GOVERNMENT OF INDIA MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY LOK SABHA UNSTARRED QUESTION NO. 505 TO BE ANSWERED ON: 20.07.2022

IMPORT DEPENDENCE IN SEMICONDUCTORS

505. SHRI N. REDDEPPA:

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): The government is very focused on its important objective of building the overall semiconductor ecosystem and ensure that, it in-turn catalyses India's 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 Rs. 2,43,263 crore (USD 37 billion) in 2015-16 to Rs. 5,54,461 crore (USD 74.7 billion) in 2020-21 growing at a Compound Annual Growth Rate (CAGR) of 17.9%. 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 'AtmaNirbhar' 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 industry estimate, the semiconductor consumption in India was around INR 1.1 lakh crore in year 2020 which is being met through imports due to absence of commercial semiconductor fabs in India.

(b): The government is very focused on its important objective of building the overall semiconductor ecosystem and ensure that, it in-turn catalyses India's rapidly expanding electronics manufacturing and innovation ecosystem. This vision of AtmaNirbharta in electronics & semiconductors was given further momentum by the Union Cabinet chaired by the Hon'ble Prime Minister approving the Semicon India programme with a total outlay of INR 76,000 crore for the development of semiconductor and display manufacturing ecosystem in our country. The programme aims to provide financial support to companies investing in semiconductors, display manufacturing and design ecosystem. This will serve to pave the way for India's growing presence in the global electronics value chains.

Following four schemes are introduced under the aforesaid programme:

- i. Scheme for setting up of Semiconductor Fabs in India provides fiscal support to eligible applicants for setting up of Semiconductor Fabs which is aimed at attracting large investments for setting up semiconductor wafer fabrication facilities in the country. Following fiscal support has been approved under the scheme:
 - 28nm or Lower Up to 50% of the Project Cost
 - Above 28 nm to 45nm Up to 40% of the Project Cost
 - Above 45 nm to 65nm Up to 30% of the Project Cost
- ii. Scheme for setting up of Display Fabs in India provides fiscal support to eligible applicants for setting up of Display Fabs which is aimed at attracting large investments for setting up TFT LCD / AMOLED based display fabrication facilities in the country. The Scheme provides fiscal support of up to 50% of Project Cost subject to a ceiling of INR 12,000 crore per Fab.
- Scheme for setting up of Compound Semiconductors / Silicon Photonics / Sensors Fab and Semiconductor Assembly, Testing, Marking and Packaging (ATMP) / OSAT facilities in India: The Scheme provides a fiscal support of 30% of the Capital Expenditure to the eligible applicants for setting up of Compound Semiconductors / Silicon Photonics (SiPh) / Sensors (including MEMS) Fab and Semiconductor ATMP / OSAT facilities in India.
- iv. 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 Rs. 15 Crore per application and "Deployment Linked Incentive" of 6% to 4% of net sales turnover over 5 years subject to a ceiling of Rs. 30 Crore per application.

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

Applications have been invited under various schemes for setting up of Semiconductor facilities. So far 23 applications have been received which are under evaluation.

(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.
