

PRESS RELEASE

Hydrogenious LOHC Technologies awards FEED and EPCM contract for the world's largest hydrogen release plant in Bavaria, Germany

Erlangen, Germany, 28 October 2025 - Hydrogenious LOHC Technologies, German pioneer in the field of liquid organic hydrogen carriers (LOHC), has signed a contract with the Griesemann Gruppe for the Front End Engineering and Design (FEED) and the subsequent EPCM phase (Engineering, Procurement and Construction Management) for its "Green Hydrogen @ Blue Danube" project.

The scope of work includes engineering, procurement and construction services for the world's largest LOHC release plant at the Bayernoil refinery in Vohburg, with a release capacity of up to five tons of RFNBO-certified hydrogen from LOHC per day. Corresponding to 1,800 tons of green hydrogen per year, this can replace grey hydrogen produced from natural gas and thus save up to 16,000 tons of CO₂ annually. A potential expansion of the dehydrogenation plant could further contribute to a secure hydrogen supply and future decarbonization of industries in the Danube region.

The FEED phase is planned to be completed in the second half of 2026 which will represent an important milestone to reach FID (Final Investment Decision) of the "Green Hydrogen @ Blue Danube" project. Following a positive FID, the construction phase will begin on site. Start of commercial operations is planned for mid-2028.

First LOHC supply chain will secure hydrogen availability in Bavaria

Hydrogenious' project "Hector" demonstrates the large-scale storage of RFNBO-certified hydrogen in LOHC with a storage plant at Chempark Dormagen, North Rhine-Westphalia. The "Green Hydrogen @ Blue Danube" project will establish a corresponding release plant on the offtaker side.

Combined, the two projects form the "LOHC Link" - a comprehensive and sustainable hydrogen value chain including storage in LOHC, safe transport, and the release and supply of RFNBO hydrogen to industrial offtakers.

Project of Common European Interest

The "Green Hydrogen @ Blue Danube" project has been notified as an "Important Project of Common European Interest" (IPCEI) by the European Commission and receives funding from the German Federal Government and the Bavarian State Government.

The plant will be operated based on Hydrogenious' innovative Liquid Organic Hydrogen Carrier (LOHC) technology, which uses the thermal oil benzyl toluene (LOHC-BT) as a carrier material to store hydrogen safely, efficiently, and flexibly. The LOHC-BT can be transported by deploying already established infrastructure for conventional mineral oil

products. As part of the “LOHC Link” supply chain, hydrogen-loaded BT will be transported by truck at ambient conditions.

Competent and experienced partner for FEED and EPCM

Following a tender process, Hydrogenious selected the Griesemann Gruppe as its engineering partner for the FEED phase, with the aim of developing the project to FID. Given the Griesemann Gruppe's project execution capabilities for complex process plants, Hydrogenious intends to entrust the Griesemann Gruppe with the EPCM services of the world's first industrial-scale LOHC release plant.

With over 1,750 employees at more than 40 locations in Germany, Austria, and the Netherlands, the Griesemann Gruppe is a leading engineering company and EPC contractor in the process industry. The family-owned business specializes in the design, construction, and maintenance of industrial plants for over 45 years and has in-depth expertise in process engineering and complex infrastructure projects.

Statements

Dr. Stefan Bürkle, Chief Operating Officer, Hydrogenious LOHC

“Launching the FEED phase, is a strong sign of scaling-up our LOHC technology to an industrial level – and will kick-start the implementation of the first commercial LOHC value chain of a material size. The storage and release plants combined will demonstrate how hydrogen can be stored, transported, and supplied safely and efficiently – decarbonizing industries and ensuring security of hydrogen supply.”

Dr. Andreas Lehmann, Chief Executive Officer, Hydrogenious LOHC

“At a time when the hydrogen economy is facing uncertainties, we need tangible projects and technology-neutral approaches. The FEED phase for “Green Hydrogen @ Blue Danube” is not only a technical milestone - it is a signal to policymakers and industry to stay on track and actively shape the ramp-up of the hydrogen economy based on innovative solutions such as LOHC.”

Uwe Gaudig, Managing Director of Griesemann Gruppe

“Hydrogenious' LOHC technology creates the essential conditions for the scaling and availability of green hydrogen. The Griesemann Gruppe is delighted to be part of bringing this innovative technology to fruition, in collaboration with our partner. Drawing on our experience as a leading engineering partner and EPC contractor, we are committed to contributing to the energy transition and transformation of industry. Ensuring safe and efficient transport is a vital step in the hydrogen value chain.”

On Background information for editors

About the LOHC-BT Technology by Hydrogenious

Hydrogenious' LOHC-BT technology enables hydrogen to be safely bound to the hardly flammable thermal oil benzyltoluene in a chemical process termed hydrogenation. This oil can be transported using conventional infrastructure such as trucks, trains, barges, and tankers without any loss of hydrogen. The LOHC technology is a very safe and simple way to transport large quantities of hydrogen over long distances to the hinterland, especially when compared to other hydrogen transport methods. LOHC can be stored and transported at ambient temperature and pressure and has a hazard potential comparable to diesel. At its destination, hydrogen in high purity is released from the oil in a chemical dehydrogenation process to be used for industrial applications, power generation, or the mobility sector. The carrier oil is not consumed in this process and can be reused for the storage and transport of hydrogen.

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Signing of the FEED/EPCM contract between Hydrogenious LOHC and the Griesemann Gruppe. (From left:) Dr. Stefan Bürkle, COO Hydrogenious LOHC Technologies, and Uwe Gaudig, Managing Director of the Griesemann Gruppe © Jens Müller | Hydrogenious LOHC

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. www.hydrogenious.net

About Griesemann Gruppe

Griesemann Gruppe is one of the largest owner-managed industrial service companies in Germany and provides comprehensive services in the areas of plant construction, engineering, plant technology, and lightning protection throughout the entire life cycle of industrial plants. As a driver of the energy transition, the focus is on the transformation of industry on the one hand, and on the other hand, as a competent partner in climate-friendly projects for the production of hydrogen and power-to-X plants. With broad expertise, multidisciplinary solutions, and 1,750 employees at over 40 locations in Germany, Austria, and the Netherlands, the group contributes to shaping a sustainable industrial future.

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