

Analyzing Geothermal Power in New Zealand

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Abstracts

New Zealand has one of the biggest geothermal industries in the world, along with the highest geothermal energy production capacity globally. With fossil fuels fast depleting, various countries are incessantly relying on their natural resources for quenching their demand for energy and New Zealand is no different from them. The most recent expansions in geothermal capacity have been partly driven by the rising wholesale electricity price, which has been driven up by rising fossil fuel prices as well as their ongoing shortage. Direct use of geothermal energy in New Zealand is significant. Until now, consumer energy associated with geothermal direct use has exceeded geothermal electricity generation except for brief periods of equality immediately after the commissioning of Wairakei and over the last decade.

About half of that direct use is associated with operations at Kawerau. In turn the Kawerau industrial supply of geothermal steam is equal to the total amount of geothermal industrial direct use at all other locations in the world. It has been estimated that New Zealand's available geothermal resource base is 2,600 MW. High temperature geothermal fields are principally located in the Taupo Volcanic Zone and Ngawha in Northland. Moderate to low and very low temperature systems are more widely scattered.

Some of the major geothermal fields in the country are as under. With the recent successful completion of new geothermal plants in Kawerau, Ngawha, Nga Awa Purua and Te Huka, and the start of construction at Te Mihi and Ngatamariki, the New Zealand geothermal industry is in the midst of an exciting resurgence. A growing range of New Zealand organizations have been key contributors to this recent success providing world class scientific, engineering and construction services.

There is significant potential for expansion of geothermal energy in New Zealand. Of course not all potential will be developed, but even after taking account of

environmental and regulatory limitations, it has been estimated that there is approximately another 1000MWe of geothermal potential that could be used for generating electricity. There is also significant potential for the direct use of geothermal heat, for example in industrial use, or in 'cascading' uses.

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

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

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 New Zealand 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 Indonesia, we analyze the power generated from geothermal resources, geothermal power installed capacity, industry segmentation by renewable energy technologies, regulatory frameworks governing the market in New Zealand, 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 New Zealand is a complete guide to this rapidly growing industry.

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