# GET H2: New alliance aims to create the basis of a European infrastructure for green hydrogen

- Consortium of seven companies to launch hydrogen economy with production, transport, storage and industrial offtake of climate-friendly green hydrogen from renewable energies in 2024
- Bundled projects could avoid up to 16 million tonnes of CO<sub>2</sub> by 2030
- Public funding sought through "Important Projects of Common European Interest" (IPCEI) programme
- Regulatory changes before the end of this legislative period are crucial for a timely entry into the hydrogen economy.

**Bochum/Dortmund/Essen/Marl/Münster/Salzgitter, 9 March 2021.** Seven companies from the GET H2 initiative show how rapidly the planning of the national and European hydrogen economy is developing. The consortium wants to build a cross-border infrastructure for hydrogen - from the production of green hydrogen to transport and industrial use. From Lingen (Emsland) to Gelsenkirchen and from the Dutch border to Salzgitter, production, transport, storage and industrial acceptance of green hydrogen are to be connected in several steps between 2024 and 2030 under the umbrella of the overall project.

For this project, the companies bp, Evonik, Nowega, OGE, RWE, Salzgitter Flachstahl and Thyssengas, all partners in the GET H2 hydrogen initiative, have now submitted an expression of interest for funding under the IPCEI programme (Important Project of Common European Interest) to the Federal Ministry of Economics and Technology. By using green hydrogen in refineries, in steel production and for other industrial uses, the overall project outlined here should be able to avoid  $CO_2$  emissions of up to 16 million tonnes by 2030.



The project at a glance:

In Lingen (Emsland) RWE produces green hydrogen via an electrolysis plant. From 2024 this will be used to supply the bp refinery in Gelsenkirchen. Most of the transport will take place via existing gas grid lines (shown in orange), which will be converted to hydrogen transport. In 2025, it is planned to extend the network to the Dutch border, and in 2026 RWE will integrate a cavern storage facility in Gronau-Epe. By 2030, the network is to be extended to the Salzgitter steelworks and, if necessary, connected to other networks (shown in light blue).

Thyssengas



Collectively, the overall project can map the essential building blocks of the green hydrogen value chain and form the basis for an efficient European gas infrastructure for hydrogen. With the integration of a cavern storage facility by RWE in Gronau-Epe, the system, which is based on electricity generation from wind energy, can also make a contribution to supply security. The link to the Dutch gas market lays the foundation for a trans-European hydrogen market. The expansion of the project by partners from the transport sector and for the distribution of green hydrogen in the area is also already in preparation. Other partners from the GET H2 initiative have also submitted expressions of interest for IPCEI funding for projects aimed at building a hydrogen infrastructure.

The companies want to push ahead with the development of a hydrogen economy. However, these plans can only be implemented with the necessary regulatory framework. The current focus is on the amendment of the Energy Industry Act (EnWG). The companies are convinced that the draft passed by the Federal Cabinet at the beginning of February does not go far enough. It does not provide for an overarching regulation of gas and hydrogen networks with a uniform gas and hydrogen network fee. However, this would be the best solution to enable a uniform and non-discriminatory use of the hydrogen infrastructure at sustainable conditions. The IPCEI programme can finance the network construction in part. However, the financing of network operation requires a long-term solution to the charging issue in the EnWG.

Further political steps are also necessary to create incentives for the use of green hydrogen in industry. The national implementation of the EU Renewable Energy Directive 2 (RED 2), which was approved by the federal cabinet at the end of December, is an important step towards making the rapid use of green hydrogen economically viable for refineries through corresponding demand in the transport sector. The definition of the electricity purchase criteria is still outstanding here. The criteria for the levy exemption of green electricity used in electrolysis, which was decided in December as part of the amendment to the Renewable Energy Sources Act, also still need to be worked out. For the steel industry, a different subsidy path is necessary, as RED 2 does not apply here. Corresponding support models such as so-called Carbon Contracts for Difference (CCfD), which favour the use of CO<sub>2</sub>-free or low-CO<sub>2</sub> steel, have been announced in the German government's hydrogen strategy, but legal implementation is still pending.

# **Press Contact:**

#### bp

Marc Schulte Marc.Schulte1@bp.com +49 (0)234 4366-3860

#### OGE

Carolin Kielhorn Carolin.Kielhorn@oge.net +49 (0)201 3642-12562

# Salzgitter AG

Bernhard Kleinermann Kleinermann.b@salzgitter-ag.de +49 (0)5341 21-2300

#### *Evonik* Ruben Thiel ruben.thiel@evonik.com +49 (0)201 177 4299

*RWE* Olaf Winter olaf.winter@rwe.com +49 (0)201 5179-8455

# Nowega

Kai Tenzer presse@nowega.de +49 (0)251 60998-345

# Thyssengas

SALZGITTER

Peter Alexewicz Peter.Alexewicz@thyssengas.com +49 (0)231 91291-3189





# **Project Partners:**

# BP Europa SE

BP Europa SE employs around 10,500 people in Germany, Austria, Belgium, Hungary, the Netherlands, Poland and Switzerland. The company is based in Hamburg, where its lubricants, aviation and shipping businesses are handled. Bochum is the administrative headquarters of bp in Germany, as well as being the hometown of the German retail market business Aral. The supply and sales units of BP Europa SE are also based here. The company also operates refineries and retail stations in other European countries. With around 43 million tonnes of petroleum products under the brand names of Aral, bp and Castrol, BP Europa SE meets a large part of annual demand in Europe. Bp has set itself the ambitious aim of becoming net zero by 2050 or earlier. This applies particularly to all of bp's operative activities on an absolute basis and includes a stepwise increase in investments in alternative businesses.

## Evonik Industries AG

Evonik is a global leader in specialty chemicals. The Group is active in over 100 countries and in 2020 generated sales of 12.2 billion and a profit (adjusted EBITDA) of EUR 1.91 billion. Evonik goes far beyond chemistry to create value-adding and sustainable solutions as a partner to its customers. More than 33,000 employees are united by a common drive: We want to make life better, day after day.

The Technology & Infrastructure Division bundles expertise in all aspects of chemical production and is a driver of innovation and digitalisation in the production-related environment. With competence, technical excellence and creativity, around 8,000 employees offer all services across the entire life cycle of a chemical plant and along the supply chain.

#### Nowega GmbH

Nowega GmbH is a transmission system operator, based in Münster. A subsidiary of Erdgas Münster GmbH, Nowega operates, maintains and markets around 1,500 kilometres of highpressure gas pipelines. The pipeline network stretches from the Dutch border across Lower Saxony and parts of North Rhine-Westphalia to the Wendland, and it is part of the inner European transportation route for natural gas.

#### OGE GmbH

OGE is one of the leading transmission system operators in Europe. With a pipeline network measuring around 12,000 kilometres, the company transports gas throughout Germany. Due to its geographical position, OGE connects up the gas flows in the European internal market. The company's 1,450 staff stand for security of supplies. OGE makes its network available to all market players in a non-discriminatory and transparent way, and in line with market requirements. The company shapes energy supplies, both today and with the energy mix of the future.

#### **RWE Generation SE**

With its power plants in Germany, the UK and the Netherlands, the approximately 3,000 employees of RWE Generation produce electricity primarily from gas, hydropower and biomass. The company ranks third in Europe with its gas-fired power plants. The RWE Group bundles its hydrogen activities in RWE Generation. RWE is driving forward more than 30 research and development projects with partners from industry and science.



### RWE Gas Storage West GmbH

RWE Gas Storage West, based in Essen, operates and markets five underground natural gas storage facilities (cavern storage facilities) with a working gas volume of around 1.7 billion cubic metres for the north-west European gas market. At present, the natural gas storage facilities make an important contribution to security of supply in the natural gas market with the flexible and reliable services of RWE Gas Storage West. Looking to the future, gas storage facilities with their ability to store energy in the short and long term as part of sector coupling can be an important building block for a secure and affordable energy transition.

## Salzgitter Flachstahl

Salzgitter Flachstahl is the largest steel subsidiary of the Salzgitter Group. Around 5,500 employees produce around 4.3 million tonnes of crude steel in an integrated steel mill. The most important customers are vehicle manufacturers and their suppliers, tube/large pipe manufacturers, cold-rollers and the construction industry. The products are hot-rolled wide strip, cold-rolled sheet and surface-finished material.

With more than 7 million tonnes of crude steel capacity, over 25,000 employees in more than 150 subsidiaries and associated companies and around  $\in$  9 billion in external sales, the Salzgitter Group is one of Europe's leading steel and technology companies.

## Thyssengas GmbH

Thyssengas GmbH, based in Dortmund, is an independent gas network operator and one of the leading German natural gas transmission network companies. Our infrastructure extends to the territory of North Rhine-Westphalia and Lower Saxony. Every year we transmit approx. 6 billion m<sup>3</sup> of gas through our underground transmission network with a total length of about 4,200 km to distribution network operators, industrial plants and power stations in a safe and environmentally friendly manner.



