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## Solar to Products 4,8 M€ (2016-2022)

"Using solar energy to drive conversion of CO<sub>2</sub> and H<sub>2</sub>O to the formation of chemical building blocks"

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Title	Partners	Started*
Photo Thermocatalytic conversion of CO <sub>2</sub> and H <sub>2</sub> O to methanol	UT Guido Mul, Syngaschem, Synchem by Shell, Gas Chemistry, Chemicals, Power & Energy	11.2017
CO <sub>2</sub> valorisation in biogas by Solar driven Plasma Reforming	DIFFER Gerard van Rooij, Shell	01.2018
An integrated device to directly convert sunlight, water, and CO <sub>2</sub> to syngas using only earth abundant materials	TU Delft Wilson Smith, UL, Shell	10.2017
Redox Mediators in Dye-sensitized Photoelectrochemical Cells for CO <sub>2</sub> -reduction	UvA Joost Reek, Merck	06.2017
Darwin's path towards sustainability: Exploring evolutionarily stable strategies in engineered biosolar cell factories	UvA Branco dos Santos, Merck, Photanol	09.2017
Vibrationally stimulated electrofuel production in a proton conducting solid oxide electrolyte cell	TU/e Richard van de Sanden, DIFFER, UT, Shell	09.2017
Design and optimization of a photoanode for solar fuel production	LU Francesco Buda, VU, SCM	06.2017
Electrochemical reduction of CO <sub>2</sub> to ethylene	UT Guido Mul, UL, UU, TNO and Shell, TNO	11.2017

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## Eerste resultaten

**Cyanobacterial acetic acid production**  
Darwin's path towards sustainability: Exploring evolutionarily stable strategies in engineered Biosolar Cell Factories (UvA)

**Co-electrolysis setup**  
Vibrationally stimulated electrofuel production in a proton conducting solid oxide electrolyte cell (DIFFER)

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## Solar to Products bijeenkomst

- Mid-term bijeenkomst Solar to Products projecten
  - Incl. bredere community (o.a. CO<sub>2</sub> Neutral Fuels)
  - Andere ontwikkelingen: SUNRISE, ECCM, sleuteltechnologieën, etc.
- Wanneer: oktober-november 2019 (datum wordt nog gezocht)
- Waar: DIFFER, Eindhoven
- Meer informatie, nieuwsbrief: [energie@nwo.nl](mailto:energie@nwo.nl)

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