



€ 11,078,742.50



48 MONTHS

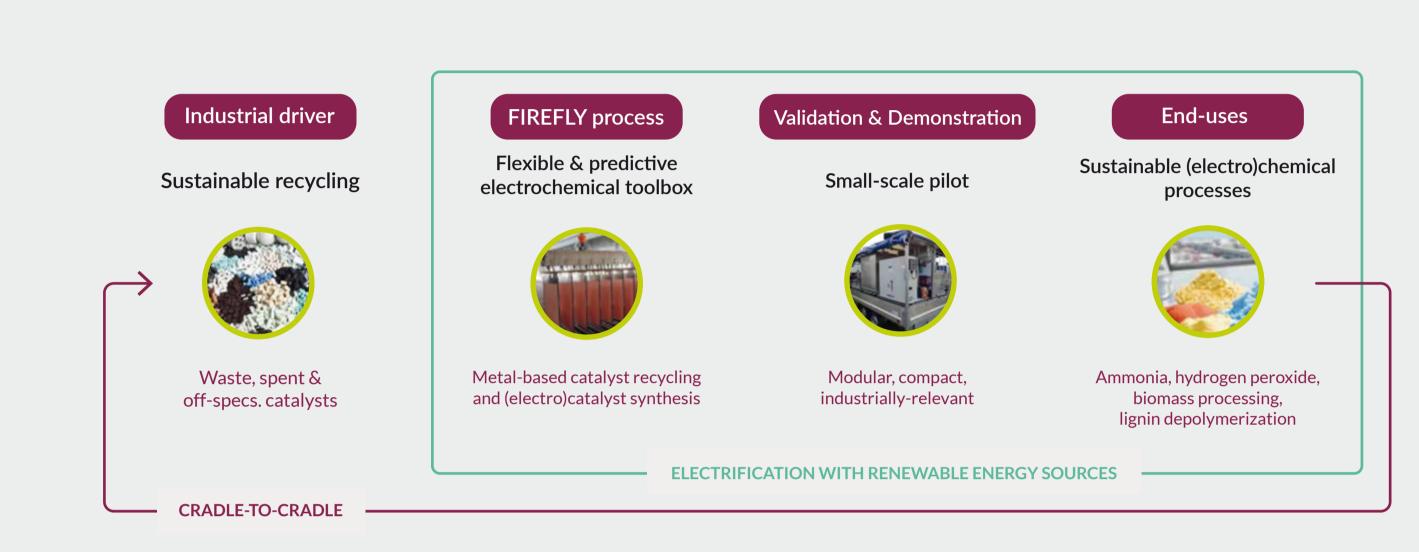




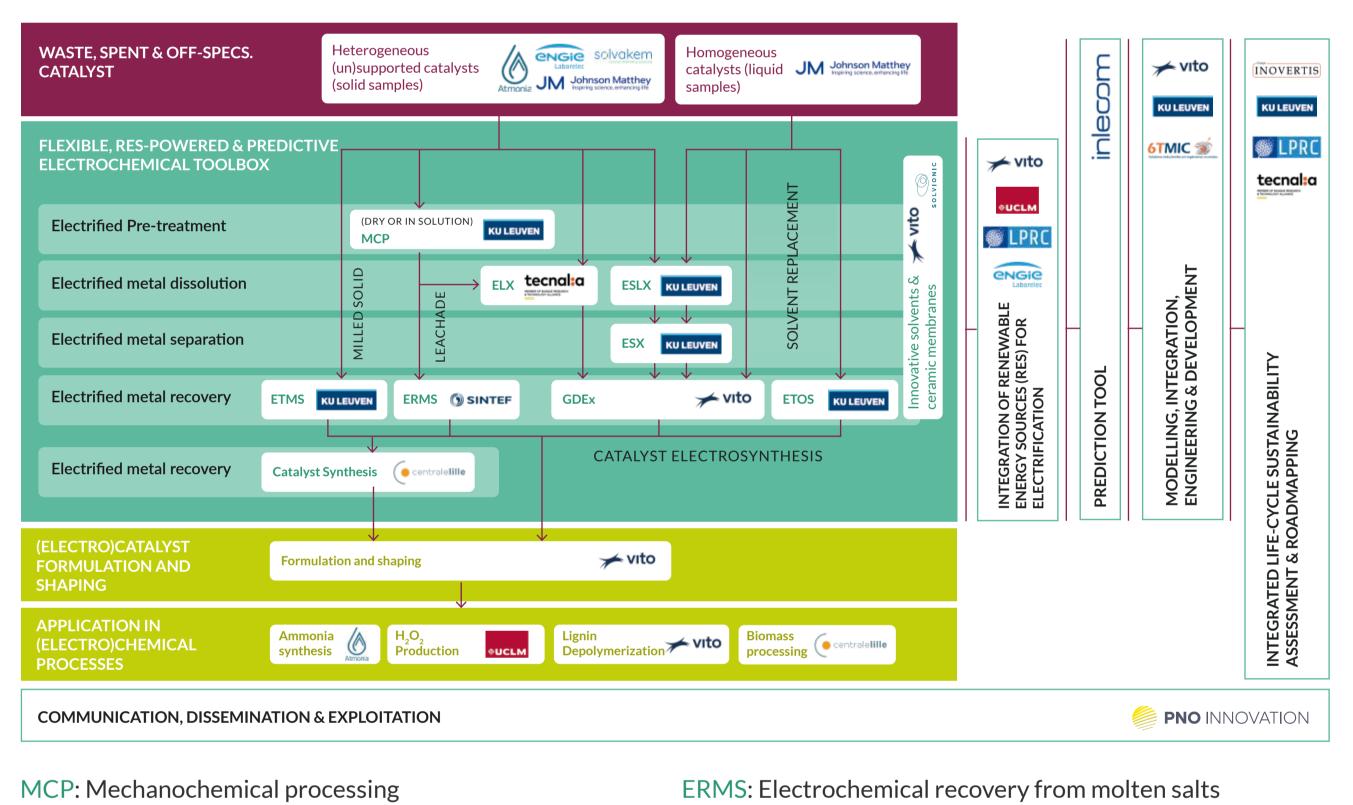
### **OBJECTIVE**

# Power-to-catalyst and chemicals fostered via electrochemical recycling

The FIREFLY project aims to electrify a large part of the chemicals value chain in a sustainable way (environmental, economic and social): power-to-catalyst and chemicals fostered via electrochemical catalyst recycling.



### CONCEPT



ELX: Electro-driven solvent extraction

ERMS: Electrochemical recovery from molten salts
ETMS: Electrochemical transformation in molten salts
ETOS: Electrochemical transformation in organic solvents
GDEx: Gas-diffusion electro-crystallisation

The FIREFLY concept proposes a revolutionary approach to (electro)catalyst manufacturing by introducing RES and utilising secondary resources such as waste and off-specification catalysts. This will simultaneously reduce the production costs and improve the sustainability of the chemical industry.

# IMPACT

# New electrochemical conversion routes for the chemical industry

By leveraging downstream synthesis of strategic metal-based (electro)catalysts, the FIREFLY project is expected to develop at TRL6 a sustainable process for the flexible, RES-powered electro-driven recycling of metals.

# COORDINATION TEAM

VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V. (VITO)

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# STAY IN TOUCH

in FIREFLY Horizon Europe





# WEBSITE

https://www.firefly-project.eu/

































