

# Opportunities in Energy Sector

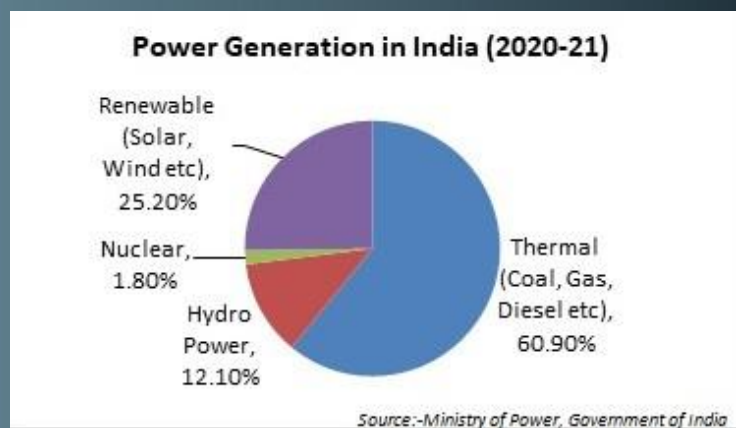


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Nowadays, energy has become an essential requirement for human existence and development. The gap between available energy and energy demand is widening day by day. Considering the whole world, this need is expected to increase by almost 60% in the next 30 years. In a developing country like India, energy demand is expected to grow by more than 130%. To meet this need, we have to find alternative energy sources and not rely on conventional energy sources such as thermal energy. As on today, the share of electricity

generated in India from thermal energy, i.e. coal, gas and petroleum is 60 to 65%. The remaining 30 to 35% of energy is getting from hydropower, non-conventional energy sources such as solar energy, windmills, biofuels etc. India has focused on nuclear as well as non-conventional energy sources to meet future energy demand. Nuclear energy generation is reached 6780 MW in 2020 under India's Atomic Energy Program. The country has set ambitious renewable energy goals – 175 GW by 2022 and 450 GW by 2030. The share of Non-conventional energy sources which is 40% will increase up to 80% of the energy available at that time in the year 2035.



By 2050, 90% of India's energy infrastructure will be in the non-conventional energy sector. This change will require skilled manpower. Number of jobs will be created in the energy sector in the near future. Also, in the current situation, it is necessary to save the energy that is available by planning it properly. The industrial sector needs experts for this.

As a result, a graduate and post graduate in this field, an Energy Engineer, can work with the power generation sector to provide green, economical and pollution-free energy. This engineer can play various roles in the industry such as designing and testing of machinery (engines, boilers, turbines, etc.), as well as improving existing industrial processes, developing nonconventional energy sources, which are still in their infancy.

Opportunities are available for Energy Engineer in the following industries

Power generation and distribution, Nuclear energy and related industries, Unconventional energy sector, Automotive and generator industry, Petroleum refining and distribution, Boiler and cold storage industry, Chemical industry, Pharmaceutical industry, Paper and pulp industry, Bio-industry And research institutes and so on.