

Company Registration Number: 196300098Z

Taking Another Step Towards a Decarbonised Future: Sembcorp Marine and Partners Attained AIP from ABS to Design an Ammonia Bunkering Vessel

Collaboration to explore viability of ammonia as a marine fuel to pave the way for emission-free shipping in the future

Demonstrates Sembcorp Marine's commitment to support the marine industry's transition with the provision of innovative and sustainable solutions

Singapore, 11 January 2022 – Sembcorp Marine Ltd. (the "**Company**", together with its subsidiaries, the "**Group**"), through its wholly-owned subsidiaries, Sembcorp Marine Integrated Yard Pte. Ltd. ("**SMIY**") and LMG Marin AS ("**LMG Marin**"), together with its partners, Mitsui O.S.K Lines, Ltd, and ITOCHU Corporation, have attained Approval in Principle ("**AIP**") from the American Bureau of Shipping ("**ABS**") for the conceptual design of an ammonia bunkering vessel.

Leveraging SMIY's vast expertise and technological bench strength in the design and construction of marine vessels, as well as LMG Marin's cutting-edge design capabilities, the Group designed a NH3 bunkering vessel and provided associated information for a Hazard Identification Study ("HAZID"). Sembcorp Marine, with support from its partners and ABS, carried out a comprehensive HAZID in fulfilment of the AIP application which was also instrumental in the attainment of AIP. The vessel's rigorous design took into consideration ammonia's toxicity, as well as design input on the cargo containment system and bunkering system from Wartsila Gas Solutions and Trelleborg Westbury/KLAW LNG respectively.

This vessel, if realised, will be the first of its kind bunker vessel. It will also augment Singapore's marine decarbonisation efforts with resultant positive impact on the global maritime industry. A successful outcome will support the International Maritime Organization's ambition to halve the total annual GHG emissions from international shipping by 2050 compared to 2008 levels.

The Group believes in playing an active part in contributing to decarbonisation in the maritime industry. It has developed a suite of comprehensive Gas Value Chain solutions. Notably, the Group is building a 12,000 m³ LNG (Liquefied Natural Gas) bunkering vessel for Mitsui O.S.K. Once completed, this vessel will be the largest LNG bunkering vessel built in Singapore, complementing Singapore's advocacy for decarbonisation and augmenting the development of Singapore's ecosystem and infrastructure to support LNG bunkering.

In April 2021, Sembcorp Marine entered into a Memorandum of Understanding with Shell and Penguin International to jointly develop hydrogen as a marine fuel, another first for Singapore as this nation-state continues to champion decarbonisation and emission-free shipping in the future. Sembcorp Marine President and CEO, Mr Wong Weng Sun, said: "Sembcorp Marine is delighted to undertake another collaborative effort that has the potential to revolutionise shipping and transportation. This collaboration clearly underpins the Global Centre for Maritime Decarbonisation's ongoing pursuit to define the safety and operation envelopes to enable ammonia pilot demonstrations in Singapore."

"We are cognizant that the push to accelerate decarbonisation must be supported by a portfolio of solutions. We are leveraging our proven expertise and differentiated capabilities in the design and fabrication of offshore structures and vessels to support the offshore, marine and energy industries' mission critical search for viable solutions to reduce their carbon footprint. This joint project is also in line with Sembcorp Marine's Sustainability Vision to reduce our carbon footprint."



Artist's impression of the Ammonia Bunkering Vessel designed by Sembcorp Marine's wholly-owned subsidiaries, Sembcorp Marine Integrated Yard and LMG Marin

Editor's Notes

For a high-resolution version of the above image, please <u>click here</u>.

About Sembcorp Marine

Sembcorp Marine provides innovative engineering solutions to the global offshore, marine and energy industries. Headquartered in Singapore, the Group has close to 60 years of track record in the design and construction of rigs, floaters, offshore platforms and specialised vessels, as well as in the repair, upgrading and conversion of different ship types. Sembcorp Marine's solutions focus on the following areas: Renewables, Process, Gas, Ocean Living and Advanced Drilling Rigs.

Sembcorp Marine's customers include major energy companies, owners of floating production units, shipping companies and cruise and ferry operators. They are supported by four commercial units: Rigs & Floaters; Repairs & Upgrades; Offshore Platforms and Specialised Shipbuilding.

Sembcorp Marine operates shipyards and other facilities in Singapore, Indonesia, the United Kingdom, Norway and Brazil.

Discover more at <u>www.sembmarine.com</u>.

For more information, please contact:

Ms Chua Mun Yuen Head, Investor Relations and Corporate Communications Tel No: +65 6971 7039 Email: <u>munyuen.chua@sembmarine.com</u>

Ms Serene Lam Manager, Investor Relations and Corporate Communications Tel No: +65 6971 7043 Email: <u>serene.lam@sembmarine.com</u>