

Lecture 7: Reducing Energy intensity of the Indian economy

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Summary:

(Mr.Didi)

For Indian primary energy supply, fossil fuel (coal, oil and natural gas) accounted for more than 70% (IEA, 2013). Despite relatively low energy intensity per capita, India has huge room to improve the human development aspect. As a country with more than 1.2 billion population, Indian government aims for economic growth together with the lower energy intensity. Regarding to energy efficiency, the challenges are not only an investment accounting for 1-2% of total investment, but also other issues (i.e. high upfront cost, perceived risk of uncertainty, split incentives, high transaction cost, poor financial health of municipalities and state-owned PSUs, and cross-subsidy in agriculture and low income household). The Bureau of Energy Efficiency (BEE) works under two enabling mechanisms (1) Energy Conservation Act 2001 and (2) National Action Plan for Climate Change 2008. In addition, major schemes are launched e.g. Capacity building (certified energy auditors, energy service companies), Standards and targets (BEE star label, Perform-Achieve-Trade scheme), Demand side management, Awareness, Funds and State levels.

(Mr.Choudhary)

Concerning energy intensity, it could possible refer to energy efficiency in economic perspective. Since the post-liberalization (from 1991) there are unprecedented opportunities for both economic growth and expansion, especially Indian manufacturing sector. The Micro, Small and Medium Enterprises (MSMEs) comprise of two sub-sectors: manufacturing and service business with different investment criteria to determine business size. MSMEs have significant roles accounting for approximately 40% of total manufacturing output, 43% of exports, 8% of GDP. In India, the 36 million MSMEs produce around 6,000 products. However, this sector has the higher ratio of labour per capital compared to large industries. The barriers to enhance energy efficiency are Obsolete technology (including the lack of access to modern technology); Lack of knowledge, financing and inertia; 90% units with proprietorship concerns; and financial unviable perception of energy efficiency. Hence, National Manufacturing Competitiveness Programme (NMCP) is launched to tackle these challenges.