

LONG-TERM PLANNING IN MAGDEBURG

THE STATE CAPITAL AS AN IDEAL LOCATION FOR INTERNATIONAL INVESTORS

—— **Industry focus on hydrogen** as a driver
of innovation for a successful energy transition



state
capitol
magdeburg

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Hydrogen as an energy source

Magdeburg has a high density of research facilities and projects relating to hydrogen as an energy source. Particularly noteworthy are the Otto-von-Guericke University and the Magdeburg-Stendal University of Applied Sciences, which constantly produce well-trained specialist graduates to provide the necessary young skilled workers. The further development of the hydrogen economy creates high-quality jobs in the region and ensures added value for Magdeburg as a business location.

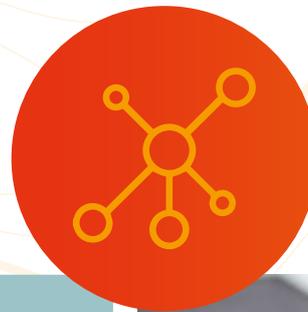
H² players in the region

- **H2 Green Power & Logistics (IGP Mittelbe):** operation of H² filling station (700 bar); planning of H² filling station (350 bar); construction and operation of an H² commercial vehicle fleet; construction and operation of 2MW electrolyser; construction of additional H² infrastructure (pipeline, etc.)
- **Fraunhofer IFF:** mapping of the entire value chain; development of microbiological processes for fermentative hydrogen generation; decentralised mobile medical care; software-based process development of Power-to-X system modules
- **Max Planck Institute:** joint project PtX-Wind H²Mare; project to increase the energy efficiency of an electrolyser; project to improve the service life of water electrolyzers; biohydrogen catalysis
- **Otto-von-Guericke University:** unitary reversible PEM fuel cells for flexible energy storage; further development of fuel cell technology for use as CHP
- **Magdeburg Stendal University of Applied Sciences:** integration of a fuel cell drive using the example of the shunting locomotive; emission-free power pack for recycling and environmental technology
- **DiLiCo engineering:** development and planning of specialised measuring technology for fuel cells; consulting in the field of H² technology
- **Horiba FuelCon:** development of test benches for fuel cells



Advantages of Magdeburg as a location

- Hydrogen filling station (700 bar) already in operation (close to A2 motorway)
- Various ongoing projects aimed at decentralised production and use of hydrogen
- Production of green hydrogen using renewable energies on site



Magdeburg is a lively green city with well-developed infrastructure for a quadri-modal hydrogen economy on road, ship, and rail, and above all the early connection of a 100% hydrogen pipeline in collaboration with the pipeline network operators around Magdeburg.

This network connection provides secure supply options for industrial customers and mobility. With our 3 MW electrolysis and the planned 100 MW large-scale electrolysis, we can generate local green hydrogen with regionally generated green electricity and thus represent an entire value chain for Magdeburg. The hydrogen-powered lorries we sell round off the green logistics for the Magdeburg area and provide ideal conditions for our location.

Dr. Ludger Hellenthal,
Managing Partner
H2 Green Power & Logistics GmbH

**H2 GREEN
POWER &
LOGISTICS**

