

# Novel photo-assisted systems for direct Solar-driven redUction of CO<sub>2</sub> to energy rich CHEMicals

**Timeline** | 10/2020 to 09/2023

**ICIQ People** | [Galán-Mascarós Research Group](#)

**Overall Budget** | 3,941,507 €

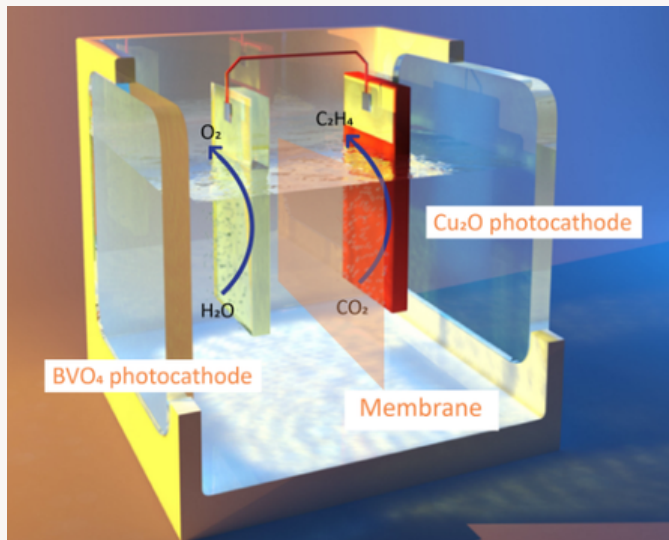
**Website** | <https://www.sun2chem.eu>

**ICIQ's Budget** | 323,750 €

**Call** | H2020-LC-SC3-2019-NZE-RES-CC

## SUMMARY

Ethylene is an energy-rich chemical produced from fossil fuels in industry, with high commercial value and a strong presence in the global market. Targeting ethylene as the final product, the EU-funded **SUN2CHEM** project aims to develop solutions that will result in efficient solar-driven CO<sub>2</sub> reduction. To do this, the project will develop all the components to be integrated into tandem photoelectrochemical cells and advanced photocatalytic reactors. It will also conduct environmental and social studies on the new technology in the context of a circular economy, its energy security impacts and the social acceptance of chemicals produced from sunlight conversion. The project will play a role in making us less dependent on fossil fuels and in reducing carbon emissions by CO<sub>2</sub> conversion.



*"Novel photo-assisted systems for direct solar-driven reduction of CO<sub>2</sub> to energy rich chemicals"*

## CONSORTIA

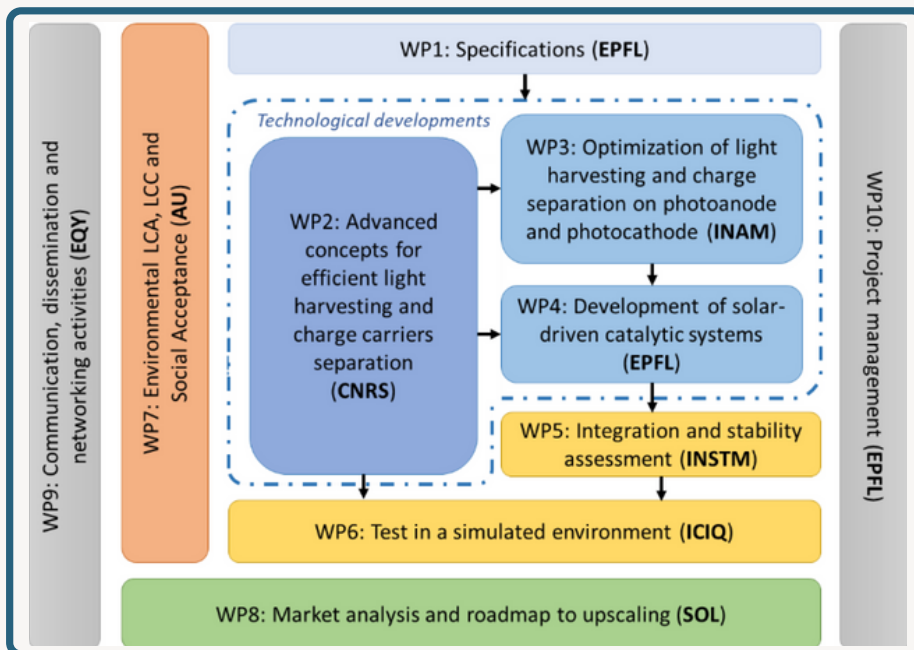
**EPFL**  
Project coordinator



Universiteit Leiden



## WORK PLAN



Follow us on our social media!