

# **Global Geothermal Energy Market Size study & Forecast, by Technology (Binary Cycle Plants, Flash Steam Plants, Dry Steam Plants, Others), by Temperature (Low Temperature, Medium Temperature, High Temperature), by Application (Power Generation, Residential Heating and Cooling, Commercial Heating and Cooling) and Regional Analysis, 2023-2030**

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## **Abstracts**

Global Geothermal Energy Market is valued at approximately USD XX billion in 2022 and is anticipated to grow with a healthy growth rate of more than XX% during the forecast period 2023-2030. Geothermal energy is a renewable energy source derived from the heat stored beneath the Earth's surface. This heat originates from the natural radioactive decay of elements in the Earth's crust, along with the heat that was trapped during the planet's formation. Geothermal energy can be harnessed for various applications, including electricity generation and direct-use applications. The key factors driving the market growth are the rising use of geothermal energy for power generation, surging demand for ground source/geothermal heat pumps, and growing focus on addressing the climate crisis and reducing greenhouse gas emissions that are anticipated to support the market growth during the forecast period 2023-2030.

Additionally, the rising adoption of Geothermal in industrial sectors is anticipated to create a lucrative demand for the market over the projected period. For instance, in Feb. 2021, Turboden SpA, a subsidiary of Mitsubishi Heavy Industries Ltd (MHI) and Mitsubishi Power Ltd, collaboratively disclosed securing a contract for the supply of 29 megawatts (MW) of binary cycle power generation equipment. The designated installation site for this equipment is the geothermal power plant situated in Palawan, Philippines, operated by the Energy Development Corporation (EDC). Moreover, the

emergence of advanced technologies and rise of Geothermal 2.0, and the co-production and conversion of oil and gas wells for geothermal energy are anticipated to create lucrative opportunities for the market during the projected year. However, the high growth of solar, wind, gas, and other alternative renewable energy sources, and the lack of exploration and drilling techniques required to identify and develop undiscovered geothermal resources stifles market growth throughout the forecast period of 2023-2030.

The key regions considered for the Global Geothermal Energy Market study includes Asia Pacific, North America, Europe, Latin America, and Middle East & Africa. North America dominated the market in 2022 owing to the cohesive government's financial incentives, tax credits, and supportive policies, increasing public awareness and acceptance of renewable energy sources, including geothermal, and the presence of key market players. Whereas, the Asia Pacific is expected to grow at the fastest growth rate over the forecast period, owing to factors such as the increasing energy demand, supportive government policies, advances in geothermal exploration, drilling technologies, plant efficiency, and increasing awareness of the benefits of geothermal energy.

Major market player included in this report are:

Ormat Technologies Inc. (U.S.)

Turboden S.p.A. (Italy)

Mitsubishi Corporation (Japan)

Enel Green Power North America Inc. (U.S.)

EthosEnergy (U.S.)

GEG Power (Iceland)

ElectraTherm (U.S.)

Toshiba International Corporation (Japan)

First Gen Corporation (Philippines)

## Berkshire Hathaway Energy (U.S.)

### Recent Developments in the Market:

In July 2022, Ormat has successfully initiated the operational phase of the Casa Diablo-IV (CD4) 30 MW geothermal power plant. Currently, the facility is actively providing 7 MW of geothermal power to Silicon Valley Clean Energy and Central Coast Community Energy through 10-year power purchase agreements (PPAs). Additionally, under a long-term 25-year agreement, the CD4 plant is contributing an extra 16 MW of geothermal power to the Southern California Public Power Authority.

### Global Geothermal Energy Market Report Scope:

Historical Data – 2020 - 2021

Base Year for Estimation – 2022

Forecast period - 2023-2030

Report Coverage - Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Segments Covered – Technology, Temperature, Application, Region

Regional Scope - North America; Europe; Asia Pacific; Latin America; Middle East & Africa

Customization Scope - Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope\*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Technology:

Binary Cycle Plants

Flash Steam Plants

Dry Steam Plants

Ground Source Heat Pumps

Direct Systems

Others

By Temperature:

Low Temperature (Up to 900C)

Medium Temperature (900C – 1500C)

High Temperature (Above 1500C)

By Application:

Power Generation

Residential Heating and Cooling

Commercial Heating and Cooling

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy

ROE

Asia Pacific

China

India

Japan

Australia

South Korea

RoAPAC

Latin America

Brazil

Mexico

Middle East & Africa

Saudi Arabia

South Africa

Rest of Middle East & Africa

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