

# **Karnataka Electronic System Design and Manufacturing (ESDM) Policy 2013**



## **Preamble**

**1.** Electronic System Design and Manufacturing (ESDM) is the fastest growing segment of the Information and Communications Technology (ICT) sector. As per the National Electronics Policy-2012 (NEP-2012), ESDM is expected to grow to USD \$400 Billion by the year 2020 and will generate a total employment of over 28 million.

**2.** The key objectives of the national policy on ESDM as per the National Electronics Policy 2012 (NEP-2012) and the National Telecom Policy 2012 (NTP-2012) are:

**2.1** To create an eco-system for a globally competitive ESDM sector in the country to achieve a turnover of about US\$ 400 billion by 2020 involving investment of about US\$ 100 billion and employment to around 28 million people at various levels.

**2.2** To build on the emerging chip design and embedded software industry to achieve global leadership in Very Large Scale Integration (VLSI), chip design and other frontier technical areas and to achieve a turnover of US\$ 55 billion by 2020.

**2.3** To build a strong supply chain of raw materials, parts and electronic components to raise the indigenous availability of these inputs from the present 20-25 per cent to over 60% by 2020.

**2.4** To increase the export in ESDM sector from US\$ 5.5 billion to US\$ 80 billion by 2020.

**2.5** To significantly enhance the availability of skilled manpower in the ESDM sector. Special focus on augmenting postgraduate education and to produce about 2,500 PhDs annually by 2020.

**3.** Government of India has already announced the following policy measures for the same:

**3.1** Preference for Domestically Manufactured ESDM Products in government procurement with special emphasis on increasing domestic value-addition, and also provide preferential market access to Indian products to address strategic and security concerns of the country.

**3.2** Modified Special Incentive Package Scheme (M-SIPS) that provides up to 25% of the capital investment in SEZ areas and 20% in non-SEZ areas as financial incentive to the ESDM sector;

**3.3** Provide incentives for setting up Semiconductor manufacturing (Fab) in India

**3.4** Electronics Development Fund to promote the growth of ESDM sector by providing funding from seed-stage, to venture capital to low-cost debt funding.

**3.5** Creating the National Electronics Mission (NEM)

**4.** ESDM as an emerging sector is strongly aligned to the professional skills, knowledge base and managerial talent available in the state of Karnataka in the field of VLSI, semiconductor chip design and embedded software. As of 2012, Karnataka has 85 chip design houses, 336 R&D facilities, delivers outsourced information technology solutions to over 400 of the global Fortune 500 companies and has over 6 lakh technology professionals employed in Bangalore alone. Further,

**4.1** Karnataka is home to a third of the software companies contributing more than 35% of the national exports.

**4.2** Karnataka's electronic, computer software, and biotechnology exports composed 63.5% of its total exports in the year 2009-10

**4.3** Karnataka's software exports contributed 21.4% to its Gross State Domestic Product (GSDP) with export CAGR of 13.5% and GSDP CAGR of 15.2% between FY05 -FY10

**4.4** BPO/ITeS companies grew to around 270 in number by CAGR of 13.4% from the years 2005-08, while hardware exports grew to US\$825 million at CAGR of 14.4% in the referenced period.

**4.5** 9 of top 10 leading IT companies on Forbes Global 2000 list have based the headquarters of their India operations in Bangalore.

**4.6** Karnataka contributes around 500,000 IT professionals from its leading engineering institutes to India's total IT workforce of around 2.5 million.

**4.7** Karnataka's IT sector has attracted 44.6% of total investments in the national IT industry in 2010-11

**4.8** With investments of US\$1,271.45 million, 47 of the 58 Special Economic Zones (SEZ) approved in the state are slated to drive the IT/ITeS sector

**5.** While Karnataka has certain advantages for the conducive growth of the ESDM sector, this will not be enough as different States will enjoy all the benefits from the Government of India Policy. In order to attract investments to Karnataka as compared to other States, it is necessary for Karnataka to have a Policy which has additional incentives to encourage the growth of ESDM sector. Hence, it is necessary to have Karnataka ESDM Policy.

## **6. Objectives**

The objective of the Karnataka ESDM Policy is to facilitate, promote and develop the "ESDM" sector in the State of Karnataka and make Karnataka a preferred destination for investment in this sector. For the purpose of this Policy, "ESDM" shall mean Electronics System Design and Manufacturing which includes, but not be restricted to, Electronics Hardware design and manufacturing (which shall include embedded software) for IT, Telecommunications, Defense, Medical, Industrial, Automotive, Consumer Products, applications and components, parts, and accessories required for the aforesaid products and applications.

**7.** The following targets are set for Karnataka ESDM policy:

**7.1** Emerge as the leading contributor to India's ESDM sector by accounting for at least 10% of the USD \$400 billion by 2020,

**7.2** Generate over 20% of the country's total ESDM exports target of USD \$80 billion in 2020,

**7.3** Develop core competencies in specific ESDM verticals such as telecom, defense electronics, avionics and energy

**7.4** Make Karnataka the country's preferred destination for investments in ESDM, and

**7.5** Generate at least 240,000 new jobs, 25% of India's PhDs and 5000 patent filings in ESDM sector in Karnataka by 2020

**7.6** Increase the value-addition that is done in Karnataka.

**8.** To accomplish these objectives, there is a need to promote "Karnataka ESDM Companies" which shall be defined as:

**8.1** Company that is registered in Karnataka and is working in the ESDM sector.

**8.2** Company that achieves a minimum of 30% Domestic Value Addition, or as specified by Deity or DOT for any specific product. The thresholds shall be increased year on year in line with Deity policy.

**8.3** Company that employs at least 50% of its total workforce in Karnataka.

**9.** The Karnataka Government has taken a holistic view of the challenges and fiscal disabilities faced by the ESDM industry and these are addressed using a combination of promotional initiatives, post-performance incentives, fiscal measures, capital subsidies and other capacity building measures.

## **10. Promotional Initiatives under the ESDM Policy**

Government of Karnataka hereby outlines the following Promotional initiatives under the ESDM Policy, which will enable the State to be a leading contributor in India's ESDM sector and make the State a preferred destination for investments in ESDM.

### 10.1 Preferential Market Access (PMA) Policy

In line with the Government of India policy, Preferential Market Access shall be given to "Karnataka ESDM companies" for the ESDM products procured by all Government Departments of Karnataka. The year wise PMA and value addition thresholds for each product shall be in line with the National Electronics Policy and National Telecom Policy as shown below. This Policy shall be applicable from the date of notification and shall remain in force for a period of next 7 years.

For the purpose of becoming eligible under the PMA, domestically manufactured Electronic products are those that are manufactured by companies registered and established in Karnataka and engaged in manufacturing, including contract manufacturers, but excluding traders. These Electronic products shall meet the following graded domestic value addition in terms of Bill of Material (BOM) for domestic manufacturers:

Electronic Products	
Year	Percentage domestic value-addition in terms of Bill of Material (BOM)
Year 1	25%
Year 2	30%
Year 3	35%
Year 4	40%
Year 5	45%

#### The formula for Value-Addition is:

- Product Price (Ex-factory) : A
- Cost of Bill of Material (BOM) in 'A': B
- BOM sourced from domestic Manufacturers : C
- Value Addition in terms of BOM :  $(C/B)*100$

## **10.2 Setting-up of ESDM innovation centers:**

Karnataka will set up three ESDM innovation centers that will provide complete infrastructure to entrepreneurs and companies who want to take their product concept and implement a working prototype. Such innovation centers will have all the requisite design tools such as VLSI design tools, prototype development facilities, testing facilities, characterization labs, compliance and certifications labs along with requisite manpower and component stocks. The first such center shall be housed at IIIT-Bangalore and subsequent centers will be setup in other parts of the state.

## **10.3 Semiconductor IP and Fables Chip Design fund:**

To stimulate the creation of Fables Design companies and semiconductor IP, which will be needed in the ESDM sector, the Government will launch a Semiconductor IP and Fables Fund that will provide funding to Karnataka ESDM companies for their startup, growth and debt/working capital needs in the next seven years. This fund will work closely with the ICT Innovation Fund and shall be jointly funded by the Government of Karnataka, Government of India and other Public/Private Financial Institutions. The Government of Karnataka contribution shall be limited to 26% of the fund size.

## **10.4 Electronics Manufacturing Clusters:**

Karnataka will promote the creation of high-class ESDM Manufacturing Clusters (EMC) to provide world-class infrastructure facilities necessary to attract investment into the ESDM sector including EMS and component manufacturing. The State will encourage participation of the private sector in a PPP mode, wherever practical, in developing such infrastructure. Karnataka's EMC policy shall provide additional incentives on top of those offered by Government of India's Electronics Manufacturing Cluster scheme notified by Deity.

**10.4.1** The policy will support the development of 7 (seven) ESDM Manufacturing Clusters (EMC) in the State by 2020. The EMCs shall provide internal and external infrastructure, inclusive of advanced logistics, shared testing and training facilities. Support of Government of Karnataka for infrastructure development in EMCs shall not exceed 20% of the total infrastructure cost.

**10.4.2** The EMCs will be laid out keeping in mind the latest international standards of town and country planning and being made environment-friendly with proper segregated disposal mechanism and landscaped lung space.

**10.4.3** Development of complimentary infrastructure such as Roads, Railways, etc., ensuring proper connectivity between the cluster and the appropriate Airport/Seaport/Railway stations.

**10.4.4** The Government shall make efforts to increase the number of trains and aircraft operating to and from major cities of Karnataka to facilitate better movement of goods and passengers.

### **10.5 Establishing “Karnataka Brand” globally**

The Government will market Karnataka as an attractive ESDM center for the global investor audience and build a strong “Brand Karnataka” for ESDM. The State shall work with the external affairs ministry to conduct road shows for foreign ambassadors in Delhi, sign MoUs with identified “sister-cities” in other countries, and engage with the 50 top ESDM companies of the world to pro-actively invite investments into the state.

### **10.6 Innovation Promotion**

Government will promote innovation in the ESDM Sector through Awards by way of grants. The best innovations in the ESDM sector will be selected by the Screening Committee comprising of Industry and Academia representatives.



## **11. Post-performance incentives and subsidies:**

### **11.1 Incentives for Patents and IPR:**

High-value-added ESDM manufacturing requires creation of Intellectual Property (IPR) which needs to be protected in the form of Patents, both in India as well as abroad. This is an activity that needs to be actively encouraged so that Karnataka becomes a leader in IPR and knowledge economy, which in turn will result in significant commercial success. The target is to file 3000 domestic and 2000 international patents in ESDM by Karnataka ESDM Companies by 2020. The Government shall reimburse up to 50% of the actual costs (including filing fees, attorney fees, search fees, maintenance fees) with a maximum of Rs 100,000 for filing a domestic patent and up to Rs 500,000 for filing an international patent. This reimbursement shall be payable 75% after the patent is filed and the balance 25% after the patent has been granted. The patent filing incentives provided by Government of Karnataka shall be in addition to any existing scheme of Govt. of India.

### **11.2 Marketing incentives to Karnataka ESDM companies to expand in International markets**

For export promotion of ESDM products and building brand equity of Karnataka ESDM companies as credible players internationally, the Government shall provide reimbursements of 50% of the actual costs (including travel) incurred in international marketing, sales promotion, trade show participation, webinars, market research etc. by Karnataka ESDM companies. This reimbursement will be subject to a maximum of Rs 10 Lakhs per year per company.

### **11.3 Export incentives:**

To overcome the large disability faced by the ESDM industry against global competitors, the Karnataka State Government would formulate a '*Duty Drawback Scheme*' in respect of the State Taxes that do not get refunded to the exporting units in the normal course of implementation of the State Tax Laws, and as a result get embedded in the exports. The guiding approach in formulation of such a scheme would be that the State Taxes do not get exported, as far as practical.

#### **11.4 Deemed export incentives (for domestic sales):**

For sales within Karnataka of ESDM products, the ESDM Units will be eligible for an incentive in the form of interest free loan against the eligible gross VAT under the Industrial Policy 2009 – 14. For domestic sales outside Karnataka (inter-state sales), the State will reimburse 95% of Central Sales Tax, till GST is implemented, paid by the eligible ESDM units during the first 5 years of their operations.

#### **11.5 R&D Grant:**

It is essential to encourage R&D investments in ESDM so as to create a culture of innovation and IPR creation in Karnataka. The Karnataka Government shall give R&D grants in the form of reimbursement equaling upto 20% of the actual R&D expenses (including manpower costs) incurred annually by Karnataka ESDM Companies, subject to a maximum of 2% of their annual turnover. The R&D grant shall be subject to a maximum of Rs. 1 Crore per company per year and shall be in addition to any similar benefits announced by the Government of India.

#### **11.6 Incentive for Capital Investment in ESDM sector:**

To attract investments in ESDM sector, Government will provide upto 10 % capital subsidy or Rs.5 Crores, whichever is lower to Karnataka ESDM companies (both for ESDM manufacturing as well as R&D units) and will be given to the first two Anchor Units in each Greenfield Cluster.

This will act as a strong pull factor for investors to set up their ESDM design, R&D and/or high-tech manufacturing facilities within the State.

**12. In addition to the above, fiscal incentives and concessions as per Karnataka Industrial Policy 2009-14 will be extended to ESDM units covered under this Policy**