RENOVATE - A CIRCULAR AND CHEMISTRY-NEUTRAL APPROACH FOR RECYCLING AND RECOVERY OF BATTERY WASTE FEEDS

First Press Release

Pavia (Italy) – 8th and 9th February 2024. The members of the RENOVATE project gathered two consecutive days for its official kick-off meeting at the University of Pavia. The meeting aimed at planning the first and upcoming research activities and discussing the expected outcomes that will boost the recycling and re-use of batteries, cell materials, and related components. The ultimate goal is to foster new circular economy solutions for the European battery value chain.

RENOVATE is funded by Horizon Europe, the European Union's key programme for Research and Innovation, part of which addresses Climate, Energy, and Mobility.

RENOVATE consortium during the kick-off meeting at the University of Pavia, Italy (February 2024).

The meeting was hosted by the project coordinator, the National Interuniversity Consortium of Materials Science and Technology - INSTM, the biggest network in Italy working on material research, involving 52 Italian universities and 3000 researchers. In it participated Politecnico di Milano, Iberian Energy Storage Research Center – CIAEE, Helmholtz Institute Ulm HIU Electrochemical Energy Storage, founded by the Karlsruhe Institute of Technology, SYENSQO, SVOLT, BALance Technology Consulting, ERP Italia Servizi, LOMARTOV, FAAM, and Organik Kimya, including the University of Pavia and the University of Milano-Bicocca as associated partners.

RENOVATE members, through their direct involvement in circular batteries and chemical processing, focus on recycling processes and performance, to achieve the closed-loop circular approach. In parallel, they aim to communicate and disseminate their work to a large audience, specialists, and non-specialists for a wider impact of the project.

The project consortium had the opportunity to visit the R²BATT Lab "Batteries Recycling and Reuse" of the Department of Chemistry of the University of Pavia and see the R&D laboratory in which several RENOVATE activities will be performed.

RENOVATE members finished the meeting by visiting the R²BATT R&D laboratory.

Funded by the European Union

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RENOVATE is a three-year project, whose final goal is to validate novel, innovative, and sustainable recycling technologies at Technology Readiness Level 4, meaning the technology will be validated at a laboratory level. The aim is also to accelerate the integration of recycled contents (including production scraps) as secondary raw materials into the manufacturing of new cells. The environmental and economic impacts of the technologies will be assessed using methods of the Life Cycle Assessment (LCA) and Life Cycle Costing (LCC), allowing to find strategies for a higher recovery performance.

RENOVATE is built upon the BATTERY2030+ Initiative, funded from the European Union's Horizon Europe research and innovation programme under grant number No. 101104022.

Additionally, RENOVATE will develop a strategic map of the key regulatory framework and align with several national and international initiatives to maximise the benefits of the battery value chain. The project will be strongly involved in the BATTERY 2030+ Initiative, a large-scale, long-term European research initiative that brings together the most important stakeholders in the field of battery research and development and will work with other EU-funded projects from the topic "New processes for upcoming recycling feeds (Batt4EU Partnership)".

Stay connected to the RENOVATE project and explore more about the implementation of such transformative solutions for the future of the battery value chain.

RENOVATE EU

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