

Call for urgent action to accelerate clean hydrogen and its derivatives' deployment by 2030

Open Letter from the Global Hydrogen Industry

25 October 2024

As a global coalition of industry representatives for hydrogen and its derivatives, we support the COP29 clean hydrogen ambition and emphasize that governments have the opportunity to accelerate deployment of clean hydrogen and its derivatives by 2030 to deliver the Paris climate targets.

Over the past four years, the governments and industry efforts have contributed to a major advancement in hydrogen deployment. Clean hydrogen projects that reached final investment decision have seen a seven-fold increase in committed investment, growing from approximately USD 10 billion across 102 projects in 2020 to some USD 75 billion across 434 projects in 2024 – signaling a crucial shift from planning to implementation.¹ While the increase in hydrogen capacity reaching financial closure globally has been extraordinary, the pace and scale of deployment has not been sufficient to remain on track with our global climate commitments.

According to International Energy Agency and the Hydrogen Council, to advance our mid-century decarbonisation goals, clean hydrogen deployment across end use sectors would need to reach some 75 Mt p.a. by 2030.² Whereas the mandates and demand-side incentives put forward by governments to date could translate into 7 Mt p.a. by 2030 globally.³

This means that a collective push towards a 10-fold increase in incentives and offtake commitments for clean hydrogen across the end-use sectors by 2030 is the North Star for both governments and industry. This includes accelerated uptake of hydrogen in the heavy industry, energy and transport sectors, as well as decarbonisation of the traditional hydrogen applications such as refining, feedstock to produce ammonia, methanol and other chemicals; and as a reducing agent to produce direct reduced iron.

As the clean hydrogen industry matures, it offers a unique opportunity to unlock material benefits for climate, global economies, societies and energy systems:

- 60-80 GT of CO₂ abated by mid-century thanks to clean hydrogen deployment⁴;
- USD 3.7 trillion in CAPEX investments saved thanks to the development of cross-border supply chains in hydrogen and derivatives by 2050;
- 25 million good quality jobs generated globally, half of which can be created in emerging markets and developing countries.

We call on governments to make a collective commitment to scale demand for clean hydrogen and its derivatives by 2030 underpinned by robust incentives and mandates.

¹ Hydrogen Insights 2024, Hydrogen Council

² IEA Global Hydrogen Review 2024, Hydrogen Insights 2024

³ Emerging trade corridors for hydrogen and its derivatives, Hydrogen Council - International Hydrogen Trade Forum joint initiative, May 2024

⁴ IEA; Hydrogen Council

This commitment can be supported by prioritising the following enabling measures introduced within the next two years:

- **Set and implement incentives and targets for clean hydrogen deployment in end-use sectors, considering national circumstances:** demand-side visibility and certainty is a critical enabler for project bankability allowing the unlock of private capital investments in clean hydrogen applications. Where demand-side measures have already been announced, it is critical to accelerate their implementation, including transposition into national or sub-national legislation as appropriate.
- **Support midstream infrastructure:** accelerating the projects for retrofitting, repurposing, and building the enabling infrastructure is key to unlock cross-border supply chains and deliver cost-efficiency gains. For every dollar invested in global trade infrastructure, society saves 25 dollars in capital expenditure.⁵
- **Advance implementation and reinforcement where appropriate of supply side incentives, considering national circumstances:** while some countries and regions have been making progress with implementation of supply-side measures, continued work on translating aspirational targets into incentives and mandates remains important to advance clean hydrogen production from renewable and low-carbon sources. This includes incentives for upstream renewable energy projects and investment protection measures in emerging markets and developing economies reducing cost of capital.
- **Increase public procurement:** with public procurement representing 13-20% of the global GDP⁶ governments can harness their purchasing power to support the uptake of clean hydrogen and its derivatives in midstream infrastructure and transportation.
- **Speed up permit-granting processes:** considering that the permitting processes for the buildout of upstream renewable energy production projects alone can take up to nine years in some jurisdictions, it is vital to streamline permit-granting processes for clean hydrogen supply and midstream infrastructure. This can and should be done in a transparent manner while safeguarding safety and environmental sustainability.
- **Include hydrogen in national energy transition plans:** considering the upcoming submission of NDCs in 2025, there is an opportunity to reflect the contribution of clean hydrogen and its derivatives sending a strong signal to global investors and decision-makers across the industry.
- **Advance public-private partnerships beyond MOUs and support blended finance:** support the development of innovative finance models, blended finance solutions and de-risking instruments for projects across the value chains for hydrogen and its derivatives to unlock private capital.
- **Accelerate the adoption of global standards and mutual recognition of certification schemes:** in particular, the ISO standards for the assessment of GHG emissions of hydrogen and its derivatives on a life-cycle analysis basis, and mutual recognition of certification schemes for clean hydrogen and its derivatives advancing the implementation of the COP28 Declaration of Intent.

These actions, if implemented in a timely manner could accelerate decarbonisation and deliver nearly 40% reduction in cost of energy for consumers thanks to cost-effective matching of supply and demand of hydrogen and derivatives on a global scale by 2030, paving the way for a global market for clean hydrogen and its derivatives.⁷

We stand ready to work together hand in hand with governments to advance the above actions and support the delivery of the enabling measures to scale demand and infrastructure deployment for clean

⁵ Emerging trade corridors for hydrogen and its derivatives, Hydrogen Council and IHTF, 2024

⁶ IEA Global Hydrogen Review 2023

⁷ Emerging trade corridors for hydrogen and its derivatives, Hydrogen Council and IHTF, 2024

hydrogen and its derivatives to accelerate energy transition, strengthen energy security and support greater political stability and just transitions internationally.

