



KERALA INDUSTRIAL & COMMERCIAL POLICY

(Draft) 2022



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DEPARTMENT OF INDUSTRIES & COMMERCE
GOVERNMENT OF KERALA



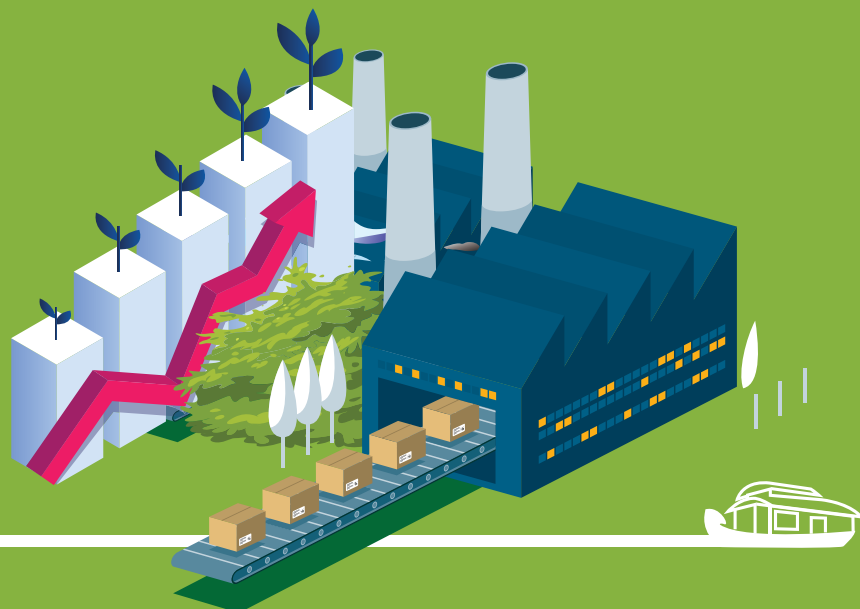
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INTRODUCTION



Kerala leads India in social development indices. It is also a model for the world for achieving the highest levels of social development with relatively modest economic means. High levels of attainment in social indicators like education, health care and quality of life have enabled the attainment of high levels of economic prosperity in the State. Kerala has come a long way in its industrial development journey. With major industrial units established in Travancore during the period between 1930 and 1949 followed by investments in modern industries in the Aluva–Kochi region, in the late 90s, the focus shifted towards investments in specific sectors, which primarily included service sectors like Transport, IT, Healthcare, Finance & Tourism. Land reforms and private sector engagement in agriculture, investments in real estate, house construction and other service sector establishments fuelled Industrial growth. This period also saw a dominance of PSUs in the Electronics sector. With the onset of development of large Industrial Park Infrastructure – Export, Apparel, SEZ, etc. investments were made in value-addition of industries which increased market share in value added products including Chemicals, Refined petroleum products, Natural Rubber, Electronic products, Pharma, Spices, Food processing etc. The State has eventually become a hub for MSMEs, with around 2.3 million MSMEs established across manufacturing, trade & other services, and attracting investments across Food Processing, Pharma, Biotech, Electronic components, Aerospace & Defence, Petrochemical Park etc. The Industrial Policy 2018 adopted a 360-degree approach for ease of doing business, easing regulations, driving sector growth, encouraging entrepreneurship, boosting MSMEs and exports, enabling technology adoption and environment-friendly systems. The world is now moving towards the fourth industrial revolution which is characterized by the convergence of the emerging technology

domains, including nanotechnology, biotechnology and advanced digital technologies like 3D printing, artificial intelligence, and Internet of Things (IoT). The State has also created the base for attracting investments in new and emerging sectors by creating a robust IT sector and is now moving towards reorienting the existing industry to adopt 4 IR technology to improve efficiency and competitiveness. With the new responsible agenda in place, the State is striving to build a responsible and futuristic industrial ecosystem based on the three pillars of Environmental Responsibility, Social Responsibility and Economic Responsibility leading to a Responsible Industry that would lead to a Responsible Society. Kerala is the first Indian State to adopt 'Responsible Investment, Responsible Industry' programme as part of industrial growth. The State's renewed focus on ESG-driven Responsible Investments is paving way for growth of new emerging sectors in the State. This policy places a special emphasis to achieve the State's vision **to build an Industry 4.0-ready industrial ecosystem by 2028 for generating responsible investments and fostering innovation across sectors.**



OBJECTIVES



The new Kerala Industrial & Commercial Policy 2023-2028 aims to foster a conducive and sustainable industrial ecosystem that brings about investment and innovation. The objectives of the policy are as follows:

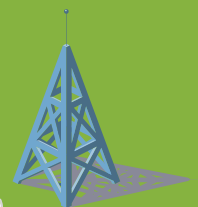
- i. To build a robust entrepreneurial ecosystem in the State
- ii. To make Kerala a thriving Start-up destination in India
- iii. To nurture the entrepreneurial talent of unemployed educated youth & women
- iv. To create innovation infrastructure to cater to the futuristic industries
- v. To maximise private investments in industrial infrastructure development
- vi. To strengthen logistics infrastructure to achieve multifold growth in exports
- vii. To create an Industry 4.0 compliant industry ecosystem
- viii. To upgrade traditional industries by infusing new technologies into its production methods
- ix. To enable easy access to e-commerce platforms
- x. To enhance Industry-ready skill sets and create ample opportunities for better jobs
- xi. To attract industry players from emerging sectors
- xii. To create an environment to work, live and play
- xiii. To foster a seamless environment for Doing Business in the State
- xiv. To improve access to funding across the investment life cycle
- xv. To establish multiple interfaces for entrepreneur engagement
- xvi. To attract large capital investments in innovative and high potential businesses
- xvii. To build the brand equity of “Kerala” collectively and enhance its leadership position across key segments globally
- xviii. To promote the manufacturing capabilities of Kerala and its world-class quality products, services, and skilled manpower
- xix. To build global linkages to foster foreign investments and exports
- xx. To enable access to foreign markets for increased trade volumes
- xxi. To encourage businesses to adopt best ESG practices
- xxii. To enable sectoral partnerships between



- government and industry to increase sector-led investments to the State
- xxiii. To create sector focused infrastructure and clusters
 - xxiv. To foster responsible investments and promote sustainable industries
 - xxv. To enhance R&D capabilities and linkages in new and emerging sectors of industry and economy

In order to achieve the aforesaid objectives, the following 7 policy focus pillars are identified.

1. Fostering Entrepreneurship
2. Enabling Infrastructure
3. Being Hi-Tech
4. Building Futuristic Skillsets for employment
5. Supportive Business Environment
6. Enhancing “Kerala” Brand Equity
7. Building Sectoral Ecosystems



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.

Objectives	Policy Focus Pillar to achieve the objective	Outcome
<ul style="list-style-type: none"> i. To build a robust entrepreneurial ecosystem in the State ii. To make Kerala a thriving Start-up destination in India iii. To nurture the entrepreneurial talent of unemployed educated youth & women iv. To create innovation infrastructure to cater to the futuristic industries 	Fostering Entrepreneurship	Creating aspirational jobs for all
<ul style="list-style-type: none"> v. To maximise private investments in industrial infrastructure development vi. To strengthen logistics infrastructure to achieve multifold growth in exports 	Enabling Infrastructure	Access to world-class industrial & support infrastructure in the State
<ul style="list-style-type: none"> vii. To create an industry 4.0 compliant industry ecosystem viii. To upgrade traditional industries by infusing new technologies into its production methods ix. To enable easy access to ecommerce platforms 	Being Hi-tech	Embracing digital and being Industry 4.0 ready
<ul style="list-style-type: none"> x. To enhance Industry-ready skill sets and create ample opportunities for better jobs xi. To attract industry players from emerging sectors xii. To create an environment to work, live and play 	Building Futuristic Skillsets for employment	Developing prosperous employable youth of the future
<ul style="list-style-type: none"> xiii. To foster a seamless environment for Doing Business in the State xiv. To improve access to funding across the investment life cycle xv. To establish multiple interfaces for entrepreneur engagement 	Supportive Business Environment	Encouraging entrepreneurs to start and grow business



Objectives	Policy Focus Pillar to achieve the objective	Outcome
<ul style="list-style-type: none"> xvi. To attract large capital investments in innovative and high potential businesses xvii. To build the brand equity of “Kerala” collectively and enhance its leadership position across key segments globally xviii. To promote the manufacturing capabilities of Kerala and its world-class quality products, services, and skilled manpower xix. To build global linkages to foster foreign investments and exports xx. To enable access to foreign markets for increased trade volumes xxi. To encourage businesses to adopt best ESG practices 	<p>Enhancing “Kerala” Brand Equity</p>	<p>Help creating brands with global recognition and promoting ESG compliant brands</p>
<ul style="list-style-type: none"> xxii. To enable sectoral partnerships between government and industry to increase sector-led investments to the State xxiii. To create sector focused infrastructure and clusters xxiv. To foster responsible investments and promote sustainable industries xxv. To enhance R&D capabilities and linkages in new and emerging sectors of industry and economy 	<p>Building Sectoral Ecosystems</p>	<p>Fostering growth of Sunrise, Traditional and mature sectors</p>



ELIGIBILITY



The policy shall come into effect on the date of its notification in the Official Gazette of Government of Kerala. This policy is applicable to “New” and “Existing” units. To foster an inclusive and sustainable industrial ecosystem that ushers in Industry 4.0 and promotes investment and innovation, various fiscal and non-fiscal incentives shall be provided under the policy on the basis of project categories and sunrise sectors identified by the State. The policy incentives will be available for projects basis below categorisation on total investment and turnover;

Project Category	Definition
MSME	Investment in Plant & Machinery not exceeding INR 50 Cr. and turnover not exceeding INR 250 Cr.
Large	Investment in Plant & Machinery above INR 50 Cr. and not exceeding INR 300 Cr.
Mega	Investment in Plant & Machinery above INR 300 Cr.

Industrial units/projects availing incentives under this policy shall not be eligible to avail similar incentives as given under any other Government of Kerala policy but may be availed in addition to any Government of India scheme/policy.

The identified incentives and following initiatives under the 7 policy focus pillars shall form part of the action plan for implementation of the new industrial policy in the State.



FOSTERING ENTREPRENEURSHIP

The State shall build 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 help desks, etc. To further enhance the entrepreneurial ecosystem in the State, the following key initiatives are identified under this policy pillar:

i. Entrepreneur support system

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

- a. A dedicated program “1 Lakh Enterprises” shall be launched with an aim to create an MSME-friendly ecosystem to boost job creation in the State – promoting Start-ups in every district, capacity development, seamless facilitation, mentorship support, knowledge sharing, facilitation, technology support, financial support, etc.
- b. Mentorship programs shall be curated in collaboration with Government organizations, incubation centres, etc., for assisting entrepreneurs to scale up.
- c. New-age programmes shall be designed, and Entrepreneur Clubs shall be set up across Colleges, by the Kerala Institute for Entrepreneurship Development (KIED).
- d. 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.
- e. Dedicated programs shall be curated 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 Scheme and KSIDC’s Seed Fund Programme shall be enhanced to offer support to Non-IT Start-ups across different phases.
- b. Dedicated MSME equity funds shall be launched.
- c. A Venture Capital Fund shall be created collectively by Kerala Bank, KSIDC, KFC, and KSFE exclusively for Start-ups and MSMEs, including for their R&D works, with a corpus of INR 200 Cr per year.
- d. Special initiatives shall be designed to strengthen the international market relations of Kerala start-ups and MSMEs.
- e. KSIDC’s Innovation Acceleration scheme shall be stepped-up.
- f. Greater access to funds shall be enabled by leveraging fintech.



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. An Industry-academia driven innovation ecosystem shall be created where universities would work with local partners across a range of issues/challenges/market.
- c. A State level innovation challenge and hackathon shall be launched in partnership with academia and industries, to identify innovative business ideas and facilitate funding avenues for such manufacturing 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 at 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.



ENABLING INFRASTRUCTURE

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

Ease of availability of land to set-up enterprises is a critical requirement for starting a business and information in this regard is to be curated in a robust fashion.

- 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.

ii. Infrastructure Upgradation 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 curated 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.



iv. Sector-focused Industrial Parks

Sector-focussed industrial parks are key to develop sectoral ecosystems and clusters in the State.

- a. Vertical Standard Design Factories (SDF) with modular facilities shall be developed in the State for industrial/ manufacturing projects.
- b. Dedicated areas shall be demarcated for R&D and Logistics facilities at new and existing sectoral parks.
- c. A Graphene Industrial Park shall be developed and the development of Pharma Zone at Petrochemical Park shall be fast-tracked.
- d. Bio-technology units and connected research institutes, and medical devices units shall be set up at the Life Sciences Park, Trivandrum.
- e. Sector-focussed Private Industrial Parks with plug-and-play facilities shall be encouraged in the State.
- f. The PM Gati Shakti Special Assistance for States Scheme shall be utilised for conceptualisation and development of new industrial infrastructure projects.

v. Dedicated 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 dedicated industrial corridors is poised to aid industries in increased 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 Malabar region of Kochi-Mangalore Industrial Corridor shall be developed.

vi. Industrial Township and Industrial Smart City

The presence of an ecosystem provides all enablers for enterprises to flourish, such as the requisite infrastructure as well as skilled manpower and other amenities. This is critical for development of industrial townships and fostering 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, exit procedures form an important aspect in creating an enabling 'ease of doing business' environment in the State.

- a. 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 ceiling limit, as prescribed under the Kerala Land Reforms Act, 1963, shall be raised for setting up Private Industrial Parks.
- c. Usage of plantation land for industrial purposes, and for setting up related ancillary units, processing centres, logistics & warehousing facilities shall be facilitated through enabling legislations.

x. Infrastructure Support for Scale-Ups

Budding enterprises require support especially to scale-up their operations in aspects such as adequate and cost-effective infrastructural and capital support.

- a. 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.



BEING 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. Enablement and Digitalisation for MSMEs

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. Industry 4.0 Technology Innovation Zone

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.
- d. R&D to produce cost-effective, tailor-made indigenous security solutions meeting cyber security challenges specific to the industrial sectors in State shall be encouraged through research grants, subsidies, working capital loans, etc., to research institutions and start-ups.

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 and adequate knowledge material shall be curated for enhancing knowledge sharing in this area.



BUILDING FUTURISTIC SKILLSETS FOR EMPLOYMENT

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. Cluster-Specific 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. Upskilling & Reskilling programmes shall be curated and conducted at regular intervals for MSMEs to acquire industry specific skill sets.
- c. Industry-specific short term/ long term/ modular courses shall be introduced in the existing ITIs, Polytechnics and Engineering Colleges.
- 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.

ii. Industry 4.0 Skilling Initiative

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. Programmes shall be curated in conjunction with Kerala Start-up Mission to develop a detailed plan to train individuals to adopt modern tools and technologies of industry 4.0.
- c. Partnerships between EdTech players and academic institutions shall be facilitated to train college students on new-age skills at subsidized rates.
- d. Skill Development Centres shall be established in association with Industry Associations for skilled manpower as per industry's requirements.

iii. Industry Training Centres for Excellence

Skill development and training are aspects which require convergence of academia and industry to bridge the skill gap and cater to the demands of the industries, for which creation of industry Centres for Excellence is important.

- a. An Industry 4.0 Centre of Excellence (CoE) shall be developed in PPP mode, with linkages to academic institutions to create competence labs, incubation centres and R&D ecosystems.
- b. Multi-Skill Training Centres shall be developed to cater to the sunrise sectors identified for the State.
- c. Sector-focussed 'Test beds' / sandboxes for trying out various technologies shall be developed to offer a common platform for Big Data players/researchers/start-ups etc.



SUPPORTIVE BUSINESS ENVIRONMENT

A robust supportive business environment is achievable through combined efforts across multiple domains including legislative reforms, digital reforms transforming investor engagement model, 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 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

A responsive and reactive administration which addresses the grievances of the enterprises with minimal time is required for providing a supportive business environment;

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

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 submission for application processes and subsequent verification is 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 Powers

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

- a. 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 and active Acts, and Rules can increase the ease of



regulatory compliance and further reduce delays in application process and the need for legal proceedings.

- a. A centralised repository of Central & State Acts/Rules shall be developed
- b. The repository shall be made accessible to public and collaterals/ knowledge material shall be developed for common public to understand the provisions of the Act/ Rule in conjunction with respective departments.

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 curated for Investors.
- d. The Invest Kerala Helpdesk 2.0 shall function 24x7 on all days.



viii. Continuous Stakeholder Engagements

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

- a. Regular Invest Kerala "Investor Konnect" meets, sector-wise Industry meets shall be conducted.
- 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 for Sunrise Sectors

The state aims to promote development of sectoral ecosystems and to facilitate a supportive environment for these sectors to avail benefits under various schemes and policies, industry status shall be accorded to select promising sectors.

- a. 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.

x. 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.

xi. Robust Industry Co-ordination Groups

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.

- a. 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. Availability of exports financing to exporters shall be enhanced.



ENHANCING 'KERALA' BRAND EQUITY

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. Building the Kerala Brand – Investment Promotion

Building the Kerala Brand would aid in promoting investments and add value to exports. The new 'Make in Kerala' branding will give multi-industry quality standard and will open a new way of marketing of different Kerala products and services across the globe under one unique brand.

- 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 the brand promotion.
- d. Participation of MSMEs with 'Made in Kerala' logo in various National & International Exhibitions / Trade Fairs shall be facilitated

ii. Export Promotion

Export promotion forms a significant part of brand building which aids in promoting regional and sectoral growth.

- 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. The activities of State Level Export Promotion Council and District Level Export Promotion Council shall be strengthened.

- d. Collaterals for Export Promotion shall be published in national and international Export-specific forums.
- e. Incentives shall also be extended to MSME exporters for participation in international trade fairs and exhibitions.

iii. Single Unified Portal 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 unified portal for engaging with investors shall be developed to facilitate a series of activities comprising of investments solicitation, investor outreach, and investor life cycle management.
- b. Digital mapping of Industrial clusters and sector-wide industries and resources in Kerala shall be undertaken.

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 industries and sectors and in different corners 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.



CREATING SECTORAL ECOSYSTEMS

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 sunrise sectors of the State forms an essential pillar of the policy.

i. Sector-Based Industry Master Data

A repository of the various industries registered in the State along with their sector wise classification would result in curating focussed sectoral policy initiatives.

- a. A sector-focused Industry databank shall be created in the State for implementing focused promotion & development programs and enhancing the competitiveness of MSMEs in the State.
- b. Data analytics shall be adopted to visualize the State's industry footprint and ESG compliance levels.

ii. Champion Sector Sub-Policies

To be at the forefront of the industries of the future, the State has identified following key sunrise sectors. These sunrise sectors would be governed by sub-policies which 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.

1. Artificial Intelligence
2. Ayurveda
3. Biotechnology & Life Sciences
4. Design
5. ESDM
6. Electric Vehicles

7. Engineering R&D
8. Food-Tech
9. Graphene
10. Hi-Tech Farming
11. High Value-Added Rubber Products
12. Logistics
13. Maritime Cluster
14. Medical Equipment
15. Nano Technology
16. Renewable Energy
17. Retail
18. Robotics
19. Space sector
20. Tourism & Hospitality
21. 3D Printing

The sector policy framework addresses the various aspects which should be considered for each sunrise sector such infrastructure, investment promotion and facilitation, digitization 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. ARTIFICIAL INTELLIGENCE

AI is an emerging field which provides solutions which extends beyond sectors or stages of production. It has the potential to revolutionise production systems and economies making them more effective and efficient.

a. Infrastructure

- i. A 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.



- ii. 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.

b. Investment Promotion and Facilitation

- i. Incentives shall be offered for the procurement and installation of AI related infrastructure components.
- ii. A Fund of Funds shall be set up to attract SEBI registered VC funds to invest in AI based start-ups and industries in Kerala. The Government shall invest equal amount invested by VCs in the Fund.

c. Research & Development

- i. Research scholars, start-ups, and industrial units in the State shall be encouraged to undertake industrial application-based research in the identified sunrise sectors of the State.
- ii. 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.

d. Skilling and Capacity Building

- i. 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 in the MSMEs in the State.

- ii. AI specific skilling program for Industrial Applications shall be developed along with Digital University Kerala and Department of Industries & Commerce.

2. AYURVEDA

Consumer habits and lifestyles have changed in recent times with greater focus on sustainable wellness, veganism, 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.

a. Infrastructure

- i. A Global Ayurveda Village (GAV) 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.
- ii. A world class Integrated Ayurvedic Centres of Excellence shall be established in the State.

b. Investment Promotion and Facilitation

- i. 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.



c. Skilling and Capacity Building

- i. Dedicated training programs on collection practices, cultivation practices and organic certification shall be curated.

d. Research & Development

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

3. BIOTECHNOLOGY & LIFE SCIENCES

The sector is composed of Biopharmaceuticals, Life Sciences, Bio industrial, Bio agriculture, Bio IT and Bio Services.

a. Infrastructure

- i. 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.

b. Investment Promotion and Facilitation

- i. 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.
- ii. Land at Life Sciences Park, Thiruvananthapuram shall be offered at subsidised prices for setting up of Biotech facilities in the State.

c. Research & Development

- i. A dedicated fund shall be curated for encouraging R&D in biotechnology
- ii. A State-of-the-art research infrastructure shall be established in the State in PPP mode for giving thrust to special projects which are of strategic importance such as stem cell therapy, biofuel, bioplastics, vaccine production etc.
- iii. Intellectual property rights (IPR) shall be

accepted as collateral against acquiring loans from financial institutions to promote innovation. Specific guidelines shall be established for the same.

4. 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.

Design for Industries

a. Infrastructure

- i. Design 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.
- ii. Common design centres shall be set up within industrial clusters/ industrial hubs.

b. Digitalisation and Technology

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

c. Regulatory and Institutional Mechanism

- i. Process guidelines and procedures for registration of new designs shall be streamlines
- ii. Promote and facilitate Intellectual Property (IP) generation in the area of design
- iii. Setting quality standards for design to enhance competitiveness

d. Investment Promotion and Facilitation

- i. Strategic alliances shall be established with global design companies to enable access to technology and know-how.



e. Skilling and Capacity Building

- i. Supporting programmes shall be curated for skilling of workforce in different areas of design.
- ii. Establishment of design centres within universities/colleges shall be encouraged.
- iii. Various courses and skilling programmes in different aspects of design shall be curated and industry-academia linkages for creating new design shall be established.

f. ESG & Sustainability

- i. Eco-friendly and sustainable designs across sectors shall be encouraged.
- ii. Sustainable designs/eco-design of industrial facilities shall be promoted.
- iii. Industrial use systems using alternate fuels like Green Hydrogen etc. shall be offered additional incentives.

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 deigning and thus enhancing the traditional crafts and leveraging technology to market them would help the sector and the artisans in growing further.

a. Infrastructure:

- i. 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.
- ii. 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.
- iii. 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 etc.

- iv. The number of spinning mills, automatic spinning machines and automatic looms shall be increased in the State.

b. Digitalisation and Technology

- i. A research grant for the development of innovative technology solutions to enhance the traditional crafts practices in Kerala shall be curated.

c. Investment Promotion

- i. Artisans access to Global online platforms to showcase their products and reach a wider market while ensuring fair prices shall be facilitated.
- ii. A dedicated program shall be curated for promotion of Traditional craft products at Government offices, Metro stations, investor facilitation centres and other key events etc.

d. Skilling and Capacity Building

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

5. 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.

a. Infrastructure

- i. An Electronics Hardware Park for Electronic Hardware manufacturing units and assembling units, R&D Centres, and the supporting infrastructure shall be established.
- ii. An Electronic Manufacturing Cluster (EMC)



shall be developed under the EMC scheme by MeitY.

- iii. KELTRON Karakulam Centre shall be established as a hub for power electronics with the help of CDAC's National Mission on Power Electronics.

b. Investment Promotion and Facilitation

- i. KELTRON shall establish joint ventures with global companies for upgradation and expansion of existing production capacity.
- ii. Electronics sector Domestic and International Expos shall be curated and conducted in the State.

c. Skilling and Capacity Building

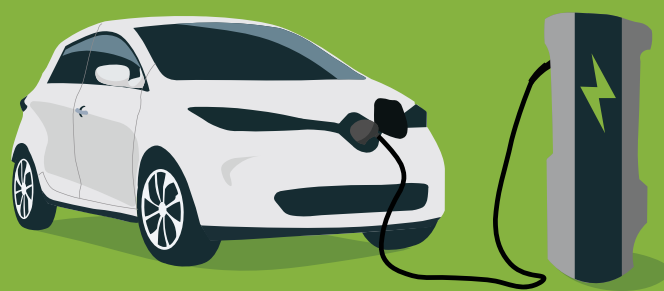
- i. Industry-academia linkages shall be formulated for creating skilled manpower in different electronics manufacturing segments like consumer electronics, automotive electronics, computer hardware, strategic electronics (aerospace & defence).
- ii. Government organizations/PSU/private companies shall be encouraged to set up Centres of Excellence (CoE) in ESDM through Institutional/academic collaborations.

d. Research & Development

- i. Industrial application-based R&D in ESDM sector shall be encouraged.
- ii. An R&D ecosystem for indigenous technology transfer to industry for commercialization, and creation of Intellectual Property (IP) shall be established.

6. ELECTRIC VEHICLES

The increased focus on and transition to electric vehicles, building a conducive ecosystem to ensure greater investment in the sector and promote manufacture of electric vehicles and other subsidiary industries in the State is critical.



a. Infrastructure

- i. 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.
- ii. Dedicated financial scheme for setting up of EV infrastructure and Swapping Stations shall be devised.

b. Research & Development

- i. Dedicated grant shall be allocated for institutions conducting research on electric mobility solution and EV component.
- ii. A Centres 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.
- iii. Industry oriented research on battery technology development, recycling & reuse of batteries, battery management systems, charging infrastructure, etc., shall be encouraged.



7. 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.

a. Infrastructure

- i. The ER&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.

b. Investment Promotion and Facilitation

- i. Global players shall be encouraged to set up Global Capability Centres (GCCs) for Engineering R&D in the State.
- ii. 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.

c. Skilling and Capacity Building

- i. 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.
- ii. 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.

8. FOOD TECH

a. Infrastructure

- i. 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, or private enterprises with low-cost precooling and cold chain

facility for grading, packing, improve quality and shelf life of products.

- ii. Food Tech incubators backed by the government, academic institutions, large food corporation and VCs shall be established.
- iii. A Mega Food Park/ Specialty Food Park shall be established in PPP mode with futuristic technology & modern amenities.

b. Digitalisation and Technology

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

c. Regulatory and Institutional Mechanism

- i. A marketing network with apex bodies to ensure proper marketing of processed products shall be established.

d. Research & Development

- i. A dedicated programme to collaborate 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. shall be curated.

9. 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.

a. Infrastructure

- i. 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.





b. Regulatory and Institutional Mechanism

- i. A specialized and independent Nodal Agency, viz., India Innovation Centre for Graphene (IICG) shall act as the State Nodal Agency.
- ii. The State shall come up with a separate Graphene Policy for promotion of Graphene based R&D, innovation, manufacturing and policy administration.

c. Skilling and Capacity Building

- i. Collaborations with national and international agencies shall be established to incorporate latest graphene-related development and research in industrial applications of Graphene.

d. Research & Development

- i. Dedicated fund shall be allocated for meeting the R&D, skill development and training requirements for Graphene.

10. HI-TECH FARMING

Leveraging technology to attain self-sufficiency in agriculture and reduce the stress on available natural resources is of high significance, pressing the need for promoting hi-tech farming practices in the State.

a. Infrastructure

- i. Agriculture Knowledge centres for Hi-tech farming shall be set up with scientists from Kerala Agriculture University as nodal officers.
- ii. Upgradation of existing departmental

laboratories including Soil Testing for soil fertility assessment and analysis of major inputs like fertilizers.

b. Skilling and Capacity Building

- i. Promoting new age hi-tech farming practices through workshops and awareness programmes in conjunction with Department of Agriculture for the promotion of vertical farming, hydroponics, aeroponics, aquaponics, micro-irrigation methods, polyhouse design, tissue culture, etc.
- ii. Training programs shall be curated for imparting modern farming techniques to agricultural workers.

c. Research & Development

- i. 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.

11. HIGH VALUE-ADDED RUBBER PRODUCTS

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.

a. Infrastructure

- i. An Industrial Park 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.
- ii. Group Processing Centres (GPC)/Community processing centres shall be established for natural rubber collection, pre-processing and testing to ensure quality raw material supply for specialized rubber products manufactured in the Park.



b. Digitalisation and Technology

- i. Training programmes and workshops shall be curated for the workforce in the rubber manufacturing sector to adopt modern tools and technologies of industry 4.0 in collaboration with Kerala Digital University, Kerala Start-up Mission, Rubber Board and Kerala Technical University (KTU).
- ii. Enabling access for High-value rubber products to e-commerce platforms.
- iii. Technology-led innovation activities of rubber smallholders, private entrepreneurs in production, processing, and value addition to produce high-value rubber products shall be encouraged.

c. Investment Promotion and Facilitation

- i. One-time reimbursement of 50% of cost incurred on obtaining quality certification for certification related to export of high value rubber products

d. Skilling and Capacity Building

- i. Upskilling programmes for the workforce in conventional rubber products manufacturing units shall be curated in coordination with Rubber Board/ Rubber Training Institute for enabling the conventional units to diversify into high value rubber products.
- ii. Roadshows and events shall be organised along with Industry – Academia collaboration to understand the market potential of high-value rubber products in international market

e. ESG & Sustainability

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

f. Research & Development

- i. A dedicated fund shall be curated for innovation in Rubber processing.
- ii. IPR shall be accepted as collateral against acquiring loans from financial institutions to promote innovation. Specific guidelines shall be established for the same.

12. LOGISTICS

Presence of robust logistical connectivity and supporting industry is essential for a growing economy.

a. Infrastructure

- i. Strengthening of logistically important roads shall be undertaken to support maximum tonnage vehicles
- ii. Cargo infrastructure shall be enhanced for using rail and water transport cargo.
- iii. Mini-multi modal logistics park shall be established.
- iv. Certain percentage of land shall be allocated for logistics facilities in upcoming Industrial Parks.
- v. City level logistics action plan shall be developed in conjunction with LSG Department.



- vi. Rail Freight transport (cold-chain, Ro-Ro support, good storage and loading facilities in stations etc.) shall be augmented.
- vii. A dedicated Logistics Cell will be established at KSIDC to coordinate and monitor the various activities in connection with the State Logistics Action Plan.
- viii. Steps will be taken to implement the suggestions/ recommendations in the LEADS Report published by the Ministry of Commerce, Government of India, pertaining to the State.

b. Digitalisation and Technology

- i. Traffic management technology systems shall be deployed in key cargo routes.
- ii. Start-ups in the logistics sector providing smart solutions for logistics shall be encouraged.

c. Regulatory & Institutional Mechanism

- i. An institutional setup for developing an ecosystem of minimal inspection and stoppage of trucks on road shall be curated.
- ii. A benchmarking framework to assess third party logistics service providers with various cargo handling capabilities shall be developed.

d. Investment Promotion and Facilitation

- i. Industry Status shall be accorded for Logistics (Warehousing) players.
- ii. An Industry Engagement Channel for legal, policy and standards setting shall be established by the logistics cell.

e. Skilling and Capacity Building

- i. A Specialized Skilling plan for logistics sector covering storage, transport & services; a high-level skilling needs analysis shall be curated.

f. ESG & Sustainability

- i. A green logistics and reverse logistics development plan shall be prepared.
- ii. Feasibility study for using Electric Vehicles for last-mile delivery shall be undertaken.

13. MARITIME CLUSTER

The proposed maritime cluster project at Cochin is poised to enhance the strength and development of maritime sector create robust ecosystem connecting all the stakeholders under the cluster realising the immense potential of maritime activity in Kerala.

a. Infrastructure

- i. Setting up of shipping and port related infrastructure comprising of ship repair, boat manufacturing and repair facility, and other facilities.
- ii. Existing export infrastructure shall be upgraded with new logistics, multimodal, exhibition facilities, warehouses, and maritime transport infrastructure.
- iii. 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.

b. Digitalisation and Technology

- i. 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.

c. Investment Promotion and Facilitation

- i. Export promotion expos and events shall be organised to promote products manufactured in the maritime cluster

d. ESG & Sustainability

- i. Attractive incentives shall be offered for manufacturers of boats/cruise vessels etc. that use sustainable fuels.

14. MEDICAL EQUIPMENT

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

a. Infrastructure

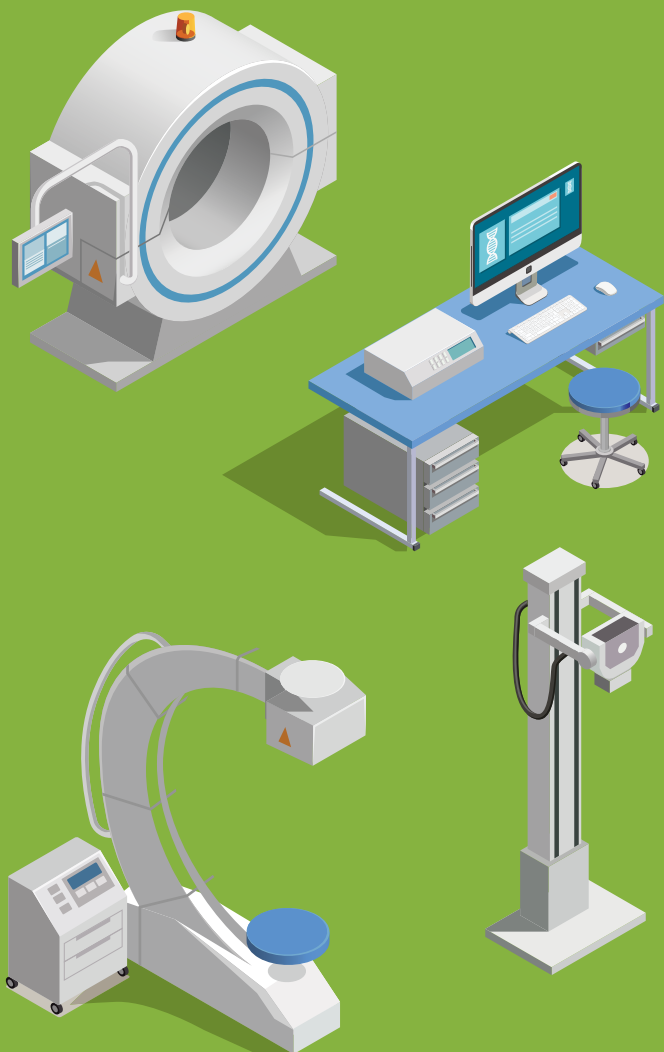
- i. A dedicated component design and moulding facility shall be developed at MedSpark for the shared use of the units in the park.
- ii. An online platform for sourcing and supply of high-quality medical materials such as high-temperature plastics, medical-grade silicone rubber, microfluidics, medical alloys, and elastomeric materials for the manufacture of medical devices shall be developed.
- iii. A dedicated medical device testing laboratory shall be set up at MedSpark to serve the local medical device manufacturing units in the State.

b. Investment Promotion and Facilitation

- i. One time reimbursement (up to 50%) of cost incurred for the obtaining the compliance certifications for medical devices manufacturing under domestic and international regulations, subject to a maximum of Rs. 25 Lakh.

c. Research & Development

- i. 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.
- ii. Centres of Excellence (CoE) shall be set up in premier academic and research institutions that support product development: design and prototyping, validation, and certification of the medical use of devices, adopt, implement, and advocate policies on efficacy and safety testing.
- iii. IPR shall be accepted as collateral against acquiring loans from financial institutions to promote innovation. Specific guidelines shall be established for the same.



15. NANO TECHNOLOGY

Nano Technology is a disrupting technology can revolutionize many industries especially for the end user. Its applications can be utilized in varied sectors such as agriculture, aerospace, defence, materials science, and energy.

a. Infrastructure

- i. 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.

b. Investment Promotion and Facilitation

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



c. Research & Development

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

16. 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.

a. Infrastructure

- i. 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.
- ii. A robust ecosystem shall be developed for private participation in power generation sectors.
- iii. Floating Solar Power projects shall be set up in the State under PPP model. Hybrid models with Green hydrogen production shall be explored.

b. Investment Promotion and Facilitation

- i. A "RE Innovation Award" programme shall be launched to attract and promote innovative developments in the field of RE technology and the winners shall be supported with financial assistance for transforming their ideas/ prototypes to commercial products.
- ii. A dedicated scale-up fund shall be curated 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)).

c. Research & Development

- i. A R&D hub in collaboration with educational institutions, research centres, industries, utility, etc. shall be established for working towards applied research and commercialization of



potential technologies to accelerate deployment of various combinations of solar cell technologies, energy storage solutions and solar-based hybrid co-generation technologies, hydrogen generation technologies etc. which will focus on improving efficiency in existing systems, reducing cost of balance of system.

d. ESG & Sustainability

- i. Expos and events shall be organised to promote 'green energy technologies'.

e. Regulatory & Institutional Mechanism

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

17. RETAIL

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

a. Infrastructure

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

b. Digitalisation and Technology

- i. A 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.

c. ESG & Sustainability

- i. Retailers shall be encouraged to adopt methods/technologies to reduce wastage and use of sustainable packaging solutions.

- ii. Installation of solar panels across warehouse and distribution centres, retail stores etc. shall be encouraged.

18. ROBOTICS

Robotics form a significant part of Industry 4.0, with industries moving towards partial or full automation.

a. Infrastructure

- i. Robotics Innovation / Incubation Centre shall be established at selected education institutions based on competency and track record in the field of robotics and automation.



b. Digitalisation & Technology

- i. A digital platform shall be developed to build open repository of AI challenges in industrial applications.
- ii. Special incentive package shall be curated for enterprises working to develop localized technologies for collaborative robots and related components and software etc. as part of their development to transform to smart factories

c. Investment Promotion and Facilitation

- i. Participation of start-ups, research institutions and other entities involved in robotics development in international robotic expos and forums shall be facilitated.
- ii. International expos and investment roadshows shall be organised to showcase the sectors in



the State with potential for robotic innovation such as agriculture, healthcare, education, tourism, disaster management, logistics, etc. for attracting investment in robotic solution development.

- iii. IPR shall be accepted as collateral against acquiring loans from financial institutions to promote innovation. Specific guidelines shall be established for the same.

d. Skilling and Capacity Building

- i. Robotic design workshops and workforce upskilling programmes in process automation for MSMEs, based on maturity level of industries/MSMEs shall be curated and conducted.
- ii. 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 up can showcase their offerings and the industry can source its technology requirements.
- iii. An advanced robot commercialization research centre, ICT convergence centre and humanoid robot research centre shall be established in collaboration with Government – Industry – Academia AI.

e. ESG & Sustainability

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



19. SPACE SECTOR

Kerala is nurturing start-ups in the space tech sector and striving to make the space industry play a significant role in the growth of Kerala. Kerala Space Park is one of the ambitious initiatives of the Government of Kerala to make Kerala a production hub for aerospace products and services.

a. Infrastructure

- i. An Industrial Park shall be set up under the existing Kerala Space Park project to position the State as a unique space tech hub

b. Digitalisation and Technology

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

c. Investment Promotion and Facilitation

- i. Participation of start-ups, research institutions and other entities involved in space technology development shall be facilitated for international expos and forums
- ii. Dedicated Innovation Fund shall be curated for Space Technology Application development focusing on ICT based projects in the Space Tech
- iii. Technology Development Fund (TDF) shall be curated for start-ups and scale-ups involved in space application development.

d. Skilling and Capacity Building

- i. An online platform shall be developed to link ISRO, VSSC, LPSU, IISU, IIST and start-ups in the State to promote collaboration in the development of Space 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.
- ii. Partnerships shall be explored with international space tech players, accelerators, large companies and the local SME's and Start-ups to gain access to international markets.



20. 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.

a. Infrastructure

- i. 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.
- ii. A data bank of vacant land parcels suitable for development of Caravan parks shall be Developing caravan Parks shall be established in conjunction with LSG Institutions / other Departments.

b. Investment Promotion and Facilitation

- i. Dedicated financial loan scheme shall be formulated for enterprises/entrepreneurs for purchase, furnishing, assembly of caravans.
- ii. New innovative Tourism and Hospitality Infrastructure facilities shall be promoted.
- iii. Tourism-led ancillary businesses such as Start-ups focusing on Technology use in Tourism shall be encouraged.

c. ESG & Sustainability

- i. 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 the caravan park shall be encouraged.



21. 3D PRINTING

3D printing or additive manufacturing is a sector which is revolutionizing manufacturing across industries varying from Aerospace and Defence to Medicine through applications such as tooling aids, visual and functional prototypes, and end-use parts.

a. Infrastructure

- i. A Centre for Promotion of Additive Manufacturing in PPP mode shall be established 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.
- ii. A world class bioprinting Lab through shall be established in PPP mode with facilities for advanced 3D bioprinting & research & development in the healthcare sector.

b. Regulatory & Institutional Mechanism

- i. 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.

c. Skilling and Capacity Building

- i. Dedicated courses shall be curated specifically for 3D printing in consultation with industry and academia and rolling out skilling programmes through Technology Clinics.
- ii. Financial assistance up to 50 per cent of the cost (subject to maximum INR 10 lakhs) to select academic institutions in the State to setup 3D printing labs to develop an educated and skilled human resource base for 3D printing technology.
- iii. One time reimbursement of upskilling cost shall

be provided for exiting workforce in MSMEs in 3D printing technology.

d. ESG & Sustainability

- i. 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.

e. Research & Development

- i. A fully funded R&D programme with a corpus of INR 10 Cr per year 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.

11. INCENTIVES

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 21 'Champion Sectors' identified above. The following incentives are identified under this policy.

Sl. No.	Incentive Category	Project Category	Description
1	Investment Subsidy on Fixed Capital	Large, Mega	10% subject to a maximum of Rs. 10 Cr.
2	SGST Reimbursement	Large, Mega	100% reimbursement on capital investment for 5 years
3	Apprenticeship Incentive (Manufacturing sector)	Manufacturing Sector	50% of the stipend subject to a maximum of Rs. 5,000/- per apprentice for 6 months for 1,000 apprentices (yearly)
4	Electricity Duty Exemption	MSMEs	100% exemption for 5 years
5	Access to Finance for MSMEs through IPO route	MSMEs	Existing and new MSMEs shall be reimbursed 50% expenses subject to a maximum of Rs. 1 Cr., incurred on floating Public Issue through the SME platform of NSE & BSE, provided the funds thus raised are utilized for setting up/ expanding enterprise in the State.
6	Waiver of Stamp Duty & Registration charges	Manufacturing Sector	Up to 100% on lease deed/ purchase of land/ building for setting up manufacturing unit in Government and notified Private Industrial Parks
7	Waiver of Stamp Duty & Registration charges	Women & SC/ ST entrepreneurs	Up to 100% on lease deed/ purchase of land/ building for setting up manufacturing unit in the State



Sl. No.	Incentive Category	Project Category	Description
8	Interest Subvention	MSMEs	2% interest subvention on term loan taken for fixed capital investment, by priority sector units, from Govt. financial institutions, for a period of 5 years from the date of starting commercial operations
9	Reduction in Land Conversion charges	Large	Waiver of 50% of conversion charges as well as full exemption from remitting additional fees for the built-up space to be developed on the converted land, for setting up Manufacturing units and Logistics Parks having a minimum capital investment of Rs. 100 cr. (excluding land cost)
10	Incentive for exporters for participation in international trade fair	MSME	Exporters will be reimbursed up to 100% of the stall charges incurred subject to a maximum of Rs. 5 lakhs for participating in one international fair/ exhibition per annum
11	IP creation incentive	MSME	Reimbursement of 50% of the expenditure incurred subject to a maximum of Rs. 30 lakhs, for patent, copyright, trademarks, GI registration, etc.
12	Quality Certification incentive	MSME	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 Reimbursement of 50% of the cost incurred in obtaining 'Made in Kerala' certification
13	Incentives for sustainability and responsible industrialization	MSME	Reimbursement of 25% of expenses incurred for purchase of Plant & Machinery/ equipment for setting up ETP, rainwater harvesting, Zero Discharge technologies, recycling of e-waste and recycling of wastewater, excluding expenditure incurred for civil works, subject to a maximum of Rs. 25 Lakhs during the policy period
14	Incentive for introducing IR 4.0 initiatives in manufacturing process	MSME	20% reimbursement of the cost of Software (big data analytic tools), machinery, etc., subject to a maximum of Rs. 25 lakhs/unit during the policy period

12. PERIOD OF POLICY

The new industrial policy will be in effect from date of publishing in the gazette for a period of five years.



