

GOVERNMENT OF INDIA  
DEPARTMENT OF ATOMIC ENERGY  
**LOK SABHA**  
**UNSTARRED QUESTION NO.946**  
TO BE ANSWERED ON 08/02/2023

**Fusion Fuel**

946. SHRI K. NAVASKANI:

Will the PRIME MINISTER be pleased to state:

- (a) whether the Government has taken note of the fact that a small quantity of fusion fuel can generate so much energy that it can run a power plant for years with no carbon dioxide emissions; and
- (b) If so, the details of the initiatives that are proposed to be taken by the Government keeping in mind that fusion energy will provide clean and safe electricity without greenhouse gas emissions?

**ANSWER**

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS  
AND PRIME MINISTER'S OFFICE (Dr. JITENDRA SINGH):

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- (a) Yes Sir. The Government has taken note of the fact that Nuclear Fusion, the process by which stars produce energy offers a potentially unlimited low-carbon energy source for the future.
  
- (b) Fusion reactors are complex and require State of the Art Technology. Engineers and Scientists worldwide are trying to harness the potential of fusion energy for more than 5 decades, till date energy from fusion reactor could not be generated. Institute of Plasma Research (IPR), Gandhinagar, a Grant-in-Aid Institute under the Department of Atomic Energy (DAE) leads the Indian programme in Fusion. DAE has also joined International Thermonuclear Experimental Reactor (ITER), an international effort in this direction with vision to harness fusion energy with the objective to create necessary technologies for sustained production of clean energy from fusion.

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