

A short story on green H2

April 17, 2023 / Hannover Messe
Carsten Hasbach / Government Affairs



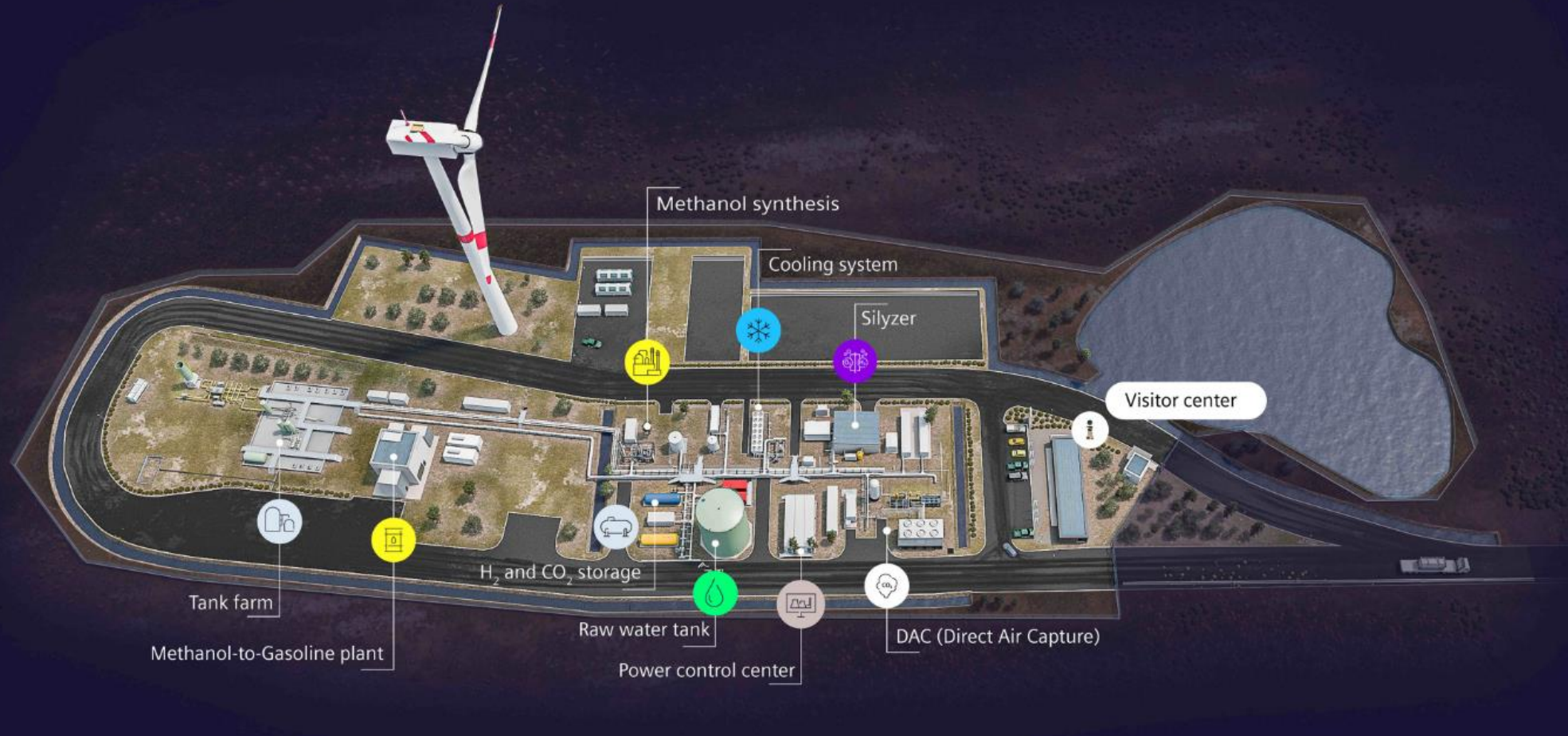
**Why can't transport be as sustainable
as 200 years ago?**

Can wind and sun fuel our cars?

Honestly, it can!

Haru Oni | The world's first integrated, commercial, industrial-scale hydrogen plant for making synthetic climate-neutral fuels

SIEMENS
ENERGY



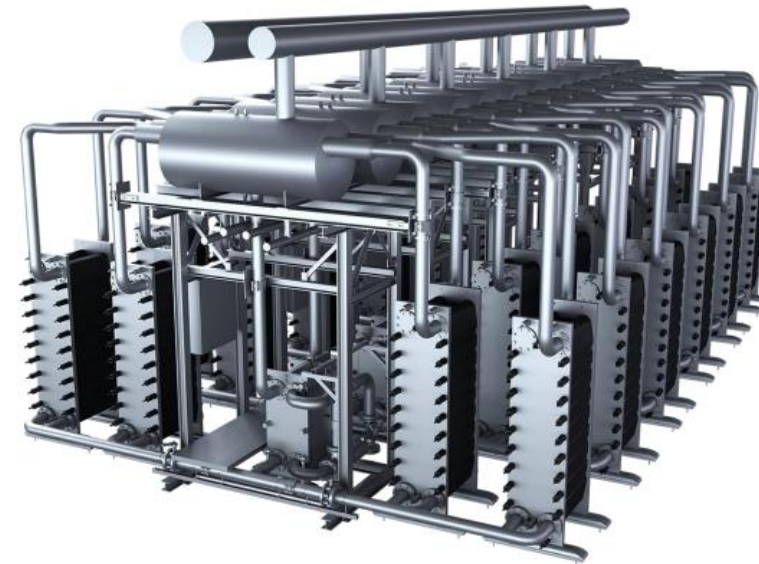
Heart & core of the Haru Oni project

Silyzer 300 Fact Sheet

	Hydrogen production	335 kg/h
	Plant efficiency (HHV¹)	>75.5%
	Power demand	17.5 MW
	Start-up time	<1 min, enabled for PFRS ²
	Dynamics in range	10%/s in 0 – 100%
	Minimal load	20%
	Dimension full Mod. Array	15.0 x 7.5 x 3.7 m
	Module design lifetime	Optimized for 80 kOH ⁴
	Plant availability	~95%
	Demin water consumption	10 l/kg H ₂
	Dry gas quality³	99.9999%
	Delivery pressure	Customized

¹ Plant efficiency includes rectifier, transformer, transformer cooling and gas cooling

² Primary Frequency Response Service | ³ With DeOxo | ⁴ Operating Hours



Haru Oni | In just 2 years from idea to reality!

Dec 2020
**project & funding
announcement**

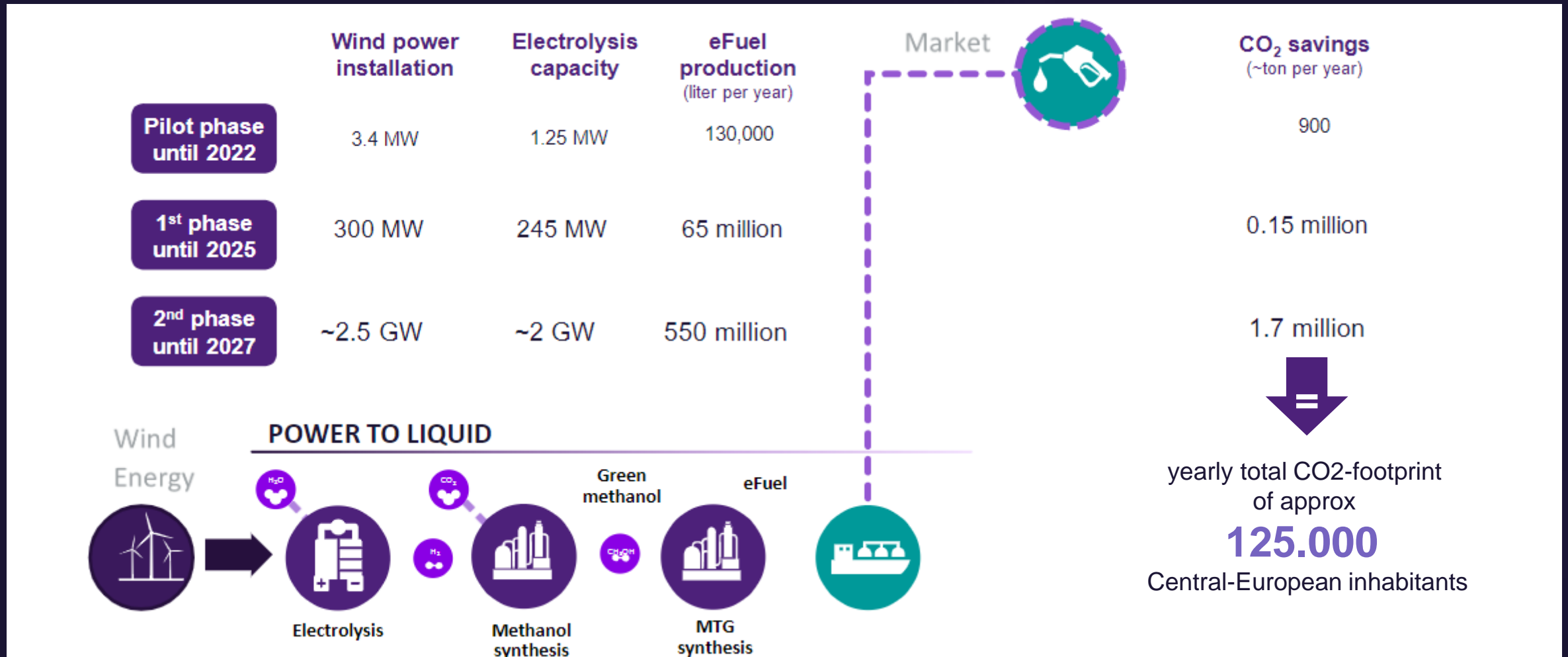
Sep 2021 – Nov 2022
construction & testing

Dec 2022
first fuelling

Gemeinsam. Europa wieder stark machen.
Together for Europe's recovery
Tous ensemble pour relancer l'Europe



Haru Oni | Scale-up plan





Haru Oni – Green fuel from wind & water in Chile.

Further information:

<https://www.haruoni.com/#/en>

Siemens Energy:

Mr. Carsten Hasbach
Government Affairs
carsten.hasbach@siemens-energy.com
+49 – 152 0438 5629