

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

UNSTARRED QUESTION NO:1413
ANSWERED ON:04.03.2011
RESEARCH AND DEVELOPMENT IN RENEWABLE ENERGY SECTOR
Deora Shri Milind Murl;Singh Shri Ganesh

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

- (a) the details of funds allocated alongwith the expenditure incurred on research and development in renewable energy sector in the country during the last three years and the current year:
- (b) whether there is large potential for cost reduction in renewable energy technologies and achieve grid parity with electricity generated from renewable energy sources through Research and Development (R&D);
- (c) if so, the present policy in this regard alongwith the incentives given by the Government to promote Public Private Partnerships(PPPs) for rapid scaling-up of investments in high quality R&D in this field;
- (d) whether any such partnerships have been developed in the country so far; and
- (e) if so, the details thereof, and if not, the Government's plan to operationalise such PPPs during the current year?

Answer

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

- (a): A budgetary provision of Rs.253.06 crore has been made for research and development in new and renewable energy for the first four years of the 11th Five Year Plan of the Ministry of New and Renewable Energy (MNRE). Against this provision an expenditure of Rs.199.74 crore has been incurred on R&D in renewable energy sector during the last three years and the current year (upto February, 2011).
- (b): The 11th Plan has a special emphasis on efficiency improvement and cost reduction of new and renewable energy systems and devices. The Government has launched Jawaharlal Nehru National Solar Mission (JNNSM) with the objective to create conditions through rapid scale-up of capacity and technological innovation to drive down costs towards grid parity. With the current level of fiscal and financial incentives the other renewable power sectors such as wind, small hydro, biomass cogeneration/ combustion and biogas based power have nearly achieved grid parity. However, R&D and technology demonstration projects are promoted to make it still better, specially for low capacity systems.
- (c): The present policy and guidelines of MNRE for research, design, development, demonstration and manufacture for new and renewable energy provides for promoting Public Private Partnerships (PPPs) for rapid scaling of investments in high quality R&D in this field. It has provisions to support R&D for technology development and demonstration through various academic and research institutions including autonomous bodies and industry. Financial assistance for projects that involve partnership with industry/ civil society organizations is normally restricted upto 50% of the project cost.
- (d)&(e): Under the Jawaharlal Nehru National Solar Mission (JNNSM), a number of mega projects in the area of solar thermal and solar photovoltaics have been sanctioned to consortiums involving academic institutions and industry. In order to promote public-private partnerships in other renewable energy sectors R&D and technology demonstration projects have also been undertaken in the areas of hydrogen energy, bio-fuels and biogas generation, purification and bottling through entrepreneurs/ industry and their associations.