



SUMMARY STATEMENT

The First International Conference on Fuel Ammonia (ICFA2021)

October 6, 2021

1. The First International Conference on Fuel Ammonia (ICFA2021) was held online on October 6, 2021 hosted by the Ministry of Economy, Trade and Industry(METI) and the Clean Fuel Ammonia Association(CFAA).
2. The Conference has attracted a high level of interest, and had over 1,500 registrations. The Government Session was participated in by five countries as well as the International Energy Agency(IEA), making all together, six remarks. The Industry Session featured 14 presentations from seven countries. Taking this opportunity, IHI, TNB Power Generation, and Petronas Gas and New Energy signed a cooperation agreement on ammonia co-firing.
3. Overall, growing interest is evident worldwide in the use of ammonia as a fuel for decarbonization. With the background of the global decarbonization trend, energy supply counties are making concrete moves to strategically use fuel ammonia as a new source of clean energy. We are seeing such moves to use fuel ammonia not only in Japan but also in Asia.
4. IEA Executive Director Dr. Birol stated that fuel ammonia can play a major role in reducing the carbon footprint of existing thermal plants in Asia where many of the fleets are young. The above-mentioned cooperation agreement among three parties is an important first step towards achieving this.
5. The Industry Session provided valuable information on the value chain from production, supply, transport, and utilization.
6. In the area of production and supply, presentations on the supply potential for blue and green ammonia in Australia, the U.S., Saudi Arabia, Norway, and South America informed that the supply of clean fuel ammonia is very likely to become a reality in the near future. With a view to creating a large-scale market for fuel ammonia, cost reductions are being considered for production facilities by scaling up and further



modularization.

7. From the standpoint of utilization, the technology for use of fuel ammonia in power generation has made significant progress and with the support of the Japanese government, it will eventually be possible to produce ammonia power generation. In this context, power producers are aiming to become carbon neutral by utilizing the supply of fuel ammonia and its power generation technology.
8. In maritime sector, large size vessels are being considered, and there is a growing trend towards decarbonization by the utilization of ammonia as ship fuel. The use of ammonia as shipping fuel is becoming a global trend including in Europe. Japanese companies are now actively involved in the fuel ammonia supply chain drawing on the knowhow accumulated in the LNG business. This was also made clear at the Conference.
9. In this context, the Japanese government has expressed its intention to set up a task force to discuss supply chain issues between the public and private sectors, and they will be working on solutions for next year's Conference, combined with support to promote production and procurement of fuel ammonia.
10. The Conference informed that strategic initiatives by the public and private sectors to establish a fuel ammonia value chain are being specifically considered and implemented. It was also confirmed from the discussions that international collaboration between producing and consuming countries, as well as technology transfer are crucial for the development of a new strategic energy value chain. ICFA2021 was a very useful Conference showcasing the fact that we are very close to realizing the fuel ammonia value chain.
11. The sincere hope is to be able to share with you a further developed picture next year.