Federal Ministry
for Economic Affairs
and Climate Action

MITTELSTAND
GLOBAL
ENERGY SOLUTIONS
MADE IN GERMANY

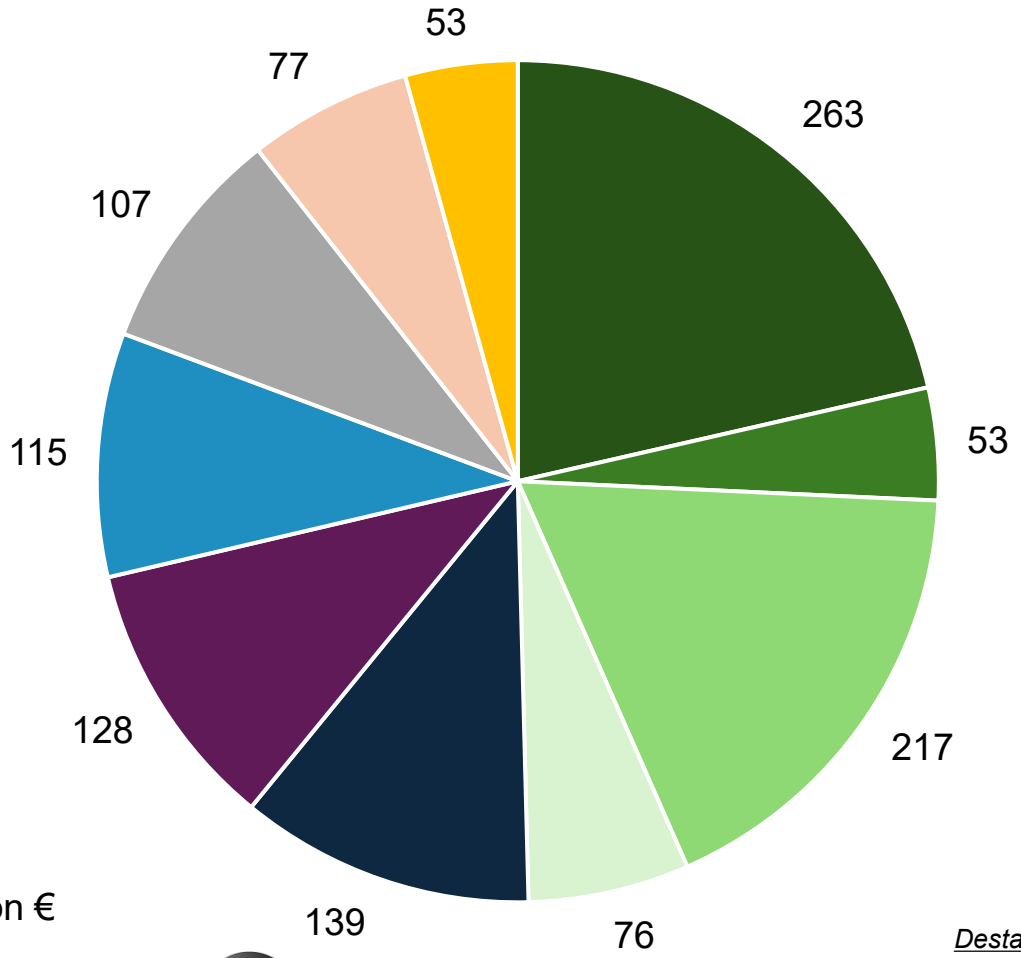
Germany’s path to hydrogen value chains

Frederik Wewetzer

implemented by
eclareon

Most important German export goods 2024

[bn €]



- Motor vehicles and motor vehicle parts
- Other vehicles
- Machines
- Metals
- Chemical products
- Data processing equipment
- Pharmaceutical products
- Electrical equipment
- Food and animal feed
- Rubber and plastic goods

Total: 1.228 billion €

Destatis, 2025

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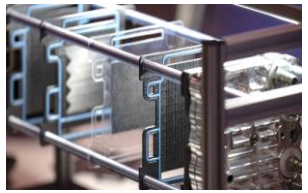
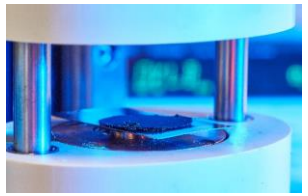
Value chains for hydrogen technologies








1,75 million jobs in 2030 in Europe

- Production, transport and application
- OEM and system manufacturers
- Stacks and components
- Machines, equipment suppliers, materials

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The German Hydrogen Strategy

Publication June 2020 → Progress report May 2022 → Update Juli 2023

Core targets

- Creation of suitable framework conditions
- Accelerated market ramp-up of hydrogen
- Building an efficient hydrogen infrastructure
- Ensuring sufficient availability of hydrogen and its derivatives
- Establishment of hydrogen applications in all sectors
- Development of Germany as leading supplier of hydrogen technologies

Transformation support for existing value chains

Developed by

TECHNISCHE UNIVERSITÄT CHEMNITZ

ALF AdvancedPowertrains

Minimise barriers
Simplify access
Provide requirements
Transfer knowledge

Goals for 2025

- Expansion of the current OSS050 concept to OSS150 (150 cm² active area)
- Development of an OS electrolysis stack

Based on projects funded by

nip – Gefördert durch: Bundesministerium für Verkehr und digitale Infrastruktur – Koordiniert durch: NOW GMBH.DE – ptj Projektträger Jülich Forschungszentrum Jülich – Europäische Union – Europa fördert Sachsen. EFRE

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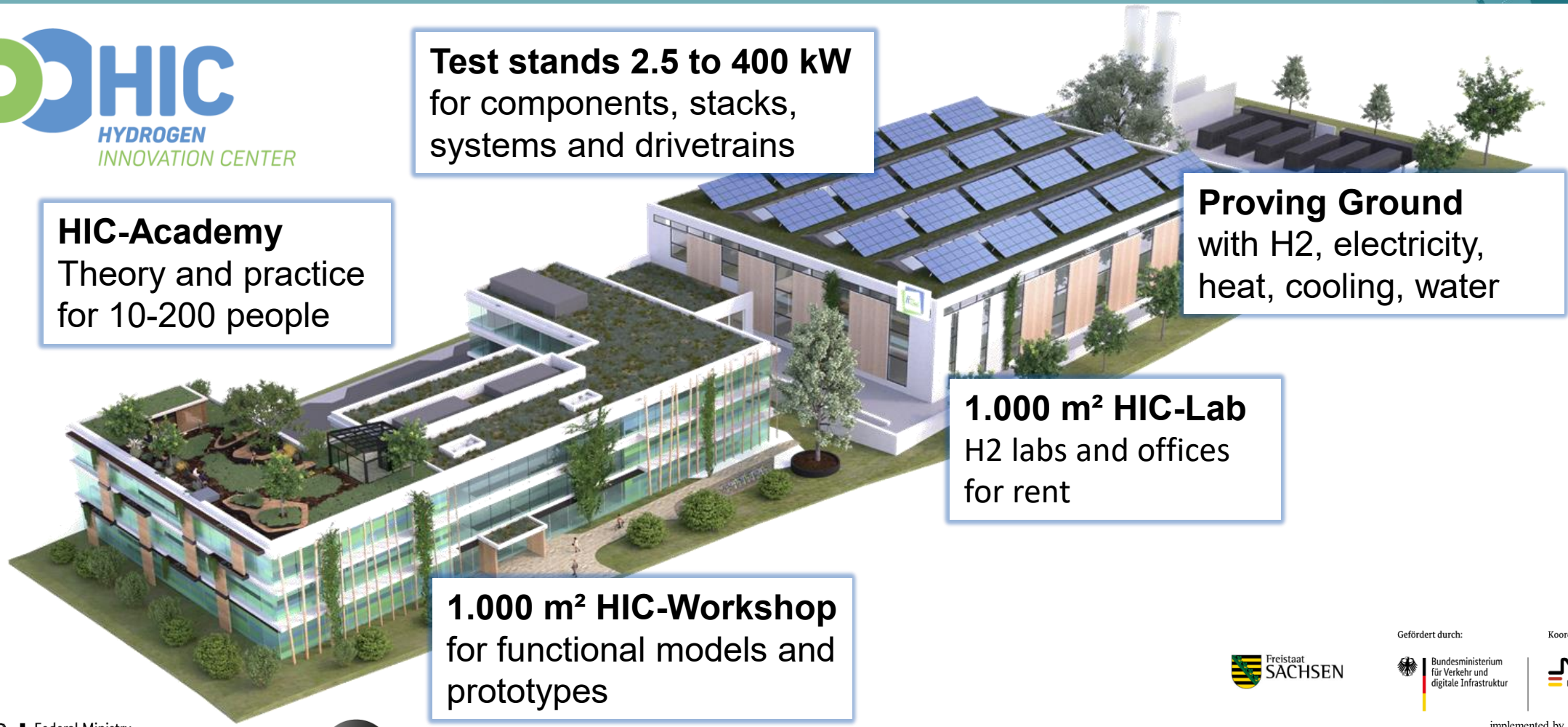
Germany‘s new Hydrogen Innovation Center

HIC
HYDROGEN
INNOVATION CENTER

Test stands 2.5 to 400 kW
for components, stacks, systems and drivetrains

HIC-Academy
Theory and practice for 10-200 people

Proving Ground
with H2, electricity, heat, cooling, water



1.000 m² HIC-Lab
H2 labs and offices for rent

1.000 m² HIC-Workshop
for functional models and prototypes

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Freistaat
SACHSEN

Gefördert durch:
Bundesministerium
für Verkehr und
digitale Infrastruktur

Koordiniert durch:
NOW
NOW-GMBH.DE

implemented by
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Demands of existing industries

HIC research and transfer center

Opening in **Summer 2025**

Testing of stacks and components

Regulation, codes and standards

R&D

Knowledge transfer

Networking

Consultancy

Training

H_2-Labs and workshop

Meeting point for H2 developers

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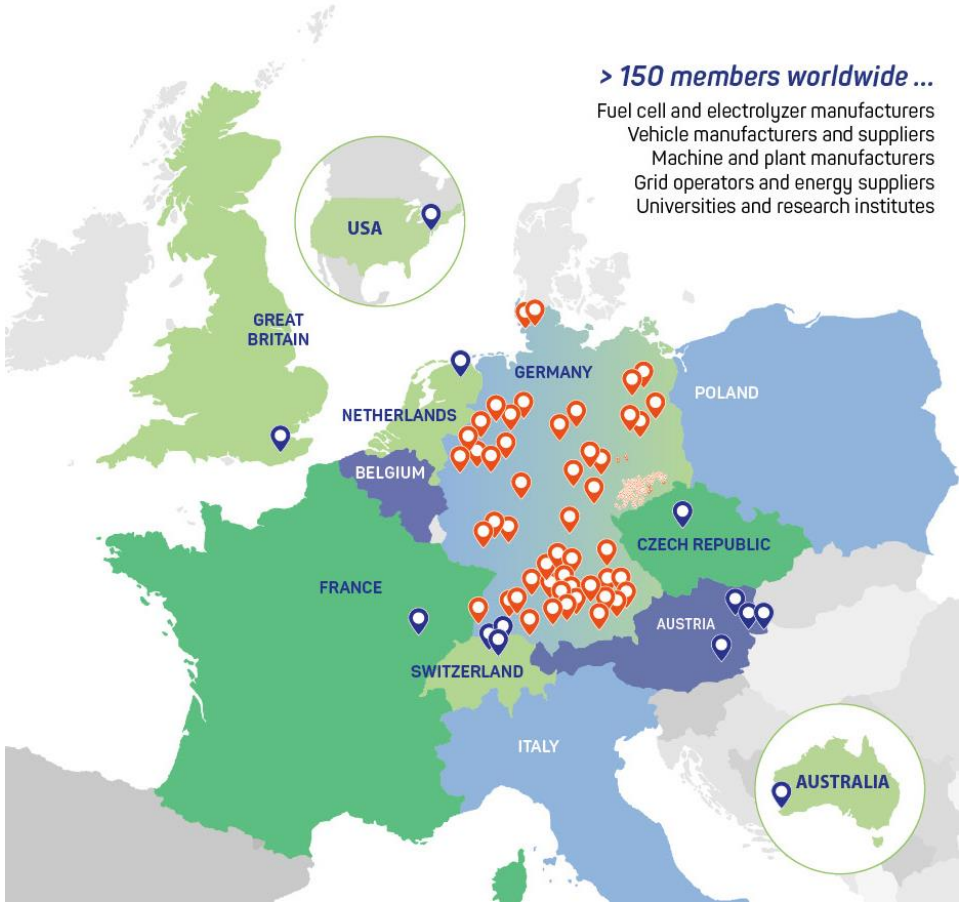
HZwo – Hydrogen Technology Cluster



> 150 members worldwide ...

Fuel cell and electrolyzer manufacturers
Vehicle manufacturers and suppliers
Machine and plant manufacturers
Grid operators and energy suppliers
Universities and research institutes

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HIC HYDROGEN INNOVATION CENTER

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