HYDROGEN CENTER BAVARIA

HYDROGEN ALLIANCE BAVARIA

## Overview:

The Bavarian Hydrogen Landscape

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Introduction

# Hydrogen landscape Bavaria





Hydrogen strategy and update (2020/24) and roadmap (2022)





Leading innovation hub for hydrogen technologies



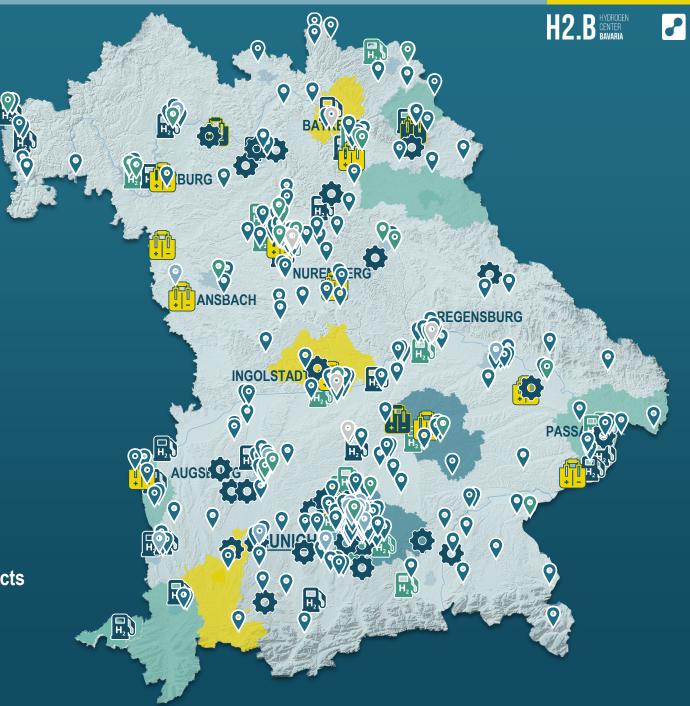
Strong network of active and innovative players:

HyLand-Regions former & active

**40+** Hydrogen refueling stations active & planned

**45+** Funded Hydrogen & Electrolyzer projects active & planned (excerpt)

385+ Partners in the Hydrogen Alliance Bavaria





## Hydrogen Center Bavaria (H2.B) and Hydrogen Alliance Bavaria

# H2B HYDROGEN CENTER BAVARIA

#### Hydrogen Center Bavaria (H2.B)

Coordination and networking center for hydrogen of the Free State of Bavaria for

- Accelerating the ramp-up of the Bavarian hydrogen economy
- Advising, informing and connecting the Bavarian hydrogen players

#### Tasks:

- ► H2-roadmap development
- Advice to Bavarian government
- ► Market & technology analyses
- ► Public relations & networking

Coordination



#### **Hydrogen Alliance Bavaria**

Networking, information and interest platform for more than 380 H2 players with a registered office in Bavaria

#### Services:

- Events & services for networking & information
- National & international technological matchmaking
- ► Initial project consulting
- ► Joint exhibition booths
- ▶ Delegation visits

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### Partners in the Hydrogen Alliance Bavaria



#### Founding Partners 2019:



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# Competencies & Industries in the Hydrogen Alliance Bavaria • Activities and interests along the hydrogen value chain:

H<sub>2</sub> generation – H<sub>2</sub> storage and transport – H<sub>2</sub> utilization – industrialization of H<sub>2</sub> key components

• Broad-based alliance with self-employed, SMEs, large corporations, financial service providers, research institutes, associations & clusters

Industry associations

**Network operators** 

Drive technology

Vacuum Technology

Fuel cell technology

Automotive engineering

Investment & financing

Project development

Suppliers

Gas installation

Gas logistics

Plastics engineering

Project management

Chemical engineering

Engineering

Energy technology

Research & Development

Sensor technology

Connection technology





387 alliance partners



Research institutions / universities

35 Associations / clusters

7 Other organizations



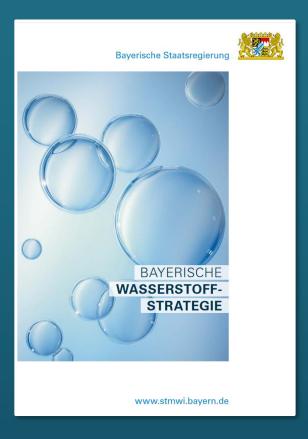




# Strategy & International Cooperation









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## The Bavarian Hydrogen Strategy (2020)

- Strong focus on green hydrogen and H2 in mobility
- Strategic priorities:
  - Innovation and technology leadership
  - Industrial scaling and economic efficiency
  - Expansion of H2 infrastructure/application (industry, transport)
- Mainly hydrogen imports to Bavaria and technology exports from Bavaria
- Implementation steps (excerpt):
  - Hydrogen research initiative "H2 Hightech Bavaria"
  - Establishment of facilities for development, testing and application
  - Funding program for HRS
  - Funding program for electrolysers









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## Hydrogen Roadmap Bavaria (2022)

#### Goals:

- Identification of perspectives, concrete needs for action and important milestones for the rollout of hydrogen in Bavaria
- Estimation of possible hydrogen consumption in Bavaria

#### Key findings:

- Faster ramp-up of the H<sub>2</sub> economy required
- Cumulative demand (H2 + derivatives) by 2030: 10 TWh; by 2040: at least 33-75 TWh mainly for petrochemicals/conversion (H2 as basic material, reconversion) and mobility
- Need for Bavarian electrolysis capacity of at least 1 GW by 2030
- Great opportunities for the export-orientated Bavarian industry
- Legal framework and availability of an H2 transport infrastructure as an important basis for market activation







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## **Bavarian Hydrogen Strategy 2.0 (2024)**

- Published within the framework of the Energy Plan Bavaria 2040
- Update and clarification of overall goals and specific actions in order to strengthen the ramp-up of the Bavarian hydrogen economy
- Priorities

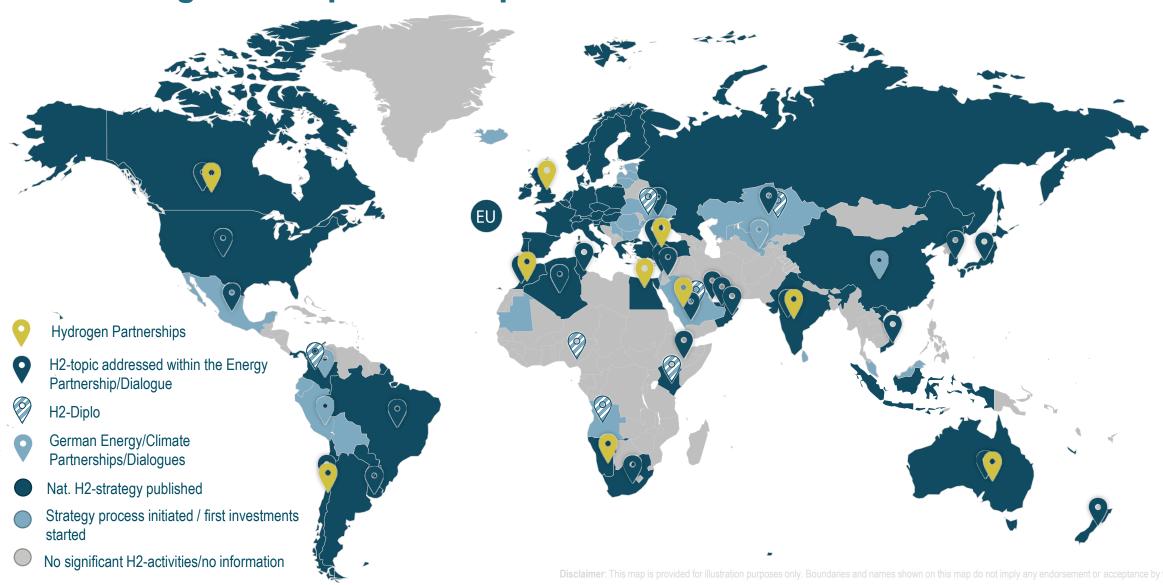
Setting the basic (regulatory) framework for future hydrogen projects
Ensuring availability of hydrogen according to Bavarian demand
Establishing hydrogen as a tool for industry transformation

- Implementation steps (excerpt):
  - Strengthening hydrogen networks and expertise in Bavaria
  - Support and assistance in the development of hydrogen infrastructure
  - Increased cooperation on hydrogen imports, import corridors and technology exports at international level
  - Advocating for Bavarian interests at federal and EU level





## **H2-Strategies and partnerships worldwide**



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## **Bavarian H2-delegation trips und -dialogues**



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## **Examples of cooperation projects**

 "Haru Oni", proc Enel Green Pov

"Power-to-MEDI dimethyl ether ()

 Partnership for SENAI)



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#### Your contact



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