PRESS RELEASE
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Greenergy and Hydrogenious LOHC Technologies agree joint study to develop green hydrogen supply chain

London, United Kingdom/ Erlangen, Germany

Greenergy and Hydrogenious LOHC Technologies have agreed terms for a joint pre-feasibility study on the development of a commercial scale hydrogen supply chain with the aim of shipping low-cost green hydrogen from Canada to the UK.

Hydrogenious' proven and safe Liquid Organic Hydrogen Carrier (LOHC) technology enables hydrogen to be chemically bound to a thermal oil for safe storage and bulk shipping, leveraging the existing infrastructure for liquid fuels. Temporarily absorbed to the LOHC the hydrogen can be transported and handled safely and easily in ports and in urban areas. On arrival and discharge at the import location the hydrogen will then be released from the liquid carrier for delivery as pure green hydrogen to end users.

Greenergy's access to large terminals is ideal for the importation, release and distribution of hydrogen using the LOHC, with Navigator Thames already identified as a strategic location to meet expected demand for hydrogen in the South East of England. Greenergy's distribution network and strong customer base will also enable delivery to a broad range of industrial and commercial customers across the UK.

Christian Flach, Chief Executive Officer of Greenergy, says: "Working with Hydrogenious is an important step in our strategy to offer cost effective hydrogen to our customers using existing storage and delivery infrastructure. Delivering hydrogen is an important goal in supporting the energy transition."

Dr Toralf Pohl, Chief Commercial Officer at Hydrogenious LOHC Technologies, says: "North America will soon be a key market for large-scale clean hydrogen exports to Europe. The UK is committed to hydrogen consumption, and together with Greenergy, we will now be exploring the possibility of establishing a LOHC-based hydrogen supply chain, including constructing storage and release plant assets in Canada and the UK capable of handling more than 100 tonnes of hydrogen per day, while leveraging the existing infrastructure for liquid fuels in ports with our LOHC technology."

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Notes to editor

Background

Shipping hydrogen over long distances on an industrial scale in its pure form, either under high pressure or liquefied at extremely low temperatures, is both costly and complex. The conversion of hydrogen into ammonia and its shipment would have significant disadvantages in terms of safety in urban ports.

As an alternative, hydrogen can easily be stored in and released from a Liquid Organic Hydrogen Carrier (LOHC) called benzyl toluene, a thermal oil which enables safe and convenient hydrogen transport. This specific LOHC has particularly positive properties as a hydrogen carrier for handling in ports and urban environments, since it is a non-explosive, flame-retardant oil. It can easily and safely be transported from the hydrogen source to the receiving country over long distances in the already existing liquid fuel infrastructure, shows now boil-off losses of hydrogen and does not require low temperatures or high pressures, making it more cost effective and flexible to handle.

Once imported, hydrogen can then be released and distributed to customer sites.

Green hydrogen is expected to play an important role in meeting the UK's net zero targets, and hydrogen imports to the UK can bolster its energy infrastructures. In the UK Government's Hydrogen Roadmap, it is estimated that total demand could be 20-35% of the UK's final energy consumption by 2050.

Canada is already one of the world's top ten hydrogen producers, with an annual production of three million tonnes of (grey) hydrogen. By the year 2050, Canada aims to be one of the world's top three producers and a major exporter of green hydrogen.

About Greenergy

Greenergy is an established supplier and distributor of transportation fuels with a proven track record as the low-cost supplier delivering highly reliable customer service. Greenergy markets in the UK, Ireland and Canada with terminal infrastructure in these regions ensuring custody and quality-control of the supply chain.

Europe's largest manufacturer of biodiesel from waste, Greenergy is also investing in other next gen projects to help drive decarbonisation and support circularity.

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About Hydrogenious LOHC

Hydrogenious LOHC Technologies provides the missing link for flexible hydrogen supply chains worldwide. Based on its proven Liquid Organic Hydrogen Carrier (LOHC) technology, the market pioneer founded in 2013 enables the storage and transport of hydrogen in a particularly safe, simple and efficient way - at high storage densities, under ambient conditions and in conventional liquid fuel infrastructure. The portfolio of the Erlangen-based scale-up and its international joint venture and subsidiary companies today comprises stationary and mobile (on-board) LOHC-based applications, including turnkey (de)hydrogenation plants, operation & maintenance and LOHC logistics. www.hydrogenious.net

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