National Policy on Electronics 2019

Why in news?

The Union Cabinet recently gave its approval to the National Policy on Electronics 2019 (NPE 2019).

What is the policy for?

- The National Policy of Electronics 2019 (NPE 2019) replaces the National Policy of Electronics 2012 (NPE 2012).
- It was proposed by the Ministry of Electronics and Information Technology (MeitY).
- The NPE 2019 aims to position India as a global hub for Electronics System Design and Manufacturing (ESDM).
- The policy will lead to the formulation of several schemes, initiatives, and measures for the development of ESDM sector.
- **Targets** - The policy aims at achieving a turnover of US$ 400 billion (approximately Rs 26,00,000 crore) by 2025 in the ESDM sector through domestic manufacturing and export.
- This will include a targeted production of 1 billion mobile handsets by 2025, valued at US$ 190 billion.
- A part of this includes 600 million mobile handsets valued at US$ 110 billion for export.

What are the key features of the policy?

The National Policy on Electronics 2019 provides for the following:

- creating an eco-system for globally competitive ESDM sector for promoting domestic manufacturing and export in the entire value-chain
- providing incentives and support for manufacturing of core electronic components
- providing special package of incentives for mega projects which are extremely high-tech and entail huge investments; e.g. semiconductor facilities display fabrication, etc
- formulating suitable schemes and incentive mechanisms to encourage new units and expansion of existing units
- promoting Industry-led R&D (research and development) and innovation in

all sub-sectors of electronics
- [These include grass root level innovations and early stage Start-ups in emerging technology areas such as 5G, loT/Sensors, Artificial Intelligence, Machine Learning, Virtual Reality, Drones, Robotics, Additive Manufacturing, Photonics, Nano-based devices, etc.]
- providing incentives and support for significantly enhancing the availability of skilled manpower, including re-skilling
- offering special focus on Chip Design Industry, Medical Electronic Devices Industry, Automotive Electronics Industry and Power Electronics for Mobility and Strategic Electronics Industry
- creating Sovereign Patent Fund (SPF) to promote the development and acquisition of IPs (Intellectual Property) in ESDM sector
- promoting trusted electronics value chain initiatives to improve national cyber security profile

How will it be beneficial?

- The provisions are likely to enable the flow of investment and technology, leading to -

i. higher value addition in the domestically manufactured electronic products
ii. increased electronics hardware manufacturing in the country and their export
iii. generation of substantial employment opportunities, to over one crore people

- The global electronics ecosystem has been looking beyond China due to the rising labour costs there.
- So NPE 2019 could pave the way to make India the next major global hub for manufacturing of mobile phones, refrigerators, televisions, ACs, etc.
- **Shortfalls** - Robust R&D is a pre-requisite to move up the value chain.
- Given this, interest subvention and a credit guarantee fund may not be adequate.
- There are other factors that hamper R&D investment by industry, beyond the tax structure, which need redressal.

How is electronics manufacturing in India at present?

- Since the 2012 policy, the Centre has been trying to make India a global hub for electronics equipment but has achieved limited success.
- Imports of electronics hardware account for more than half of India's domestic production.
- This has been increasing rapidly, from $37 billion in 2014-15 to $53 billion in 2017-18.

- India’s electronics hardware output accounts for just 1.5% of world output.
- Actual investments into the electronics sector have not been impressive.
- E.g. an incentive package for setting up a fabrication unit for semiconductor, which is the heart of any electronic product, has had no takers
- Getting a global player to start semiconductor manufacturing in India will be the key to the Make in India vision.
- The Modified Special Incentive Package Scheme (M-SIPS) which offers subsidies for electronics industry was launched in 2012.
- However, the rate of approval for applications filed and the investments made thereafter remain low.
- There has been some success in the manufacturing of mobile phones in the country.
- But even in this area, local value addition is only around 7-8% as most of the critical components are imported.

What should be done?

- The demand for electronics hardware is expected to rise rapidly to about $400 billion by 2023-24.
- India cannot afford to bear a huge foreign exchange outgo on the import of electronics alone.
- The production deficit is best remedied by adopting an export-orientation as against an import-substitution bias.
- Certainly, the policy should go beyond credit sops to address the R&D deficit.
- India’s scientific human resource pool needs to be engaged in this respect.
- R&D institutions could be promoted through the PPP route, so as to balance the market orientation and long-term priorities.

Source: Business Standard, BusinessLine

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