



KHIMOD
ALCEN

Bio360Expo

**Pathways for
producing SAF**



Towards a net-zero world

An aerial photograph of a vast, rolling landscape of green hills and valleys. The terrain is covered in lush vegetation, with some areas appearing slightly brown, possibly due to dryness or different types of crops. In the distance, more hills are visible under a bright, hazy sky. The overall scene conveys a sense of natural beauty and environmental health.

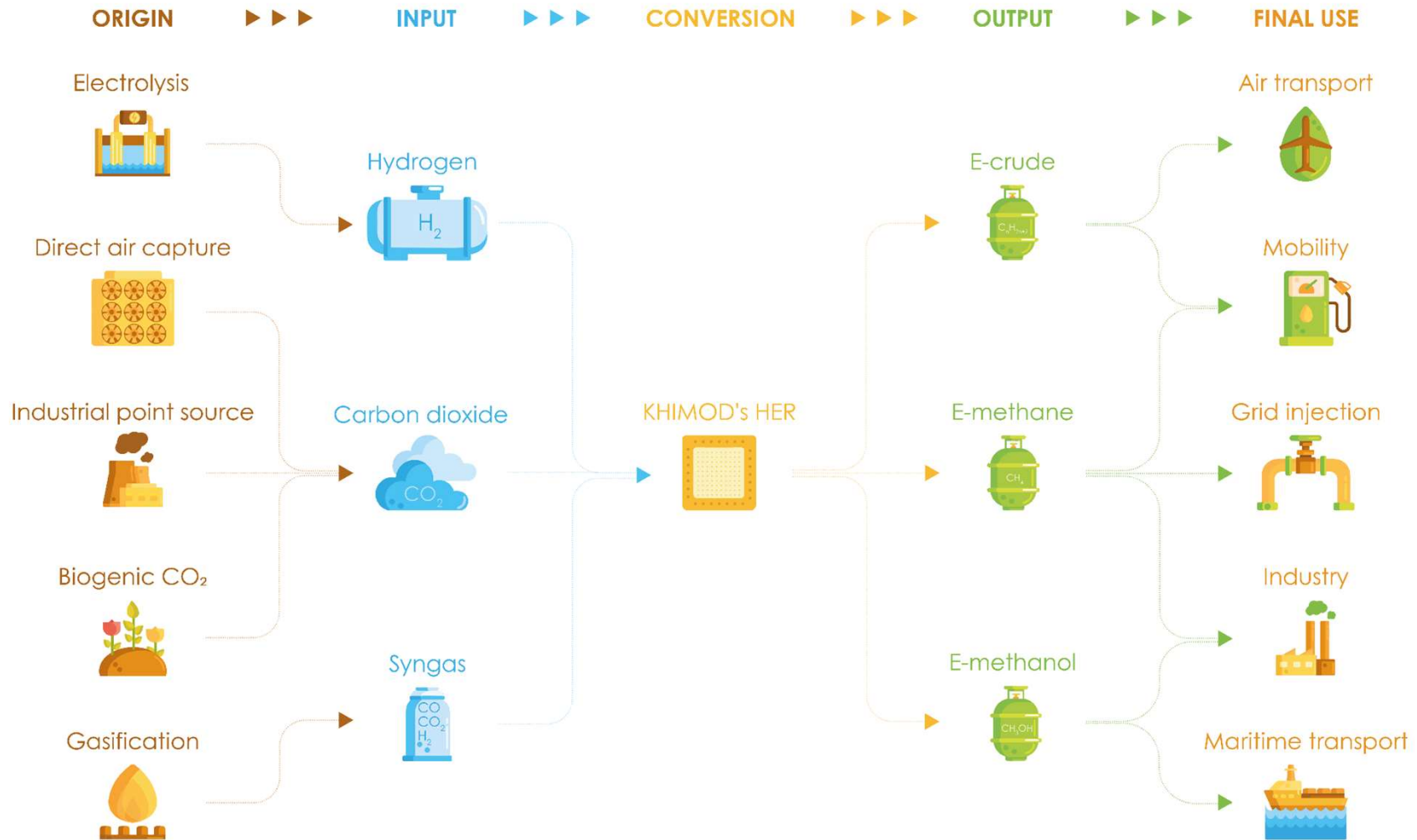
KHIMOD is aiming at net-zeroing industrial sectors such as waste, concrete, steel, air or maritime transportation thanks to the production of green gases and synthetic fuels.

KHIMOD



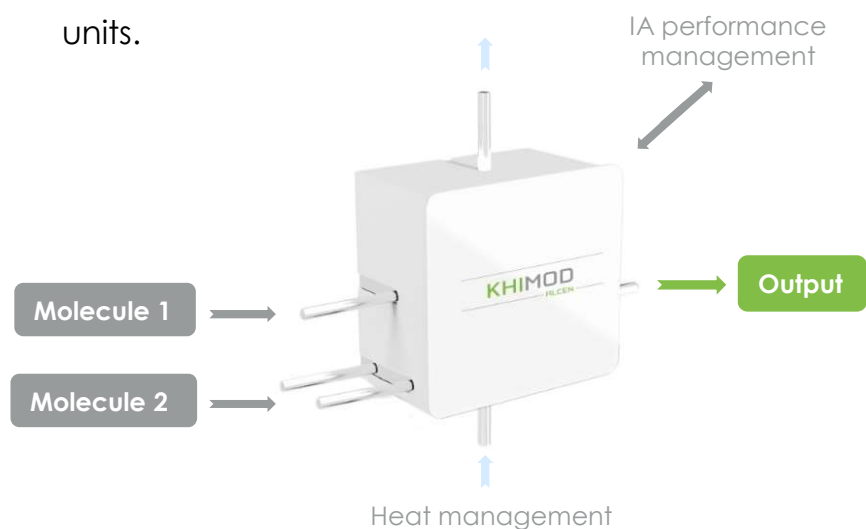
- A technical solution provider
- +20 years of technical development
- Proven technology
- Successful track record
- Industrial manufacturing capacity
- Committed team
- Strong shareholder base

How do our solutions work?

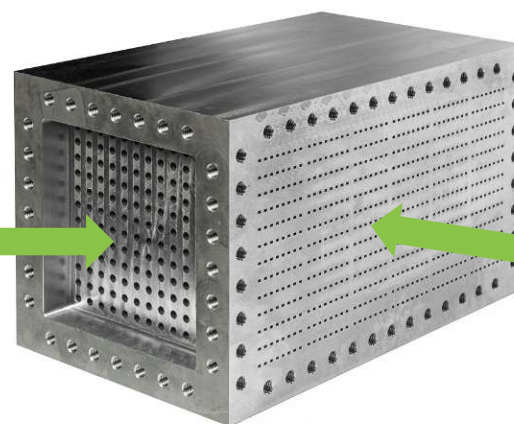


Our technology

Combining different kinds of molecules with a **specific catalyst** in a specifically designed **Heat Exchanger/Reactor (HER)** allows KHIMOD to **produce all kinds of molecules** from the simplest to the most complex and from small scale to large scale units.



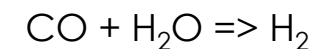
Reactive channels



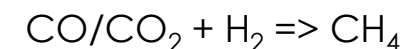
CORE REACTIONS

e-Methane

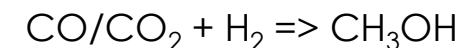
- WGS



- Sabatier

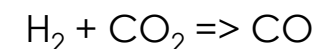


e-Methanol

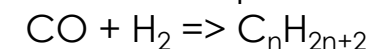


e-Crude

- rWGS



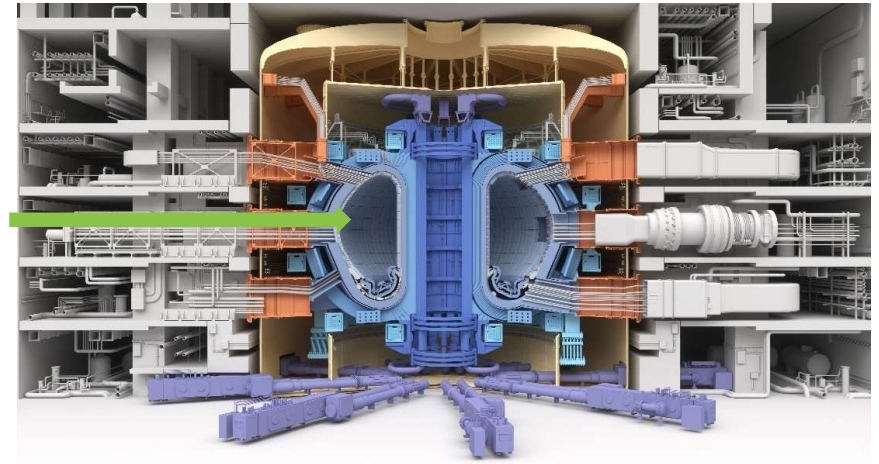
- Fischer-Tropsch



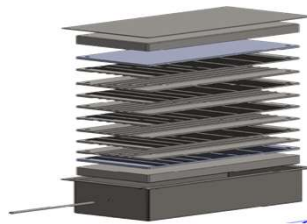
The ITER experience

ITER: an international (35 countries) project aiming at building the world's largest tokamak, a magnetic fusion device designed to prove the feasibility of fusion as a large-scale and carbon-free source of energy based on the same principle that powers our Sun and stars.

First wall panels



Taylor-made
metal sheet design



Alternating piling of
reactive and
thermal regulation
channels

Diffusion bonding
1000°C & 1000 bar
to obtain a monobloc HER



HER ready
to be equipped

Our proposal

PRODUCTS



- Wide range of Heat Exchanger-Reactors
- Designed and manufactured by KHIMOD

UNITS



- Stand-alone units
- 5 core reactions
- Up to 900 Nm³/h
- Designed by KHIMOD

SERVICES



- FEED
- Engineering
- Commissioning
- Training
- Maintenance

HER range



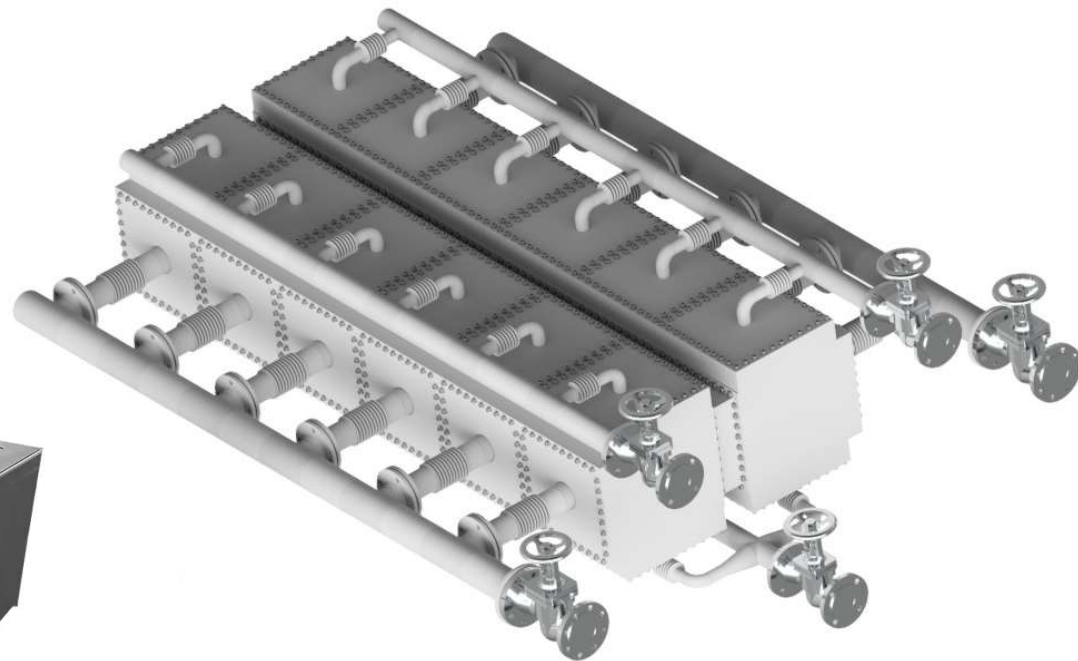
K1



K3

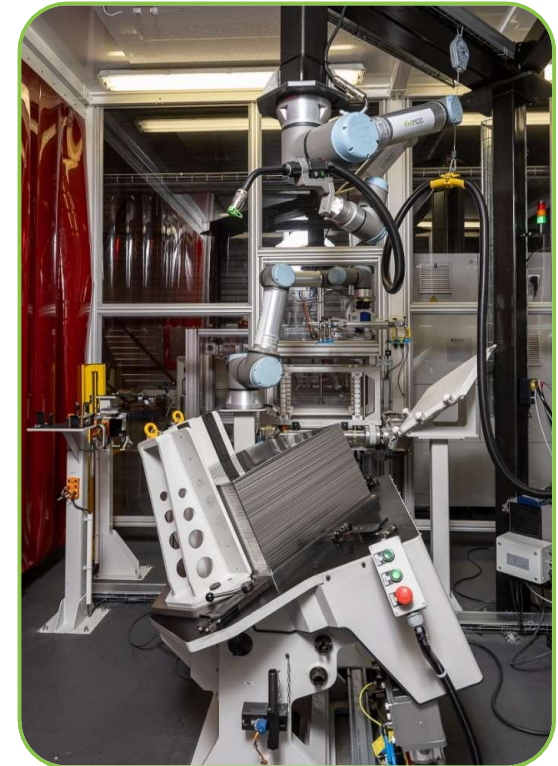


K5



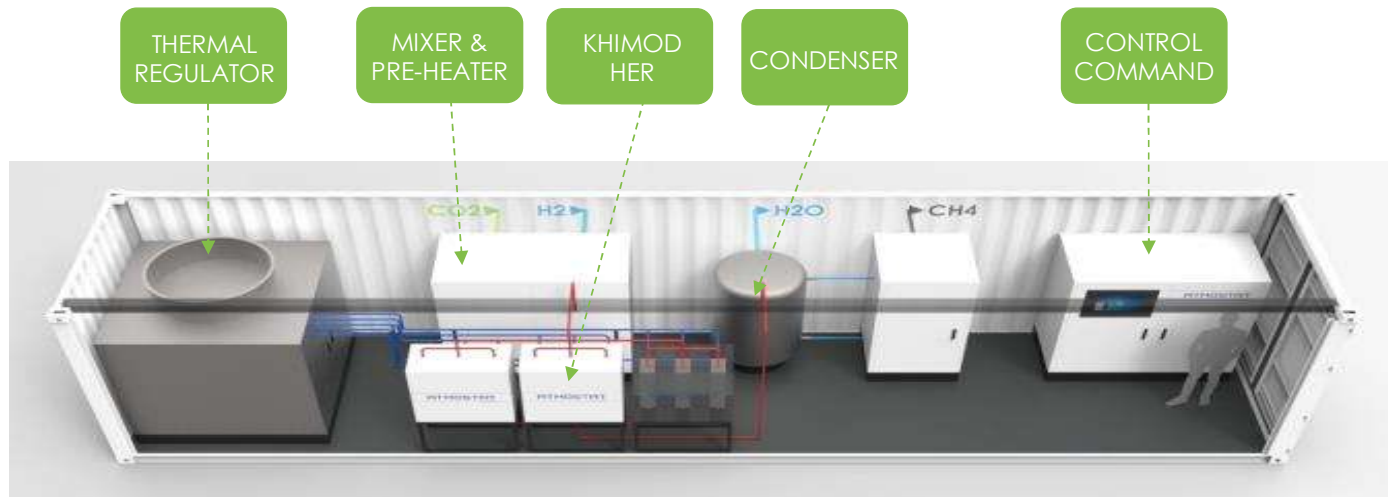
K10

Industrial site in the Paris region

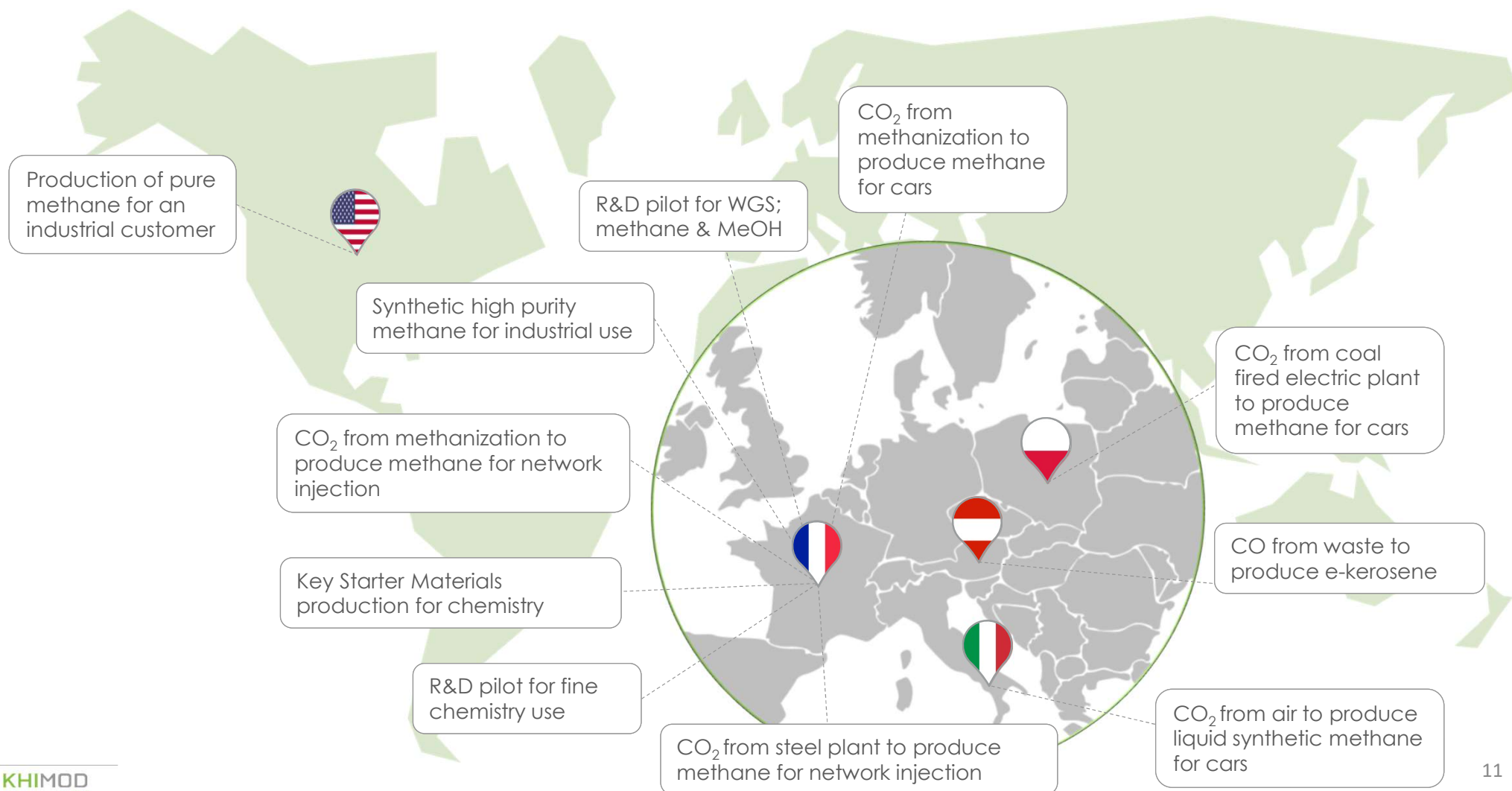


- KHIMOD owns an industrial manufacturing site in **the suburbs of Paris**
- The nominal production capacity is **15,000 Nm³/h per year (~ 200 K5/year)**
- Equivalent to **234k tons of CO₂** which can be processed every year

A modular architecture of systems



Some references



A few examples

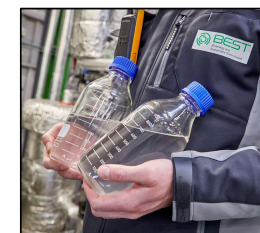
Jupiter 1000



Méthycentre



Avebio



Use-Case

Power-to-X

Waste-to-X

Power-to-X

Molecule

E-methane

E-methane

SAF

Main Partners



storengy

Elyse 

Status

In Operation

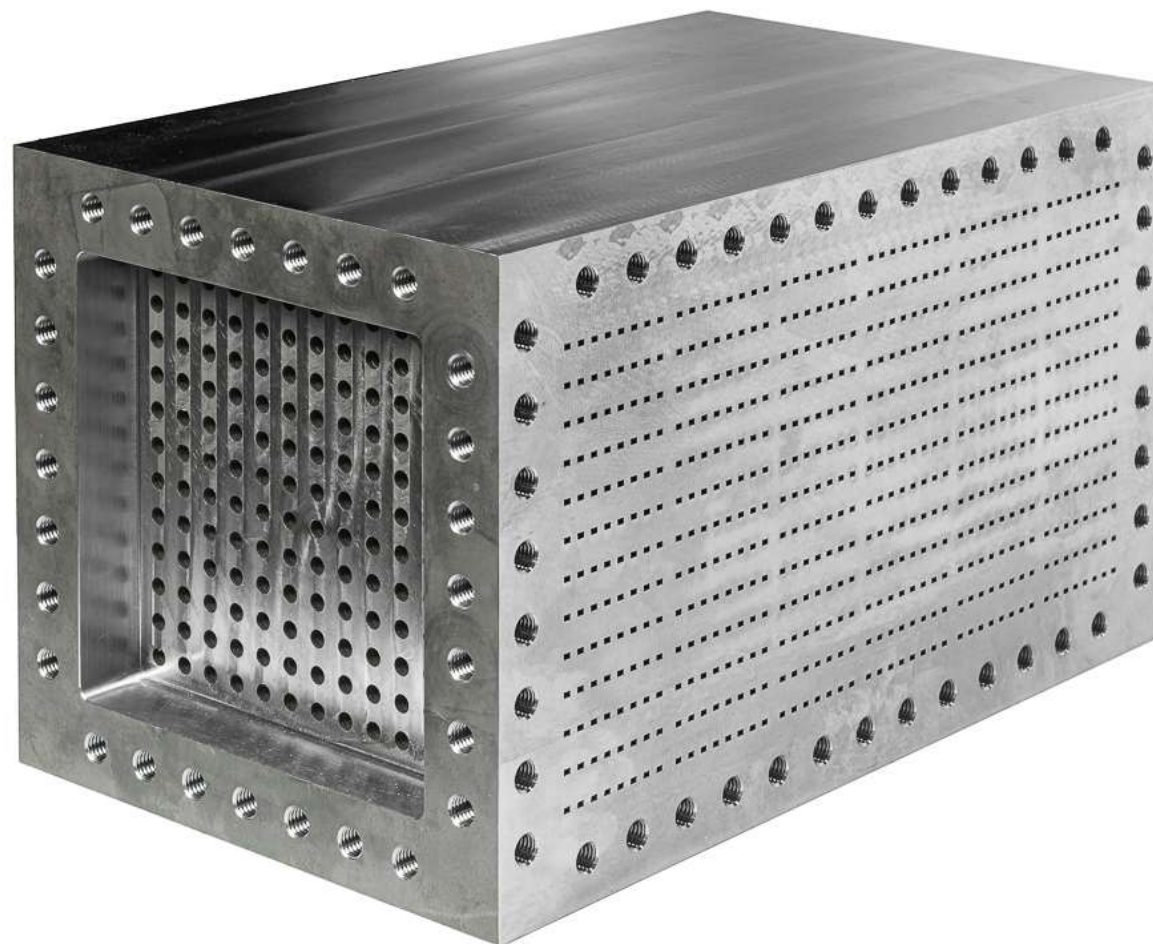
Commissioning

Project Started

JUPITER 1000

One of the World's biggest Power-to-Gas project in Operation





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