

Media Information

19 April 2023

Pilot projects under way: Used cooking oil powers BMW Group logistics

- Pilot projects with renewable diesel HVO100 under way
- Green transport logistics accelerate implementation of BMW iFACTORY strategy
- Head of Logistics Nikolaides: "Every gram of CO₂ we can save helps"

Munich. The future is already on the Autobahn: between BMW Plant Munich and Landau an der Isar, about 120 km to the northeast, four trucks can be seen to-ing and fro-ing several times a day. They are operated by the logistics provider Guggemos (GV Trucknet), their green stickers proclaiming their eco-credentials: "Ich tanke HVO100, um CO₂ -Emissionen zu senken" ("I tank with HVO100 to save CO₂ emissions"). Delivering supplies just in time from Landau to the home plant in Munich, the trucks have been running on renewable HVO100 diesel since December 2022. It's all part of a one-year pilot programme to trial the new fuel. In March 2023 the HVO100 test fleet was expanded to include another six trucks, this time belonging to DB Schenker. They commute between the BMW Group Supply Centre in Eching, just north of Munich, to deliver warehouse parts to the plant in the city for production – a round trip of a good 40 km each time.

HVO stands for 'hydrotreated vegetable oil', and the '100' in the name of the fuel confirms that conventional diesel vehicles can tank 100 percent with the pure renewable fuel. HVO100 is made from various waste products, residues and renewable raw materials, including used cooking oil. Compared with fossil diesel, it produces up to 90 percent less CO₂ well-to-wheel. On average, fuel consumption is about 3 percent higher with HVO100, but the ten trucks currently piloting the fuel – also known as "Neste MY Renewable Diesel", made by Finland's Neste – for the BMW Group are expected to emit up to 800 tonnes less CO₂ a year than they would with conventional diesel.

The progressive HVO100 pilot project is the next step in the consistent implementation of the BMW Group's Green Transport Logistics Strategy – an integral part of the BMW iFACTORY. Michael Nikolaides, Head of BMW Group Production Network and Logistics, is convinced: "Every gram of CO₂ we can save

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helps." An advocate of keeping an open mind to all technologies, he added: "We continue to reduce the carbon footprint from our transport and supply chains through a variety of measures."

Electric trucks are already operating at BMW Group Plant Munich. "The use of HVO100 in logistics brings another sustainable technology to BMW Group Plant Munich. It plays a valuable part in helping the company achieve its sustainability goals and represents a further component in the plant's transformation to a BMW iFACTORY with a LEAN, GREEN, DIGITAL approach," added Peter Weber, Director of BMW Group Plant Munich.

Nikolaides sees some major advantages in the simple use of HVO100: vehicles and engines require no modifications to run on the eco-friendly fuel, and HVO can be used pure or mixed with fossil fuel in any ratio. It can also be supplied via the existing fuel station infrastructure.

The BMW Group's partner on the current HVO100 pilot project is the Finnish company Neste. Their hydrotreated vegetable oil is based on their patented NEXBTL technology and produced purely from renewable raw materials, with plant oils being converted to hydrocarbons through a catalytic reaction with hydrogen. HVO diesel is not the same as bio-diesel, however, which is chemically different and produced by a different process.

By using the new fuel in transport logistics, the BMW Group intends to find out how the renewable diesel works in everyday operations and how cost-efficient it is. "We want to know which drive technologies and fuels work best in which contexts," Nikolaides explained. To do this, a team of BMW Group experts is evaluating aspects such as fuel consumption with different loads, at different speeds, in a variety of weather conditions, and over shorter and longer distances.

If you have any questions, please contact:

Corporate Communications

Sandra Schillmoeller, Head of Communications Production Network BMW Group

Telephone: +49 89 382 12225

E-mail: Sandra.Schillmoeller@bmwgroup.com

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Martina Hatzel, Communications Production Network BMW Group

Telephone: +49 89 382 11966

E-mail: Martina.Hatzel@bmwgroup.comMedia website: www.press.bmwgroup.comE-mail: presse@bmwgroup.com**The BMW Group**

With its four brands BMW, MINI, Rolls-Royce and BMW Motorrad, the BMW Group is the world's leading premium manufacturer of automobiles and motorcycles and also provides premium financial and mobility services. The BMW Group production network comprises over 30 production sites worldwide; the company has a global sales network in more than 140 countries.

In 2022, the BMW Group sold nearly 2.4 million passenger vehicles and more than 202,000 motorcycles worldwide. The profit before tax in the financial year 2022 was € 23.5 billion on revenues amounting to € 142.6 billion. As of 31 December 2022, the BMW Group had a workforce of 149,475 employees.

The success of the BMW Group has always been based on long-term thinking and responsible action. The company set the course for the future at an early stage and consistently makes sustainability and efficient resource management central to its strategic direction, from the supply chain through production to the end of the use phase of all products.

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