**Press release**

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# MAN Energy Solutions to Lead New Ammonia GenSet Project

**Danish 'NH3 Spark – FutureFlex' project aims to develop pioneering, small-bore engine concept that dispenses with need for pilot fuel**

Danish State initiative, the EUDP (Energy Technology Development and Demonstration Programme), has announced the 'NH3 Spark – FutureFlex' project. It aims to develop a dual-fuel, four-stroke GenSet capable of operating purely on ammonia without the need for a pilot fuel, a first for a commercial, industrial engine.

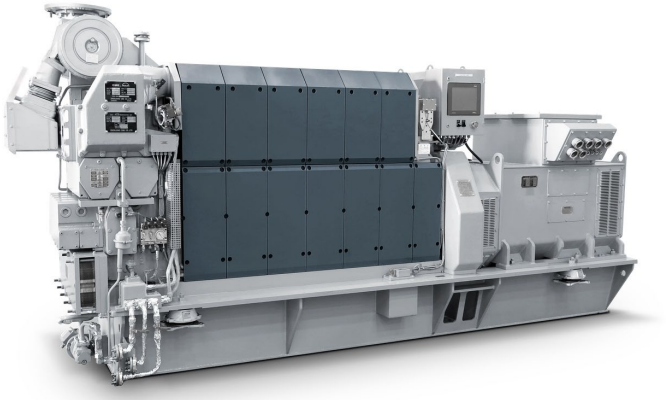
The project brings together a consortium led by MAN Energy Solutions' Holeby site along with the Technical University of Denmark (DTU) and Skovgaard Energy, the Danish renewable-energy player. Comprising four phases, the first – ammonia testing on a single-cylinder MAN GenSet – will take place at DTU Construct's engine laboratory and is scheduled to commence during Q3 2025. This will be followed by full-scale testing under powerplant conditions at Skovgaard Energy's green-ammonia production facility.

Jarl Klüssmann, NH3 Spark Project Manager, said: "We support the energy transition and are always happy to work with like-minded industry partners. This project brings together a unique constellation of collaborators with different competencies and I am confident we will deliver practicable results that the market will be able to capitalise upon."

For the purposes of the project, MAN Energy Solutions will take an innovative approach to the dual-fuel concept by developing a small-bore engine where simplicity, price and retrofit suitability are paramount, and which are particularly relevant for the more than 20,000 MAN GenSet engines currently in operation that were designed at the Holeby location. The concept's suitability for use with other, low-emission fuels will also be evaluated during the project, hence the 'FutureFlex' modifier.

Warley Thomsen – Senior R&D Specialist, MAN Energy Solutions – said: "This project has the potential to create a new niche for the well-proven oil-fuelled engine where units can be quickly retrofitted or installed onboard new ships or in power plants. It aims to provide an attractive retrofit solution for existing engines with fuel-flexibility as a priority. The concept will be capable of operating purely on ammonia but also on conventional biofuel oils to accommodate shipowners and the environment, regardless of which future-fuels ultimately prevail."

The Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping, DFDS – the international shipping and logistics company – and Hafnia – the leading tanker owner – have all declared support for the project and will contribute input. A classification society will also join the project at a later stage.



*The initial phase of the NH3 – FutureFlex project involves ammonia testing on a single-cylinder MAN GenSet at the Technical University of Denmark*

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