Completion Ceremony Held for Natural Gas and RPF-Powered Thermal Power Plant at Toyobo Iwakuni Production Center

—Contributing to an Annual Reduction of 80,000 Tons of CO2 Emissions from the Facility—

October 12, 2023 Osaka Gas Co., Ltd. Daigas Energy Co., Ltd.

Osaka Gas Co., Ltd. (President: Masataka Fujiwara, Head Office: Chuo-ku, Osaka, hereinafter "Osaka Gas") and its wholly-owned subsidiary Daigas Energy Co., Ltd. (President: Masayuki Inoue, Head Office: Chuo-ku, Osaka, hereinafter "Daigas Energy") are pleased to announce that a completion ceremony was held today for the construction project to upgrade a coal-fired power plant at the Iwakuni Production Center (Iwakuni, Yamaguchi Prefecture) of Toyobo Co., Ltd. (President: Ikuo Takeuchi, Head Office: Kita-ku, Osaka, hereinafter "Toyobo") to a thermal power plant fueled by natural gas and RPF.*1

This joint project between Toyobo and Daigas Energy has been granted a FY2020 Subsidy to Support the Promotion of Investment in Energy Conservation by the Ministry of Economy, Trade and Industry (under the Program to Support Operators of Energy Use Rationalization Business).*2

The project aims to renovate the coal-fired power plant (completed in 1972 with a capacity of 10,480 kW) at the Iwakuni Production Center by installing a new power generation system fueled by natural gas and RPF with high energy efficiency and low carbon emissions. The facility will supply both electricity and heat through an energy service contract.*3 The new power plant will not only discontinue the use of coal but also achieve energy-saving control through effective use of both the high-temperature exhaust gas generated from the system and the cold energy of LNG. This conversion from the previous coal-fired power plant will reduce CO₂ emissions by about 80,000 tons per year, contributing to reducing the environmental load.

As declared in the Daigas Group Carbon Neutral Vision released in January 2021, the Daigas Group aims to achieve carbon neutrality by 2050 by decarbonizing the raw materials for city gas through methanation^{*4} and other methods as well as decarbonizing power sources mainly through the introduction of renewable energy, in addition to its conventional efforts to expand the use of natural gas.

In March 2023, the Group also announced Daigas Group Energy Transition 2030, which provides an overview of the path towards the transition to low-carbon or decarbonized energy, and the Group's specific initiatives toward 2030 and the solutions it can provide to its customers.

The entire Daigas Group will continue to develop technologies and services toward achieving carbon neutrality and promote efforts that contribute to the global environment in cooperation with customers, in order to become a corporate group that contributes to further improving people's daily lives and businesses.

^{*1:} RPF stands for "refuse derived paper and plastic densified fuel." It is a solid fuel made mainly from used paper and waste plastics.

- *2: This program provides subsidies for a portion of the expenses required for the introduction of highly energy-efficient equipment planned by businesses as part of their energy efficiency improvement initiatives.
- *3: Under the agreement, Daigas Energy brings its energy facility onto the customer's premises, rather than having the customer buy one themselves, thereby achieving zero initial costs.
 - In this project, Sumitomo Mitsui Finance and Leasing Co., Ltd. owns the system and leases it to Daigas Energy, which provides energy processing services to the customer.
- *4: Methanation is a technology for synthesizing methane, which is the main component of the raw materials for city gas, from hydrogen and CO₂.





Exterior view of the new thermal power plant

Completion ceremony

■Overview of new thermal power plant construction project at Iwakuni Production Center

Business Toyobo, Daigas Energy

operators

Construction site Toyobo Iwakuni Production Center (1-1 Nada-machi, Iwakuni, Yamaguchi

Prefecture)

Equipment A high-efficiency gas turbine power generation system, an RPF boiler, a

installed packaged boiler, steam turbines, and LNG satellite equipment

Power 16,420 kW (output of the entire power plant, including that of the existing

generation steam turbine, which is 2,880 kW)

output

Estimated CO₂ Approximately 80,000 tons/year (from FY2013)

emissions reduction