

(b) Does not arise.

(c) The capital investment required in renewable energy projects is highly resource and region / site specific. In many cases (except solar and some other emerging renewable power technologies) it is presently of the same order as of conventional power projects. However, the cost of generation is higher because of inherently dilute and intermittent nature of renewable resources leading to relatively low plant load factors. The Government is facilitating setting up of such projects in private sector through a mix of fiscal and financial incentives that help to reduce the cost of generation to levels competitive with that from traditional sources.

(d) No, Sir.

(e) Does not arise.

(f) Does not arise.

Generation of solar power

559. SHRI TARUN VIJAY: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the current power generation in MW through solar power in the country during the years 2009, 2010 and 2011;

(b) the investment in the solar energy industry in the same years;

(c) the amount in million dollars that was granted by banks to companies for setting up new power generation plants in the same years, company-wise; and

(d) why Government has scaled down the target for the installation of the new power generation capacity for the current Five Year Plan from 78,700 MW to 62,000 MW?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) The total installed capacity of grid connected solar power in the country is reported to be 503.9 MW so far. The capacity addition during years 2009-10, 2010-11 and 2011-12 is 8.1 MW, 25.1 MW and 468.3 MW, respectively.

(b) The total investment for grid connected solar power projects is estimated to be about Rs. 6,000 crores at an average cost price of Rs. 12.0 crore per megawatt capacity.

(c) The solar power projects are installed on build, own and operate basis, and the solar project developer is paid solar tariff for the power injected into the grid. No data on the amount of loans granted by financial institutions to developers is provided to the Ministry.

(d) 11th Plan target of 78,700 MW was revised to 62,374 MW during Mid-term Appraisal of the plan by Planning Commission. The reasons for scaling down the target included delay in placement orders for main plant and civil works, contractual disputes between project developers and the contractors/vendors, delay in land acquisition, environmental concerns, flash flood and difficult climatic conditions.

As far as capacity addition through renewable energy, during current 11th plan period, the target of 12,380 MW has been achieved.

Lead batteries used for storage

560. SHRI NARESH GUJRAL: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) the number/capacity of lead batteries currently being used for storage of solar energy, State-wise;
- (b) whether there are any guidelines for the disposal of such lead batteries and if so, the details thereof;
- (c) the rate of compliance with these guidelines;
- (d) the details of penalties imposed for not meeting the guidelines during the last two financial years; and
- (e) the number of registered recyclers for lead batteries in the country with a capacity of over 50,000 tonnes per year, the size at which adequate pollution controls are considered to be cost effective?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) Ministry is not maintaining any data of lead acid batteries being used in solar photovoltaic systems. However, each solar lighting system has one lead acid or any other battery for storing electricity generated by solar photovoltaic module. Stand-alone SPV power plants with and without storage batteries have also been set up in the country. 18,45,583 solar lighting systems and stand-alone SPV power plants of 16.451 MWp capacity have been installed in the country as on 31.1.2012.

(b) Yes, Sir. The responsibilities of manufacturer, importer, assemblers and re-conditioners in respect of collection of used /life expired lead acid batteries, are detailed Environment (Protection) Act, 1986. As per these Rules, these stakeholders are required to ensure that used batteries are collected back.

Further, the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 have been notified for proper management and handling of hazardous wastes, including used lead acid batteries (LABs). As per these Rules, every person who is engaged in handling of such wastes needs to obtain authorization from the State Pollution Control Board concerned. In addition, every recycler of lead scrap/lead acid batteries needs to register with State Pollution Control Board concerned. The waste LABs are required to be sent or sold to a registered or authorized recycler.

(c) and (d) As per these Rules, the State Pollution Control Boards/Pollution Control Committees are required to issue directions under the Environment (Protection) Act, 1986, in case of violation.

(e) As per the information provided by the Central Pollution Control Board, till