

International Partnership for Hydrogen and Fuel Cells in the Economy

# **Germany Update**

42<sup>nd</sup> IPHE Steering Committee Meeting 20 - 21 November 2024 Brussels, European Commission



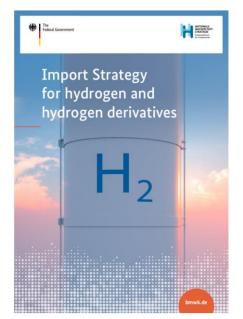
# **Announcements / New Initiatives Germany**

## **Policies/Initiatives**

- In May, the German Government agreed on the <u>Hydrogen Acceleration Act</u> creating the legal framework for the rapid development and expansion of production, import and storage capacities of hydrogen
- In July, the German Federal Cabinet adopted the <u>National import strategy for</u> <u>hydrogen and hydrogen derivatives</u>. Initial expected domestic demand:

 $_{\odot}$  95 - 130 TWh by 2030, with approx. 50% - 70% expected to be covered by imports

 $_{\odot}$  360 - 500 TWh of hydrogen and around 200 TWh of hydrogen derivatives by 2045







# **Announcements / New Initiatives Germany**

## **Policies/Initiatives**

- In May, the second amendment to the Energy Economy Act (EnWG) came into force. Amongst others, the amendment establishes a framework for financing a core hydrogen network. In October the Bundesnetzagentur (Federal Network Agency) approved the joint application of German gas transmission system operators to develop a hydrogen core network.
  - $_{\odot}$  The approved network includes a total of **9,040 kilometres of pipelines**
  - The total investment costs are expected to be €18.9bn
  - $_{\odot}$  The core network pipelines are scheduled to be gradually commissioned between 2025 and 2032
- In July, the German Federal Government approved a new strategy under the Power Plant Security Act, which will tender a total of 12.5 GW of power plant capacity along with 500 MW of longterm storage. This strategy focuses primarily on new H2-ready gas power plants.







## **Investments/Funding**

- H2Global: Ammonia results of the 1st tender round for the import of green hydrogen derivatives have been published:
  - Between 2027 and 2033, at least 259,000 tons of green ammonia will be imported to Europe/Germany
  - Net price (excluding transport and import costs) of 811 €/t of ammonia, or less than 4.50 €/kg of green hydrogen
  - Contract between Hint.co and Fertiglobe of up to € 397 million
  - In March 2024, a MoU between Germany and Canada was signed to establish a joint H2Global financing window
- In July, the German Government launched the implementation of 23 IPCEI H2 projects in Germany



BMDV announced the launch of the NIP R&D project BALIS 2.0

- Funding for the development of fuel cell drives for regional aircraft with 40 to 80 seats
- Approximately €9.3 million will be invested between 2024 and 2026 to develop a 350kW fuel

cell module, forming the basis for a powerful megawatt drive system (up to 10 MW)



**Deployment Activities** 

## **Announcements / New Initiatives Germany**

**New Research & Development, Demonstration and/or** 







# **Announcements / New Initiatives Germany**

## **Key Collaborations**

• In May, Germany, Austria and Italy signed a joint declaration of intent for

the development of the southern hydrogen corridor (SoutH2 Corridor)

• Via the SoutH2 Corridor imports from North Africa to important hydrogen demand clusters in Italy, Austria and Germany are to arrive through

southern Italy







# **Germany – Profile November 2024**



#### **Status of Deployments**

Application	Capacity (October 2024)
Electrolyser	108 MW
FC Trucks	219
FC Busses	162
FC Cars	2,202
Operational refueling stations	86

#### **Leading Government Initiatives**

- IPCEI
- H2Global
- National core H2 network
- Climate protection contracts (CCfDs)
- REDII implementation
- AFIR implementation

#### **Deployment Goals**

- 10 GW electrolysis capacity by 2030 in Germany
- 45-90 TWh imports of hydrogen and derivatives by 2030

#### **Goals or Focus Areas**

- Availability of hydrogen
- Infrastructure
- Implementing applications in industry, transport and power generation
- Framework conditions

### Funding

Various programs and mechanisms (see initiatives)

# Thank you



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