

Lok Sabha

Renewable energy schemes and programmes are only supplementing the energy and electricity needs of the people in the country. A potential of around 90,000 MW for energy / power generation from different renewable energy sources (excluding solar) in the country has been estimated which includes 48,561 MW from wind power, 14,294 MW from small hydro power and 26,367 MW from bio-power. The potential for solar energy is estimated for most parts of the country at around 20 MW per square kilometer of open, shadow free area covered with solar collectors.

However, harnessing the exploration of renewable energy sources faces hurdles such as:

- Inherent and intermittent nature of renewable energy sources leading to low capacity utilization factors ranging from about 17% to 70%, depending on resource and location; and also need for storage.
- Grid synchronization limitations on account of intermittent nature of supply;
- Relatively higher capital investment compared to conventional power projects, Requirement of preferential tariffs apart from other fiscal and/or financial concessions to make investment in renewable power a commercially attractive proposition
- General difficulties in servicing and maintenance in remote areas where the renewable energy systems are installed.

While the inherent intermittent nature of renewable energy sources cannot be altered, the government is focusing on certain specific steps for better exploitation of these sources. They are:

- Reducing the costs and improving efficiencies & reliability of renewable energy systems through support for research and development activities in identified and development of standardization and testing facilities.
- Support to industry (concessional loans) for upgradation of technology/ production facilities.
- Support for manpower, skill development through fellowships and sector specific training programmes
- Fiscal and financial incentives, such as, capital and interest subsidy, accelerated depreciation, nil concessional excise and customs duties; preferential tariff for grid interactive renewable power;
- Extensive publicity and awareness on the use of renewable energy systems/ devices through print and electronic media, and special events.

Around 6,367 MW grid-interactive power generation capacity has been added during the last three years through renewable energy sources, against the total target of 5,974 MW. Year-wise achievements have ranged from 81% to 152% of the set targets, which is indicative of good performance. Further target of 3,226 MW has been set for 2009-10, against which 287.80 MW capacities has already been achieved as on 30.06.2009. Details of the targets and achievements are given as follows:

Details of targets set and achievements made for grid-interactive renewable power generation installed capacity during the last 3 years and current year

S. No.	Year	Target (MW)	Achievement (MW)	Percentage (%)
1.	2006-07	1407	2138.00	152%
2.	2007-08	1987	2146.00	108%
3.	2008-09	2580	2083.39	81%
4.	2009-10	3226	287.80	Not applicable

MW = Megawatt

This information was given by Shri Farooq Abdullah, Union Minister for New and Renewable Energy, in a written reply in Lok Sabha today.