



**JASDAQ**

June 19, 2017

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## Tamagawa Holdings announces decision to initiate drilling at site of prospective geothermal power plant in Ibusuki city, Kagoshima prefecture

Tamagawa Holdings announces that its consolidated subsidiary Tamagawa Energy Co., Ltd. has today decided to initiate drilling at the site of a prospective geothermal power plant in Ibusuki city, Kagoshima prefecture, in order to release steam for geothermal binary power generation.

### 1. Outline

Tamagawa Holdings group has since the inception of the fixed-rate feed-in price regulations for renewable-energy power generation been working to expand its operations centered on solar energy power plants. Moreover, Tamagawa Holdings group has been focusing also on clean energy sources other than solar energy, and to that end has been conducting surveys and reviews on business related to hydrogen, which allow for CO<sub>2</sub> emission-free power generation and storage, and on power plant business with other renewable energy sources such as wind power, geothermal power, small-scale hydro power, and biomass power.

As for the planned Ibusuki city geothermal power plant business, Tamagawa Holdings Group has been advancing its own power source development with a view to taking that plant into operation as part of a novel renewable-energy development.

With the acquisition of the drilling permit and the surveying of the geothermal reservoir completed, Tamagawa Holdings is now ready to initiate full-scale drilling work.

### 2. Outline of geothermal binary power generation

Geothermal binary power generation refers to power generation technology where turbines are moved by using a heat carrier with a lower boiling point than water that is vaporized using the heat obtained from the hot water and steam emitted from a hot spring. This method enables renewable energy generation with nearly no environmental impact because the steam extracted from underground can be returned almost completely into the ground again through a recharging well.

Specifically, geothermal power generation has the following advantages.

- (1) Unlike solar energy power generation, it delivers stable power supply around the clock regardless of weather, season, daytime or nighttime.
- (2) For this reason, a geothermal power plant with an output of about 125Kw is able to deliver energy on a scale matching a 1MW solar energy power plant.

- (3) Power generation facilities occupy comparatively little ground, which allows for efficient power sources.
- (4) The fixed-rate feed-in price of ¥40/kWh (net of tax/less than 15,000Kw) for geothermal energy power generation remains in force also this fiscal year.
- (5) Considering the investment amount and expected return, cost performance is strong and maximizing investment efficiency is a viable objective.

### 3. Further outlook

The drilling work is scheduled to continue for about six months. Tamagawa Holdings currently assumes that the drilling work will ascertain the presence of enough steam for a power generation plant with an output capacity of around 500Kw. However, the exact steam volume for power generation will become clear only after fumarolic testing. Further public announcements will be made as details become available.