

GOVERNMENT OF INDIA
MINISTRY OF HEAVY INDUSTRIES AND PUBLIC ENTERPRISES
DEPARTMENT OF HEAVY INDUSTRY

LOK SABHA
STARRED QUESTION NO.106
TO BE ANSWERED ON 28.04.2015

R & D for Electric/Hybrid Vehicles

106. SHRIMATI POONAM MAHAJAN:

Will the Minister of HEAVY INDUSTRIES AND PUBLIC ENTERPRISES be pleased to state:

- (a) whether the Government has any proposal/scheme for testing the infrastructure and R&D Projects for hybrid/ electric vehicles;
- (b) if so, the details thereof and the aims and focus areas of the scheme along with the funds allocated for each of the focus area;
- (c) whether the Government is aware that the development of hybrid/electric vehicles requires high technology inputs, cost intensive battery technology and charging infrastructure;
- (d) if so, the details thereof and the action taken by the Government to facilitate development of the requisite high-end technology; and
- (e) whether the hybride/electric vehicle scheme is likely to be aligned with Make in India, Atal Mission for Rejuvenation and Urban Transformation (AMRUT) and Smart cities schemes so as to ensure convergence amongst them and if so, the details thereof?

ANSWER

MINISTER OF HEAVY INDUSTRIES AND PUBLIC ENTERPRISES
(SHRI ANANT G. GEETE)

(a) to (e) : A statement is laid on the Table of the House.

STATEMENT

Statement referred to in reply to parts (a) to (e) of Lok Sabha Starred Question No.106 asked by Shrimati Poonam Mahajan regarding R&D for Electric/Hybrid Vehicles.

(a) & (b): Yes Madam, Government of India approved a scheme namely **FAME – India** (Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India) for implementation with effect from 1st April 2015.

Testing infrastructure and R&D Projects for hybrid/ electric vehicles (xEV) comes under the ‘**Technology Up gradation**’, which is one of the four focus areas of this scheme.

Other three focus areas are **demand creation** by way of up front incentives for purchase of xEV vehicles, **pilot project** for demonstration effect of xEVs and creation of Public **charging infrastructure**.

Fund allocated for each of this Focus area is as given below.

<i>Component of the scheme</i>	<i>2015-16</i>	<i>2016-17</i>
<i>Technology Platform (Including testing infrastructure)</i>	<i>Rs. 70 Crore</i>	<i>Rs. 120 Crore</i>
<i>Demand Incentives</i>	<i>Rs. 155 Crore</i>	<i>Rs. 340 Crore</i>
<i>Charging Infrastructure</i>	<i>Rs. 10 Crore</i>	<i>Rs. 20 Crore</i>
<i>Pilot Projects</i>	<i>Rs. 20 Crore</i>	<i>Rs. 50 Crore</i>
<i>IEC/Operations</i>	<i>Rs. 05 Crore</i>	<i>Rs. 05 Crore</i>
<i>Total</i>	<i>Rs. 260 Crore</i>	<i>Rs. 535 Crore</i>
<i>Grand Total</i>		<i>Rs. 795 Crore</i>

(c) & (d): Yes Madam, Development of hybrid/electric vehicles require high technology inputs and cost intensive battery technology and charging infrastructure. This has already been envisaged while formulating the scheme and sufficient provision has been made in the concerned focus areas of the scheme.

For development of indigenous technology, ‘**Technology Advisory Group**’ formed under the scheme has already chalked out a detailed **Technology Road Map for electric and Hybrid Vehicle R&D program**.

Collaborative approach with automobile industry, leading research institutes like ARAI, TIFAC, NFTDC, NATRiP, ICAT and Academia like IITs are being encouraged for R&D activities under this scheme.

Some of the main areas of xEV sector, where technological R&D efforts are under progress are:-

1. Development of indigenous technology for advanced battery.
2. Standardization of Charging Infrastructure
3. Technology and reduction of cost of battery with advanced technology.
4. Establishment of Testing Infrastructure at ARAI Pune.

(e): Yes Madam, Incentives under this scheme are available to vehicles, which are manufactured in India only.

Scheme intends to offer additional incentives to the vehicles purchased under AMRUT (erstwhile JnNURM).

Cities under Smart Cities Initiatives of Government of India are already covered under this scheme.

As such, this scheme is aligned with the Make in India, AMRUT and Smart Cities schemes of the government.
