

FLOW PHOTO CHEM

Sustainable chemicals from sunlight and carbon dioxide

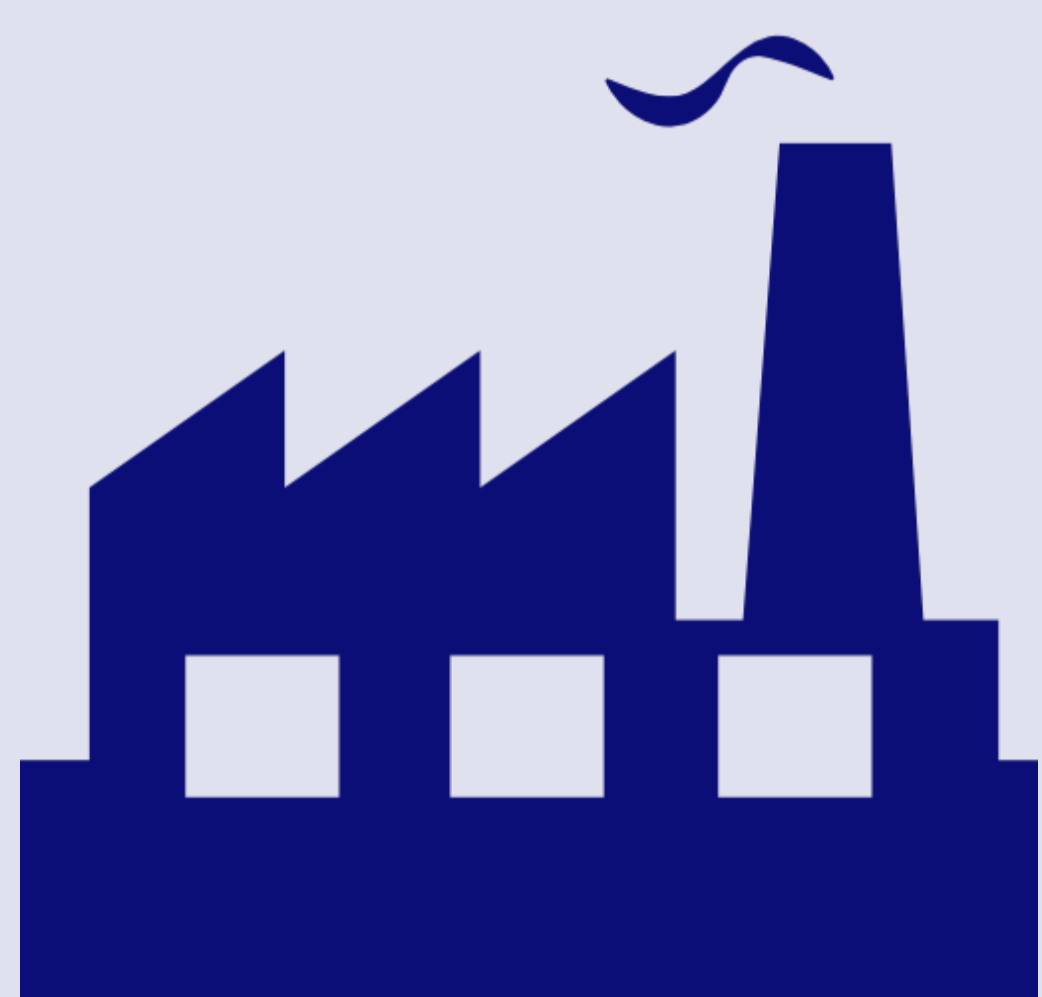


www.flowphotochem.eu



@flowphotochem

European Chemicals



>€500 billion sales
>1 million direct jobs
Highly polluting industry

European Climate Targets



2030: ↓ 40% CO₂ emissions
2050: Climate neutral
economy

Sustainable Development Goals



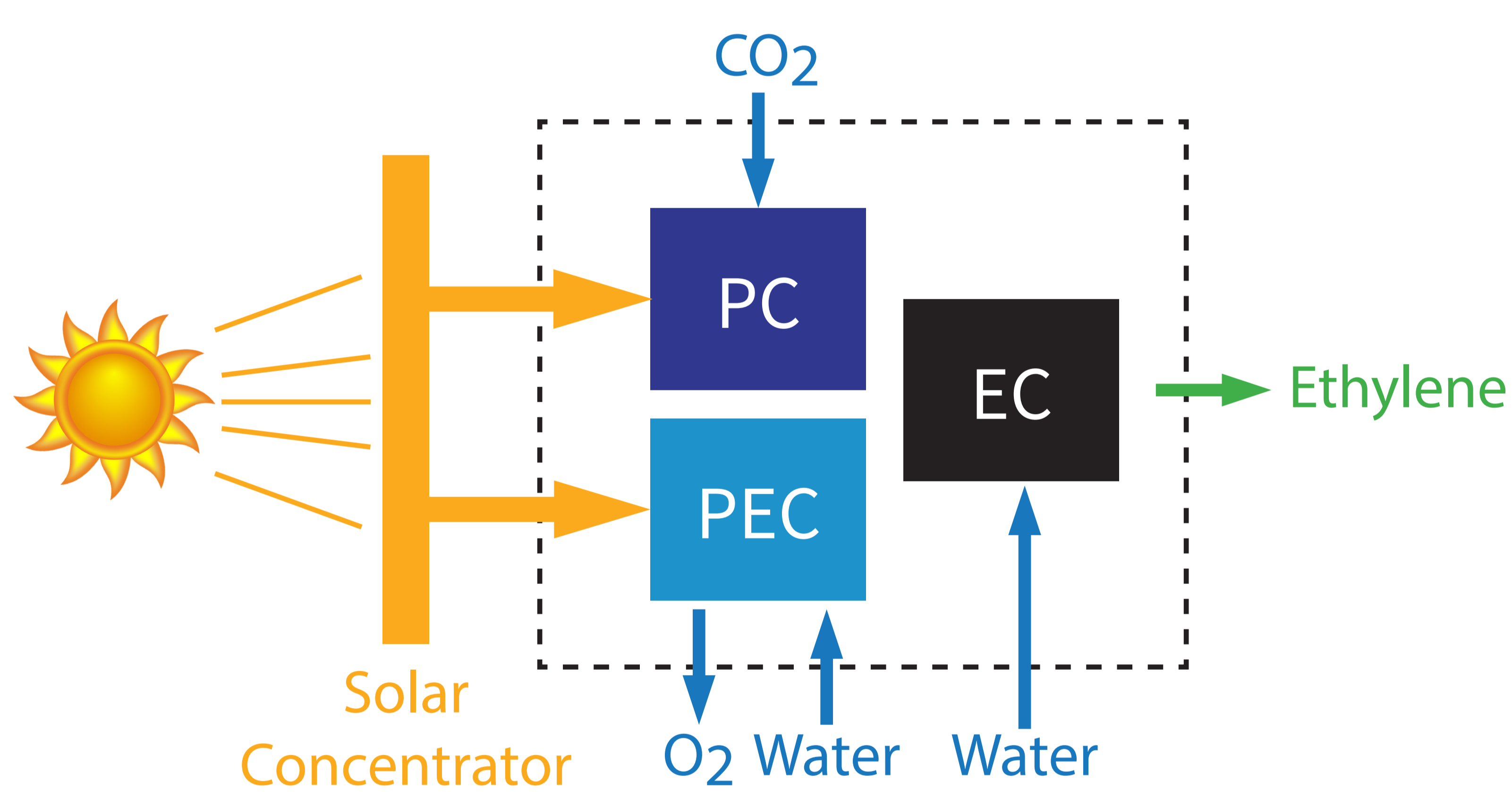
Reduced fossil fuel reliance
Sustainable manufacturing
EU-Africa cooperation

FlowPhotoChem is a multi-national, EU-funded research project developing new and more sustainable ways to manufacture chemicals.

The project addresses key challenges faced when using solar energy and advanced catalysts to convert carbon dioxide (CO₂) into valuable chemicals.

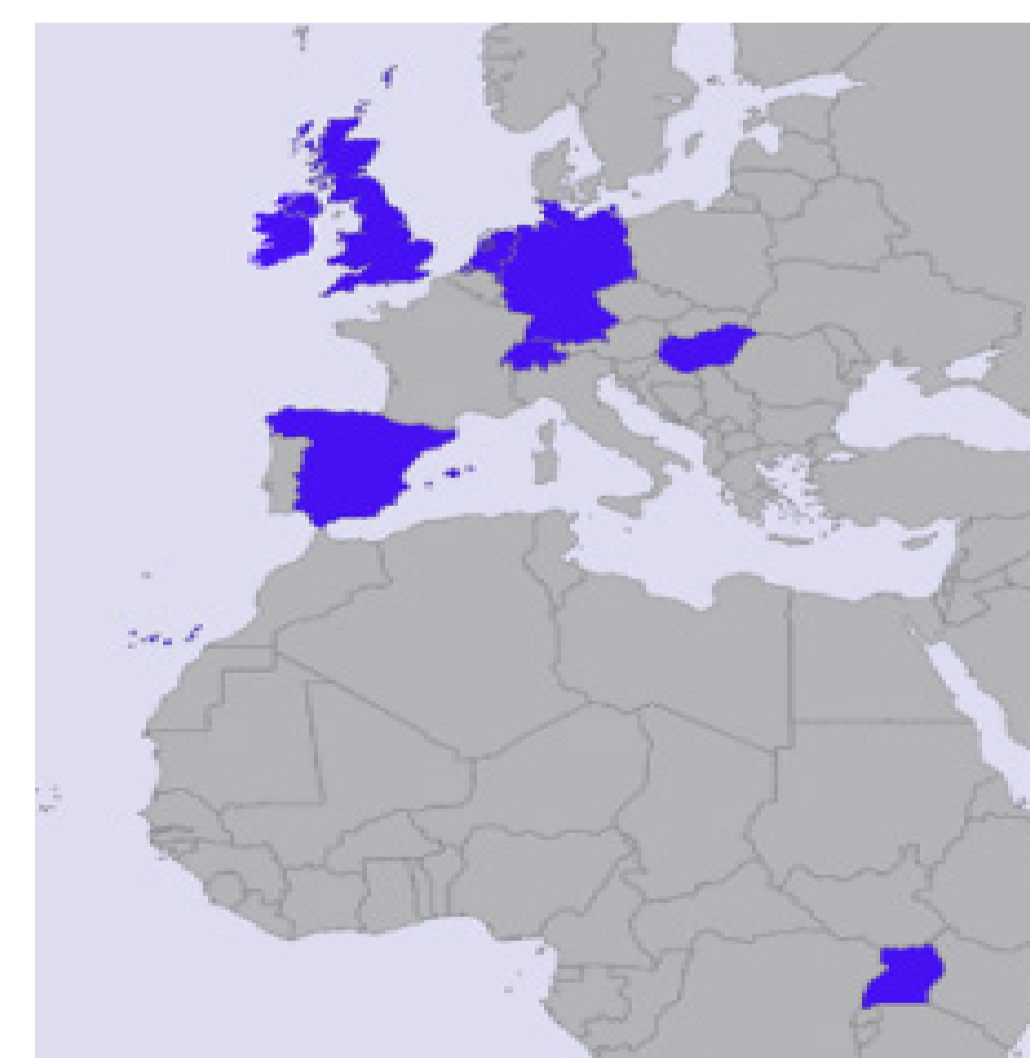
FlowPhotoChem will:

- Develop three types of modular flow reactors (photo-electrochemical (PEC), photo-catalytic (PC) and electrochemical (EC)),
- Use advanced computer modelling to find more affordable and durable catalysts and optimise reactor performance,
- Develop an integrated demonstrator reactor from the modular flow reactors to manufacture ethylene, a high value chemical, using solar energy and CO₂.



Embed
Life
Cycle Analysis
in design
process

Foster
international cooperation



Engage with industry

to plan for
commercialisation



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