

Chair's Summary of the 8th Hydrogen Energy Ministerial Meeting
- Hydrogen and Ammonia Underpinning Energy Security –
10 September 2026, Chiba, Japan

The Ministers and Delegates responsible for hydrogen and ammonia energy policies in their respective countries convened in Chiba, Japan, both in person and online, on 10 September 2026 and engaged in broad-ranging discussions on, among other topics, the significance of hydrogen and ammonia for energy security, efforts to expand supply and demand through demand creation, and the future direction of international cooperation.

1. Importance for Energy Security

In recent years, we have faced significant changes in the global energy landscape. Against the backdrop of growing instability in the international environment, including developments in the Middle East, rising geopolitical tensions, and increasing uncertainty surrounding the supply of energy resources and fuels, ensuring energy security has once again emerged as one of the most important shared priorities among countries.

In particular, as supply chain vulnerabilities arising from excessive dependence on specific supply sources have become increasingly evident, it has become essential to strengthen preparedness in normal times against the risks of energy supply disruptions and price volatility. Accordingly, efforts to diversify both supply sources and energy sources are being pursued in order to enhance energy security, as exemplified by initiatives such as AccelerateEU and the Partnership On Wide Energy and Resources Resilience Asia (POWERR Asia).

Hydrogen and ammonia can be produced from a wide range of energy sources, including not only fossil fuels but also renewable energy and nuclear power. As they can reduce dependence on specific supply sources and contribute to the diversification of energy sources, they represent important energy sources for enhancing energy security. In addition, hydrogen and ammonia serve as essential feedstocks for the production of fertilizers, petroleum products, chemicals, and other industrial products, and are therefore also important for strengthening the resilience of supply chains across these industries, including the food sector.

Against this backdrop, the Ministers and Delegates reaffirmed the importance of positioning hydrogen and ammonia as key energy sources for enhancing energy security and strengthening the resilience of industrial supply chains. They further reaffirmed the importance of advancing efforts to diversify both supply sources and energy sources through effective policy and regulatory design leveraging international cooperation frameworks, as well as through strengthened cooperation with regions capable of providing cost-competitive and large-scale supplies.

2. Efforts to Expand Supply and Demand through Demand Creation

In order for hydrogen and ammonia to fully play their role in enhancing energy security and strengthening the resilience of industrial supply chains, it is important to advance integrated supply and demand-side efforts encompassing production, transportation, and utilization, with demand creation serving as the starting point. Policies to this end are being advanced across participating countries. Over the past year, tangible progress has been made across major economies. Europe has

made progress in demand creation measures, including the transposition into national legislation of renewable hydrogen usage targets under RED III. In addition, the European Hydrogen Bank has demonstrated concrete progress on both demand creation and supply expansion, with a total of nine projects, representing approximately 1.3 million tonnes of hydrogen over a ten-year period, awarded in its third auction held in May 2026. Meanwhile, in India, efforts on both the demand and supply sides have also advanced. For example, under the Strategic Interventions for Green Hydrogen Transition (SIGHT) Programme, successful bidders signed green ammonia supply agreements in March 2026, covering approximately 670,000 tonnes of ammonia supply per year. In Japan, as of June 2026, a total of seven projects, representing approximately 200,000 tonnes of hydrogen per year, were certified under support schemes aimed at addressing price gaps. Consequently, various hydrogen and ammonia projects across a broad range of sectors, including mobility, industry, and power generation, are advancing into the implementation phase. In addition, initiatives aimed at establishing resilient hydrogen and ammonia supply chains for large-scale deployment are also progressing, including Japan's Hydrogen Backbone Initiative and the EU's European Hydrogen Backbone, through coordinated public and private investment.

Taking these developments into account, the International Energy Agency's (IEA) Global Hydrogen Review 2026 indicates that the outlook for low-emissions hydrogen production by 2030 has been revised to a more conservative level than previously projected, reflecting slower-than anticipated progress in demand creation and project implementation. Meanwhile, large-scale projects continue to advance, with committed production output expected by 2030 reaching 4.3 million tonnes, representing a 3% increase from the previous year.

Furthermore, the Hydrogen Council's Global Hydrogen Compass 2026 reports a wide range of efforts aimed at expanding hydrogen supply and demand. Specifically, approximately 65 new clean hydrogen projects have been committed over the past year, bringing the total number of committed projects to 575, representing approximately 7 million tonnes of hydrogen production capacity. Moreover, operational hydrogen production capacity has almost doubled over the past year (reaching 1.7Mtpa from 1Mtpa) and is expected to double again by next year.

Against this backdrop, the Ministers and Delegates recognized that committed projects aimed at creating demand for hydrogen and ammonia, developing markets, and establishing supply chains are advancing around the world. They also reaffirmed the importance of further accelerating efforts to expand both supply and demand for hydrogen and ammonia, with demand creation as the starting point, through close collaboration between the public and private sectors, in order to advance their deployment across society.

3. Future Directions for International Cooperation

To realize a hydrogen and ammonia-based economy, it is essential not only to create demand but also to strengthen globally competitive production capacity, enhance competitiveness across the entire supply chain, and reduce costs. Accelerating innovation and deployment will be critical to achieving these objectives. As technological development and investment continue to advance in the fields of production, transportation, storage, and utilization, international cooperation should be further strengthened to support the sustainable growth of hydrogen and ammonia markets.

Currently, various regions around the world are advancing research, development, and supply chain initiatives within their respective regions, with the aim of strengthening industrial bases and enhancing supply chain resilience. While such initiatives can play a certain role in the early stages of market creation, hydrogen and ammonia markets remain at a nascent stage of development. To enhance competitiveness and realize substantial cost reductions, it is essential to promote open international cooperation based on transparency, fairness, and mutual benefit, rather than confining cooperation to particular regions or economic blocs.

Furthermore, corporate collaboration is progressing both among demand-side countries and between supplier countries and demand-side countries in areas such as technology development, large-scale manufacturing of equipment, and the development of transportation systems. Such cross-border cooperation can significantly contribute to enhancing the competitiveness of hydrogen and ammonia and achieving cost reductions through market expansion, the realization of economies of scale, and the promotion of technological innovation.

Going forward, it is necessary to further strengthen global cooperation among resource-rich countries, technology-provider countries, and demand-side countries at every stage, from research and development to deployment, mass production, and international standardization, while recognizing the growing interest of developing and emerging countries in hydrogen and ammonia-related technologies and their deployment across the supply chain.

Against this backdrop, the Ministers and Delegates reaffirmed the importance of accelerating the development of hydrogen and ammonia supply chains through open and globally inclusive international cooperation based on the principles of transparency, fairness, and mutual benefit, with a view to fostering a resilient and sustainable global market.

4. The Way Forward

The Ministers and Delegates called upon leading international organizations, international cooperative frameworks, and global hydrogen-related organizations, including IEA, IPHE, the Clean Energy Ministerial, the Hydrogen Initiative, Mission Innovation, IRENA, the World Bank, UNIDO, and the Hydrogen Council, to address these challenges both individually and in close coordination with one another.

They further reaffirmed that cooperation within international frameworks, including the Glasgow Breakthrough Agenda launched at COP26 and initiatives undertaken under the G7, G20, and the United Nations Framework Convention on Climate Change (UNFCCC), is essential to maximizing the effective use of resources, avoiding duplication of efforts, and advancing strategic and coherent actions.

They further agreed to enhance cooperation with these international organizations, international cooperative frameworks, and hydrogen-related organizations, and to promote international cooperation toward demand creation, market development, and the establishment of international supply chains for hydrogen and ammonia.