

## EUROPEAN COMMISSION FINANCES A 10 MILLION EURO PROJECT TO CREATE A NEW PROCESS FOR RECOVERING CRITICAL RAW MATERIALS FROM ELECTRIC VEHICLE BATTERIES

- Funded through the Horizon Europe Programme and due to the strategic importance of the European Union reducing its dependence on critical raw material imports, the BATRAW project will help guarantee a stable supply chain to support the expected growth in the electric mobility market.
- Two pilot tests will be developed to recover the cobalt, nickel, manganese, lithium, graphite, aluminium, and copper contained in these batteries.

**Brussels, 30 June 2022 – The European Commission finances with more than 10 million euros** a project to develop new technological processes for the recovery of critical raw materials contained in electric vehicle batteries, through the **Horizon Europe programme**. A consortium of 18 partners from seven countries will develop this project, known as BATRAW, which is of strategic importance for the EU in reducing its dependence on imports of these critical raw materials, as well as being able to guarantee a stable supply chain in view of the expected growth of the **electric mobility market** in Europe in the coming years.

The **4-year** project is aligned with the objectives of the proposed EU Regulation on **batteries and waste batteries**. This regulation, now under discussion, would require all batteries placed on the EU market, including those for electric and hybrid vehicles to be managed in a sustainable manner at the end of their useful life and serve as a source of secondary raw materials for sectors such as the automotive and renewable energy and low-carbon technologies.

The BATRAW project includes **two pilot tests** with **electric vehicle batteries**, but these can be extended, depending on the results, to other types of batteries, including domestic batteries, to recover all the metals and materials contained in them, i.e. cobalt, nickel, manganese, lithium, graphite, aluminium, and copper. Key information captured during the project will be made accessible to all stakeholders via a digital battery passport, stored on the Minespider blockchain.

The first pilot will take place at Pamplona (Spain) and hosted by BeePlanet. It will apply **semi-automated processes** to the handling of these batteries to **separate up to 95% of their components**, including cells and modules suitable for reuse. The second pilot will be implemented at Bessines sur Gartempe (France) at the Orano facility. It will implement a mechanical pre-treatment and hydrometallurgical technology to improve the separation of the materials contained in the so-called black mass (a substance composed of non-ferrous metals resulting from the shredding of the batteries), to separate between 90%-98% of the graphite, aluminium, and copper.





The project, which kicked off on 1<sup>st</sup> May with the first consortium meeting, includes a first phase focused on the development of eco-design guidelines that favour the repair and dismantling of batteries, as well as best practices for the safe handling and transport of these wastes. The project will also create a prototype battery from the recovered raw materials and a digital battery passport to capture and communicate key information throughout the battery life-cycle, including the sourcing, processing, (re-)use and recycling of components. In a final phase, the partners will analyse the feasibility of a business plan for the EU-wide exploitation of these new battery dismantling and recycling processes. Policy recommendations based on the project's results to feed ongoing regulatory developments will also be produced.

A word from the coordination team of BATRAW: "We're excited to help guide such an important project that helps tackle this societal challenge. The macrotrend of increased battery use, particularly in the mobility sector represents a huge challenge in the push to create a more circular Europe. The EU has a great opportunity to become a global leader in battery dismantling and recycling".

The consortium lead by <u>Acondicionamiento Tarrasense Asociación</u> (Leitat) (Spain), also includes <u>BeePlanet Factory</u> (Spain), <u>Centre for European Policy Studies</u> (Belgium), <u>Centro De Experimentación y Seguridad Vial Mapfre</u> (Spain), <u>Comanai</u> (Spain), <u>Commissariat a l energie atomique et aux energies alternatives</u> (CEA) (France), <u>Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V.</u> (Germany), <u>Ford Otomotiv Sanayi</u> (Turkey), <u>Indumetal Recycling</u> (Spain), <u>Isle Utilities</u> (The Netherlands),<u>Minespider</u> (Germany), <u>MTB</u> <u>Manufacturing</u> (France), <u>Orano</u> (France), <u>POSCO Holdings</u> (South Korea) <u>Recyclia</u> (Spain), <u>Renault</u> (France), <u>Technische Universitaet Braunschweig</u> (Germany) and <u>Torrecid</u> (Spain).

The BATRAW project (grant agreement 101058359) has a **total budget of 13,212,811** million euros of which 10,236,986 euros are financed by the European Commission in the Horizon Europe framework programme, the EU's main funding programme for research and innovation for 2021-2027.

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