Geophysical Research Abstracts Vol. 14, EGU2012-10076, 2012 EGU General Assembly 2012 © Author(s) 2012



## **Turkey's High Temperature Geothermal Energy Resources and Electricity Production Potential**

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Turkey is in the first 7 countries in the world in terms of potential and applications. Geothermal energy which is an alternative energy resource has advantages such as low-cost, clean, safe and natural resource. Geothermal energy is defined as hot water and steam which is formed by heat that accumulated in various depths of the Earth's crust; with more than 20oC temperature and which contain more than fused minerals, various salts and gases than normal underground and ground water. It is divided into three groups as low, medium and high temperature. High-temperature fluid is used in electricity generation, low and medium temperature fluids are used in greenhouses, houses, airport runways, animal farms and places such as swimming pools heating. In this study high temperature geothermal fields in Turkey which is suitable for electricity production, properties and electricity production potential was investigated.