



**UN Climate Change COP 28
Dubai, United Arab Emirates**

Outcome Document

**Accelerating decarbonisation of shipping sector with
hydrogen-based fuels**

Organized by the following partners:

UN Foundation

World Economic Forum

Global Maritime Forum

RMI

Mærsk Mckinney Møller Center for Zero Carbon Shipping

**6th December, 1300-1400 GST
Al Shaheen, Action Room 1**

Accelerating decarbonisation of shipping sector with hydrogen-based fuels

Implementation Lab

Key Messages:

- Unlocking decarbonisation solutions for shipping sector with green hydrogen-based fuels keeps 1.5 degrees within reach
- Shipping is an important sector for global welfare and economy and hydrogen has a critical role in the energy transition to net zero by 2050.
- Political structure and standards are required to be able to leverage hydrogen in transportation
- On the fuel supply side, while the aggregate capacity continues to expand, the ultimate realization of SZEZ production by 2030 still uncertain
- We need electrolyser capacity beyond what is currently in the pipeline, right now the Green Hydrogen catapult is at 14 GW of projects in late stage (close to FID).
- The 5% uptake of zero emission fuels by 2030 is achievable, but current progress is not on the desired trajectory, we need to match demand to stimulate investments in production and increase offtake agreements.

Outcomes:

Outcome 1: Identify top three solutions to focus on in the near-term with a timeline to support at least 5% uptake of zero emission fuels by international long-distance shipping

Regulation: Pricing mechanisms and policy frameworks like a mandate to create the demand, which ultimately stimulate investments in fuel production and provide more certainty to investors & fuel suppliers. The need for clear Life Cycle assessment guidelines.

Permitting: The timeline set in the Revised IMO GHG Strategy means that ports need to allow new chemicals into port and city environments and need to be prepared to handle this. Great volumes of chemicals need to be handled. It is important to find a smart way to find global permitting procedures to do this much faster, therefore speeding this process up and sharing lessons learned on permitting procedures.

Green Corridors: Strengthen the geographic signal in terms of where the fuels need to be physically delivered. Green shipping corridors are the obvious tool here, though more radical ideas like government procurement via navy demand could also send that signal.

Outcome 2: Strengthen cross value chain collaboration and public / private collaboration

Trust- documented trust in all levels of the supply chain. Not just an opportunity but a need to move much faster than we have, trickling down from the IMO.

Time: Projects take time (around 6 years) and the key to delivery is not around the uncertainty right now but not to dent the confidence on the way.

Outcome 3: Foster concrete action from key actors in shipping ecosystem to advance deployment on the ground

Concrete action from key actors including but not limited to:

The chief executives of shipping giants, Mærsk, CMA CGM, Hapag-Lloyd, MSC and Wallenius Wilhelmsen [called](#) for an end date for fossil-fuel powered newbuilds.

Höegh Autoliners announced a \$1.2 billion investment in 12 new net zero ammonia-ready car carriers as well as collaborative efforts with Yara Clean Ammonia and Sumitomo Corporation to secure the necessary fuel, Yara Clean Ammonia and North Sea Container Line will put the world's first clean ammonia-powered container vessel on the water in 2026, while Maersk announced an investment in a major green methanol production facility in Spain.

Content:

Events were required to feature collective progress on mitigation (2030 breakthroughs), adaptation and resilience (SAA outcomes) and means of implementation. Please outline below how this is featured in your session.

The 2030 Breakthrough for Shipping of at least 5% uptake of zero emission fuels by international shipping was the main focus of the implementation lab.

- The implementation lab identified three key enabling solutions for advancing decarbonisation of the shipping sector with hydrogen-based shipping fuels
- The implementation lab created opportunities for synergies across the value chain to deliver at least 5 MTPA of hydrogen for production of zero or near zero emissions fuels for the shipping sector by 2030
- The implementation lab built a community of actors from across the value chain who signed the [joint statement](#) and made commitments to supply and use green hydrogen derived fuels by 2030 who will continue to work together following COP28.

Diversity & Inclusion:

Event organisers were requested to ensure events were inclusive of age, gender, geography, and represented a spectrum of stakeholders across all levels of government and sectors. Please share below the number of speakers represented in each group at this event.

This event was organised as a workshop so all participants in the room were engaged in breakout group activities and had the opportunity to speak. The facilitator of each of the 4 breakout groups fed back to the wider group - this included 2 female and 2 male facilitators.



The introduction and framing of the exercise was undertaken by 4 speakers and 1 moderator which are noted in the table below.

Youth <i>No of Speakers under 35</i>	Geography <i>Number of Speakers from developing countries</i>	Gender <i>Number of female speakers</i>	Indigenous Peoples <i>Number of speakers from Indigenous groups</i>
0 / 5 total speakers	0 / 5 total speakers	3 / 5 total speakers	0 / 5 total speakers
%	%	60%	%

Materials / Assets:

[COP28 Shipping Implementation Lab Briefing Document.pdf](#)

[iLab photographs](#)