'National Campaign For Energy Efficiency & Conservation: Inputs Seminar' 5th May, 2010, New Delhi

Address by Shri Sushilkumar Shinde, Hon'ble Union Minister of Power

The per capita consumption of energy in India is amongst the lowest in the world: in 2006, it was 510 kg of oil equivalent (kgOE) of primary energy compared to 7740 in USA and the world average of 1800. To achieve a sustained economic growth rate of 8%-9%, through 2031/32 and to meet the lifetime energy needs of all its citizens, India needs, at the very least, to increase its primary energy supply by 3 to 4 times and its electricity generation capacity by approximately 6 times. Demand for energy will keep increasing because of accelerated industrialization, urbanization and an emerging consumer society.

Consequently, energy efficiency across all sectors of the economy is essential for decoupling growth in energy demand from economic growth while ensuring that the energy demands are met.

The Government of India has put in place an overarching legal, regulatory and policy framework to promote market based energy efficiency in Indian economy. They are enactment of enabling legislation (Energy Conservation Act, 2001), Institutional arrangements at central and state level for regulatory oversight (Bureau of Energy Efficiency and State Designated Agencies), Action Plan for promoting energy efficiency (2007 - 2012) and the National Mission for Enhanced Energy Efficiency to enhance energy efficiency in Indian economy.

The National Mission for Enhanced Energy Efficiency is one of the eight missions of the National Action Plan on Climate Change which was released by the Hon'ble Prime Minister, on 30th June 2008. The Ministry of Power and Bureau of Energy Efficiency were tasked to prepare the implementation plan for the National Mission on Enhanced Energy Efficiency.

The Mission seeks to upscale the efforts to unlock the market for energy efficiency on a PPP basis, which is estimated to be around Rs. 74,000 crores. The total avoided capacity addition as a result of these initiatives is expected to be 19,598 MW. Given that these savings will happen at the demand side, the avoided investment in generation, transmission and distribution sector will be to the tune of Rs. 1,95,980 crores. The total CO2 emissions that will be reduced is estimated to be 98.55 million tonnes as a result of these initiatives.

One of the important achievements was the assessment of energy saving which was made during the last two years related to programmes of the Bureau of Energy Efficiency. I am glad to inform you that electricity savings of 10,259 million units and fuel savings equivalent to 5 million tons of oil has been achieved through various

programmes. The Electricity savings imply a cumulative avoided capacity addition of 2123 MW during the last two years, i.e. 2007-08 and 2008-09.

The Ministry of Power and the Bureau of Energy Efficiency has also undertaken many awareness programmes to educate the masses about the efficient use of energy and its conservation. A postage stamp on energy conservation was also released by the Hon'ble Prime Minister as a part of the national campaign to help create a movement for the energy conservation in the country.

However, there is need for a more vigorous and focused National Awareness Campaign to focus on the creation of the public awareness, understanding of the significance of the energy conservation and promotion of energy conservation through voluntary action. The campaign should target the domestic, commercial, agricultural, industrial and educational sector. The focus of the national campaign should include:

- 1. Spreading information about energy situations, simple energy saving methods that can be applied in everyday life. This is intended to serve as a foundation for the subsequent campaigns in the following years.
- 2. In terms of the communication strategy, mass media and campaign events are planned to be used to create energy conservation awareness effectively and rapidly among the audience nationwide at an initial stage.
- 3. Present a wider variety of energy conservation methods to improve energy consumption behavior, including prevention of energy waste and leakage.
- 4. Information about power and oil situations and its rising prices and effectively meeting this challenge through energy savings and substitution.

Apart from these, there is a need for general awareness since the immediate step to overcome shortages can be Power Conservation by the people. This can be achieved by motivating people to save power by rational use of electricity and to achieve this, awareness is to be created amongst the masses to Save Power. The general awareness program needs to be complimented with other specific awareness campaigns keeping in mind the different set of target groups for different programmes.

Amongst other programmes on energy efficiency, Agricultural Demand Side Management programme is a key thrust area of Bureau of Energy Efficiency to reduce overall power consumption and, indirectly, to reduce peak demand. The agricultural DSM programme also promises immense opportunity in improving ground water extraction and reducing the subsidy burden of the states without sacrificing the service obligation to the agriculture sector. The first such project under implementation is in Solapur, Maharashtra. This project covers 3530 agricultural pumps connected on five feeders. Farmers will be provided new BEE Star labelled

energy efficient pumps and motors free of cost and they will not be charged any money for implementation of this scheme.

The replacement of about 3530 inefficient pumps will result in savings of 88 lakh units annually. The intervention will lead to lower energy consumption on the rural feeders with improved quality of supply, and hence, will result in lower subsidy to be paid by the State Government. Part of the savings in subsidy will be used to pay back the investment made by ESCO in providing new BEE star labelled energy efficient pumps.

It is proposed that the Solapur model for implementation of Agricultural DSM project will be replicated elsewhere in the country through the new initiative of the Ministry of Power to form a joint venture company, namely Energy Efficiency Services Limited (EESL). This company has been set up with equal equity participation of NTPC Limited, Power Grid Corporation of India Limited, Power Finance Corporation Limited and Rural Electrification Corporation Limited. Energy Efficiency Services Limited has been given the mandate to implement energy efficiency projects as Energy Service Company, to develop and implement schemes, programmes and policies of Central and state governments or its agencies, to provide consultancy on energy efficiency.

I am happy to share with you what recently CDM Executive Board, which is an international organization for approval of Carbon credit projects situated at the United Nations Framework Convention on Climate Change (UNFCCC) headquarter at Bonn, Germany, has approved our "Bachat Lamp Yojana" in which incandescent lamps are being replaced by energy efficient CFLs at a cost of Rs. 15 only using carbon credits. Replacement of all the incandescent bulbs in the country will result in saving of 6000 MW power.

A strategy as mentioned above, will facilitate is removing the key barrier of lack of awareness amongst policy makers, regulators, general public, industry, etc. Is extremely limited about the efficacy, need and comparative use of energy efficient technologies. I hope that this seminar will provide valuable inputs towards a national campaign for energy efficiency and conservation. I will congratulate the organizers of the event and wish this event a grand success.