







Bayer, E.ON, Iqony and Westenergie planning hydrogen cluster for Bergkamen

Partners Bayer, E.ON, Igony and Westenergie conclude a Memorandum of Understanding on the establishment of a hydrogen cluster

Bergkamen/Unna/Essen. The companies Bayer, E.ON, Igony and Westenergie have agreed on a joint investigation into the feasibility of developing a hydrogen cluster in Bergkamen. In future, hydrogen could be produced from imported ammonia and supplied to customers in the region.

In the planned project, the partners will jointly cover the entire hydrogen value chain - from planning to marketing. The core of the cluster will be the production of green hydrogen based on imported ammonia. In the future, potential customers at the Bayer Group's Bergkamen Industrial Park could be supplied with the hydrogen.

Partners' contributions to the project

The international energy company E.ON, which focuses on energy networks and customer solutions, will take on ammonia procurement and logistics as well as hydrogen sales. E.ON will also examine further utilization and marketing opportunities.

Igony, as a service provider and plant operator in the green energy sector, will be responsible for ammonia storage, constructing and operating the ammonia cracker and supervising the site preparation measures at Bayer's Bergkamen site. The planning considerations will also include the construction of a pipeline to transport the hydrogen produced to the project partner Bayer's industrial park.

The energy service and infrastructure provider Westenergie is to undertake an in-depth review of the pipeline construction. The investigation will focus in particular on the technical feasibility and the legal approval aspects of such a pipeline.

Contact at Igony









The partners see great potential in the development of a hydrogen cluster in Bergkamen: the direct use of green hydrogen would contribute to the ongoing decarbonization efforts of local industry. Located in the immediate vicinity of the Datteln-Hamm Canal and equipped with a well-developed infrastructure, the region offers special opportunities for the expansion of hydrogen initiatives. In addition, Igony already has technical infrastructure for the supply and storage of ammonia, including a tanker vessel for the operation of the power plant site located directly on the Datteln-Hamm Canal.

What the partner companies say

"The hydrogen capacities required to decarbonize our economy in the future will be so large that it will simply not be possible to provide the amount needed from domestic production based on renewable energy sources alone. Instead, imports and a functioning import infrastructure will be needed to ensure that the hydrogen required can be supplied safely and reliably. The Bergkamen hydrogen cluster is a contribution to the establishment of such an import infrastructure," says Dr. Andreas Reichel, CEO of Igony.

"German industry and SMEs need safe, clean and affordable energy in order to remain internationally competitive and secure jobs in the future. And that requires hydrogen - a lot of it, very quickly. As it is not possible to electrify every process, industry and SMEs are dependent on process heat, i.e. high and constant temperatures," says Katherina Reiche, CEO of Westenergie. "I am therefore delighted that we are taking a decisive step towards hydrogen in Bergkamen together with E.ON and our partners Igony and Bayer - with strength, courage and foresight. The favorable conditions at the site make it almost ideal for analyzing the opportunities and challenges of an ammonia-based hydrogen supply along the entire value chain."

The planned project is also unique for the partner E.ON in terms of the future supply of hydrogen to local industry. "The planning of a hydrogen cluster is of especial value to us. Our aim is to supply our customers with hydrogen as quickly and easily as possible in order to support them in their green transformation. This is of great interest to the chemical industry in particular, as those companies can recycle the hydrogen. In total, we plan to provide our customers in this cluster with several thousand metric tons of hydrogen each year. Together with our partners, we are using this project to drive forward the development of a functioning hydrogen economy," says Dr. Gabriël Clemens, Managing Director of E.ON Hydrogen.

It is also an advantage to have the purchasing and recycling side of the project covered by our partner Bayer. "We are committed to economically viable, sustainable solutions," says Dr. Dieter Heinz, Head of Site Management & Infrastructure Services, Pharmaceuticals Division of Bayer. "Green hydrogen from ammonia can become another important building block enabling us to become a climate-neutral site by 2030 and move closer to our long-term goal of net zero greenhouse gas emissions by 2050. We bring the viewpoint of a future user at the Bergkamen Industrial Park into the joint project."

Contact at Igony









Project dovetails with regional development plans

The target set by the partners of establishing a hydrogen cluster in Bergkamen also fits in well with the plans of the city of Bergkamen and the district of Unna to develop a regional hydrogen economy on the eastern edge of the Ruhr area together with partners such as the city of Hamm: "We see hydrogen not only as an opportunity, but rather as a necessity if we want to secure the economy in our region in the medium and long term and make it fit for the future," says Mario Löhr, Unna District Administrator.

Bergkamen's mayor Bernd Schäfer takes a similar view: "The Ruhr region is a traditional location for industry and manufacturing, which form the basis of our prosperity. Where, if not here, should the transformation to a largely emission-free hydrogen economy succeed?"

Looking forward

The project partners have agreed to answer the questions of technical and commercial feasibility by the end of June 2024 and then jointly decide how to proceed with the project as a whole.









About Bayer

Bayer is a global company with core competencies in the life science fields of health and nutrition. With its products and services, the company aims to benefit people and protect the environment by helping to solve the fundamental challenges of a steadily growing and aging world population. Bayer is committed to making a significant contribution to sustainable development through its business activities.

The Bergkamen Supply Center is Bayer's largest production site for active pharmaceutical ingredients. The production facilities of other companies in the chemical industry located at the site give it the character of an industrial park.

About E.ON

E.ON is an international private energy company based in Essen, Germany, which focuses on the business areas of energy networks and customer solutions. As one of Europe's largest energy companies, E.ON plays a leading role in shaping a green, digital and distributed energy world. To this end, around 74,000 employees develop and sell products and solutions for private, commercial and industrial customers. Around 48 million customers purchase electricity, gas, digital products and systems for electromobility, energy efficiency and climate protection from E.ON. Further information can be found at www.eon.com.

Through its subsidiaries E.ON Hydrogen GmbH and E.ON Energy Projects GmbH, which are involved in the project, E.ON supplies location-related decarbonization solutions for industry based on hydrogen and carbon capture storage/utilization (CCS/CCU) along the entire value chain.

About Westenergie

Essen-based Westenergie AG is the largest regional energy service and infrastructure provider in Germany and the largest subsidiary of E.ON SE. The Westenergie Group's distribution system operators are responsible for around 37,000 kilometers of natural gas network. The approximately 196,000-kilometer-long electricity grid they manage would stretch around the world almost five times. With this infrastructure, the Westenergie Group ensures the supply of millions of households and companies in North Rhine-Westphalia, Rhineland-Palatinate and Lower Saxony - not only with electricity and gas, but also with water and broadband internet. With around 10,000 employees and around 1,400 municipal partnerships, the company is making an important contribution to shaping a climate-neutral western Germany. The Westenergie Group includes Westnetz GmbH, Westenergie

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Netzservice GmbH and Westenergie Metering GmbH. Further information can be found at www.westenergie.de.

About Igony

Iqony makes green energy feasible. With more than 85 years of experience in the planning, construction and operation of energy facilities, the company provides holistic solutions for the decarbonization, decentralization and digitalization of the energy supply. Iqony focuses on renewable energies and bridging technologies that can be used in a climate-neutral way now and in the future. In addition to solar, wind and geothermal energy, the portfolio includes hydrogen solutions, storage technologies, engineering services and gas-fired power plants. Around 2,300 employees worldwide implement projects for major industrial companies, utilities, cities and municipalities in numerous countries across the globe. Specializing in tailor-made solutions for complex challenges, Igony draws on its broad and in-depth knowledge of the energy industry across the full range of technologies and services.