

The use of green hydrogen in metallurgical processes

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Orzel Bialy - battery recycling

Horizon Europe Matchmaking Event
Energy Research

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Orzeł Biały is a company that recycles lead-acid batteries

- ▶ We have a research and development center that deals with the implementation of new ideas and process optimization.
- ▶ We have a well-equipped laboratory for testing the chemical composition and phase structure.

Expertise

We cooperate with research units such as the AGH University of Science and Technology in Kraków, the Silesian University of Technology in Gliwice, and the Institute of Non-Ferrous Metals in Gliwice.

We have led or we have conducted consortia in projects of the company-development, leading both nationally and internationally.

Reduction of CO₂ emissions by using green hydrogen in lead pyrometallurgy.

Project should cover such issues as: green hydrogen production, hydrogen storage and the use of hydrogen in the reduction of metals, and in particular, lead with the use of hydrogen.

The biggest innovation of this project will be the replacement of the methane gas which is currently used in hunts' kilns with green hydrogen which will be used as a metal reducer.

The current view says that water is a good metal reducer, while its use on an industrial scale is a big challenge.

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