

GOVERNMENT OF INDIA  
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 2141**  
TO BE ANSWERED ON: 13.12.2024

**ENVIRONMENTAL IMPACT OF SEMICONDUCTOR FAB PROJECTS**

**2141 # SMT. MAHUA MAJI:**

Will the Minister of Electronics and Information Technology be pleased to state:

- (a) the plan being formulated under the India Semiconductor Mission (ISM) to control greenhouse gas emissions and water usage in the proposed semiconductor fabs to ensure compliance with India's climate commitments;
- (b) the details of the steps to be taken for regulating the use of chemicals and gases, including Fluorinated gases (F-gases) regulations and the ban on Per- and Polyfluoroalkyl Substances (PFASs), in the semiconductor manufacturing process; and
- (c) the details of the monitoring and accountability mechanisms that will be implemented to ensure regular assessment and mitigation of the environmental impact of the semiconductor fab projects?

**ANSWER**

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY  
(SHRI JITIN PRASADA)

(a) to (c): Semiconductors manufacturing is a very complex and technology-intensive sector with significant capital investments, long gestation and payback periods, and rapid changes in technology which require significant and sustained investments. It also requires suitable infrastructure such as availability of uninterrupted power and clean water. All approved semiconductor projects in India are expected to abide by applicable law including in respect of pollution control. Further, to ensure accountability, after obtaining necessary licenses / approvals to operate the plant, it is mandatory for the project companies to submit half yearly compliance reports to the concerned state authorities in respect of environmental licenses granted to them.

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