"Hydrogen Utilization Study Group in Chubu" Launched to Study the Potential for Large-scale Hydrogen Use in the Chubu Region

March 6, 2020 Hydrogen Utilization Study Group in Chubu

Ten private companies working to promote hydrogen utilization (listed below) have established the **Hydrogen Utilization Study Group in Chubu** (hereinafter "Group") to create demand for hydrogen and build a supply chain for stable hydrogen utilization in the Chubu region.

This Group will take its first effort in Japan to conduct cross-sectional studies in various industries such as energy (oil, gas and electricity), petrochemicals, automobiles and finance.

[Participant companies] As of March 6, 2020. Alphabetized, (*)Secretariat companies.

Air Liquide Japan G.K., Chubu Electric Power Co., Inc., Idemitsu Kosan Co., Ltd., Iwatani Corporation, JXTG Nippon Oil & Energy Corporation,

Mitsubishi Chemical Corporation, *Sumitomo Corporation,

*Sumitomo Mitsui Banking Corporation, Toho Gas Co., Ltd., *Toyota Motor Corporation

[Background]

Taking actions to tackle climate change is a critical issue globally and promoting sustainable and low-carbon energy use has long been desired.

Under such circumstance, the Japanese government set the hydrogen as one of the key elements for sustainable energy, and formulated the "The Strategic Roadmap for Hydrogen and Fuel Cells" (hereinafter "Roadmap") to realize a "Hydrogen Society."

The Roadmap set the plan to develop its commercial-scale and international hydrogen supply chain to procure 300,000 tons of hydrogen annually by around 2030.

[Purpose and main activities]

Regarding hydrogen production and the supply sector, innovative technologies for social implementation have been executed by various groups of companies. Meanwhile, in the demand side, studies on large-scale hydrogen utilization presently stay being carried out by individual companies.

In response to this situation and to realize the social implementation of hydrogen, we have established this cross-industry Group, focusing on the Chubu region as a first step, and launched the study to take action for creating the large-scale hydrogen demand in collaboration with hydrogen suppliers.

This Group aims for social implementation in the mid-2020s as a stepping stone to realize the Roadmap's plan of "300,000 tons of hydrogen annually by around 2030."

- Conduct scoping study of hydrogen demand from the hydrogen receiving terminals to end users in the Chubu region based on the presumption of largescale hydrogen transport from overseas.
- Estimate the potential demand of hydrogen in the entire Chubu region, such as in the power generation and oil industries, and in mobility.
- Conduct studies of sustainable hydrogen cost for each industry.
- Clarify the bottleneck on the technical, financial and legal frameworks to realize its business models that will lead to social implementation.

In order to realize the Roadmap, we must take a triumvirate approach consisting not only of technological development and cost reduction by industry, but also the implementation of funding schemes in cooperation with the financial institutions, as well as the designing of incentives, and regulatory framework carried out under government leadership. This Group will play a key role in these efforts.

Eventually, we aim to work together with the government to spread the work of this Group not only in the Chubu region but also to the other region to spread nationwide.