

**GOVERNMENT OF INDIA
NEW AND RENEWABLE ENERGY
LOK SABHA**

STARRED QUESTION NO:161

ANSWERED ON:01.12.2006

WIND ENERGY GENERATION

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Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) the present capacity of wind power in the country alongwith per unit cost of power generation;
- (b) whether the Government has worked out total potential of wind power in the country;
- (c) if so, whether the Government proposes to exceed the wind power generation capacity above the level of the nuclear energy capacity by 2020; and
- (d) if so, the action initiated so far to boost this environment friendly power and reduce per unit power generation cost thereof?

Answer

MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI VILAS MUTTEMWAR)

- (a): A total wind power capacity of 6070 MW has been installed in the country as on 30th September, 2006. The average generation cost ranges between Rs.2.75 to 3.50 per unit depending on the site, wind regimes and infrastructure development cost.
- (b): Yes, Sir. A gross wind power potential in the country has been estimated at over 45,000 MW. Major part of the potential, however, lies in low wind regimes having wind power density of 200 – 300 Watt per square meter.
- (c): The wind power generation capacity has already exceeded nuclear power generation capacity.
- (d): The Government is encouraging setting up of wind power projects in the country by providing concessional custom duty on certain components, excise duty exemption, accelerated depreciation, loan from Indian Renewable Energy Development Agency (IREDA) and detailed wind resource assessment to identify further potential sites. R&D efforts are focused on various industry related problems, design of wind turbine blades, development of indigenous gearbox, wind resource assessment, and indigenization of major components to reduce cost per unit power generation.