

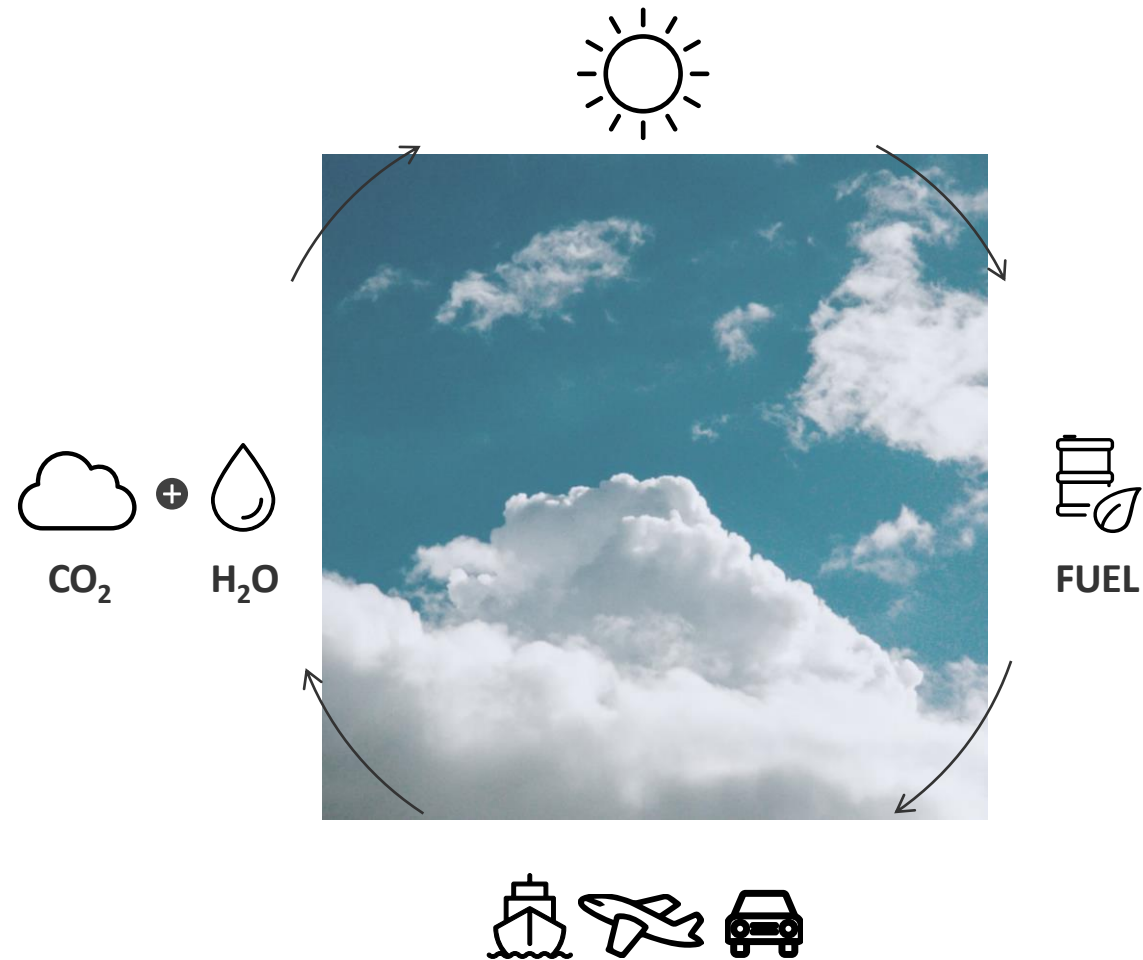




Our vision

Let's close the carbon cycle.

TURNING SUNLIGHT INTO FUEL.





Synhelion

TURNING SUNLIGHT
INTO FUEL.

Concentrated solar
system delivers
high-temperature
process heat.



Video: Solar tower IMDEA Energy Institute, Móstoles, ES



Synhelion technology

TURNING SUNLIGHT
INTO FUEL.

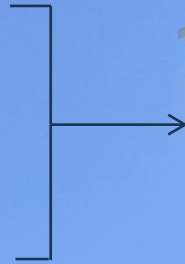
Synhelion uses solar heat to convert CO₂ and H₂O into synthetic fuels – so-called solar fuels.

Possible carbon sources:

- Biomass
- Recycled CO₂
- CO₂ from DAC

Possible water sources:

- Water from network
- Desalination
- DAC



SYNGAS
(H₂ + CO)

GASOLINE
DIESEL
JET FUEL
METHANOL



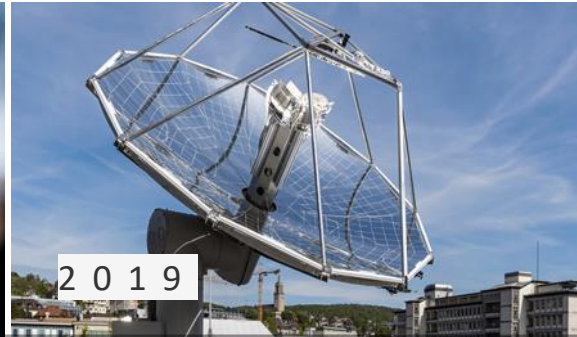


A record-breaking path to market

TURNING SUNLIGHT INTO FUEL.



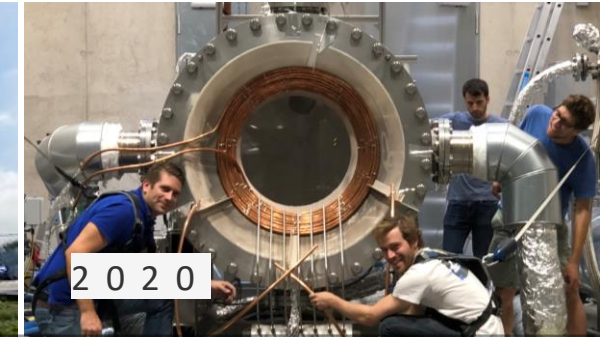
World's first solar jet fuel from H₂O and CO₂ in the lab



World's first carbon-neutral fuels from air and sunlight



Medium-scale demonstration under real field conditions



Full-scale demonstration of key components





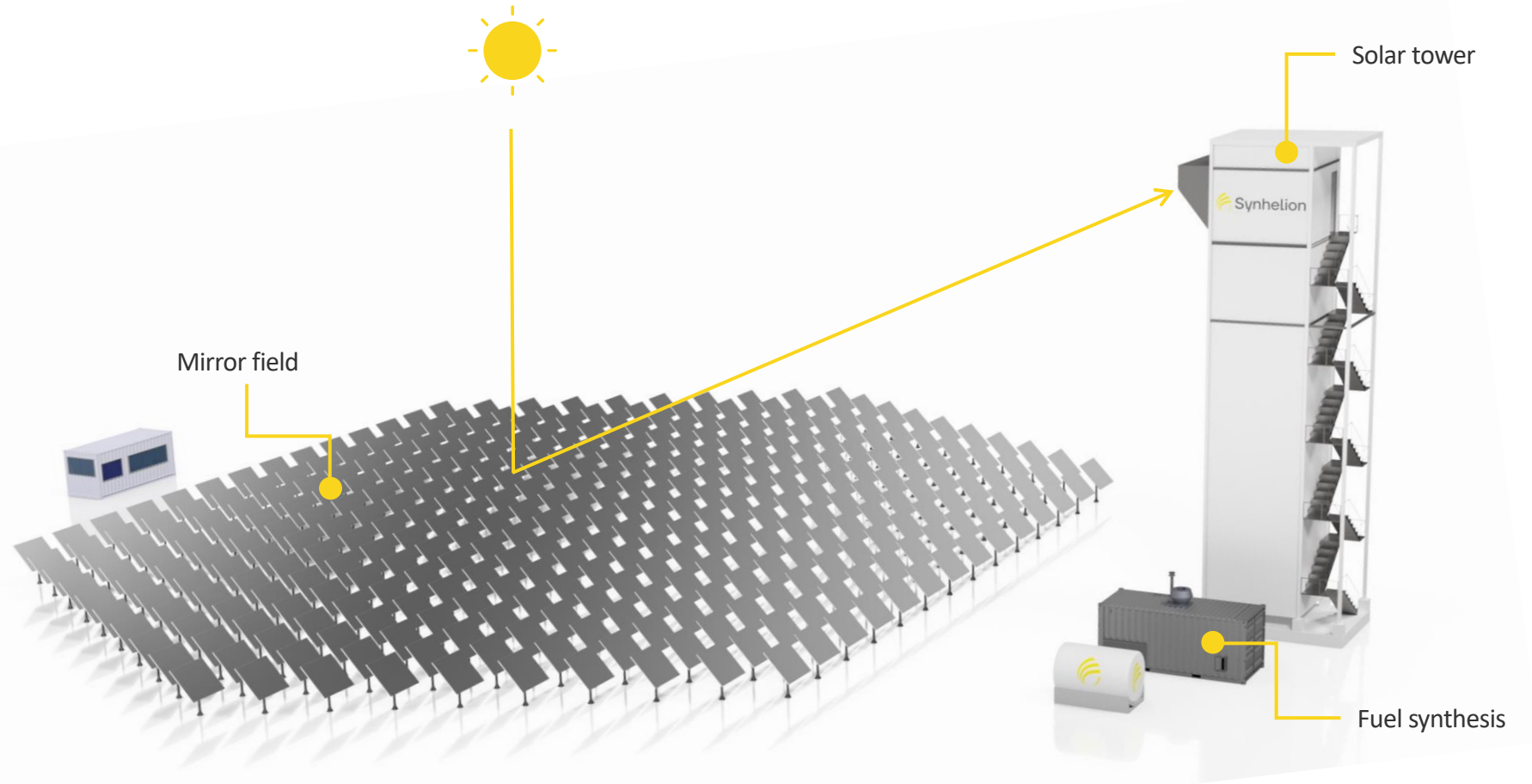
TURNING SUNLIGHT INTO FUEL.











2022/23: Industrial plant Jülich

TURNING SUNLIGHT
INTO FUEL.



Main specifications

-  1'800 m² mirror area
-  1 MW solar input power
-  10'000 l/y fuel demo batches

-  Status: fully financed
-  Construction / commissioning: 2022 / 2023
-  Customer: Lufthansa Group / Airport Zürich

Supported by:



on the basis of a decision
by the German Bundestag



Synhelion roadmap

TURNING SUNLIGHT INTO FUEL.

2021-2023

2023-2025

2025-2030

2040

= 50% of Switzerland's jet fuel consumption

= 50% of European jet fuel consumption



FIRST INDUSTRIAL PLANT

Building an industrial-scale plant to start fuel production

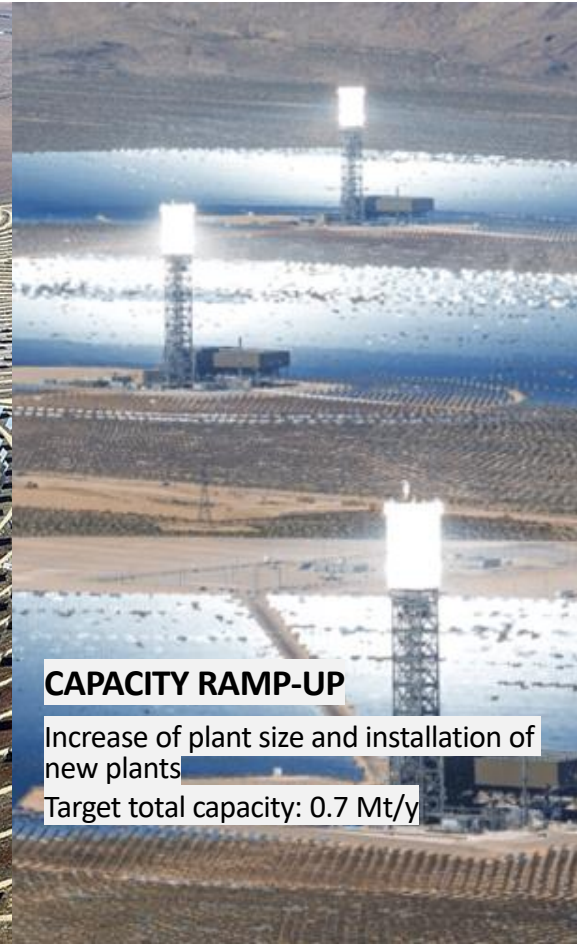
Capacity: ~10'000 l/y



FIRST COMMERCIAL PLANTS

First two commercial fuel plants

Capacity: 1 Mio L/y



CAPACITY RAMP-UP

Increase of plant size and installation of new plants

Target total capacity: 0.7 Mt/y



TOWARD NET ZERO

Ramp-up of production capacity

Target total capacity: 40 Mt/y





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