

Daigas Energy Starts Commercial Operation of Its High-efficiency Gas Turbine Power Generation System at Mitsui Chemicals Osaka Plant

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Osaka Gas Co., Ltd.
Daigas Energy Co., Ltd.

Daigas Energy Co., Ltd. (President: Masayuki Inoue, head office: Chuo-ku, Osaka City, “Daigas Energy”), a wholly owned subsidiary of Osaka Gas Co., Ltd. (President: Masataka Fujiwara, head office: Chuo-ku, Osaka City, “Osaka Gas”), has installed a high-efficiency gas turbine power generation system at the Osaka Plant (Takaishi City, Osaka Prefecture) of Mitsui Chemicals, Inc. (President: Osamu Hashimoto, head office: Minato-ku, Tokyo, “Mitsui Chemicals”) and started commercial operation of the system on December 1, 2020.

This joint project with Mitsui Chemicals has been granted the FY 2018 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).^{*1}

The high-efficiency gas turbine power generation system has been introduced at Mitsui Chemicals Osaka Plant under an energy service agreement.^{*2} The system is fueled by city gas to operate, and it serves as a distributed power source to supply electricity and heat to the plant. The system raises the in-house power generation rate of the plant, contributing to cutting peak power consumption. Moreover, hot exhaust gas from the system is recycled as combustion air at the plant, which contributes to reducing 70,000 tons of CO₂ emissions per year.

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

The Daigas Group has announced its “Carbon Neutral Vision” toward the achievement of decarbonization in 2050. The Group will continue to contribute to reducing overall CO₂ emissions of society and improving energy resilience by further promoting intensive use of natural gas and distributed power sources.

*1 This program supports expenses required for the implementation of projects that provide private entities with some of their expenses for the introduction of equipment and facilities that save much energy and contribute to reducing peak power consumption among business operators’ planned efforts to rationalize energy use and level electricity demand.

*2 Under the agreement, Daigas Energy brings its energy facility onto the customer’s premises, saving the customer from buying one and achieving zero initial costs.

(Appendix)

■ Project overview

Business operators	Mitsui Chemicals and Daigas Energy
Installation site	Mitsui Chemicals Osaka Plant (1-6 Takasago, Takaishi City, Osaka Prefecture)
Equipment installed	High-efficiency gas turbine power generation system
Maximum power output	About 30 MW
Manufacturer	Mitsubishi Power, Ltd.
Estimated CO ₂ emissions reduction	Approximately 70,000 tons/year (from FY 2016)

■ Outdoor shots



Bird's-eye shot of Mitsui



Full shot of the high-efficiency gas turbine