GOVERNMENT OF INDIA MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY LOK SABHA UNSTARRED QUESTION NO. 3422 TO BE ANSWERED ON: 09.08.2023

IMPORT DEPENDENCE OF SEMICONDUCTORS

3422. SHRIMATI SANGEETA AZAD:

Will the Minister of ELECTRONICS AND INFORMATION TECHNOLOGY be pleased to state:

(a) the details of the current import dependence with regard to semiconductors;

(b) the details of measures being taken to make India self-reliant in terms of semiconductor manufacturing along with the progress made in this regard; and

(c) the obstacles faced currently and the proposed measures to be taken to address them?

ANSWER

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY (SHRI RAJEEV CHANDRASEKHAR)

(a): Government is focused on its objective of catalysing overall semiconductor ecosystem to further expand India's already rapidly expanding electronics manufacturing and innovation ecosystem. As a result of several initiatives taken by the Government and efforts of the industry, the domestic production of electronic goods has increased substantially from INR 3.88 lakh crore (USD 60 Billion) in 2017-18 to INR 8.25 lakh crore in 2022-23 (USD 101.9 Billion) at a Compound Annual Growth Rate (CAGR) of 16.28%. Many policies of the Government including the flagship Production Linked Incentive (PLI) Schemes, Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors, Modified Electronics Manufacturing Cluster (EMC 2.0) Scheme are major steps towards making India 'Atma Nirbhar' in electronics manufacturing. As semiconductors form a major part of all electronic products, as a result of growth in electronics manufacturing sector, semiconductor market in India has also witnessed proportionate growth over the last few years. As per the Directorate General of Commercial Intelligence & Statistics (DGCIS) portal, semiconductor chips worth INR 1,29,703 crore were imported in FY 2022-23 due to absence of commercial Fabs in India.

(b): Government has approved the Semicon India programme with a total outlay of INR 76,000 crore for the development of semiconductor and display manufacturing ecosystem in the country. The programme aims to provide financial support to companies investing in semiconductors, display manufacturing and design ecosystem. This will pave the way for India's growing presence in the global electronics value chains. Following four schemes have been introduced under the aforesaid programme:

- i. **'Modified Scheme for setting up of Semiconductor Fabs in India'** for attracting large investments for setting up semiconductor wafer fabrication facilities in the country to strengthen the electronics manufacturing ecosystem and help establish a trusted value chain. The Scheme extends a fiscal support of 50% of the project cost on *pari-passu* basis for setting up of Silicon CMOS based Semiconductor Fab in India.
- ii. 'Modified Scheme for setting up of Display Fabs in India' for attracting large investments for manufacturing TFT LCD or AMOLED based display panels in the country to strengthen the electronics manufacturing ecosystem. Scheme extends fiscal support of 50% of Project Cost on *pari-passu* basis for setting up of Display Fabs in India.
- iii. 'Modified Scheme for setting up of Compound Semiconductors / Silicon Photonics / Sensors Fab / Discrete Semiconductors Fab and Semiconductor

Assembly, Testing, Marking and Packaging (ATMP) / OSAT facilities in India' extends a fiscal support of 50% of the Capital Expenditure on Pari-passu basis for setting up of Compound Semiconductors / Silicon Photonics (SiPh) / Sensors (including MEMS) Fab/ Discrete Semiconductor Fab and Semiconductor ATMP / OSAT facilities in India.

iv. 'Semicon India Future Design: Design Linked Incentive (DLI) Scheme'offers financial incentives, design infrastructure support across various stages of development and deployment of semiconductor design for Integrated Circuits (ICs), Chipsets, System on Chips (SoCs), Systems & IP Cores and semiconductor linked design. The scheme provides "Product Design Linked Incentive" of up to 50% of the eligible expenditure subject to a ceiling of ₹15 Crore per application and "Deployment Linked Incentive" of 6% to 4% of net sales turnover over 5 years subject to a ceiling of ₹30 Crore per application.

In addition to the above schemes, Government has also approved modernisation of Semi-Conductor Laboratory, Mohali as a brownfield Fab.

Under the Semicon India Programme, the proposal of Micron Technology Inc. has been approved for setting up a semiconductor ATMP unit in India with capital investment of ₹22,516 crore (USD 2.75 Billion).

(c): Setting up of Semiconductor unit requires huge investments and necessitates suitable infrastructure like availability of uninterrupted Power and Clean Water. Further, Semiconductors manufacturing is a very complex and technology-intensive sector with huge capital investments, high risk, long gestation and payback periods, and rapid changes in technology which require significant and sustained investments. However, the Government is committed to make all round efforts to develop semiconductors and display manufacturing ecosystem in India.
