

# H2Giga - HTEL- Stacks

## HTEL – Ready for Gigawatt

### Key Facts



#### Funding Agency

BMBF



#### Duration

05/2021 – 03/2025



#### Coordinator

Sunfire (Sun)



#### Partners

- European Institute for Energy Research (EIFER)
- Fraunhofer IKTS
- KIT IAM-WET
- Universität Bayreuth (CME)
- Deutsches Zentrum für Luft- und Raumfahrt (DLR)
- Kerafol GmbH
- Fuelcon GmbH
- IMK automative GmbH
- Xenon Automatisierungstechnik GmbH



#### Website

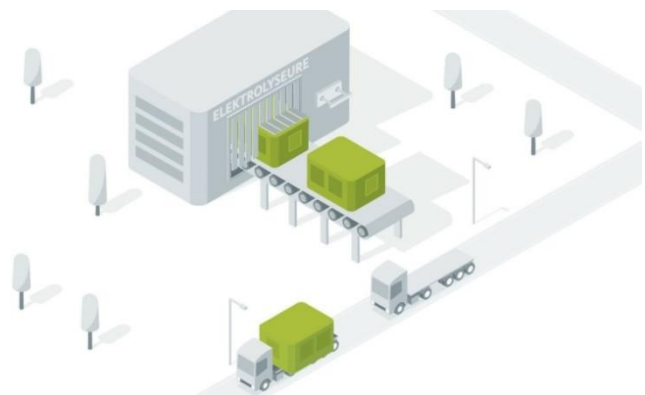
<https://www.wasserstoff-leitprojekte.de/>

### Project Objectives

H2Giga-HTEL Ready for Gigawatt aims at the industrialization of the high-temperature steam electrolyzer from Sunfire. The target is to scale-up the technology with mass production as well as to increase the performance, durability and flexibility of cell, stack and modules. Industry and researchers will work in collaboration to develop automation processes, production up-scaling, improved single unit in terms of cell and interconnect performance and lifetime as well as balance of plant components, among others. In turn, innovative cell and stacks for the future will be developed and tested.

### EIFER's Contribution

EIFER is involved in the long-term validation of cell and stacks developed by Sunfire. EIFER will perform long-term tests at cell and stack to assess the degradation rate. In addition, EIFER will work on the flexibility of the technology. Analysis of the cells using advanced techniques will be performed to understand the degradation mechanism. Finally, measures will be proposed for improved cell performance and durability.



Source: Projektträger Jülich im Auftrag des BMBF

### Contact

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