







FlexIble, predictive and Renewable Electricity powered electrochemical toolbox For a sustainable transition of the catalyst-based European chemicaL industry

FUNDING BODY	Horizon Europe
GRANT AGREEMENT NUMBER (IF ANY)	101091715
WEBSITE	https://www.firefly-project.eu/
SOCIAL MEDIA	Linkedin Twitter

SHORT DESCRIPTION OF THE PROJECT

The catalyst-based chemical industry is evolving towards electrification. FIREFLY develops electrically driven technologies for metal recycling from spent, waste and off-specification catalysts available in Europe. This includes an experimental, modelling, optimisation and engineering approach, as well as the efficient integration of renewable electricity. Artificial intelligence tools for predicting best-processing routes will boost the competitiveness of the process.

>>> WHY IS IT IMPORTANT?

In a revolutionary way, the FIREFLY concept introduces Renewable Energy Sources in the manufacturing process of (electro) catalysts from secondary resources, which will lower significantly the production costs for the chemical industry. Using mainly spent, waste and off-specifications catalysts from different industrial applications, the project follows the road to circularity, proposing more sustainable and viable pathways for the chemical industry.

