

Analyzing Geothermal Power in Japan

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Abstracts

The Japanese geothermal industry is set to expand in the coming years as the country does not want to rely just on nuclear power to fulfill its electricity needs. As Japan had been more dependent on the nuclear energy to produce its electricity before, in the wake of the recent nuclear Fukushima disaster, Japanese authorities are looking to several other ways to generate electricity and geothermal energy makes to the top of their list.

Geothermal is responsible for approximately 0.2% of electricity generation in Japan, but with an estimated 23,000 MW of geothermal energy, opportunities to further develop Japan's geothermal resources are plenty. Japan relaxed rules regarding geothermal energy within its national parks. Now, at least one project is moving forward, a 500-kilowatt plant at the Tsuchiyu Onsen hot spring in Fukushima City, an area not far from the epicenter of 2011's nuclear crisis. The project has the potential to expand to 1 megawatt (MW).

In July 2012 the government introduced a feed-in tariff that will force the ten regional electricity monopolies to buy renewable energy at above-market rates. At the end of March, the environment ministry had said it would abolish guidelines that restrict geothermal development in some national parks. Companies including Idemitsu, a refiner, have quickly announced plans to build a geothermal plant in the mountains of Fukushima prefecture, which is famous for its hot springs. But they expect it will take ten years before they start generating electricity. The long time lag reflects some of the difficulties of developing new business in Japan.

Toshiba, Mitsubishi Heavy Industries and Fuji Electric control more than half of the global market for geothermal turbines, yet Japan itself gets a mere 0.3% of its energy, or 537 megawatts, from its own steam. The industry's promoters say that Japan sits on about 20,000 MW of geothermal energy, or the equivalent of 20 nuclear reactors,

though not all of this could be developed. Since the disaster at Fukushima last year, all but one of the nation's 54 nuclear reactors temporarily suspended now, reducing Japan's power-generating capacity by about a third. That has accelerated the search for alternatives, geothermal springs nearby. Besides generating electricity, it could use the hot water from the springs to heat houses, as Iceland does.

Aruvians Rsearch analyzes the Geothermal Power in Japan in its latest research offering Analyzing Geothermal Power in Japan.

The report is a comprehensive coverage of the geothermal industry in the region as well as in Japan.

The report begins with an introduction to geothermal power. We analyze the utilization of geothermal energy, the grading of geothermal resources, technologies used in geothermal power generation, emerging technologies, amongst others.

We analyze the global geothermal power market before the analysis of the geothermal market in Japan and in Asia Pacific. We first analyze the global geothermal power industry through power generated from geothermal resources worldwide and global geothermal power installed capacity. We further look at the factors impacting the global geothermal power industry such as growth drivers and challenges facing the global geothermal industry.

Geothermal power in Asia Pacific is analyzed through power generated from geothermal resources, installed capacity of geothermal power, regional segmentation of the industry and the major industry deals that have taken place in recent years.

For the geothermal industry in Japan, we analyze the power generated from geothermal resources, geothermal power installed capacity, industry segmentation by renewable energy technologies, regulatory frameworks governing the market in Japan, and major industry projects, both existing and upcoming.

Major global industry players are analyzed through a corporate profile, an analysis of their major business segments, the presence of these companies in the geothermal market, and a SWOT analysis.

Aruvians Rsearch's report Analyzing Geothermal Power in Japan is a complete guide to this rapidly growing industry.

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