KERALA
INDUSTRIAL
POLICY 2023
# Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Introduction</td>
<td>05</td>
</tr>
<tr>
<td>II. Policy Objectives</td>
<td>09</td>
</tr>
<tr>
<td>III. Seven Focus Pillars</td>
<td>11</td>
</tr>
<tr>
<td>1. Fostering Entrepreneurship</td>
<td>14</td>
</tr>
<tr>
<td>2. Enabling Infrastructure</td>
<td>16</td>
</tr>
<tr>
<td>3. Transition to Hi-Tech</td>
<td>20</td>
</tr>
<tr>
<td>4. Skill Development</td>
<td>22</td>
</tr>
<tr>
<td>5. Supportive Business Environment</td>
<td>24</td>
</tr>
<tr>
<td>6. Enhancing ‘Kerala’ Brand Equity</td>
<td>28</td>
</tr>
<tr>
<td>7. Priority Sector based industrialization</td>
<td>30</td>
</tr>
<tr>
<td>IV. Priority Sectors</td>
<td>31</td>
</tr>
<tr>
<td>1. Aerospace and Defence</td>
<td>31</td>
</tr>
<tr>
<td>2. Artificial Intelligence, Robotics and Other Breakthrough Technologies</td>
<td>32</td>
</tr>
<tr>
<td>3. Ayurveda</td>
<td>34</td>
</tr>
<tr>
<td>4. Biotechnology &amp; Life Sciences</td>
<td>35</td>
</tr>
<tr>
<td>5. Design</td>
<td>36</td>
</tr>
<tr>
<td>6. Electric Vehicles</td>
<td>38</td>
</tr>
<tr>
<td>7. Electronic System Design &amp; Manufacturing</td>
<td>39</td>
</tr>
<tr>
<td>8. Engineering Research &amp; Development</td>
<td>40</td>
</tr>
<tr>
<td>9. Food Technologies</td>
<td>41</td>
</tr>
<tr>
<td>10. Graphene</td>
<td>42</td>
</tr>
<tr>
<td>11. High Value-Added Rubber Products</td>
<td>43</td>
</tr>
<tr>
<td>12. High-tech Farming and Value-Added Plantation Produce</td>
<td>45</td>
</tr>
<tr>
<td>13. Logistics &amp; Packaging</td>
<td>46</td>
</tr>
<tr>
<td>14. Maritime Sector</td>
<td>48</td>
</tr>
<tr>
<td>15. Medical Equipment</td>
<td>49</td>
</tr>
<tr>
<td>16. Nano Technology</td>
<td>50</td>
</tr>
<tr>
<td>17. Pharmaceuticals</td>
<td>51</td>
</tr>
<tr>
<td>18. Recycling &amp; Waste Management</td>
<td>52</td>
</tr>
<tr>
<td>19. Renewable Energy</td>
<td>53</td>
</tr>
<tr>
<td>20. Retail Sector</td>
<td>55</td>
</tr>
<tr>
<td>21. Tourism &amp; Hospitality</td>
<td>56</td>
</tr>
<tr>
<td>22. 3D Printing</td>
<td>57</td>
</tr>
<tr>
<td>V. Incentives</td>
<td>59</td>
</tr>
<tr>
<td>VI. Policy Tenure</td>
<td>63</td>
</tr>
</tbody>
</table>
I. INTRODUCTION

1. Kerala ranks among the developed nations in terms of human development indices. Outstanding achievements have been made by the State in the fields of education, health, and social welfare. Kerala’s limitation, however, was its inability to achieve intended growth in the manufacturing sector. Recognizing this, the previous LDF government attempted to attract more investments to the industrial sector and create job opportunities. The continuity of government in 2021 has helped these policies continue without a break. Discontinuity of governance also meant discontinuity of policies. But in this new situation, the government intends to continuously improve the industrial policy approved by the previous government.

2. The policies adopted by the Central Government have fuelled fierce competition among States to attract investments. As a part of this, States are constantly revising their respective industrial policies. Rather than blindly following them, the State, through the new Industrial Policy, attempts to uphold an alternative perspective and engage realistically.

3. The Government has taken various measures to further improve the industry friendly environment. State was able to move up from 28th to 15th position in the Ease of Doing Business ranking. Attempts are being made to bring Kerala within the top ten ranks in the next survey. K-SWIFT will be made more efficient. It will be made mandatory for all departments to provide their services online.

4. Protection of the public sector, other than those in the services domain, is a policy of the Government. The goal is a competitive and profitable public sector. The public sector is not to be seen as institutions that function like government departments; instead, they should be competitive and profitable entities, operating under Companies Act. For that modernization should be implemented to increase productivity and reduce cost of production. Masterplans have been prepared for the same, and long-term, medium-term and short-term goals have been set and are being worked upon. The objective is to make all Public Sector Undertakings under the department profitable. Professionals were included in the board of directors
Acts related to Western Ghats, Coastal Zones, Forest Areas and Wetlands. Therefore, the main problem challenging the industrial development of the State is the inadequacy of land. Necessary lands will be acquired for starting more industrial parks, on the basis of feasibility studies. Land acquisition for the Kochi-Bengaluru Industrial Corridor will be completed. Galas will be encouraged for more efficient utilisation of lands under the Industries Department. The Private Industrial Park Policy has been realistically modified. Private Industrial Parks will be established in all fourteen districts of the State. Thematic Parks will be launched extensively, including ten Food Processing Parks. Private Industrial Parks will be started with State Government participation and private ownership. A special scheme will be prepared for utilization of land of panchayat industrial estates. A new policy for allotment of land in industrial estates and parks will be announced.

5. The Kerala Rubber Company Limited, formed with private participation, marked a new beginning. The company, which intends to provide participation to farmers and private producers, is a model to be followed in other sectors as well.

6. The traditional industry is facing a serious crisis. Expert committees have been engaged to study the problems in coir, cashew and handloom sectors. Modernization is essential to transform the sector by reducing the cost of production and making it competitive. Mechanization by protecting the existing labour is a viable option. The sector should be able to produce the products that the market requires. The Expert Committees’ reports will be discussed with concerned stakeholders and implemented. Mergers and amalgamations of possible entities would be undertaken to avoid unnecessary costs. Extensive measures are being taken to strengthen the Khadi sector; production and marketing of Kerala Khadi will be strengthened.

7. One of the limitations of the State is lack of availability of land. Land utilization is subject to the provisions of various Acts related to Western Ghats, Coastal Zones, Forest Areas and Wetlands. Therefore, the main problem challenging the industrial development of the State is the inadequacy of land. Necessary lands will be acquired for starting more industrial parks, on the basis of feasibility studies. Land acquisition for the Kochi-Bengaluru Industrial Corridor will be completed. Galas will be encouraged for more efficient utilisation of lands under the Industries Department. The Private Industrial Park Policy has been realistically modified. Private Industrial Parks will be established in all fourteen districts of the State. Thematic Parks will be launched extensively, including ten Food Processing Parks. Private Industrial Parks will be started with State Government participation and private ownership. A special scheme will be prepared for utilization of land of panchayat industrial estates. A new policy for allotment of land in industrial estates and parks will be announced.

8. Micro, Small, and Medium Enterprises have huge potential in Kerala. A law has been passed to allow non-Red category MSMEs to operate for three years without certain prior approvals under State laws. The financial year 2022-23 was observed as the ‘Year of Entrepreneurship’. The scheme aimed at starting one lakh new enterprises has successfully come to fruition in just 250 days and has captured national attention. Government will provide necessary support to maintain and strengthen these businesses. It is noteworthy that one-third of these entrepreneurs are women.

9. Given Kerala’s ecological importance, a
vision of Responsible Investment and Responsible Industry is proposed. Kerala will be developed as an ESG (Environment Social and Corporate Governance) investment destination in India.

10. Large enterprises in the private sector will be encouraged. However, they should be in areas suitable for Kerala. Such enterprises will be given special consideration. Kerala is characterized by its technical and skilled human resources. Special consideration will be given to modern smart industries that can efficiently utilize this. We must be able to efficiently utilize the vast opportunities that the Fourth Industrial Revolution presents. This policy lays down a specific action plan for the same. Training schemes will be implemented to ensure availability of highly skilled human resources. Gift City will be completed in time. Special consideration will be given to attract new generation industries to the State.

11. Industries that require new technology will also need to attract foreign investment. A special system will be put in place in KSIDC for that purpose. The department will create an action plan based on this policy. Utilizing the potential of the fourth industrial revolution, Kerala will be transformed into a rapidly developing industrial state.

12. Kerala is the hub of spice processing in the world. Special attention will be paid to this area by making use of this positive factor. It was in Kerala that a Plantation Policy was announced for the first time in India and a Plantation Directorate was formed. Value addition will be strengthened in this sector.

13. The Government aims to transform the State into a Knowledge society. For this, industry-academia linkage has to be strengthened. The results of researches in universities need to be channelled into industrial production. The government will provide financial support for the same. Along with this, higher education institutions should be able to solve the problems faced by the industry. For this, industry should also fund researches in universities.

14. Start-ups are especially important in today’s world. All incentives and considerations given to start-ups in the IT sector will be extended to start-ups in other sectors too. Support will be extended to start-ups for their next stage of development.

15. It is imperative to inculcate entrepreneurship in the new generation. For this, schemes will be developed in collaboration with the Department of Public Education. KIED will be developed as a Centre of Excellence to coordinate these.

16. Necessary permits for starting and running the industry will be provided expeditiously. Non-Red category industries with a capital investment of up to Rs 50 Crore can operate for up to three years without certain approvals under State laws. After that the license renewal process will be expedited. Departmental approvals for non-MSME enterprises that does not fall under Red category will be given within seven days of application. Committees will be constituted at district and state levels for redressal of grievances related to setting up and running of industries.
Punitive action will be taken against the officials who do not implement the orders of these committees. All inspections in industries will be done through a centralized system.

17. The Kerala brand will be widely promoted. A special protocol will be devised for awarding the “Made in Kerala” brand. A special network will be established for the marketing of Kerala brand products. E-commerce platforms will be used. The industrial policy puts forward an incentive scheme to strengthen exports.

18. The State must be able to create employment opportunities and increase the income of workers. Entrepreneurs should contribute towards skill updation of the workers. It must be able to ensure the quality of workforce. Enterprises can be made profitable and competitive by increasing productivity and reducing production costs. This way, better wages could be ensured for workers. The increase in wages should take into consideration the financial condition of the enterprise along with the increase in cost of living. Legitimate rights should be guaranteed and anarchic tendencies should be strongly countered. A system comprising General Manager of the District Industries Centre, District Labour Officer, and representatives of industry and trade unions will be formed at the district level for timely intervention in disputes that may arise in the industries.

19. Interventions through the Commerce Mission will be strengthened to promote economic growth, sustainable development in the commercial sector, and to find national and international markets for the products of MSMEs from Kerala. The Mission will focus on expanding the small business sector in the State and modernizing marketing in line with the new era. The Commerce Mission will serve as an institutional mechanism and an advisory body for regular interactions between businesses and the State Government for promotion of commerce sector in the State.

20. A new perspective needs to be developed by considering the construction sector and the logistics sector as industry.

21. Investments by Non-Resident Keralites is a major possibility for Kerala. Utilising this investment, the government will take stakes in the priority sector industries and instil confidence in them.

22. With the vision of responsible investment, the government is trying to attract more investment, bring in industries, and create job opportunities through this policy. By utilizing the potential of the fourth industrial revolution, Kerala will be made the centre of new generation industries.
II. **POLICY OBJECTIVES**

The new Industrial Policy aims to foster a conducive and sustainable industrial ecosystem that brings about investment and innovation. The objectives of the policy are as follows;

1. To build a robust entrepreneurial ecosystem in the State.
2. To make Kerala a thriving Start-up destination in India.
3. To nurture the entrepreneurial spirit of educated unemployed youth and women.
4. To create innovation infrastructure to cater to futuristic industries.
5. To maximise private investments in industrial infrastructure development.
6. To strengthen the public sector, other than those in the services domain, and make them more competitive. To implement timely changes in the manufacturing sector.
7. To achieve better growth in exports by strengthening infrastructure development in the commodity export sector.
8. To create an Industry 4.0 compliant industry ecosystem
9. To modernise traditional industries by infusing new technologies in production process.
10. To enable easy access to e-commerce platforms.
11. To enhance Industry-ready skill sets and create ample opportunities for better jobs.
12. To attract industry players from emerging sectors.
13. To create an environment to work, live and play
14. To create a hassle-free environment for doing business in the State.
15. To improve funding opportunities for investors at every stage of industrial investment.
16. To establish extensive interfaces for entrepreneur engagement.
17. To attract large capital investments in innovative and high potential businesses.
18. To create Kerala brand globally and establish leadership in key sectors.
19. To promote the manufacturing capabilities of Kerala and its world-class products, services and manpower.
20. To strengthen global linkages for increasing foreign investments and exports.
21. To facilitate access to world markets for improving trade.
22. To enable sectoral partnerships between government and industry to increase sector-specific investments.

23. To create sector focused infrastructure and clusters.

24. To foster responsible investments and promote sustainable industries.

25. To enhance R&D capabilities and linkages in new and emerging sectors of industry and economy.

26. To explore the possibilities of integration of Central and State schemes for existing entrepreneurship promotion.

27. To take steps for ensuring self-sufficiency and autonomy to public sector institutions in the State, on the basis of the Expert study report, as a part of giving more responsible autonomy to the public sector.

28. To take steps for establishing Industrial Facilitation Parks focussing on various technical facilities required by entrepreneurs, in the surplus lands in public sector institutions; and to start Industrial Parks that focus on commercial production of products resulting from industry-academia research.

29. To take steps to initiate joint ventures with technologically skilled investors in feasible areas for diversification and upliftment of Public Sector Undertakings.

30. To take steps to ease the procedures for starting self-initiated projects that provide renewable energy to industrial establishments.
Achieving the above-mentioned objectives requires actions centered on the seven key policy pillars given below:

1. Fostering Entrepreneurship
2. Enabling Infrastructure
3. Transition to Hi-Tech
4. Skill Development
5. Supportive Business Environment
6. Enhancing ‘Kerala’ Brand Equity
7. Priority Sector based industrialization

These pillars shall aid the various implementing agencies, industry partners and other stakeholders to work in a concerted manner to achieve the objectives of the policy and usher in development of a robust Industry 4.0-ready ecosystem and realizing following key outcomes for the State:

<table>
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<th>Objectives</th>
<th>Policy Focus Pillar to achieve the objective</th>
<th>Outcome</th>
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<td>5. To maximise private investments in industrial infrastructure development.</td>
<td>Enabling Infrastructure</td>
<td>Access to world-class industrial &amp; support infrastructure in the State</td>
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<td>6. To strengthen the public sector, other than those in the services domain, and make them more competitive. To implement timely changes in the manufacturing sector.</td>
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The objective of the policy is to establish an enterprising entrepreneurship ecosystem that would aid in creation of self-employment opportunities leading to creation of aspirational jobs for all. The Department of Industries has already taken up various initiatives to promote entrepreneurship in the State including facilitating sufficient incubators, ease of access to credit, Skill development and training, investor facilitation centres, etc. To further enhance the entrepreneurial ecosystem in the State, the following key initiatives are identified under this policy pillar;

i. Entrepreneur Support System

a. The presence of an enabling environment and support system is paramount especially to promote new entrepreneurs and cultivate an entrepreneurship culture.

b. Financial year 2022-23 was observed as the ‘Year of Entrepreneurship’ with an aim to create One Lakh Micro, Small and Medium Enterprises. Employment opportunities will be increased by starting startups in each district. Capacity development and support schemes will share technology and knowledge. Technical assistance and financial assistance will also be a part of this.

c. NRI investors will be encouraged to start joint ventures with the government.

d. Mentorship programs to provide guidance to entrepreneurs will be implemented through government agencies and incubation centers.

e. New generation schemes for entrepreneurs will be developed, and Entrepreneurship Clubs will be formed in colleges through the Kerala Institute for Entrepreneurship Development (KIED).

f. Simple and user-friendly interactive collaterals and knowledge material shall be developed for educating budding entrepreneurs on how to start a business in the State.

g. Dedicated programs shall be designed to encourage innovation and unlock investments to new products across sectors.

ii. Entrepreneurship Funding Support

Financial enablers are key for the creation of a conducive industrial ecosystem specially in supporting Start-ups and MSMEs.

a. The existing Entrepreneurship Support
and hackathon will be organized with academic-industry partnership to facilitate fund raising for transforming innovative business ideas into start-ups.

d. Dedicated R&D Funds shall be provided to technically competent institutions for specific projects to drive innovation as per requirements of the sector.

e. KSIDC’s Innovation Acceleration Scheme shall be stepped-up.

f. Schemes will be formulated for access to finance.

III. Industry-Academia Research

A strong Industry-Academia relationship is instrumental not only for producing technical graduates suited for industry needs but also for creating an ecosystem of innovation and entrepreneurship. This collaboration is key to catalyse innovation and growth in technology. Technology is evolving at a rapid pace and such technological and managerial innovation forms a key aspect of Industry 4.0. Thus, creating an ecosystem which promotes Industry-Academia Research collaboration is paramount.

a. An Industry-Government-Academia Research collaboration ecosystem shall be developed to foster innovative ideas and help them get converted into successful business.

b. A new industry-academia-led ecosystem shall be created where universities will act as regional partners.

c. A State level innovation challenge and hackathon will be organized with academic-industry partnership to facilitate fund raising for transforming innovative business ideas into start-ups.

d. Dedicated R&D Funds shall be provided to technically competent institutions for specific projects to drive innovation as per requirements of the sector.

IV. Sector-focused Fab Labs in Industrial Parks

The presence of enabling and State-of-the-art infrastructure are important to facilitate new and emerging enterprises.

a. Sector-focused Fab labs shall be set up at existing Industrial Parks in the State.

b. A Design, Testing and Common Facility Centre shall be setup for the ESDM sector.
Robust and resilient infrastructure is essential for promoting industrial growth. The quality of infrastructure determines an economy’s competitiveness and its ability to utilise its comparative advantage. The upcoming projects like the Kochi Bengaluru Industrial Corridor will fuel economic growth and generate employment opportunities by stimulating investments in the manufacturing sector, logistics sector, Agro processing services and export-oriented units. This industrial policy aims at creating enabling industrial infrastructure facilities in the State and upgradation of existing infrastructure for Industries. The following key initiatives are identified under this policy pillar;

i. **Industry-Compliant Land Bank**
   a. A dedicated industrial land bank shall be developed at State & District levels to facilitate smooth allocation of land to start-ups and MSMEs.
   b. A robust framework shall be designed for allowing private investment and creation of private industrial land banks.
   c. A dedicated sector-specific land bank shall be developed at local body level.
   d. Economic Development Opportunities (EDOs) in the areas of industry, renewable energy, transport, tourism, trade and agriculture are being evaluated to transform the state's major transit corridors (Coastal Highway, West Coast Canal etc.) into economic and trade corridors. For development of EDO’s thus identified, land measuring between 10-30 acres will be made available to investors through a transparent process by the government for public private partnership-based development.

ii. **Infrastructure Development Fund**

To ensure systematic upgradation of industrial infrastructure in the State, a comprehensive infrastructure evaluation framework is to be developed.

a. Infrastructure gap studies shall be conducted for existing industrial infrastructure facilities in the State and upgradation plans shall be devised for existing Government-owned industrial infrastructure facilities.

b. A dedicated fund shall be created for upgradation of infrastructure facilities to world-class standards.
iii. Clusters of Excellence

Clusters of excellence are essential to ensure effective utilization of existing infrastructure and creation and upgradation of new and improved infrastructure.

a. Designated Clusters of excellence shall be demarcated in line with ODOP/OLOP scheme.

b. Specific Cluster packages shall be designed for upgradation of infrastructure in these clusters along with specialized incentives.

g. A professionally run ‘Hub and Spoke’ model Processing and Value Addition mechanism will be implemented to serve smallholder farmers, cooperatives and other entrepreneurs, incorporating climate-friendly processes, agro-forestry, renewable energy, international/local branding and innovative marketing.

v. Industrial Corridor Development

The Kochi-Bengaluru Industrial Corridor (KBIC) shall be developed in two nodes viz., Industrial Manufacturing Cluster (IMC) - Palakkad and GIFT City - Kochi. The presence of economic zones such as industrial corridors can enhance the connectivity and competitiveness of industries.

a. New industrial corridor shall be developed to create major industrial hubs across the State.

b. The development of Kochi-Palakkad High Tech Industrial Corridor shall be fast-tracked.

c. The Kochi-Mangalore Industrial Corridor will be established in the Malabar region.

vi. Industrial Township and Industrial Smart City

A good industrial ecosystem provides the necessary infrastructure, skilled manpower, etc. for enterprises to flourish. This is crucial for the development of industrial townships and creation of industrial smart cities in the State.

a. Industrial Townships shall be developed in the State by attracting anchor investors.

b. Development of Global Industrial Finance and Trade (GIFT) City at Ernakulam with modern amenities.
shall be fast-tracked.

c. Smart Industrial Corridors shall be developed in the Kochi – Trivandrum stretch.

vii. Unified Land Allotment, Management & Governance Regulations

Simple, transparent and investor friendly land allotment systems are critical for offering a hassle-free experience for investors.

a. The existing land disposal regulations adopted by various agencies under Industries Department shall be revamped and a uniform land allotment and disposal regulation shall be formulated.

b. The regulation shall comprise of provisions with respect to allotment of plot to private builders and developers, land for Logistics activities and subleasing of warehouse facilities, lease premium calculation and revision, procedure for allotment, reservation, or revocation of plots, surrender of plots, allotment of built-up space/SDF building, provision for change of activity, transfer of allotment, renewal of lease etc.

viii. Streamlining Land Conversion Process

Streamlining processes in all aspects involved in starting business including land conversion, land registration and exit procedures form an important aspect in creating an enabling ‘ease of doing business’ environment in the State. Land conversion processes shall be streamlined, and regulatory compliances shall be reduced by clearly publishing the adequate checklist for the conversion process for industrial purpose within the stipulated timelines.

ix. Private Industrial Parks - Land Holding Reforms

Development of Industries shall be promoted by streamlining the process of setting up of Private Industrial Parks.

a. Land shall be made available to industry by offering exemptions under the Kerala Land Reforms Act, 1963.

b. The land limits prescribed under the Kerala Land Reforms Act, 1963 are applicable for establishment of Private Industrial Parks. Procedures for availing statutory exemptions will be simplified.

c. A single window system will be introduced to permit cultivation of legally permitted crops and related activities in the plantation sector. Practical issues related to this will be discussed and necessary changes will be made.
x. **Infrastructure Support for Scale-Ups**

Budding enterprises require support especially to scale-up their operations in aspects such as adequate and cost-effective infrastructure and capital support. Infrastructure facilities such as built-up space in the government owned/assisted parks shall be offered at subsidized rates for scaling-up of enterprises.

xi. **Logistics Infrastructure**

One of the most important factors to improve competitiveness of industries is connectivity and access to seamless logistical infrastructure.

a. The State Action Plan for Logistics sector shall be implemented for boosting the trade ecosystem in the State.

b. The functioning of the State level Logistics Coordination Committee for implementation of initiatives proposed under the LEADS Index of Ministry of Commerce, Government of India, shall be strengthened by the newly formed Logistics Cell at KSIDC.

c. The export related infrastructure in the State including major and minor ports, air cargo facilities, storage facilities, Container depots, cold storages facility, rail-road connectivity, and inland waterways shall be strengthened.
3. TRANSITION TO HI-TECH

Industry 4.0 is characterised by increasing automation and the employment of smart factories and smart machines. It has revolutionised production with the digitization of manufacturing through adoption of machine learning, data analytics, automation of processes, etc. Thus, making existing businesses in the State Industry 4.0-ready by embracing digitalisation and creating a robust ecosystem for attracting Industry 4.0 investments is paramount. The following key initiatives are identified under this policy pillar:

i. Digitalisation of Micro, Small & Medium Enterprises

Digitalisation and technology enablement in MSME sector would aid in attaining economies of scale, reduce resource use, improve energy efficiency, and improves the overall competitiveness of MSMEs.

a. A mechanism shall be developed to map industry 4.0 readiness of existing businesses and MSMEs in the State for technology enablement and digitalization of MSMEs.

b. Cluster/region specific Technology Centres/Technology clinics shall be developed in the State to enhance the productivity of MSME and facilitate growth of indigenous industries.

c. Start-ups and MSMEs shall be encouraged to outsource their R&D activities to bring down R&D cost and increase efficiency.

ii. Modernization in line with Industrial Revolution 4.0

Innovation is one of the key propellants of Industry 4.0. Hence it is key to create an enabling environment that fosters innovation.

a. A Technology Innovation Zone shall be developed which will serve as a global innovation incubator hub with State-of-the-art infrastructure.

b. Multiple technology sectors shall be brought under this common platform to enable cross-pollination of ideas and technology breakthroughs.

c. Procurement of raw materials shall be enabled through digital platforms for MSME’s.

iii. Enabling access to Ecommerce Platforms

Leveraging Ecommerce platforms would
enable SMEs to better benefit from digital transformation and improve economies of scale.

a. MSMEs shall be facilitated for access to markets and e-commerce platforms.

b. Dedicated workshops will be organized and adequate knowledge materials developed to enhance knowledge sharing in this area.

c. New schemes will be devised and implemented with the help of advanced technologies to reduce the labor burden and increase the wages of traditional sector workers.

d. A master plan has been created for each institution as part of the modernization of the public sector, and a specialised team of professionals has been engaged. The objective is to increase productivity through technology and achieve self-sufficiency through diversification.
Technology is driving Industry 4.0 futuristic technologies such as Automation, Robotics, Internet of Things (IoT), Artificial Intelligence, Additive Manufacturing, etc., which requires creation of a workforce with futuristic skillsets to cater to the demands that arise. Harnessing the existing human resource strengths of the State to create prosperous employable youth of the future is of utmost importance to the State. The following key initiatives are identified under this policy pillar;

i. **Industry Oriented Training**

With cluster and sector specific industrial parks being set up, the measures to provide cluster-specific training becomes essential.

a. Industry specific skills/ cluster-specific training/ vocational courses shall be identified in association with KIED to create a ready talent pool.

b. Skill training programs will be conducted at regular intervals for MSMEs to develop industry-specific skills. This will help in development of existing skills as well as acquisition of new skills.

c. Industry oriented courses will be started in ITIs, Polytechnics and Engineering colleges. Such short and long term courses will be designed in convenient short modules.

d. Cluster-wise Technical Centres of Excellence shall be established in PPP mode with industry bringing in hands-on learning opportunities and academia building up the theoretical knowledge.

e. Under the aegis of the Kerala Knowledge Economy Mission, a strong skill infrastructure ecosystem will be created and soft loans shall be
be implemented with educational institutions and edtech (educational technology) institutions to equip college students with modern skills.

d. Skill Development Centres shall be established in association with Industry Associations.

iii. Centres of Excellence for Industrial Training

a. An Industry 4.0 Centre of Excellence (CoE) shall be developed in PPP mode. Labs, Incubation Centers and Research & Development centers will be part of it.

b. Multi-Skill Training Centres shall be developed to cater to the Priority Sectors identified for the State.

c. Test Beds / Sandboxes for trying out various technologies shall be developed to offer a common platform for Big Data researchers and Start-ups.

ii. Industry 4.0 Skilling

Industry 4.0 requires the presence of a workforce which is highly skilled, and these skills are technical and intricate.

a. Local, national, and international technology-oriented conferences and conclave series shall be organised to create awareness about Industry 4.0.

b. Programs shall be designed in collaboration with Kerala Startup Mission to enable the use of modern technologies and tools.

c. Partnership programmes shall provided to students and professionals to undertake advanced courses and trainings.
A robust supportive business environment is achievable through combined efforts across multiple domains including legislative reforms, digital reforms to modernise investor engagements, robust industrial infrastructure, grievance redressal, etc. The following key initiatives are identified under this policy pillar:

i. **Composite License**

A composite license shall help facilitate a smooth investment journey and offer multiple benefits to investors.

a. An Investment Facilitation Bureau shall be constituted to grant all major industrial licenses and clearances under various State enactments for non-Red category non-MSME’s, in the form of a Composite Licence.

b. The Bureau shall take decision to approve, or call for more details, or reject an application for Composite License, within 7 working days after receipt of such an application. The Composite License thus issued shall be valid for a period of five years.

ii. **Grievance Redressal Mechanism**

a. Dedicated Grievance Redressal Cells shall be set up to cater to industry-specific grievances.

b. A Statutory body for Grievance Redressal comprising of State Grievance Redressal Committee and District Grievance Redressal Committees shall be set up by suitably amending the Kerala Industrial Single Window Clearance Boards & Industrial Township Area Development Act, 1999.

c. The Grievance Redressal Mechanism is also tasked with coordination of concerned departments, agencies and local governments as conflicts often arise between labour laws, environmental laws, health care laws and industrial activities.

iii. **Minimising Regulatory Compliance Burden**

Implementation of measures to minimise the compliance burden and digitalize and streamline regulatory processes are critical to reduce complexity and time required to start and run industries in the State.

a. The existing regulatory compliances shall be assessed, and adequate reduction measures shall be implemented through decriminalisation, digitising & digitalising processes, and
making systems online, centralised inspections, etc.

b. The suggestions of the External Committee for scrutinising all Acts and Rules relevant to business community and citizens as part of the initiative of Ease of Doing Business, shall be implemented. Department level Working Committees shall be constituted towards implementation of the recommendations of the External Committee.

iv. Transition to Paperless Processes

Transitioning to paperless systems and single window application processing are required to simplify processes involved in establishing and conducting businesses in the State.

a. The K-SWIFT online single window portal shall be upgraded to offer a Single, Integrated and Intelligent Suite with more Departmental services integrated, improved accessibility, and features like revamped Common Application Form, advance Dynamic Dashboard, and world class UI/UX design with elevated user experience.

b. Online application submission through K-SWIFT portal shall be mandated for new industries and receipt of final downloadable certificates shall be made available through the single window system.

c. Steps will be taken towards gradually shifting the application submission and processing of all State-level licenses/permits/clearances/ NOCs, etc., through K-SWIFT, so that it will become the one-stop destination for all licenses/permits in the State.

Necessary integration of other parallel licensing portals to K-SWIFT shall be done in due course.

v. Decentralisation of Authority

Distribution of powers amongst subordinate bodies is essential to speed up the regulatory compliance processes.

District level offices of several departments shall be granted more authority for speeding process of regulatory compliances while regional offices shall only oversee development, supervise, and monitor.

vi. Central Repository of Acts & Rules

A centralized database of all relevant Acts and Rules will help make the process faster and easier and avoid delays in applications.

a. A centralised repository of Central & State Acts/Rules shall be developed and made available to public.

b. Simplified interpretations and notifications will be prepared in collaboration with the respective departments so that the rules and regulations can be understood by the people..

c. Steps will be taken towards gradually shifting the application submission and processing of all State-level licenses/permits/clearances/ NOCs, etc., through K-SWIFT, so that it will become the one-stop destination for all licenses/permits in the State.

vii. Invest Kerala Helpdesk 2.0

A single-window system or a single point of contact, along with dashboards information facilitation services for investors and entrepreneurs can help simplify investment decision making process and foster investments to the State.

a. The Invest Kerala Helpdesk 2.0 shall be launched with an Omnichannel Interface with a single unified contact centre for voice, chat and task
management for mobile and desktop.

b. The Helpdesk shall be run using a platform comprising of a prioritization system, well-defined escalation mechanism for queries, and Big Data technology-based database management system.

c. Dedicated facilitation services shall be made available to Investors.

d. The Invest Kerala Helpdesk 2.0 shall function 24x7 on all days.

evii. Continuous Stakeholder Engagement

Converged efforts and contribution of all stakeholders in a systematic and continuous manner are required to create a conducive industrial ecosystem.

a. Sector-wise “Investor Connect” meets shall be conducted on a regular basis.

b. A mechanism shall be developed to seek feedback regularly from stakeholders in order to gauge and understand gaps in business facilitation.

c. A robust industry database of existing and potential investors shall be developed to engage on a continuous basis.

ix. Industry Status to New Sectors

Sector-wise business ecosystems need to be developed and specific support provided to enable industries to reap the benefits of various schemes and policies.

IT Enabled Services, Robotics, AI, High-Tech Farming, and other sunrise sectors, including their R&D, shall be treated separately and given priority status, and separate provisions shall be set for these sectors.

Investment Forward Training Initiative

Sensitization of all stakeholders including department officials is critical to augment facilitation services and attract investments.

a. LSGD facilitation services shall be strengthened and streamlined using Investment Enabling Sensitization programs.

b. Continuous awareness sessions shall be conducted to promulgate acceptance of online applications through K-SWIFT.

c. Training programs shall be designed and conducted for District Investment Facilitation Centres.

d. Periodic training of officials under the Department of Industries & Commerce, its line departments and various agencies/PSUs under it, shall be done so as to impart knowledge on the latest developments and requirements in the industry.

Robust Industry Co-Ordination System

To create an enterprising business environment in the State, it is essential to promote collaborative efforts of all Departments involved in the entire investment lifecycle of an entrepreneur.

Industry coordination groups comprising of representatives from all departments shall be set up to fast track granting of licenses and other compliances under an automated mode with no manual interference at any stage of follow-ups or query discussions.
xii. **Access to Finance**

In order to make entrepreneurship accessible to all and to expand and scale-up existing businesses, access to finance and credit is an important component.

a. Cluster financing models shall be introduced in which a group of MSMEs will form a Special Purpose Vehicle (SPV), which then borrows from banks under a single transaction, and on-lends to its members.

b. MSMEs shall be encouraged to source finance through IPOs, and fiscal incentives would be provided for such MSMEs that resort to IPOs for their expansion/diversification and capital creation purposes.

c. Loans for technology adoption and digital transformation shall be offered to MSMEs.

d. Supply Chain Financing (SCF) shall be enabled with short term credit cycles to optimize working capital availability.

e. Use of surrogate guarantees including personal guarantee, insurance guarantee, bank Statement, GST data, etc., to evaluate credit worthiness of MSME borrowers shall be allowed.

f. Financial assistance for exporters will be increased.

g. Cooperation of financial institutions, crowd funding, angel funding, multilateral funding, etc., will be examined at each stage of industrial investment.
The State shall make strides towards creating a Kerala brand and improve the branding of products by means of a voluntary quality certification programme. The following key initiatives are identified under this policy pillar;

i. **Investment Promotion Schemes**

Building the Kerala Brand would aid in promoting investments and add value to exports. A new ‘Made in Kerala’ brand will be developed for this purpose.

a. A voluntary quality certification programme shall be launched to ensure that the products of MSME’s manufactured in Kerala meet the specified quality standards.

b. Dedicated investment promotion events shall be organised to showcase high quality products of MSMEs under this certification programme.

c. ‘Made in Kerala’ exhibitions shall be organised for brand promotion.

d. Participation of MSMEs under ‘Made in Kerala’ logo in national/ international exhibitions and trade fairs will be ensured.

ii. **Export Promotion**

Export promotion forms a significant part of brand building.

a. A dedicated policy for promotion of exports shall be notified.

b. Programmes for sector-focused promotion and branding of products across districts shall be conducted.

c. State/ District level export promotion activities will be strengthened.

d. Collaterals for Export Promotion shall be published in national and international Export-specific forums.

e. MSME exporters will be further encouraged to participate in national/ international trade fairs and exhibitions.

iii. **Single Window System for Investors**

A single unified portal for promoting prospective investment, providing all requisite information, investment opportunities and managing investments in the State would help streamline the investment processes.
a. A single window system will be set up to interact with investors on investment opportunities.

b. Digital mapping of Industrial clusters and sector-wide industries and resources in Kerala shall be undertaken.

d. Investment promotion meets shall be organised under the theme of Responsible Investments.

e. Various incentives shall be offered for businesses/ MSMEs adopting ESG practices as per the ESG criteria.

iv. Hub for ESG Investments

The State recognises the importance of ESG investments and is inclined to promote an approach of ESG-driven responsible investments in the State.

a. A dedicated policy for promoting ESG focused MSME development and providing performance-based loans and incentives for innovation and green growth based on ESG-rating of MSMEs shall be devised.

b. A sector based ESG rating framework, criteria and methodology for industries while aligning with the United Nations Sustainable Development Goals and Sustainability Accounting Standards Board (SASB) metrics shall be developed.

c. Dedicated funds shall be formulated to provide green incentivisation for entrepreneurs promoting sustainable industry practices.

d. Investment promotion meets shall be organised under the theme of Responsible Investments.

e. Various incentives shall be offered for businesses/ MSMEs adopting ESG practices as per the ESG criteria.

v. Attracting Global Talent

One of Kerala’s biggest comparative advantages is its highly established and talented diaspora in various industrial and allied sectors in different parts of the world.

a. A mission shall be launched to connect with Malayali diaspora and attract global talent to the State.

b. Global investments in Kerala start-ups shall be encouraged and dedicated programmes shall be organised to appraise global talent on the new opportunities in the State.

c. A dedicated desk shall be set up to conduct surveys and undertake studies to understand aspirations of youth and an action plan for implementation shall be developed.

d. Success story sessions and roadshows shall be conducted at select destinations.
In order to facilitate successful scaling up and capturing the value addition prospects from each sector, establishing sectoral ecosystems which promote efficient and effective use of available resources and infrastructure is vital. Thus, fostering a sectoral ecosystem in the State, especially for innovative and priority sectors forms an essential pillar of the policy.

To be at the forefront of the industries of the future, the State has identified following Priority sectors. These Priority sectors would be governed by sub-policies that are aligned to offer comprehensive support in the form of infrastructure development, technology and innovation, institutional streamlining, market development and exports facilitation, research and development, skill development and incentives.

Aerospace and Defence
1. Artificial Intelligence, Robotics and Other Breakthrough Technologies
2. Ayurveda
3. Biotechnology & Life Sciences
4. Design
5. Electric Vehicles
6. Electronic System Design & Manufacturing
7. Engineering Research & Development
8. Food Technologies
9. Graphene
10. High Value-Added Rubber Products
11. High-tech Farming and Value-Added Plantation Produce
12. Logistics & Packaging
13. Maritime Sector
14. Medical Equipments
15. Nano Technology
16. Pharmaceuticals
17. Recycling & Waste Management
18. Renewable Energy
19. Retail Sector
20. Tourism & Hospitality
21. 3D Printing

The sector policy framework addresses the various aspects which should be considered for each Priority Sector such infrastructure, investment promotion and facilitation, digitalisation and technology, regulatory and institutional mechanisms, skill and capacity building, research and development and ESG and sustainability aspects. The sub-policies for each sector are provided in detail in the subsequent sections.
1. Aerospace and Defence

Start-ups in the aerospace and defence technology sectors are playing an important role in Kerala’s industrial growth. Kerala Space Park is one of the ambitious initiatives of the Government of Kerala to make the State a manufacturing hub of defence products and services.

Infrastructure

- An Industrial Park shall be set up under the existing Kerala Space Park project to position the State as a unique aerospace and defence technology hub.

Digitalization and Technology

- Start-ups providing technological support for the development of launch manufacturing, propulsion systems, drones, subcomponent research and developments shall be encouraged.

Investment Promotion and Facilitation

- Participation of start-ups, research institutions and other entities involved in aerospace & defence technologies shall be facilitated, in international expos and forums.

- A dedicated Innovation Fund shall be created for Application development in Aerospace and Defence Technology, focusing on ICT based projects in the sector.

- A Technology Development Fund (TDF) shall be created for start-ups and scale-ups involved in new technology development in the sector.

Skilling and Capacity Building

- An online platform shall be developed to link ISRO, VSSC, LPSU, IISU, IIST, BrahMos, and start-ups in the State to promote collaboration in the development of aerospace & defence technology products, applications in various sectors, and systems, where the start-ups can showcase their solutions and the space tech leaders can source its technology requirements.

- Partnerships shall be explored with leading international companies, accelerators, and the local SME’s and Start-ups to gain access to international markets.
2. Artificial Intelligence, Robotics and Other Breakthrough Technologies

Artificial Intelligence, robotics, and other breakthrough technologies are driving significant changes in various sectors. AI is an emerging field that provides solutions which extend beyond sectors or stages of production. It has the potential to revolutionise production systems and economies, making them more effective and efficient. It can play a crucial role in this era when industries are moving towards partial or complete automation.

Infrastructure

- An MSME-AI Mission shall be rolled out to promote the development and commercialization of AI-enabled solutions in thrust sectors of the State such as Manufacturing, Food & Agro-processing, Tourism, Healthcare, Biotechnology & Life Sciences, Construction, and Logistics.
- AI Enablement Centres shall be established in above identified thrust sectors under the MSME-AI Mission to support small and medium enterprises to drive business adoption, use, and commercialisation of AI technologies.
- Robotics Innovation / Incubation Centres shall be established in select educational institutions having competence and track record in the field of Robotics and Automation.

Investment Promotion and Facilitation

- Procuring and installation of AI related infrastructure components shall be encouraged.
- A Fund of Funds shall be set up to attract SEBI registered Venture Capital funds to invest in AI based start-ups and industries in Kerala. The Government shall invest equal amount invested by VCs in the Fund.
- International expos and investment roadshows shall be organised to showcase the sectors in the State having potential for robotic innovation such
Kerala and Department of Industries & Commerce.

• An online portal shall be developed to link the industry, educational institutions, and start-ups in the State to promote collaboration in the development of robotic and automation solutions, where the academia and start-ups can showcase their offerings and the industry can source its technology requirements.

Advanced Robot Commercialization Research Centre, ICT Convergence Centre and Humanoid Robot Research Centre shall be established in collaboration with Government, Industry and Academia.

Research & Development

• A knowledge repository of AI technologies shall be developed for industrial applications from across the globe for enabling faster technology adoption by the State's MSMEs.

ESG & Sustainability

• Sustainable manufacturing using Green Robots through waste reduction and energy-saving shall be encouraged.

Skilling and Capacity Building

• Training programmes in AI and related technologies shall be incorporated in the capacity building programmes offered under Department of Industries & Commerce such as Technology Management Development Programme, Technology Clinics, etc., for awareness creation and capacity building of MSMEs in the State.

• An AI specific skilling program for Industrial Applications shall be developed along with Digital University
3. **Ayurveda**

Consumer habits and lifestyles have changed in recent times with greater focus on sustainable wellness and Ayurveda. Ayurveda is lauded as a form preventative healthcare and for treatment of chronic illnesses world over and is a rising industry which can be tapped into in the State. The sector is one that can promote the growth of larger players as well as MSMEs when given a conducive ecosystem.

**Infrastructure**

- A Global Ayurveda Village shall be established to enhance the opportunities with value added services and an integrated approach with all other medicinal system in the health care service sectors.
- World class Integrated Ayurvedic Centres of Excellence shall be established in the State.

**Investment Promotion and Facilitation**

- Setting up of testing facilities created in Joint Forest Management Committees (JFMC), packaging/ handling equipment, or pooled facilities catering to more than one JFMC/ Village/ Panchayats shall be encouraged.

**Skilling and Capacity Building**

- Dedicated training programs on collection, processing and organic certification shall be conducted.

**Research & Development**

- Traditional Knowledge based R&D programs shall be established with a view to develop new novel herbal products and nutraceuticals.
- An R&D centre shall be established through academic collaboration for development of AYUSH based products for commercial use.
4. Biotechnology & Life Sciences


Infrastructure

- A Biotechnology Incubation Centre shall be established in the State for supporting the research process with facilities for technology incubation, technology demonstration and pilot plant studies to accelerate the commercial development of biotechnology.
- A Centre of Excellence in Nutraceuticals shall be established, which integrates medical nutrition practices, pharmaceutical science and traditional knowledge provided by indigenous communities around the world. Ventures such as ‘Nutraceuticals Parks’ will be initiated to bring together research centers, start-ups, industrial enterprises and other institutions working in this field.

Investment Promotion and Facilitation

- Participation of MSMEs in expos and roadshows shall be encouraged to attract investment in areas such as Stem Cell Research, Probiotics development, Nano biotics, etc.
- Land at Life Sciences Park, Thiruvananthapuram shall be offered at subsidised prices for setting up of Biotech facilities in the State.

Research & Development

- A dedicated fund shall be created for encouraging R&D in Biotechnology.
- A State-of-the-art research infrastructure shall be established in PPP mode for giving thrust to special projects which are of strategic importance such as stem cell therapy, biofuel, bioplastics, vaccine production, etc.
- Intellectual Property Rights (IPR) shall be accepted as collateral against loans taken from financial institutions to promote innovation. Specific guidelines shall be established for the same.
5. Design

Design includes designing products, services, devices and objects for the companies or end-users. An effective design can help enhance the manufacturing process to achieve business goals and enhance customer experience while producing goods and services that are sustainable and durable.

(a) Design for Industries

Infrastructure
- Incubation Centres shall be set up with common facilities and enabling tools like rapid product development, high performance visualization for various sectors including jewellery, leather, toys, semiconductor chip designing, etc.
- Common Design Centres shall be set up within industrial clusters/industrial hubs.

Digitalisation and Technology
- Technology adoption in industrial design process for cost reduction and quality enhancement shall be encouraged through a dedicated scheme.
- Collaboration of MSMEs with tech-driven design start-ups shall be encouraged in conjunction with Kerala Startup Mission.

Regulatory Mechanism
- Process guidelines and procedures for registration of new designs shall be streamlined.
- Intellectual Property (IP) generation in the area of design shall be promoted.
- Quality standards shall be set for design to enhance competitiveness.

Investment Promotion and Facilitation
- Strategic alliances shall be established with global design companies to enable access to technology and knowhow.

Skilling and Capacity Building
- Supporting programmes shall be conducted for skilling of workforce in different areas of design.
- Establishment of Design Centres in Universities/Colleges shall be encouraged.
- Various courses and skilling programmes in different aspects of design shall be developed and industry-academia linkages shall be established for creating new designs.
ESG & Sustainability

- Eco-friendly and sustainable designs across sectors shall be encouraged.
- Sustainable designs /eco-design of industrial facilities shall be promoted.

(b) Design for Reviving Traditional Crafts

Kerala is renowned for its unique traditional crafts and artefacts crafted by its master craftsmen. Providing the infrastructure and other requirements for designing and thus enhancing the traditional crafts and leveraging technology to market them would help the sector and the artisans in growing further.

Infrastructure

- 3D printing enabled design facilities shall be established at the Common Facility Centres under the Handicrafts Development Corporation of Kerala and Kerala Artisan Development Corporation.
- Use of the digital innovation centres (Fab Labs, Makerspaces, MSME innovation centres and research centres) in the State shall be made available to artisans and craftsmen for familiarizing them with the latest technological developments in design and manufacturing.
- An industry ecosystem for traditional crafts shall be established in the State for Geographical Indication (GI) tags like Aranmula Kannadi, Balaramapuram Kaithari, Alleppey Coir Products, Palakkadan Matta Rice, Malabar Pepper, Vazhakulam Pineapple, Marayur Jaggery, Wayanadan Jeerakashala Rice, etc.
- The number of spinning mills, automatic spinning machines and automatic looms shall be increased in the State.

Digitalisation and Technology

- A Research Grant for the development of innovative technology solutions to enhance the traditional crafts practices in Kerala shall be created.

Investment Promotion

- Artisans’ access to global online platforms to showcase their products and reach a wider market while ensuring fair prices shall be facilitated.
- A dedicated program shall be charted for promotion of Traditional craft products at Government offices, Metro stations, Investor Facilitation Centres and at on key events.

Skilling and Capacity Building

- Skill development programmes and skill upgradation workshops shall be conducted for traditional craft sectors.
- A dedicated programme shall be developed for branding and commercialization of traditional crafts by availing international quality standards/ certifications and adopting green manufacturing concepts.
- Facilitation efforts shall be directed towards promoting and handholding traditional craft micro industrial units at industrially backward areas.
6. Electric Vehicles

In view of the increased focus and transition to electric vehicles, building a conducive ecosystem to ensure greater investment in the sector, and promoting manufacture of electric vehicles and other subsidiary industries in the State are critical.

Infrastructure

- A plug-and-play electric vehicle manufacturing facility/ EV Park with advanced battery manufacturing facility for 2, 3 & 4 wheelers and heavy vehicles shall be established.
- Dedicated financial scheme for setting up of EV infrastructure and Swapping Stations shall be devised.
- An electric vehicle manufacturing ecosystem shall be created in the State by establishing facilities like Energy Storage Hub, Drivetrain Hub, Power Electronics Hub and Drivetrain Testing Lab, for promoting research, design and development of EVs. Adoption of the most advanced technologies in the field of electric mobility will be considered through an Electric Vehicle Consortium.

Research & Development

- Dedicated grant shall be allocated for institutions conducting research on electric mobility solution and EV component.
- A Centre of Excellence (CoE) for EV shall be established comprising of facilities for various components of EVs including battery technology, drive train technologies, software development, energy storage, fuel cells, battery management system, motors, and controllers & charging technologies.
- Industry oriented research on battery technology development, recycling & reuse of batteries, battery management systems, charging infrastructure, etc., shall be encouraged.
7. Electronics System Design & Manufacturing (ESDM)

Kerala with its comparative advantage of a highly skilled workforce and booming IT services sectors is appropriately placed to diverge into the Electronics System Design and Manufacturing sector.

Infrastructure

- An Electronics Hardware Park for Electronic Hardware manufacturing units and assembling units, R&D Centres, and the supporting infrastructure shall be established.

- An Electronic Manufacturing Cluster (EMC) shall be developed.

Investment Promotion and Facilitation

- KELTRON shall establish joint ventures with global companies for upgradation and expansion of existing production capacity.

- Domestic and International Expos on Electronics sector shall be conducted.

Skilling and Capacity Building

- Industry-academia linkages shall be formulated for creating skilled manpower in different electronics manufacturing segments like consumer electronics, automotive electronics, computer hardware, strategic electronics (aerospace & defence).

- Government organizations/ PSUs / private companies shall be encouraged to set up Centres of Excellence (CoE) in ESDM through Institutional/ Academic collaborations.

Research & Development

- Industrial application-based R&D in ESDM sector shall be encouraged.

- An R&D ecosystem for indigenous technology transfer to industry for commercialization, and creation of Intellectual Property (IP) shall be established.
8. Engineering R&D

The engineering research and development sector is a key growth sector for the State owing to its talented & skilled youth and strong engineering education & skilling ecosystem.

Infrastructure

- The Engineering R&D infrastructure in the State shall be enhanced via upgradation of existing PSU facilities and by setting up Innovation Labs in PPP mode with facilities for prototyping and testing.

Investment Promotion and Facilitation

- Global players shall be encouraged to set up Global Capability Centres (GCCs) for Engineering R&D in the State.
- International exhibitions and roadshows shall be organised to showcase the Kerala Advantage for investing in Engineering R&D and also the achievements of indigenous industry and research institutions for attracting investment.

Skilling and Capacity Building

- Industry-academia-government linkages shall be established to accelerate development of Engineering R&D products and services and disseminate information on market insights, marketing avenues, latest developments in the industry.
- One-time upskilling cost reimbursement shall be provided to MSMEs for their workforce to leverage cutting-edge technologies like IoT, Robotics, AI/ML, etc., in strengthening engineering R&D.
9. Food Technologies

Infrastructure

- Common infrastructure facilities shall be established with modular workstations along with other offerings such as quality cell, consultations services, regulatory facilitation, IPR Cell, etc., to support Farmer Producer Organizations (FPOs), Self-Help Groups (SHGs), cooperatives, etc.
- Food Tech incubators backed by the government, academic institutions, large food corporation and VCs shall be established.
- A Mega Food Park/ Specialty Food Park shall be established in PPP mode with futuristic technology & modern amenities.

Digitalisation and Technology

- Innovation in sustainable food packaging technologies that minimize wastage and increase the shelf life of the products shall be encouraged.

Regulatory and Institutional Mechanism

- A marketing network with apex bodies to ensure proper marketing of processed products shall be established.
- Dedicated programmes shall be held in collaboration with IITs, State Government Institutions, Government funded Organizations, R&D laboratories and CSIR recognized R&D units in private sector and international organizations to undertake demand driven R&D work in the field of Food Processing Sector for product and process development, design and development of specialty foods, nutraceuticals, medicinal foods, food supplements, sugar-free products, gluten-free products, equipment, improved storage, shelf-life, packaging, etc.
10. Graphene

Graphene is a carbon-based nanomaterial, a wonder material which has applicability in multiple industries and can disrupt markets by replacing existing technologies and materials.

Infrastructure

- A dedicated Graphene Industrial Park with common factory facilities like workshops, product standards testing centre, office facilities, meeting rooms, plug and play facility for power, water & internet connectivity shall be established.

Regulatory and Institutional Mechanism

- A specialized and independent Nodal Agency, viz., India Innovation Centre for Graphene (IICG) shall act as the State Nodal Agency.

- The State shall come up with a separate Graphene Policy for promotion of Graphene based R&D, innovation, manufacturing and policy administration.

Skilling and Capacity Building

- Collaborations with national and international agencies shall be established to incorporate latest graphene-related research and development in industrial applications of Graphene.
Kerala being a front runner in natural rubber production, and with increasing industrial and other applications of rubber products, high value-added rubber products have a promising future in various applications.

**Infrastructure**

- Industrial Parks for high value-added Natural Rubber products with world class industrial infrastructure at affordable prices for commercialization of specialized rubber products shall be established with special focus to MSMEs and rubber cooperatives.

- Group Processing Centers/ Community Processing Centers shall be established for pre-processing, testing and collection of natural rubber to ensure supply of quality raw materials for specialized rubber products manufactured in Industrial Parks.

**Digitalisation and Technology**

- Training programmes and workshops in collaboration with Kerala Digital University, Kerala Startup Mission, Rubber Board and Kerala Technical University (KTU), shall be conducted for the workforce in the rubber manufacturing sector for adoption of modern tools and technologies of Industry 4.0.

  - Enable access for High-value rubber products to e-commerce platforms.
  - Technology-led innovation activities shall be encouraged for rubber smallholders, private entrepreneurs, etc., in production, processing and value addition to produce high-value rubber products.

**Investment Promotion and Facilitation**

- A one-time reimbursement of 50% of the cost of obtaining quality certification related to export of high-value rubber products will be provided.

**Skilling and Capacity Building**

- Upskilling programmes shall be developed for the workforce in conventional rubber products manufacturing units, in coordination with Rubber Board/ Rubber Training...
practices in the rubber industry shall be encouraged by enriching the recycling ecosystem for end-of-life tyres (ELTs).

- Roadshows and events shall be organised along with Industry-Academia collaboration to understand the market potential of high-value rubber products in international market.

ESG & Sustainability

- Manufacturing of zero-carbon rubber products shall be encouraged.
- Adoption of circular economy practices in the rubber industry shall be encouraged by enriching the recycling ecosystem for end-of-life tyres (ELTs).

Research & Development

- A dedicated fund shall be curated for innovation in Rubber processing.
- IPR shall be accepted as collateral against acquiring loans from financial institutions to promote innovation. Specific guidelines shall be established for the same.
12. Hi-Tech Farming & Value Added Plantation Produce

There is a growing need to promote hi-tech farming practices in the State. The policy emphasizes on achieving self-sufficiency in agriculture by leveraging technology and reducing over-exploitation of available natural resources. Government has accorded industrial status to plantations and allowed multi-cropping on 5% of plantation land. Government has also set up a Plantation Directorate which envisages the integrated functioning of various departments, like Revenue, Forest, Industries, Labour, LSGD, Finance, Power and Agriculture. The policy promotes value-added products from plantations.

Infrastructure

- Cluster projects of the Department of Industries will be extended to high value horticultural crops (commercial crops).

- A single window system will be implemented for sanctioning projects involving high-value-added plantation produce.

Skilling and Capacity Building

- Workshops and awareness programmes shall be organised on new age hi-tech farming practices, in association with Department of Agriculture, for the promotion of vertical farming, hydroponics, aeroponics, aquaponics, micro-irrigation methods, polyhouse design, tissue culture, etc.

- Training programs shall be developed for imparting modern farming techniques to agricultural workers.

Research & Development

- Modern R&D facilities shall be established in association with major Agro industries for expansion of seedlings under favourable microclimate created in cost-effective low-cost structures, standardization of new growing media for optimum plant growth, refined technologies for hardening of seedling, green house design, structure, and technology.

- Initiatives to improve processing and value addition of high value horticultural crops will be launched.

- Enterprises will be supported in the areas of policy, finance, business, marketing, technology, management and innovative knowledge through the Value Added Agriculture Mission (VAAM) to create an enabling ecosystem for value addition in the agriculture sector.
13. **Logistics & Packaging**

Presence of robust logistical connectivity and supporting industry is essential for a growing economy. The demand for packaging has increased significantly due to rapid growth in consumer markets, particularly in the processed food, personal care, and pharmaceutical end-user industries.

**Infrastructure**
- Strengthening of logistically important roads shall be undertaken to support maximum tonnage vehicles.
- Cargo infrastructure shall be enhanced for using rail and water transport cargo.
- Mini Multi Modal Logistics Parks shall be established.
- Certain percentage of land shall be allocated for logistics facilities in upcoming Industrial Parks.
- City level Logistics Action Plan shall be developed in association with LSG Department.
- Rail Freight transport (cold-chain, Ro-Ro support, good storage and loading facilities in stations, etc.) shall be augmented.
- A dedicated Logistics Cell will be established in KSIDC to coordinate and monitor the various activities in connection with the State Logistics Action Plan.

**Digitalisation and Technology**
- Traffic management technology systems shall be deployed in key cargo routes.
- Start-ups in the logistics sector providing smart solutions for logistics shall be encouraged.
Regulatory & Institutional Mechanism
- An institutional setup shall be established for developing an ecosystem of minimal inspection and stoppage of cargo vehicles on road.
- A benchmarking framework shall be developed to assess third party logistics service providers with various cargo handling capabilities.

Investment Promotion and Facilitation
- Industry Status shall be accorded to Logistics (Warehousing) sector.
- An Industry Engagement Channel for legal, policy and standards setting shall be established by the proposed Logistics Cell.
- Promotion of ‘green’ flexible packaging by encouraging production of easily recyclable and biodegradable laminate and packaging material; Recycling of post-consumer waste will be encouraged.

ESG & Sustainability
- A Green Logistics and Reverse Logistics Development Plan shall be prepared.
- Feasibility study for using Electric Vehicles for last-mile delivery shall be undertaken.
- Shifting to eco-friendly packaging and reducing the use of Polyvinyl Chloride (PVC) in packaging shall be encouraged.
14. Maritime Sector

The proposed maritime cluster project at Cochin has potential to enhance the strength and development of maritime sector, and create a robust ecosystem connecting all stakeholders.

Infrastructure

• Shipping and port related infrastructure shall be created, comprising ship repair, boat manufacturing and repair facility, and other facilities.
• Existing export infrastructure shall be upgraded with new logistics, multimodal, exhibition facilities, warehouses, and maritime transport infrastructure.
• A unique tourism infrastructure facility shall be conceptualised with a range of components from cruise vessels to water sports equipment, maritime museum, and water sport activities.

Digitalisation and Technology

• A sustainable Maritime Technology Hub shall set up under the maritime cluster to promote R&D in development of future-proof engines running on sustainable fuels, etc.

Investment Promotion and Facilitation

• A Maritime Expo shall be organized to attract investments and provide investment assistance to units in the sector.

ESG & Sustainability

• Attractive incentives shall be offered for manufacturers of boats, cruise vessels, etc., that use sustainable fuels.
15. **Medical Equipments**

Kerala’s human resource strength and location attractiveness makes it an appropriate destination for the medical devices industry.

**Infrastructure**

- The MedsPark will have facility for design and manufacturing of medical accessories, for the shared use of the units in the Park.
- A ‘Medical Tech Innovation Park’ will be set up at KSIDC’s Bio360 Life Sciences Park, Thiruvananthapuram to accelerate medical device manufacturing and technology in Kerala by fostering a knowledge-sharing ecosystem between academic-research institutions, industrial enterprises, startups, healthcare institutions and the government.
- An online platform for sourcing and supply of high-quality medical materials such as high-temperature plastics, medical-grade silicone rubber, microfluidics, medical alloys, and elastomeric materials for the manufacture of medical devices shall be developed.
- The MedsPark will provide facilities for quality control of medical devices.

**Investment Promotion and Facilitation**

- A One-time reimbursement shall be provided of up to 50% of the cost incurred for obtaining compliance certifications for medical devices manufactured in the State under domestic and international regulations, subject to a maximum of Rs. 25 Lakh.

**Research & Development**

- Dedicated fund shall be earmarked for encouraging joint research between industry players, reputed academic institutions and SMEs/Start-ups to carry out research in development of advanced medical devices.
- Centers of Excellence shall be set up in academic institutions and research institutes that provide technical assistance in manufacturing medical accessories, help in obtaining quality certificates and conduct safety testing of medical devices.
- IPR shall be accepted as collateral against acquiring loans from financial institutions to promote innovation. Specific guidelines shall be issued for the same.
16. Nanotechnology

Nanotechnology is a disrupting technology that can revolutionize many industries especially influencing the end user. It has applications in varied sectors such as agriculture, aerospace, defence, materials science and energy.

Infrastructure

- A shared-use NanoFab shall be established in PPP mode for offering start-ups, researchers and industry with economical access and training on State-of-the-art toolsets required for cutting-edge nanotechnology development.

Investment Promotion and Facilitation

- Dedicated funding scheme shall be established to support start-ups and MSMEs for licensing and commercializing technologies developed in nanotechnology institutes such as the Centre of Excellence in Nanoelectronics (CEN) at Indian Institute of Technology Bombay.

- International conferences and seminars shall be organized to facilitate industry interactions with nanotechnology research organizations and thereby foster the development and commercialization of new technological solutions.

Research & Development

- Nanotechnology-based research in areas such as carbon-free energy options, clean water, etc., shall be encouraged.
17. Pharmaceuticals

Indian pharma companies have made a global mark through their quality products and price competitiveness. 60% of the world’s vaccines and 20% of generic drugs are currently manufactured in India. The policy seeks to create an enabling ecosystem in the state for pharmaceutical manufacturing and research.

Infrastructure

- Phase 2 development of Life Sciences Park in Thiruvananthapuram will be completed.
- The proposed Pharma Zone at the Petrochemical Park at Ambalamugal will offer common facilities, land parcels, built-up spaces, testing laboratories, quality centers, etc.
- Setting up of cold storage facilities specific to the pharmaceutical industry with controlled temperature suitable for temperature sensitive medicines shall be encouraged.
- Kerala State Drugs and Pharmaceuticals Limited will be strengthened and facilities upgraded.

Investment Promotion and Facilitation

- Manufacturing of generic drugs, API/ Bulk drugs, Vaccines, Contract Research & Manufacturing Services, Biosimilars and Biologics, etc., shall be encouraged.
- Road shows and events shall be organized in collaboration with industry academia.
- Industry-oriented courses will be developed in pharmaceutical subjects like drug formulation, clinical trials, etc.

Research & Development

- A Center of Excellence will be established in the pharmaceutical sector offering state-of-the-art facilities, incubators, etc.
- Bioprospecting of pharmaceutical and traditional medicine shall be promoted.
- A dedicated fund shall be earmarked for carrying out research and development activities and promoting cutting-edge research activities in the pharmaceutical industry.

ESG & Sustainability

- Environmental friendly approaches in pharmaceutical manufacturing shall be promoted.
18. Recycling and Waste Management

Recycling is a key component of modern waste management and is a significant pillar in the ‘Reduce, Reuse, and Recycle’ motto. It promotes environmental sustainability by removing raw material input and redirecting waste output in the economic system. It also includes composting and reuse of biodegradable waste, such as food and garden waste.

Infrastructure

- Setting up of Facilities for collection, storage and recycle of materials shall be encouraged.
- Waste to Energy projects shall be promoted in PPP mode, with support from Local Self Government Institutions.
- A scheme will be formulated to promote advanced technologies in solid waste management in regional clusters on PPP model, in collaboration with industry bodies.

Investment Promotion and Facilitation

- Legislations for mandatory recycling collection, container deposit, and increasing the use of recycled materials, shall be framed.
- Procurement policies which reserve a certain amount of spending for recycled products, will be devised.

Research & Development

- R&D activities and best practices to develop innovative solutions for waste management shall be promoted.
- A Research Fund shall be set up to promote research on innovative ideas/inventions and product/process developments/modifications.
- Strategic partnerships shall be established with NGOs, industry associations like NASSCOM, etc., to identify issues in waste management, promote procurement of refurbished goods, etc.

ESG & Sustainability

- Stable supply of recyclable material shall be ensured through Local Self Government Institutions and NGOs.
19. **Renewable Energy**

The State has developed various plans to achieve its green vision and is looking forward to international collaborations to fast track implementation efforts.

**Infrastructure**

- A Renewable Energy (RE) Park shall be established to provide common infrastructure and transmission facilities on a plug and play basis for technology development and demonstration in areas of new and renewable energy such as solar photovoltaic systems, biogas systems, waste to energy systems, wind energy systems, hybrid systems, storage systems, hydrogen and fuels cells, geothermal energy, hybrid/electric vehicles, etc.
- A robust ecosystem shall be developed for private participation in power generation sectors.
- Floating Solar Power projects shall be set up in the State under PPP model.
- Hybrid models with green hydrogen production shall be explored.

**Investment Promotion and Facilitation**

- An ‘Innovation Award’ shall be instituted to attract and promote innovative ideas in the field of Renewable Energy technology.
- A dedicated scale-up fund shall be created for the start-ups incubated at the proposed Clean Energy Innovation and Business Incubation Centre (CEIBIC) - a joint initiative of Energy Management Centre Kerala, Clean Energy International Incubation Centre (CEIIC), and Kerala Development and Innovation Strategic Council (K-DISC).
Research & Development

• A Research & Development Centre will be established in collaboration with educational institutions, research centres, industries, utility, etc. The aim is to make the technologies suitable for practical use and commercialization. Research shall focus on various combinations of solar cell technologies, energy storage solutions and solar-based hybrid cogeneration technologies, hydrogen generation technologies, etc. Focus will be on improving efficiency in existing systems and reducing cost of balance of system.

ESG & Sustainability

• Expos and events shall be organised to promote ‘green energy’ technologies.

Regulatory & Institutional Mechanism

• A Net-Zero Strategy for MSMEs shall be developed with emphasis on the adoption of renewable/clean energy sources and decarbonization.
20. **Retail Sector**

There is exponential growth opportunity for the retail sector in a consumer State like Kerala having high digital penetration.

**Infrastructure**

- State-of-the-art warehouses shall be established on PPP basis for MSMEs/Start-ups/Private Players (eComm players etc.).
- Small in-city warehouses shall be established to facilitate easy movement of goods for e-commerce players.
- Modern E-tail zones shall be set up in the State.

**Digitalisation and Technology**

- Memorandum of Understanding (MoU) shall be signed with e-commerce players, and other platforms to facilitate MSME units to sell their products online, and digitizing MSMEs including sellers, artisans & weavers, delivery & logistics service partners, etc.

**ESG & Sustainability**

- Retailers shall be encouraged to adopt methods/technologies to reduce wastage and use of sustainable packaging solutions.
- Installation of solar panels across warehouse and distribution centres, retail stores, etc., shall be encouraged.
21. **Tourism & Hospitality**

Kerala enjoys unique geographical features that have made it one of the most sought-after tourist destinations in Asia. New-age tourism & hospitality products are gaining popularity and the State wishes to tap its potential.

**Infrastructure**

- Caravan Parks (comprising of day parks, state-of-the-art Caravan Parks, Hybrid Caravan Park, Caravan Parks as independent houses, Caravan Parks in Plantation, etc.) shall be developed in PPP mode.

- A data bank of vacant land parcels suitable for development into Caravan Parks shall be created in association with LSG Institutions / other Departments.

**Investment Promotion and Facilitation**

- A dedicated loan scheme shall be formulated for enterprises/entrepreneurs for purchase, furnishing, assembly of caravans.

- New innovative Tourism and Hospitality infrastructure facilities shall be promoted.

**ESG & Sustainability**

- Tourism-led ancillary businesses such as Start-ups focusing on Technology use in Tourism shall be encouraged.

- Enterprises offering unique technologies and existing offerings for adequate and safe method of sewerage collection, treatment and disposal system for the reception, storage of all the refuse and waste matter originating from Caravan Parks shall be encouraged.
22. **3D Printing**

3D printing or additive manufacturing is a sector that is revolutionizing manufacturing. The State would explore how 3D printing can benefit industries as diverse as Aerospace, Defense and Healthcare.

**Infrastructure**

- A Centre for Promotion of Additive Manufacturing shall be established, in PPP mode, for developing indigenous 3D printing/ additive-manufacturing technology (material, machine, process, application products) which will act as a hub for end-to-end 3D printing innovation and will address the needs of industry on skilled manpower, indigenous technology development, design software development, materials & machines sourcing, process development.
- A world class Bioprinting Lab through shall be established in PPP mode with facilities for advanced 3D Bioprinting and research & development in the healthcare sector.

**Regulatory & Institutional Mechanism**

- A nodal agency/consortium shall be constituted to coordinate the activities in the State for the commercialization of 3D printing technologies through ease of access of information resources, IP and research, training of workforce, development & deployment of 3D printing technologies.

**Skilling and Capacity Building**

- Dedicated courses shall be designed specifically for 3D printing in consultation with industry and academia and rolling out skilling programmes through Technology Clinics.
- Financial assistance up to 50% of the cost (subject to maximum Rs.10 Lakh) shall be extended to select academic institutions in the State for setting up 3D Printing Labs. The aim is to overcome the shortage of skilled human resources in this sector.
- A one-time reimbursement of upskilling cost shall be provided to the existing
workforce in MSMEs in the sector.

ESG & Sustainability

- An action plan shall be prepared for the repurposing/ recycling of traditional manufacturing infrastructure which will become obsolete with the adoption of 3D printing in manufacturing.

Research & Development

- A fully funded R&D programme with a corpus of at least Rs.10 Crore shall be developed to support the development of 3D printed products for industrial use, healthcare, technology for post processing and powder recycling, design software development, etc.
To foster an inclusive and sustainable industrial ecosystem that ushers in Industry 4.0 and promotes investment and innovation, an incentive structure has been designed to cater to the needs of the industrial enterprises in the 22 ‘Priority Sectors’ identified above.

(i) The following incentives are identified under this policy;

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Incentive Category</th>
<th>* Project Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Low interest loans</td>
<td>MSME</td>
<td>Loan @ 4% interest subject to a maximum of Rs. 10 Lakh (via interest subvention upto 6%)</td>
</tr>
</tbody>
</table>
| 2       | Capital subsidy incentive | MSME | • Micro – upto 45%, subject to a maximum of Rs. 40 Lakh  
• Small – upto 45%, subject to a maximum of Rs. 100 Lakh  
• Medium – upto 45%, subject to a maximum of Rs. 200 Lakh |
<p>| 3       | Electricity Duty Exemption | MSME | 100% exemption for 5 years. |
| 4       | Access to finance through IPO route | MSME | Reimbursement of 50% expenses subject to a maximum of Rs. 1 Cr., incurred on floating Public Issue through the SME platform of NSE &amp; BSE, provided the funds thus raised are utilized for setting up/ expanding enterprise in the State. |
| 5       | Investment subsidy | Large, Mega | Investment subsidy of 10% on fixed capital investment, subject to a maximum of Rs. 10 Cr., in phases. |
| 6       | SGST reimbursement | Large, Mega | 100% reimbursement on capital investment for 5 years. |</p>
<table>
<thead>
<tr>
<th></th>
<th>Employment Enhancer Incentive</th>
<th>Large, Mega</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>When more than 50% of permanent jobs are filled from local population, an amount equivalent to 25% of the monthly wages of each additional employment thus created, subject to a maximum of Rs. 5000/- per month per person, shall be reimbursed to the employer, for one year.</td>
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<td></td>
<td>When more than 50% of permanent employees are women, an amount equivalent to 25% of the monthly wages of each additional employment thus created, subject to a maximum of Rs. 5000/- per month per woman employee, shall be reimbursed to the employer, for one year.</td>
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<tr>
<td></td>
<td>When permanent employment is provided to transgenders of the State, reimbursement will be provided to the employer for one year, at the rate of Rs. 7500/- per month per transgender employee.</td>
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<td></td>
<td><strong>Waiver of Stamp Duty &amp; Registration charges for manufacturing units</strong></td>
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<tr>
<td></td>
<td>All category</td>
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<tr>
<td></td>
<td>Up to 100% on lease deed/purchase of land/building for setting up manufacturing unit in Government Industrial Parks and notified Private Industrial Parks.</td>
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<tr>
<td></td>
<td>For Women, SC/ST, PH &amp; Transgender entrepreneurs - Up to 100% on lease deed/purchase of land/building for setting up manufacturing unit anywhere in the State.</td>
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<td></td>
<td><strong>Private Industrial Estates</strong></td>
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<td></td>
<td>All category</td>
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<td></td>
<td>Funding support upto Rs. 3 Cr. for infrastructure development.</td>
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<td></td>
<td><strong>Incentive for participation in trade fairs</strong></td>
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<td>All category</td>
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<tr>
<td></td>
<td>Reimbursement up to 100% of the stall charges incurred, subject to a maximum of Rs. 5 Lakhs for participating in one domestic and one international fair/exhibition per annum</td>
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<td></td>
<td><strong>Intellectual Property creation</strong></td>
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<td>All category</td>
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<tr>
<td></td>
<td>Reimbursement of 50% of expenditure incurred, subject to a maximum of Rs. 30 Lakhs, for patent, copyright, trademarks, GI registration, etc.</td>
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<td></td>
<td><strong>Quality certification incentive</strong></td>
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<td></td>
<td>Refund of expenses incurred for compulsory marking like CE, FDA, ISO, BIS, etc., to the extent of 50% of expenses, subject to a maximum of Rs. 25 Lakh per unit per annum.</td>
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<td></td>
<td><strong>Incentives for sustainability and responsible industrialization</strong></td>
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<td>All category</td>
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<td></td>
<td>Reimbursement of 25% of expenses incurred for purchase of Plant &amp; Machinery/equipment for setting up ETP, installations for substitution of power from grid, rainwater harvesting, Zero Discharge technologies, recycling of e-waste and recycling of wastewater, conducting audits for energy and water conservation &amp; purchase of material for such conservation, excluding the expenditure incurred for civil works, subject to a maximum of Rs. 25 Lakh during the policy period.</td>
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<td>No.</td>
<td>Category</td>
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</tr>
<tr>
<td>1</td>
<td>MSME</td>
<td>Micro Enterprise Enterprises whose investment in plant &amp; machinery/ equipment does not exceed Rs.1 Crore and turnover does not exceed Rs.5 Crore.</td>
</tr>
<tr>
<td>2</td>
<td>Small Enterprise Enterprises with investment in plant &amp; machinery/ equipment not exceeding Rs.10 Crore and turnover not exceeding Rs.50 Crore.</td>
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<tr>
<td>3</td>
<td>Medium Enterprise Enterprises whose investment in plant &amp; machinery/ equipment does not exceed Rs.50 Crore and turnover does not exceed Rs.250 Crore.</td>
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<tr>
<td>4</td>
<td>Large Enterprise Enterprises whose investment in Plant &amp; Machinery/ Equipment exceeds Rs.50 Crore and turnover not exceeding Rs.300 Crore.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Mega Enterprise Enterprises with investment in Plant &amp; Machinery/ Equipment exceeding Rs.300 Crore.</td>
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</tbody>
</table>
(ii) Other Incentives

a) The government shall consider providing a package of incentives on a case-to-case basis for large, mega and ultra-mega projects of special importance. For this purpose, a High-Power Committee headed by the Chief Secretary will be constituted.

b) Provision will be made for immediate allotment of land/infrastructure to companies with 100% Foreign Direct Investment (FDI), in order to attract investments.

c) After the impact of Covid-19, many organizations are planning to relocate their operations and diversify their supply chains. Special incentives will be considered on a case-to-case basis for such companies planning to shift operations from other countries and states.

d) As electricity cost is a major operating cost for industries, in order to promote industries, Open Access of renewable energy (Round The Clock/RTC transactions), wheeling for floating solar projects and adoption of solar roof top systems, etc., shall be promoted.
VI. POLICY TENURE

The Industrial Policy will be constantly evolving in nature, with suitable amendments and sub-policies added on from time to time, based on industry requirements and sectoral trends.