PRODUCTION OF SEMICONDUCTOR CHIPS

1848. SHRI VIVEK THAKUR:

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

(a) whether China recently banned the export of metals or minerals such as Gallium and Germanium used in the manufacturing of semiconductor chips and LED bulbs; and
(b) if so, the impact of the same on the semiconductor industry of India and the details of the efforts being made by Government to reduce its adverse impact?

ANSWER

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

(a): It is reported that China will impose export controls on Gallium and Germanium metals/minerals from August 2023 to safeguard national security and interests. It is expected that exporters in China will be required to obtain export permission for exporting Gallium, Germanium and its related minerals.

(b): The supply chain for semiconductors is global and complex. The impact of export control by China is expected to be negligible globally because other suppliers will step in. Further, India has adequate mineral resources and production capacity for aluminium. Gallium with high purity can be produced as a by-product of Aluminium. Centre for Materials for Electronics Technology (C-MET) has capability to purify Gallium up to 99.9999% which can be used for semiconductor applications.

For other critical minerals, Government is working with other countries for collaboration on technology partnership, collaborative research, building a talent pipeline, building a Trusted Supply Chain, demand aggregation, infrastructure development, trust diplomacy, access to mines for semiconductor raw materials and minerals and other supporting frameworks of the growing digital and technology ecosystem.

Government is focused on its objective of catalysing overall semiconductor ecosystem to further expand India’s already 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. This will pave the way for India’s growing presence in the global electronics value chains.

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