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Press Release

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Announcement on Commercial Operation Begins at Binary Power Plants in Takigami

Idemitsu Kosan Co.,Ltd. (Head Office: Chiyoda-ku, Tokyo; Representative Director & CEO: Takashi Tsukioka; hereinafter "Idemitsu") today began commercial operation of a binary power plant at the Takigami Office of its wholly owned subsidiary Idemitsu Oita Geothermal Co., Ltd. (President: Teruo Takenaka).

Since the Great East Japan Earthquake in March 2011, development of geothermal power has advanced across Japan as a renewable energy source capable of delivering stable supplies of electricity without being affected by weather conditions. Japan is home to approximately 10% of the world's geothermal resources, and as a result it has the third highest potential for geothermal power in the world.

Idemitsu entered the geothermal power business in 1979, and since the start of operation of the Takigami Power Station of Kyushu Electric Power Company, Inc. in 1996, the Takigami Office of Idemitsu Oita Geothermal Co., Ltd. has supplied steam used to generate power.

As we released in 2015 Mar, Aiming to put unused hot water to effective use, construction began on the Takigami Binary Power Plant, one of the largest binary power plants in Japan, in the same area in March 2016. Today, the plant began commercial operation.

The term "binary" refers to the use of two fluids—the heat source of hot water and a medium that has a low boiling point—in power generation. This method makes it possible to generate power using low-temperature steam and hot water that could not be used in traditional geothermal power generation.

In the future as well, Idemitsu plans to contribute to Japan's energy security and to the realization of a sustainable society by using domestically sourced renewable energy such as geothermal power to increase the supply of electricity.

Note that these response measures have no impact on Idemitsu's consolidated financial results in FY2016.

[Outline of the Takigami Binary Power Plant]

Name	Takigami Binary Power Plant
Location	3330-152 Oaza Nogami, Kokonoe-machi, Kusu-gun, Oita (on the site of Production Pad No. 1)
Generation capacity	5,050 kW (output)
Annual generation	31 million kWh
Line of business	Geothermal power generation business (through use of the feed-in tariff for electricity from renewable energy sources)