

HighMag



High-energy, low-cost and scalable generation 5 magnesium-based batteries for mobility applications and beyond



Follow us on

[linkedin.com/company/highmag-project](https://www.linkedin.com/company/highmag-project)
[youtube.com/@highmag-project](https://www.youtube.com/@highmag-project)
zenodo.org/communities/highmag-project/records

► The Challenge

Lithium-ion batteries face growing issues: **cost, raw materials, recycling, and safety.**

► The Magnesium Solution

HighMag is developing **5th Generation Rechargeable Magnesium Batteries (RMBs).**

► Why Magnesium?

Abundant & Affordable

Plentiful, lower cost.

High Energy Density

More power, less space.

Enhanced Safety

A more secure battery technology.

Truly Sustainable

Built on Safe and Sustainable by Design (SSbD) principles.

► HighMag's Innovations

New Battery Chemistries

Advanced Magnesium-Sulphur and Magnesium Metal systems.

Sustainable Components

Developing PFAS-free electrolytes and novel anodes.

Manufacturing Ready

Designed for compatibility with existing production lines.

Advancing Technology

TRL 2 to TRL 4 for real-world application.

The HighMag Consortium

A powerful collaboration of leading European research and industry partners.



Funded by
the European Union

Funded by the European Union's Horizon Europe research and innovation programme under the Grant Agreement No 101202882. 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). Neither the European Union nor the granting authority can be held responsible for them.