

PERTE VEC- RECBATTERY

RESEARCH FOR OBTAINING NEW PROCESSES AND PRODUCTS AND RECOVERY OF MATERIALS FROM WASTE BATTERIES FOR ELECTRIC VEHICLES

The Challenge

The RECBATTERY project is part of the **HUB-dCO2 tractor project (VEC-01000-2022-7)**, which aims to dynamize the value chain in the automotive sector, including waste management, designing and producing a full range of components and electric mobility vehicles, allowing multi-reference and multi-brand manufacturing (**VEC-020100-2022-203**).

With the irruption of the **Electric and Connected Vehicle (VEC, in Spanish)**, a wide and new field of waste is going to be produced. This primary project aims to acquire **new knowledge** related to the recovery of materials and obtaining new products derived from the manufacturing **process of batteries for the VEC, and until the end of their useful life**.

The Solution

Solutions have been sought for three types of waste, generated at different stages of the process chain until the end of battery life.

1. We have investigated how to **recover valuable metals (Ni, Co, Mn and Li)** contained in waste from the manufacture of Li-ion batteries, in such a way that it is possible to reintroduce them into the production chain as secondary materials.
2. The **valorization of wastes** generated in the extraction of lithium, such as analcime, or zeolitic compounds, has been studied through their conditioning and use in the construction industry.
3. It has been studied the **obtaining and purification of residual sodium sulphate**, coming from the obtention of precursors and the valorization of black mass, to introduce it in the market, as a product.

Benefits

Three companies of the TRADEBE Group have participated in this project: GRUPO TRADEBE MEDIOAMBIENTE, LUNAGUA and LIMPIEZAS NERVIÓN.

The acquisition of the **Know-How** is an opportunity for the company to present solutions to potential customers, in order to obtain a reduction in the environmental pollution derived from the battery waste generated in their processes.

This would allow to stand out from the competition, being a reference in the field of VEC battery recycling and generating a new line of business, with a high projection, for the TRADEBE Group.

Cost: GTMA: 586.000,00 €, LUNAGUA: 432.928,00 € and LINERSA: 167.090,00 €

Duration: 01/06/2022 - 30/06/2025

Crew members:

GTMA: Jose Casañas, Cecilia Parra, Xavier Fragua, Raúl Beato, Adrián Roldán, Claudia Gómez, Judith Ferré and Oscar Fernández.

LUNAGUA: Sergio Becerril, Jesús Curto, Lucia Achurra, Visitación San Martín, Virginia Matanza, Noelia Muñoz, Mariano Garcia, Jose Pavón, Yolanda Guerra and Gonzalo Mañueco.

LINERSA: Ana Iglesias, Álvaro de Pablo, Raquel Vinuesa and Iñigo Alonso.

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