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Assessment of present conventional and non-conventional energy scenario of Pakistan

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ABSTRACT

It has become the universal fact that the energy is one of the key factors for the smooth and faster upgradation of the socio-economic activities in any country. In Pakistan's history of over 60 years, the country presently is facing possibly the worst energy crisis that has geared back the socio-economic development below the level of critical sustainability and tolerance of the people. Every walk of life and industrial activities have declined due to long electricity shut-down every day since last few years. In view to access the current status of available energy resources, the present research study has been carried out to review and assess the demography of the country versus energy sectors, energy supplies & consumptions, status of fossil-fuel resources (oil, gas & coal), conventional & non-conventional electricity generation, and past, present & future energy demand-supply during 2001–2011. The results of this assessment indicate that conventional resources in Pakistan are and will not be enough to meet the ever growing energy demand and consequently highlight the importance of the renewable energy sources that are apparently encouraging in the country but have not been developed to any satisfaction. Priority is imperative to be given for the adequate development of renewable energy sectors in addition to the present energy mix.

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1. Introduction

In view of the new millennium challenges for the modern faster socio-economic upgradation and adoption of new lifestyle, the industrial development seems to be at a very high demand as revealed from the on-going energy consumption and its

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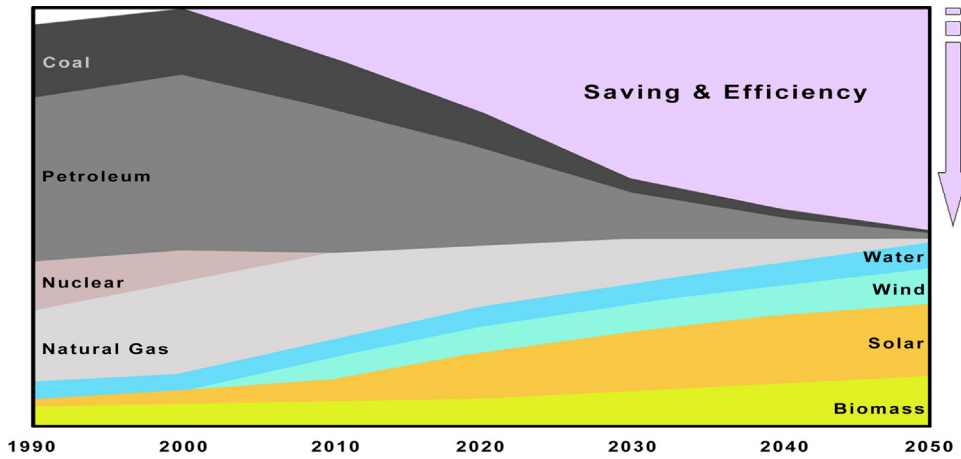


Fig. 1. Plots showing trends in adopting the energy sources since history to future.
Data Source: [1].

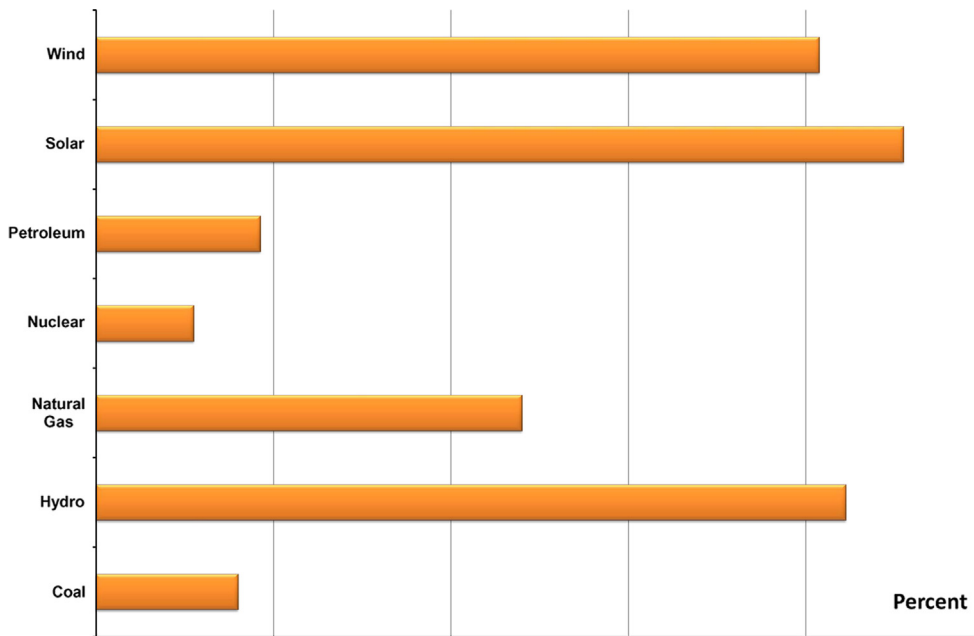


Fig. 2. Global consensus regarding the choice to adopt the energy generation sources.
Data Source: [3].

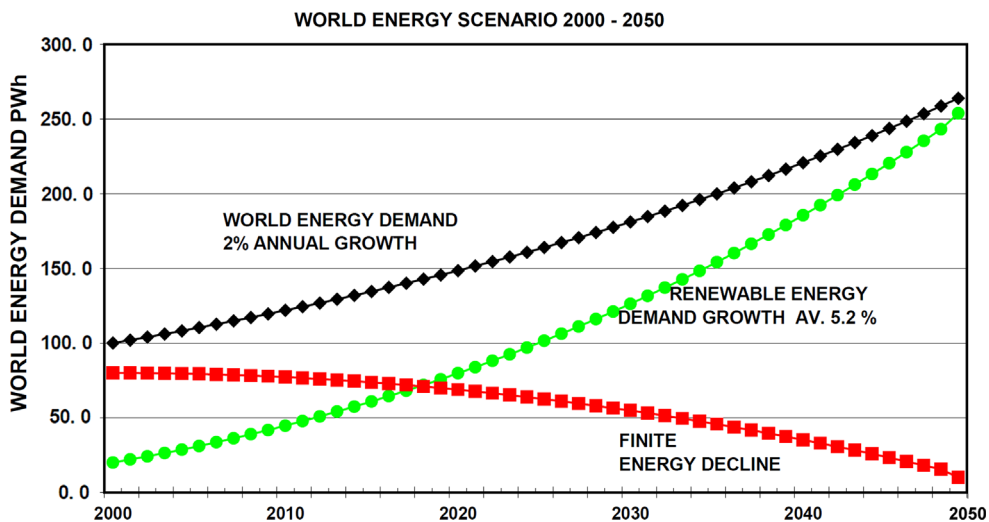


Fig. 3. Plots showing world energy scenario since 2000–2050.
Source: [7].

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