



# CEM H2 Initiative

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# CEM's HYDROGEN INITIATIVE (H2I)

## OBJECTIVE

To raise international ambition and advance commercial scale low-carbon hydrogen deployment in the long-term globally, across all sectors .

## RATIONALE

There is a need for long term plans, vision and goals in giving direction to hydrogen uptake and to enable effective planning and development of consistent policies.

## AMBITION/TARGET

To build strategic partnerships to develop and facilitate global actions on clean hydrogen and fuel cell deployment across regional, national, and municipal economies.

## ACTORS

Co-Leads:



Participants:

- More than 20 governments are part of the network.
- Hydrogen Council and individual companies part of the discussion
- Around 60 port association and authorities
- Coordination with other international H2 initiatives a priority.

## ACTIONS

- Global aspirational goals – EC lead
- Global Ports Hydrogen Coalition – EC lead
- International hydrogen trade and supply-chains- NL and UAE co-lead
- North-Western Europe hydrogen market coordination- NL lead
- H2 Twin cities programme- US lead
- IEA Global Hydrogen Review tracking policies and markets (EC support)

# Global Aspirational Goals –EC lead

- First work stream of H2I, activities started in 2020
- Lead by the European Commission with support from the IEA, tracking all hydrogen-related targets and aspirational goals of governments, feeding into the Global Hydrogen Review.
- CEM H2I was set up specifically to address H2 demand.
- CEM15 discussions on accelerating future fuels in Foz do Iguaçu (Brazil)

# Global Hydrogen Ports Coalition – EC lead

- **The CEM Global Ports Hydrogen Coalition aims to:**
  - Establish a platform for collaboration between ports around the world.
  - Facilitate policy discussion between ports and national authorities
  - Open doors for port authorities to other hydrogen stakeholder
  - **60 Ports already engaged**

## STRATEGIC ROLE OF PORTS IN H2-ECONOMY

- **Pivotal Role:** Ports & industrial cluster are crucial in scaling up low-emission hydrogen production, offtake, and trade globally, serving as key hubs for distribution and international trade.
- **Collaborative Frameworks:** Effective global cooperation among ports is essential to overcome challenges and leverage opportunities in the hydrogen sector. Sharing lessons learned and best practices can enhance supply chain efficiency and foster innovation.
- **Hydrogen Applications:** Exploring hydrogen usage within ports for both marine and land applications can significantly reduce emissions. Investing in hydrogen infrastructure and technology supports sustainable operations and broader environmental goals.

# Global Hydrogen Ports Coalition – EC lead

## CONCLUSIONS WORKSHOP WHS MAY 2024

- **Public & Private Partnership:** Joint efforts are needed to finance hydrogen initiatives.
- **Regional Importance:** Ports and hydrogen developments play a crucial role for regional economies—stay connected.
- **Start Small:** Begin with megawatt-scale projects before scaling to gigawatts; take small steps and work together. Ports are already facilitating and supportive, for instance on bunkering
- **Focus on People:** Emphasize the human aspect of these initiatives and maintain connections.
- **Align on Infrastructure:** Develop a long-term vision for port infrastructure capacity and work together.
- **Share Information:** Exchange lessons learned and experiences among ports, particularly in this early phase.
- **Ports Need Ports:** Collaboration between ports is essential for success.

# 1/2 International Hydrogen Trade Forum (former H2 Trade WG)

**Co-Chairs\***



*\*Co-chairs rotate on an annual basis*

**Country members\*\***



*\*\*Other countries in process of joining the IHTF*

**Technical coordinator**



**Private sector engagement coordinator**

**Hydrogen Council**



**High-level Ministerial dialogue** on cross-border trade in hydrogen and derivatives, bringing together key prospective importing and exporting countries



**Advancing public-private cooperation** and dialogue between **Ministers and CEOs** of leading companies to **align better priority actions** to tackle key barriers to and enablers for cross-border trade



**Taking stock of key insights** from the relevant analyses on the topic carried out by international organizations and initiatives



# 2/2 International Hydrogen Trade Forum

## Way forward



- High-level side event bringing together Ministers and industry leaders to discuss activation roadmaps and key enablers for the development of international low-emissions supply chains and trade corridors of H2 and derivatives
- Presentation of case studies to provide actionable insights on access to finance, demand creation, certification
- Identification of actionable commitments to accelerate investments in the H2 supply chain and global H2 trade that can serve as a basis for setting voluntary targets in the framework of COP



### Political track

**COP29 Hydrogen Action Pact** will raise to the political stage the need to strengthen **Demand Creation through Local Use, Application and Trade** for low-emissions hydrogen.

### Implementation track

- **Announcements of a series of flagship outcomes** to showcase progress in the global low-emissions hydrogen economy since COP28
- **2025 BAKU Breakthrough Agenda Priority Actions** to support the delivery of the COP29 Hydrogen Action Pact and to set the framework and roadmap for prioritisation and collaborative action towards COP30.

# Northwest European Hydrogen Monitor

## Progress of the Working Group

- Established working group **sharing knowledge** on latest policy developments and established **yearly monitoring** activity of the NW EU hydrogen market

- Int total 11 governments involved:



- **Activities**

- 1 regular meeting held in February 2024 to discuss progress of the monitor and have country updates
- Monitor publication and webinar for presentation (april 2024)
- Expert (in person) meeting for monitor planend in September 2024





# H2 Twin Cities Program led by US DoE

## Progress – New Round of H2 Twin Cities Announced



### H2 Twin Cities Winners Announced

*New Mentor-Mentee Pairings to Accelerate Progress and Adoption*

**h2 Regional Energy Hub**  
Houston, Texas, United States (Mentor)  
and Nuevo Leon, Mexico (Mentee)

**Hy HouB**  
Houston, Texas, United States (Mentor)  
and Barrancabermeja, Colombia (Mentee)

CLEAN ENERGY AUTHORITY

### Completed Activities

- Public announcement at H2 Americas Summit
- News alert issued by US Dept. of Energy (DOE)
- Social media activity from CEM and US DOE
- Webpage with project summaries and videos from winning teams



<https://www.energy.gov/eere/h2twincities/h2-twin-cities-winners-2023-2024-program-round>

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Ongoing discussions on a new competition to be announced in 2025 to also address key sustainability, environmental, or community factors challenges, which can often result in project delays or stoppage.

# IEA GLOBAL HYDROGEN REVIEW 2024

## IEA policy recommendations



1. Accelerate **demand creation** for low-emissions hydrogen, leveraging industrial hubs and public procurement
2. **Support project developers** to scale up low-emissions hydrogen production and drive cost reductions
3. Strengthen **regulation and certification** of environmental attributes for low-emissions hydrogen
4. Identify opportunities to start **developing hydrogen infrastructure**
5. Support **emerging markets and developing economies** in expanding low-emissions hydrogen production and use