

MEDIA RELEASE

Singapore, 27 April 2023 | **Immediate Release**

Working with Academia, Industry and Global Partners to Accelerate Decarbonisation of International Shipping

1. The Maritime and Port Authority of Singapore (MPA) hosted its second edition of the 'Accelerating Decarbonisation Conference' at the Marina Bay Sands Expo and Convention Centre. More than 400 industry leaders, academia and experts gathered to discuss efforts to accelerate global maritime decarbonisation, challenges, and opportunities that could be seized in the transition to use of low-carbon and carbon-free energy sources in the maritime sector.
2. Mr Teo Eng Dih, Chief Executive of MPA, delivered the opening remarks at the event, while Mr Kitack Lim, Secretary-General, International Maritime Organization (IMO), delivered the keynote address. In his address, Mr Kitack emphasised the urgency for shipping to decarbonise and reaffirmed IMO's commitment and long-standing efforts to reduce greenhouse gas (GHG) emissions from international shipping.
3. Four expert panels were convened to discuss various issues related to the current state of the maritime sector's transition to low and zero carbon fuels. In particular, panelists covered the potential of green shipping corridors and net-zero fuel pathways to support emissions reduction for the maritime sector, in line with the goals of IMO and countries' Nationally Determined Contributions (NDCs). See [Annex A](#) for full list of panel members.

MaritimeSG LowCarbon50 Award Ceremony

4. The MaritimeSG LowCarbon50 Award Ceremony, co-hosted by Singapore Shipping Association (SSA) and Global Compact Network Singapore (GCNS), was also held at the conference for the second year running. The award was introduced by MPA as part of the Maritime Singapore Green Initiative's Green Awareness Programme¹ to recognize companies' contributions to emission reduction.
5. Twenty companies took part in the second run of the Low Carbon Management workshop in 2022, and companies' submissions for the award were evaluated by a

¹ The Maritime Singapore Green Initiative's Green Awareness Programme encourages maritime companies to start exploring carbon reporting and internal carbon pricing.

panel comprising MPA, SSA and GCNS based on three main criteria of emission reduction, innovation and scalability. A total of six awards were given out to:

- (i) Executive Ship Management Pte Ltd,
- (ii) Goodwood Ship Management Pte Ltd,
- (iii) Hafnia Pools Pte Ltd,
- (iv) Hong Lam Marine Pte Ltd,
- (v) Ocean Network Express Singapore Pte Ltd, and
- (iv) X-Press Feeders Pte Ltd.

Singapore-IMO NextGEN Connect Challenge Award Ceremony

6. The Singapore-IMO NextGEN Connect Challenge award ceremony was also held at the conference to recognise proposals to reduce GHG emissions on a global scale. Launched in April 2022, the award's call for proposals received multiple high-quality submissions from around the world, proposing route-based action plans to reduce GHG emissions between specific points along shipping routes.

7. A distinguished panel of international judges from IMO, MPA, the Norwegian Ministry of Climate and Environment and the Maritime Technology Cooperation Centre Asia (MTCC-Asia) evaluated the submissions based on a set of criteria supporting IMO 2050 emissions reduction goals, taking into consideration implementation feasibility and inclusiveness.

8. The winner of the inaugural award went to Lloyd's Register Maritime Decarbonisation Hub (LR MDH), for their proposal on "Development of a Route-Based Action Plan Methodology based upon Silk Alliance". The Silk Alliance is a green shipping corridor cluster project to trial decarbonisation strategy for container ships operating primarily in Asia to achieve significant emission-saving impact, based on LR MDH's First Movers².

9. Charles Haskell, Director of the LR Maritime Decarbonisation Hub said, "This endorsement by the Singapore-IMO NextGen's Call for Proposals judging panel indicates that our methodology provides a clear focus in estimating the critical mass needed to drive much-needed infrastructure investments, such as port and fuel production infrastructure for alternative fuels, in preparation for shipping's decarbonisation. By doing so, we not only aim to reduce emissions from the cargo trade in the region, but also incentivise the development of alternative fuel supply

² LR MDH 'First Movers Framework' s aims to guide the private and public stakeholders in the supply chain to systematically evaluate decarbonization strategies for a specific fleet. The framework is designed with the view that both sides, the fuel supply, and the fleet should work in tandem to support the energy transition along a shipping 'corridor' to ensure its success.

infrastructure in strategic positions, including those in the region's developing countries.”

Exploring feasibility of Ammonia as Marine Fuel

10. MPA and the Energy Market Authority has called for an Expression of Interest (EOI) for ammonia power generation and bunkering, which will close by 30 April. Four presentations from our research institutes and companies were done to share their initial findings from their studies on the safety and feasibility of ammonia as a marine fuel. See [Annex B](#) for full list of speakers. MPA and our agencies will work with shortlisted consortia/companies from the EOI to conduct further studies, table-top exercises and training programmes as part of a rigorous set of evaluation prior to the conduct of any ammonia-related trials in Singapore, or with our Green and Digital Shipping Corridor partners.

Accelerating Decarbonisation through Collaboration

Memorandum of understanding between MPA and Wärtsilä on decarbonisation, digitalisation and talent development

11. MPA signed a memorandum of understanding (MoU) with Wärtsilä³ to collaborate on the development of the next generation renewable fuels, digital port optimisation and talent development. This MoU expands on the scope of an earlier MoU signed with Wärtsilä Voyage in 2021, and includes the following focus areas:

a. Green Fuels Technologies and Safety

MPA and Wärtsilä will explore renewable fuel technologies and seek partnerships with various stakeholders to develop green fuel safety concepts and procedures to ensure safe handling and operation of future fuels. Insights gained will support the development of global standards for maritime fuel safety.

b. Next Generation Digital Port Optimization

MPA and Wärtsilä will develop reliable, secure and cost-effective data exchanges and AI-enabled intelligent vessel capabilities, to better enable

³ Wärtsilä is a global leader in innovative technologies and lifecycle solutions for the marine and energy markets, emphasizing innovation in sustainable technology and services to help customers continuously improve their environmental and economic performance.

interoperability between vessels and port operators along selected green corridors.

c. Talent Development

MPA and Wärtsilä will develop training curriculum and explore new tools, including virtual and augmented reality, to equip the future maritime workforce with new skills and competencies for digitalisation and decarbonisation roles.

MPA and Classification Societies to establish Standards and Notations

12. MPA signed a Letter of Intent (LOI) with all eight recognised classification societies in Singapore, to explore collaboration on setting standards and technical references in support of maritime digitalisation and decarbonisation, including smart and autonomous shipping, cybersecurity, electrification, and zero & low-carbon fuels, and the corresponding manpower development. This collaboration will help accelerate the development of standards, technical references for digitalisation and decarbonisation in Singapore, as well as for global markets.

13. The LOI was signed by signed by Teo Eng Dih, Chief Executive of MPA, Christopher J. Wiernicki, Chairman, President and Chief Executive Officer of American Bureau of Shipping, Matthieu de Tugny, President of Bureau Veritas Marine & Offshore, Sun Feng, Chairman and President of China Classification Society, Remi Eriksen, Chief Executive Officer of DNV, Lee Hyungchul, Chief Executive Officer of Korean Register, Nick Brown, Chief Executive Officer of Lloyd's Register of Shipping, Hiroaki Sakashita, President and Chief Executive Officer of Nippon Kaiji Kyokai (ClassNK) and Paolo Moretti, Chief Executive Officer of RINA Services S.p.A.

For more details on SMW 2023, visit <https://www.smw.sg/>.

- End of Release -

About the Maritime and Port Authority of Singapore (MPA)

MPA was established on 2 February 1996 with the mission to develop Singapore as a premier global hub port and international maritime centre, and to advance and safeguard Singapore's strategic maritime interests. MPA is the driving force behind Singapore's port and maritime development, taking on the roles of port authority, maritime and port regulator and planner, international maritime centre champion, national maritime representative and a champion of digitalisation and decarbonisation efforts at regional and international fora such as at the International Maritime



Organization. MPA partners industry, research community and other agencies to enhance safety, security and environmental protection in our waters, facilitate maritime and port operations and growth, expand the cluster of maritime ancillary services, and develops maritime digitalisation and decarbonisation policies and plans, R&D and manpower development. MPA is responsible for the overall development and growth of the maritime domain and Port of Singapore. In 2022, Singapore remained one of the world's busiest transshipment hubs with a container throughput of 37.3 million 20-foot equivalent units (TEUs).

For more information, please visit <https://www.mpa.gov.sg>

About Singapore Maritime Week 2023

SMW is an annual gathering of the international maritime community to advance key industry issues and exchange ideas to bring the sector forward. Driven by MPA, in collaboration with industry stakeholders and research and educational institutions, SMW brings together key opinion leaders and industry leaders through conferences, dialogues and forums.

The range of activities and events organised by MPA, industry stakeholders and research and educational institutions, as well as the cosmopolitan profile of participants, reflect the vibrancy and diversity of Singapore as a global hub port and leading international maritime centre.

For media enquiries, please contact

Ms Eileen Kang
Communications and Community, Maritime and Port Authority of Singapore
eileen_kang@mpa.gov.sg

Ruder Finn Asia for Singapore Maritime Week 2023
RFSingapore_SMW@Ruderfinnasia.com

ANNEX A: List of speakers at 2nd Accelerating Decarbonisation Conference - Panel Discussions

International Green Policy and Efforts for Net-Zero Future

Panel 1: Development of green corridors and international policies

Moderator:

Nick Brown, Chief Executive Officer, **Lloyd's Register** (UK)

Panellists:

Alisa Kreynes, Head of Ports and Shipping, **C40 Cities** (USA)

Amb. Suat Hayri Aka, Permanent Representative of Türkiye to the ICAO

Benedict Chia, Director-General (Climate Change), National Climate Change Secretariat, **Prime Minister's Office, Singapore**

Pernille Dahlgard, Chief Officer, Business, Regulatory & Analytics, **Maersk-McKinney Moller Centre for Zero Carbon Shipping** (Denmark)

Saskia Mureau, Director Logistics & Digital, **Port of Rotterdam** (the Netherlands)

Panel 2: Opportunities and inclusiveness

Moderator:

Youngso Kim, Head, Partnerships, Department of Partnerships and Projects, **IMO** (UK)

Panellists:

Amb. Nancy Karigithu, Principal Secretary, **State Department for Shipping and Maritime** (Kenya)

Guy Platten, Secretary-General, **International Chamber of Shipping** (UK)

Jose Firmo, Chief Executive Officer, **Port of Acu** (Brazil)

Capt. Moin Ahmed, Director General, **International Mobile Satellite Organisation** (UK)

Panel 3: Fuels Options and Strategies to Accelerate Decarbonisation

Moderator:

Prof. Dr. Jasmine Lam, Centre Director, **Maritime Energy & Sustainable Development Centre of Excellence (MESD CoE)** (Singapore)

Panellists:

Chris Chatterton, Chief Operating Officer, **Methanol Institute** (Singapore)

Mikal Boe, Chairman & CEO, **Core Power** (UK)

Louise Tricoire, Vice President Marine Fuels, **TotalEnergies** (Singapore)

Sanjay Verma, Director, Decarbonisation Solutions, **Wärtsilä Singapore**

Takeo Akamatsu, General Manager, Green Innovation Business Unit, Plant Project, Marine & Aerospace Division, **ITOCHU Corporation** (Japan)

Panel 4: #CEOs Vision: Delivering Net-Zero

Moderator:

Teo Eng Dih, Chief Executive, **Maritime and Port Authority of Singapore**

Panellists:

Christian M. Ingerslev, Chief Executive Officer, **Maersk Tankers** (Denmark)

Capt. Rajalingam Subramaniam, President and CEO, **MISC Berhad** (Malaysia)

Remi Eriksen, Group President and CEO, **DNV** (Norway)

Christopher J. Wiernicki, Chairman, President and CEO, **American Bureau of Shipping (ABS)** (USA)

ANNEX B: List of speakers at 2nd Accelerating Decarbonisation Conference - Progress Update on Ammonia Studies

Opening and Closing by **New Wei Siang**, Director (Maritime Decarbonisation & Net-Zero Pathways), **Maritime and Port Authority of Singapore**

Enabling Safe Ammonia Supply Chains

Speaker:

Rob Boudestijn, Managing Director, **Vopak Terminals Singapore**

Ammonia as a Marine Fuel - Consequences from Accidental Release and Mitigation Measure

Speaker:

Dr. Liu Ming, Research Lead, **Maritime Energy & Sustainable Development Centre of Excellence**

CFD-based Risk Assessment Framework for Ammonia Accidental Releases: Now and Future

Speaker:

Dr. Nguyen Vinh Tan, Innovation Target Area Lead, Green Technologies for Marine, Offshore, Oil & Gas Engineering, **Institute of High Performance Computing, A*STAR**

Ammonia Safety Study Findings and Recommendations

Speaker

Prof. Lynn Loo, Chief Executive Officer, **Global Centre for Maritime Decarbonisation**
