

Announcement of Commencement of Commercial Operation of a Liquefied Carbon
Dioxide Production Plant in Nagaoka City, Niigata Prefecture

November 16, 2020
Osaka Gas Co., Ltd.
Osaka Gas Liquid Co., Ltd.
Nagaoka Carbonic Co., Ltd.

Today, November 16, 2020, Nagaoka Carbonic Co., Ltd. (head office: Nagaoka City, President: Yoshitaka Kayahara, hereinafter, “Nagaoka Carbonic”), which was established in September 2018 with 100% ownership by Osaka Gas Liquid Co., Ltd. (head office: Osaka City, President: Shinichi Tada), a wholly owned subsidiary of Osaka Gas Co., Ltd. (head office: Osaka City, President: Takehiro Honjo), started commercial operation of a liquefied carbon dioxide production plant (hereinafter, “the plant”) in Nagaoka City, Niigata Prefecture.

Construction of the plant started in March 2019, aiming to start commercial operation in April 2021. Because the construction work proceeded smoothly, commercial operation has started five months ahead of schedule. In January 2021, commercial operation of a dry ice production plant (hereinafter, “the plants” collectively with the plant) will start.

In the industrial gas field of the Daigas Group, the plants represent the first project outside the Kansai region that encompasses construction, production, and sale. Nagaoka Carbonic will receive a supply of carbon dioxide gas, which is used as the raw material, from an adjacent plant operated by INPEX CORPORATION to produce and sell liquefied carbon dioxide and dry ice (hereinafter, “liquefied carbon dioxide, etc.”).

The supply of carbon dioxide gas has been decreasing due to a decrease in the number of oil refineries and reduction in production of ammonia in Japan. Thus, there has been a chronic shortage of supply of liquefied carbon dioxide, etc. across Japan. Meanwhile, the Tohoku and Hokushinetsu areas, including Niigata Prefecture, depend on long-haul transport for the supply of liquefied carbon dioxide, etc. from the Kanto and Kansai areas, etc. Under these circumstances, the operation of the plants will contribute to building a stable supply system of liquefied carbon dioxide, etc. in these areas.

The Daigas Group considers the industrial gas field as one of the fields that have a future growth potential in its long-term management vision “Going Forward Beyond Borders 2030.” The Daigas Group remains committed to building new production equipment and creating a value chain in the industrial gas field, including the midstream and downstream businesses, in order to expand the industrial gas business in and outside the Kansai region.

1. Company profile

Company name	Nagaoka Carbonic Co., Ltd.
Representative	President Yoshitaka Kayahara
Shareholder	Osaka Gas Liquid Co., Ltd. (100%)
Establishment	September 19, 2018
Capital	140 million yen
Business description	Production and sale of liquefied carbon dioxide, dry ice, etc.

2. Plant profile

Location	222-1 Kaminoyama, Asahi, Nagaoka, Niigata
Production capacity	150 tons/day (total of liquefied carbon dioxide and dry ice)
Commencement of commercial operation	November 16, 2020

[Photos]



[Liquefied carbon dioxide production plant]



[On the day of commencement of commercial operation]

[Reference]

[Profile of each company]

■ Osaka Gas Co., Ltd.

Location: 4-1-2 Hiranomachi, Chuo-ku, Osaka

Business description: Production, supply, and sale of gas; generation, supply, and sale of electricity, etc.

■ Osaka Gas Liquid Co., Ltd.

Location: 4-7-19 Kitahama, Chuo-ku, Osaka

Shareholder: Osaka Gas Co., Ltd. (100%)

Business description: Production and sale of industrial gas; utilization of cryogenic energy of liquefied natural gas, etc.