

**GOVERNMENT OF INDIA
POWER
LOK SABHA**

UNSTARRED QUESTION NO:4746
ANSWERED ON:07.08.2009
SAVING IN ENERGY CONSUMPTION
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Will the Minister of POWER be pleased to state:

- (a) the details of the methodology worked out to ascertain savings in energy consumption by industrial units in different sectors of the economy;
- (b) the steps taken to ensure energy security in domestic market to effect reduction in greenhouse gas emissions;
- (c) whether the Government proposes to set mandatory targets for the large industrial units with the mechanism to reward the units achieving the set targets and trading the savings in the market under the rules prepared for the same by the approved agency after auditing the actual energy consumption; and
- (d) if so, the details thereof?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF POWER(SHRI BHARATSINH SOLANKI)

(a) : The details of the methodology worked out to ascertain the savings in energy consumption by industrial units in different sectors are as follows:

- The savings are ascertained on the basis of the National Energy Conservation Awards scheme of the Ministry of Power and implemented by the Bureau of Energy Efficiency.
- Similar Energy Conservation awards schemes are also being implemented by various states in the country.
- The industrial units in different sectors are invited annually to participate in the scheme on a voluntary basis and are required to fill up an Award questionnaire.
- The industrial units report their annual energy consumption and production for the previous three consecutive years.
- The industrial units in each sector also report any reduction in the energy consumption and are awarded on the basis of the percentage reduction achieved during the previous years.
- The award winning industrial units are then visited by energy auditors appointed by the Bureau of Energy Efficiency to verify the values of energy consumption, and the reduction achieved.

(b) : Government has taken various steps to ensure energy security in the domestic market which will also result in reduction in greenhouse gas emissions. The Integrated Energy Policy (IEP) lays emphasis on energy conservation and efficiency, particularly through Demand Side Measures (DSM) and estimates 15% saving of energy is possible by such interventions. The Conference of Chief Ministers chaired by the Hon'ble Prime Minister on 28th May, 2007, recognized the significant potential of saving electricity through its efficient use by DSM interventions to provide immediate results for saving electricity. Interventions include bulk procurement and distribution of CFLs, adoption of Energy Conservation Building Code (ECBC), promoting and mandating the use of energy efficient pumps and other energy efficient appliances.

Government of India through Bureau of Energy Efficiency is implementing the following schemes with a target of reducing the avoided capacity by 10,000 MW in the 11th Five Year Plan which would also lead to reduction in greenhouse gas emissions:

- Bachat Lamp Yojana
- Standards and Labelling Programme for appliances
- Energy Conservation in Buildings
- Demand Side Management in Agriculture Pump Sets
- Demand Side Management in Municipal water pumping and street lights

- Energy Conservation in Small and Medium Industries and Designated Consumers.

(c) & (d) : Yes, Madam. Government proposes a scheme under the National Mission on Enhanced Energy Efficiency (NMEEE) of the National Action Plan on Climate Change to set mandatory targets for the large industrial units with the mechanism to reward the units achieving the set targets and trading the savings in the market under the rules prepared for the same by the approved agency after an energy audit of the actual energy consumption. The details are as follows: Section 14 (e) and 14 (g) of the Energy Conservation Act, 2001 empower the Central Government, on the recommendations of BEE, to prescribe energy consumption norms and standards for Designated Consumers. The Government has, in March, 2007, notified, units consuming more than specified minimum amounts of energy in 9 industrial sectors, namely Aluminium, Cement, Chlor-Alkali, Pulp & Paper, Fertilizers, Power Generation Plant, Steel, Textiles and Railways, as Designated Consumers (DCs). These Designated Consumers, have to appoint an energy manager, file energy consumption returns every year and conduct mandatory energy audit and also have to adhere to the energy consumption norms specified by the Government. In order to capture the maximum possible energy savings, the Perform Achieve and Trade (PAT) mechanism under the NMEEE is proposed as a market based mechanism to enhance cost effectiveness of improvements in energy efficiency in energy-intensive large industrial units and facilities, through certification of energy savings that could be traded. The main features of the PAT mechanism are as under:

? Methodology for setting Specific Energy Consumption (SEC) norm for each designated consumer in the baseline year and in the target year.

? Verification process for SEC of each designated consumer in the baseline year and in the target year by an accredited verification agency.

? Issuance process for Energy Savings Certificates (ESCerts) to those designated consumers who exceed their target SEC reduction.

? Trading Process for ESCerts

? Compliance and reconciliation process for ESCerts.

? Cross sectoral use of ESCerts and their synergy with Renewable Energy Certificates.