**Nuclear Energy Role in Developing of the country and its Environmental Impacts**

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**Abstract**:

Energy is vital in our everyday lives and as the most important factors in socio-economic development. New technologies are reshaping not only our economies and our societies, but also how people use energy.

Due to electrification and digitalization of modern world, electricity has become crucial to the human life. Globally, electricity use is rising rapidly as new major economies develop in places such as, China and India. This need for electricity drives a growing demand for electricity generation, with thousands of new power plants needed across the world over the coming decades.

This article discusses about different options of electricity generation technologies and compares nuclear energy with fossil fuel resources. Then nuclear power plant Global Status and different types of nuclear reactor technologies is presented. Next, energy planning in Iran and the necessity of development of nuclear power program is discussed. A set of information about the Busher-1 NPP performance is provided and also the status of Busher-2&3 NPP construction is presented. Finally, the article reviews the nuclear energy environmental impacts, including its advantages and considerations of radioactive waste management.

In conclusion, Countries according to their own conditions, policies and available energy resources use of different options to generate electricity. Iran has a young and educated population which need job. Nuclear energy program can play an important role in job creation and economic growth in Iran. In view of the decreasing trend of fossil fuel resources and in view of various economic and environmental advantages, nuclear power is believed to play an important role in our energy mix. Using mixed energy option or using combination of different power production methods in order to get rid of electricity generation from dependency on one resource

\**This article is presented by Mr. Saeed Fatourechian.*