Chair's Summary of the 7th Hydrogen Energy Ministerial Meeting
- Demand Creation Towards Hydrogen Society -
15 September 2025 Osaka, Japan

The Ministers and Delegates responsible for coordination of hydrogen energy policy within respective countries met in Osaka, Japan on 15 September 2025 to discuss strategies for cooperation toward the development of hydrogen energy.

1. Progress Made towards the Goals of the Global Action Agenda

Since the 1st Hydrogen Energy Ministerial Meeting in 2018, 65 countries have formulated national hydrogen strategies and those countries are making concrete efforts toward their goals in 2030 and/or beyond 2030. The Hydrogen Energy Ministerial Meeting, as the global ministerial meeting dedicated specifically to hydrogen, reported on progress of more than 690,000 fuel cell systems deployment and over 1,300 hydrogen refueling stations installation as of the end of 2024 towards the Global Action Agenda goals of 10-10-10: 10 million fuel cell systems, 10 thousand hydrogen refueling station, in 10 years. Furthermore, with regard to the goals added in 2022 and 2023 of production and demand for 90 Mt of renewable and low-carbon hydrogen by 2030, it was reported that its production and demand were at 0.7 Mt in 2024.

2. Demand Creation

(1) Importance of Demand Creation

Recently we have faced changes in global energy trends. Hydrogen has emerged as a key energy source towards carbon neutrality. Following the Russian invasion of Ukraine, the importance of energy security has been further underscored, and hydrogen has gained attention as a means of diversifying energy supply sources.

In this context, countries around the world have adopted various hydrogen strategies and support measures. The European Union set an ambitious aspiration under REPowerEU on the introduction of renewable hydrogen by 2030; the United States enacted the Inflation Reduction Act, which set forth support measures to promote large supply of hydrogen, including giving tax credits for clean hydrogen production; and Japan revised its Basic Hydrogen Strategy in 2023 to set the direction for advancement of hydrogen-related industries. These initiatives fostered strong market expectations for large-scale hydrogen deployment, which lead to the launch of numerous hydrogen projects and a steady increase in both investment volumes and the number of projects which reached final investment decisions (FID).

According to the Global Hydrogen Review 2025 by the International Energy Agency, low-emission hydrogen production could reach 37 Mtpa by 2030, and 4.2 Mtpa are operational, under construction or have reached FID by the end of July 2025. In 2024, 1.9 Mtpa of new offtake agreements were signed, marking steady progress; however, a faster pace of advancement remains essential.

According to the Global Hydrogen Compass 2025 by the Hydrogen Council, currently more than 500 projects are past FID or already operational and investment commitments exceeds USD 110 billion while there are more than 1,700 clean hydrogen projects announced globally and only 50 projects have been publicly cancelled in the past 18 months.

Due to the impact of recent global inflation, coupled with the fact that many projects require substantial capital investment not only for production but also for storage, transportation, and utilization, hydrogen

supply costs remain high compared to conventional fossil fuels, making it difficult to secure offtake agreements. Each country's government is increasingly expected to exercise policy leadership and to implement support measures that enable hydrogen to become cost-competitive with conventional fossil fuels. Therefore, the Ministers and Delegates emphasized the critical importance of "Demand Creation" of hydrogen.

i. Efforts Towards Building International Hydrogen Supply Chains

As hydrogen utilization expands and trading volumes increase, a virtuous cycle can emerge in which supply costs decline, thereby creating further demand. Continued commitment by each country to advance policies aimed at the expansion of hydrogen utilization is imperative. As a transitional strategy for decarbonization, it is important that various measures are explored to promote the future expansion of hydrogen utilization and trading volume, including the use of by-product hydrogen. Furthermore, it is essential to continue to advance technological development across the hydrogen supply chain—production, transportation, storage and utilization—to foster innovation, reduce costs, and accelerate demand creation.

ii. Nurturing Sources of Demand

In order to fulfill demand on a global scale, it is crucial that as many countries as possible become consumers of hydrogen and actively contribute to Demand Creation. In each country, governments are expected to take the lead through policy initiatives to develop concrete projects and steadily build track records, while connecting the dots across sources of supply and demand in each country to foster the growth of international hydrogen supply chains.

To achieve carbon neutrality, it is essential not only to promote renewable energy and electrification, but also to decarbonize hard-to-abate industries through the utilization of clean hydrogen and its derivatives. The Ministers and Delegates reaffirmed the importance of hydrogen and its derivatives and seek to expand hydrogen supply and demand, with Demand Creation of hydrogen as the trigger.

(2) Actions to be Taken for the Demand Creation

For the Demand Creation of hydrogen, it is necessary for each country to actively promote the deployment and utilization of hydrogen. Supply chains cannot be built alone. We need to undertake coordinated efforts to globally drive Demand Creation. We need to accelerate policy support and mobilize resources to expand hydrogen utilization across regions and countries and connect these efforts to build global hydrogen supply chains.

For each country to effectively promote hydrogen utilization, the following key factors should be taken into consideration:

- Integrated development of policy support and regulatory frameworks
- Expansion of hydrogen utilization in power generation, industry, mobility and hard-to-abate sectors
- Infrastructure development and safety assurance
- International coordination on regulations, standards and specifications
- Promotion of innovation

Ministers and Delegates requested the leading organizations including the International Energy Agency, World Bank, International Partnership for Hydrogen and Fuel Cells in the Economy, Clean Energy Ministerial, Hydrogen Initiative, Mission Innovation, and the International Renewable Energy Agency to

take actions on these issues individually and collaboratively. Cooperation in the context of the COP26 Glasgow Breakthrough Agenda, G7, G20 and of the United Nations Framework Convention on Climate Change is also considered critical to leverage resources, avoid duplication, and ensure a cohesive, coordinated, and strategic effort to accelerate progress. This will enable multiple other initiatives and partnerships that are initiating hydrogen activities, such as the World Economic Forum, and others, to work collaboratively towards common goals. To this end, the International Conference on Fuel Ammonia will be consolidated to the Hydrogen Energy Ministerial Meeting for integrated policies to further expand the utilization of hydrogen and its derivatives.