

GOVERNMENT OF INDIA
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
LOK SABHA
UNSTARRED QUESTION NO. 604
TO BE ANSWERED ON: 20.07.2022

HOLISTIC ECOYSYSTEM FOR SEMICONDUCTORS

604. SHRI GYANESHWAR PATIL:

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

- (a) whether the Government proposes to develop a holistic ecosystem for the semiconductor manufacturing industry and if so, the details thereof;
- (b) whether the Government proposes to provide incentives and special assistance for setting up local factories and if so, the details thereof;
- (c) the details of the response received by the Government from the young innovators in this regard;
- (d) whether the Government has approved any scheme to promote semiconductor and display manufacturing in the country; and
- (e) the details of other steps taken by the Government to make the country self-reliant in electronics manufacturing?

ANSWER

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

(a): Yes, Sir. 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. 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.

(b) and (d): 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 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 Semiconductor Laboratory, Mohali as a brownfield Fab.

(c): Under Semicon India Program, Government has also approved Design Linked Incentive (DLI) Scheme for domestic companies, start-ups and MSMEs to develop & design semiconductor chips in the country. DLI Scheme aims to offer the fiscal support as well as 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 over a period of 5 years. Sixteen (16) applications have been received under Design Linked Incentive Scheme.

(e): Other steps taken by the government to make the country self-reliant in electronics manufacturing are as follows:

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.

To attract and incentivize large investments in the electronics value chain and promote exports, following three Schemes have been notified under the aegis of NPE 2019:

- (i) **Production Linked Incentive Scheme (PLI) for Large Scale Electronics Manufacturing** notified vide Gazette Notification No.CG-DL-E-01042020-218990 dated April 01, 2020 provides an incentive of 4% to 6% to eligible companies on incremental sales (over base year) involved in mobile phone manufacturing and manufacturing of specified electronic components, including Assembly, Testing, Marking and Packaging (ATMP) units. Second Round of the PLI Scheme for Large Scale Electronics Manufacturing was launched on 11.03.2021 for incentivizing Electronic Components. Under the Second Round, incentives of 5% to 3% shall be extended on incremental sales of goods manufactured in India and covered under the target segment, to eligible companies, for a period of four (4) years.
- (ii) **Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors (SPECS)** notified vide Gazette Notification No.CG-DL-E-01042020-218992 dated April 01, 2020 provides financial incentive of 25% on capital expenditure for the identified list of electronic goods that comprise downstream value chain of electronic products, i.e., electronic components, semiconductor/ display fabrication units, ATMP units, specialized sub-assemblies and capital goods for manufacture of aforesaid goods.
- (iii) **Modified Electronics Manufacturing Clusters (EMC 2.0) Scheme** notified vide Gazette Notification No.CG-DL-E-01042020-218991 dated April 01, 2020 provides support for creation of world class infrastructure along with common facilities and amenities, including Ready Built Factory (RBF) sheds / Plug and Play facilities for attracting major global electronics manufacturers along with their supply chain to set up units in the country. The Scheme provides financial assistance for setting up of both EMC projects and Common Facility Centres (CFCs) across the country.

- (iv) **Production Linked Incentive Scheme (PLI) for IT Hardware** notified vide Gazette Notification No. CG-DL-E-03032021-225613 dated March 03, 2021 provides of 4% to 2% / 1% on net incremental sales (over base year) of goods manufactured in India and covered under the target segment, to eligible companies, for a period of four (4) years. The Target Segment under PLI Scheme includes (i) Laptops (ii) Tablets (iii) All-in-One PCs and (iv) Servers.
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. **Modified Special Incentive Package Scheme (M-SIPS):**
To offset disability and attract investment in Electronic System Design and Manufacturing (ESDM) sector, M-SIPS was approved in July 2012. Revisions were made in the scheme in 2015 by expanding its scope and adding new product categories accompanied by simplification of procedures. The scheme provides 20-25% of capex subsidy on investment made in the first 5 years of the project (20% for investments in Special Economic Zones (SEZs) and 25% in non-SEZs). The incentives are available for 44 categories / verticals of electronic products and components covering entire electronics manufacturing value chain. The scheme was open to receive applications till 31.12.2018. Most of the projects approved under the scheme are in the implementation mode. So far, 314 applicants with an investment of INR 86,912 crore and committed incentives of INR 9,544 crore have been approved. Incentives amounting to INR 1781.02 crore have been disbursed. Out of 314 units approved, 271 units have invested INR 31,416 crore and 233 units have started production.
4. **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 3,743 crore including Government Grant-in-Aid of INR 1,527 crore have been approved.
5. **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. Till date, EDF has invested INR 236.48 crore in 8 Daughter funds with direct employment generation of 18,500.
6. **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.
7. **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.

8. **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.
9. **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.
10. **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.
11. **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 vide Notification dated 07.09.2020 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 locals suppliers.
12. **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 all product categories.
