GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO. 2138
TO BE ANSWERED ON: 13.12.2024

DEVELOPMENT OF SEMICONDUCTOR SECTOR

2138. DR. SASMIT PATRA:

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

(a) the details of the steps taken for the development of the semiconductor sector in the country;
(b) the total investment already made and further investment expected in this sector;
(c) the total employment expected to be generated in the semiconductor sector; and
(d) the details of the cutting-edge advantage that this sector might provide to the country?

ANSWER

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

(a) to (d): Government has approved Semicon India programme with a total outlay of Rs76,000 crore for the development of semiconductor and display manufacturing ecosystem in the country. This programme provides:

i. Fiscal support of 50% of the project cost on *pari-passu* basis for setting up of Silicon Complementary Metal-Oxide-Semiconductor (CMOS) based Semiconductor Fabs in India.
ii. Fiscal support of 50% of Project Cost on *pari-passu* basis for setting up of Display Fabs in India.
iii. Fiscal support of 50% of the Capital Expenditure on *pari-passu* basis for setting up of Compound Semiconductors / Silicon Photonics (SiPh) / Sensors (including Micro-Electro-Mechanical Systems) Fab/ Discrete Semiconductor Fab and Semiconductor Assembly, Testing, Marking and Packaging (ATMP) / Outsourced Semiconductor Assembly and Test (OSAT) facilities in India.
iv. Product Design Linked Incentive of up to 50% of the eligible expenditure subject to a ceiling of ₹15 Crore per application and also "Deployment Linked Incentive" of 6% to 4% of net sales turnover over 5 years subject to a ceiling of ₹30 Crore per application for incentivising chip design.

Government has also approved modernisation of Semi-Conductor Laboratory, Mohali. Besides, MoU for cooperation in development of semiconductor ecosystem have been signed with Singapore, USA, European Union and Japan.

Applied Materials has set up a collaborative engineering centre in Bengaluru with an investment of 400 million dollars over 4 years. This engineering centre is focused on development and commercialisation of technologies for semiconductor manufacturing equipment. AMD has established its largest global design center, AMD Technostar, in Bengaluru. This centre is focused on the design and development of semiconductor technology including 3D stacking, artificial intelligence, and machine learning.

India is well on its path to create a robust semiconductor ecosystem in the country. 5 semiconductor units with cumulative investment of Rs 1.52 Lakh Crore have been approved under the Semicon India Programme. Construction on these units is going on at a rapid pace.

17 semiconductor design companies are being supported under the Design Linked Incentive Scheme. Additionally, 48 semiconductor design companies have been approved for access of

the EDA tools made available by National EDA Tool Grid setup at ChipIN Centre at C-DAC Bengaluru.

The approved semiconductor manufacturing facilities under Semicon India Programme are expected to generate direct employment of about 25,000 advanced technology jobs and about 60,000 indirect jobs.

Semiconductor industry is a foundational industry for the economy. All sectors such as industrial, consumer, defence, telecommunication and automotive etc depend on semiconductors as a critical input for their products. This sector offers transformative advantages by driving technological innovation, economic growth, and strategic self-reliance. It has the potential to enable leadership in advanced technologies like Artificial intelligence(AI), 5G, and quantum computing.

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