

Media Release, 16 May 2022

Biofuel Market Booming:

Hitachi Zosen Inova Takes on Contract from VERBIO AG

Hitachi Zosen Inova BioMethan GmbH, Zeven, on behalf of VERBIO AG, is taking on the construction of a biomethane gas upgrading unit at VERBIO's site in Zörbig, Germany. The biomethane produced by VERBIO will in future be liquefied in a bioLNG installation and marketed as vehicle fuel. The project partners see this as a decisive step towards reduced dependence on fossil fuels and ongoing decarbonisation. For HZI this is the first CO₂ polishing project and its first joint project with VERBIO.

Zeven, May 2022 – VERBIO AG has commissioned Hitachi Zosen Inova BioMethan to construct a gas upgrading plant for purifying and liquefying biomethane at its Zörbig production site in Saxony-Anhalt, Germany.

VERBIO has been producing biomethane at this location since 2011. The renewable gas is produced exclusively from residues and used as biofuel for CNG-powered vehicles. This innovative fuel reduces CO₂ by at least 90% versus diesel and petrol, and is suitable for powering cars, lorries and local buses. So far all the biomethane produced has been fed into the natural gas grid and supplied as bioCNG in gaseous form at CNG stations. In the future the biomethane is to be liquefied and offered as bioLNG. It has great potential as a fuel for long-haul heavy goods vehicles.

Biofuels: Climate Protection and Security of Supply

"Rising electricity, natural gas and oil prices and the adoption of substantially more ambitious 2030 climate goals for transport have been accompanied by an increase in demand for advanced biofuels such as our residue-based biomethane. In the medium term, biomethane is the only available climate-friendly alternative to diesel, especially for heavy goods vehicles. For this reason, we have set the goal, in collaboration with our expert engineering and project management partner HZI, of getting our bioLNG project in Zörbig into operation as early as 2023," explains Professor Oliver Lüdtke, the VERBIO executive in charge of bioethanol and biomethane technology.

Since the biomethane used already meets the required natural gas quality standard, less CO_2 has to be removed from the volume flow to upgrade it for use as a vehicle fuel. This means that despite its smaller dimensions, the CO_2 polishing unit can increase volume flows and throughput.



HZI: Technology Partner with Gas Upgrading Expertise

For the VERBIO project, Hitachi Zosen Inova's gas upgrading technology has been modified to enable significantly higher throughput in the scrubbing tower. The purified biomethane is then dried and fed on into the liquefaction unit. The low concentration of CO₂ in the feedgas also allows proven, standardised amine regeneration from the gas upgrading process to be deployed in a compact container construction, despite the increased throughput. HZI is thus expanding the existing A-Series with a pressure-controlled system variant for CO₂ polishing.

For HZI this job is also its first joint project with VERBIO, which could be followed by more. Stefano Boscolo, Director Sales Renewable Gas Products + Systems at HZI, is confident about the new partnership: "We're convinced that together with VERBIO we'll be able to meet the growing demands of the dynamically evolving energy transition by jointly implementing highly efficient, future-proof solutions."

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Attachement: 2 Press photos

Verbio_Standort_Zoerbig.jpg; caption: View of the Zörbig site, where the HZI CO₂ polishing plant is being built (Image: VERBIO AG)

VERBIO_LNG_FuelStation.jpg; caption: The first verbioLNG station at the Zörbig site. 20 more stations will follow throughout Germany from September 2022 (Image: VERBIO AG)

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 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.

To find out more about HZI, please visit www.hz-inova.com.

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About VERBIO Vereinigte BioEnergie AG (VERBIO)

VERBIO Vereinigte BioEnergie AG (VERBIO) is one of the leading independent bioenergy manufacturers, and is also the only large-scale producer of biodiesel, bioethanol and biomethane in Europe. The group has approximately



900 employees at its locations in Saxony, Saxony-Anhalt and Brandenburg as well as at its foreign subsidiaries in India, the USA, Canada, Poland and Hungary. VERBIO concentrates on the use of internally developed innovative and efficient energy-saving production processes VERBIO's biofuels achieve CO₂ savings of up to 90 percent compared to petrol or diesel. Its production capacity comes to around 660,000 tonnes of biodiesel, 260,000 tonnes of bioethanol and 900 gigawatt hours of biomethane a year. In addition to this, VERBIO produces organic fertilisers and animal feedstuffs for use in agriculture, as well as high-quality raw materials for the pharmaceutical, cosmetics and food industries. With its innovative processes and highly efficient production plants, VERBIO is a technology leader in the biofuels market. Since October 2006, VERBIO's share (ISIN DE000A0JL9W6 / WKN A0JL9W) has been listed on the Prime Standard segment of the Frankfurt Stock Exchange.

Online and social media

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