

# The German Hydrogen strategy

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For more than 20 years now, DWV has been advocating the technological development and market introduction of hydrogen technologies.

DWV represents all European member associations of Hydrogen Europe (12 associations - March 2019) on the board of the European Hydrogen Association. Hydrogen Europe is directly involved in the design of the European funding programs of the FCH JU.

The expert commission performing energy is the key market player, which has been working intensively since 2015 to ensure that "green hydrogen" is taken into account in the many regulations on energy system transformation for use in refineries.

We have been able to successfully inspire European, federal and state politicians with our proposals and make a decisive contribution to the consideration of green hydrogen in national and European regulations.





# German National Hydrogen Strategy

**Federal Ministry of Economics and Energy (BMWi)**

**Federal Ministry of Transport and Digital Infrastructure (BMVI)**

**Federal Ministry of Education and Research (BMBF) and the Federal Ministry for  
Economic Cooperation and Development (BMZ)**

**Federal Ministry for the Environment, Nature Conservation and Nuclear Safety**





# National Hydrogen Strategy

## Goals and ambitions of the Federal Government



With the “National Wasserstoff Strategy” (NWS), the German Federal Government is creating a coherent framework for action for the future production, transport and further use of hydrogen and thus for corresponding innovations and investments.

The NWS defines the steps that are necessary to contribute to achieving the climate targets, to create new value chains for the German economy and to further develop international energy policy cooperation.

**In order to achieve these goals, 13 concrete objectives have been defined in the NWS, which are to be achieved with 37 coordinated measures.**

# National Hydrogen Strategy

## Selected targets of the NWS



### Develop "home market" for hydrogen technologies in Germany and open the way for imports of hydrogen

#### Positive:

The German government sees a hydrogen demand of about 90 to 110 TWh until 2030.

#### Criticism DWV:

Currently 55 TWh/a of H<sub>2</sub> in Germany are current consumed. The Government plans a ramp-up of hydrogen demand of up to 55 TWh/a. However, it intends to produce only 14 TWh/a as green hydrogen until 2030. This would mean that emissions in the hydrogen sector would increase by 75%. This target is therefore not in line with the climate targets for 2030.

Instead, the additional demand for H<sub>2</sub> must be produced exclusively with renewable energies (PtX). Instead of the 3- 5 GW by 2030 addressed in the NWS, the Government must address 20 GW in the NWS.

**DWV position:** minimum 5 GW domestic market and minimum 15 GW import market

With regard to the **EU initiative 2 x 40 GW**, Germany would have to aim for 2 x 12 GW measured by GDP.

# National Hydrogen Strategy

## Selected targets of the NWS



### **Huge potential for Internationale Hydorgen-Partnerships**

The formulation of the NWS allows the conclusion that there is a theoretical potential for the import of green hydrogen of up to 41 TWh by 2030. This would require an installation of up to 15 GW of electrolysis capacity with a total investment potential of around 30 Mrd. EUR.

### **Financial Support**

To activate the market for green hydrogen imports, the German government's National Hydrogen Strategy provides EUR 2 billion for international partnerships.

### **Focus on Green Hydrogen**

The German government is backing the production of hydrogen with electricity from renewable energies.

This also applies to the import of hydrogen. Here, proof of the additionality of renewable energies will also have to be provided so that hydrogen can be used in Germany to meet climate protection requirements.

# Nationale Hydrogen Strategy Action plan



## **Positive:**

Identification of 37 concrete measures across all application options to establish the hydrogen economy in Germany.

Announcement of the legal creditability of co-processed renewable electricity-based hydrogen in refineries with a market economy potential of 2 GW.

Announcement of support programmes with a total volume of EUR 7.1 billion.

## **Negative:**

Support programmes are not exclusively available to the hydrogen economy - greyhound racing.

Failure to address the creation of market-driven demand, which is essential for an industrial ramp-up.



# Nationale Hydrogen Strategy Action plan



## **Positive:**

Addressing future markets like industry, aviation and shipping.

## **Negative:**

Failure to identify regulatory options for opening up short-term demand markets in road transport for green hydrogen.

This applies in particular to the vehicle manufacturers' mandatory fleet emission targets.

**DWV:** It is unreasonable to burden citizens and the economy with additional costs, especially in view of the economic burdens of the CORONA crisis.

It is therefore irresponsible that the test order for the crediting of green hydrogen against fleet emissions has been deleted in the draft of the NWS.

It is time to act now and establish a market design for renewable electricity-based fuels to ensure an immediate industrial market ramp-up.



Deutscher Wasserstoff- und  
Brennstoffzellen-Verband



[www.dwv-info.de](http://www.dwv-info.de)



[@sektorkopplung](https://twitter.com/sektorkopplung)

Contact:  
Werner Diwald  
Chairman of the board  
[diwald@dwv-info.de](mailto:diwald@dwv-info.de)