

# Alternative Energy

*Edited by*

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## Chapter 1

### The Impact of energy utilization on environment

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#### **Abstract**

Energy and environment, both are essential for our survival on the planet earth to ensure a decent standard of living and good health. However, there is a price for the comfort that we strive hard to achieve. It took forty years to realize that CFC (Chlorofluorocarbons) causes Ozone depletion. Similarly, greenhouse gases and acid rain are realities that we have to contain to provide a cleaner environment for the future generation. Fossil fuels are essential but their application can be limited to areas where high temperatures are required. For power production, natural gas should be encouraged. Solar thermal applications may be considered for areas where low temperatures are involved, as the technology is proven.

**Keywords:** Energy, environment, sustainability, renewable energy.

#### **INTRODUCTION**

For the existence of mankind, the use of energy in different forms is considered fundamental. The environmental problems that have emerged in recent years can be attributed to the ways mankind has been using the energy resources. Although the environmental pollution may be of different types, the emission from combustion of fuels in power plants and automobiles are considered probably the most worrying, when the impact of the air quality on health is considered (Brown et al.,2001, Elliot,1997). The use of fossil fuels: coal, oil and gas is, generally, seen as having a major impact, resulting in events such as global warming. A review of the energy forecasts in early 1990s conducted by various researchers reveals that only minor changes in energy consumption will occur during the next few decades (Lenssen and Flavin, 1996, WEC, 1993). During the last century, the developing countries, with more than three-quarters of the world's population, accounted for only one-fifth of the CO<sub>2</sub> released to the atmosphere. If emissions in 2025 are to remain at the level of 1990, emission from