



SOLIDBAT

Deliverable D8.1

Dissemination, communication and exploitation plan

Date: 31/05/2025

AUTHOR: Rita Clancy
EURIDA



**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 the European Climate, Infrastructure and Environment Executive Agency (CINEA). No. 101147533.

DOCUMENT CONTROL SHEET

PROJECT INFORMATION

Project Acronym	SOLIDBAT		
Project Full title	Competitive and sustainable lithium solid-state battery technology enabling large scale production for automotive application		
Project Start date	01/12/2024	Project Ending Date	30/11/2028
Project Duration	48 Months		
Funding call	HORIZON-CL5-2023-D2-02		
GA* n°	101147533		
Coordinator	CICenergiGUNE		
Website	www.solidbat.eu		

*GA: Grant Agreement

DELIVERABLE INFORMATION

Deliverable n° - Title	D8.1 – Dissemination, communication and exploitation plan		
Deliverable Due Date	31/05/2025		
Deliverable Lead Partner	EURIDA		
Deliverable Description	Strategic document that provides the basis for SOLIDBAT outreach and exploitation activities by (i) outlining the project dissemination, exploitation and communication strategy, by (ii) defining the communication and exploitation roles and responsibilities and (iii) by summarising the contractual requirements for dissemination and exploitation as set out in the Grant Agreement (GA), complemented by the Consortium Agreement (CA). It will further include detailed timelines, dissemination channels, exploitation roadmaps and selected events and networks at work package, deliverable and milestone level and define partners' responsibilities at task level for each project period as well as the SOLIDBAT visual ID, diss/comms channels, and key stakeholders. this deliverable will be updated on M18, M36 and M48. Updated versions of the Advanced DEP will further be provided as part of each Periodic Technical Report after each project period (M18, M36, M48). D8.1 is linked to Task T8.1 and T8.2 and provides the basis for T8.3-T8.5.		
WP ¹ n° - Title	WP8 – Impact Maximisation - Dissemination, communication and exploitation		
WP ¹ Leader	EURIDA		
Task/s n° - Title	T8.2 Develop and implement the project's Advanced Dissemination and Exploitation Plan		
Task Leader	EURIDA		
Main Author	Rita Clancy – EURIDA		07/05/2025

Other Authors	María Martínez – CICE Nicola Boaretto – CICE	
Reviewer/s	Estibaliz Crespo – CICE	16/05/2025
Deliverable Type	Report <input checked="" type="checkbox"/> DMP ² <input type="checkbox"/> Demonstrator <input type="checkbox"/> DEC ³ <input type="checkbox"/>	
Dissemination Level	PU ⁴ <input checked="" type="checkbox"/> SEN ⁵ <input type="checkbox"/> Classified ⁶ <input type="checkbox"/>	
Date Approved by Coordinator	22/05/2025	
Status	Draft <input checked="" type="checkbox"/> Final <input type="checkbox"/>	

¹WP: Work Package; ²DMP: Data Management Plan; ³DEC: Websites, patent filings, videos, etc.; ⁴PU: Public, fully open; ⁵SEN: Sensitive, limited under the conditions of the GA;

⁶Classified R-UE/EU-R – EU RESTRICTED under the Commission Decision No2015/444

Classified C-UE/EU-C – EU CONFIDENTIAL under the Commission Decision No2015/444

Classified S-UE/EU-S – EU SECRET under the Commission Decision No2015/444

DELIVERABLE REVISION HISTORY

V.	Date	Author	Description of Change	Reviewed by
0	07/05/2025	Rita Clancy, EURIDA	First draft version	CICe
1	16/05/2025	María Martínez, Nicola Boaretto, Estibaliz Crespo, CIC energiGUNE	Revision of the draft	Rita Clancy, EURIDA
2	29/05/2025	Rita Clancy, EURIDA	Final version	N/A

List of Figures

Figure 1 SOLIDBAT dissemination and communication goals	12
Figure 2 SOLIDBAT Logo	16
Figure 3 SOLIDBAT Corporate Colours.....	16
Figure 4 SOLIDBAT Project Website	18
Figure 5 SOLIDBAT LinkedIn Channel.....	19
Figure 6 SOLIDBAT Overall Exploitation Roadmap.....	29
Figure 7 SOLIDBAT way and time to market	31

List of Tables

Table 2.1 SOLIDBAT Key Stakeholders	11
Table 2.2: SOLIDBAT Key Exploitable Results.....	34

List of Abbreviations

Abreviation	Definition
BAT	Best Available Technology
BREF	BAT Reference Document
CA	Consortium Agreement
CAM	Cathode Active Material
CRM	Critical Raw Materials
DEP	Dissemination, Communication and Exploitation Plan
DoA	Description of Action
e-LCA	Environmental Life-Cycle Analysis
EV	Electric Vehicle
GA	Grant Agreement
IP	Intellectual Property
IPR	Intellectual Property Rights
KPI	Key Performance Indicator
LCA	Life-Cycle Assessment
LCC	Life-Cycle Costing
NGO	Non-Governmental Organisation
RRI	Responsible Research and Innovation
SEO	Search Engine Optimisation
SSB	Solid-State Battery
SoA	State-of-the-Art
TRL	Technology Readiness Level

CONTENTS

1	Executive Summary	7
2	Dissemination, communication and exploitation in SOLIDBAT.....	8
2.1	The overall SOLIDBAT dissemination, communication and exploitation strategy	9
2.2	The SOLIDBAT terminology	10
2.3	The SOLIDBAT key stakeholders and target groups	10
2.4	The SOLIDBAT dissemination and communication strategy	12
2.4.1	Goals and objectives	12
2.4.2	Strategy focus throughout the project phases.....	14
2.4.3	SOLIDBAT Key messages for the wider public.....	14
2.4.4	Dissemination and communication target groups and tailored messages and content	14
2.4.5	Plan for the dissemination of SOLIDBAT results	16
2.4.6	Plan for the communication of SOLIDBAT (multi-stakeholder groups)	23
2.4.7	Plan for the exploitation of SOLIDBAT results	29
3	Roles and responsibilities.....	35
4	Legal obligations and requirements for dissemination, communication and exploitation (as per Grant Agreement Article 17 and Annex 5)	36
4.1	Communication — Dissemination — Promoting the action.....	36
4.2	Visibility — European flag and funding statement	36
4.3	Quality of information — Disclaimer.....	37
4.4	Open Science.....	37
5	Conclusions	38

1 EXECUTIVE SUMMARY

This document represents the Dissemination, Communication and Exploitation Plan (DEP) and provides the basis for SOLIDBAT outreach and exploitation activities by

- (i) outlining the SOLIDBAT dissemination, exploitation and communication strategy;
- (ii) defining the communication and exploitation roles and responsibilities and;
- (iii) summarising the contractual requirements as set out in the Grant Agreement (GA), complemented by the Consortium Agreement (CA).

The DEP includes the SOLIDBAT online presence and visual identity, project branding and the social media strategy and is complemented by bi-annual workplans for conference participations, scientific publications and articles, knowledge exchange formats and public engagement.

The DEP will be further advanced throughout the project term and used as a working document until the end of SOLIDBAT and beyond. The resulting advanced DEPs will apply the strategy and principles outlined in this deliverable to verified project results and outputs achieved during the term of SOLIDBAT. This will allow for the systematic implementation of the SOLIDBAT outreach strategy throughout the project.

The complementing workplans will include detailed timelines, dissemination channels, exploitation roadmaps and selected events and networks at work package, deliverable and milestone level and define partners' responsibilities at task level for each project period.

The DEP will be continuously assessed for its effectiveness and adapted as the project progresses. To this end, Key Performance Indicators (KPIs) are defined for the key activities in dissemination, communication and exploitation, which will serve as benchmarks for success and failure of implemented and planned measures.

This will build the basis of the SOLIDBAT dissemination and communication action plan and the exploitation roadmap. The DEP will provide the framework of what will be disseminated why, to whom, how and when and will define the:

1. Dissemination and communication aims, target groups and appropriate formats.
2. Strategy, content and timeline of the dissemination and publicity measures.
3. Responsibilities for the implementation of the dissemination and publicity measures.
4. The overall SOLIDBAT exploitation strategy and project results that may be subject to exploitation.
5. Evaluation concept for dissemination, publicity and exploitation measures.
6. The DEP will ensure that all project partners have a joint idea and understanding of dissemination and exploitation, and the IP protection measures.

Deliverable D8.1 will be complemented by deliverable D1.3 Data Management Plan which outlines the strategy for data management, including data protection and open, fair and responsible data sharing.

2 DISSEMINATION, COMMUNICATION AND EXPLOITATION IN SOLIDBAT

SOLIDBAT targets a new SSB technology delivering high energy density (>400 Wh/kg, 1000 Wh/L), high rate-capability, and long cyclability, and improving at the same time safety, cost and recyclability for an optimised environmental and climate impact.

To be able to stimulate the emergence of a European innovation ecosystem around solid state batteries, well beyond the world of research alone, it is essential to ensure that the widest possible group of stakeholders is reached with the results and products of SOLIDBAT.

To achieve this goal, the draft plan for the dissemination, communication and exploitation (DEP) as presented in the project Grant Agreement and Descriptions of Action (DoA) has been elaborated and developed into an advanced dissemination, communication and exploitation plan at the start of SOLIDBAT and is presented in this deliverable report.

Working towards the higher TRL levels of technology demonstration in an environment that is relevant for the industry (TRL6), especially future end users and technology integrators will be at the centre of SOLIDBAT dissemination, communication and exploitation activities, since they represent stakeholders with crucial roles in the longevity of the technology and the success or failure of solutions in a future market.

At the same time, sharing results openly with the scientific communities that are interested in SOLIDBAT progress and technology breakthroughs, providing verified results as evidence base for future policymaking and European strategies and connecting with citizens to achieve wide public acceptance of novel solid state batteries are pivotal to achieve the highest possible impact for the project.

In this context, the DEP provides the strategic framework of what will be disseminated and exploited why, to whom, how and when and describes the:

- Dissemination and exploitation aim target groups and appropriate formats.
- Strategy, content and timeline of the dissemination and exploitation strategy and publicity measures.
- Responsibilities for the implementation of the dissemination and exploitation measures.
- Evaluation concept for dissemination and exploitation measures.

The DEP will ensure that no ad hoc dissemination, communication or exploitation activities will occur, but that all project partners have a joint idea and understanding of strategic dissemination and exploitation, and the Intellectual Property (IP) protection measures throughout SOLIDBAT. As Intellectual Property Right (IPR) issues must be respected, dissemination activities will be designed and implemented in close cooperation with the consortium partners that individually or jointly created knowledge and results and that are responsible for their exploitation.

Activities in SOLIDBAT are based on the principles of Responsible Research and Innovation (RRI). This is one of the key priorities in the 'Innovation Union' Flagship Initiative of the European Commission which aims to maximise projects' impacts by engaging the civil

society in Research and Innovation activities and making know-how as openly accessible as possible to wide user groups.

2.1 The overall SOLIDBAT dissemination, communication and exploitation strategy

SOLIDBAT targets a new Solid-State Battery (SSB) technology that delivers high energy density, high rate-capability, and long cyclability. At the same time, it aims to increase the battery safety, cost and recyclability. The use of critical raw materials will be reduced, and a greener manufacturing process will be developed avoiding the use of organic solvents. The recycling of each component will be considered during all steps, starting from the preliminary materials' selection all the way to the final cell design. All those goals and targets will contribute to an optimised environmental, economic and climate impact, and to an increased independence of the European batteries and materials sector from supply chains outside Europe.

The new battery technology will further be of high relevance for a range of application sectors, among them electrified vehicles and passenger transport and, beyond that, stationary applications.

The goals and applications cases reflect the diverse range of stakeholders that are of interest for SOLIDBAT and that will benefit from the results and overall project success.

While it is essential to ensure that the widest possible group of stakeholders is reached with the results of SOLIDBAT to secure the biggest possible scientific, economic and societal impact in Europe, SOLIDBAT SSBs clearly have a strong market potential. To secure this market potential and the future commercialisation of SSBs in Europe, newly created and previously existing intellectual property will have to be protected. Therefore, dissemination activities will be designed and implemented in close cooperation with the exploitation partners who are responsible for exploiting the SSBs after the project end (INOBAT, TME, AMPERE) predominantly for electrified vehicles and all private sector and public partners who will exploit innovation along the SOLIDBAT value chain, either as products or services or as novel technology that can be licensed out. No dissemination or communication of results may take place before a decision is made regarding their role in the exploitation plan and the possible protection through IPR. In advance of any dissemination, communication and exploitation activity all project partners have therefore to be contacted for their authorisation. The SOLIDBAT dissemination, communication and exploitation managers from EURIDA and CICE will oversee the action.

While it will be important to protect SOLIDBAT results for exploitation to secure European leadership in novel battery technologies and to create positive economic impact, some breakthroughs will require open collaboration outside the project consortium to create true long-term impact. Furthermore, results will not be subject to IP protection but can help within the battery ecosystem to progress and overcome existing problems.

To make most out of knowledge and results sharing, all dissemination, communication and exploitation activities are targeted at well identified groups with appropriate and well-defined goals as outlined in the following plan for the dissemination, communication and exploitation of results. Activities and means are chosen based on these goals and are divided in 'dissemination and communication' and 'exploitation' activities.

2.2 The **SOLIDBAT** terminology

In line with the European Commission's understanding and the rules and obligations to promote the project, its actions and its results by providing targeted information to multiple audiences (including the media and the public), in a strategic, coherent and effective manner, SOLIDBAT uses the following definitions for the terms 'dissemination', 'communication' and 'exploitation':

- ☞ **'Dissemination'** is defined as the one-way sharing and transfer of results to identified users of SOLIDBAT results and peers from research, technology, industries, regulations and standardisation and policy. It involves conveying information, data and knowledge through publications, presentations at conferences, scientifically relevant channels and posts in social media, the project website (science and technology sections), and similar dissemination channels. The language is mostly scientific and content and materials show deep scientific and/or technological details (unless flagged for IP protection for exploitation).
- ☞ **'Communication'** is defined as two-way activity, targets a more intense knowledge exchange and discussions with a wide range of stakeholders and focuses on project processes, challenges, opportunities and impact rather than on detailed scientific or technological results. Communication involves channels and means like general social media channels and posts targeting a wider, non-scientific audience, non-technical sections of the project website, workshops, roundtables, stakeholder meetings and panel discussions. The language and content used is generally less scientific than for dissemination activities, so non-experts can understand project concepts and results. Content and materials are tailored for a non-scientific community and include visuals and elements of storytelling.
- ☞ **'Exploitation'** is defined as the use of results in commercial products or services, further research, development and/or innovation activities after the end of SOLIDBAT, the scale-up of processes, or standardisation activities. Actions cover the use of results either via commercial routes or as knowledge exploitation, for example as input for policymaking or for future standards. Exploitation activities include results and innovation screening, managing intellectual property, building exploitation pathways and business plans.

2.3 The **SOLIDBAT** key stakeholders and target groups

SOLIDBAT aims to maximise its impact and improve its innovation potential by knowing the project's target groups and end users and understanding their needs. SOLIDBAT has a wide variety of stakeholder groups, among them industrial end-users deploying SSBs for mobility and stationary applications, scientists, investors, policy makers, regulators, suppliers, civil society and citizens. SOLIDBAT fosters stakeholder relationships to understand their different interests and requirements through regular and systematic forms of dialogue: i.e. meetings, conferences, workshops, and a demonstration round towards the end of the project at the facilities of exploitation partner INOBAT to boost future application potentials. By including stakeholders' knowledge and concerns, engaging in serious discussions, and striving for transparency in all activities, SOLIDBAT aims to develop innovation that meets the demands of the industry and therefore maximises the chances for future market uptake.

A thorough stakeholder analysis provides the basis for all activities aimed to maximise SOLIDBAT's impact and serves as the foundation for the project's dissemination and communication plan as presented in this report and annual activities.

The most important stakeholders and their expected benefits and interest in SOLIDBAT are shown in **Table 2.1**:

TARGET GROUP	EXPECTED BENEFITS
SSB manufacturers & battery industry	Availability of novel advanced materials, tested and validated for SSBs with higher cost efficiencies and improved sustainability performance.
CAM manufacturers	Availability of novel validated high-performance materials for cathodes for different battery chemistries.
Chemical industry	Novel business opportunities and applications for (solid) electrolytes, polymers and associated materials and platform chemicals for materials.
EV Car manufacturers	Novel batteries for EVs that show better performances regarding energy density, cost & environmental sustainability.
Transport sector (electrified buses, trams)	Novel competitive batteries as alternative to SoA LIBs to boost the electrification of passenger buses and trams and, as a result help decarbonise passenger transport.
Materials sector	Proven materials applications and possible business pathways for battery materials; improved knowledge about materials' sustainable performances (LCC, LCA, e-LCA) and optimisation opportunities.
Policy makers	Novel SSBs and evidence-based policy recommendations as important contributions to public strategies and policies for the decarbonization of passenger transport and for increasing the shares of renewables in stationary applications. Inclusion of novel technologies related research on public funding programs and policies.
Investors	Investment options in novel and sustainable battery value chains in Europe.
Standardisation bodies & regulators	Evidence for future standards and Best Available Technology (BAT) and associated BAT reference documents (BREFs) in the field of SSBs.
Civil society (incl. NGOs) & citizens	Sustainable, reliable and safe battery technology for EV to support the decarbonization of passenger transport; improved understanding of the benefits and wider acceptance of non-fossil fuels as sustainable technology for mobility transformation.

Table 2.1 SOLIDBAT Key Stakeholders

2.4 The SOLIDBAT dissemination and communication strategy

The main approach towards dissemination is the use of research results generated during the project to create value within the battery and energy storage communities and initiatives in the EU. This includes the scientific and technology expert communities as well as related industries, policy, standardisation and other peers in the field or specific technology aspects.

This approach ensures that public funding will result in strong progress and a competitive position of European innovation and industries as key players in the global marketplace. In line with the nature of each partner, their roles and dissemination activities will be designed and tailored during the project.

The SOLIDBAT communication strategy aims to intensify stakeholder dialogues with industries, end-users, and the public to increase the visibility of and acceptance towards novel SSBs for mobility and transport as well as stationary applications, gathering and understanding requirements, opinions, expectations and ideas, and considering these in project concepts and activities. Especially e-mobility and electrified vehicles are consumer sensitive. Therefore, a high acceptance of novel battery technologies will be crucial for future market success. The early involvement of end users and consumers in technology development via co-creative approaches can help with securing the necessary trust and give them a share in innovation processes. This approach is based on innovative Open Science & Innovation concepts that put stakeholder, end-user and citizen involvement and dialogues at the centre of innovation instead of one-way technology transfer and technology push.

2.4.1 Goals and objectives

The immediate goals and objectives of SOLIDBAT dissemination and communication can, depending on the project phase that the activities are planned for, be summarised as shown in Figure 1.

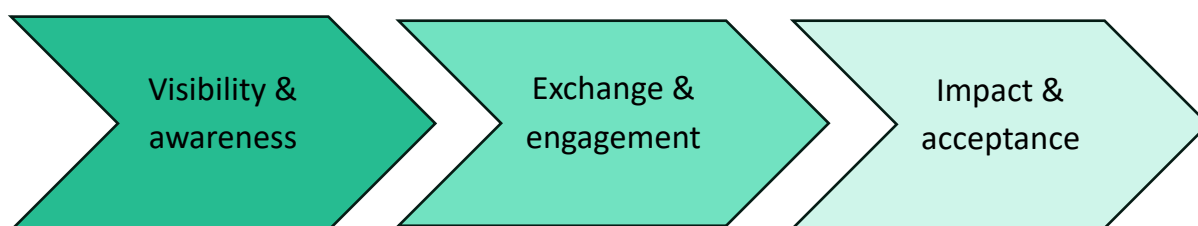


Figure 1 SOLIDBAT dissemination and communication goals

In a longer term, the outcomes expected from dissemination and communication activities can be summarised by impact and/or target group:

☞ **Visibility and exchange for applicability and industrial feasibility**

Being an Innovation Action working at medium-to-higher TRLs (TRL6 at the end of the project), SOLIDBAT puts a strong focus on disseminating and communicate project results and newly created know-how to and with commercial end-users, technology integrators and adopters and potential investors for future market uptake.

A specific communication objective in SOLIDBAT is to intensify stakeholder dialogues with the aim of gathering and understanding needs, expectations and ideas, and considering

these in project concepts and activities. A number of the key stakeholders 'industries' and 'end users' are already members of the SOLIDBAT consortium. INOBAT represents the battery manufacturing sector, while TME and AMPERE play important parts as end users from the automotive industry. SCHOTT, HQ and SP as developers and innovators in battery materials and components will contribute their expertise and benefit from cooperating and exchanging knowledge with battery manufacturer INOBAT and the end users. For maximum impact, market success and sustainability of the target SSBs SOLIDBAT will extend its knowledge exchange by means of an (industrial) end user panel which guarantees an end user-driven innovation approach throughout all phases of the project. This Panel will be established and coordinated by EURIDA and CICE with the support of all project partners as part of the project communication and knowledge exploitation activities.

➤ **Knowledge exchange for a European SSB ecosystem**

Engaging with the scientific community, especially with other funded projects in the field of solid-state batteries and advanced battery materials, will be crucial for knowledge exchange and increase the project's impact regarding transferring know-how beyond the project's own community. In return, new perspectives from researchers and innovators in the field can be considered for SOLIDBAT concepts and activities if they are of added value for the project.

➤ **Communication and engagement for public acceptance**

As SOLIDBAT in their target applications touches the consumer-sensitive area of mobility and electrified vehicles, engaging with the public will generate trust among future end users, consumers and the wider public and remove potential barriers to acceptance. This aspect is of particular importance as consumer concerns towards novel batteries in terms of safety, cost and performance may represent market barriers and business risks for industrial project partners and the entire field of solid-state batteries in Europe.

In a nutshell, the specific objectives of all dissemination and communication tasks within SOLIDBAT are:

- Enhance the project visibility at the local, national and international level.
- Show how outcomes are relevant to public, e.g. by better product performances, product safety, economic growth, positive environmental impacts.
- Work towards a strong European battery ecosystem and the knowledge base on SSBs for mobility, transport and other applications via targeted knowledge and data transfer.
- Ensure that the project results are taken up by decision-makers to influence policy-making, by industry to secure market uptake and sustainable growth of the European battery sector.
- Connect with the scientific community to ensure intense knowledge exchange and project follow-up.
- Contribute to skills development of a future research and innovation workforce via trainings and seminars.
- Maximize support and acceptance and minimize risks towards project outputs via stakeholder and public engagement.

2.4.2 Strategy focus throughout the project phases

Within the first six months of the project, the focus in our strategy has been put on raising awareness about the project within the scientific and technology community that is relevant for SOLIDBAT as well as to inform interested citizens and policy makers about project activities, aims and expected results and outcomes. This aim has been achieved by establishing the project's online presence (e.g. project website and social media presence) and by introducing SOLIDBAT to the battery community. The SOLIDBAT online presence and visual ID as key component for dissemination and communication is described in detail in Section 2.4.5.

After the end of the first project year the focus of dissemination and communication will shift more and more towards sharing and presenting results in conferences and publications (dissemination) and discussing results alongside critical issues and impacts with the scientific and non-expert community (communication).

In the final project phase (M37-M48) the focus will be put on knowledge transfer towards technology adopters, policy input via policy briefs and other proven formats and intense dialogues with the dedicated end user panel, which will culminate in a demonstration round of SOLIDBAT SSBs in the final stage of the project (a stakeholder event is currently planned for May/June 2028).

2.4.3 SOLIDBAT Key messages for the wider public

Effective dissemination and communication strategies require a clear idea about the key messages that wish to be conveyed to the stakeholders. SOLIDBAT has identified the following messages for the first period of the project. As the project progresses and expected results are achieved or unexpected results or challenges or development in the scientific or industrial ecosystems occur, additional (verified) results, key findings, messages and lessons learnt will be identified, formulated and shared with suited target groups.

- Key Message #1: SOLIDBAT SSBs represent a safer and better performing battery technology for the electrified automotive sector compared to current LIB batteries at competitive cost levels.
- Key Message #2: SOLIDBAT batteries will improve the environmental footprint of batteries by avoiding CRMs and toxic components.
- Key Message #3: SOLIDBAT will improve the recyclability of SSBs as materials and design will be selected for maximum recyclability.
- Key Message #4: SOLIDBAT will reduce the dependencies of the European battery sector on countries outside Europe by reinforcing the European knowledge autonomy and technology advantage.

In addition to those messages, dissemination and communication will cover the promotion of project publications, conference participation and SOLIDBAT events as specific content (key messages).

2.4.4 Dissemination and communication target groups and tailored messages and content

Based on the stakeholder analysis results shown in Section 2.3 a range of key audiences and target groups have been identified for dissemination and communication activities with defined objectives, tailored content and expected benefits per stakeholder group. Content tailored for each target group is summarised in Table 2.2.

TARGET GROUP	TAILORED CONTENT PER TARGET GROUP
SSB manufacturers & battery industry	Raise awareness and transfer knowledge about battery components scaling up and a new SSB manufacturing concept that may speed up the transition towards solid-state technology, thanks to the adaptability of already existing Li-ion manufacturing pilot plants.
CAM manufacturers	Transfer results about innovative CAM surface coating materials and CAM surface coating processes.
Chemical industry	Development of new chemistries and application of existing ones to energy storage industrial sector.
EV Car manufacturers	Final performances of the 1 Ah and 5 Ah cells (cycling stability, storage and fast charge ability of the SOLIDBAT cells); final cost, recycling and process possibilities (or blocking points) and LCA analysis is also relevant to see the potential of commercialization in the future
Transport sector (electrified buses, trams)	Final performances of the 1 Ah and 5 Ah cells (cycling stability, storage and fast charge ability of the SOLIDBAT cells); final cost, recycling and process possibilities (or blocking points) and LCA analysis, to evaluate the potential benefits of applying SOLIDBAT technology to other mobility sectors beyond EV cars.
Materials sector	New materials will be developed within SOLIDBAT project that could be of interest for other applications beyond solid-state batteries. The synthesis, processing and performance characterization will be available.
Policy makers	Outcome about SOLIDBAT SSB performance, environmental impact, economic considerations, overall technology competitiveness.
Investors	Information related to independent materials performance, as well as prototypes manufacturing and performance, technology scalability, cost and recyclability.
Standardisation bodies & regulators	Manufacturing process of SSB prototypes and replicability on their performance; testing standard protocols for aging, safety, performance (rate capability, energy density and cycle life) and safety assessment; SSB recycling efficiency and LCA.
Civil society (incl. NGOs) & citizens	Results of SOLIDBAT battery performance translated into EV car driving autonomy, charging time, cost, safety, etc.

Table 2.2 Main content for dissemination and communication by target group

2.4.5 Plan for the dissemination of SOLIDBAT results

2.4.5.1 SOLIDBAT project branding / visual ID

SOLIDBAT Logo

During the first month of SOLIDBAT a project logo (Figure 2) has been designed by CICE as part of the project's visual identity and branding. The logo translates the technology aspects of SOLIDBAT by means of the abstracted battery power symbol with yellow colours commonly representing energy/electricity, combined with the sustainability aspect realised by using green as general colour for environmentally friendly processes and materials combined with blue representing the aqueous binder. By integrating the abstract visual elements with the corporate colours, the logo can at a glimpse be clearly linked with batteries, a 'green' and a water-based component without further in-depth explanations, which is the purpose of visual branding.



Figure 2 SOLIDBAT Logo

SOLIDBAT Corporate Colours




	#ffdc00	A set of colours, also featured in the project logo, were selected for SOLIDBAT. They are shown in Figure 3 and are a shade of yellow commonly representing energy, electricity or electrical power, a shade of blue, commonly representing water and/or aqueous solutions and green, commonly standing for environmentally friendly solutions. The corporate colours will be used for all SOLIDBAT visual elements and project presentations, posters, flyers, brochures and any other dissemination, communication and exploitation materials.
	#388bbf	
	#58b451	

Figure 3 SOLIDBAT Corporate Colours

2.4.5.2 SOLIDBAT Digital Content Strategy – Website and Social Media

Project Website

To ensure an immediate visibility of the project, a project website has been developed starting in M1 of the project (Dec 2024). It went online in M4 of the project (March 2025).

The website is designed as source of information for all project stakeholders, including scientific communities, industry, end users, policymakers, media and the general public.

The site is located at the URL www.solidbat.eu and contains the official information about the project, namely the project vision and concept, objectives, expected impact, technology approach, target applications, the consortium and partner descriptions, results and publications, news and events and other content that is deemed to be relevant for sharing through the project website. Further, the website provides a contact form for interested parties as well as links to the project social media channels.

The SOLIDBAT website has the following general structure, which can also be seen in Figure 4:

- Homepage
- About
 - o Vision & Concept
 - SOLIDBAT Context
 - Project
 - Objectives
 - Impact
 - o Technical Approach
 - Applications
- Consortium
 - o Partner descriptions & roles in the project
- Results / Research
- News / Events
- Contact
 - o Contact Form

The social media groups on LinkedIn and YouTube are linked to the SOLIDBAT website. Further social media accounts and feeds will be added if they become available.

The website domain www.solidbat.eu is owned by the project Coordinator CICE. The website was published on the 21st March 2025.

Over the course of the project, the website will be populated with news about project progress, events, publications, public deliverables and other content to cater the different needs of the SOLIDBAT stakeholders.

The Communication Manager will collect photos, visuals and text content from all SOLIDBAT partners to make project progress and results as widely accessible for the interested public as possible.

Alongside technical content, it will be made sure that easy-to-understand content and visuals will be used, so that non-experts get at least a basic understanding of the SOLIDBAT concept and progress.

Over the course of the project, the website will be matured further and also maintained after the project ends.

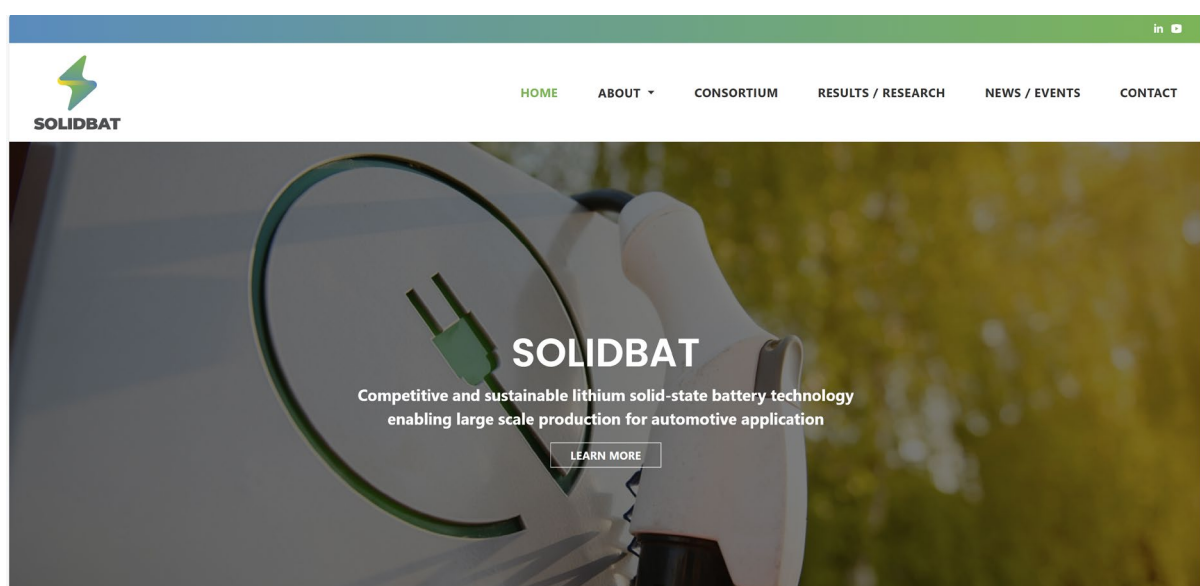


Figure 4 SOLIDBAT Project Website

To ensure a good ranking of the project website and to position the project well in search engines like Google, common Search Engine Optimization (SEO) techniques are used. Keyword research is essential to the success of SEO success and further assure that the key audience finds the SOLIDBAT content easily. The initial set of keywords for SOLIDBAT are:

Battery – Batteries – Solid-state – Solid-state battery – Sustainable – Energy – Electrification – SOLIDBAT – Europe – Horizon Europe – Research – Project – Critical Raw Materials – CRM – Raw Materials – Advanced Materials – Materials – Electromobility – Mobility – Renewables – Renewable Energy – Renewable Energies – Li metal anode – Gel polymer electrolyte – Waterborne cathode

SOLIDBAT Social Media Presence

CIC energiGUNE is responsible partner for the establishment and population of the social media channels that have been selected for the SOLIDBAT project and are showcased in the following:

➔ SOLIDBAT on LinkedIn

A 'SOLIDBAT' LinkedIn account has been created and linked to the project website. The account is accessible at: <https://www.linkedin.com/company/solidbat/>. It has been established and will be maintained and populated with content by the Communication Office at CICE.

LinkedIn has been selected as professional social network with mainly a business, technology and industrial audience. Therefore, the content and language used will be in line with these target groups. Dissemination of scientific results will be linked to their applicability in key industrial sectors and to end use cases where possible.

To further appeal to the general public rather technical messages will be combined with wider context and a helicopter perspective. Generally, scientific and technical jargon will

only be used in posts with content that clearly target an audience with scientific or technical expertise.

Consortium members have been invited to follow the LinkedIn page. The consortium will further invite colleagues and interested parties to follow the SOLIDBAT account, they will promote project posts by liking and reposting posts and contribute content to create new posts.

To date (31st May 2025), the SOLIDBAT LinkedIn account has 405 followers (Figure 5).

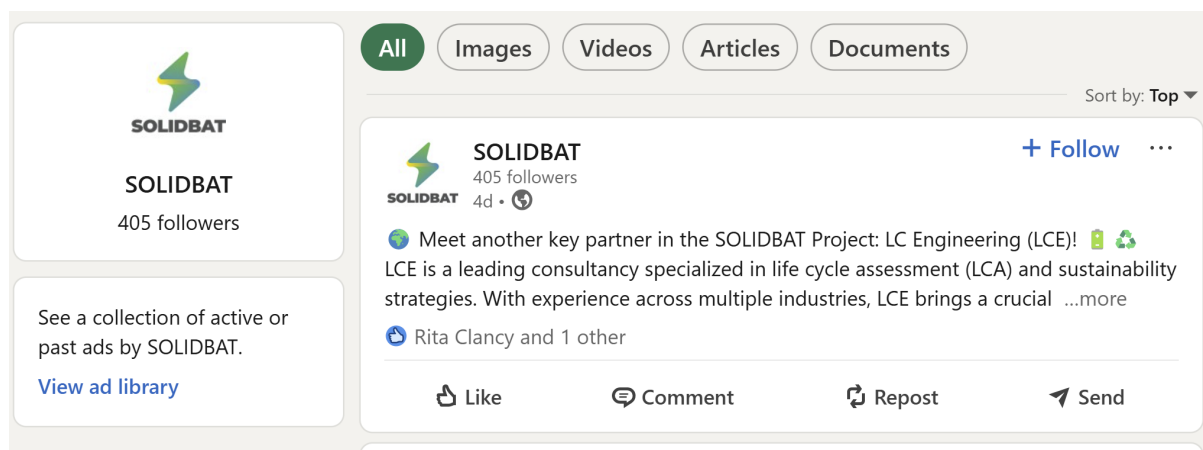


Figure 5 SOLIDBAT LinkedIn Channel

➔ SOLIDBAT on YouTube

The YouTube channel of SOLIDBAT is accessible at <https://www.youtube.com/@solidbat>

YouTube represents the most common video social network and the second most used content search engine after Google. That is why it is of vital importance to create a project presence with videos that show content for wide and diverse audiences with different backgrounds.

The YouTube channel that will be used as a repository for audiovisual material specifically created by SOLIDBAT. Video content will be created as short promotional videos highlighting the concept and impact of SOLIDBAT in an easy-to-understand manner and an entertaining way.

➔ Other social media channels

So far, the SOLIDBAT consortium has decided against creating a project social media account on 'X' (former Twitter). The reason is that X under new ownership has seen many scientists and industry leaving, either as key audiences could not be reached any longer or as a form of protest against new policies when dealing with fake news, inclusion or other principles of ethical conduct.

SOLIDBAT will openly investigate alternative solutions, such as BlueSky and consider creating a project channel on X, provided that policies change and key audiences return to the social media platform.

Leaflet, poster & roll-up.

Leaflets, brochures and/or posters with details on the project and contact information will be produced. The material will also be placed on the website for download. A first digital flyer (a trifold brochure) will be developed by M11 the latest and made available for download from the project website, aiming to raise awareness among the target groups and end-users. A second set of brochures (digital) will be designed once relevant project results will be available (between M24 and M36) with publishable results, a third set towards the end of the project (M46-M48), highlighting the project achievements and future applications for the SOLIDBAT technology.

For all flyers/brochures a limited set may be printed on request by project partners to be used for booths at conferences and trade fairs or at other relevant events.

A general SOLIDBAT roll-up and poster will be created, equally by project M11 the latest, that highlights the SOLIDBAT goals, expected impact and key applications in a brief easily digestible manner. While the project poster will feature more content, the roll-up is intended mainly as eye-catcher for events and will include a QR code that will direct audiences to the SOLIDBAT website.

Posters or other tailored materials with specific project content will be created on demand either by the individual project partners or as joint effort between consortium partners under guidance of WP8 leader EURIDA and Coordinator CICE.

2.4.5.3 Plan for the dissemination of SOLIDBAT results (by specific stakeholder groups)

☞ Dissemination to the scientific community – conferences and publications

Publications

SOLIDBAT partners are expected to publish their work and results (unless results are flagged for IP protection) in peer-reviewed scientific journals or disseminate them as patent applications. All scientific articles will be published via Open Access using 'Gold' access and deposited in digital repositories linked to OpenAire (institutional or Zenodo). That way scientific content and underlying data will be accessible and usable free of charge straight after publication. In addition, open access publications will be made accessible via ResearchGate and the project website as download. Knowledge and data flagged by the Exploitation and IP Manager or by partners as IP sensitive and 'confidential' will be assessed and, if deemed relevant for exploitation, excluded from publications. Realistically, about 1-2 publications can be expected for the first year of SOLIDBAT. For the remaining project phases, at least six publications per year are anticipated. Relevant peer reviewed scientific journals, available as Open Access, include:

- Advanced Energy Materials
- Energy Storage Materials
- Advanced Functional Materials
- ChemElectroChem
- ChemSusChem
- Journal of the Electrochemical Society
- Journal of Power Sources
- Batteries & Supercaps

- Resources
- Electrochimica Acta
- Conservation & Recycling

Timeline: Continuous, starting from year 1; first publications expected after year 1, until >2 years after project end.

KPI: A minimum of six peer-review publications between Year 2 and 4

Beyond SOLIDBAT: 2 publications or abstracts per year at least for 2 years after project end.

Responsible: All project partners

Conferences, symposia and other events with science and technology focus

To increase the project visibility and to extend the project network beyond the consortium, SOLIDBAT results will be presented at relevant conferences and fora. Applying for dedicated sessions on project topics will be assessed for selected events. Conferences that have been previously identified for participation are listed below and will be selected and other conferences added as the project progresses:

- Advanced Battery Power
- International Society of Electrochemistry Meeting (ISE)
- CIRP Conference on Life Cycle Engineering
- International Conference on Life Cycle Management
- International Battery Production Conference
- International Symposium on Polymer Electrolytes (ISPE)
- International Battery Association Conference (IBA)
- Swiss Battery Days;

Timeline: Continuous, starting from year 1; further conference presentations until >2 years after project end.

KPI: Min. 4 to 6 events/yr. (oral & poster pres., booths)

Beyond SOLIDBAT: Participation in 4-8 scientific conferences after project end.

Responsible: All project partners

During the first six months of the project SOLIDBAT partners have attended the following conferences:

Conference	Partner and contribution
grEnoble eNerGy conversIoN & storagE (ENGINE2025) school	CICe - Poster

🔄 Knowledge exploitation and exchange with the European battery, energy storage and materials community

SOLIDBAT will proactively exchange knowledge with and towards the battery, the advanced materials and related communities, including relevant European Technology

Platforms, clusters and knowledge groups. Knowledge exchange activities planned here are complementing actions described therein.

Key European initiatives that are of particular interest are:

- BEPA / BATT4EU
- European Battery Alliance
- Battery 2030+
- EERA Energy Storage
- AIM-I
- Batteries Europe / Batteries Europe+ (ended on 30 April 2025)

Further platforms will be researched and addressed during the course of the project.

Within the SOLIDBAT project consortium, several partners are members of the above listed European initiatives and networks and provide input to strategic agendas, participate in consultations, develop recommendations and contribute future programmes for research and innovation at organisational level. As SOLIDBAT, we aim to further those contributions by a concerted effort from a project level. As part of this concerted approach and the overall knowledge exploitation strategy, SOLIDBAT will contribute to the co-programmed European Partnership on Batteries (Batt4EU) and report any results to Batt4EU in support of the monitoring of their KPIs. To make knowledge and results comparable, usable and impactful for the battery community, SOLIDBAT will comply with the Reporting Methodologies¹ as developed and recommended by Batteries Europe, especially for European projects.

Moreover, SOLIDBAT will contribute to existing and initiate additional information, clustering and dissemination activities to increase the visibility and synergies between relevant Horizon Europe / other programme supported actions. As initial steps, focus will be on projects that have been funded under the same or under complementing calls for funding, managed by the same EC managing agency, CINEA. Further knowledge exchange activities with other related projects will be investigated and will be organised depending on the topics that need discussing.

➔ **Providing a knowledge base for policy makers and regulators**

Actions planned in the scope of policy input will entail knowledge exchange and policy recommendations based on SOLIDBAT findings to lower potentially existing obstacles for mature SSB technologies on the way to market. Those obstacles may include financing gaps that hamper the way of novel battery chemistries from research to industrial scales. They may also come from existing knowledge gaps, generally conflicting or unsuitable regulations, the lack of European standards or skills gaps that all may hamper the industrialisation of SSBs and economically viable large scales. Activities will be targeted towards policymakers at various levels of government. This includes, depending on the level of knowledge to be discussed and provided, policy makers at international, national, regional and local levels. Where possible SOLIDBAT will also consider targeting intermediaries with policy-related information, such as expert groups, Innovation Hubs or clusters, and stakeholder platforms that involve policy makers (e.g. the EU stakeholder platforms listed above). SOLIDBAT will also target mass media, Research and Technology

¹ <https://batterieseurope.eu/wp-content/uploads/2025/04/D3.9-Batteries-Europe-Guidelines-on-common-reporting-methodology-2.pdf>

Organisations (RTOs) and individuals with good multiplier capacities for policy making. Policy Briefs will be utilized as a proven means of written knowledge provision for policy makers.

SOLIDBAT further plans to contribute to European events that target policy and policymakers alongside multi-stakeholder groups. As an example, SOLIDBAT intends to contribute to the annual European Sustainable Energy Week in Brussels. Here, a cluster of projects and/or other actors within the battery community is envisaged to create a critical mass and to assure that different perspectives are covered, including but not necessarily limited to, solid-state batteries for mobility applications.

2.4.6 Plan for the communication of SOLIDBAT (multi-stakeholder groups)

SOLIDBAT aims to intensify stakeholder dialogues with industries, end-users, related projects and initiatives and the general public to increase visibility of and acceptance towards novel SSBs for mobility and stationary applications, gathering and understanding requirements, opinions, expectations and ideas, and considering these in project concepts and activities. This approach is based on innovative Open Science concepts that put stakeholders, end-users and civil society involvement and dialogues at the centre instead of the traditional technology push and one-way technology transfer. As novel battery technologies and advanced materials strongly depend on public acceptance, SOLIDBAT activities are targeted at increasing this level of acceptance throughout the project.

To secure public acceptance way beyond the scientific, industrial or end-user communities will be pivotal to the wide success of European batteries, independent from their application cases and chemistries, as for industrialisation and competitiveness, large to giga-scale factories will be necessary to be able to compete with Asia and the US. On the other hand, Europe must secure the supply of raw materials required by batteries. This may result in further industrial activities within Europe for raw materials production that require the large acceptance and support of citizens. Further, public acceptance will be needed for the wide uptake of products, services and public infrastructures utilising batteries. Citizens must trust the technology to be willing to widely use it. To contribute to this trust is obligatory for research and innovation already at TRL levels that target piloting.

In the content of this wide approach towards communication that also includes aspects from social sciences and humanities, the following materials, channels and formats for communication and stakeholder engagement are planned:

2.4.6.1 SOLIDBAT Communication materials

SOLIDBAT plans to develop content, visuals, short videos and other communication material that translates technical aspects into easy-to-understand content. Generally, the project website and social media channels will also play an important role for the project communication as they allow to reach wide audiences with diverse backgrounds. The website and social media accounts have already been described in detail in Section 2.4.5.2.

Materials that will be developed by SOLIDBAT for the communication of project concepts, progress and results will include:

- **Fact Sheets:**

SOLIDBAT during the course of the project will develop 16 easy-to-understand "Fact Sheets". This format will translate selected technical knowledge and publishable results from project deliverables into easy-to-understand Fact Sheets.

The Sheets will have the format of digital PDFs featuring the SOLIDBAT visual ID, and images to visualise content and will be based on verified knowledge and results instead of general concepts and common statements.

The Sheets target multi-stakeholder groups, including the EU community & stakeholder Platforms in batteries & energy storage, application sectors such as mobility, AI data centres, stationary applications, the (advanced) materials' community, technology experts, industry, investors, civil society & NGOs, citizens as well as policy makers. The exact target audience depends on each Fact Sheet topic.

- **Videos** which explain the SOLIDBAT concept, target applications, expected societal and economic impacts and other aspects that are in accordance to our key messages listed in Section 1.4.3.
- **Press releases** about key achievements and milestones within the SOLIDBAT project.
A first press release has been published at the start of the project and featured the start of SOLIDBAT, explained the overall concept and project targets.
- Various **content**, including short news items, graphic presentations of SOLIDBAT aspects and short clips.

2.4.6.2 SOLIDBAT Communication channels and formats

Channels for communication will be selected according to the target groups that shall be reached in each communication activity and are summarised in brief below, including target groups, intended timelines and key performance indicators (KPIs):

➤ **SOLIDBAT website**

The SOLIDBAT Project website is a channel and meeting place for all stakeholders, including the media and general public. It is the entry point for external stakeholders to look for general project information, its concept and goals, specific activities, results and events. It will further make project materials easily accessible and that way serves as public digital repository for a wide audience.

Target Group(s): Scientific community, Industry: Battery manufacturers, EV, transport sector, stationary. Policy makers, civil society and wider public (as materials repository in combination with dedicated engagement formats such as the SOLIDBAT Citizen Panel).

Timeline: Starts in M1, continuous updates during the project term by populating the website with news, events, research results (public deliverables) and scientific publications as well as other public project materials.

KPI: Website: Unique Visitors: 500/month after year 1; 1200-1500/month at project mid-term; 2500/month at project end.

Beyond SOLIDBAT: Maintenance & updates after the project end (up to 4 years).

Responsible: CICE

➤ **Social media channels**

Similar to the project website, SOLIDBAT's social media accounts will serve as channels with a wide reach towards multiple stakeholders. LinkedIn and YouTube are at the centre of SOLIDBAT social media activities and respectively allow to convey different types of messages, visual materials and videos (esp. YouTube) -as a repository of videos and with a more general audience reach- have been identified as the most appropriate.

Target Group(s): Scientific community, Industry: Battery manufacturers, EV, transport sector, stationary. Policy makers, civil society.

Timeline: Starts in M1, continuous updates during the project term by creating posts featuring news, events, research results (public deliverables) and scientific publications as well as other public project materials.

KPI: LinkedIn as main social media channel; ~450 followers after year 1, 600-700 followers at project mid-term, ~1000 followers at project end; Average posts per month: 2-4 (frequency depends on relevant information)

Beyond SOLIDBAT: Maintenance & updates after the project end (up to 4 years).

Responsible: CICE

➤ **General media**

To reach a wide general public, SOLIDBAT will contact the general media via press releases and target broadcasts on national TV and radio. The overall responsibility will lie with the coordinator CICE, but also national media will be targeted with press releases and visual

material by the respective partners in the SOLIDBAT consortium partner countries. At the project end a larger campaign is planned with a comprehensive promotional video, a project documentary of sorts. As media partner, SOLIDBAT will approach the Horizon Europe media channels, including the Horizon Magazine and the Horizon science television format 'Futuris', which is developed and broadcast in cooperation with Euronews.

Target Group(s): Non expert audience, general public; EU Energy Community/ Policy makers.

Timeline: Continuous, starting from year 1.

KPI: 2 press releases in newspapers (1 at start for project launch, 1 towards the end with results and goals achieved); 1 participation in local radio/TV (final project year); 6 Factsheets (final project year);

Responsible: CICE

➔ **Public events**

Alongside scientific conferences and for a that target an expert audience, SOLIDBAT will organise and participate in public and impact-focused events. Aim is to connect with non-expert stakeholders such as policymakers, civil society and NGOs, and the wider public. This type of events will also allow to engage with science, technology and industry stakeholders who come from disciplines other than batteries and energy storage, which will be relevant for increasing the impact that SOLIDBAT results have beyond its own community and to access external knowledge that could be of relevance for SOLIDBAT. Public events may include Open Days at partner organisations, the European Transport Research Arena (TRA), but also policy events such the European Sustainable Energy Week/EUSEW, Citizen Hacks or similar.

Target Group(s): Non expert audience, general public; EU Energy Community/ Policy makers.

Timeline: Starting from year 3.

KPI: 2 events (Year 3 or 4, depending on relevant results and collaboration with other projects)

Responsible: CICE and EURIDA

➔ **Inter-project exchange**

Complementing the dissemination activities towards the scientific target groups, SOLIDBAT will organize meetings and knowledge exchange with EU funded projects, national initiatives and/or clusters or stakeholder platforms to discuss selected critical topics in the field of supercapacitors or energy storage. Those aspects can include technical or scientific questions, challenges and breakthroughs as much as transversal issues like standards, regulations, applicability or user acceptance.

Target Group(s): Regular discussions with representatives from related European project consortia on the overall status of the field, where mutual needs can be identified, and recommendations prepared for policy makers in areas of common interest – with the overall goal of establishing a concerted effort to promote SSBs in Europe.

Timeline: Continuous, starting from year 1.

KPI: 4 meetings with other projects and clusters funded by the EC.

Responsible: CICE and EURIDA

➤ **End-user Panel**

The planned panel aims to be a consultative body of end-users to identify and discuss industry priorities, concerns, market needs, and barriers for the scale-up and market introduction of SOLIDBAT SSBs. Envisaged members for this Panel will go beyond the SOLIDBAT key target sector of passenger transport and comprise representatives of stationary applications (e.g. grid operators) as second life use cases for SSBs, waterborne transport, aviation, public transport, off-road and other possible applications that are identified to be of interest during the project. The wider end-user Panel will help SOLIDBAT to formulate sound exploitation and follow-up strategies for SSBs and further, be a crucial part of the SOLIDBAT risk contingency plan that will allow to collect more comprehensive data for the sustainability assessment. Potential members will be reached through the project partner network. To facilitate the participation of panel members various ways of communication (e.g., virtual meetings, demonstration rounds and face-to-face during project progress meetings near their home locations) will be offered.

Target Group(s): End users and industry representatives from applications beyond the automotive industry (already included as project partners).

Timeline: Bi-annual meetings (face-to-face and online), starting from year 3.

KPI: 4 wider end-user panel meetings.

Beyond SOLIDBAT: Results will help SOLIDBAT formulate sound exploitation and follow-up strategies.

Responsible: CICE.

➤ **Citizen Panel**

The SOLIDBAT Citizen Panel will help the project to identify expectations, and potential concerns towards novel batteries, especially when used for passenger transport in electric vehicles (EVs), possible battery factories in their neighbourhoods and perceived social impacts and consumer priorities that consortium partners may not be aware of. It will be part of the SOLIDBAT risk assessment and also is expected to provide valuable insights for the feasibility assessment performed in WP7.

Target Groups: Civil society and citizens

Timeline: Bi-annual meetings (face-to-face and online), starting from year 2.

KPI: 6 Citizen Panel meetings.

Beyond SOLIDBAT: Results will help SOLIDBAT formulate sound exploitation and follow-up strategies.

Responsible: EURIDA.

➤ **Lab Prototype Demonstration Round**

INOBAT will coordinate and organise a demonstration round of the SOLIDBAT

demonstrator for end-users and discuss the novel SSB battery technology in terms of end user needs, expectations, market restrictions (e.g. costs), and other relevant topics for scale-up and industrialisation.

Target Groups: Mobility sector, waterborne, aviation, public transport sector, representatives from e-bus manufacturing (e.g. MAN), off-road; stationary applications,

Timeline: Final project year (face-to-face demo round at INOBAT premises)

KPI: 1 demo round (at the occasion of a GA Meeting) with possible follow-up discussions (face-to-face or online).

Beyond SOLIDBAT: Results will help SOLIDBAT and INOBAT formulate sound exploitation and follow-up strategies.

Responsible: INOBAT.

🔄 **Training and skills development**

SOLIDBAT will contribute to skills development to avoid the risk of a local skills gap in emerging SSB industries. Activities will include workshops and webinars with the aim to provide academic and industrial technology developers with knowledge about novel SSBs, performance breakthroughs, sustainability performances, and key applications.

CIDETEC will organise an online seminar about challenges in SSBs' manufacturing. Target audience will be young researchers. An open webinar is planned for policy makers and regional authorities to identify opportunities emerging from SSBs. At individual partner levels, project results and knowledge will be integrated in education activities (e.g., FRAUNHOFER with electrochemistry lectures at University of Wuerzburg or the Education Activities in Battery2030+; TUBS with a seminar at the end of the project on challenges and opportunities in recycling SSBs for interested participants from research and industry and by including results in academic teaching for master students in the field of sustainable energy engineering, environmental engineering, electromobility, mechanical- industrial-, and process engineering.

Target groups: Young researchers, students, public authorities

Timeline: Final project year (face-to-face demo round at INOBAT premises)

KPI: 1 demo round (at the occasion of a GA Meeting) with possible follow-up discussions (face-to-face or online).

Beyond SOLIDBAT: Results may be integrated in academic curricula and training courses by academia and research partners.

Responsible: CIDETEC, Fraunhofer, TUBS.

2.4.7 Plan for the exploitation of SOLIDBAT results

The SOLIDBAT Exploitation Plan includes the overall project exploitation roadmap and business case and individual partner business models focusing on how the project outputs and results can be exploited, commercialised and further used in the future.

The exploitation in SOLIDBAT will be coordinated by EURIDA in close cooperation with all consortium partners, who will contribute their entrepreneurship, innovation management and marketing expertise to ensure the best strategic positioning. SOLIDBAT plans with a stepwise exploitation strategy after the project end, targeting technology scale-up, optimisation and improvement in robustness considering that SOLIDBAT will succeed in creating its demonstrator at TRL6 that meets all performance targets at the project end in 2027.

The overall Exploitation Roadmap for SOLIDBAT is shown in Figure 6 , the intended time-to-market is shown in Figure 7.

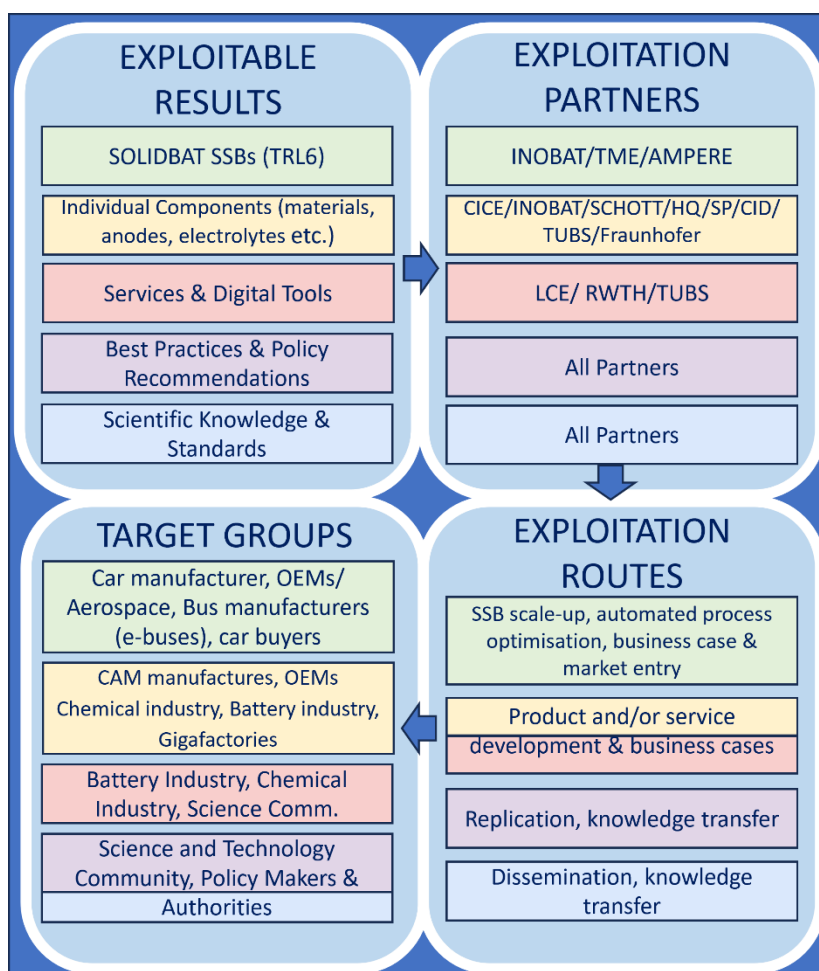


Figure 6 SOLIDBAT Overall Exploitation Roadmap

The foreseen results and outcomes of SOLIDBAT research and development can be of significant value for a diverse set of exploitation target groups. The results that are relevant

for exploitation can be classified in three types (I-III). Those, together with the SOLIDBAT Exploitation Strategy, are explained in detail in the following.

(I) SOLIDBAT SSB Technology and manufacturing processes (5 Ah Cell, validated and demonstrated at TRL6): Technology optimisation and scale-up towards industrial scales (TRL8 at module and pack levels)

SOLIDBAT will result in a 5 Ah demonstrator (TRL6). This demonstrator needs to be matured and optimised further and scaled-up to reach industrial and commercial scales after the end of the project. The focus of scale-up activities on the way to industrial scales will be put on optimising the SSBs and the manufacturing processes further and to improve the robustness of the technology. During SOLIDBAT several loops for optimising the SSB technology are planned. Optimisation will target the technical performance with the focus on the pre-defined requirements of the target application EV, the sustainability and recyclability of the SSB materials and cells, the manufacturing process and the cost performance. Further optimisation may be necessary to meet the industrial scales and requirements for successful market entry. The most relevant topics where optimisation is expected are the production processes, which are a current obstacle for SSBs to reach industrial feasibility and, as a result, the cost performance. During SOLIDBAT, further optimisation needs will be evaluated and sketched in detail for follow-up activities. The most likely option for this is a collaborative demonstration project that brings the technology readiness levels from TRL 6 to TRL7-8. An alternative for addressing technology optimisation is the inclusion of activities in the development and innovation strategy of battery manufacturer INOBAT. Which scenario will be chosen will depend on the final performance of the SOLIDBAT cell at the end of the project and the intensity of needed optimisation tasks.

Technology robustness can be defined as the ability of a closed loop system to be insensitive while system parameters are varied over a wide range. For the SOLIDBAT SSBs this is expected to be most relevant for the manufacturing process. During SOLIDBAT, semi-automated scale-up line is planned by partner INOBAT. As INOBAT will also be involved in follow-up activities for maturing SSBs and manufacturing processes, the robustness of those processes and the SSBs themselves will be optimised on the way to industrial scales and market maturity. Analogue to the technology optimisation, either a demonstration project or company R&I will provide the framework for activities.

Additional exploitation potential for the overall battery technology has been identified for car manufacturer Toyota (TME) as end users of the SOLIDBAT technology in the automotive sector. TME will create a strong market pull and define the end user requirements that are vital for exploitation and market entry of the novel SSBs for the automotive sector. Their early involvement at TRL6 and continuing cooperation as exploitation partner will result in a competitive edge in the electric vehicle market segment. The scale-up on the way to market maturity is planned in three consecutive steps, highlighted in

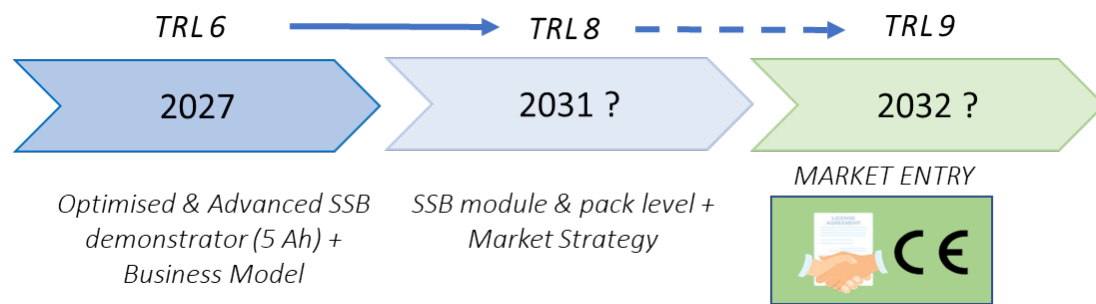


Figure 7 SOLIDBAT way and time to market

The roadmap and the expected timeline-to-market highlight the high innovation potential of SOLIDBAT as competing solutions consider market entries to be realistic for the mid 2030s.

Therefore, SOLIDBAT partners do not expect any competitive disadvantage from earlier market entries by competitors.

The latest starting from TRL6, private sector leadership will be pivotal for the industrialisation of the SSBs. INOBAT plans to directly exploit the SOLIDBAT SSBs or the most innovative components and results and introduce them to their existing product and service portfolio. INOBAT specialises in the pioneering research, development, manufacture, and provision of premium innovative electric batteries custom-designed to meet the specific requirements of global mainstream and specialist OEMs within the automotive, commercial vehicle, motorsport, and aerospace sectors. Scale-up and exploitation activities will be performed in close cooperation with car manufacturers Toyota is partners of SOLIDBAT and end users for the automotive market segment. CICE, CEA, CIDETEC, TUBS and FRAUNHOFER are involved in several European initiatives (BEPA, B2030, Batteries Europe and other EU Technology Platforms) working hand in hand with industry to define end user technology requirements. This partnership is well equipped to take up SOLIDBAT results and mature them towards industrialisation, technology integration and, eventually, market readiness.

Overall, SOLIDBAT is in a highly competitive position with its combination of private sector partners who are world leaders in their fields and application-oriented RTOs who, at consortium level, hold several patents that are crucial for the exploitation of competitive SSBs. INOBAT with its agile structure and strong focus on tailored battery solutions for the automotive, OEM and transport sector is in a good position for industrialising SSBs and can tap into a strong existing customer network and sales channels once market maturity of the SSBs is reached. Industrial capacities for automated battery production exist, which gives SOLIDBAT the chance to produce target SSB cells in a scale-upline.

TME is a world leader in the car manufacturing sector. CICE (advanced materials), SP, SCH and HQ (electrolytes, anodes and coatings) hold patents that are pivotal for exploiting and scaling up SOLIDBAT SSBs. This builds an ideal basis for future industrial production processes that are tested and validated in terms of materials, battery design and end-user requirements and enable the cost-efficient production of SSBs. This addresses one of the key market barriers for SSBs at the moment. Financing for the scale-up and industrialisation of the SSBs and other innovative results can be sought from various sources, described further in .

(II) **Products and services that emerge from SOLIDBAT & individual partner business cases**

Besides the SSBs as overall technology and business case, SOLIDBAT will result in advanced materials, battery components and protectable IP that can be directly exploited as products or services by those partners who are the producers and IP owners of the results.

Commercial exploitation most likely relates to partners INOBAT, SCH, HQ and SP as industrial partners, who will include SOLIDBAT innovation in their existing product or service portfolios. In addition, there will be results with innovation potential for which IP will be held by academic and research partners. For them direct exploitation as services may be of interest, but product development will be a less likely option. At this stage, the most promising exploitation routes are expected to be technology licensing and research services and consulting.

Products and services that can be expected from SOLIDBAT include the following (sorted by project partner):

INOBAT will strategically incorporate advanced materials developed during SOLIDBAT into their battery manufacturing processes, resulting in solid state batteries with enhanced safety, energy density, and cycle life. This integration gives INOBAT a competitive edge in the market. Further, INOBAT provides advanced battery customization services, leveraging its expertise in large-scale production and advanced materials to design tailor-made solutions for various industries, including automotive, aerospace, and other sectors.

HQ will license out thin LiM anodes developed and validated during SOLIDBAT. Main customer group is the battery manufacturing industry. The novel anode products will be sold via product licensing contracts.

SP will develop single-ion and single-ion conducting polymers for highly novel solid electrolyte products to be directly sold to battery manufacturers once higher industrial scales are reached.

TME and AMP as OEM end users will/could develop automotive products (batteries and e-vehicles) for direct sales to business and private customers, once SSBs have reached market maturity and have proven performances that respond to the end user requirements.

CIDETEC will develop software products based on their model understanding of solid electrolyte surface transitions. Commercial software licenses will be directly sold to customers with specific needs towards battery products. Based on SOLIDBAT results, CIDETEC further expects to develop and provide novel contracted software-related services (courses, software adaptation, prototype problem, etc) for customers with special needs.

TUBS will offer novel services based on their recycling model plan for SSBs and deployed recyclable materials. Services will be provided to battery manufacturers as well as the recycling and materials industry.

FRAUNHOFER will develop novel coated CAMs as products for industrial customers or services and technology licenses on the novel coatings after the successful scale-up of their coating processes used in SOLIDBAT.

Results with higher innovation levels and exploitation prospects as they are foreseeable at this stage are described in brief below and are summarised in Table 2.2.

(III) **Best practice, standards and exploitable knowledge generated by SOLIDBAT**

In addition to commercially exploitable results and IP that can be protected, we also expect the exploitation of knowledge and key findings that can be of high value for the SSB innovation ecosystem. Focus will be on findings that are relevant for future policies and innovation strategies in the context of batteries, electromobility and the decarbonisation of transport as well as contributions towards 'Best Available Technologies' and associated BREFs.

SOLIDBAT results and progress will further be screened for their potential to contribute to future European standards.

Key exploitable result (Deliverables and partners involved)	Exploitation potential	Target Group	Exploitation Pathway
SSBs with demonstrated improved safety, energy density, and cycle life. Key deliverables: D4.1, D4.2; INOBAT D6.1 & D6.2 (AMP & CID)	High	Car manufacturers OEMs/Aerospace Bus manufacturers (e-buses)	Direct exploitation via product development and direct sales; Technology licensing
Improved (cost, safety, sustainability, performance) e-vehicle technology, utilising SOLIDBAT SSB technology. Key deliverables: D2.1; D2.2, D4.2 (licensed by INOBAT) D6.1 & D6.2 (AMP & CID)	High	Consumers, private and business customers	Technology integration and direct sales; car portfolio extension
Scalable process for the coating of CAMs/Novel coated CAMs/ Knowledge about coating CAMs. Key deliverable: D3.2, D3.3, D4.1; Task results: T3.1, T4.1; FRAUNHOFER	High	CAM manufactures, Chemical industry, Battery industry, Gigafactories	IP protection, licensing, follow up projects, training

Recycling model plan. Key deliverables: D7.2; TUBS	Medium	Recycling experts, battery cell manufacturers.	Standards as input for EU Battery regulation; training
Library of reactive molecules and library of single-ion polymers and single-ion conducting polymers. Key deliverables: D3.2, Task results T3.2; SP	High	<TRL6: Universities or private R&D private in the field of batteries >TRL6 and quantities: Battery manufacturers	Direct sales (R&D quantities) of molecules; Technology licensing
<i>In situ</i> HGPE. Key deliverables: D3.2, D3.3, Task results T3.2; T4.2; CICe, SP	High	Material researchers, Battery manufacturers	IP protection/ licensing
Thin LiM anode (thicknesses, collector supported and/or 3D). Key deliverables: D4.1-D4.3; Task results: D3.3-D3.5, T4.1, T4.2; HQ.	High	Battery manufacturers and OEMs	Licensing and technology transfer
Aqueous manufacturing of high voltage cathodes for SSB. Key deliverables: D3.1, D3.2; D4.1-D4.3; Task results: T4.1, T4.2; CIDETEC	High	OEMS, battery and/or cathode manufacturers, RTO, etc	Patent, R&D industrial contracts and/or licenses
Model understanding of solid electrolyte surface transitions. Key deliverables: D5.1- D5.4; CIDETEC, RWTH	High	Specialized software companies, SSB manufacturers	Software (private/public release)

Table 2.3: SOLIDBAT Key Exploitable Results

2.4.7.1 Financing avenues for SOLIDBAT exploitation

The available funding sources envisaged by SOLIDBAT, depend on the exploitation steps and pathways, and cover a robust mix of public and private funding (incl. SOLIDBAT companies' own resources):

Public funding (e.g., for the demo project to mature technology readiness levels to TRL8) includes European funding programmes & initiatives (demonstration and innovation actions) such as:

1) Innovation Fund: The Innovation Fund is the EU fund for climate policy, with a focus on energy and industry, and is one of the world's largest funding programmes for the deployment of net-zero and innovative technologies. SOLIDBAT and involved company partners that are responsible for the exploitation of SSBs (INOBAT, TME and/or AMPERE), plan to apply to open calls for proposals as part of the exploitation plan to fund the industrialisation of SSBs and pre-market development. The exact exploitation partnership will be decided as part of a more mature SOLIDBAT Exploitation Roadmap and Business Plan. To be eligible for funding, projects need to be sufficiently mature in terms of planning, business model and financial and legal structure. This is expected to be the case at the end of SOLIDBAT. Grants will be accessed either through calls for proposals or through competitive bidding procedures (auctions) in case the SOLIDBAT LCA and LCC reveal that sustainability targets can be achieved, but cost competitiveness cannot be reached compared to fossil-based alternatives (e.g., fuel-based combustion engines);

Other funding sources at **EU Horizon Europe (demo), cPPPs, Just Transition Funds, EIC Accelerator** (with **InoBat as innovative SME**).

2) Private funding/investors such as Horizon Results Booster & the InvestEU Portal matching EU projects with investors worldwide; Traditional investors such as Technology Ventures. Equinox ventures; Industrial corporations investing in battery technology.

3 ROLES AND RESPONSIBILITIES

Rita Clancy (EURIDA) as Communication & Exploitation Manager and leader of WP8 'Impact Maximisation', in cooperation with the Communication Office at CICE (Miriam Gutierrez, and Cristina Domínguez (CICE) as IP & Innovation Manager at CICE will implement all dissemination, communication and exploitation activities in close collaboration with all partners.

The SOLIDBAT SME and large industry partners – INOBAT, SCHOTT, HQ, SP, TME and AMPERE, will mainly hold responsible for coordinating their individual business plans and market exploitation strategies as well as IP protection measures. The CICE IP Manager will provide support in IP Management.

Partners' internal Business Developers are respectively responsible for managing generated IPR and business-internal exploitation roadmaps. This will be performed in close collaboration with the Project Management Team, comprising the Project Coordinator (María Martínez/CICE), the Project Manager (Estibaliz Crespo/CICE) and the Exploitation Manager and WP Leader for Impact Maximisation (Rita Clancy, Eurida).

All partners have the responsibility to proactively contribute to dissemination and exploitation of project results via scientific publications, the protection and exploitation of relevant results and the contribution of content to the project website, dissemination material, SOLIDBAT's social media groups and other project formats.

4 LEGAL OBLIGATIONS AND REQUIREMENTS FOR DISSEMINATION, COMMUNICATION AND EXPLOITATION (AS PER GRANT AGREEMENT ARTICLE 17 AND ANNEX 5)

4.1 Communication – Dissemination – Promoting the action

As per Grant Agreement, all beneficiaries must promote the project and its results by providing targeted information to multiple audiences (including the media and the public), in accordance with the proposal and the 'Description of Actions' and in a strategic, coherent and effective manner.

Before engaging in a communication or dissemination activity that is expected to have a major media impact, the beneficiaries must inform the granting authority.

4.2 Visibility – European flag and funding statement

Communication activities of the beneficiaries related to the project (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):



Funded by the
European Union



Funded by the
European Union

The emblem must remain distinct and separate and cannot be modified by adding other visual marks, brands or text.

Apart from the emblem, no other visual identity or logo may be used to highlight the EU support. When displayed in association with other logos (e.g. of beneficiaries or sponsors), the emblem must be displayed at least as prominently and visibly as the other logos.

For the purposes of their obligations under this Article, the beneficiaries may use the emblem without first obtaining approval from the granting authority. This does not, however, give them the right to exclusive use. Moreover, they may not appropriate the emblem or any similar trademark or logo, either by registration or by any other means.

4.3 Quality of information – Disclaimer

Any communication or dissemination activity related to the action must use factually accurate information. Moreover, it must indicate the following disclaimer (translated into local languages where appropriate):

"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 [name of the granting authority]. Neither the European Union nor the granting authority can be held responsible for them."

4.4 Open Science

Open science: 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 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.

Beneficiaries (or authors) must retain sufficient intellectual property rights to comply with the open access requirements.

Metadata of deposited publications must be open under a Creative Common Public Domain Dedication (CC 0) or equivalent, in line with the FAIR principles (in particular machine actionable) and provide information at least about the following: publication (author(s), title, date of publication, publication venue); Horizon Europe funding; grant project name, acronym and number; licensing terms; persistent identifiers for the publication, the authors involved in the action and, if possible, for their organisations and the grant. Where applicable, the metadata must include persistent identifiers for any research output or any other tools and instruments needed to validate the conclusions of the publication.

Only publication fees in full open access venues for peer-reviewed scientific publications are eligible for reimbursement.

5 CONCLUSIONS

This deliverable report represents the overall strategy that underpins the SOLIDBAT dissemination, communication and exploitation activities. While the general strategy for maximising the impact that SOLIDBAT will have on various stakeholders can be laid out at this early stage of the project alongside an initial workplan for the activities that are going to be performed during the first year of the project, the strategy will need refining throughout the different project stages. At this early stage of the project (project month 6), it will be most important to establish an effective strategy for dissemination, communication and exploitation that all consortium members agree with, are fully aware of and that provides a solid basis for (bi-)annual workplans that will be updated continuously during the project. Further, this deliverable assures that all consortium partners are fully aware of their legal obligations in terms of dissemination, communication and exploitation, of acknowledging the EU contribution to this project and of possible restrictions to publicly disclosing information due to IP, ethics or other issues, such as not fully verified data or insufficient quality of results at earlier project stages.

Establishing a joint strategy as basis for future work is achieved with this deliverable report.

Updates that may be necessary will be provided for the Periodic Technical Reports to the EC. A sound exploitation roadmap is planned for the end of the project (30/11/2028) and represents deliverable D8.3. That roadmap will use this DEP as basis.



SOLIDBAT



Funded by
the European Union