

# SunCO<sub>2</sub>Chem

## PHOTOELECTROCATALYTIC DEVICE FOR SUN-DRIVEN CO<sub>2</sub> CONVERSION INTO GREEN CHEMICALS

SunCoChem project aims to provide the chemical industry with an alternative to produce oxo-chemicals without using raw materials derived from carbon oil.

The project is developing a solution based on a competitive tandem photoelectrocatalytic reactor to efficiently produce oxo-products from renewable energies based on CO<sub>2</sub>, H<sub>2</sub>O and solar energy in the presence of ionic liquids.

This will be achieved by process intensification coupling a solar-driven carbon dioxide reduction to CO/water oxidation to O<sub>2</sub> with C-C bond carbonylation reaction catalysed by novel multifunctional hybrid photoelectrocatalysts.



### Solar energy

Direct exploitation and utilization of solar energy



### Circular economy

Revalorisation of industrial waste streams and by-products



### Sustainable chemistry

Improved chemical energy conversion efficiency



### CO<sub>2</sub> conversion

Energy saving and CO<sub>2</sub> emissions reduction

SunCoChem addresses the need of the European Chemical Industry to reduce their dependence on carbon feedstock

Consortium:



Contact us:

**Maria Navarro**

Eurecat, Spain – Project Coordinator

[www.suncochem.eu](http://www.suncochem.eu)

[@SunCoChem\\_EU](https://twitter.com/SunCoChem_EU)

[info@suncochem.eu](mailto:info@suncochem.eu)



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 862192