

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) Government provides fiscal and other benefits to promote private investment in all renewable energy sectors including wind energy. The major incentives are provided as per the Income Tax Act under Section 32 Rules 5 and Section 80. Such benefits help the developers of these projects to reduce the capital investment. However, it does not have direct, bearing on the tariff rates.

(b) As there are other major factors which effect cost of generation of a wind power project, including plant load factor, capital cost, interest on borrowing etc., the above tax benefits result in a marginal reduction in cost of generation.

(c) These benefits are intended to promote investment in renewable energy sector including wind energy and increasing green power generation.

(d) These benefits are given as per the schedules laid down in the respective Income Tax Act.

(e) Only Type tested wind turbines with a certified power curve as per Indian certification system, aligned to international standards are installed and connected to grid.

#### **Tapping of Solar Energy**

946. DR. JANARDHAN WAGHWARE: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether Government is seriously thinking to generate solar energy to solve the problems of power shortage, which has badly affected the industrial and agricultural growth, hitting thereby our economy;

(b) if so, the budget earmarked for research on solar energy in the Eleventh Five Year Plan; and

(c) if not, the details of hurdles in making this perennial source of non-conventional energy for household, industrial and agricultural use?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) to (c) The Ministry of New and Renewable Energy is implementing several schemes on utilization of solar energy for off-grid and grid-connected applications in the country. The utilization of solar energy systems is increasing regularly. However, the high initial cost of solar energy systems is a barrier in large scale utilization of solar energy systems, specially for power generation.

The Ministry is supporting research and development to reduce the cost, improve the efficiency and performance of solar energy systems and also develop new materials and devices. An amount of Rs. 160 crore has been earmarked for research in solar energy during the 11th plan period.

The Ministry has taken several other steps to increase the utilization of solar energy in the country, which include (i) taking up expanded programmes to encourage utilization of solar energy systems through subsidy or soft loans, (ii) incentive to manufacturers, commercial users and power project developers (iii) support to Akshaya Urja shops to provide additional channels for supply and

after-sales servicing of solar energy systems, and (iv) support for capacity building and to create awareness through print and electronic media about the solar energy systems and their benefits.

#### **Special package for New and Renewable Energy**

947. SHRI N. BALAGANGA: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether Government is having any proposal to increase the power generation through the Ministry by providing special package; and

(b) if so, the details thereof ?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) and (b) A target for capacity addition of 15,000 MW (14,000 MW grid-interactive and 1,000 MW off-grid/ distributed) from different renewable energy sources - wind, biomass, small hydro and solar, has been set for the 11th Plan period. To achieve this target, the Government has already put in place an attractive package (mix of fiscal and financial incentives) to encourage private investment in the sector. The same includes capital/interest subsidies, accelerated depreciation, nil/ concessional excise and customs duties. Further benefit under Section 80-1A of Income Tax Act 1961 is available to undertakings setup for the generation or generation and distribution of Renewable power in India. This apart, preferential tariff for grid interactive renewable power is being given in most potential States.

#### **Viability of Solar Power Generation**

948. PROF. P.J. KURIEN: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the total quantity of power generated in the country from solar energy and the cost per mega watt;

(b) the details of projects under implementation;

(c) whether solar power generation is economically viable;

(d) if so, the details thereof; and

(e) the details of research in the country to make solar power cheap?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) A total of 32 grid interactive solar photovoltaic power plants, with aggregate capacity of 2.1 Megawatt, have been installed in the country with financial support from the Government. The estimated cost of solar power plants is in the range of Rs. 17 crore to Rs. 20 crore per mega watt.

(b) A two mega watt capacity grid interactive solar photovoltaic power plant is being set up by West Bengal Green Energy Development Corporation Limited in Asansol district in West Bengal. In addition, Karnataka Power Corporation Limited is also setting up a mega watt capacity solar photovoltaic power plant in Raichur district at the tail-end of the grid.