

## Project Facts

### Project Name

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

### Call identifier

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

### Duration

36 months (January 2024-December 2026)

### Project Coordinator

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

### Business Cases

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

## Connect

 [www.battery2life-project.eu](http://www.battery2life-project.eu)

 BATTERY2LIFE Project

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### Project funded by

 Schweizerische Eidgenossenschaft  
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## Consortium



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# BATTERY2LIFE



BATTERY2LIFE Project



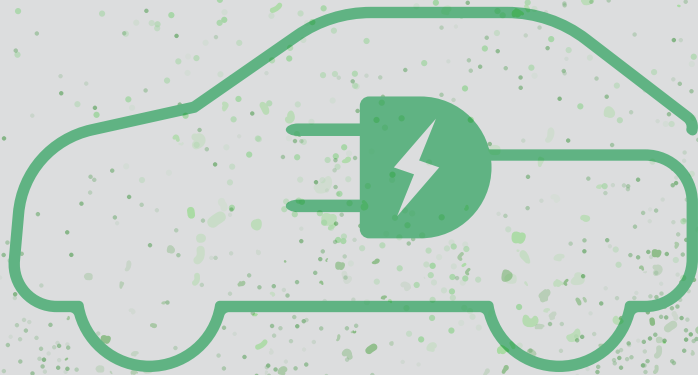
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## BATTERY2LIFE Vision

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

### Project Objectives

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



## BATTERY2LIFE Ambition

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



Battery pack design frameworks & open cloud Battery Management System (BMS) design frameworks for single module operation or recombination (reconfiguration) of modules or battery packs for consolidated and new battery technologies.



The embedded smart functionalities to offer more reliability and safety during operation.



The improved system designs to increase circularity, facilitate disassembly and offer enhanced critical control functions.



The advanced diagnostic tool and the sizing tool to facilitate the reliable assessment and reconfiguration of used modules.

