

Charging stations for electric cars

1106. SHRI K. J. ALPHONS: Will the Minister of POWER be pleased to state:

- (a) the action that has been taken by Government to set up charging stations for electric cars;
- (b) the number of charging stations that have been set up all across India; and
- (c) the target for the next five years?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI RAJ KUMAR SINGH): (a) Government of India have taken the following actions for facilitation of Charging Stations for Electric Vehicles:—

- (i) No requirement of license for setting up of charging stations for Electric Vehicles: Ministry of Power on 13.04.2018, has issued a clarification that no license is required for setting up of Charging Infrastructure for Electric Vehicles (EVs) with reference to the provisions of the Electricity Act, 2003.
- (ii) Charging Infrastructure for Electric Vehicles - Revised Guidelines and Standards: Ministry of Power, after extensive consultations with State Governments, different departments/agencies of Central Government and the stakeholders, issued "Charging Infrastructure for Electric Vehicles— Guidelines and Standards" dated 14.12.2018, which was revised on 01.10.2019 and a further amendment to it was issued on 08.06.2020 to roll out EV Public Charging Infrastructure as a national priority.
- (iii) Grid Connectivity and Safety regulations for charging stations for electric vehicles: Central Electricity Authority (CEA) has issued amendments to following regulations of CEA with reference to facilitation for charging stations:—
 - (a) Central Electricity Authority (Technical Standards for Connectivity to the Distributed Generation Resources) Amendment Regulations, 2019.
 - (b) Central Electricity Authority (Measures relating to Safety and Electric Supply) Amendment Regulations, 2019.

- (iv) Department of Heavy Industry (DHI) is administering Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME India) Scheme for promoting adoption of electric/hybrid vehicles (xEVs) in India since 01st April, 2015. Phase-I of the Scheme was available upto 31st March, 2019. Phase-II of FAME India Scheme is being implemented for a period of 3 years w.e.f. 01st April, 2019. This phase mainly focuses on supporting electrification of public and shared transportation and aims to support, through demand incentive, approx. 7000 e-Buses, 5 lakh e-3 Wheelers, 55000 e-4 Wheeler Passenger Cars and 10 lakh e-2 Wheelers. In addition, creation of charging infrastructure is also supported to address range anxiety among users of electric vehicles. An amount of ₹ 1000 crore is allocated for establishment of Charging Infrastructure under the Scheme.
- (v) Ministry of Housing and Urban Affairs (MoHUA) has issued following amendments to building by-laws and Urban and Regional Development Plan Formulation for facilitation of Charging Infrastructure for Electric Vehicles:—
- (a) Amendments in Model Building Bye-Laws (MBBL - 2016) for Electric Vehicle Charging Infrastructure.
- (b) Amendments in Urban and Regional Development Plans Formulation and Implementation Guidelines (URDPFI - 2014) for Electric Vehicle Charging Infrastructure.

(b) and (c) Energy Efficiency Services Limited (EESL), Power Grid Corporation of India Ltd. (PGCIL) and NTPC Ltd. under Ministry of Power have been engaged in installation of Public Charging Stations (PCSs) in the country. NTPC has installed 90 PCS, EESL has installed 97 PCS and PGCIL has installed 13 PCS across India, so far. In addition, various Central Public Sector - Oil Marketing Companies (OMCs) have installed 120 Charging Stations and 22 Battery Swapping Stations across the country. Further, Under Phase-I of FAME-India Scheme, Department of Heavy Industry (DHI) sanctioned about 500 Charging Stations/Infrastructure for ₹ 43 crore (approx.) in cities like Bengaluru, Chandigarh, Jaipur and National Capital Region of Delhi. DHI has also sanctioned 2636 Electric Vehicles (EVs) Charging Stations to 62 cities across 24 States/UTs on pan India basis under FAME India (Faster Adoption and Manufacturing of Hybrid and Electric Vehicles in India) scheme Phase II. As per available data, a total of 887 Charging Stations have been installed by various entities across India.

As per "Charging Infrastructure for Electric Vehicles - Guidelines and Standards" issued on 01.10.2019, rollout of EV Public Charging Infrastructure has been planned in a phased manner as detailed below:—

Phase I (1-3 Years)

All mega cities with a Population of 4 million plus (as per Census 2011), all existing expressways connected to these mega cities and important Highways connecting with each of these Mega Cities as per the list below.

- A. List of 4 million plus cities:
- (i) Mumbai
 - (ii) Delhi
 - (iii) Bengaluru
 - (iv) Hyderabad
 - (v) Ahmedabad
 - (vi) Chennai
 - (vii) Kolkata
 - (viii) Surat
 - (ix) Pune
- B. List of Corridors
- (i) Mumbai-Pune Expressway
 - (ii) Ahmedabad-Vadodara Expressway
 - (iii) Delhi-Agra Yamuna Expressway
 - (iv) Delhi-Jaipur
 - (v) Bengaluru-Mysuru
 - (vi) Bengaluru-Chennai
 - (vii) Surat-Mumbai Expressway
 - (viii) Agra-Lucknow Expressway

- (ix) Eastern Peripheral Expressway
- (x) Delhi-Agra NH2 Expressway
- (xi) Hyderabad ORR Expressway
- (xii) 5 Connected highways to each megacity

Phase II (3-5 Years):

Big Cities like State capitals, UT headquarters are also planned to be covered for distributed and demonstrative effect. Further, important Highways connected with each mega city are planned to be taken up for coverage.

Upgradation of thermal power and hydro power generation plants

1107. SHRI SAMBHAJI CHHATRAPATI: Will the Minister of POWER be pleased to state:

- (a) whether the efficiency of Government controlled thermal and hydro power plants has reduced substantially because of lack of proper maintenance and timely upgradation of machines and tools resulting in static or reduced power generation;
- (b) if so, the reasons therefor with respect to each of the power plants under the control of Government;
- (c) whether Government has formulated any programme to upgrade such thermal and hydro power plants; and
- (d) if so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI RAJ KUMAR SINGH): (a) and (b) The efficiency of thermal and hydro power plants in the Central Sector has not reduced.

(c) and (d) The power generating utilities undertake Renovation and Modernisation (R&M)/Upgradation works from time to time as required. It is a continuous exercise, as a cost effective option for optimization of energy resources through improvement in efficiency, better plant availability and also augmentation of capacity.

During 2017-22, Renovation and Modernisation (R&M)/Life Extension (LE) works of 71 units of 14929 MW thermal power stations (7 units of 224 MW for R&M in Central Sector and 34 units of 7570 MW for L.E. and 30 units of 7135 MW for R&M in State