First AI-controlled and Iridium-free hydrogen production - fully scalable for a green future

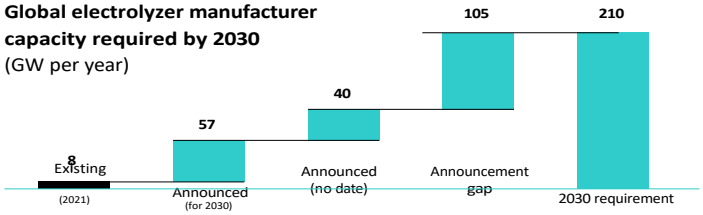
Enapter AG is a pioneer and market leader for AEM electrolyzers. Launched in 2017, Enapter has quickly developed into a pioneering company for green hydrogen. More than 15,000 hydrogen-generating units - known as cores - are now producing green hydrogen for over 375 customers in over 55 countries worldwide, bundled in electrolysers of various sizes. Whether for energy storage, off-grid applications, residential construction, refueling systems, process heat or for industrial companies for the direct use of green hydrogen - in literally hundreds of different applications, Enapter's AEM electrolysers produce exactly the desired amount of H2 that is needed. The patented AEM technology allows the compact core of the electrolysers to be standardized and mass-produced: Freely scalable from 100 KW to several megawatts. Maximum flexibility, coupled with a unique control AI that constantly learns and improves every device in the running application on a daily basis, make Enapter and its AEM technology unique.

Advantages of AEM technology

- *Patent-protected AEM technology - highly efficient thanks to scalable system design*
- *World's first AI-supported control software for electrolyzers guarantees optimum production conditions for all users*
- *Sustainable and future-proof: electrolyzers are iridium-free.*
- *Robust construction: Easy integration and use in all climatic conditions*
- *Hydrogen is supplied directly with up to 99.999 % purity and under high outlet pressure (35 bar)*
- *Ideal for use with renewable energy sources, as hydrogen production adapts dynamically to the fluctuating energy input*

Significant expansion of global electrolyzer production capacity required

Global electrolyzer manufacturer capacity required by 2030
(GW per year)



Source: Deloitte analysis based on International Energy Agency; the 2030 requirement is a low estimate based on linear deployment in the coming decade.

- *Global production capacities for electrolyzers to increase more than 25-fold to over 200 GW per year by 2030 to achieve climate neutrality targets for green hydrogen*
- *Store surplus sensibly: Global PV production capacities should increase from 250 GW per year by 2030 (2021) increase to 800 GW per year*
- *No dependence on critical raw materials such as iridium, which would slow down or increase the cost of future expansion*

From small to large: the right solution for every application - AI-controlled and Iridium-free

AEM EL 4 electrolyser
Freely scalable compact electrolyser

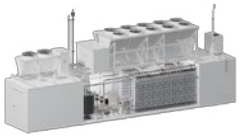
- *Modular use, quick to retrofit*
- *Quick and easy installation*
- *Ideal for on-site hydrogen production*
- *Low maintenance effort*

Production rate	*1.0785 kg/24h*
Dimensions	*W: 48.2 cm D: 63.5 cm H: 26.6 cm*
Weight	*42 kg*

AEM Flex 120 *Scalable answer in the industrial sector*

- *High redundancy: individual stacks can be changed during operation*
- *Automated and remote-controlled operation with EMS control software*
- *Ideal for on-site hydrogen production*
- *Low maintenance effort*

Stacks	*50*
Production rate	*53.9 kg/24h*
Dimensions	*L: 3.2 m W: 2.5 m H: 3 m*
Weight	*3,700 kg*

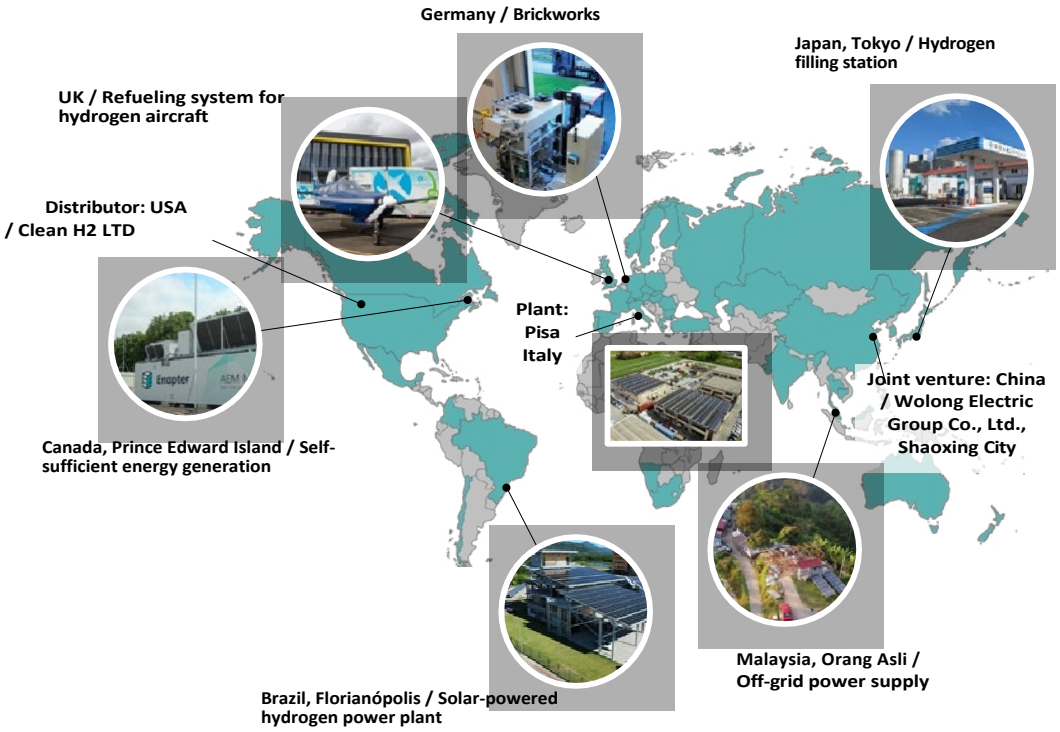


AEM Nexus
Megawatt class

- *World's first AEM megawatt electrolyzer*
- *High degree of redundancy*
- *Flexible start-up & shutdown*
- *Can be coupled with battery storage*

Stacks	*420*
Production rate	*450 kg/24h*
Dimensions	*L:16 m× W: 3 m× H: 7.3 m*
Weight of	*approx. 40 t*

Application examples of Enapter electrolyzers



Management

Dr. Jürgen Laakmann / *CEO*

Gerrit Kaufhold / *CFO*

Ivan Gruber / *CTO*

From start-up to broad-based global market leader for AEM electrolyzers

2017
Foundation of Enapter with the purchase of the plant in Pisa / Italy

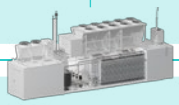
10/2020
Listing on the capital market

10/2021
Winner of the world's most important environmental prize, the Earthshot, worth 1 million pounds. Royal Foundation

5/2023
Strat. Partnership with Johnson Matthey

8/2023
Flex 120 is presented

9/2023
Nexxus - first AEM electrolyzer in the megawatt class is presented in Saerbeck



12/2023
Distributor for JV with Wolong USA distribution

01/2024
for China

03/2025
World's first AI-supported Electrolyzer

02/2018

EL 500
- Separate control

01/2019

EL 2.0
- One module
- EMS software integration
- 40 % smaller

02/2020

EL 2.1
- 5 cm smaller
- 5% energy saving
- OTA -capable

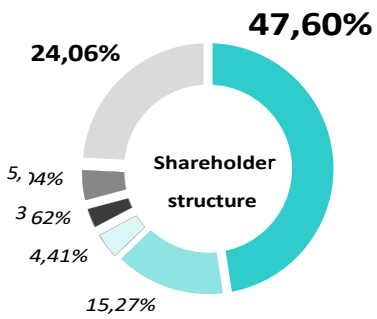
03/2024

EL 4.1
- 4.5 cm smaller
- 40% weight saving
- Air and water cooling

About the share

Enapter AG

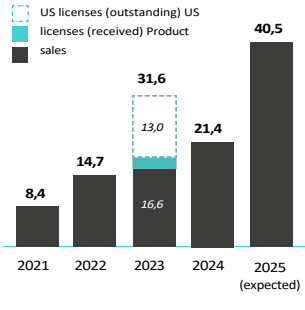
ISIN:	*DE000A255G02*
market segment	*Regulated*
Stock exchanges:	*Frankfurt/Hamburg*
Number of shares	*29.1 million*



- *Blugreen Company Ltd. Svelland*
- *Global Trading Fund Sergei Storozhenko*
- *Johnson Matthey*
- *Morgan Stanley Other shareholders*

The figures: Significant growth continues

Sales growth
in million euros



Units sold
(in MW)