

**GOVERNMENT OF INDIA
NON-CONVENTIONAL ENERGY SOURCES
LOK SABHA**

UNSTARRED QUESTION NO:5377
ANSWERED ON:29.04.2005
POTENTIAL OF RENEWABLE ENERGY
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Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

- (a) whether the potential of renewable energy from wind, small hydro and biomass is estimated to be around 80,000 MW; in the country;
- (b) if so, whether out of this only around 5500 MW grid interactive renewable power installed capacity has been set up so far;
- (c) if so, the major factors hindering the tapping the renewable sources of energy to the optimum level; and
- (d) the time by which the full potential of these to be taped in the country?

Answer

MINISTER OF STATE OF THE MINISTRY OF NON- CONVENTIONAL ENERGY SOURCES (INDEPENDENT CHARGE) (SHRI VILAS MUTTEMWAR

(a) & (b): The potential for renewable energy in the country from wind, small hydro and biomass has been estimated at around 80,000 MW, against which around 6160 MW grid interactive renewable power installed capacity has been set up, as on 31-03-2005.

(c): The major barriers to the accelerated growth of grid-interactive renewable power are, inherent intermittent nature of renewable energy sources; relatively lower capacity utilization factors; grid penetration limitations on account intermittent nature of supply; relatively high capital costs when compared to conventional power projects; and the requirement of preferential tariffs apart from concessional custom and excise duties to make grid interactive renewable power a commercially attractive proposition.

(d): The aim is to deploy around 10% of the additional grid-interactive power installed capacity through renewables during the 10th Plan. During the first 3 years, i.e., 2002-03 to 2004-05, of the Plan as much as 18% of the additional installed capacity has come through renewables, of which the contribution from wind power is 13% (1967 MW), small hydropower is 2% (267), and bio-energy is 3% (407 MW). The progress in this sector is highly satisfactory.