

## Energy Potential of Turkey and Evaluation of Solar Energy Technology as an Alternative Energy

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**Abstract :** Emerging demand for energy in developing countries rapid population growth and industrialization are causing a rapid increase, such as Turkey. Energy is an important and indispensable factor in the industry. At the same time, energy is one of the main indicators that reflect a country's economic and social development potential. There is a linear relationship between the energy consumption and social development, and in parallel this situation, it is seen that energy consumption increase with economic growth and prosperity. In recent year's, energy sources consumption is increasingly continuing, because of population growth and economy in Turkey. 80% of the energy used in Turkey is supplied from abroad. At the same time, while almost all of the energy obtained from our country is met by hydropower. Alternatively, studies of determining and using potential renewable energy sources such as solar energy have been realized for recent years. In this study, first of all, the situation of energy sources was examined in Turkey. Information of reserve/capacity, production and consumption values of energy sources were emphasized. For this purpose, energy production and consumption, CO2 emission and electricity energy consumption of countries were investigated. Energy consumption and electricity energy consumption per capita were comparatively analyzed.

**Keywords :** energy potential, alternative energy sources, solar energy, Turkey

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