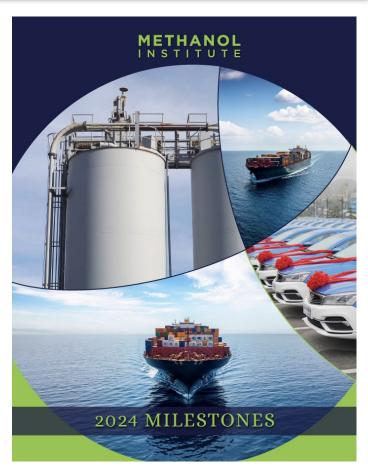


## Methanol Institute Releases 2024 Edition of Methanol Milestones

2023 was an extraordinary the methanol vear. as industry moved to seize the unique opportunity presented by methanol's rise to prominence as a preferred marine fuel of the future. One of the highlights at the start of 2024 was the proclamation Riviera by Maritime Media that "Methanol as a marine fuel emerged as the biggest story of 2023." This sentiment is borne out by the numbers, with well over 260 methanol newbuild vessels on order from the world's shipyards, methanol further and solidifying its place as a mainstream fuel option with vessel orders surpassing those of LNG for 2023.



Beyond shipping, the Methanol Institute (MI) has seen tens of thousands of methanol taxis sold in China, along with hundreds of trucks, including new hybrid models. Methanol is now fueling cookstoves, industrial boilers, kilns, home heating, gensets, and fuel cell systems. MI has also seen a wave of announcements for low carbon, ultra-low carbon, bio and e-methanol production and have included an array of new data tracking these developments on MI's website. Continuing to grow its presence across MI's digital platforms has been a central focus for the MI staff team in 2023 as well. Over the last year, MI has also welcomed over 25 new members to the

association, and the association's membership now stands at over 90 companies and organizations.

In addition to continued growth in membership, MI accomplished a great deal across a wide range of activities in 2023. Some highlights include:

- The launch of a number of new policy focused member-driven working groups which will oversee advocacy and public policy efforts in Europe, the Americas, and with the International Maritime Organization.
- The expansion of MI's staff with the hiring of Business Development Manager Desmond Loo in Singapore, and Kjeld Aabo as a Senior Advisor for Maritime Transport.
- The launch of a GHG Accounting Task Force which has undertaken a series of workshops led by consultancy Hinicio.
- Continued support for methanol fuel vehicle standards in China.
- Increased support of events including the successful marine exhibit at NorShipping.
- Continuous collaboration with partner organizations such as eFuel Alliance, Renewable & Low Carbon Liquid Fuels Platform, and the American Chemistry Council.

In this year's edition of Milestones, you will learn more about some of these initiatives as well as additional MI activities. You'll also get to meet MI's 2023 class of new members: AIRCELA, Berge Bulk, Cargill, COSCO Shipping, Geely, Green Marine, Linde, M2X Energy, Madoqua, MSEA Capital, Nacero, Oberon, PMW Technology, PTTEP, PuriFire Labs, Pyletech Energy, Renewable Earth Resources, Rolls Royce Power Systems, Royal Caribbean, Uniper, and VeryOne.

In 2024, MI will continue to lead the way in the emergence of methanol as a global marine and on road transportation fuel; work to identify and open new markets and opportunities for methanol around the world; continue to promote the methanol industry's interests before legislators and regulators across the globe; expand MI's reach via social media and web platforms; promote methanol safety; and many other important initiatives.

As MI Board Chair Ben losefa noted in his remarks for this year's Milestones. "Together we are looking forward to an exciting 2024, and the Methanol Institute is well-positioned to achieve continued growth and success for our industry and each of our member companies."

To view or download the 2024 edition of Methanol Milestones, click<u>HERE</u>.



### MI and SEA-LNG Unite Against EU Trade

#### **Barriers to Biomethane and Biomethanol Fuels**

The Methanol Institute (MI) SEA-LNG, kev and the representatives of methanol liquefied and natural gas (LNG) industries respectively, express their deep concerns following the recent announcement by the European Commission impacting trade of the biomethane and



biomethane-based biofuels such as biomethanol. The Commission has noted the intention to exclude the automatic certification of biomethane and biomethanol-based fuels produced through mass balance chain of custody in third-party countries outside the EU gas grids within the Union Database (UDB), an IT system to trace the sustainability and origin of renewable fuels placed into service in the European market. This exclusion will severely limit the use of these critical fuels in decarbonizing intra-European and international maritime transport even if these fuels were produced in accordance with EU regulations under the Renewable Energy Directive (RED).

Methanol Institute, as the trade association representing the global interests of the methanol industry, and SEA-LNG, a multi-sector industry coalition promoting the benefits of LNG as a marine fuel, are particularly concerned about the potential impacts of these measures on competitiveness and international trade dynamics. If this materializes, it will create a trade barrier that threatens to impede the importation of biomethane and biomethanol into the European Union, limiting the availability and increasing the costs of these fuels to the bunkering industry in Europe. Furthermore, it may also disqualify such fuels produced using a mass balance chain of custody from non-EU gas grids, when bunkered in non-European ports for use by vessels calling at European ports from being recognised under the Renewable Energy Directive (RED). Consequently, these fuels may not be able to generate credits under EU ETS and FuelEU Maritime.

In response to these challenges, MI and SEA-LNG call for the recognition of biomethane and biomethanol-based fuels produced using a mass balance chain of custody from non-EU gas grids under the UDB. We propose an urgent meeting between our representatives and those of the European Commission to discuss necessary amendments to ensure a sustainable and competitive energy future for the European maritime sector.

The letter is available on MI's website <u>HERE</u> and MI's Press Release is <u>HERE</u>.



## ABS Releases Industry First Advisory on Methanol Bunkering

With the publication of ABS Methanol Bunkering: Technical and Operational Advisory, ABS is expanding its industry-leading suite of guidance on methanol as a marine fuel. MI is pleased to have have the opportunity to contribute to the advisory.

A key component of the methanol value chain and the overall scalability of the fuel will be the ability to bunker methanol, either by truck-to-ship, ship-to-ship or land storage tank/terminal-to-ship.

The new advisory provides the maritime industry with insight into the challenges of bunkering methanol and strategies to address them.

"As the class provider for the world's largest methanol-fueled vessel and



METHANOL BUNKERING: TECHNICAL AND OPERATIONAL ADVISORY



with numerous methanol-based projects underway, ABS has unrivalled insight into the adoption of methanol as a marine fuel. Numbers of methanol fueled vessels are growing rapidly and ABS is focused on supporting its safe adoption by the industry, which is why we are proud to offer this publication to support owners, operators and yards with bunkering challenges related to operations, design and training," said John McDonald, ABS President and COO.

"As the global fleet of methanol-fueled vessels continues to expand, more and more ports will be offering methanol bunker solutions. The Methanol Institute appreciated the opportunity work with the ABS team as a contributor to this outstanding Methanol Bunkering advisory, providing important guidance for the safe handling of methanol," said MI CEO Greg Dolan.

The publication provides guidance regarding the technical and operational challenges of the supplier to the receiving vessel including critical design issues, regulatory compliance, safe practices, areas of operational processes to consider, training and safety aspects.

More information is available <u>HERE</u>. Download a copy of the ABS Methanol Bunkering: Technical and Operational Advisory <u>HERE</u>.

### IMO Launches Future Marine Fuels and Technology Website

The Methanol Institute is pleased to be a data provider and collaborator on the IMO Future Fuels and Technology Project, a new website providing access to latest information on low carbon and net-



carbon neutral marine fuels and technologies, including pricing information and the latest research.

Found at <u>futurefuels.imo.org</u>, the website is a partnership project between IMO and the Republic of Korea, supporting the development of new regulation within the possible IMO Net Zero Framework to achieve the targets contained in the 2023 IMO GHG Strategy.

On the site, visitors can discover more information about methanol provided by MI, including port locations, product capacity, and list of methanol fueled vessels.

To visit the website, click <u>HERE</u>. For more information on methanol as a marine fuel, visit MI's website <u>HERE</u>.

02 April 2024

Future marine fuels and technology - new website launched



#### **MI Welcomes StormFisher as a New Member**

The Methanol Institute (MI) is pleased to welcome StormFisher Hydrogen Ltd. as our newest member. StormFisher Hydrogen Ltd. develops, owns, and operates electrolysis-based clean fuel



production facilities in North America. With its track record in developing and operating clean fuel facilities, StormFisher serves its customers with a sustainable and reliable fuel supply, to meet the needs of traditionally hard to decarbonize sectors.

The company produces clean hydrogen, e-methane, e-methanol, and green ammonia, creating local energy security, and providing export opportunities to

Asia Pacific and European markets.

MI CEO Greg Dolan noted that "With their expertise in developing and operating clean fuel facilities, StormFisher is a valuable addition to MI's membership. As the clean energy transition continues to gain pace, StormFisher's e-methanol production will be part of the net-carbon neutral future."

"Our company is excited to join the Methanol Institute and collaborate on developing the eMethanol market and shaping supportive policies globally," said StormFisher CEO Jud Whiteside. "Working together, we can drive methanol's potential as a key solution for decarbonization and sustainability."

To learn more about StormFisher click HERE.

#### **Our Core Values**

- We use creativity, our experience and hard work to solve problems
- ♂ The most valuable resource we have is our team
- We are accountable to our partners, community and our customers
- We apply meticulous attention to detail in our work and in the execution of our projects
- ✓ We believe openness and healthy dialogue solve complex problems

# MI Delivers Keynote Address at Sino-Danish Shipping Decarbonization Summit

The Danish Embassy in China held the Sino-Danish Shipping Decarbonization Summit Energy Roundtable - Power to X.

Noting that 80% of investments Shipping Decarbonization in related to energy are infrastructure onshore. The summit explored how to further optimize these investments reduce the and cost of producing Green Methanol in



China? The summit attracted more 100 representatives from the renewable methanol production chain and featured 5 separate roundtables with focuses ranging from renewable power and electrolyzers, to methanol synthesis and policy.

MI's COO, Chris Chatterton gave a keynote speech on methanol market demand, and Chief China Representative, Kai Zhao moderated a roundtable

on CAPEX, OPEX and performance optimization within gasification and methanol synthesis.

During the event, Maersk signed a MOU with Long Yuan Power of China's CHN Energy for renewable methanol supply. MI members Johnson Matthey, COSCO Shipping, Topsoe, Goldwind, and Green Marine also joined the roundtable. The full program is available <u>HERE</u>.

## MI Joins 75 Industry Leaders in Signing Turin Joint Statement on Sustainable Biofuels

The Turin Joint Statement on Sustainable Biofuels highlights the role of sustainable biofuels in decarbonising all transport sectors, promoting environmental sustainability, innovation, and creating value for communities. Signed by more than 75 Industry Leaders, trade associations, and R&D organizations, the Statement focuses attention on



actions that G7 countries can take to increase the pace and scale of sustainable biofuels deployment to be consistent with a net zero pathway by mid-century. The Statement was presented to the G7 Climate, Energy and Environment Ministers' Meeting in Turin, Italy on 29 April and was noted in their 2024 Communiqué published on 30 April.2

The Statement was the focus of the International Forum on Sustainable Biofuels held in Turin, Italy on 28 April that was organized by the Italian Ministry of Environment and Energy Security (MASE), the Politecnico di Torino and the Clean Energy Ministerial Biofuture Campaign.

During the Forum Gilberto Pichetto, Italy's Minister of the Environment and Energy Security stated: "Sustainable biofuels can and must provide a fundamental contribution to the decarbonisation of the transport sector at a global level, bringing significant benefits: greater energy security, ease of integration into current logistics, fuel storage and distribution systems as well as use in existing vehicles, promotion of a circular economy logic and creation of value for local communities, promoting sustainable agricultural and forestry practices".

Liana Gouta of Fuels Europe stated that "Decarbonising transport leaving no one behind, in any region of the world, requires a combination of clean molecules and green electrons. Enabling conditions to mobilise private investments in sustainable biofuels from a competitive, robust fuels industry, is a prerequisite. The EU can lead the way if it sets a comprehensive Liquid Fuels Transition Strategy, following and complementing other sectoral decarbonisation strategies on batteries, hydrogen, and critical raw materials".

The decarbonisation of transport is a priority to reach the climate neutrality target by 2050. Despite the ehorts made in recent years, fossil fuels still represent around 95% of the energy needs of the transport sector, which

accounts for around a quarter of consumption global energy and a fifth of CO2 emissions.

"It is necessary to put in place and implement – said Pichetto – all the solutions, with a view to technological neutrality, to decarbonise all transport sectors: air, maritime and road. In this context, sustainable biofuels are among the main pillars of the decarbonisation of the transport sector, together with electrification, energy ehiciency and other sustainable fuels". "We can't wait any longer," added the Minister.

The text of the Turin Joint Statement and list of Signatories can be found <u>HERE</u>. More information on the Biofuture Campaign can be found <u>HERE</u>.



#### A CAMPAIGN OF THE CLEAN ENERGY MINISTERIAL

## Box Ships Make Up China's Largest-Ever Methanol Newbuild Order

Wärtsilä will supply three 8-cylinder and two 6cylinder Wärtsilä 32M methanol-fuelled engines each for five new container vessels for COSCO Shipping Lines Co, Ltd and seven new container vessels for OOCL.



This is the Chinese maritime sector's largest order to date for methanol-fuelled newbuild vessels.

The ships will be equipped with the selective catalytic reduction exhaust cleaning systems and alternators supplied through Wärtsilä's joint venture company CWEC (Shanghai) Co Ltd.

The Wärtsilä 32M methanol-fuelled engine has received type-approval certificates from several classification societies around the world.

"With decarbonisation a major priority for the maritime industry, sustainable fuels such as methanol will play a vital role in helping shipping to reduce its greenhouse gas emissions," said Wärtsilä Marine president and executive vice president at Wärtsilä Corp, Roger Holm.

Mr Holm continued, "As a leader in shaping the decarbonisation of marine and energy industries, Wärtsilä continues to make strong investments in developing new fuel-flexible technologies and products which enable the industry's transition towards greener fuels. It's why we value our long-term relationship with COSCO Shipping Lines and OOCL and are strongly aligned with their vision in accelerating towards net-zero emissions shipping."

The Orient Overseas Container Line's 24,000-TEU ships are to be built at the Nantong COSCO KHI Ship Engineering yard, and the COSCO Shipping Lines' 24,000-TEU ships at the Dalian COSCO KHI Ship Engineering yard. The vessels are expected to commence commercial operations in 2026. More information is available <u>HERE</u>.



## Maersk Names Second Large Methanol-Enabled Vessel in Japan

Astrid Mærsk is the second of MI member **Maersk's** landmark order for 18 large methanol-enabled vessels, scheduled for delivery between 2024 and 2025. This new series is expected to significantly contribute to Maersk's netzero targets and support customers in achieving their decarbonisation goals.

"We are truly excited to welcome Astrid Mærsk to our new fleet capable of sailing on green methanol. With this vessel and its sister vessels, Maersk is taking important steps on the journey towards the energy transition of ocean transport. No one can do this alone. To enable green supply chains and accelerate shipping's move towards net-zero emissions, continuous courageous action by dedicated customers like Nissan, industry peers and suppliers is essential" said Maersk chief executive Vincent Clerc.

Mr Clerc added, "Importantly, to maintain momentum, there is a need for global regulations from IMO to close the price gap between fossil and green fuels to secure a level playing field."

The name giving ceremony took place in Daikoku Pier Cruise Terminal in

Yokohama city, where the public could register and get on board for a vessel visit. More information is available <u>HERE</u>.



## Singapore Aims for Over 1 Million Tons of Low-Carbon Methanol Bunker Supply by 2030



Singapore has the potential to supply over 1 million metric tons of low-carbon methanol annually by 2030 to meet rising demand for alternative bunker fuel, a Singapore minister said on Tuesday.

Singapore's Maritime and Port Authority (MPA) late last year started seeking proposals from companies to supply methanol as a

marine bunker fuel at Singapore from 2025.

"On aggregate, the submissions have the potential to supply over one million tonnes per annum of low-carbon methanol by 2030," said Amy Khor, a senior minister of state, at the Singapore Maritime Week conference on Tuesday.

The submissions provide strong indications that the industry is preparing for methanol bunker demand to scale up in the coming years, said Khor.

The port authority will unveil more details on the findings on Wednesday and these will go into the development of a methanol bunkering regulatory framework, she added.

National standards on supplying methanol as a marine fuel in Singapore are expected to be published in 2025, said Khor.

The proposals emerged ahead of an expected uptick in methanol-powered

ships, as companies ramped up orders of such vessels amid plans to cut carbon emissions with cleaner fuels.

Singapore, which is the world's largest bunkering hub, conducted its first biomethanol refuelling operation for a Maersk ship in July this year.

Interest in methanol bunkering has grown as the shipping industry works towards carbon emission targets, with major shipowners and ports stepping up methanol bunkering-related projects globally. More information is available <u>HERE</u>.



# Fairway Methanol Low Carbon CCU Methanol Wins ISCC CFC Certification



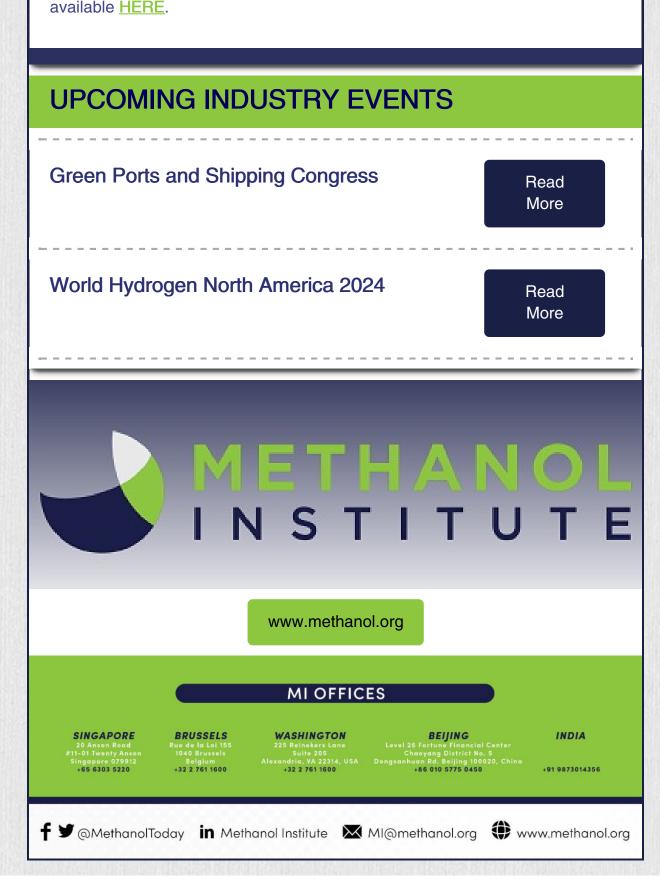
The International Sustainability and Carbon Certification (ISCC) recently certified Fairway Methanol's low carbon carbon capture and utilization (CCU) methanol under the ISCC Carbon

Footprint Certification (CFC) system.

Fairway Methanol is a joint venture between MI member Mitsui & Co. and Celanese Corporation, the US-based specialty materials and chemical company.

As informed, the newly certified low carbon CCU methanol demonstrates a greater than 70% reduction in carbon footprint relative to a global average benchmark for fossil-based methanol production, as included in EU legislation.

Celanese began operating one of the largest active CCU facilities in the world at its Clear Lake, Texas, site in January 2024. The project is expected to capture 180,000 metric tons of CO2 industrial emissions and produce 130,000 metric tons of low-carbon methanol per year. More information is



Methanol Institute | 225 Reinekers Lane Suite 205 | Alexandria, VA 22314 US

Unsubscribe | Update Profile | Constant Contact Data Notice



Try email marketing for free today!