

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

UNSTARRED QUESTION NO:3228
ANSWERED ON:31.08.2012
NEW AND RENEWABLE ENERGY TECHNOLOGIES
Tandon Annu

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

- (a) whether the Government is making efforts with academic institutions on cutting edge new and renewable energy technologies like fuel cell, hydrogen and alternate fuels for surface transportation;
- (b) if so, the details thereof;
- (c) whether the Government is considering to invite foreign companies to help in its efforts; and
- (d): if so, the details thereof?

Answer

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH)

- (a): Yes, Madam. The Ministry of New and Renewable Energy under its broad based Research, Development and Demonstration programme has been supporting projects to academic institutions and various R&D organizations including industry on hydrogen production, its storage and applications; fuel cell technologies; and alternative fuels for surface transportation.
- (b): The projects include production of hydrogen by splitting of water using solar and wind energy, through fermentation of biological wastes, gasification of bio-mass, and reformation of bio-mass derived glycerol; storage of hydrogen in hydrides and carbon materials; development and demonstration of engines/vehicles for use of hydrogen and hydrogen blended fuels; development of fuel cells including materials and components; development and demonstration of battery operated vehicles; and on different aspects of bio-fuels. Around fifty research, development and demonstration projects in these areas are under implementation with the support of the Ministry.
- (c): At present there is no proposal under consideration of the Government to invite foreign companies to help the country in the area of fuel cells, hydrogen and alternative fuels for surface transportation. However, Indian companies, academic institutions and research organisations can collaborate with foreign companies or institutions for development in these areas.
- (d): Does not arise.