

SUNlight-to-LIQUID – SINTESIS DE HIDROCARBUROS LÍQUIDOS MEDIANTE MATERIALES POROSOS DE ESTRUCTURA OPTIMIZADA Y RECUPERACIÓN DE CALOR

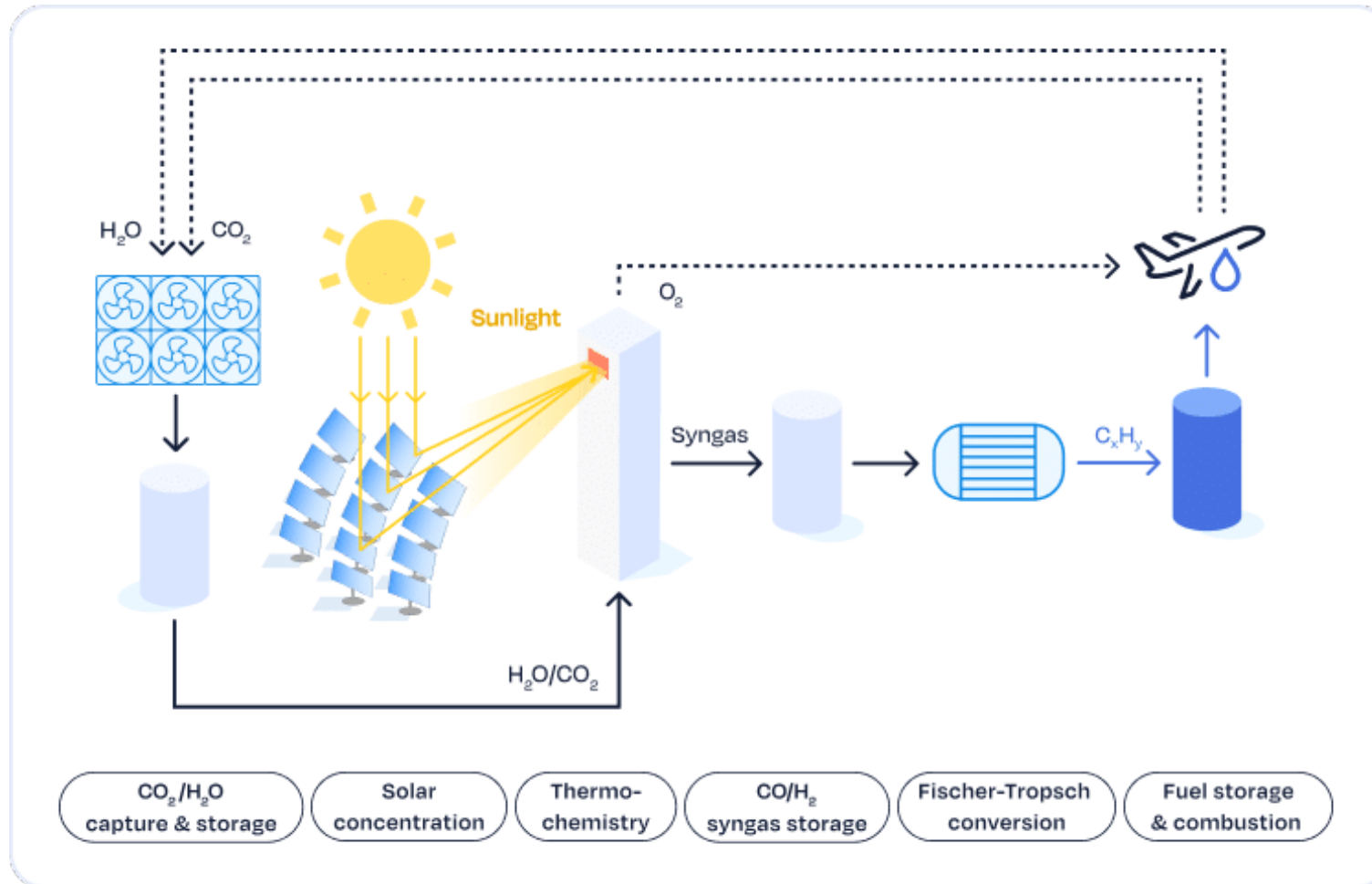
González-Aguilar J., Conceição R., Musig B., Fulgente V., Romero M.

CIES2026

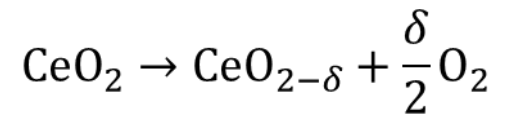
Almería, 23 a 25 de marzo de 2026

XX Congreso Ibérico y
XVI Congreso Iberoamericano
de Energía Solar





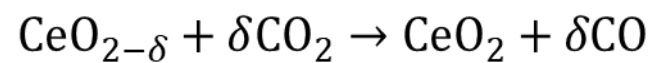
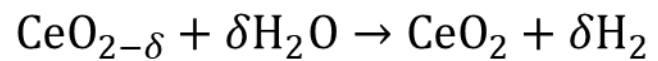
1era etapa: **Reducción**



1500 °C, vacío

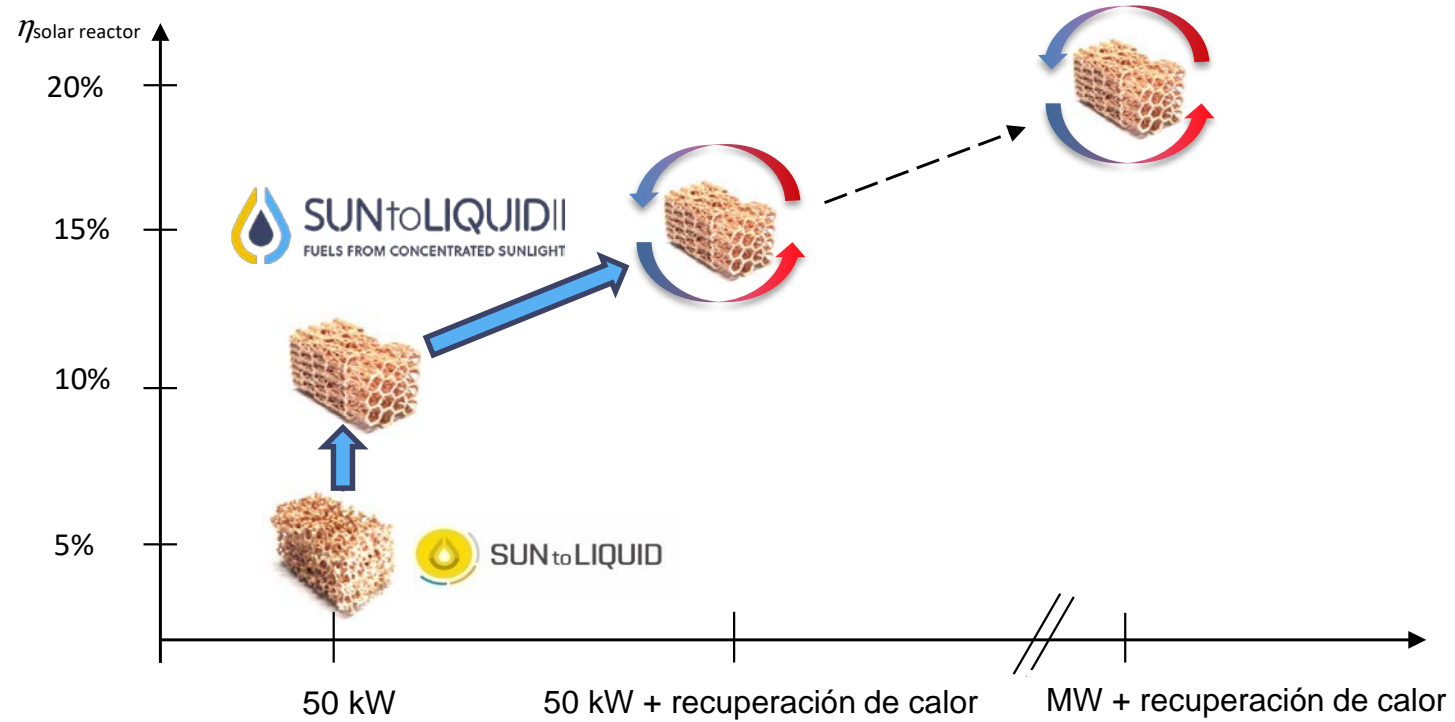


2a etapa: **Oxidación**



900 °C, presión atmosférica



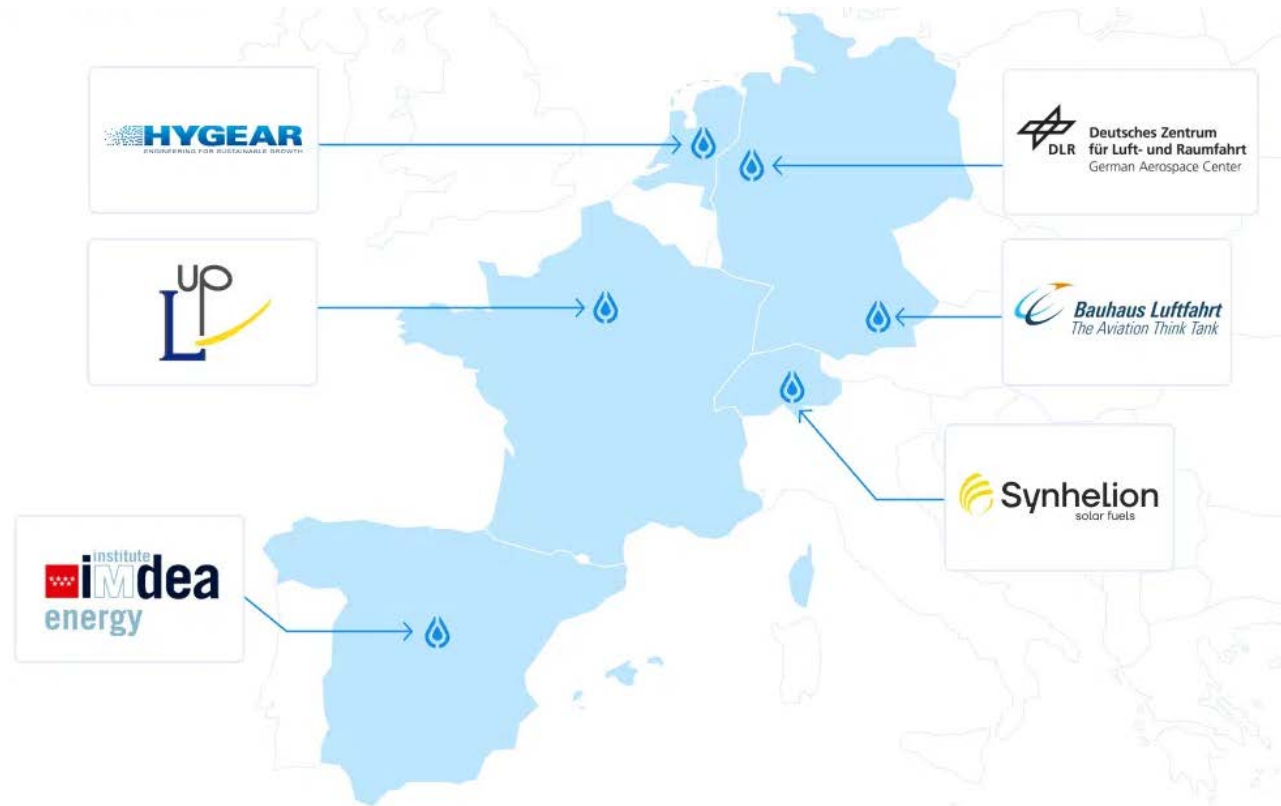


SUNlight-to-LIQUID - Efficient solar thermochemical synthesis of liquid hydrocarbon fuels using tailored porous-structured materials and heat recuperation

Funding Scheme	GA Number
Research and Innovation (RIA)	101122206

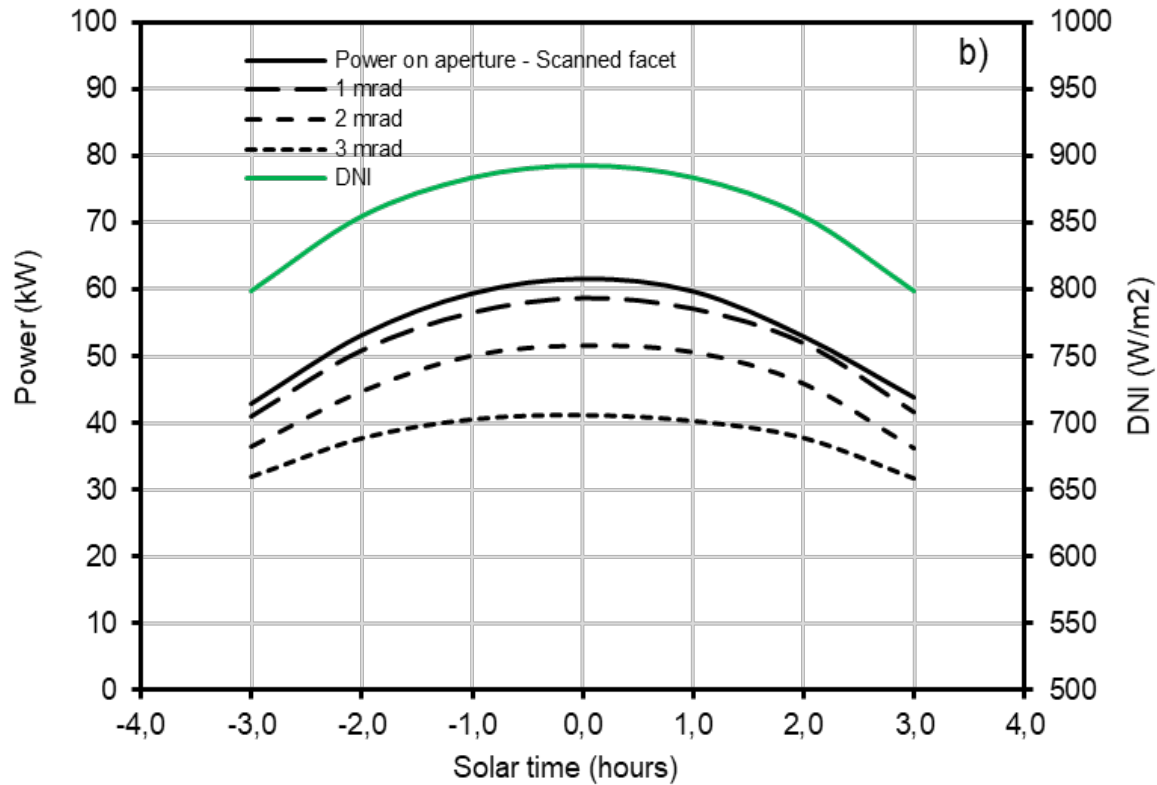
<p>Starting date</p> <p>01/11/2023</p> <p>Duration</p> <p>48 months</p>	<p>Investment in EU policy priorities</p> <table border="0"> <tr> <td>Digital agenda</td> <td><input type="radio"/></td> <td>Clean air</td> <td><input checked="" type="radio"/></td> </tr> <tr> <td>Artificial Intelligence</td> <td><input type="radio"/></td> <td>Climate action</td> <td><input checked="" type="radio"/></td> </tr> <tr> <td>Biodiversity</td> <td><input type="radio"/></td> <td></td> <td></td> </tr> </table>	Digital agenda	<input type="radio"/>	Clean air	<input checked="" type="radio"/>	Artificial Intelligence	<input type="radio"/>	Climate action	<input checked="" type="radio"/>	Biodiversity	<input type="radio"/>		
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Artificial Intelligence	<input type="radio"/>	Climate action	<input checked="" type="radio"/>										
Biodiversity	<input type="radio"/>												

<p>Total budget</p> <p>5.7 M€</p>	<p>EU grant</p> <p>4.88 M€</p>	<p>Grant from SERI Swiss State Secretariat for Education, Research and Innovation</p> <p>0.84 M€</p>	<p>GA number</p> <p>101122206 lump-sum</p>
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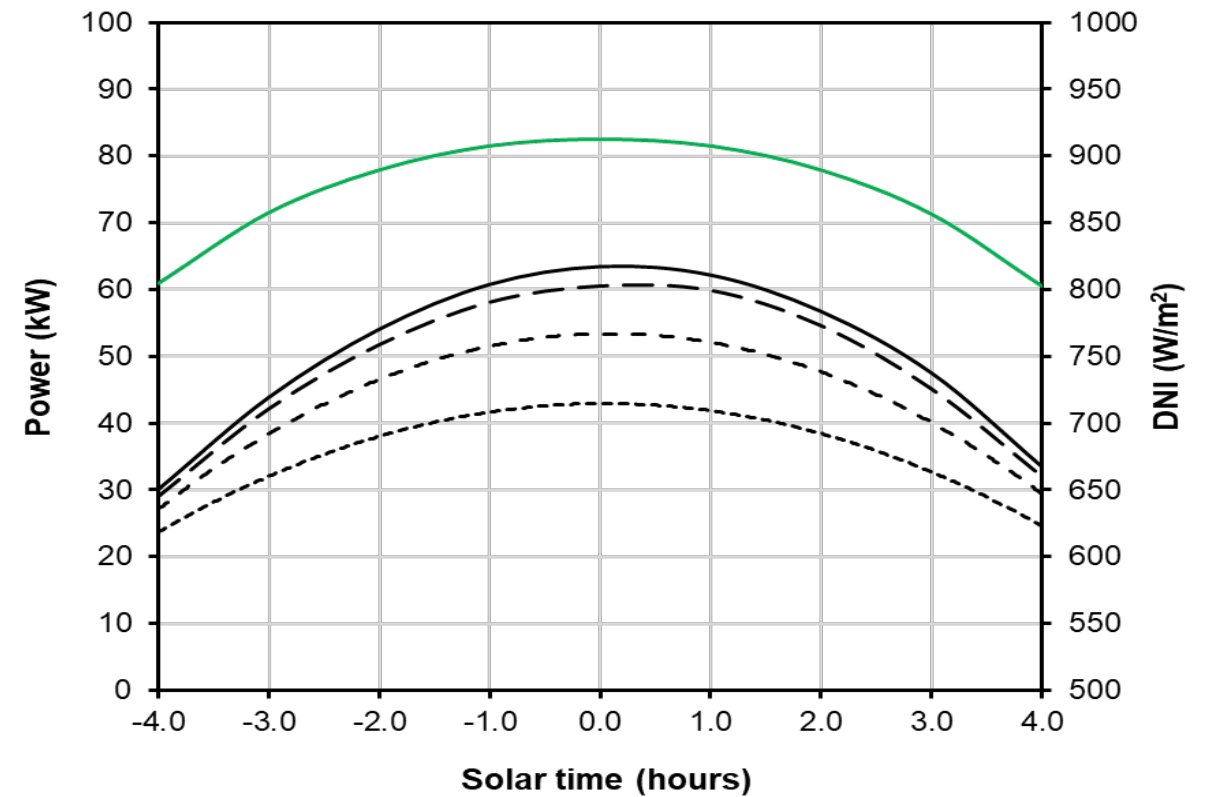


Optimización y mejora de un sistema de helióstato y torre de concentración solar de alto flujo

Equinoccio de primavera

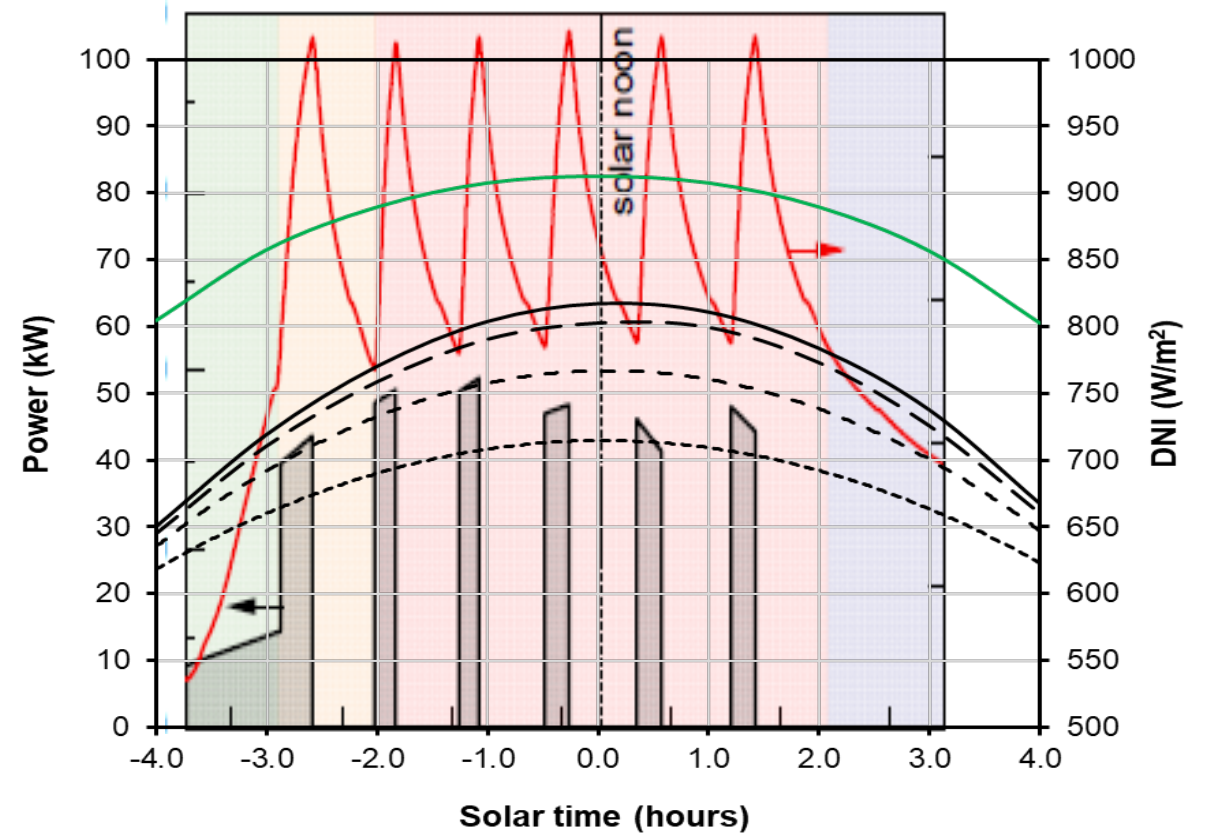
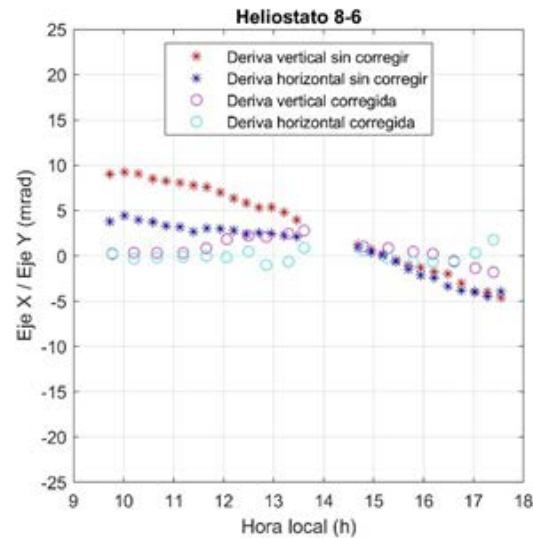
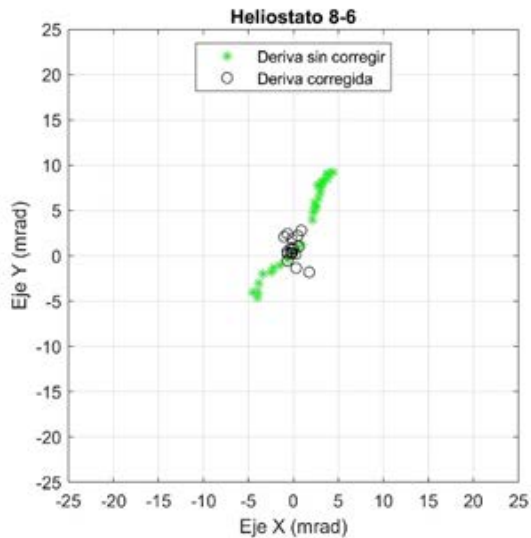


Solsticio de verano



Optimización y mejora de un sistema de heliostato y torre de concentración solar de alto flujo

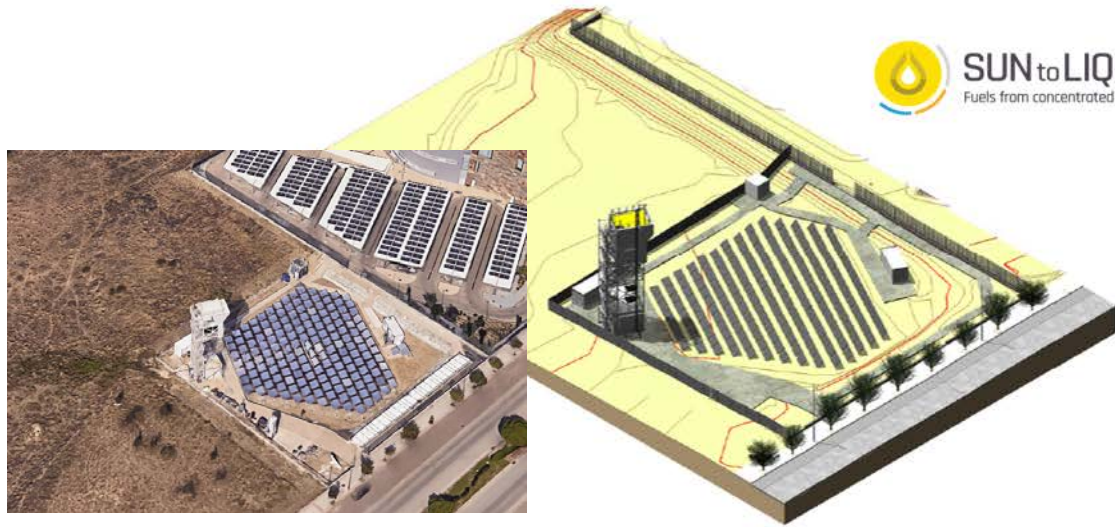
Solsticio de verano



- Error de apunte experimental inferior a 2 mrad
- Ensayos de 7 h en verano y 5 h en invierno



Mejora de las instalaciones



SUNtoLIQUID
Fuels from concentrated sunlight



SUNtoLIQUID II
FUELS FROM CONCENTRATED SUNLIGHT

3
IM01 FASE A. 3D NC ISO E



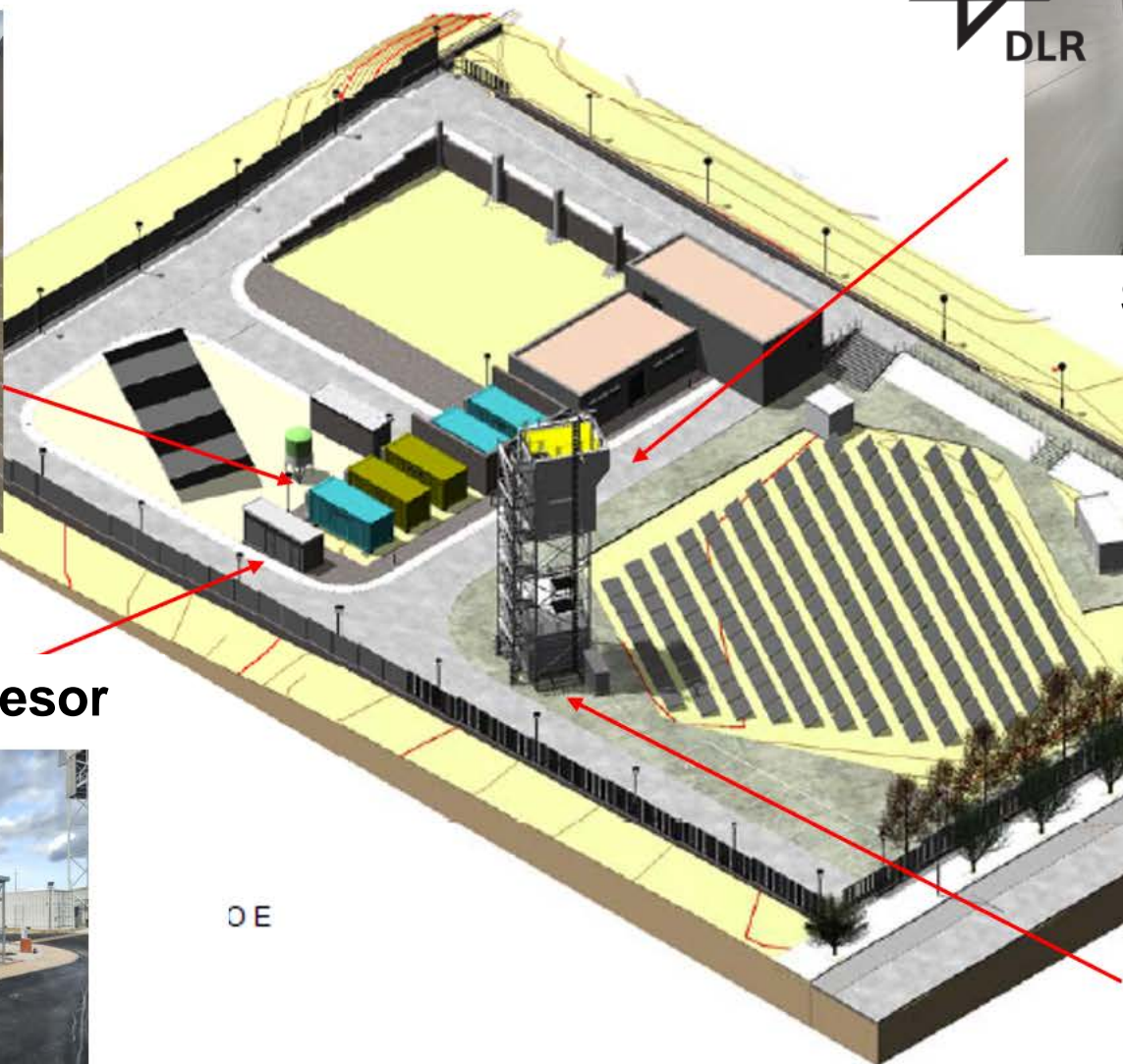
Works started in May. Expected completion by November 2025.

Preparación de las instalaciones Completado el 7 de noviembre



FT **HYGEAR**
THE GLOBAL HYDROGEN SOURCE

Gases - Compresor



OE



DLR



Sala de ensayos



Enfriadora 100 kW



TEC-2024/ECO-116

AGATA

PID2023-153368OB-I00



GA ID: 101083899



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the European Union



Schweizerische Eidgenossenschaft
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Federal Department of Economic Affairs,
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