BATTERY HEROES

9 EU-FUNDED PROJECTS

Together making Europe's battery industry more sustainable

NOVOCAM

GIGAGREEN

GIGABAT

BATMACHINE

HOLiBAT

SUCCESSOR

OLiMPUS

SOURCE

CIRCUBATT

STRATEGIC PARTNER

LIPLANET

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WHO WE ARE

Europe's battery projects, joining forces

BATTERY HEROES is a cluster of 9 EU-funded Horizon Europe research and innovation projects, with LiPLANET as permanent strategic partner. Together we share knowledge, amplify our results and speak with one voice in the European battery ecosystem, closely collaborating towards the production of batteries with lower carbon footprint.

OUR SHARED FOCUS

01 **Communication & dissemination**

02 **Sustainability & LCA, Ecodesign and SSbD**

03 **Exploitation & market uptake**

liplanet.eu

liplanet

ABOUT

STRATEGIC PARTNER

LiPLANET is the European network of lithium battery cell research pilot lines. Born as a Horizon 2020 project and now running as an association, it connects pilot lines across Europe to exploit synergies, identify knowledge and equipment gaps, organise joint trainings and strengthen collaboration with industry and academia. As permanent strategic partner of BATTERY HEROES, LiPLANET helps bring the cluster's results closer to industrial-scale battery cell production in Europe.



novoc.eu

novoc-eu

ABOUT

In the NoVOC project, our goal is to create, showcase and compare two cutting-edge methods for making battery electrodes: one using water-based manufacturing and the other using a dry process. These electrodes will later be used for the production of automotive batteries. Our focus is on producing them in an environmentally friendly and energy-efficient way, for a greener future in Europe and beyond.



@GIGAGREEN_

gigagreenproject.eu

gigagreen-project

ABOUT

GIGAGREEN aims to advance Europe's leadership in the Li-ion battery value chain by developing scalable, eco-friendly electrode and cell manufacturing processes. The project focuses on minimising environmental impact, reducing energy use, enhancing cost-efficiency and safety, and creating cell designs optimised for re-use and disassembly. It also targets high-throughput technologies that support easy scale-up and automation for Industry 4.0/5.0 gigafactories.

GIGABAT

@GIGABATeu

gigabat-project.eu

gigabat-project

ABOUT

GIGABAT is an EU-funded project focused on advancing sustainable and digitalised gigafactories for battery production using European-made machinery. The project aims to strengthen Europe's battery manufacturing value chain by reducing emissions, enhancing battery performance and cost efficiency, and promoting circular production. Through digitalisation and sustainable practices, GIGABAT envisions a future of efficient, eco-friendly energy storage in Europe.

BATMACHINE

@BATMACHINE_EU

batmachineproject.eu

batmachine

ABOUT

BATMACHINE, a Horizon Europe-funded project, aims to make battery manufacturing in Europe greener and more cost-effective by creating optimised machinery with intelligent controls to cut costs, waste and energy use. The project's vision is to enhance EU battery cell production through new machines that lower energy needs, boost efficiency and use AI-driven processes to reduce waste.

holibat.eu

holibatproject

ABOUT

HOLiBAT develops a cost-effective and sustainable EV-grade battery cell based on high-lithium-manganese (HLM) cathodes and Si/C anodes, adapted to both aqueous and dry electrode processing. Cobalt-free and with less nickel and graphite, the cells combine low-fluorine electrolytes and cellulose-based separators. Production will be upscaled to pilot lines monitored by ultrasound sensors and machine learning, and validated in prismatic and cylindrical formats targeting 350 Wh/kg.

successor-project.eu

successor-project

ABOUT

SUCCESSOR is a Horizon Europe project developing the next generation of low-cost, safe and sustainable lithium-ion batteries for Europe's electric mobility, based on LMFP (lithium manganese iron phosphate) cathode materials. The project takes LMFP from material to EV-grade cell: scaling up synthesis to 100 kg batches, developing a dedicated electrolyte and both aqueous and dry electrode processing routes, and demonstrating 40 Ah cells at TRL 7.

OLiMPUS

olimpus.eurup.eu

olimpus-project

ABOUT

OLiMPUS will demonstrate Made-in-Europe LMFP||graphite battery cells for mobility, delivering 550 Wh/L and 220 Wh/kg. Combining LMFP cathodes and aqueous electrode processing with low-CO_2 synthetic graphite anodes and self-extinguishing electrolytes, the project will produce 132 EV-grade pouch and prismatic cells (10–80 Ah) using European materials and equipment, with recycling-by-design and a clear path to industrial production in Europe.

SOURCE

@SOURCEeuproject

sourceproject.eu

euproject-source

ABOUT

SOURCE develops and demonstrates economically and environmentally viable routes to produce battery-grade synthetic graphite for high-performance lithium-ion anodes. Through energy-efficient production processes, recycling technologies, biomass-derived graphite and pilot-scale anode production, the project brings together the complete European value chain to increase EU competitiveness and independence from foreign graphite and anode suppliers.

CIRCUBATT

circubatt-project.eu

circubatt-project

ABOUT

CIRCUBATT combines advanced materials science, artificial intelligence, data analytics and circular business models such as Battery-as-a-Service and Data-as-a-Service. Covering the whole battery lifecycle, from design and manufacturing to second life and recycling, the project will reduce Europe's reliance on critical raw materials, cut environmental impacts and strengthen the competitiveness of the European battery value chain.

WHY CLUSTERING?

Stronger together

01 **Joint dissemination**
Coordinated events, social media and materials give every project more visibility for less effort.

02 **Cross-project learning**
Sharing methods, challenges and lessons learned, without compromising confidentiality.

03 **Greater impact of results**
Collective reach to industry and policy improves uptake and exploitation.

04 **A stronger voice in Europe**
Joint engagement with the European Commission, CINEA, BEPA and BATT-BRIDGE.



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NoVOC · GIGAGREEN · GIGABAT · BATMACHINE · HOLiBAT · SUCCESSOR · OLiMPUS · SOURCE · CIRCUBATT

Strategic partner: LiPLANET

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