

Join us in powering a sustainable future!



✉ info@hylist.eu



HyLiST

Hybrid Lithium Metal-based Scalable Solid-State Battery Manufacturing

www.hylist.eu



Funded by the European Union

Funded by the European Union's Horizon Europe research and innovation programme under the Grant Agreement No 101147688. 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.

Powering the new generation of Solid-State Batteries

HyLiST is an innovative EU-funded project that will explore the potential of cobalt-free cathode based Solid State Batteries (LNMO|HSIPE|Li) to revolutionalise the EU battery industry for cleaner, safer, more efficient and eco-friendly batteries for Aeronautics and Automotive applications. It will be based on:

 **Cobalt-free LNMO cathodes**

 **Hybrid solid polymer electrolytes**

 **Lithium metal anodes**

— WHAT ARE OUR GOALS?

Develop advanced battery materials

Optimise interfaces for better performance and safety

Reduce costs and energy use in battery production

Enable full recyclability and EU-compliant sustainability

Scale up to 5 Ah solid-state prototypes

Achieve superior energy density and fast charging

— OUR THREE PILLARS OF INNOVATION

 **Advanced Components & Manufacturing**

 **Interface Engineering & Performance**

 **Digitalisation, Recycling & Sustainability**

— HOW WILL HyLiST IMPACT THE EUROPEAN BATTERY SCENE?



Safer, faster, longer-lasting batteries:

The scientific efforts in battery innovation will be bridged to the industry interests by providing open access findings and creating a TRL6 prototype.



Cost-efficient EU-based battery production:

SSB is a growing market which Europe can lead, which brings economic benefits, increases employment and diminishes carbon footprint.



Reduced CO₂, greener processes & recycling:

Cleaner and eco-friendly processes and solutions reinforce Europe's commitment to the European Green Deal and Paris Agreements objectives.



Enhancing EU autonomy in energy storage:

The minor dependence from third countries supply chain will increase European battery industry resilience and sovereignty.