Battery 2030

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BATTERY 2030+

HIGHMAG

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HighMag is an ambitious EU-funded project under the Horizon Europe programme, supported by the European Climate, Infrastructure and Environment Executive Agency (CINEA). In response to the global demand for sustainable, safe, and cost-effective energy storage solutions, HighMag is developing the next generation of Rechargeable Magnesium Batteries (RMBs).

Coordinated by the Austrian Institute of Technology (AIT), the project brings together 13 leading partners from across Europe. Over a 48-month period, the consortium aims to design and validate high-energy, low-cost, and scalable Generation 5 magnesium-based batteries.

Why Magnesium?

Magnesium stands out as a promising alternative to lithium due to several key advantages:

- Naturally abundant and cost-effective
- Inherently safer than lithium
- A strong potential to support long-term sustainability

Project Focus

HighMag aims to deliver sustainable and affordable alternatives to lithium-ion batteries by developing two advanced rechargeable magnesium battery technologies:

- Magnesium-Sulfur (Mg-S) batteries with a conversion cathode
- Magnesium-Metal batteries using insertion cathodes

Coordination Team

Austrian Institute of Technology

Funded by the European Union

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WEBSITE

Call Topic: HORIZON-CL5-2024-D2-02-02 – Post-Li-ion technologies and relevant manufacturing techniques for mobility applications (Generation 5) (Batt4EU Partnership)

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