

## PRESS RELEASE

### Official approval granted for Hydrogenious LOHC's 'Hector' Storage Plant

- › The world's largest commercial plant to store hydrogen in a Liquid Organic Hydrogen Carrier (LOHC) using benzyltoluene receives authority approval.
- › Commissioning is scheduled for the end of 2027 with a plant capacity of approximately 1,800 tons of hydrogen per year.
- › Hydrogenious LOHC will build, own and operate the plant in Chempark Dormagen.

**Germany / Erlangen, April 29, 2025.** Hydrogenious LOHC has achieved a significant milestone towards designing, building, and operating the world's largest hydrogenation plant for the safe and efficient storage of hydrogen in the LOHC benzyltoluene (LOHC-BT) at Chempark Dormagen in North Rhine-Westphalia, Germany: Project 'Hector' has now received the official building and operating permit for the storage plant in accordance with §4 of the German Federal Immission Control Act (Bundes-Immissionsschutzgesetz - BImSchG).

#### Fundamental milestone

The documents for the permit application were submitted to the competent authority, the District Government of Cologne, at the end of May 2023 and have since successfully passed all necessary review steps, including public display and hearing. The building and operating permit of this first-of-its-kind LOHC storage plant constitutes a major achievement: Hydrogenious LOHC's innovative technology is considered mature and proven by the authorities, ready for implementation and operation on an industrial scale. The persistence and hard work of Hydrogenious LOHC's team and its partners Covestro Deutschland AG and Currenta GmbH & Co. OHG have laid the foundation for this success.

#### Project management and collaboration

LOHC Industrial Solutions NRW GmbH, a subsidiary of Hydrogenious LOHC Technologies based in Neuss, will be responsible for the project management, the construction and subsequent operation of the plant. Commissioning and starting commercial operations are presently scheduled for the end of 2027 with a plant capacity of approximately 1,800 tons of hydrogen per year, which will be safely stored in benzyltoluene.

The plant will be built at Covestro's site in the Chempark Dormagen. Covestro Deutschland AG has been a shareholder in Hydrogenious LOHC Technologies GmbH since 2019 and intends to supply hydrogen for the facility, qualified as RFNBO

(Renewable Fuels of Non-Biological Origin) and produced in their chlorine electrolysis plants.

Project 'Hector' is also aimed at advancing scientific insights to further develop the LOHC technology. The Helmholtz Institute Erlangen-Nürnberg for Renewable Energy (HI ERN), part of Forschungszentrum Jülich, supports the project and focuses on optimizing catalyst performance, ensuring the quality of hydrogen and LOHC materials, and developing robust quality assurance processes for industrial-scale applications. Project 'Hector' will receive funding in the amount of EUR 9 million from the state of North Rhine-Westphalia under the progress.nrw program, of which about EUR 2 million have been awarded to the HI ERN for the scientific work.

### **Clean hydrogen supply for Southern Bavaria**

Following commissioning, the 'Hector' storage plant will be connected to Hydrogenious' IPCEI 'Green Hydrogen @ Blue Danube' to supply industrial offtakers in Southern Bavaria via a release plant in the Ingolstadt region. The umbrella project named 'LOHC Link' will create a comprehensive and resilient green hydrogen supply chain based on LOHC-BT that serves as a perfect blueprint for providing access to clean hydrogen in areas not immediately accessible via port or pipeline infrastructure.

### **Statements**

#### **Dr. Andreas Lehmann, Chief Executive Officer of Hydrogenious LOHC Technologies**

"The official approval of the storage plant is a significant achievement for our team and partners. It demonstrates the viability of our LOHC technology on an industrial scale and marks an important step forward in our mission to advance the hydrogen economy. We are grateful for the support of the state of North Rhine-Westphalia and our partners and look forward to the progress of this groundbreaking project."

#### **Dr.-Ing. Stefan Bürkle, Chief Operating Officer of Hydrogenious LOHC Technologies**

"Realizing the world's first commercial, end-to-end LOHC-BT value chain, represents an exciting challenge for Hydrogenious as a company and for every single individual involved. We will now move forward to the next project phase for both, the 'Hector' storage plant and the 'Blue Danube' release plant in the Ingolstadt region, soon entering the FEED and EPCm phase. I'm 100% sure that, jointly with our partners, we will deliver our contribution to the clean energy supply of the future with the first LOHC supply chain between 'Hector' and 'Green Hydrogen @ Blue Danube'."

**Read the official public notice here (German):**

<https://www.bezreg-koeln.nrw.de/bekanntmachungen/lohc-industrial-solutions-nrw-gmbh-chempark-dormagen-41538-dormagen>

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**250429\_Chempark\_Dormagen**

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### **About Hydrogenious LOHC**

Hydrogenious LOHC Technologies enables flexible hydrogen value chains. With its proven Liquid Organic Hydrogen Carrier (LOHC) technology, the Erlangen-based market pioneer, founded in 2013, allows hydrogen to be stored and transported particularly safe, easy and efficient - at high storage densities, under ambient conditions and in conventional liquid fuel infrastructure. Together with international partners, Hydrogenious is working on the implementation of first-of-its-kind plants and industrial projects that will drive the ramp-up of the hydrogen economy and the decarbonization of industry.

LOHC Industrial Solutions NRW GmbH, a subsidiary of Hydrogenious LOHC Technologies based in Neuss and will be responsible for the project management for the construction and subsequent operation of the plant within the 'Hector' project.

[www.hydrogenious.net](http://www.hydrogenious.net)

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