

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

UNSTARRED QUESTION NO:851

ANSWERED ON:27.11.2014

RESEARCH AND DEVELOPMENT IN RENEWABLE ENERGY SECTOR

Dhurve Smt. Jyoti;Kachhadia Shri Naranbhai

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

- (a) the details of investment on research and development in renewable energy sector;
- (b) whether the Government proposes to increase this expenditure in the current Five Year Plan; and
- (c) if so, the details thereof?

Answer

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

(a): The Ministry of New and Renewable Energy has been supporting Research and Development (R&D) for technology development and demonstration through various academic and research institutions, autonomous organisations and industry. In addition, the Ministry has set up three research institutes, namely, National Institute of Solar Energy, Gurgaon, National Institute of Wind Energy, Chennai and Sardar Swaran Singh National Institute of Renewable Energy, Kapurthala, Punjab for R&D in solar energy, wind energy and bio-energy, respectively. Against a budget of Rs. 500.00 crore allocated for R&D in new and renewable energy sector for the 11th Five Year Plan, a total of 169 R&D projects in the areas of solar energy, bio-energy, hydrogen and fuels cells with an outlay of Rs.525 crore were sanctioned and an amount of Rs.239.56 crore was released. The R&D projects taken up include: higher efficiency solar cells, Mega Watt scale solar thermal power generation, advance research in biomass energy, hydrogen production, storage and utilization and fuel cells development. In the area of biogas, demonstration projects on purification and bottling of biogas for various applications were taken up. During the last two and a half years of the current plan period, a total expenditure of Rs.208.12 crore has been incurred on R&D in new and Renewable energy.

(b)&(c): Yes, Madam. For the current 12th Plan Period, the Ministry has increased the budgetary provision for research and development to Rs.910.00 crore. The focus is on reduction of cost and improving efficiency of renewable energy systems and the key areas for R&D include: Solar energy, wind energy, biomass, biogas, bio-liquid fuels and Hydrogen/fuel-cell technologies.