

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

UNSTARRED QUESTION NO:2185
ANSWERED ON:24.08.2012
COST OF ENERGY PRODUCTION BY RENEWABLE ENERGY SOURCES
Punia Shri P.L.

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

- (a) whether the Government has noticed that the rate per unit of energy generated from New and Renewable energy sources is higher;
- (b) if so, the details thereof; and
- (c) the steps taken by the Government to make the rate per unit of the said energy sources affordable and to popularize these energy sources?

Answer

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH)

(a): The rate per unit of electricity generated from various new and renewable energy sources is generally high in comparison with that from conventional power sources. It is, however, not the same for all renewable energy sources, being project location/ site, capacity and technology specific, all affecting project design and cost.

(b): Indicative costs of electricity generation in respect of different categories of renewable power projects with present state of commercialized technologies and existing framework of financial and fiscal incentives are given in Annexure.

(c): Research, design and development efforts are undertaken globally, including in our country. Such efforts driven mainly by industry are aimed at developing technologies/processes that help to reduce the cost of power generation from renewable energy sources. The Ministry supports such efforts under its RD&D programme, with CFA up to 100% of project cost to Universities, research institutions, R&D laboratories and industry, for achieving well-defined outputs.

In the case of solar power, the Ministry has introduced competitive bidding process for selection of projects under the National Solar Mission based on reverse auction of CERC determined tariff, which has led to significant lowering of the bid tariff due to intense competition amongst bidders.

To promote energy generation from renewable energy sources, the Government provides various fiscal and financial incentives for deployment of renewable energy systems/devices. The Government also supports specific seminars / workshops/ training programmes and creation of public awareness through electronic and print media on the need and usefulness of renewable energy.

Annexure referred to in reply to part (b) of Lok Sabha Unstarred Question No.2185 for 24.08. 2012 regarding Cost of Energy Production by Renewable Energy Sources

Indicative costs of electricity generation in respect of different categories of grid-interactive renewable power projects

Category of grid-interactive renewable power project	Cost of electricity generation (Financial) (Rs. / kWh)
Small Hydro Power	3.00 - 3.75
Wind Power	3.50 - 4.00
Bio-Power:	
i Biomass Power	3.50 - 4.00
ii Bagasse Cogeneration	3.25 - 3.75
iii Urban/ Industrial Waste to Power	2.50 - 5.00
Solar Power	7.00 - 11.00