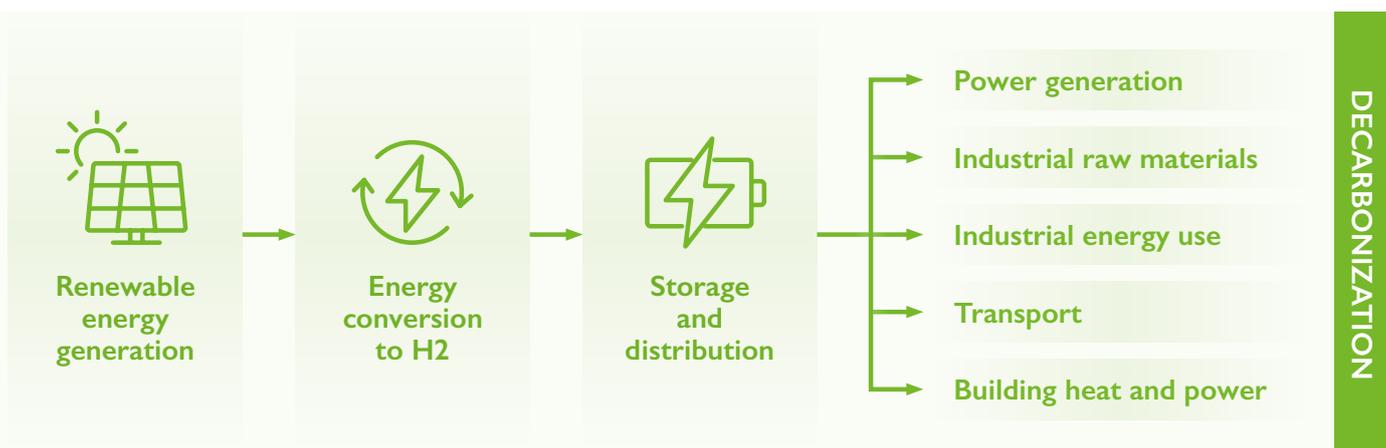




GREEN HYDROGEN

SAFE STORAGE SOLUTIONS FOR CLEAN ENERGY

Hydrogen, produced with renewable energies, is a sustainable, flexible and easily transportable energy carrier of the future: Green hydrogen is produced by electrolysis of water, with the electricity coming exclusively from renewable sources. As a result, both the electricity used and the hydrogen production are CO₂-free.



Hydrogen produces almost no exhaust gases when burned. This makes the gas an ideal substitute for coal, oil and natural gas and transport and offers many potential applications in centralized and decentralized power generation. It can also be used to power vehicles, to produce alternative fuels, combustibles and gases, and as a raw material for industrial processes.

The AEP storage system allows easy and safe storage of energy, even for long periods of time.

Hydrogen is generated from electrical energy by electrolysis and fed into storage tanks. The bonding of the hydrogen to the metal particles creates a safe and stable metal hydride, which can be dissolved again by simply adjusting the pressure and temperature.

In this way, the hydrogen can be fed into a fuel cell and converted back into electricity. All that remains is oxygen and water without any environmentally harmful effects. The heat that is generated as a by-product of the conversion can alternatively be fed into the heat cycle.



AEP – HYDROGEN STORAGE



LOSS-FREE

The AEP storage system is the ideal solution for storage of green energy without any losses and making it available at any time.



LONG TERM

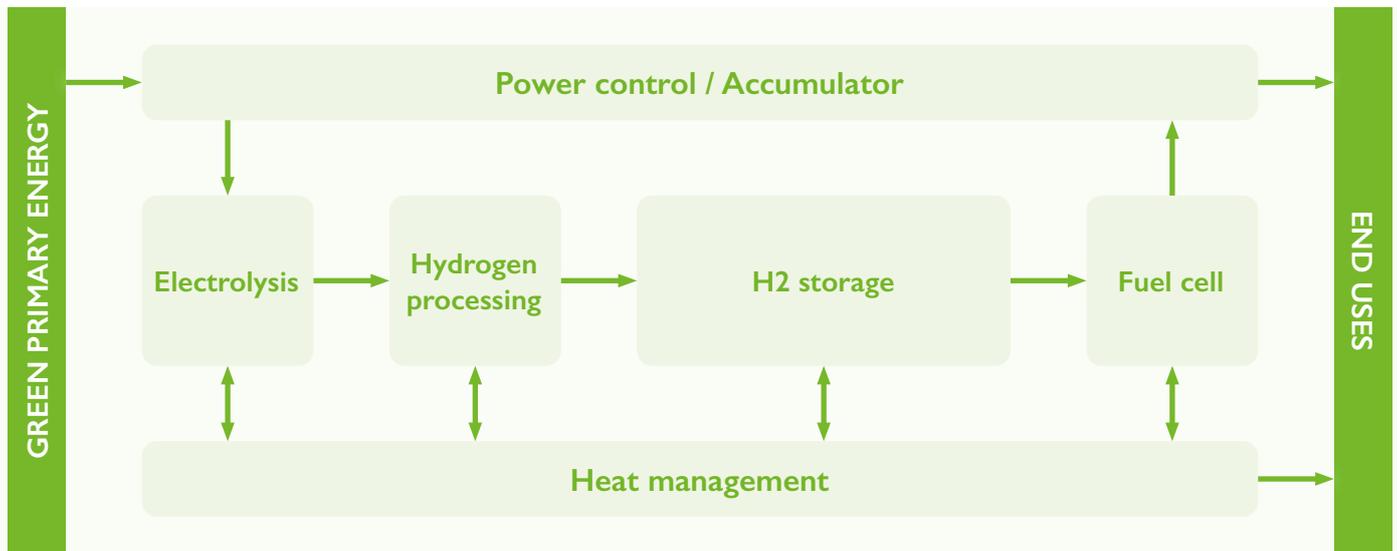
With our AEP systems, hydrogen can be stored for a particularly long time. This ensures self-sufficient energy security all year round.



EMISSION-FREE

The AEP system provides electricity and heat and increases the overall energy efficiency of the plant without harmful emissions.

100% NETWORK-AUTONOMOUS, INDEPENDENT, BLACKOUT-PROOF



AEP is your reliable partner for the planning, construction, operation and maintenance of hydrogen storage systems. With our decades of experience in the field of green energy, expert advice and high-quality components, your zero-emission power plant become a sustainable success.

TECHNICAL DATA

Long-term hydrogen storage	330 - unlimited kWh
Backup battery	10.5 - 224 kWh
Inverter	9 - 180 kW
Peak power	15 - 300 kW
Emergency power switch	yes, under 10 ms
Black start capability	yes
Smartmeter	yes

