



MEDIA RELEASE

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INDUSTRY LEADERS JOIN FORCES ON AMMONIA-FUELLED TANKER PROJECT

MISC Berhad, Samsung Heavy Industries, Lloyd's Register and MAN Energy Solutions to work collaboratively on addressing shipping's decarbonisation challenge.

MISC Berhad (MISC) , Samsung Heavy Industries (SHI), Lloyd's Register (LR) and MAN Energy Solutions have announced that they will work together on a joint development project (JDP) for an ammonia-fuelled tanker to support shipping's drive towards a decarbonised future.

The creation of the alliance has been motivated by the partners' shared belief that the maritime industry needs leadership and greater collaboration if shipping is to meet the International Maritime Organisation's 2050 Greenhouse Gas (GHG) emission target, an ambition that requires commercially viable deep-sea Zero-Emission Vessels (ZEVs) are in operation by 2030.

Ammonia is just one of the pathways towards zero-carbon emitting vessels. The partners recognise that the shipping industry will need to explore multiple decarbonisation pathways and hope their collaboration will spur others in the maritime industry to join forces on addressing this global challenge.

The partners believe that the creation of such alliances will send a clear message that shipping can progress itself to fit times and circumstances, ahead of regulatory action.

The drive to decarbonise shipping will be a dominant focus of the decade ahead and follows a year of action in 2019 that saw the launch of Getting to Zero Coalition, an alliance of leading maritime, energy, infrastructure and finance companies committed to getting commercially viable deep-sea ZEVs powered by zero emission energy resources into operation by 2030.

Shipping's decarbonisation as a shared obligation was also a key talking point during the Global Maritime Forum held in Singapore in October 2019 where more than 220 industry leaders congregated to discuss the challenges facing the shipping industry.

Yee Yang Chien, President/Group CEO, MISC Berhad said: "At MISC, we believe the global maritime industry needs to be more collaborative in defining our future together, rather than being confrontational and fragmented in our efforts. I am very glad that our distinguished partners have come together with MISC to showcase joint leadership in developing one of the pathways towards a zero-carbon future for the maritime industry. We need more shining examples of partnerships and collaborations in our industry and it is my hope that this will encourage our peers in the industry to also join hands with others to advance the zero-carbon agenda."



Joon Ou Nam, President & CEO of Samsung Heavy Industries said: We are very delighted to be a key member of this meaningful industry collaboration together with competent partners. We all know that the industry-wide movement is vital, and new zero-carbon fuel technologies, such as ammonia fuel, are to be brought on the table, in order to take action proactively on maritime GHG emissions in accordance with the IMO's ambitious road map. We hope SHI's experience and expertise in novel ship design development will effectively contribute to this joint development project and all JDP partners could get better insight into the feasible and sustainable zero-carbon fuel vessel design solutions.

Nick Brown, Marine & Offshore Director, Lloyd's Register said: "As we start the 2020s we are proud to be among a four-party team to make deepsea Zero-Emission Vessels (ZEVs) a reality within this decade. The IMO's 2050 GHG ambitions, which prescribes that international shipping must reduce its total annual greenhouse gas emissions by at least 50% of 2008 levels by 2050, require substantial and collaborative input from all maritime stakeholders and we are confident the lead taken by this partnership will encourage others to work collectively to address the challenge. These are exciting times as we commence the industry's fourth Propulsion Revolution as during LR's history we have supported the transition from wind to coal to oil and now look forward to safely decarbonising."

Bjarne Foldager Jensen, Senior Vice President, Head of Two Stroke Business at MAN, said: "Joining this project makes perfect sense for MAN Energy Solutions as system technologies that help our customers to reduce emissions and lead the way to a carbon-neutral future form a significant part of our business strategy. Low-speed diesel engines are the most efficient propulsion system for trans-oceanic shipping and already run on a sizable number of emission-friendly fuels. We look forward to adding ammonia to the list and welcome the opportunity to work with industry partners in this venture."

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About MISC Berhad

MISC Berhad (MISC), was incorporated in 1968 and is a world leading provider of international energy related maritime solutions and services. The principal businesses of the Group comprise energy shipping and its related activities, owning and operating offshore floating solutions, marine repair and conversion, engineering and construction works, integrated marine services, port and terminal services as well as maritime education and training.

As of 30 June 2019, MISC Group's fleet consists of more than 100 owned and in-chartered Liquefied Natural Gas (LNG), Petroleum and Product vessels, 14 Floating Production Systems (FPS) as well as 2 LNG Floating Storage Units (FSUs). The fleet has a combined deadweight tonnage (dwt) capacity of approximately 16 million tonnes.



We take pride in our asset and service reliability, commitment to uphold the highest standards of Health, Safety and Environment (HSE), fostering a culture of excellence amongst our employees, operating responsibly and caring for the environment as well as making a positive difference to the communities in which we operate.

MISC Group is a proud member of 'Getting to Zero Coalition' committed to developing zero-emission vessels by 2030. The Coalition is a powerful alliance of more than 70 public and private organizations that will lead the push for international shipping's decarbonisation.

Since 2014, we have been a proud constituent of the FTSE4Good Bursa Malaysia Index, a testament to our sustainability performance and strong Environmental, Social and Governance (ESG) practices.

About Lloyd's Register (LR)

We started out in 1760 as a marine classification society. Today, we're one of the world's leading providers of professional services for engineering and technology – improving safety and increasing the performance of critical infrastructures for clients in over 75 countries worldwide.

The profits we generate fund the Lloyd's Register Foundation, a charity which supports science and engineering-related research, education and public engagement around everything we do. All of this helps us stand by the purpose that drives us every single day: Working together for a safer world.

In a world of increasing complexity – overloaded with data and opinion - we know that our clients need more than technology to succeed. They need an experienced hand. A partner to listen, cut through the noise and focus on what really matters to them and their customers. Our engineers and technical experts are dedicated to assurance. That means a commitment to embracing new technology, and a deep rooted desire to drive better performance. So, we consider our customers' needs with diligence and empathy, then use our expertise and over 250 years' experience to deliver the smart solution for everyone.

After all, there are some things technology can't replace.

About SHI

SHI has successfully completed many of the world's first and largest shipbuilding and offshore EPC projects, with the sole aim of establishing global leadership in each market segment.

Since its inception in 1974, SHI secured orders for 1,250 ships and offshore facilities and successfully delivered 1,137 units as of January, 2020. Most notably, it has achieved unbeatable leadership in the high-tech shipbuilding sector by maintaining the world's no.1 share in the drillship, LNG carrier, Shuttle tanker, Arctic vessel and FPSO markets.

SHI is trying to create best products and technology services based on excellent human resources and technology. Moreover, with passion and challenges, SHI's engineers are committed to the development of eco-friendly technologies for green future ships and are continuing their research on the development of Zero Emission Ships for the next generation vessel.

About MAN Energy Solutions

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.



Useful links

<https://www.lr.org/en/latest-news/getting-to-zero-coalition/>
<https://www.globalmaritimeforum.org>

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