

#### Press release

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MAN Energy Solutions SE Teglholmsgade 41, 2450 Copenhagen SV, Denmark www.man-es.com

Group Communications Nils Søholt P +45 33 85 26 69 Nils.Soeholt@man-es.com

# Signing Ceremony Expands Dual-Fuel Methanol Agreement with CCS

New sub-agreement supports development project for new MAN 21/31DF-M engine

At an online ceremony on February 27<sup>th</sup>, 2024, MAN Energy Solutions and China Classification Society (CCS) signed a sub-agreement in line with the Strategic Framework Agreement (SFA) the two parties previously agreed in September 2023 in Beijing. The SFA, on 'Decarbonisation and Digitalisation in the maritime industry', is scheduled to last for five years.

The new sub-agreement – the third such between the companies – covers MAN Energy Solutions' new MAN L21/31DF-M (Dual-Fuel Methanol) GenSet designed at the company's Danish site in Holeby. It provides for a collaboration between the two companies that will support the new engine in the Chinese market, including all activities associated with its planned Type Approval Test (TAT) in China in Q4, 2024.

MAN Energy Solutions' Classification Department in Copenhagen hosted the Subagreement signing. Marine Product Department General Manager, Jiang Botao, and Jiangsu Plan Approval Center Manager, Sun Qun, signed on behalf of CCS; while Finn Fjeldhøj, Senior Manager and Site Manager, Holeby, and Lars Ascanius, Senior Manager, Two-Stroke Engine Lifecycle Management, signed on behalf of MAN Energy Solutions.

Jiang Botao said: "MAN Energy Solutions, as a globally-renowned ship equipment manufacturer, takes the lead in the technological advancement of marine alternative-fuel engines and has long been one of CCS's most important partners. The introduction of the MAN L21/31 DF-M methanol dual-fuel engine provides shipowners with more choices to achieve their decarbonisation goals. We much appreciate MAN Energy Solutions' contribution and believe that the collaboration between it and CCS in alternative-fuel engines will surely make further contributions to a more sustainable future for the global maritime industry."

Sun Qun said: "We have witnessed an increased interest in methanol-fuelled ships in recent years as methanol is an important alternative fuel for greenhouse-gasemissions reduction. We are delighted to collaborate with MAN Energy Solutions, the leading marine-power solution provider, on this methanol dual-fuel engine to contribute to ship safety and maritime decarbonisation. CCS is fully committed to working with MAN Energy Solutions to complete the approval and delivery of this type of methanol dual-fuel engine."

Fjeldhøj said: "The MAN L21/31 engine is well-established in the market having notched some 2,750 sales to date. With the shipping market currently experiencing an increased interest in methanol as marine fuel, we feel that the introduction of this dual-fuel engine is timely. This collaboration with CCS will provide great



support to the new MAN L21/31 DF-M variant upon its entry to the Chinese market."

Ascanius said: "It is very positive news for MAN Energy Solutions that we can now reveal this new development with China Classification Society, whom we greatly value as an esteemed partner. This latest announcement represents a further step towards a multi-fuel, decarbonised future that is quickly becoming a prominent consideration for shipowners in all vessel segments and sizes."

## SFA background

The Strategic Framework Agreement is designed as a umbrella agreement that enables MAN Energy Solutions and CCS to add sub-agreements as required. Since its original signing, and prior to this new agreement, the two companies have added two other sub-agreements. The first covers the introduction of MAN Energy Solutions' two-s troke methanol engine to the CCS Global Fleet; and the second covers changes to Class Rules for the CCS Global Fleet.

### **MAN 2131DF-M**

The 21/31DF-M is based on a simple port fuel-injection concept that optimises reliability, while simultaneously minimising capital-outlay time. The foundation for the new L21/31DF-M GenSet is the existing L21/31 GenSet, which has accumulated more than 55 million operating hours with thousands of engines in service. Furthermore, the L21/31DF-M power range spans 1,000–1,980 kW, which makes it suitable for most merchant vessels.

China Classification Society: www.ccs.org.cn

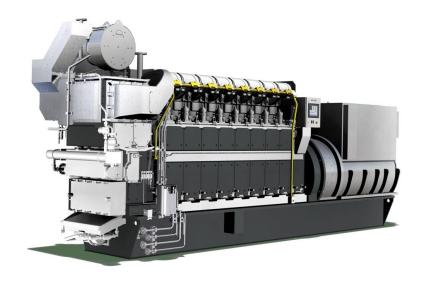


(Front, left to right) Jiang Botao, Marine Product Department General Manager, and Sun Qun, Jiangsu Plan Approval Center Manager, signed the agreement on behalf of CCS





(left to right) Lars Ascanius, Senior Manager, Two-Stroke Engine Lifeycle Management, and Finn Fjeldhøj, Senior Manager and Site Manager, Holeby signed the agreement on behalf of MAN Energy Solutions, pictured with witness, Zhu Qi, General Manager and Principle Surveyor, China Classification Society (Europe)



The MAN 21/31DF-M engine



MAN Energy Solutions enables its customers to achieve sustainable value creation in the transition towards a carbon neutral future. Addressing tomorrow's challenges within the marine, energy and industrial sectors, we improve efficiency and performance at a systemic level. Leading the way in advanced engineering for more than 250 years, we provide a unique portfolio of technologies. Headquartered in Germany, MAN Energy Solutions employs some 14,000 people at over 120 sites globally. Our after-sales brand, MAN PrimeServ, offers a vast network of service centres to our customers all over the world.