

August 17, 2020

Marubeni Corporation

Miyagi Consumer's Co-operative Society

Namie Town, Futaba District, Fukushima Prefecture

## Commencement of Feasibility Study to Establish

### Low Carbon Hydrogen Supply Chain in Namie Town, Fukushima Prefecture

Selected by the Ministry of the Environment as "FY2020 Decarbonization and Resources Circulation 'Revitalization of Town and Living'"

Marubeni Corporation (Masumi Kakinoki: President and CEO; "Marubeni"), Miyagi Consumer's Co-operative Society (Kenji Okoshi: President; "Miyagi COOP") and Namie Town, Futaba District, Fukushima Prefecture (Kazuhiro Yoshida: Mayor; "Namie Town") will conduct a feasibility study (hereinafter, "FS") to establish a low carbon hydrogen supply chain focused on Namie Town, a place that is striving to construct a "hydrogen society" in order to promote "Reconstruction" and "Decarbonization" in Fukushima Prefecture. The supply chain will involve multiple kinds of hydrogen from multiple sources, including hydrogen generated by renewable energy and by-product hydrogen; the hydrogen will be utilized as energy at local residences and public facilities. This FS has been selected by the Ministry of the Environment as "FY2020 Decarbonization and Resources circulation 'Revitalization of Town and Living'" and results of the study will be obtained within FY2020.

This FS will utilize the results from the Demonstration to Establish Low Carbon Hydrogen Supply Chain in Tomiya City, Miyagi Prefecture (hereinafter, the "Demonstration"), which was selected by the Ministry of the Environment as "FY2017 Low Carbon Hydrogen Technology Demonstration Project in Cooperation with Local Government" and was conducted over the course of three years. In the Demonstration, hydrogen generated by solar power and electrolysis was stored in the form of cassettes containing metal hydride\* and delivered through Miyagi COOP's existing distribution network to the homes of three families (registered as members of Miyagi COOP), Miyagi COOP supermarkets, and an Afterschool Children's Club in Tomiya City. After delivery, the cassettes were attached to pure hydrogen fuel cells and the hydrogen was converted to power and heat.

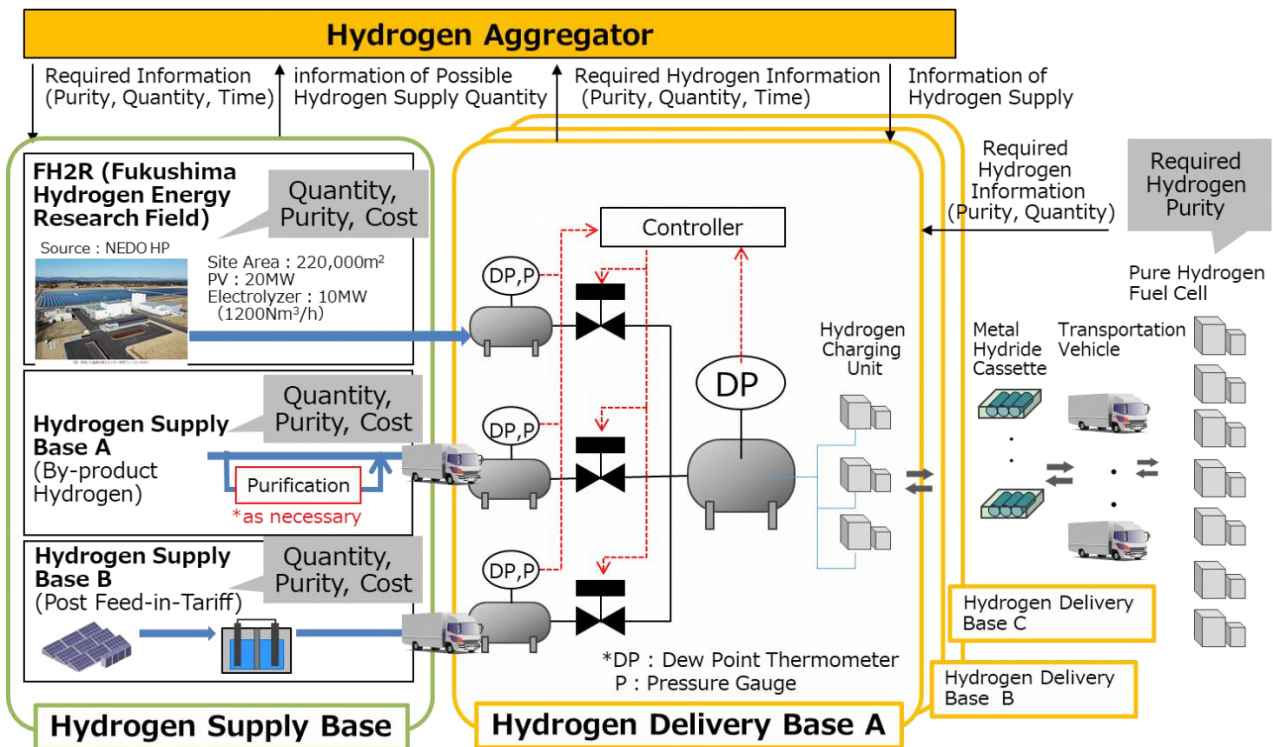
In order to commercialize a hydrogen supply chain, securing multiple supply sources will provide backup for business owners/operators in their role of reliably providing supplies to users. Using the Demonstration as a base, this FS will evaluate a more detailed business model for a hydrogen supply chain, involving multiple hydrogen supply bases in Fukushima Prefecture such as Fukushima Hydrogen Energy Research Field ("FH2R")\*\*, by-product hydrogen, and hydrogen generated by renewable energy. The FS will also include a study of an aggregator system for hydrogen utilizing IoT; for this portion of the FS, Marubeni will receive technical support from Hitachi, Ltd., who was also a partner on the Demonstration.

Marubeni, Miyagi COOP and Namie Town will strive for commercialization after FY2021 based on the results of this FS in order to contribute to "Reconstruction" and "Decarbonization" in Fukushima Prefecture.

\*Metal Hydride: Alloy that absorbs hydrogen when temperatures decrease or pressure increases, and discharges hydrogen when temperature increases or pressure decreases.

\*\*FH2R: A Power to Gas Research facility in Namie Town and is a New Energy and Industrial Technology Development Organization project. The facility contains a system to convert electricity to hydrogen, and store and utilize hydrogen, and is equipped with the world's largest electrolyzer(10MW).

## ■Outline of the FS



## ■Related Press Release

August 4, 2017

[Commencement of Demonstration to Establish Low Carbon Hydrogen Supply Chain in Tomiya City, Miyagi Prefecture Adopted by Ministry of the Environment as “FY2017 Low Carbon Hydrogen Technology Demonstration Project in Cooperation with Local Government”](#)

## ■Contact Information for the FS

Marubeni Corporation

New Energy Business Development Dept. [Person in Charge : Mr. Yuzuki]

Address: Tokyo Nihombashi Tower, 7-1, Nihonbashi 2-chome, Chuo-ku, Tokyo, 103-6060 Japan

Tel: +81-3-3282-4533 (direct)

# Marubeni

Miyagi Consumer's Co-operative Society

Environment Management Section [Person in Charge: Mr. Ohara]

Address: 4-2-2 Yaotome, Izumi-ku, Sendai city, Miyagi, 981-3112 Japan

Tel: +81-22-771-2461 (direct)

Namie Town

Industry Promotion Section [Person in Charge: Mr. Watanabe(Yu)]

Address: Rokutanda 7-2, Kiyohashi, Namie-machi, Futaba-gun, Fukushima, 979-1592 Japan

Tel: +81-240-34-0248 (direct)

## ■Media Organizations Contact Information

Marubeni Corporation

Corporate Communications Dept., Media Relations Sec. [Person in Charge : Mr. Takagi]

Address: Tokyo Nihombashi Tower, 7-1, Nihonbashi 2-chome, Chuo-ku, Tokyo, 103-6060 Japan

Tel: +81-3-3282-2375 (direct)

Miyagi Consumer's Co-operative Society

Administrative Operation Dept., Public Relations Sec. [Person in Charge: Mr. Nakashio]

Address: 4-2-2 Yaotome, Izumi-ku, Sendai city, Miyagi, 981-3112 Japan

Tel: +81-22-771-1590 (direct)

Namie Town

Industry Promotion Section [Person in Charge: Mr. Watanabe(Yu)]

Address: Rokutanda 7-2, Kiyohashi, Namie-machi, Futaba-gun, Fukushima, 979-1592 Japan

Tel: +81-240-34-0248 (direct)