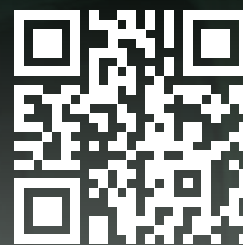


# Advanced lightweight battery systems optimized for fast charging, safety and second-life applications



albatross-h2020.eu



Modular concept scalable to different types of vehicles **aimed at creating advanced battery pack designs and systems**



**Innovative cooling technologies** that deliver lower battery temperatures during operation and charging **to ensure an extended life-cycle**



Lightweight modular solutions designed following an **eco-design approach to allow subsequent disassembly, recycling and reuse**



Advanced remote control, maintenance and troubleshooting of each battery module through **a flexible advanced Battery Management System (BMS) that ensures safety** even at higher peak energy densities



+50%

An **improvement of the Peak Energy Density** by around 50%.

+15%

A 15 to 20% **improvement over the full lifecycle.**

-20%

A 20% **weight reduction of the battery system.**



**Allow for fast charging while maintaining or improving battery capacity and useful life.**

-25%

A 25% **charging time reduction** with a 150 kW charger.



**Extensive knowledge improvements in thermal management systems and second life / recycling.**



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Do you have concerns with battery range, cost, long-term reliability and excessive charging times? ALBATROSS has a sustainable solution!



The proposed solutions will develop the next generation of battery packs for electric vehicles (EVs)



The technological developments will centre around a combination of smart battery modules along with lightweight multi-material structures, delivering an unprecedented level of safety and performance



The solutions will allow for a proper industrial integration and significant life-cycle improvements beyond existing solutions



**Significant improvement in the performance of EVs**



**Overcome the uncertainty of range.**



**Bigger attractiveness of EVs** with reduced charging times and extended battery life.



**In line with Circular Economy goals.**



Improved **dismantling and reuse / recycling approaches.**

