

GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO. 47
TO BE ANSWERED ON: 02.02.2022

DEVELOPMENT OF SEMI CONDUCTOR

**47. SHRI RAJA AMARESHWARA NAIK:
SHRIMATI SANGEETA KUMARI SINGH DEO:
SHRI BHOLA SINGH:
SHRI RAJVEER SINGH (RAJU BHAIYA):
DR. SUKANTA MAJUMDAR:
DR. JAYANTA KUMAR ROY:
SHRI VINOD KUMAR SONKAR:**

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

- (a) whether the Government proposes the comprehensive program for the development of sustainable semiconductor and display ecosystem in the country;
- (b) if so, the details thereof;
- (c) whether the government has proposes to set up a specialized and independent “India Semiconductor Mission (ISM)” in the country;
- (d) if so, the details thereof;
- (e) whether the abovesaid program will usher a new era in electronics manufacturing by providing a globally competitive incentive package to companies engaged in semiconductors and display manufacturing as well as design;
- (f) if so, the details thereof; and
- (g) the details of the other steps being taken by the Government in furtherance of the vision of Aatmanirbhar Bharat and positioning India as the global hub for Electronic System Design and Manufacturing?

ANSWER

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

(a) and (b): Yes, Sir. The government is very focussed 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 have been 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.
- iii. **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 ₹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.

(c) and (d): Yes, Sir. Cabinet approval is also granted for setting up of India Semiconductor Mission (ISM) as an Independent Business Division within Digital India Corporation having administrative and financial autonomy to drive India’s strategies for developing semiconductors and display manufacturing ecosystem. Envisioned to be led by global experts in the Semiconductor and Display industry, ISM will serve as the nodal agency for efficient, coherent and smooth implementation of the schemes.

(e) and (f): Yes Sir. The Semicon India program is expected to usher a new era in electronics manufacturing by providing a globally competitive incentive package to companies engaged in semiconductors and display manufacturing. Semiconductors are key to the 'must-win' technologies of the future, including artificial intelligence and 5G, which will be essential to achieving the goal of a 'dynamic, inclusive and innovative economy' identified as a critical national advantage. In addition, the advanced autonomous systems, cyber security, space and hypersonics, and directed energy are also dependent on semiconductor technologies.

The Semicon India programme provides fiscal support for all the major stages of semiconductor production: design, semiconductor fabs, display fabs, specialised fabs for compound semiconductors, silicon photonics and sensors, Assembly, Testing, Marking and Packaging (ATMP) units etc.

(g): Steps taken by the Government for making India a global hub for Electronics System Design & Manufacturing (ESDM):

1. **National Policy on Electronics 2019:** The National Policy on Electronics 2019 (NPE 2019) has been notified on 25.02.2019. The vision of NPE 2019 is to position India as a global hub for Electronics System Design and Manufacturing (ESDM) by encouraging and driving capabilities in the country for developing core components, including chipsets, and creating an enabling environment for the industry to compete globally.
2. **100% FDI:** As per extant Foreign Direct Investment (FDI) policy, FDI up-to 100% under the automatic route is permitted for electronics manufacturing (except from countries sharing land border with India), subject to applicable laws / regulations; security and other conditions.
3. **Electronics Manufacturing Clusters (EMC) Scheme:** Electronics Manufacturing Clusters Scheme was notified on 22nd October, 2012 to provide support for creation of world-class infrastructure along with common facilities and amenities for attracting investment. Under the Scheme, 19 Greenfield EMCs and 3 Common Facility Centres (CFCs) measuring an area of 3,464 acres with total project cost of INR 3,762 crore including Government Grant-in-Aid of INR 1,538 crore have been approved.
4. **Electronics Development Fund (EDF):** Electronics Development Fund (EDF) has been set up as a “Fund of Funds” to participate in professionally managed “Daughter Funds” which in turn will provide risk capital to startups and companies developing new technologies in the area of electronics and Information Technology (IT). This fund is expected to foster R&D and innovation in these technology sectors. INR 409 crore has been committed through EDF to 9 Daughter Funds with a targeted corpus of INR 2,626 crore.
5. **Phased Manufacturing Programme (PMP)** has been notified to promote domestic value addition in mobile phones and their sub-assemblies / parts manufacturing. As a result, India has rapidly started attracting investments into this sector and significant manufacturing capacities have been set up in the country. The manufacturing of mobile phones has been steadily moving from Semi Knocked Down (SKD) to Completely Knocked Down (CKD) level, thereby progressively increasing the domestic value addition.
6. **Tariff Structure has been rationalized** to promote domestic manufacturing of electronic goods, including, inter-alia, Cellular mobile phones, Televisions, Electronic components, Set Top Boxes for TV, LED products and Medical electronics equipment.
7. **Exemption from Basic Customs Duty on capital goods:** Notified capital goods for manufacture of specified electronic goods are permitted for import at “NIL” Basic Customs Duty.
8. **Simplified import of used plant and machinery:** The import of used plant and machinery having a residual life of at least 5 years for use by the electronics manufacturing industry has been simplified through the amendment of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, vide Ministry of Environment, Forest and Climate Change Notification dated 11.06.2018.

9. **Relaxing the ageing restriction:** The Department of Revenue vide Notification No.60/2018-Customs dated 11.09.2018 has amended the Notification No.158/95-Customs dated 14.11.1995, relaxing the ageing restriction from 3 years to 7 years for specified electronic goods manufactured in India and re-imported into India for repairs or reconditioning.
10. **Public Procurement (Preference to Make in India) Order 2017:** To encourage 'Make in India' and to promote manufacturing and production of goods and services in India with a view to enhancing income and employment, the Government has issued Public Procurement (Preference to Make in India) Order 2017 vide the Department for Promotion of Industry and Internal Trade (DPIIT) Order dated 15.06.2017 and subsequent revisions vide Orders dated 28.05.2018, 29.05.2019, 04.06.2020 and 16.09.2020. In furtherance of the aforesaid Order, MeitY has notified mechanism for calculating local content for 13 Electronic Products viz., (i) Desktop PCs, (ii) Thin Clients, (iii) Computer Monitors, (iv) Laptop PCs, (v) Tablet PCs, (vi) Dot Matrix Printers, (vii) Contact and Contactless Smart Cards, (viii) LED Products, (ix) Biometric Access Control / Authentication Devices, (x) Biometric Finger Print Sensors, (xi) Biometric Iris Sensors, (xii) Servers, and (xiii) Cellular Mobile Phones, for procurement to be made from local suppliers.
11. **Compulsory Registration Order (CRO):** MeitY has notified "Electronics and Information Technology Goods (Requirement of Compulsory Registration) Order, 2012" for mandatory compliance to ensure safety of Indian citizens by curbing import of substandard and unsafe electronic goods into India. 63 Product Categories have been notified under the CRO and the order is applicable on 63 product categories.
12. **Establishment of Gallium Nitride (GaN) Ecosystem Enabling Centre and Incubator:** The project for "Establishment of Gallium Nitride (GaN) Ecosystem Enabling Centre and Incubator for High Power and High Frequency Electronics" has been approved. The project is being implemented by Society for Innovation and Development (SID), Centre for Nano Science and Engineering (CeNSE), IISc Bengaluru.
