

## HyCS6000

*Development and long-term demonstration of efficient energy storage with hydrogen and the HyCS process – cycle stability and modeling of a HyCS storage unit*

### CHALLENGE

Hydrogen is one of the key energy carriers of the future to ensure a climate-neutral and environmentally friendly economy. However, for the implementation of the hydrogen economy, it is crucial that hydrogen is available at all times and at the locations where it is needed. In particular, suitable storage and transport solutions must be found for decentralized, small, and medium-sized enterprises.

### OUR PROJECT

In the HyCS6000 project, we investigate hydrogen storage using iron pellets. The energy potential of hydrogen is stored in this way, achieving a higher energy density than with alternative hydrogen storage systems. The focus of the research project is on the scale up of the storage technology. For this purpose, a test unit is constructed and operated in long-term tests, and the process is modeled.

### PARTNERS

- AMBARtec AG

### FUNDING

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### DURATION

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