

Identificació del projecte

Nom del projecte

Conversion of Energy in Sustainable Chemicals (CESC)



Expedient numero

2023 CLIMA 00067

Descripció del projecte

CESC aims to transform CO₂ into compounds of economic interest, tackling the decarbonization of relevant industrial processes contributing to a safer and healthier environment, and the use of CO₂ as a primary source to produce chemicals of economic interest, such as CO, CH₄ and other C₂ products, that are currently produced from fossil fuel sources. For this, we propose the construction of a continuous flow catalytic reactor at TRL4 for the reduction of CO₂ into chemicals of interest. The project will comprise: (i) novel efficient and stable catalysts for the transformation of CO₂; (ii) solar-to-fuel conversion efficiency using solar cells to deliver sufficient power for the electrochemical reduction of CO₂; (iii) development of a pilot continuous flow modular and smart device integrating CO₂ electrochemical reduction, organic photovoltaic system as power supply and CO₂ capture systems; and (iv) data analysis and impact assessment to accelerate early implantation at a pilot plant.

Financiació

Entitat finançadora

Amb el suport del Departament de Recerca i Universitats, del Departament d'Acció Climàtica, Alimentació i Agenda Rural i del Fons Climàtic de la Generalitat de Catalunya

Import

360.000,00 €