www.flowphotochem.eu

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Sustainable chemicals from sunlight and carbon dioxide

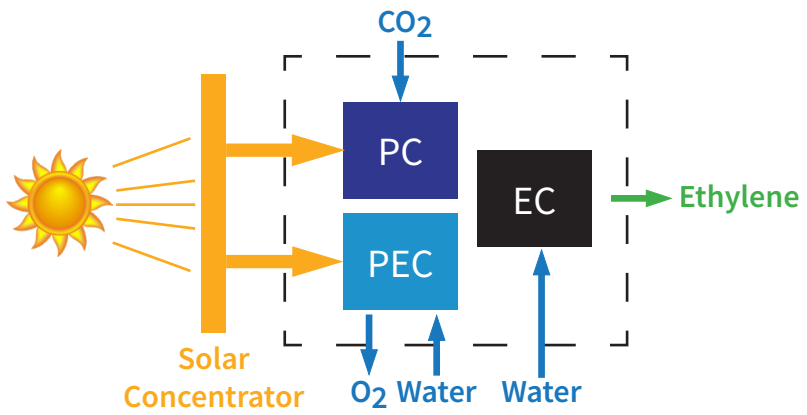
European Chemicals	European Climate Targets	Sustainable Development Goals
>€500 billion sales >1 million direct jobs Highly polluting industry	2030: ↓40% CO_2 emissions 2050: Climate neutral economy	Reduced fossil fuel reliance Sustainable manufacturing EU-Africa cooperation

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 (CO_2) into valuable chemicals.

Three types of modular flow reactors will be developed: photo-electrochemical (PEC), photo-catalytic (PC) and electrochemical (EC)).

They will be integrated in a demonstrator reactor to manufacture ethylene, a high value chemical, using solar energy and CO_2.



Life Cycle Analysis embedded in design process

Fostering international cooperation

Engagement with industry to plan for commercialisation

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