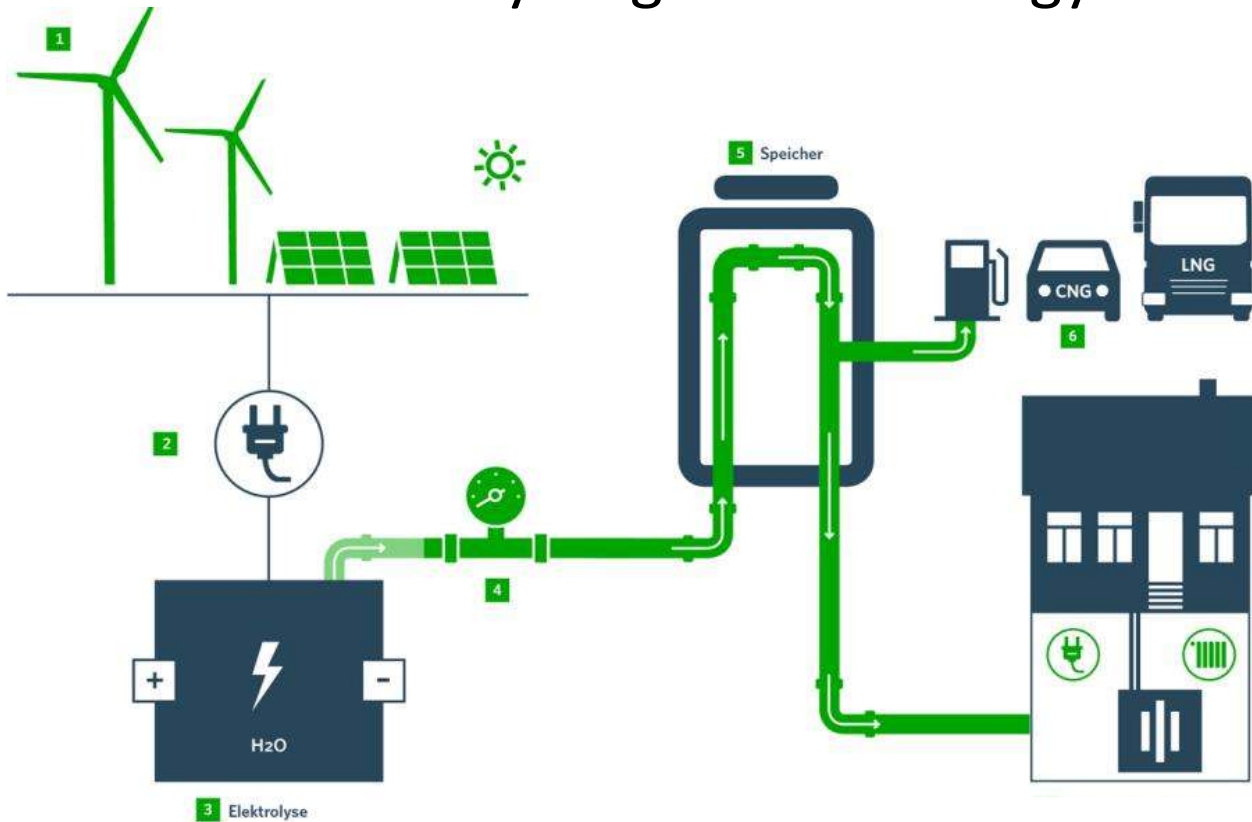


Manfred Becke
Farmer
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Germany





Hydrogen - the energy carrier of the future



Quelle: Zukunft-Erdgas e.V.

The temporarily stored hydrogen obtained by electrolysis can then be converted back into heat and electricity via CHP such as the badger during times when the wind is not blowing and the sun is not shining (i.e. there are not enough renewable energies available). In this way, Dachs helps to provide electricity and heat supply in a cost-effective, secure and CO₂-free manner and to relieve the distribution grids (reduction of grid expansion costs).



Quelle: SenerTec

In the future, sufficient climate-friendly gases will be available to serve the heating market as well!



SENERTEC – HYDROGEN STRATEGY

H₂ Beimischung ab sofort

- Neue SenerTec Produkte sind bereits heute für 20 Vol.% H₂ zertifiziert

Technologie H₂-ready in Zukunft verfügbar

- Zukünftig H₂-Readiness (100 Vol. % H₂) durch Update Kits
- Rückwärtskompatibel für alle Dachs Gen2

TECHNOLOGIEN FÜR MORGEN – HEUTE VERFÜGBAR!





AEM electrolyser EL 4

The device you have full control. Start with a module for green hydrogen applications from 2.4 kW or reach several kW by combining many individual electrolyzers.



- Scalable and modular
- Quick and easy installation
- Low maintenance
- Water & air-cooled variants available

Production rate	500 NL/h or 1.0785 kg/24h
Hydrogen purity	99.9% (or > 99.999% with opt. dryer)
Output pressure	up to 35 barg
Module dimensions	B: 482 mm T: 635 mm H: 266 mm
Module weight (without water)	42 kg

→ [AEM Electrolyser EL 4 Datasheet](#)

→ [More about our AEM Electrolyser EL 4](#)

H2 Core Systems, Germany



Hydrogen Production - AEM ELECTROLYSERS 2.5 kW to 1 MW

Modular: HYDROCAB INDOOR and OUTDOOR



2.5 – 12.5 kW (BoL)*

1.1 – 5.5 kg /24h

0.5 – 2.5 Nm³/h

12.5 – 150 kW

5.5 – 66.0 kg/24h

2.5 – 20 Nm³/h

NEW: AEM FLEX 120

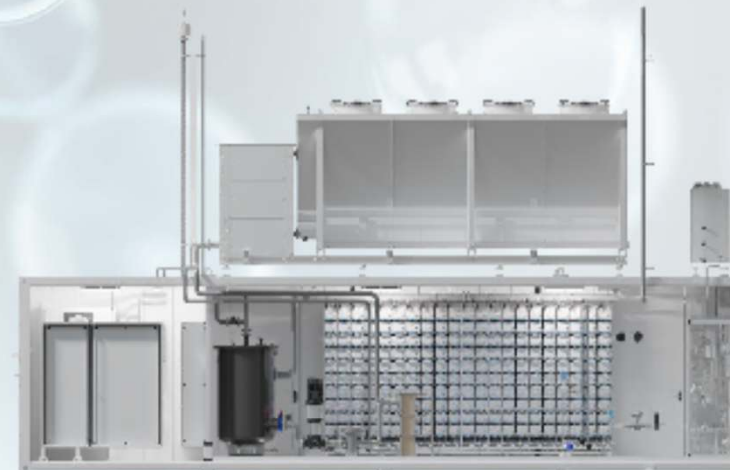


120 kW (BoL)

53.9 kg/24h

25 Nm³/h

AEM Nexus 500 and 1000



500 kW (BoL)

225 kg/24h

105 Nm³/h

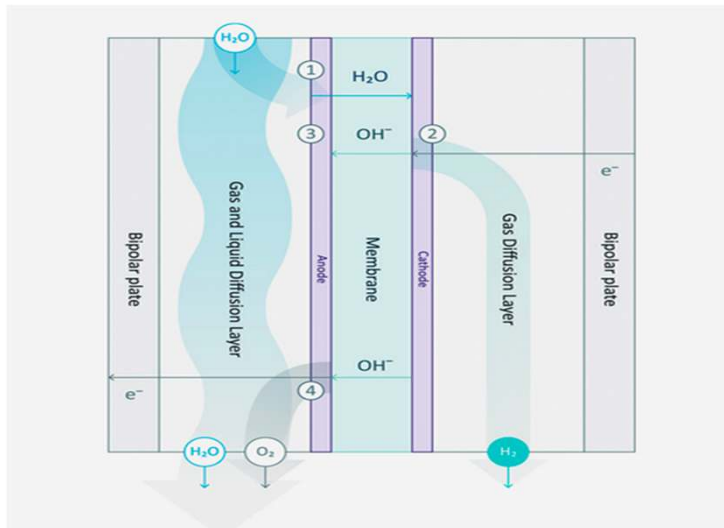
1,008 kW (BoL)

450 kg/24h

210 Nm³/h

AEM water electrolysis: How does it actually work?

Enapter is the only manufacturer of so-called AEM electrolyzers worldwide. But what does AEM mean? And what are the advantages of AEM electrolysis in the production of green hydrogen?



And what is the difference between AEM and PEM electrolysis?

For comparison, in a proton exchange membrane electrolyzer (PEM), the proton (H⁺) is transported through the PEM in a strongly acidic environment. For this purpose, the PEM electrolyser requires platinum group metals (PGM) as catalysts and expensive titanium bipolar plates to survive the highly corrosive and acidic environment. In the AEM electrolyser, on the other hand, non-PGM catalysts and steel bipolar plates are completely sufficient for effective hydrogen production.

The diluted KOH solution in an AEM electrolyser is also safer to handle than the electrolyte with a pH of 14 in a TA electrolyser.

