Deliverable 9.3

Plan for exploitation and dissemination

Project acronym: ECO²LIB
Project title: Ecologically and Economically viable Production and Recycling of Lithium-Ion Batteries
Grant Agreement number: 875514
Coordinator: Martin Krebs

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Funding Scheme: **H2020-LC-BAT-2019**

Delivery Date from Annex I:	September 2020
Start date of the project:	Jan 1st 2020
Project duration:	48 months

Work package:	9
Lead beneficiary for this deliverable:	EurA
Authors:	All partners

Dissemination level		
PU	**Public**	**X**
CO	**Confidential, only for members of the consortium (including the Commission Services)**	
CI	**Classified**	

Deliverable abstract

The objective of the dissemination and exploitation activities is to create the greatest innovation momentum from the project developments within the targeted research communities and industries throughout Europe and beyond. Therefore, awareness will be created among a wide range of key persons i.e., decision makers and “awareness multipliers” (from association, industrial partners, technical board experts) sensitive of the potential improvements by ECO²LIB innovations.

This plan is a living document and will be updated along the project progress. Not all project dissemination and exploitation activities can already be planned now and not all planned activities will actually be realised. However, the purpose is to get a good and quick overview about the results published or to be published within the project.

In addition, as most other projects as well, our dissemination and exploitation activities are of course also strongly impacted by the COVID-19 pandemic as many events, congresses, trade fairs and the like are being cancelled, postponed or are uncertain.

1. Dissemination of scientific results (papers)

Title	Status	Authors	Partners involved	Ref.
Surface Oxidation of Nano-Silicon as a Method for Cycle Life Enhancement of Li-ion Active Materials	published	Maciej Ratynski, Bartosz Hamankiewicz, Dominika A. Buchberger and Andrzej Czerwinski	UW	Molecules, **2020**, 25, 4093; doi:10.3390/molecules 25184093
Environmental Assessment for stationary battery modules/ systems	Targeted publication / to be defined with partners	TBD	VS EurA ACC	TBD
Multi-scale quantification and modelling of aged nanostructured silicon-based composite anodes	In production	Thomas Vorauer, Praveen Kumar, Christopher L. Berhaut, Fereshteh F. Chamasemani, Pierre-Henri Jouneau, David Aradilla, Samuel Tardif, Stephanie Pouget, Bernd Fuchsbichler, Lukas Helfen, Selcuk Atalay, Dhammika Widanalage, Stefan Koller, Sandrine Lyonnard, Roland Brunner	CEA UoW VMI MCL	Communications Chemistry Nature.com
Quantification of Nanoscale pore system and impact on lithiation in Si-based composite Anodes	In planning	Thomas Vorauer, Fereshteh F. Chamasemani, Pierre-Henri Jouneau, Bernd Fuchsbichler, Dhammika Widanalage, Stefan Koller, Sandrine Lyonnard, Roland Brunner et al.	CEA UoW VMI MCL	Possible Journals ACS, NPJ, etc.
Neutron Tomography Investigation on Si-based Coin Cells	In planning	Thomas Vorauer, Fereshteh F. Chamasemani, Pierre-Henri Jouneau, Bernd Fuchsbichler, Dhammika Widanalage, Stefan Koller, Sandrine Lyonnard, Roland Brunner et al.	CEA UoW VMI MCL	Possible Journals ACS, NPJ, etc.

In Situ Nano-Tomography To Unravel The 3d Morphology Evolution And Lithiation Process Of Novel Silicon/Graphite Anodes For Li-Ion Batteries	In planning	Thomas Vorauer, Fereshteh F. Chamasemani, Pierre-Henri Jouneau, Bernd Fuchsbichler, Dhammika Widanalage, Stefan Koller, Sandrine Lyonnard, Roland Brunner et al.	CEA UoW VMI MCL	Possible Journals ACS, NPJ, etc.
Fluorine-free electrolytes	In planning (2020)	TBD	UU EurA ?	TBD
Sustainable design of energy storage systems	Idea	TBD	VS VMB EurA ?	Possible Journals: Energy & Environmental Science, Journal of Industrial Ecology, Journal of Energy Storage
Review on battery recycling	Idea	TBD	ACC EurA ?	TBD
Supporting the development of ecologically and economically viable lithium-ion battery systems by means of project-accompanying LCA and LCC	In planning (2022 ff)	TBD	EurA all?	Possible Journals: Energy & Environmental Science, International Journal of LCA, Journal of Industrial Ecology, Journal of Cleaner Production
A novel numerical method for simulating fracture problems in Li-ion batteries (tentative title)	Ongoing	M. Poluektov, Ł. Figiel	UoW	Possible journals: Comput Methods Appl Mech Eng, Comput Mech, Int J Numer Methods Eng

Microscale chemo-mechanical models for enhancing interfacial fracture resistance in Li-ion battery anodes (tentative title)	Plan	M. Poluektov, Ł. Figiel, other authors (depending on their contributions)	UoW, other partners (depending on their contributions)	Possible journals: IOP journals, etc.

2. Dissemination at conferences, seminars, associations, platforms

Conference/Seminar	Presentation title	Speaker	Partners involved	Date
American Association for Advanced Functional Materials	Multiscale Investigation of an Si-Fe Alloy Anode Material for Storage Applications with Improved Aging Performance".	R. Brunner	MCL	August 18-20, 2021
M&M2022	3D Imaging and Analysis of Advanced Si-based Li-ion batteries	R. Brunner	MCL	2022
Lecture: Montanuniversität Leoben "Solar Cells" Communication with students Energy relevant topics and storage for PVs.	Solar Cells lecture	R. Brunner	MCL	WS2021/22 WS2022/23 WS2023/24
IBA		S. Lyonnard	CEA	
SENS		S. Lyonnard	CEA	
Graz battery days		S. Lyonnard	CEA	2020
IMLB		S. Lyonnard	CEA	
IBA		J. Mindmark	UU	2020
ISPE		J. Mindmark	UU	2021
ISE (online) meeting	Elimination of Fluorination: The Influence of Fluorine-Free Electrolytes on the Performance of Si-based Li-ion Batteries	Guiomar Hernández	UU	2020-09-03
Lecture in NAT workshop (sustainability agreement Thuringia)	Lecture	D. Ott	EurA	2021
Conference on Life Cycle Management (LCM) or similar	Supporting the development of ecologically and economically viable lithium-ion battery systems by means of project-accompanying LCA and LCC	D. Ott	EurA	2022 ff.
USNCCM (plan)	TBC	M. Poluektov	UoW	2021
MMM (plan)	TBC	M. Poluektov	UoW	2021

3. Press releases, Publications in magazines, Posters

Title	Status	Nature	Authors	Partners involved
Comparative study of Li-ion battery recycling processes	ongoing	Press/Poster	Reiner Sojka, Qiaoyan Pan, Laura Billmann	ACC
Multi-scale quantification and modelling of aged nanostructured silicon-based composite anodes	Work in progress	Behind the paper Post in the Nature Chemistry Community (invited)	R. Brunner	MCL
Battery production and Research in Styria (Austria),	In planning	Press release in Austrian newspaper	R. Brunner, S. Koller	MCL VMI
Multi-scale quantification and modelling of aged nanostructured silicon-based composite anodes	In planning	Press release for the Communications chemistry nature.com paper for newspaper etc. in Austria	R. Brunner	MCL
Newsletter Accurec in Eco2LIB	published	Newsletter on Acc website	Q. Pan	ACC
ECO2LIB project newsletter	Published and ongoing	ECO2LIB website LinkedIn Twitter	Stefan Durm Input by all partners	EurA All partners
Elektrolyt utan giftigt fluor ger elbilsbatterier samma prestanda	Published online	Article in Swedish technology newspaper “Ny Teknik”		UU