

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

UNSTARRED QUESTION NO:6157
ANSWERED ON:30.04.2015
NATIONAL HYDROGEN ENERGY PROGRAMME
Mahajan Smt. Poonam

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

- (a) whether a roadmap has been prepared by the Government for developing National Hydrogen Energy Programme in India;
- (b) if so, the details thereof along with the technology gaps identified and challenges to be overcome for a large-scale introduction of hydrogen as an energy carrier in a phased manner; and
- (c) the funds spent so far for implementation of the roadmap?

Answer

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

- (a): Yes, Madam. A National Hydrogen Energy Roadmap was prepared in 2005 with involvement of all stakeholders.
- (b): The Roadmap has identified technological gaps concerning all components of the Hydrogen Energy System, that is production, storage, transport and delivery, applications and safety aspects, including some projects to be implemented in Mission Mode. The Roadmap also identified two new initiatives on transportation and power generation for introduction of hydrogen as an energy carrier.
- (c): Ministry of New and Renewable Energy has been implementing a broad-based Research, Development and Demonstration (RD&D) Programme on Hydrogen Energy and Fuel Cells during the 11th and 12th Plans, which is broadly in accordance with the National Hydrogen Energy Roadmap. Total amounts of Rs.35.20 crore during the 11th Plan and Rs.39.00 crore during the first three years of the 12th Plan (2012-13 to 2014-15) period were provided as financial support by the Ministry for implementing RD&D Programme on Hydrogen Energy and Fuel Cells.