



Media Release, 9 May 2022

# energielenker and Hitachi Zosen Inova Establish Company for the Production of Bio-LNG

The German energielenker Group and the Swiss cleantech company Hitachi Zosen Inova AG have founded a company in Blankenhain that will build a plant that by the end of 2023 will be producing 3,700 tonnes of bio-LNG annually from sustainably produced biogas. The green fuel and the associated greenhouse gas quotas will be fed into the German fuel market and thus contribute to the decarbonisation of the transport sector.

**Blankenhain, Germany** – In mid-April 2022, the German energy service provider energielenker and the Swiss cleantech company Hitachi Zosen Inova (HZI) established the joint venture company Blankenhain Verflüssigungs GmbH. Its purpose is to modernise and convert the wet fermentation plant already operated by energielenker in Blankenhain, Thuringia. The newly established company will also enable the two owners to further develop their portfolios with the support of each other and thus increase their contribution to the decarbonisation.

# Flagship Blankenhain Project: Upgrading of Biogas to Biogenic Fuel and Liquid CO<sub>2</sub>

The energielenker Group has been successfully operating a fermentation plant at the Blankenhain site in Thuringia since 2011. The plant was built by what was then Schmack Biogas (now HZI Schmack GmbH). Biomethane is produced here on the basis of renewable raw materials and fed into the grid. This classic plant concept is now to be further developed. To this end the plant's substrate feed will be changed to almost 100% sustainable feedstocks such as liquid manure, dung and other waste materials from agriculture and food production. In addition, the old gas processing plant will be replaced by a modern amine scrubber from HZI and will receive additional systems for methane and CO<sub>2</sub> liquefaction as well as for generating its own electricity and heat by means of a combined heat and power plant.

From the almost 58 GWh/a of sustainable raw biogas, in the future approximately 3,700 tonnes of biogenic liquefied gas will be produced annually for the fuel market. In addition, around 4,000 tonnes of liquid  $CO_2$  will be produced as a by-product, replacing fossil-generated  $CO_2$  in industry. This refinement of biogas goes hand in hand with a considerable greenhouse gas reduction: more than 20,000 annual tonnes of  $CO_2$  equivalents can be claimed and sold in the form of greenhouse gas quotas (GHG quotas) under the new German legislation.

## **Greenhouse Gas Reduction as the Main Driver of the Business Case**

It is precisely these reductions in greenhouse gases, which are calculated and traded in the form of GHG quotas, that make it possible to invest in the cryogenic liquefaction technology needed for the process. The basis for this is the European Renewable Energy Directive (RED II), which imposes concrete obligations on member states, such as making the fuel mix increasingly green. In Germany, this goal is implemented by means of a system of greenhouse gas reduction quotas within the Federal Immission Control Act. The law obliges distributors of fossil fuels to reduce their CO<sub>2</sub> footprint by 25% by 2030. This circumstance has recently triggered considerable demand for sustainable biofuels and the associated GHG quotas.

## **Two Optimally Complementary Partners**

In addition to its headquarters in Münster, energielenker has 11 other office locations throughout Germany. The group is not only known as an accomplished provider of comprehensive and innovative energy concepts and consulting services for countries, cities and municipalities, but also as an operator of biomethane cogeneration plants for institutions such as hospitals, universities or charitable facilities. In addition, the energielenker group owns and operates a biogas portfolio comprising 45 plants. The further development of this biogas portfolio with innovative solutions such as bio-LNG and liquid CO<sub>2</sub> is more topical than ever. Henner Paskarbies, Managing Director of energielenker Green Energy, emphasizes: "The partnership with Hitachi Zosen Inova in the newly founded company is not limited to the specific bio-LNG





project in Blankenhain, but opens up the option of cooperating with one of the leading suppliers in this field to offer our existing and new customers more advanced solutions that clearly go beyond the concept stage."

From the point of view of the Zurich-based, globally active plant manufacturer and technology supplier HZI and its 100% subsidiary HZI BioMethan (HZIBM) in Zeven, Germany, the founding of the company with energielenker is a first important step towards gaining a foothold in the home market of Germany with the new liquefaction solutions. "Joining forces with energielenker in this project is an ideal case for us. On the one hand, with energielenker we have an extremely experienced biogas plant operator and thus reliable raw biogas supplier at our side as a partner and co-investor. On the other hand, we can already think about further-reaching technology solutions - both for this and for other energielenker sites, as well as for third-party customers," explains Jens Becker, Managing Director of HZI BioMethan.

According to the implementation plan, construction of the plant in Blankenhain is to begin this year, so that pure bio-LNG can then be produced towards the end of 2023.

#### About energielenker

The energielenker Group was founded in 2012 and, as a system service provider in the context of the energy transition, has already supported 700 customers and over 1750 projects in the fields of energy, buildings, mobility and the environment. More than 300 employees work in 12 office and 50 plant locations across all divisions. Consulting, conceptual and engineering services are just as much a part of the service portfolio as digital solutions for decentralised plant control as well as operating and service support for technical plants.

You can find out more about energielenker here: <a href="https://energielenker-service.de/">https://energielenker-service.de/</a>

#### **Media Contact**

Friederike Reschke Büro Münster Tel: 0251 27601-730 reschke@energielenker.de

#### About Hitachi Zosen Inova

Zurich-based green-tech company Hitachi Zosen Inova (HZI) is a global leader in solutions for energy transition and circular economy including Energy from Waste (EfW) and Renewable Gas (RG), operating as part of the Hitachi Zosen Corporation Group. HZI acts as a project developer, technology supplier and engineering, procurement and construction (EPC) contractor delivering complete turnkey plants and system solutions for thermal and biological waste recovery. Its solutions are based on efficient and environmentally sound technologies, are thoroughly tested, and can be flexibly adapted to customer requirements. HZI's Service Solutions Group combines its own research and development with comprehensive manufacturing and erection capabilities to provide support throughout a plant's entire plant cycle. HZI works for customers ranging from established waste management companies to up-and-coming partners in new markets. Its innovative and reliable solutions have been part of more than 1,600 reference projects worldwide.

Find out more about HZI at www.hz-inova.com.

## **Media Contact**

Hitachi Zosen Inova AG Corporate Communication Manuela Höllinger Hardturmstrasse 127, CH-8005 Zurich, T +41 44 277 14 57 com@hz-inova.com, www.hz-inova.com