





CEM Global Ports Hydrogen Coalition

1st meeting 12-14 October 2021

Leaders from governments around the world will gather in November at **COP26** in Glasgow with the aim to accelerate action towards the goals of the Paris Agreement. To achieve the objectives under the UNFCCC framework, a raised ambition within the energy, industry and transport sectors will be crucial, as a bulk of the global emissions come from these sectors.

As part of governments' efforts to reduce emissions from the energy sector, the world has in recent years seen an increased interest in **low-carbon hydrogen** as a clean fuel and feedstock. Hydrogen is seen as a versatile resource that can be stored and used over time. It is considered one of the most promising solutions for sectors where emissions are particularly hard to abate, such as the transport and heavy industry sectors. The increasing number of national hydrogen strategies across the world and the inclusion of hydrogen in governments' economic recovery plans are examples of the current momentum of hydrogen technologies.

International hydrogen collaboration on a global level has over the last years been strengthened. At the 10th Clean Energy Ministerial (CEM10) meeting in Vancouver, 2019, the CEM members launched a Hydrogen initiative (H2I) dedicated to support the scale-up of clean hydrogen in the economy. As part of the initiative's efforts, the members expressed at the last H2I Advisory board meeting a wish to further engage in activities with representatives from ports and coastal industrial clusters. From the discussion sprung the idea of establishing the **Global Ports Hydrogen Coalition**. The Coalition was launched at the 12th Clean Energy Ministerial meeting hosted by Chile on 1-4 June 2021.

Why a Global Ports Hydrogen Coalition?

The Coalition will be the first global forum that brings representatives from ports together with decision-makers from governments as well as industry with the view to accelerate low-carbon hydrogen deployment. Ports and coastal industrial clusters are seen by experts as a cornerstone for the adoption of hydrogen fuels and technologies, a necessary backbone infrastructure for their transport and trade. The adoption of hydrogen technologies and fuels is also vital for the maritime sector and ports in their plans to reduce greenhouse gas emissions.

What's the Coalition's objective?

The Coalition will enhance policy dialogue and project-oriented collaboration related to scaling up the production and use of low-carbon hydrogen and hydrogen-based fuels in industrial coastal areas. It will build upon already existing dialogues about the potential for adopting hydrogen in ports operation, including, but not limited to, those at the International Association of Ports and Harbours (IAPH), the World Ports Climate Action Program (WPCAP) and the Hydrogen Council.

What's the first meeting's objective?

Participants at the first meeting will be part of setting the priorities for the Coalition's work in the first year and identify a list of potential deliverables for the 13th Clean Energy Ministerial in 2022. See draft list with suggested deliverables in annex I.











EVENT PROGRAMME 12 October

Plenary Session I

13:00 - 14:30 (CEST)

The CEM Global Ports Hydrogen Coalition's 1st meeting will be opened by the European Commission, as the main initiator of the initiative. Participants will during Plenary I be informed about the suggested list of deliverables for the first year, to be discussed among Coalition members on 13 October. Government officials, representatives from ports and international ports association will also share their views on the Coalition's role in their efforts to scale up low-carbon hydrogen production and use.

Registration link:

https://ieaorg.zoom.us/meeting/register/tZEucuqrqj4qG9WYLifdaII4JmT6aHHcghTT

Moderator: Dan Dorner, Head of the Clean Energy Ministerial Secretariat

13:00	Introduction and Opening Remarks		
	Tudor Constantinescu, Principal Adviser, European Commission		
13:10	The Role of Ports and Coastal Industrial Clusters in Plans to Scale-up Low-Carbon Hydrogen Production and Use		
	Jose M. Bermudez, Energy Technology Analysts, Hydrogen and Alternative Fuels, IEA Madadh MacLaine, co-author, Hydrogen Technology Collaboration Programme		
13:20	The Role of the Coalition in National Low-Carbon Hydrogen Strategies and Plans		
	Christine Falken-Grosser, Head of Unit Bilateral Energy Cooperation, Germany Sunita Satyapal, Hydrogen and Fuel Cell Technologies Office Director and Hydrogen Program Coordinator, United States Prerna Bhargava, Assistant Manager, Hydrogen Strategy Team, Australia		
13:40	Building and Elevating Ongoing Ports Collaborations and Efforts		
	Antonis Michail, Technical Director, International Association for Ports and Harbours Christine Rigby, Team Lead for the Sustainable Marine Fuels Work Group, World Ports Climate Action Programme Isabelle Ryckbost, Secretary-General, European Seaports Organisation		
14:00 Ports' Views on How the Coalition can Bring Value to Them			
	Rosie Mercer, General Manager Sustainability, Ports of Auckland, New Zealand Wilco van der Lans, Manager Hydrogen Program, Port of Rotterdam Authority, the Netherlands Reggy Vermeulen, CEO, Port of Duqm, Port of Duqm, Oman Rich Byrnes, Chief Infrastructure Officer, Port Houston, United States Christine Rigby, Senior Air Quality and Climate Policy, Port of Vancouver, Canada		
14:20	Closing Remarks		
14:30	End of Plenary I		











EVENT PROGRAMME 13 October Group Discussions

Four group discussion will be organised on 13 October throughout the day to enable Coalition members, independent of time zone, to join and provide their feedback on the suggested deliverables for the first year (see annex I). During the discussions, Coalition members are invited to express their interest to lead and participate in the various activities and share their own plans to scale-up low-carbon hydrogen production and use.

<u>Group discussion I – Eastern Time Zones</u> 06:00 – 07:00 (CEST)

Registration link: <u>https://ieaorg.zoom.us/meeting/register/tZUvd-GtrDkrHtfjK5iet67x2e35LUralWsp</u>

06:00	Opening and Welcoming
	The Chair opens the Group discussion and introduces again the list of suggested
	Coalition deliverables.
06:10	Coalition's Year 1 Deliverables - Discussion
	Participants are invited to responds and provide feedback on which of the activities
	would bring the greatest value to them and their hydrogen ambitions.
06:50	Closing Remarks
	The Chair summarises and highlights the 2-3 activities that brought most interest
	from the group participants.
07:00	End of Group discussion

<u>Group discussion II – Central Time Zones</u> 11:00 – 12:00 (CEST)

Registration link: <u>https://ieaorg.zoom.us/meeting/register/tZlqf-2qpz8tGNPuXoHJDbUbTmhWmPQDi3bO</u>

11:00	Opening and Welcoming
	The Chair opens the Group discussion and introduces the list of suggested Coalition deliverables.
11:10	Coalition's Year 1 Deliverables - Discussion
	Participants are invited to responds and provide feedback on which of the activities
	would bring the greatest value to them and their hydrogen ambitions.
11:50	Closing Remarks
	The Chair summarises and highlights the 2-3 activities that brought most interest
	from the group participants.
12:00	End of Group Discussion











<u>Group discussion III – Central Time Zones</u> 14:00 – 15:00 (CEST)

Registration link: <u>https://ieaorg.zoom.us/meeting/register/tZArdu-vqDwiE9M82LpIVejEkQ9U6tB_Xx4N</u>

14:00	Opening and Welcoming
	The Chair opens the Group discussion and introduces the list of suggested Coalition deliverables.
14:10	Coalition's Year 1 Deliverables - Discussion
	Participants are invited to responds and provide feedback on which of the activities would bring the greatest value to them and their hydrogen ambitions.
14:50	Closing Remarks
	The Chair summarises and highlights the 2-3 activities that brought most interest from the group participants.
15:00	End of Group Discussion

<u>Group discussion IV – Western Time Zones</u> 17:00 – 18:00 (CEST)

Registration link: <u>https://ieaorg.zoom.us/meeting/register/tZ0tceytrjwvG9PlnktMNosqP113LR97Cqqs</u>

06:00	Opening and Welcoming
	The Chair opens the Group discussion and introduces the list of suggested Coalition Year 1 deliverables.
06:10	Coalition's Year 1 Deliverables - Discussion
	Participants are invited to responds and provide feedback on which of the activities would bring the greatest value to them and their hydrogen ambitions.
06:50	Closing Remarks
	The Chair summarises and highlights the 2-3 activities that brought most interest
	from the group participants.
18:00	End of Group Discussion











EVENT PROGRAMME 14 October

Plenary session II

13:00 - 14:30 (CEST)

Plenary session II will start with a presentation of the results from the group discussion and the list of preferred activities and deliverables for the first year. The Coalition will then formally decide on the priorities for the first Year 1 and discuss the next steps leading up to the 13th Clean Energy Ministerial hosted by United States in 2022 (Q3).

Registration link: <u>https://ieaorg.zoom.us/meeting/register/tZAkcO2vqTkpEtYITEfroGIBOfgjzsBteAaT</u>

13:00	Opening of Session		
13:15	Review and Adoption of Year 1 Priorities		
	The Coalition members are invited to provide their comments on the suggested short list from 13 October, and if not already done so, indicate in which activities they like to support.		
13:45	The Coalition's Modalities		
	The Hydrogen initiative's Coordinator (IEA) will present to the Coalition members the modalities, including frequency of meetings, resourcing and collaboration with other relevant ongoing activities.		
14:15	Closing Remarks and Next Steps		
14:30	End of Plenary session II		















Annex I - CEM Global Ports Hydrogen Coalition – draft list of potential year 1 deliverables

#	Title	Description	Type of activity	Lead
1	Project database for hydrogen related projects in ports	To strengthen the <u>World Ports Sustainability Programme's database</u> with all the hydrogen related projects currently under development in ports around the world. The database today includes all type of port projects related to sustainability but only have a relatively limited number of hydrogen projects entries included so far.	Data and analysis	IAPH
2	Study on Hydrogen demand in port areas	An evaluation of current hydrogen demands in the surrounding areas of the ports involved of the initiative. It could be complemented by an assessment of the potential increase if new H2 techs are adopted (trucks, shipping, high temperature heat in nearby industry, other port operations), although we could leave this for a second round of activities if it is too complex.	Data and analysis	
3	Study on short term hydrogen opportunities and barriers in ports	To set up an online repository to collect existing and future reports about the short term opportunities and barriers (technological, economic and regulatory) for the adoption of hydrogen in ports activities.	Data and analysis	Input from IAPH and Coalition members
4	Policy recommendations to CEM Ministers	To develop a set of policy recommendations to CEM Ministers with suggestions for how governments may facilitate the scale-up of low-carbon hydrogen production and use in port and surrounding areas. The next Ministerial meeting will take place in the third quarter of 2022 in the United States.	Policy recommendations	Any port ready to lead the work? Input from IAPH/CMF and WPCAP and IEA
5	Regional and National Coalitions	To establish regional and/or national coalitions to adapt and implement the Coalition's work to regional and national circumstances. The knowledge gathered from ports around the world may help ports to structure and bring substance to a policy discussion with ministries and other key decision-making institutions in respective regions and countries.	Organisational	











6	Guide for ports to scale up low-carbon hydrogen	To develop a "dummy" for ports that are in the early process of adopting hydrogen technologies and fuels in their operations. The Coalition may through this deliverable provide a guidebook to these ports with lessons learned from ports that are further ahead in their work to scale up hydrogen in their activities. One possibility is to extend this to also become a mentoring programme.	Data and analysis
7	Regional investment roundtables	To Organise roundtable(s) with industry to further support the accessibility to external funding and investment in ports low-carbon hydrogen activities. Through this activity, the Coalition will establish a closer contact with the financial sector and potential external funders in low-carbon hydrogen in port areas.	Coalition webinars
8	How to close the skills gap	To Organise roundtable(s) with a best practices exchange among Coalition members for how to attract talent and skills for ports activities related to clean energy, with a focus on low-carbon hydrogen.	Coalition webinars
9	Connecting Ports via import and export of hydrogen	To strengthen the development of overseas transport of hydrogen. What are drivers and barriers (technological, economic, regulatory)? Set up of recommendations for ports and policy to CEM Ministers.	Analysis and recommendations









<u>Annex II – Overview week - Preliminary schedule (CEST)</u>

	Monday 11 October	Tuesday 12 October	Wednesday 13 October	Thursday 14 October	Friday 15 October
06:00			Group discussion I Eastern Time Zones Information sharing, Discussion list of Year 1 deliverables		
07:00					
08:00					
09:00					
10:00					
11:00			Group discussion II Central Time Zones Information sharing, Discussion list of Year 1 deliverables		
12:00					
13:00		Plenary session I Opening remarks, CEM Hydrogen members present their expectations, updates from ongoing initiatives and		Plenary session II The result from the breakouts is presented. Coalition member decide on the priorities for Year 1 and discuss plans for delivery to CEM13.	











	presentation of possible Coalition deliverables for year 1		
14:00		Group discussion III Central Time Zones Information sharing, Discussion list of Year 1 deliverables	
15:00			
16 :00			
17:00		Group discussion IV Western Time Zones Information sharing, Discussion list of Year 1 deliverables	
18 :00			