

Hydrogen

Bridging Renewable Energy into Mobility

Requirements for mobility are increasing steadily. Mobility shall not only be economic and safe but also climate-neutral – in companies, urban, regional and interregional.

Sector coupling “**Power to X**” facilitates the growing integration of Renewable Energy.

Therefore, hydrogen has an increasing importance as fuel, especially for commercial vehicles such as busses or trains.

Covalion and its partners offer solutions for:

- › Hydrogen fueling stations with hydrogen production on site
- › Hydrogen fueling stations with hydrogen delivery
- › Facilities to generate hydrogen from renewable energies
- › Transportation and storage

With decades of international experience in power plant projects, **Covalion** ensures as overall project manager the implementation of the project.

We store **Your Energy**



Solution Example

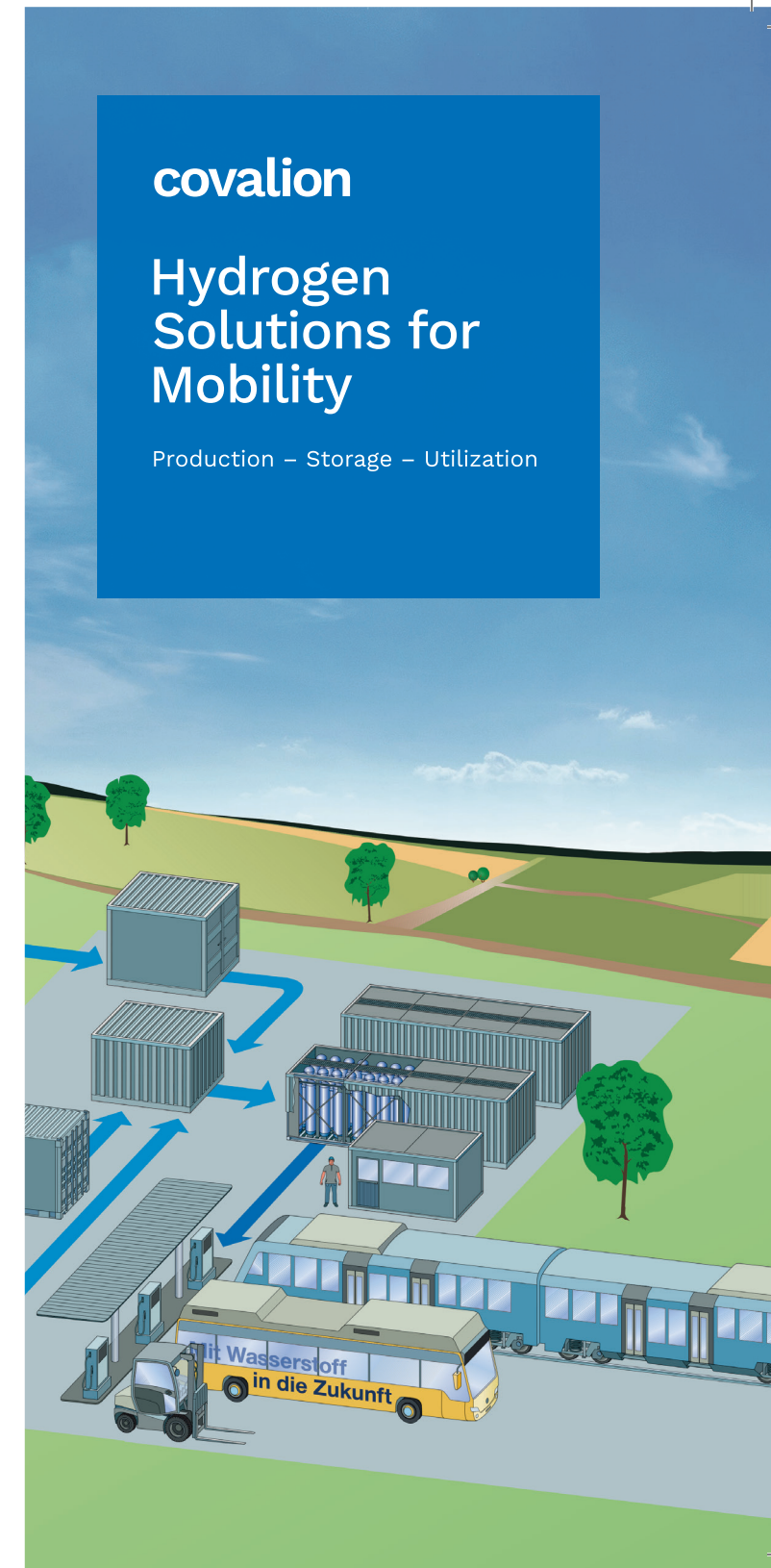
Number of busses	10	20
Capacity H ₂ -storage high pressure tanks 500 bar:	400 kg	800 kg
Volume H ₂ production on site per day per PEM electrolyzser	250 kg	500 kg
Maximum fueling capacity per hour	4 busses	
Driving range in normal operation per bus and day	per bus 200 – 300 km	
H ₂ -storage capacity in LOHC (in preparation)	approx. 1000 l LOHC – 50 kgH ₂	

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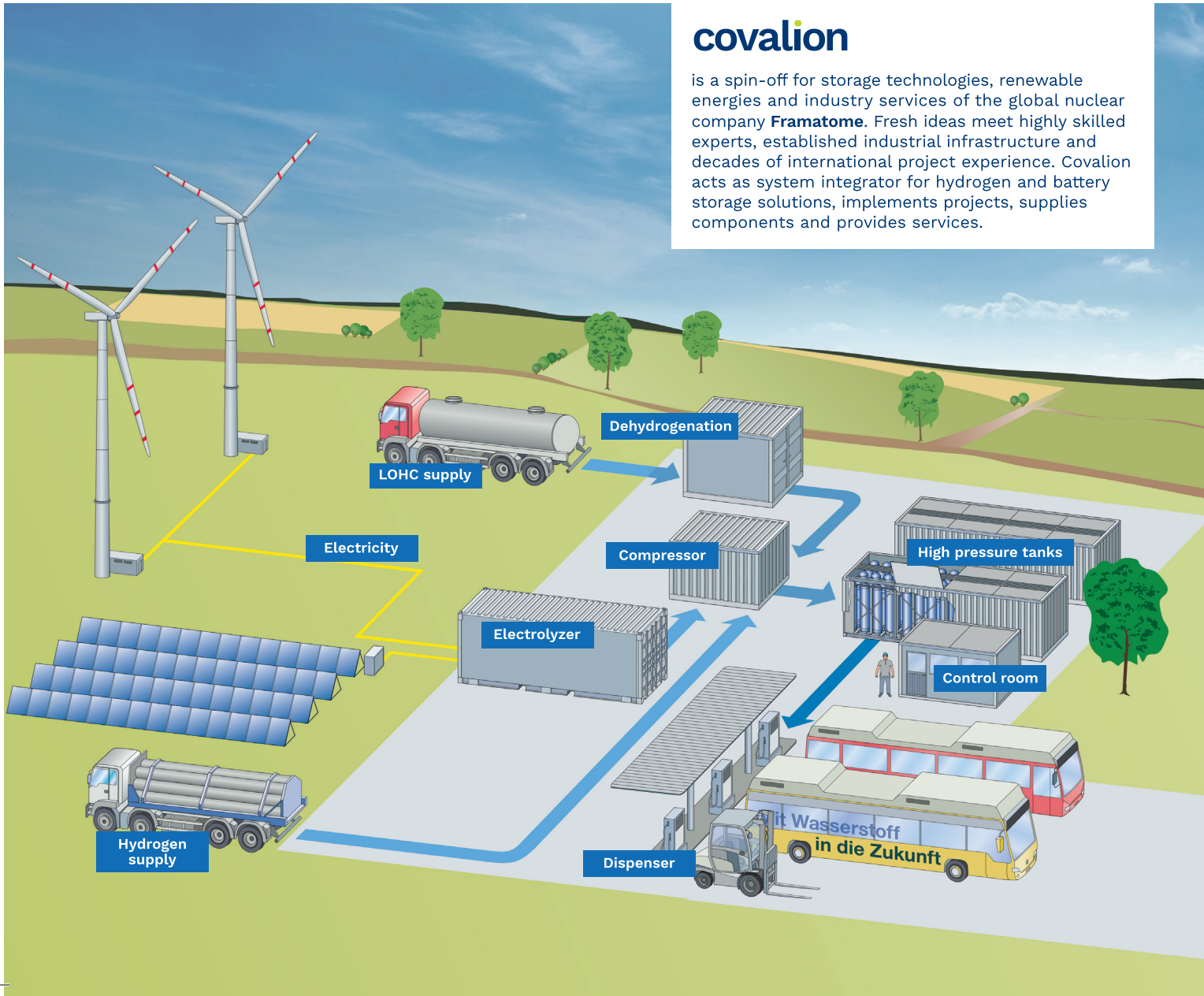
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Covalion relies on a strong network of partners – on international and regional level

Our network partners



covalion

is a spin-off for storage technologies, renewable energies and industry services of the global nuclear company **Framatome**. Fresh ideas meet highly skilled experts, established industrial infrastructure and decades of international project experience. Covalion acts as system integrator for hydrogen and battery storage solutions, implements projects, supplies components and provides services.



EMCEL is specialized in engineering services for fuel cells, hydrogen technology and electro mobility, it offers consulting and development, but also service and maintenance activities.

AREVA H2Gen

AREVA H2Gen manufactures PEM electrolyzers in different performance classes from 25 kilowatt to multimegawatt-installations. The plants are flexible enough to produce hydrogen using fluctuating electricity input from solar and wind plants.



ANLEG designs and constructs high pressure gas facilities for different processes and applications and integrates components including compressors, tanks, dispensers as well as respective piping and valves.



EMS has been manufacturing innovative solutions for the chemical industry made of carbon fiber reinforced plastic material for more than 40 years. Based on this experience, the company has developed high pressure tanks able to store hydrogen at a pressure of up to 500 bars safely in a space-saving manner.



WEMA has been constructing fueling stations for decades: For petrol and diesel as well as for natural gas and hydrogen. Besides construction the company provides all services for the safe operation of fueling stations.