

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

STARRED QUESTION NO:540
ANSWERED ON:14.08.2014
ENERGY FROM BIOMASS
Jena Shri Rabindra Kumar

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

- (a) whether the energy generated from biomass plants is cheaper than solar and wind energy and if so, the details thereof;
- (b) the cost of electricity per unit generated by biomass plants vis-a-vis that generated by solar and wind energy;
- (c) whether biogas plants have received carbon rebates under the Clean Development Mechanism (CDM) of the United Nations Framework Convention on Climate Change (UNFCCC); and
- (d) if so, the details thereof?

Answer

THE MINISTER OF STATE FOR POWER, COAL & NEW AND RENEWABLE ENERGY (INDEPENDENT CHARGE) (SHRI PIYUSH GOYAL)

(a), (b), (c) & (d) : A statement is laid on the table of the House.

Statement referred to in reply to parts (a), (b), (c) and (d) of Lok Sabha Starred Question No. 540 for answer on 14th August, 2014 regarding Energy from Biomass

(a) & (b) Solar and wind based power generation does not involve cost of fuel as in case of biomass based power generation. However, solar and wind energy plants are site specific. The cost of electricity per unit generated from biomass plants is cheaper in comparison to cost of electricity per unit generated from solar. However, in view of sharp increase in price of biomass fuel in recent times, the cost of generation of electricity from biomass has increased in comparison to wind. The increase in biomass price also happens during the year especially in monsoon season.

The cost of electricity per unit generated from solar photovoltaics is in the range of around 6.50 - 8.50 in comparison to 4.50 - 5.65 in case of biomass power and 3.75 to 4.25 per unit in case of wind energy depending upon the location, plant load factor and capital cost.

(c) & (d) Yes, Madam. The biogas plants have received carbon credit under the Clean Development Mechanism (CDM) of the United Nations Framework Convention on Climate Change (UNFCCC). The National CDM Authority (NCDMA) has accorded Host Country Approval (HCA) to 32 CDM projects based on biogas. State-wise list is given in the Annexure I. Out of 32 projects, 13 projects have been registered with CDM Executive Board under UNFCCC as on July, 2014. State-wise list and estimated emission reductions from these projects are given in the Annexure II.