Anshuman Gupta · Narendra N. Dalei Editors

Energy, Environment and Globalization

Recent Trends, Opportunities and Challenges in India



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Narendra N. Dalei and Anshuman Gupta

2.1 Introduction

The outlook of a country depends not only on how much natural resources it has but also on how efficiently the country can provide clean, green and affordable energy to its citizens. As far as India's global position is concerned, India is an emerging and growing economy that needs an adequate amount of energy resources to manage its each sector. Being an emerging economy, India has the potential to become world's second major economy by 2050 (The Goldman Sachs Group 2007). Meeting the demand of 1.3 billion people accounting around 17.5% of the world population is a difficult task for India, as it has only around 0.8% of known oil and natural gas reserves of the world. In addition to this, the proven crude oil reserves of India are exhausting at an increasing rate; dry well problems along with high degree of depreciation, depletion and amortization (DDA) are rising at an alarming speed; and above all, oil companies are not showing much interest in new investment for exploration. The only alternative available with India to fulfill the energy demand of the economy is to import crude oil. At present, India is heavily depending on crude oil imports, as around 80% of India's energy needs are met from imports. If this trend continues, India will outstrip China in terms of energy demand growth. India's energy demand has been projected to be 1,464 million tonnes of oil equivalent by 2035, and to sustain 8% growth of GDP, three to four times of current primary energy supply and five to six times of current electricity supply are needed for India (IEA 2011). This shows that India's energy demand, along with crude oil import dependence, will keep on rising.

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