

# NEW ROUTES TOWARDS SUSTAINABLE REUSE & RECYCLING OF LITHIUM-ION BATTERIES (LIBS)



**BATTERIES REUSE AND DIRECT PRODUCTION OF HIGH-PERFORMANCE CATHODIC AND ANODIC MATERIALS AND OTHER RAW MATERIALS FROM BATTERIES RECYCLING USING LOW- COST AND ENVIRONMENTALLY FRIENDLY TECHNOLOGIES**



The RHINOCEROS project proposes novel, cost-effective, scalable and low-carbon technologies for the reuse of end-of-life LIBs or their recycling as high-performance battery materials at high recycling rates and purity.



The aim of the RHINOCEROS project is to develop and improve economically and environmentally viable routes for re-using and recycling end-of-life LIBs from electric vehicles and stationary energy storage systems. Demonstrating this sustainable process for EoL LIBs will contribute to decreasing Europe's import dependency on critical battery raw materials.

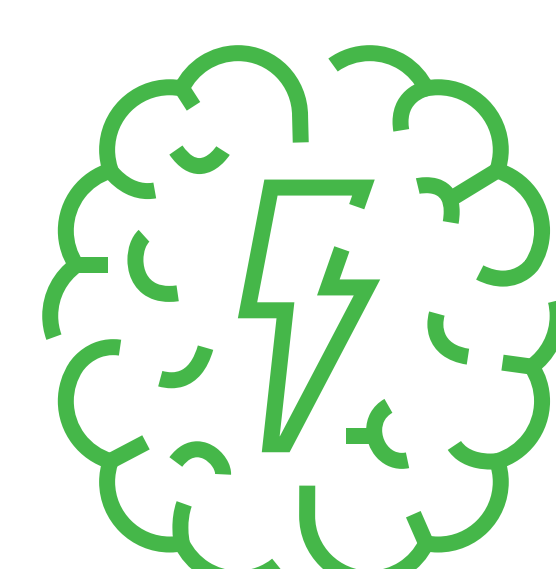


New breakthrough scientific discovery on repurposing and reusing LIBs for second-life applications;

Recycling of all the materials present in LIBs, such as metals, graphite, fluorinated compounds and polymers, active materials, etc.



Sustainable, safe, low-carbon footprint technologies;  
Zero liquid waste discharge process.



Pilot recycling process which will accelerate the growth of innovative, competitive and sustainable battery recycling and manufacturing industry.

Safer processes for operators;

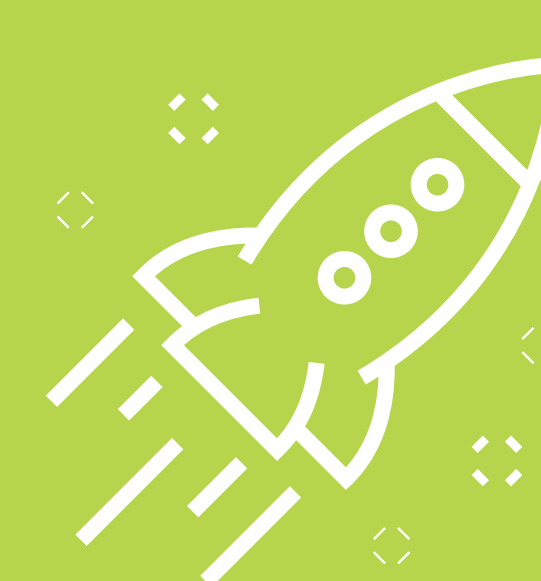


Less toxic waste released;

Strengthened resilience, lowered dependency on CRMs imports required by the emerging European green energy and climate strategy.



**HORIZON EUROPE**  
FUNDING PROGRAM



**€ 8.943.025**  
EU CONTRIBUTION



**17**  
PARTNERS



**9**  
COUNTRIES



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MEMBER OF BASQUE RESEARCH  
& TECHNOLOGY ALLIANCE

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**LEITET**  
managing technologies

**WATT4EVER**  
BATTERIES FOR LIFE

**vito**

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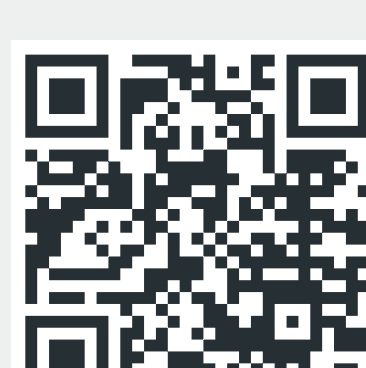
**cidetec**  
energy storage

## STAY IN TOUCH

### PROJECT COORDINATION



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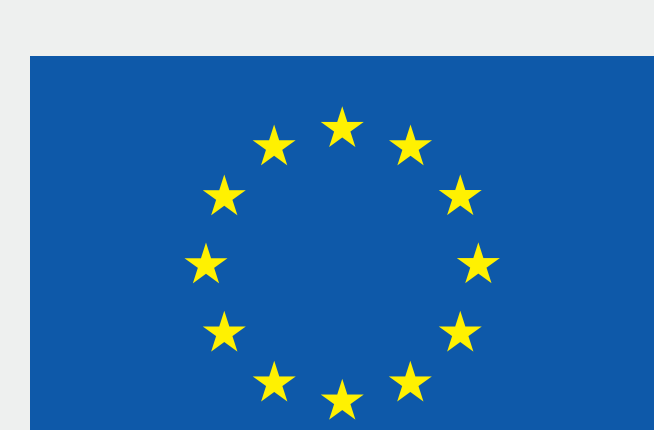
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