFE will provide enablers and will generate knowledge and open data for more accurate monitoring and control of used batteries.	Scientific & research community
BATTERY2LIFE will enable the safe and cost-efficient integration of used EV batteries in 2 nd life applications, reducing their carbon footprint and boosting the European battery ecosystem.	Public bodies & policy makers
BATTERY2LIFE enablers will cover current and future systems and technologies and are interoperable among systems and manufacturers.	Relevant European projects and initiatives
BATTERY2LIFE enablers and data models will support interoperability of different BMS and BS and open access to battery data by third parties, including the battery passport concept.	Standardisation community
BATTERY2LIFE offers a safe, reliable and cost-efficient 2 nd life to EV batteries, promoting circularity and sustainability.	Media
BATTERY2LIFE paves the way for safe, reliable and inexpensive 2 nd life of electric vehicles' batteries for a green European future.	General public

Table 2: Core messages and key audiences

3 DISSEMINATION AND COMMUNICATION TOOLS AND ACTIVITIES

3.1 Brand identity

3.1.1 Logo

The project logo was designed and voted on by all consortium partners at the very beginning of the project. The vote took place even before the project Kick Off Meeting (KOM). ICCS tried to create a simple and engaging logo that will immediately convey the project's vision to everyone. In total, three different draft versions were presented to the partners and the consortium partners voted on one of the designs via majority voting in which all partners cast one vote. The logo is the trademark of the project and is used on the project's website, social media and templates. According to Horizon Europe guidelines, it also needs to be included on any physical demonstrator that the project produces, in this case the Energy Storage Systems (ESS) manufactured and tested during the project as well as all battery packs that constitute them.



Figure 2: Final logo

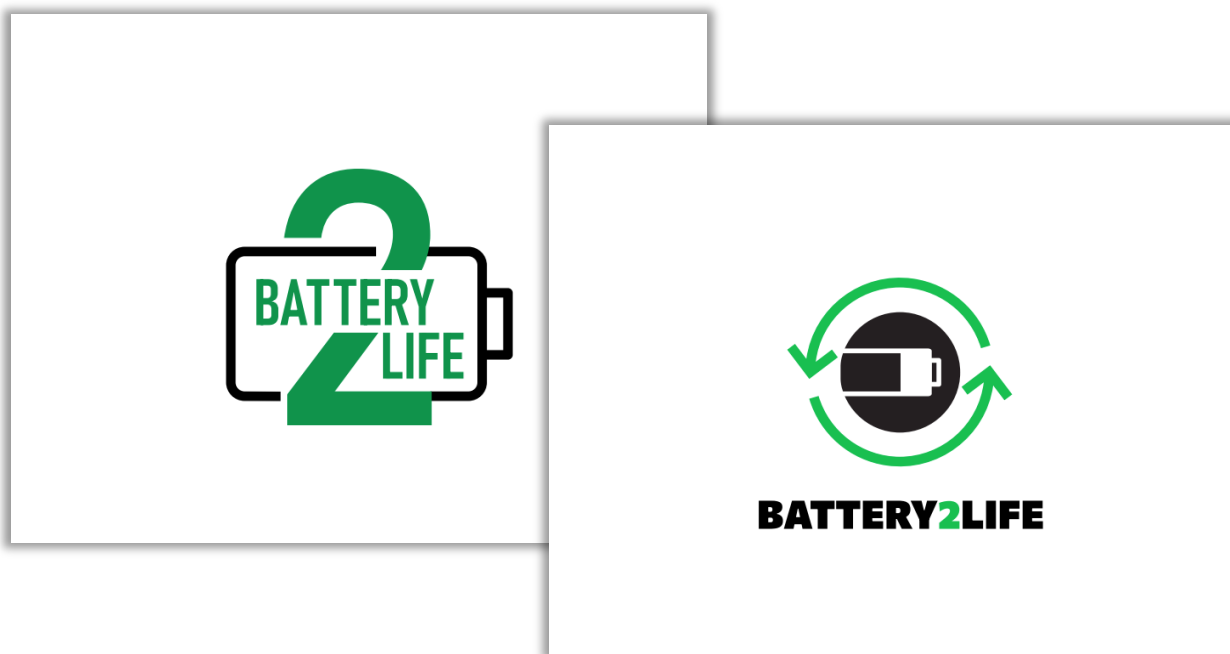


Figure 3: The two logo versions that were not chosen

3.1.2 Logo use, fonts and colours

It is important to keep a consistent project identity so that the project gets easily recognisable to the public. Therefore, we created a dedicated brand book that includes guidance for the logo use, the font that should be used in the project's templates and on the website as well as the project colours which reveal the green aspect of the project. The project brand book is available on the project [website](#) and also in full in *Annex 1: Brand book* of this document.

3.2 Templates

ICCS is the Dissemination and Communication manager of BATTERY2LIFE and created a set of MS office templates that comprise of a deliverable template in .docx format, an agenda template in .docx format, a meeting minutes template in .docx format and a presentation template in .pptx format for the partner presentations. The templates are available on the project repository and also can be found in full in *Annex 2: Templates* of this document.

3.3 Digital tools

3.3.1 Website

The BATTERY2LIFE [website](#) was created in M3 of the project lifespan. The project website is the pillar of the project communication and the main channel of communication with anyone



interested in the project. The design is based on the project brand and visual identity and is being kept as simple as possible.

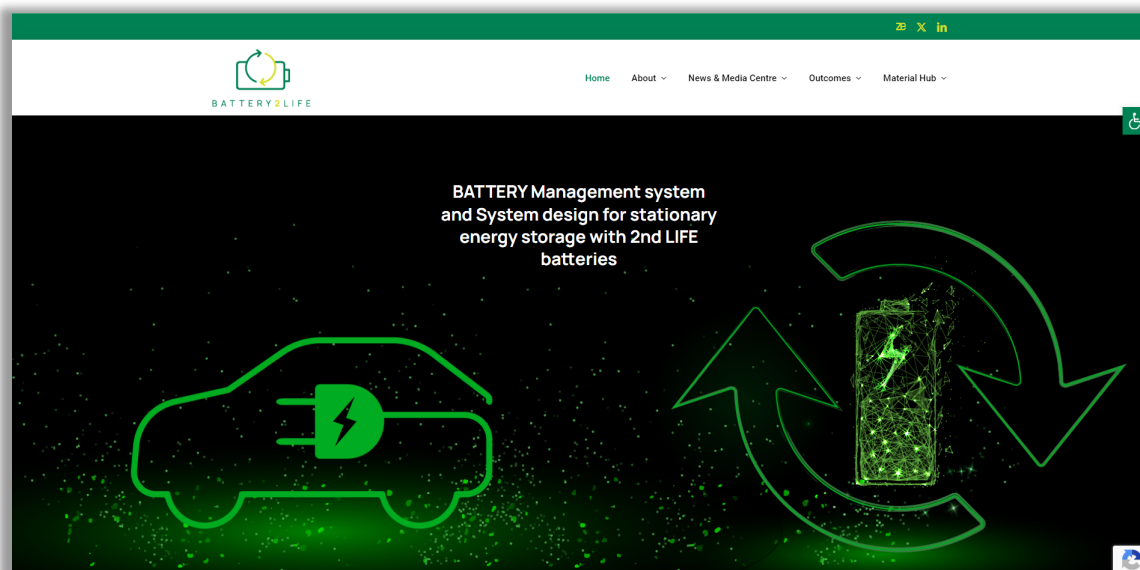


Figure 4: Project website home page

3.3.2 Social media

The project social media channels will be used to communicate the project to a wider audience by disseminating its results, news and highlights in a catchy, yet informative way. The project has been already running an X (formerly known as twitter) channel and a LinkedIn account since the launch of the project. A YouTube channel will be also launched to host the project videos at a later stage and once more tangible results become available.

Media	Account
X (Twitter)	@battery2life_eu
LinkedIn	BATTERY2LIFE Project

The consortium partners have already received guidelines on how to use these accounts. They have been asked to tag the official project accounts every time they want to post about their work within the project, to repost the project channel's announcements, to use the appropriate hashtag(s), spread the word about the project accounts to help the project grab the public's attention and increase the number of effective followers also by the followers of the consortium partner accounts.

Social media	Actions	Hashtag
	Follow the project accounts.	• #battery2lifeproject



<p><u>@battery2life_eu</u></p> <p><u>BATTERY2LIFE</u></p> <p><u>Project</u></p>	<p>Always tag the official accounts, when making your own posts.</p> <p>Repost the project social media announcements.</p> <p>Spread the word to your network and ask them to follow the project accounts.</p>	<ul style="list-style-type: none">• #secondlife• #ElectricVehicles• #batteries• #horizoneurope• #HorizonEU• #sustainability• #reusedbatteries• #secondlifeapps• #cleanenergy• #batterysystems
---	--	--

Table 3: Social media actions and hashtags

The project has already completed a social media campaign during which each week there another consortium partner was presented, so that the project could begin to engage more people from the consortium organisations. More campaigns will follow depending on the project progress and achievements. The project social media accounts are very active and will continue to inform their audience about the project results. Furthermore, an inventory has been created, which contains all consortium partners social media channels with links and number of followers to give ICCS the full overview over all available social media channels and pool the audiences of all partners into a potent pool of social media audience members both new and established. In total, the consortium including all social media channels reaches 200K followers. This will also help the project considerably to amplify the key messages to the target audiences.

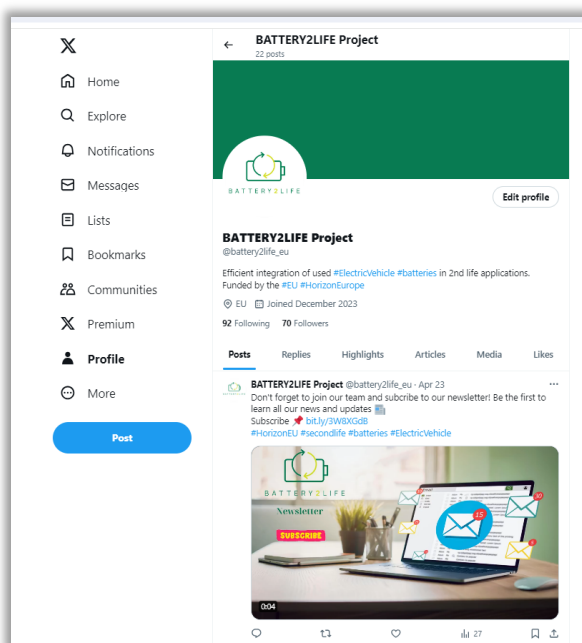


Figure 5: X (formerly twitter) project profile

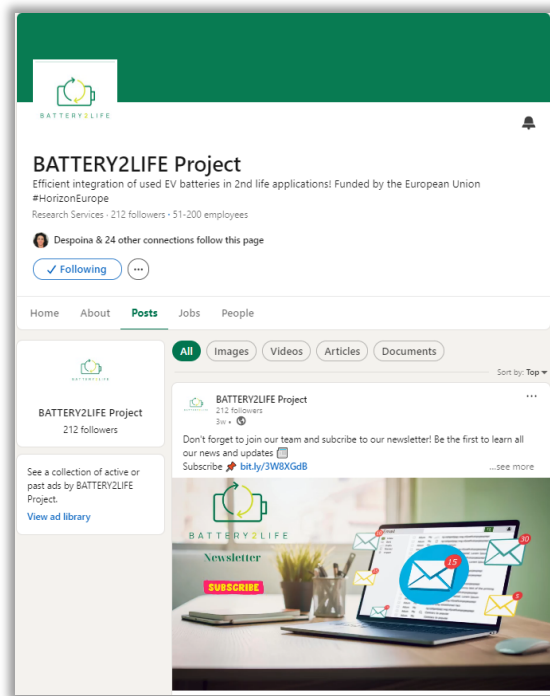


Figure 6: LinkedIn project profile

3.3.3 BATTERY2LIFE Zenodo community

A BATTERY2LIFE Zenodo Community has been created at the beginning of the project with the intention to publish here all of the public deliverables once they are accepted by the EC. The community will also contain all of the project publications (both from conferences and scientific publications) and its promotional materials (e-newsletters, brochure, roll up banner) known to the public and gain visibility. So far, it includes the project logo and brand book, the project brochure and roll-up banner and its two published press releases.

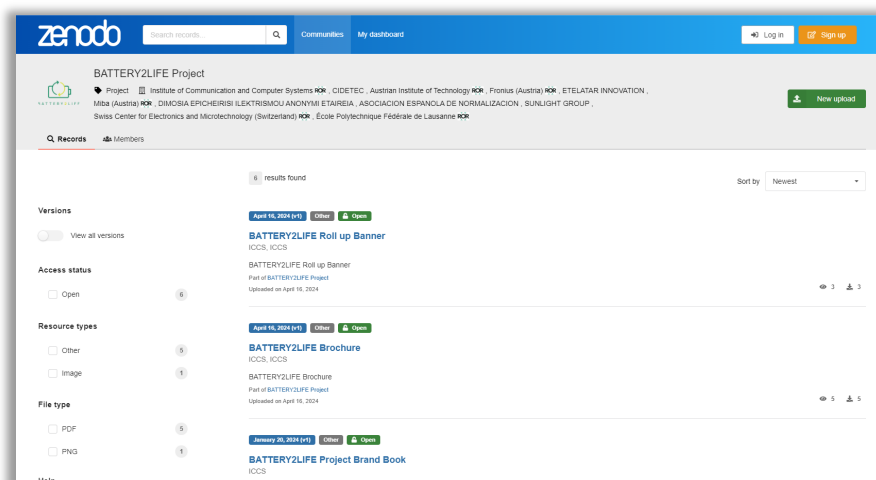


Figure 7: Project Zenodo community

3.3.4 Blog

As soon as there are results to be presented, consortium partners will provide at least one article per partner for the project blog. The blog articles will be available on the dedicated section that has already been created on the website and on the project Zenodo Community.

3.3.5 Podcasts

The project will launch a podcast series, made up of at least four (4) podcasts episodes about the project scope and outputs, following the trend of audio-visual contents and podcasts and engaging more stakeholders and relevant actors in this way. ICCS will guide the consortium into making the podcasts giving useful tips on both the content and technical aspects.

3.3.6 Video

A general project video that communicates the project scope and impact in an easily understandable way to the general public will be created by the end of the 2nd project year. The video will be circulated through the social media, will be hosted on the project website and YouTube channel and will be used in related events.

3.4 Promotional material

3.4.1 Brochure and roll-up banner

Both the BATTERY2LIFE brochure and roll-up banner were designed at an early project stage to support the consortium dissemination and communication activities. The material was created based on the project brand identity and includes the project vision, objectives, expected breakthroughs, the consortium logos, the project social media and website as well as the project facts (duration, call identifier, business cases). All the consortium partners gave input to have the



very best result. Both the brochure and the roll-up banner are available on the project's [website](#) and [Zenodo Community](#). They are also presented in full in *Annex 3: Brochure and Roll up Banner* of this document.

3.4.2 E-newsletters

The BATTERY2LIFE project will circulate two e-newsletter issues per year to inform people on the project accomplishments and progress. The project e-newsletter will be sent to the subscribers and then they will be communicated through the project social media and will be made available on both the website and the Zenodo community to reach as many people as possible. The e-newsletter will be created via the service [Mailchimp](#) and the consortium will guarantee the GDPR compliance of subscribers.

3.4.3 BATTERY2LIFE general presentation

An overview of the project has been created to assist the consortium in their dissemination and communication activities. This presentation includes the main project information, such as its aim, objectives, expected impact, business cases, consortium information in a clear and engaging way and it can be used with no prior approval from the consortium in various events. The BATTERY2LIFE General Presentation is available on the project's repository, and it is also presented in *Annex 4: General Presentation*.

3.5 Press activities

3.5.1 Press releases, media articles, interviews

The BATTERY2LIFE consortium partners will use their media network and contacts to publicise the project vision and its achievements in a later stage. ICCS leads the communication actions of the project and has created a press release just after the project official launch and circulate it to the consortium partners to circulate it (in English or translated in national languages) among their media channels. Based on this press release the Greek partners of the project (ICCS, PPC and SLG) released a joint Greek press release which resulted in seven (7) press clippings and two (2) media articles in renown Greek online media and one (1) TV news report. Another consortium partner, AIT also released a press release about the project launch which resulted in two (2) media articles in popular media sites. All the media actions are available on the project's website: [Press releases](#) and [media articles/interviews](#) and they are shown in the table below:

Action	Link	Partner
Press Release	https://bit.ly/3UOudnh	ALL
Press Release	https://bit.ly/3K5H3bE	ICCS, PPC, SLG
Press Clippings/republications	<ul style="list-style-type: none">ictplus.grGetelectric.grStartup.gr	ICCS, PPC, SLG



	<ul style="list-style-type: none"> • Metaforespress.gr • Politicalbank.gr • Enerymag.gr • Euro2day.gr 	
Press Article	Naftemporiki.gr	PPC
TV Media Report	Naftemporiki Channel	PPC
Press Article	Industry-news.gr	SLG
Press Release	Ait.ac.at	AIT
Press Article	Batteriesnews.com	AIT
Press Article	Circulaire-it.nl	AIT

Table 4: List of press releases and press activities

3.6 Events

3.6.1 External events

The project's consortium partners will participate in various events such as renown conferences and popular fairs and expos to diffuse the project scope and expected results and showcase the projects results. A calendar of such events has been created by ICCS and is available on the project repository to encourage partners to organise their participations. The calendar of events is a living document that will be constantly updated with new events and useful information. The calendar of events is also presented in *Annex 5: Calendar of Events*.

3.6.2 Project webinars

Three (3) webinars will be organised by the consortium partners. The first webinar will introduce the project to the public to all the interested parties and will be held during the 1st year of the project. The second and third will follow in the third project year and will describe the two project business cases and will be supported mainly by the partners who are responsible for the demonstrations.

Webinar	Topic	Partner(s)	Project Month
#1	Overview of the project	ALL	M1-M12
#2	Utility scale storage application.	ICCS, PPC, SLG and others	M25-M36
#3	Domestic storage demonstration	ICCS, FRO, MIBA and others	M25-M36

Table 5: Project webinars

3.6.3 Project use cases



There will be two different use cases during the project life span. While the use cases are developed and piloted for validation purposes, ICCS will provide support in terms of dissemination and communication. Examples of the actions that will be implemented are presented below:

Channel/Tool	Activity
Dissemination kit	Utilise branded material and usage at venue.
Media presence	Publish at least one related press release.
Organisation of events	Organisation of two webinars dedicated to the two use cases .
Online presence	Devoted social media campaign, website announcements.
Networking	Invitations to external stakeholders to attend the dedicated webinars and/or the pilot sites.

Table 6: Activity per pilot use case

3.6.4 Final event

The project final event will be held to demonstrate the project outcomes to a wider audience and prepare the ground for further developments and exploitation of its results. It is expected that more than 100 people will attend the event. Examples of the actions that will be held are presented below:

Channel/Tool	Activity
Dissemination kit	Utilise branded material and usage at venue.
Media presence	Publish at least one related press release.
Online presence	Devoted social media campaign, website announcements.
Networking	Invitations to external stakeholders and other EU-funded projects to attend the project's final event.

Table 7: Activities for the final event

3.7 Networking & liaison activities

The project will initiate relations with other similar EU-funded projects and related organisations to exchange knowledge and share information, promoting the European collaboration and open research principles. The main result of this activity will be the organisation of at least two (2) joint workshops with the EU-funded projects and also the creation of a cluster of projects which will meet and cooperate in a regular basis. The consortium has already identified several European and national projects which are mentioned in the [GA](#) (6). Adding to that list, the projects that are funded under the same call as BATTERY2LIFE or with similar interests, makes it clear that there will be quite a few opportunities for collaboration.



Project	Partner(s) in common	Duration	Coordinator
<u>NEMO</u>	CSEM	05/2023 – 04/2026	Free University of Brussels (VUB)
<u>RECIRCULATE</u>	CSEM	05/2023 – 04/2026	Centria University of Applied Sciences
<u>NEXBAT</u>	CSEM, SLG	06/2023 – 11/2026	VTT Technical Research Centre of Finland
<u>BIGLEAP</u>	-	01/2024 – 06/2027	Brussels Research and Innovation Center for Green Technologies
<u>BATMAX</u>	CSEM	05/2023 – 10/2026	VTT Technical Research Centre of Finland
<u>BATTEREVERSE</u>	-	05/2023 – 10/2026	French Alternative Energies and Atomic Energy Commission (CEA)
<u>REBELION</u>	-	06/2023 – 11/2026	Polytechnic University of Valencia (UPV)

Table 8: Similar EU-funded projects

Beside the EU-funded projects, there are quite a few relevant associations and partnerships that will be approached through the partners that are related to them. Below you can see the related European associations/partnerships:

Partnerships	Description	Related Partners
<u>BATT4EU</u>	Co-programmed Partnership established under Horizon Europe that aims to achieve a competitive & sustainable European industrial value-chain for e-mobility and stationary applications.	CID, CSEM, SLG, AIT
<u>2ZERO</u>	Towards zero emission road transport (2Zero) is a co-programmed Partnership funded under the Horizon Europe and aiming at accelerating the transition towards zero tailpipe emission road mobility across Europe.	CID, ICCS, AIT
<u>EARPA</u>	European Automotive Research Partners Association	CID, AIT
<u>ETIP Batteries Europe</u>	Batteries Europe, the European Technology & Innovation Platform on batteries provides the community with a forum to spearhead Research and Innovation actions so to accelerate the	CID, AIT



	establishment of a globally competitive European battery industry	
<u>EuroBat</u>	EUROBAT brings together the battery value chain to drive innovation and contribute technical expertise to the EU policy-making process.	SLG
<u>ETIP SNET</u>	Smart networks for energy transition	CID
<u>EuBatIn</u>	The IPCEI on Batteries and the IPCEI European Battery Innovation (EuBatIn). Both IPCEIs have in common that their participants represent the complete value chain, from material through the cells to the battery system and the final step of recycling. At the same time, there is a high degree of networking between the companies themselves and the two IPCEIs.	MIBA, SLG

Table 9: Related associations and partnerships

3.7.1 Joint workshops

BATTERY2LIFE will try to establish synergies with the EU-funded projects and initiatives mentioned in the previous section 0 and jointly organise at least two (2) workshops, promoting the European collaboration. Beside the workshops, BATTERY2LIFE will initiate the creation of a project cluster that will have meetings and further collaboration in other levels. Possible activities that can be held with other EU-funded projects are presented in the table, below:

Possible joint activities
Creation of a cluster (joint name).
Creation of a joint brand identity (logo).
Creation of a joint brochure.
Set up joint social media.
Circulation of a joint e-newsletter.
Publication of joint press releases, white papers.

Table 10: Possible network actions

3.7.2 Stakeholders group

BATTERY2LIFE will establish a Stakeholders Group to involve a wider base of different actors from the target audiences, mentioned in 2.3, in various important project events with the aim to get valuable feedback.



3.8 Publications

The BATTERY2LIFE partners will submit scientific papers in peer-reviewed journals and high impact conference proceedings as these would be one of the main outcomes of the project. This action is mainly focused in the academic and research partners, but it is expected that all partners will contribute.

3.8.1 Open science

The project has committed to offer open access to all its publications. The consortium will follow the steps for open access in publications as these are mentioned in the Annotated Grant Agreement (Funding programmes 2021-2027) (7).

The beneficiaries must ensure open access to peer-reviewed scientific publications relating to their results. In particular, they must ensure that:

- at the latest at the time of publication, a machine-readable electronic copy of the published version or the final peer-reviewed manuscript accepted for publication, is deposited in a trusted repository for scientific publications.
- immediate open access is provided to the deposited publication via the repository, under the latest available version of the Creative Commons Attribution International Public Licence (CC BY) or a licence with equivalent rights; for monographs and other long-text formats, the licence may exclude commercial uses and derivative works (e.g. CC BY-NC, CC BY-ND).

How to provide open access:

Beneficiaries/authors may publish in the venue of their choice, either in a closed venue (i.e. access to all content is restricted), an open access publishing venue or in a hybrid publishing venue, provided that all their open access-related obligations as detailed in this section are complied with.

- ‘Open access publishing venues’ are publishing venues whose entire scholarly content is published in open access (e.g. open access journals, books, publishing platforms, repositories or preprint servers).
- ‘Hybrid publishing venues’ are publishing venues which provide part of their scholarly content in open access, while another part is accessible through subscriptions/payments (e.g. hybrid journals and books). These are often journals/books based on subscription/purchase which provide open access to part of their content when an open access fee is paid by their authors/institutions (paid ad hoc or on the basis of an institutional agreement with the publishers).
- ‘Mirror and sister journals’ (i.e. more recently established open access versions of existing subscription journals, which may share the same editorial board as the original journal



and usually have (at least initially) the same or very similar aims, scope and peer review processes and policies; these journals often have a name similar to the subscription title but a different International Standard Serial Number (ISSN) are considered open access publishing venues for Horizon Europe grants (not hybrid journals).

To help you find publishing venues that comply with Horizon Europe open access requirements, you can use:

- **Journal Checker Tool** — can help to determine whether a specific publishing venue allows compliance with the open access obligations of Horizon Europe
- **Directory of Open Access Journals** — can help to identify full open access journals that allow open access publishing under CC BY or an equivalent licence
- **Open Research Europe** — open access publishing platform of the European Commission, allows automatic compliance with the Horizon Europe requirements.

ICCS prepared and circulated the dedicated guidelines to the consortium at the launch of the project. The guidelines are available on the project's repository and also in *Annex 6: Guidelines for Open Access to Scientific Publications* of the current document.



4 PERFORMANCE OF THE BATTERY2LIFE DISSEMINATION AND COMMUNICATION PLAN

4.1 Partner contributions

ICCS is the BATTERY2LIFE dissemination and communication manager and will be leading, monitoring and evaluating all the relevant actions and provide guidance to the consortium partners whenever it is needed. All the BATTERY2LIFE partners will be contributing to the project dissemination and communication plan but to a different extent. ICCS will identify each partner's strong point and encourage them to evolve it. As a first step, the consortium partners have been asked to organize their dissemination and communication plans for the first project year in a document that will be filled in once a year. In a later stage ICCS will proceed and discuss with each partner how they could contribute to the project promotion and redefine their original plans.

1 DISSEMINATION/COMMUNICATION PLAN

*To be completed by the BATTERY2LIFE consortium partners once a year

Table 1: Participation in events

Name of the event (which event)	Date (when)	Place (Where)	What to present

Table 2: Organisation of events

Title	Date (when)	Partners involved	Description of the event (type, aim)

Table 3: Publications

Targeted journals / Conferences	Topic planned to be elaborated (what)	Other partners to be involved as co-authors (name ONLY the organization)

Table 4: Social Media & Press Activities

Activity (social media post, press release, press article, interview etc)	Number of posts/press releases/articles


 Co-funded by
the European Union

Figure 8: Partners individual dissemination and communication plans



4.2 Dissemination and communication roadmap

The BATTERY2LIFE project dissemination and communication plan will be divided into three project stages. During the first stage that spans from the launch of the project until the end of the first year we will establish the project brand name and promote the project to the public. In the second stage, we will focus on the dissemination of the available outputs and in the third and last stage the consortium partners will disseminate the most mature and final project results. In Table 11, there is a short description of how the dissemination and the communication activities will be implemented in the three project phases.

Dissemination and Communication Activities	1 st stage	2 nd stage	3 rd stage
Project identity (logo, brand identity, templates)	*		
Online presence (website, social media)	*	*	*
Communication kit (brochure, roll-up banner, e-newsletters)	*	*	*
Media presence (press releases, media articles/interviews)	*	*	*
Publications (conference proceedings, journals)		*	*
Audio-visual material (video, podcasts)	*	*	*
Participation in events (conferences, expos, trade fairs, etc)	*	*	*
Organisation of project events (webinars, final event)	*	*	*
Networking & liaison activities (establish networks, joint workshops, stakeholders list)	*	*	*

Table 11: Short description of the dissemination and communication activities implementation



However, in order to achieve an efficient dissemination and communication of the project, ICCS has created a thorough plan that includes specific planned activities which will help reach and maybe exceed the defined key performance indicators, which are presented in 5.2 of this document. The table below and the figure in *Annex 9: Project Roadmap*, present in detail the actions of each project stage:

Project stage & description	Activities	Planned actions	Highlights
1 st stage (M1-M12): Establish the project identity and raise awareness	Creation of the project brand identity (project logo, colour palette, brand book, templates)	The project brand identity (project logo, colour palette, brand book, templates) was ready before the KOM.	D9.1 Dissemination and Communication Strategy.
	Set up of social media channels and continuous networking	X (formerly Twitter) and LinkedIn accounts launched before the project KOM. Reach 200 followers in total.	
	Project website	Project website launched in M3.	
	Communication kit (brochure, roll up banner, e-newsletters)	Brochure and roll-up banner were ready by M3. Publication of two e-newsletters (M6, M12).	
	Publication of media articles/interviews & press releases	Publish a press release and two media articles.	
	Presentations in conferences and other events	Present the project to at least 3 related events.	
	Networking activities with other EU projects & organisations	Establish networking activities with at least 2 related projects and organisations.	



	Organisation of webinars	Organise one webinar (introducing the project).	
	Audio-visual material (video, podcasts)	Launch the project podcast series.	
Project's stage & description	Activity	Planned Actions	Highlights
2 nd stage (M13-24): effective communication of the available project outcomes and findings.	Website and social media maintenance and update	Weekly updates on the website & social media. Reach 350 followers in social media.	D9.3 Dissemination and Communication Strategy Update
	Participation in conferences and other events	Participation in at least 5 related events.	
	Communication kit (brochure, roll up banner, e-newsletters)	Publication of two e-newsletters (M18, M24).	
	Networking activities with other EU projects & organisations	Establish networking activities with at least 3 more related projects and organisations. Organisation of a joint workshop. Add at least 10 people on the Stakeholders Group.	
	Audio-visual material (video, podcasts)	Create the project general video. Add at least two podcast episodes.	
	Publication of media articles/interviews & press releases	Publish a press release and two media articles.	



Project's stage & description	Activities	Planned Actions per activity for successful communication & reaching KPIs	Highlights
3 rd stage (M25-M36): effective dissemination of the final project results to maximise the project exploitation	Website and social media maintenance and update	Weekly updates on the website & social media Exceed the 500 followers in social media.	D10.1 Dissemination and outreach activities final report Project use cases
	Publication of media articles/interviews & press releases	Publish a press release and two media articles.	
	Publications	Publish at least 5 scientific publications in conference proceedings or journals.	
	Participation in conferences and other events	Participation in at least 5 related events.	
	Audio-visual material (video, podcasts)	Add at least two podcast episodes.	
	Communication kit (brochure, roll up banner, e-newsletters)	Publication of two e-newsletters (M30, M36).	
	Networking activities with other EU projects & organizations	Establishing networking activities with at least 2 more related projects and organisations. Organisation of a joint workshop. Add at least 10 people on the Stakeholders Group.	



	Publications	Publish at least 5 scientific publications in conference proceedings or journals.
	Organisation of events	Organise two webinars. Organise the final event.

ICCS in collaboration with all the project consortium partners, has created the BATTERY2LIFE dissemination procedures since the beginning of the project. The project dissemination procedures describe in detail the steps that should be followed before and after every dissemination or communication action that is related to the project and aims to promote the project. The objectives of these procedures are to guarantee quality presentations and scientific publications, to prevent duplications and finally, prevent disclosure of the project confidential information. The BATTERY2LIFE dissemination procedures are based on the project GA and the Annotated Grant Agreement (Funding programmes 2021-2027) and are adhered to by all the consortium partners. The project dissemination procedures are available on the project repository and are shown in *Annex 7: Dissemination Procedures*.

Communication activities of the beneficiaries related to the action (including media relations, conferences, seminars, information material, such as brochures, leaflets, posters, presentations, etc., in electronic form, via traditional or social media, etc.), dissemination activities and any infrastructure, equipment, vehicles, supplies or major result funded by the grant must acknowledge EU support and display the European flag (emblem) and funding statement (translated into local languages, where appropriate):

BATTERY2LIFE partners can download the EC flag either from the [Europa.eu](https://europe.eu) or from the project repository.



4.4.1 State Secretariat for Education, Research and Innovation (SERI) acknowledgement

Our associated partners are being funded by a different funding source, BATTERY2LIFE partners are kindly requested to add the State Secretariat for Education, Research and Innovation (SERI) of Switzerland logo, as well. According to article 17.2 of the Horizon Europe Model Grant Agreement, acknowledgement of other “sponsors” can be displayed next to the EU logo but not more prominently and visibly than the EU logo.

SERI logo can be downloaded [here](#) or from the project repository.



5 MONITORING IMPACT AND EXPECTED RESULTS

5.1 BATTERY2LIFE monitoring tool

ICCS will maintain a record of all dissemination and communication activities carried out throughout the lifetime of the project. In order to keep track of all the performed and future actions of the BATTERY2LIFE partners, ICCS has created a monitoring tool that is based on the requirements of the [EC SyGMA](#) portal, and it is divided into three sections: Dissemination actions, Communication actions and Publications. The project partners should fill in this living document with every activity they perform that can be included in the three aforementioned sections. The monitoring tool is available on the project repository and is also presented in *Annex 8: Monitoring Tool*.

5.2 Key performance indicators

The Key Performance Indicators (KPI) of the project have been defined since the proposal stage are mentioned in the project GA and will be used as a measurement of the project effective communication and overall success of the actions and tools mentioned in the project dissemination and communication plan. These quantitative targets that will assist us in measuring how the project progresses towards its dissemination goals, will be monitored and reviewed. D9.3 Dissemination and Communication Strategy Update will provide an update on the status and the progress on M18 of the project.

The table below presents the expected results in different dissemination and communication activities.

Activity	Channel/Tool	Expected Result
Online presence	Website	Website unique visitors ≥ 500 per year.
	Twitter	≥ 500 in total, Impressions ≥ 1500 per year.
	LinkedIn	
	YouTube channel	N/A
Communication kit	Brochure & roll-up banner	≥ 1
	E-newsletters	≥ 6
Media presence	Press releases	≥ 4
	Press activities/interviews	≥ 3
Publications	Scientific publications	≥ 10



	(journals/conference proceedings)	
Audio-visual material	Video	≥1
	Podcasts	≥4
Participation in events	Scientific events/conferences, fairs & other events	≥10
Organisation of events	Webinars	≥3
	Final event	100 participants
Networking & liaison activities	Networking activities with other EU projects & organisations	≥7
	Joint workshops	≥2
	Stakeholders group	≥20

Figure 9: Project KPIs



6 CONCLUSION

D9.1 Dissemination and Communication Strategy is the main output of T9.1 Development of a full dissemination and communication plan and T9.3 Clustering with European projects and it is a living document that will be updated in M18 and later in M36 of the project.

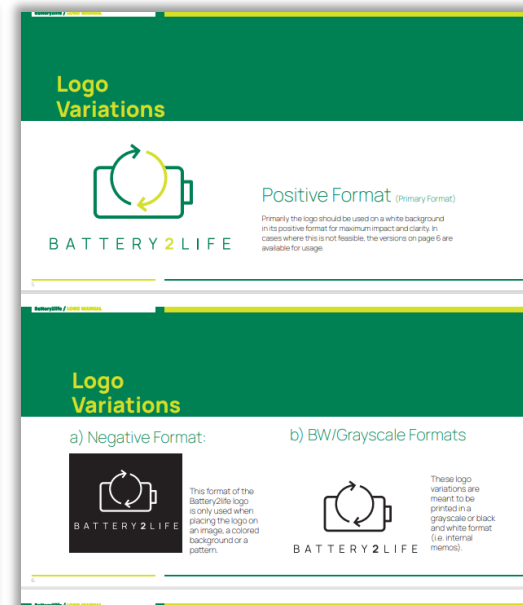
The present document was written with the scope to serve as a guide for the productive communication of the project and the dissemination of its results. It presents the project core messages and defines the audiences it is addressed to. It outlines the most suitable tools and channels we could use to attract and engage these defined target audiences. The deliverable also provides the step-by-step strategic plan on how the project impact will reach the expected success.

Finally, it shows the way the dissemination and communication actions will be monitored and evaluated using the quantitative targets that will assist us in measuring how the project progresses towards its dissemination goals.



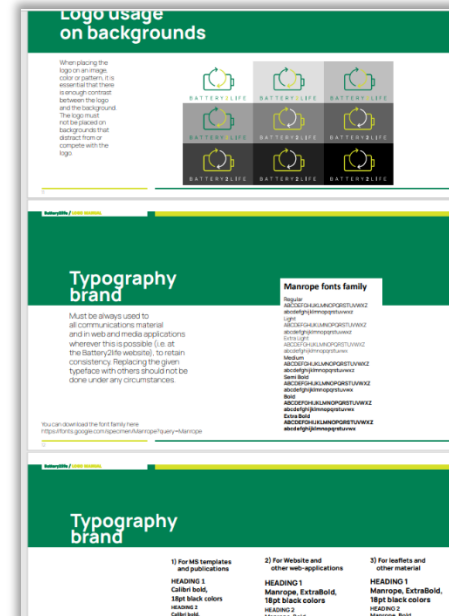
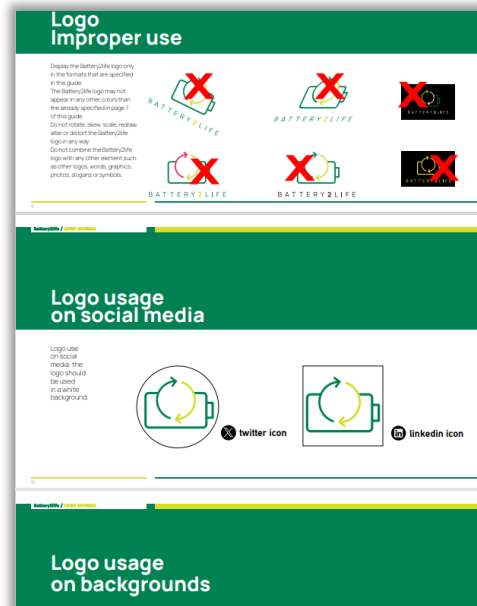
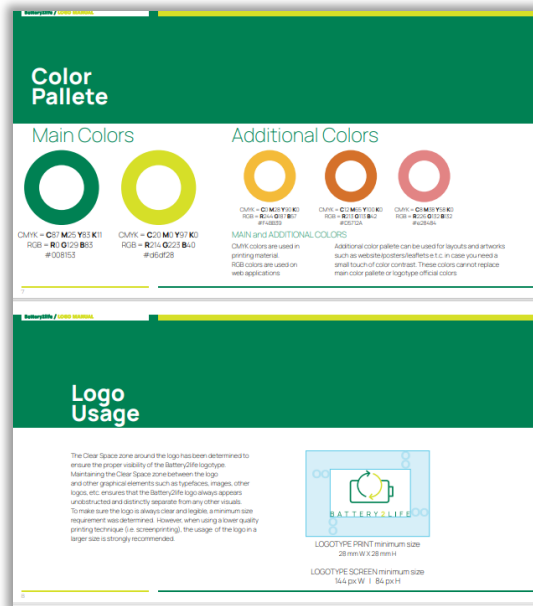
7 ANNEXES

ANNEX 1: BRAND BOOK





Deliverable 9.1





BATTERY2LIFE

ANNEX 2: TEMPLATES

Deliverable 9.1

1 AGENDA				
Meeting Title:				
Place: City, country/Virtual, URL				
Date:				
Time: CET				

2 VENUE DETAILS				
Venue: name, address, google maps				


Figure 10: Agenda template





Co-funded by
the European Union

Copyright© BATTERY2LIFE Consortium





BATTERY2LIFE
Meeting Title



 Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor CINEA can be held responsible for them.

Project funded by
[Logo]
[Text]
[Text]


BATTERY2LIFE

1 AGENDA

agenda

Meeting Title:


Place: City, country/Virtual, URL

Date:

Time: CET

2 MEETING MINUTES

No	Description	Partner	Date

 Co-funded by the European Union

Copyright © BATTERY2LIFE Consortium, 2024-2027

2

Figure 11: Meeting minutes template

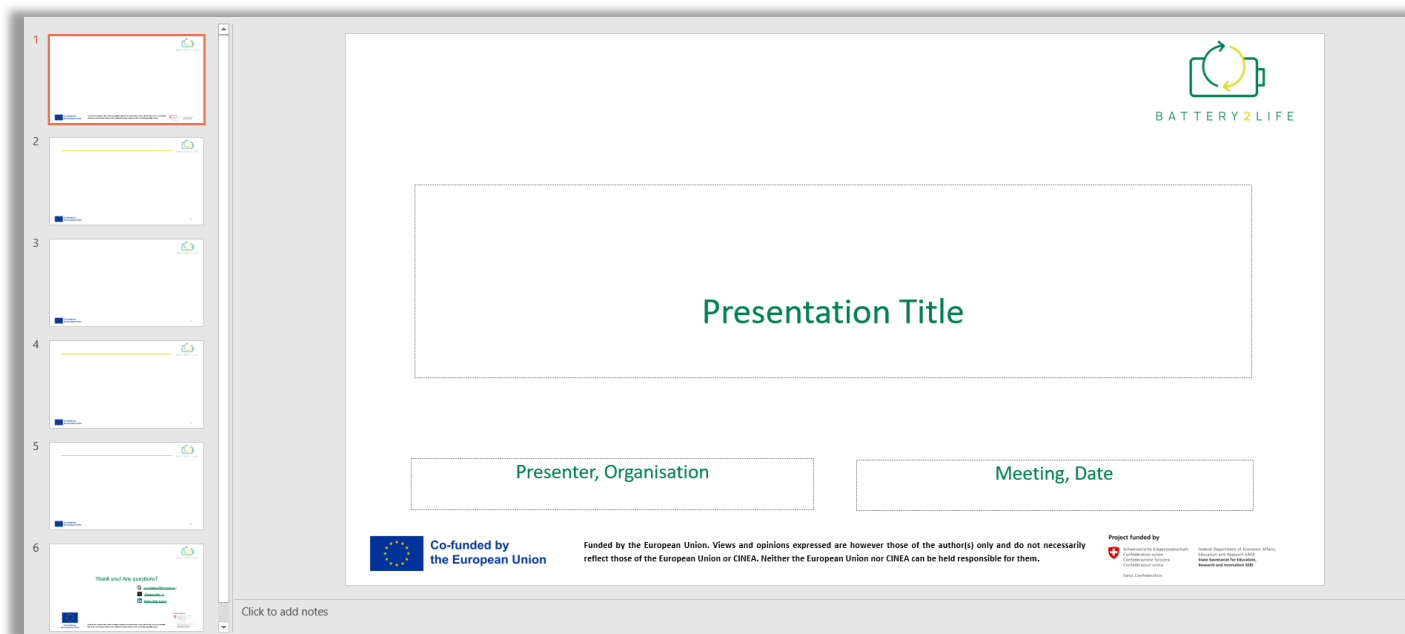


Figure 12: PowerPoint template



BATTERY2LIFE

ANNEX 3: BROCHURE AND ROLL UP BANNER

Deliverable 9.1

Project Facts

Project Name
BATTERY Management system and System design for stationary energy storage with 2nd LIFE batteries

Call identifier
Cross-sectoral solutions for the climate transition (HORIZON-CL5-2023-D2-01)

Duration
36 months (January 2024-December 2026)

Project Coordinator
Dr Angelos Amditis, Institute of Communication and Computer Systems (ICCS)

Business Cases
Domestic storage- Austria, Industrial (grid-scale) storage- Greece

Connect
www.battery2life-project.eu
BATTERY2LIFE Project
@battery2life_eu

Consortium

ICCS, cidetec energy storage, AIT, Fronius, etelätär innovation, Miha Battery Systems, ΔΕΗ, UNE, SUNLIGHT, csem, EPFL

Co-funded by the European Union

Project funded by
Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra
Swiss Confederation
Federal Department of Economic Affairs,
Education and Research LER
State Secretariat for Education,
Research and Innovation SER

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor CINEA can be held responsible for them.

BATTERY2LIFE

www.battery2life-project.eu

BATTERY2LIFE Project
@battery2life_eu

Figure 13: Project brochure (cover)



Co-funded by
the European Union

Copyright© BATTERY2LIFE Consortium



BATTERY2LIFE Vision

The vision of BATTERY2LIFE is to facilitate the smooth transition of batteries to 2nd life use and boost the innovation of the European Battery Industry by providing enablers to implement open, adaptable smart Battery Management Systems (BMS) and improved system designs towards reliable reconfiguration of used batteries.

Project Objectives

- ▶ Enable the safe and efficient reconfiguration of the BS for 2nd life use.
- ▶ Design and develop an open cloud-based BMS, adaptable to battery technologies & communication protocols for 1st or 2nd life storage applications.
- ▶ Embed smart monitoring and control functionalities in the BMS to ensure safety and reliability in 2nd life operation.
- ▶ Develop AI based tools for the reliable and efficient assessment, sorting and recombination of modules according to their suitability for 2nd life applications.
- ▶ Demonstrate and assess the efficiency and the impact of the developed solutions in domestic and utility-scale storage applications.
- ▶ Propose sustainable business plans to boost the competitiveness of the European battery industry.

BATTERY2LIFE Ambition

BATTERY2LIFE will bring together, adapt and improve technological advances in Battery Management Systems (BMS), system designs and in diagnostics for the efficient transition of used batteries in 2nd life applications. As a summary the major expected breakthroughs of BATTERY2LIFE are:



- ▶ Battery pack design frameworks & open cloud Battery Management System (BMS) design frameworks for single module operation or recombination (reconfiguration) of modules or battery packs for consolidated and new battery technologies.
- ▶ The embedded smart functionalities to offer more reliability and safety during operation.
- ▶ The improved system designs to increase circularity, facilitate disassembly and offer enhanced critical control functions.
- ▶ The advanced diagnostic tool and the sizing tool to facilitate the reliable assessment and reconfiguration of used modules.

Figure 14: Project brochure (inside)



Figure 15: Project roll-up banner

ANNEX 4: GENERAL PRESENTATION

BATTERY2LIFE General Presentation

Presenter, Organisation


Meeting, Date

Co-funded by the European Union


Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CREA. Neither the European Union nor CREA can be held responsible for them.

Project funded by:

Co-funded by the European Union



In a nutshell



Project Name: BATTERY Management system and System design for stationary energy storage with 2nd LIFE batteries

Call identifier: Cross-sectoral solutions for the climate transition (HORIZON-CL5-2023-D2-01)

Duration: 36 months (January 2024-December 2026)

Business Cases: Domestic storage in Austria and Industrial (grid-scale) storage in Greece

Project Coordinator: Dr Angelos Amditis, Institute of Communication and Computer Systems (ICCS)

Consortium: 11 Partners from 5 countries


Funding: ~4ME

Website: battery2life-project.eu

Social Media:

- @battery2life_eu
- BATTERY2LIFE Project

Co-funded by the European Union




Motivation and Challenges

In the near future the number of electric vehicle (EV) batteries, which are no longer appropriate for automotive use, will dramatically increase. It is estimated that over 5 million metric tons of EV batteries will be inappropriate for mobility purposes by 2030. The average EV battery capacity loss is estimated to around 2.3% per year, thus, at the end of the warranty, the expected EV battery nominal capacity varies between 70-80%. This residual capacity can be still exploitable for other non-EV storage applications aiming to facilitate the green energy transition and promote the Renewable Energy Source (RES) share in all electricity grids.

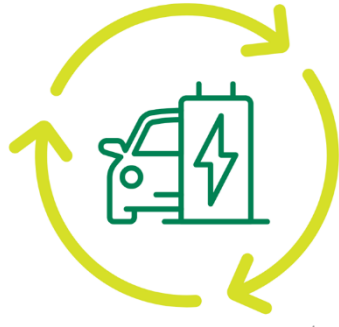
- ➔ Lack of flexible and standardised packaging for efficient disassembly, assessment and reconfiguration method
- ➔ Lack of standardised, reliable and efficient means to monitor status, assess suitability and appropriately match used modules for 2nd life applications
- ➔ Transferring a BMS design from 1st life (automotive) to 2nd life (static storage) applications is a challenging task, since the requirements of the system, functions and safety are not the same

Co-funded by the European Union



Aim

BATTERY2LIFE aims to facilitate the smooth transition of batteries to 2nd life use and boost the innovation of the European Battery Industry by providing enablers to implement open adaptable smart Battery Management Systems (BMS) and improved system designs towards reliable reconfiguration of used batteries.



Co-funded by the European Union

Innovations ✓



01

Open interoperable hybrid BMS adaptable to chemistries, technologies, protocols, application requirements

04

BMS with embedded Electrochemical Impedance Spectroscopy (EIS) for State of Charge (SoC)

02

Improved/New system designs for easy reconfiguration of used modules

05

Advanced diagnostic tool for 2nd life batteries

03

Smart reliability and safety functionalities embedded in the BMS State of Warranty (SoW) – to enhance battery operational efficiency

06

Generalized sizing tool for 2nd life use



5

Objectives 🎯



- Enable the **safe and efficient reconfiguration of the Battery Systems for 2nd life use**: a) *facilitate re-configuration on existing designs*, b) *propose new design frameworks for 1st & 2nd life batteries*
- Design & develop an **open cloud-based BMS**, adaptable to battery technologies and communication protocols for 1st or 2nd life storage applications
- **Embed smart monitoring and control functionalities in the BMS** to ensure safety and reliability in 2nd life operation (SoX estimators, EIS, sensors, active balancing algorithms)
- Develop AI-based **tools for the reliable and efficient assessment, sorting & recombination** of modules according to their suitability and needs for 2nd life applications
- Demonstrate and assess the **efficiency and the impact of the B2L solutions in domestic and utility-scale storage applications**
- Propose **sustainable business plans** to boost the **competitiveness of the European battery industry**



6

Expected Impact ♀



- ✓ **Battery pack & Battery Management System (BMS) design** for **single module operation or recombination** (reconfiguration) of modules or battery packs **for consolidated and new battery technologies**.
- ✓ **Safe, accessible and reliable operation of batteries and compatible with the battery passport concept**.
- ✓ Battery System (BS) design to enable **disassembly and reconfiguration** for 2nd life.
- ✓ Development of **fast and efficient qualification strategies and assessment of Electric Vehicle (EV) batteries for 2nd life applications** and quantify it with respect to state of the art in terms of time and efficiency.
- ✓ **Reduction of 30% of repurposing/refurbishment cost** for adapting EV batteries to stationary applications in 2nd life.
- ✓ **Environmental impact assessment**, from both positive and negative aspects, for adapting EV batteries to 2nd life applications.
- ✓ **Impact in the European economy** by a growth of the market and employment, by facilitating the uptake of stationary Energy Storage System feasibility of operation in the batteries extended life domain (2nd life).



7

Business Cases ⚙️



Utility scale storage application
Efficient reconfiguration for 2nd life

Domestic storage application
New battery design principles



8



ANNEX 5: CALENDAR OF EVENTS

A	B	C	D
Event	Website	Dates	Location
Battery Show	The Battery Show Europe 18-20 June, 2024	18-20 June 2024	Stuttgart, Germany
Battery2030	Battery 2030+ 4th Annual Conference EASE: Why Energy Storage? EASE (ease-storage.eu)	28-29 May 2024	France
Energy Storage Conference 2024	ENERGY STORAGE GLOBAL CONFERENCE 2024, Tue, Oct 15th, 2024 @ 9:30 AM Accelevents	15-17 October 2024	Brussels, Belgium
Intersolar 2024	Intersolar Europe – Home - Intersolar Europe	18-21 June 2024	Munich, Germany
Electric Vehicle Symposium 2026	EVS36 - 36th Electric Vehicle Symposium & Exposition	TBC 2026	TBC
Genera 2025 International Fair of Energy and Environment	Genera 2024 Feria Internacional de Energía y Medioambiente	TBD 2025	Madrid, Spain
TRA 2026	https://traconference.eu/	TBD 2026	TBD
ITS European Congress 2025	https://itseuropeancongress.com/	3-5 June 2025	Seville, Spain
ITS World Congress 2024	https://itsworldcongress.com/	16-20 September 2024	Dubai
AABC Europe 2024	https://www.advancedautobat.com/europe	13-16 May 2024	Strasbourg, France
Battery Recycling Conference and Expo 2024	https://batteryrecycling-expo.com/	26-27 June 2024	Frankfurt, Germany
Future Battery Forum 2024	https://www.futurebattery.eu/	5-6 November 2024	Berlin, Germany
electric & hybrid vehicle expo 2024	Electric & Hybrid Vehicle Tech Expo Europe 18-20 June, 2024 (evtechexpo.eu)	18-20 June 2024	Stuttgart, Germany
International Congress for Battery Recycling 2024	https://events.icm.ch/event/6747b2ca-647b-4525-9506-b9e63e4d94d0/summary?gad_source=1&gclid=Cj0KCQiw6auyBhDzARIsALio6v-fFDdvo11pUCgCMkTy5jXat9KpY3eITvtv8iYS8i8U1JvauwDr9oEaAnHBEALw_wcB	10-12 September 2024	Switzerland

Figure 16: Calendar of events



1 OPEN ACCESS TO SCIENTIFIC PUBLICATIONS

The beneficiaries must ensure open access to peer-reviewed scientific publications relating to their results. In particular, they must ensure that:

- at the latest at the time of publication, a machine-readable electronic copy of the **published version or the final peer-reviewed manuscript** accepted for publication, is **deposited in a trusted repository** (e.g. Zenodo) for scientific publications
- immediate open access is provided to the deposited publication via the repository, under the latest available version of the **Creative Commons Attribution International Public Licence (CC BY)** or a licence with equivalent rights; for monographs and other long-text formats, the licence may exclude commercial uses and derivative works (e.g. CC BY-NC, CC BY-ND) and
- information is given via the repository about any research output or any other tools and instruments needed to validate the conclusions of the scientific publication.

Personal websites and databases, publisher websites, as well as cloud storage services (Dropbox, Google drive, etc) are **NOT** considered repositories. Academia.edu, ResearchGate and similar platforms do not allow open access under the terms required and therefore are also **NOT** considered repositories.

2 HOW TO PROVIDE OPEN ACCESS:

Beneficiaries/authors may publish in the venue of their choice, either in a closed venue (i.e. access to all content is restricted), an open access publishing venue or in a hybrid publishing venue, provided that all their open access-related obligations as detailed in this section are complied with. **Please note that publication fees are only eligible when publishing in full open access publishing venues (venues in which the entire scholarly content is openly accessible to all) and not in hybrid venues.**

2.1 Open access publishing venues

Open access publishing venues are publishing venues whose **entire scholarly content is published in open access** (e.g. open access journals, books, publishing platforms, repositories or preprint servers).

2.2 Hybrid publishing venues

Hybrid publishing venues are publishing venues which provide **part of their scholarly content in open access**, while another part is accessible through subscriptions/payments (e.g. hybrid journals and books). These are often journals/books based on subscription/purchase which provide open access to part of their content when an open access fee is paid by their



authors/institutions (paid ad hoc or on the basis of an institutional agreement with the publishers). Not eligible costs.

2.3 Mirror and sister journals

Mirror and sister journals (i.e. more recently established open access versions of existing subscription journals, which may share the same editorial board as the original journal and usually have (at least initially) the same or very similar aims, scope and peer review processes and policies; **these journals often have a name similar to the subscription title but a different ISSN**) are considered open access publishing venues for Horizon Europe grants (not hybrid journals).

3 USEFUL LINKS

[Directory of Open Access Journals](#): to identify full open access journals

[Journal Checker Tool](#): to determine whether a specific publishing venue allows compliance with the open access obligations of Horizon Europe

[Open Research Europe](#): open access publishing platform of the European Commission, allows automatic compliance with the Horizon Europe requirements.

All the information is available in detail on [aga_en.pdf \(europa.eu\)](#)

Figure 17: Guidelines for open access

1 PROJECT PRESENTATIONS

For project presentations in **conferences or seminars/webinars**, partners should notify the project dissemination manager (Maria Tsirigoti maria.tsirigoti@iccs.gr) **at least 15 days before** the presentation (according to the G.A. COMMUNICATION, DISSEMINATION, OPEN SCIENCE AND VISIBILITY (— ARTICLE 17), p 10-11). Any **objection** by other partners regarding the planned presentation should be given within **10 days after the notification**.

To ensure the visibility of participation in events partners should consider the following:

Before the event:

- Send the event information via email (to the dissemination manager) so it can be disseminated via the project's social media and the website.
- Use the appropriate template, logos, EU-funded disclaimer and other guidelines presented in this document.

During the event:

- Make sure to take pictures of your participation.
- If sharing on social media, do not forget to tag BATTERY2LIFE official pages (@battery2life_eu, BATTERY2LIFE Project)

After the event:

- Send the project's dissemination manager the pictures/ videos and the ppt of your presentation from your participation in the event.
- Fill out the [monitoring tool](#) with all the relevant information.

2 SCIENTIFIC PAPERS (IN CONFERENCES OR JOURNALS)

When an opportunity is identified:


- Register the request in the [monitoring tool](#) with all the relevant information, at **least 30 calendar days in advance**. (according to CA, SECTION 8.4.2 Dissemination of own (including jointly owned) Results)
- Share the abstract/draft paper/draft poster, etc., and more detailed information with the project's dissemination manager who will send the information and request within **2 working days** to the Consortium partners for approval, modification and request for extra information/clarifications or rejection.

The Consortium partners will have **20 calendar days to reply**; no response is considered as **approval**. The dissemination manager then informs the initiator and the Project Coordination team about the decision.

Co-funded by the European Union

Copyright © BATTERY2LIFE Consortium, 2024-2027

2



In case of Approval

The initiator may proceed with the submission planned publication

In case of Conflict or Objection

Any Consortium member can object to proposed academic publication in cases of overlaps or risk of disclosure of restricted or confidential information. The objection has to include clear reasoning as well as a precise request for necessary modifications. The issue is discussed among the Coordinator and the involved partners

3 ACKNOWLEDGEMENT, COMMUNICATION ACTIVITIES & PUBLICATIONS

Communication activities of the beneficiaries related to the action (including media relations, conferences, seminars, information material, such as brochures, leaflets, posters, presentations, etc., in electronic form, via traditional or social media, etc.), dissemination activities and any infrastructure, equipment, vehicles, supplies or major result funded by the grant must **acknowledge EU support and display the European flag (emblem) and funding statement** (translated into local languages, where appropriate):


- Please download the flag [here](#). You can also find the EC acknowledgement on [BATTERY2LIFE teams](#).
- Add the funding statement:

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor CINEA can be held responsible for them.

- Also, since our associated partners are being funded by a different funding source, you are kindly requested to add the State Secretariat for Education, Research and Innovation SERI logo, as well. According to article 17.2 of the [Horizon Europe Model Grant Agreement](#), acknowledgement of other "sponsors" can be displayed next to the EU logo but not more prominently and visibly than the


Please download the SERI logo [here](#). You can also find [BATTERY2LIFE teams](#).

Sample use of logos:



Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor CINEA can be held responsible for them.

Co-funded by the European Union




NOTES

- ◆Before engaging in a communication or dissemination activity expected to have a major media impact, the beneficiaries must inform the granting authority. (G.A, art 17.1)
- ◆Please also note that publication fees are only eligible when publishing in full open access publishing venues (venues in which the entire scholarly content is openly accessible to all) and not in hybrid venues. (Annotated Grant Agreement, pg282)

Figure 18: Dissemination procedures



ANNEX 8: MONITORING TOOL



General Information about the spreadsheet. Please check all three sheets!

communication reporting

Type of action to be reported
EVENT
EXHIBITION
MEDIA ARTICLE
NEWSLETTER
OTHER
PRESS RELEASE
PRINT MATERIALS
SOCIAL MEDIA
TV & RADIO CAMPAIGN
VIDEO
WEBSITE

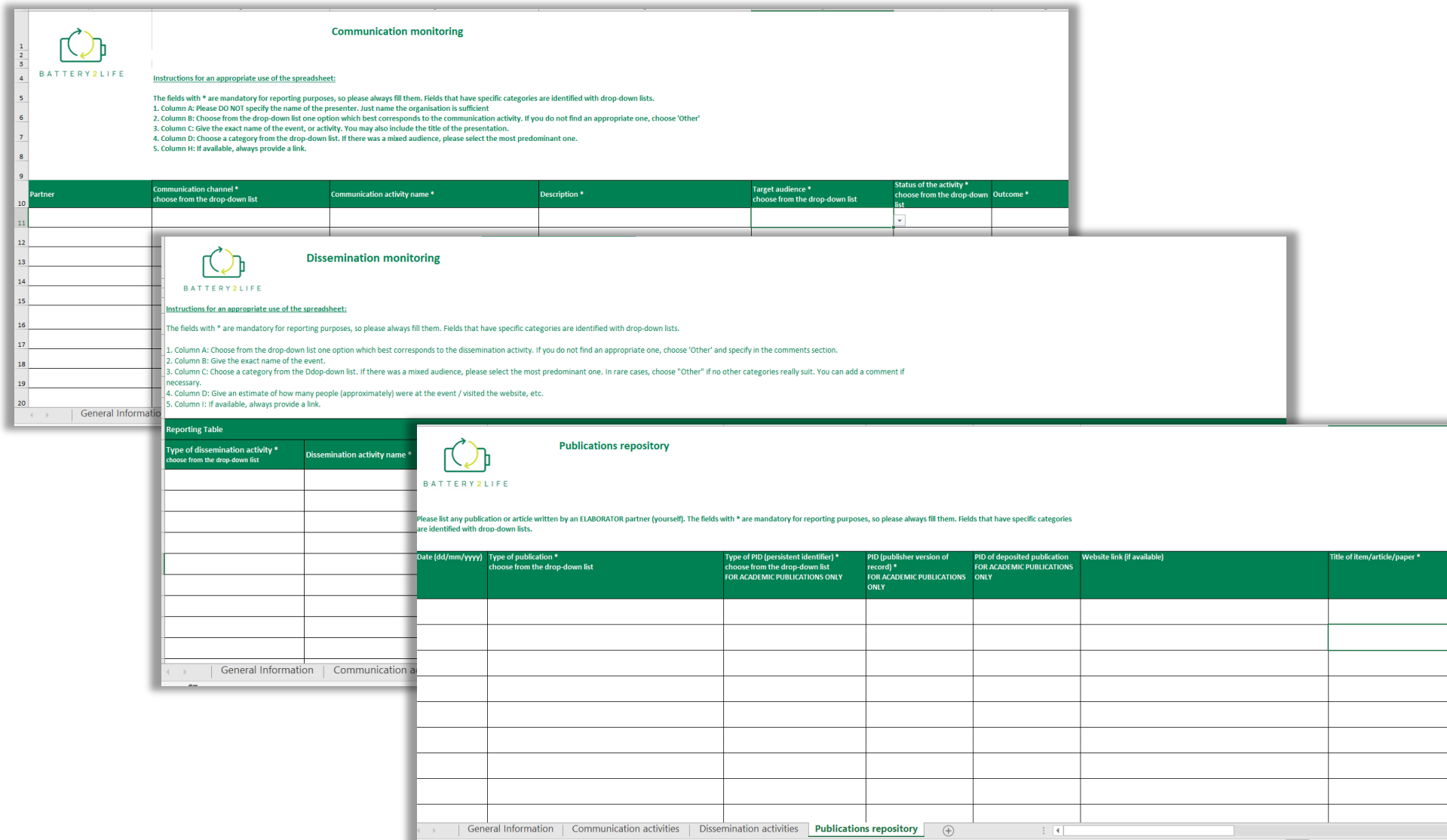
dissemination reporting

Type of action to be reported
CLUSTERING ACTIVITIES
COLLABORATION WITH EU FUNDED PROJECT
CONFERENCES
EDUCATION AND TRAINING EVENTS
MEETINGS
OTHER
OTHER SCIENTIFIC COLLABORATION
OTHER SCIENTIFIC COOPERATION

publication reporting

Type of PID (repository)*	Type of publication*	Type of publishing venue
DOI	Article in journal	Hybrid venue
Handle	Publication in conference proceeding/workshop	Full open access venue
ARK	Books/monographs	Full subscription venue
URI	Chapters in books	
pURL	Thesis/dissertation	
Other	Other	
None		

General Information
Communication activities
Dissemination activities
Publications repository



Communication monitoring

Instructions for an appropriate use of the spreadsheet:

The fields with * are mandatory for reporting purposes, so please always fill them. Fields that have specific categories are identified with drop-down lists.

- Column A: Please DO NOT specify the name of the presenter. Just name the organisation is sufficient
- Column B: Choose from the drop-down list one option which best corresponds to the communication activity. If you do not find an appropriate one, choose 'Other'
- Column C: Give the exact name of the event, or activity. You may also include the title of the presentation.
- Column D: Choose a category from the drop-down list. If there was a mixed audience, please select the most predominant one.
- Column H: If available, always provide a link.

Partner	Communication channel *	Communication activity name *	Description *	Target audience *	Status of the activity *	Outcome *
	choose from the drop-down list			choose from the drop-down list	choose from the drop-down list	

Dissemination monitoring

Instructions for an appropriate use of the spreadsheet:

The fields with * are mandatory for reporting purposes, so please always fill them. Fields that have specific categories are identified with drop-down lists.

- Column A: Choose from the drop-down list one option which best corresponds to the dissemination activity. If you do not find an appropriate one, choose 'Other' and specify in the comments section.
- Column B: Give the exact name of the event.
- Column C: Choose a category from the Ddrop-down list. If there was a mixed audience, please select the most predominant one. In rare cases, choose "Other" if no other categories really suit. You can add a comment if necessary.
- Column D: Give an estimate of how many people (approximately) were at the event / visited the website, etc.
- Column I: If available, always provide a link.

Reporting Table

Type of dissemination activity *	Dissemination activity name *
choose from the drop-down list	

Publications repository

Please list any publication or article written by an ELABORATOR partner (yourself). The fields with * are mandatory for reporting purposes, so please always fill them. Fields that have specific categories are identified with drop-down lists.

Date (dd/mm/yyyy)	Type of publication *	Type of PID (persistent identifier) *	PID (publisher version of record) *	PID of deposited publication	Website link (if available)	Title of item/article/paper *
	choose from the drop-down list	choose from the drop-down list	FOR ACADEMIC PUBLICATIONS ONLY	FOR ACADEMIC PUBLICATIONS ONLY		

General Information | Communication activities | Dissemination activities | Publications repository

Figure 19: Monitoring tool

ANNEX 9: PROJECT ROADMAP

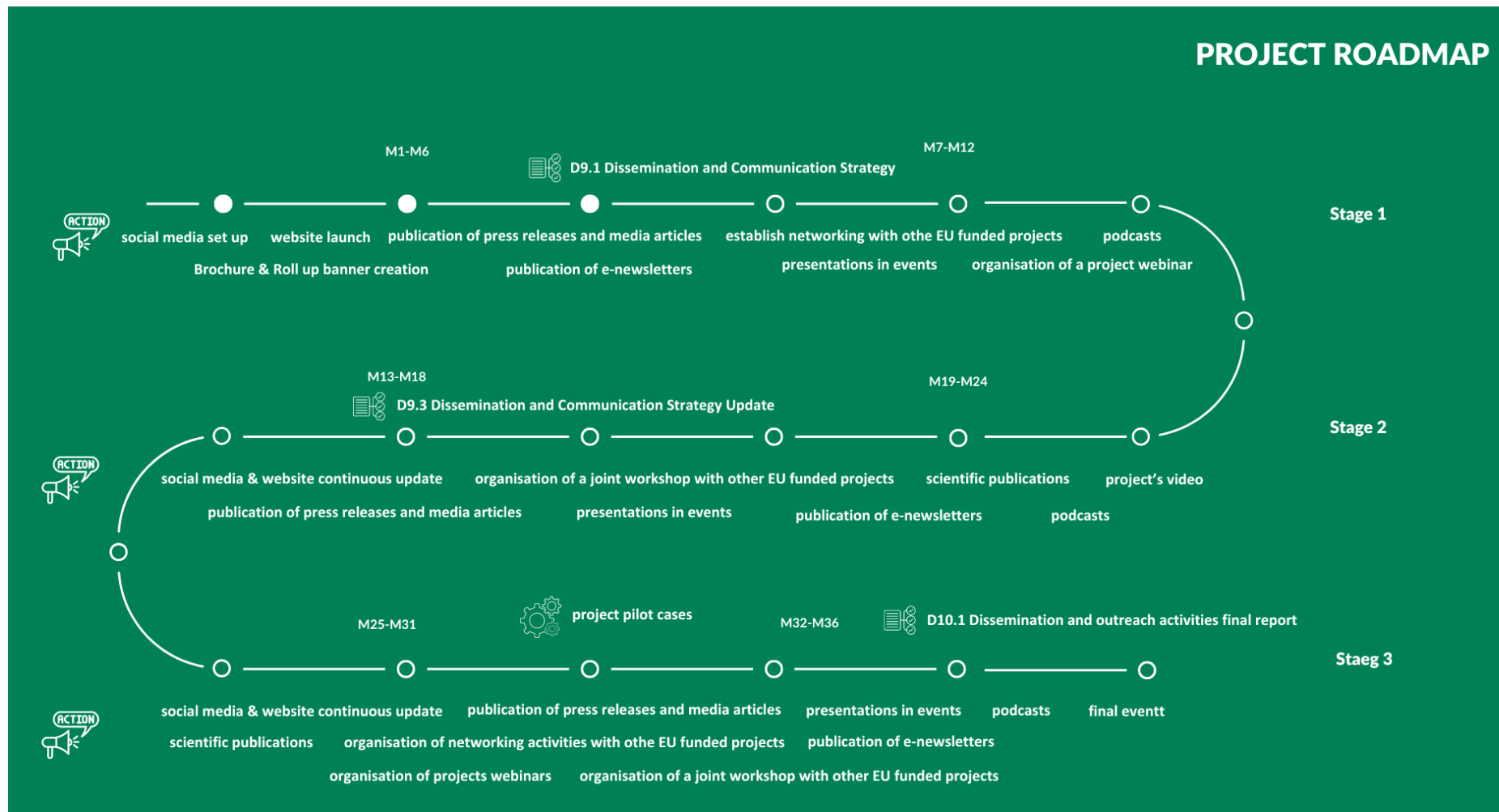


Figure 20: Project's roadmap



8 REFERENCES

1. European Commission (2022). Communicating about your EU-funded project. https://rea.ec.europa.eu/communicating-about-your-eu-funded-project_en#six-reasons-to-communicate-about-your-eu-funded-project
2. Greenberg, B. S.; Salwen, M. B. (2008). Mass communication theory and research: Concepts and models. In *An integrated approach to communication theory and research*. pp. 61–74
3. BATTERY2LIFE Consortium. BATTERY2LIFE Grant Agreement. List of Work Packages, WP9 Dissemination, Communication and Exploitation.
4. BATTERY2LIFE Consortium. BATTERY2LIFE Grant Agreement. Section 2.2.1 “Strategic Plan for Battery2Life Communication and Dissemination”.
5. BATTERY2LIFE Consortium. BATTERY2LIFE Grant Agreement. Section 2.2.1 “Strategic Plan for Battery2Life Communication and Dissemination”.
6. BATTERY2LIFE Consortium. BATTERY2LIFE Grant Agreement. Section 1.2.4 “Links to national and international R&I activities”
7. Annotated Grant Agreement. Open Science: Open access to scientific publications. p371-374. https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/guidance/aga_en.pdf