elogen

Expert in PEM electrolysis technology for green hydrogen





## Why

Faced with the climate emergency, we are taking action, by industrializing our sector, to make a difference.

## How

For our customers, we combine technological know-how and tailor-made support.



## Elogen Key figures

## Elogen, the French technological leader in PEM technology



Over 15 years'
experience
in electrolysis using
PEM technology



**3 continents**Electrolysers
in operation in Europe,
Asia and the US



~60 highly-skilled employees, covering all disciplines



400 MW
Minimum objective for annual sales of electrolysis capacity by 2030\*

**Empowering a sustainable world** 

## Elogen, a key player in green hydrogen with the largest production capacity in France

#### **Current production capacity**

With its production facility near Paris (Les Ulis), Elogen is the only manufacturer of PEM electrolysers in France.



- Total surface area of 2300 m<sup>2</sup>
- Innovation, Sales, Operations, Customer Service
- Assembly of electrolysers and stacks, R&D test benches, engineering
- Production capacity: up to 160 MW per year thanks to a new assembly line commissioned in Q1 2022

#### **Production massification**

### Gigafactory project



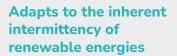
- Within the framework of IPCEI of hydrogen for financing the project
- Pre-notification expected in H1 2022 by the French Government to the European Commission
- Preliminary study achieved with a capacity target of more than 1GW
- Production to start in 2025, with a capacity above 1GW
- Site to be located in Vendôme, France.

## **Advantages**

## of PEM technology

The best technology to produce hydrogen from renewable energies







Capable of managing grid fluctuations and offering ancillary services



Simple to maintain, no handling of hazardous substances



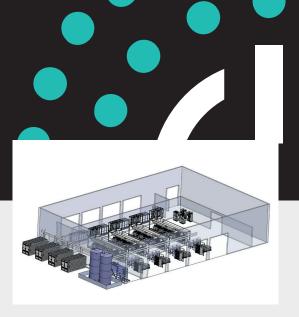
Saves space due to limited equipment footprint

# elogen's offering



#### Self-contained, turnkey electrolysers

- From 50 kW to several MW
- Optional hydrogen purification unit for mobility projects



#### **Electrolysis plants**

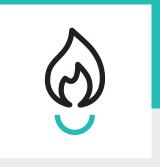
- Several dozen MW per plant
- Designed by Elogen
- In partnership with EPC (Engineering, procurement, and construction) contractors

#### **Customer Services**

- Maintenance
- Real-time monitoring of operational electrolysers
- Artificial intelligence tools for predictive maintenance

# Elogen's markets









#### **Mobility**

Elogen supplies electrolysers for mobility (heavy road vehicles, logistics, marine transportation), together with hydrogen stations where necessary.

#### **Power-To-Gas**

The hydrogen generated by Elogen's electrolysers enables the production of synthetic fuels and molecules, for instance methane, which can then be used instead of natural gas.

#### **Power-To-Power**

Elogen's systems are perfectly suited to energy storage, especially in isolated areas powered by intermittent renewable energy sources or for offshore wind projects.

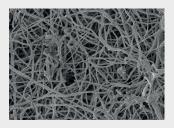
#### Industry

Using high-power stacks, and drawing on our robust engineering capabilities and partnerships, Elogen aims to deliver large scale electrolysis plants as of 2023.

# III prove efficienc

## The 3 axes of Elogen's R&D

New materials



- Increase competitiveness through cost reduction and efficiency improvement and further differentiate our products
- Dec. 2021: signature of a collaboration agreement with the French University Paris Saclay renowned for its expertise in materials science for the electrolysis of water

High-power stacks



- Give access to larger projects, above 10 MW
- Target: 1 MW stack ready to be sold in 2023

Balance Of Plant (BOP) optimization



- Increase competitiveness through Capex reduction
- BOP can represent a significant part of electrolyser Capex

elogen

Empowering a sustainable world



## Our conviction

Technology will be the cornerstone for the industrialization of carbon-free hydrogen production

## **Contact**

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Visit our website: elogenh2.com

