



## SHORT DESCRIPTION OF THE PROJECT

Smart tools, such as artificial intelligence and machine learning, will turn the FIREFLY process more competitive. After modelling them, they will analyse rich data, making sure the most suitable chemical treatment is used to recycle each sample of waste metal-based catalyst. FIREFLY will also develop production methods for (electro)catalysts for innovative (electro)chemical processes, as sustainable alternatives to traditional production routes associated with high temperatures, use of chemicals and lack of circularity, which are not eco-friendly.

## WHY IS IT IMPORTANT?

**Economic impact:** Energy savings compared to the conventional production routes and Competitive costs of the new process technology and its integration in the processing line, including upstream and downstream.

Societal impact: Significant reduction of CO<sub>2</sub>, including the emissions related to the generation of electricity.

