

DistributEd Chemicals And fuels production from CO₂ in photoelectrocatalytic DEvices

Timeline | 05/2020 to 04/2024

ICIQ People | J.R. Galán-Mascarós Research Group
Palomares Research Group

Overall Budget | 5,358,672.49 €

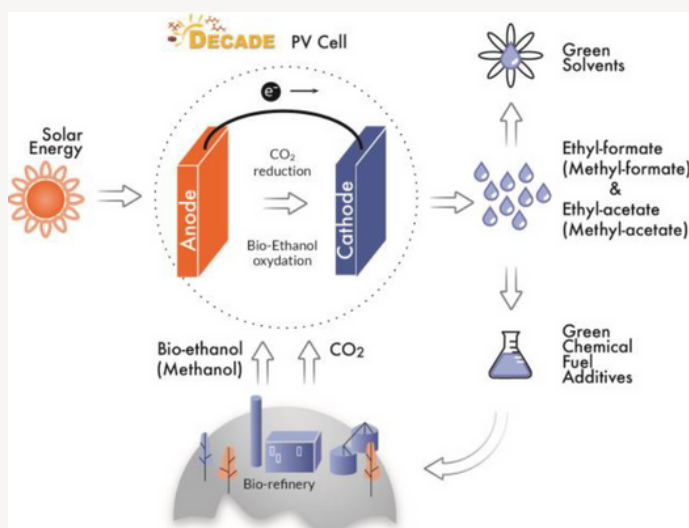
Website | <https://www.decadeproject.eu/>

ICIQ's Budget | 538,937.50 €

Call | H2020-NMBP-ST-IND-2018-2020

SUMMARY

The photoelectrocatalytic (PEC) reduction of CO₂ into chemical fuels in water is a promising route to mitigate the energy crisis and global warming issues. The EU-funded **DECADE** project focusses on a new PEC approach, avoiding water oxidation as anodic reaction. Novel PEC technology will be developed using alcohols and waste CO₂ as feed. Different applications are investigated, including green refinery as well as distributed green solvent production and use to lower the carbon footprint in methanol plant. The project involves top-level scientists in the field and an international collaboration with Japan to allow the best possible benchmarking for the novel approach developed.

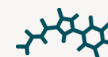


CONSORTIA

ERIC
Project coordinator



HYSYTECH
FILLING THE GAP



JÜLICH
Forschungszentrum

NextChem
Maire Tecnimont for Energy Transition



CICbiomaGUNE MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

CASALE

MOTOR OIL

UniSMART
Fondazione Università di Padova

MERT CONSULTING HOUSE
Deploying Excellence Together

THE UNIVERSITY OF TOKYO

ekodenge

FILR
surface care solutions

PLANNING

WORK PACKAGES	Year 1	Year 2	Year 3	Year 4
WP0. SPECIFICATIONS	■ ■ ■ ■			
WP1. ELECTRODE DESIGN	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	
WP2. PEC DESIGN	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	
WP3. ASSESSMENTS AND EXPLOITATION	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■
WP4. SCALE-UP & PROTOTYPE		■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■
WP5. VALIDATION			■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■
WP6. BENCHMARKING		■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■
WP7. PROJECT COORDINATION AND MANAGEMENT	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■ ■

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