ICO2NIC

Full Title: Innovative electrochemical CO2 Conversion to Versatile Feedstock

HORIZON-CL4-2024-TWIN-TRANSITION-01-35

Aim:

The ICO2NIC strategy focuses on promoting CO2 capture and electrochemical conversion to transform industrial CO2 waste into valuable feedstock, with the goal of reducing energy consumption, cutting CO2 emissions and enhancing economic sustainability. The project aims to capture and valorise waste CO2, making CCU economically viable, and paving the way for substantial reductions in global emissions. ICO2NIC will combine advancements in CO2 capture technology based on polymer membranes with a new gas diffusion electrochemical cell to convert CO2 into formic acid. This formic acid will then be processed through biochemical methods to produce high-value goods and materials. ICO2NIC will create opportunities for substantial long-term CO2 capture in the EU refinery sector, supporting decarbonisation efforts.

Start date:
01/01/2025

End date:
31/12/2028