

**Osaka Gas to Convert Coal-fired Power Plant at the Toyobo Iwakuni Production Center to
Contribute to Reducing CO₂ Emissions by 80,000 Tons/year**

November 30, 2021

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 advise that on November 2021, Daigas Energy started construction for an upgrade of a coal-fired power plant (completed in 1972, 10,480 kW) 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 The new power plant is scheduled to start operations in October 2023.

This joint project with Toyobo has been granted a FY 2020 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}

At the Iwakuni Production Center, this project will build a high-efficiency power generation system fueled by natural gas and RPF for energy saving and lower carbon emissions, and supply electricity and heat under 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 this system and the cold heat 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.

The Daigas Group aims to achieve carbon neutrality by 2050 by decarbonizing the raw materials for city gas through methanation^{*4} as well as decarbonizing power sources mainly through the introduction of renewable energy, in addition to conventional efforts to expand the use of natural gas.

Daigas Energy examines the issues and potential needs that industrial and other business customers have at their manufacturing sites from all angles, co-creates solutions with them, and provides optimal services that contribute to the local community and society.

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 supports part of the expenses required for the introduction of high energy saving equipment among business operators' planned efforts to rationalize energy use.

*3 Under the agreement, Daigas Energy brings its energy facility onto the customer's premises, saving the customer from buying one

and thereby achieving zero initial costs.

In this project, Sumitomo Mitsui Finance and Leasing Company, 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.

■ Project overview

Business operators: Toyobo and Daigas Energy

Facility installation location: Toyobo Iwakuni Production Center (1-1 Nada-machi, Iwakuni, Yamaguchi Prefecture)

Facilities to be installed: A high-efficiency gas turbine power generation system, an RPF boiler, a packaged boiler, steam turbines, and LNG satellite equipment

Power generation output: 16,420 kW (output of the entire power plant, including that of the existing steam turbine, which is 2,880 kW)

Estimated CO₂ emissions reduction: About 80,000 tons/year (from FY 2013)

■ Exterior of the Iwakuni Production Center

