TAMIL NADU
ELECTRIC VEHICLE POLICY 2019
Tamil Nadu
Land of Abundant Opportunity
TAMIL NADU ELECTRIC VEHICLE POLICY 2019
I  Preamble
II  Electric Vehicles of India and FAME India Guidelines
III  Vehicle Population in Tamil Nadu
IV  Need for Electric Vehicle Policy in Tamil Nadu
V  Advantage of EV Ecosystem for Tamil Nadu
VI  Scope and Applicability of EV Policy
VII  Objectives of EV Policy
VIII  Policy Measures
    A. Electric cars and Two Wheelers
    B. Electric Vehicle in Shared Mobility
    C. Electric Vehicle in Public Transport
    D. Electric Vehicle in Educational Institutions
    E. Electric Vehicles in Goods Carriers
IX Demand-Side Incentives
    A. Incentives for Purchase of Electric Two Wheelers
    B. Incentives for Three-Seater Auto-Rickshaw
    C. Incentives for Transport Vehicle such as Taxi, Tourist Cars, etc.,
    D. Incentives for Goods Carriers (including Three Wheelers)
    E. Incentives for Private Car Purchase
    F. Incentives for Charging Stations
| I | Preamble | 01 |
| II | Electric Vehicles of India and FAME India Guidelines | 03 |
| III | Vehicle Population in Tamil Nadu | 04 |
| IV | Need for Electric Vehicle Policy in Tamil Nadu | 05 |
| V | Advantage of EV Ecosystem for Tamil Nadu | 06 |
| VI | Scope and Applicability of EV Policy | 07 |
| VII | Objectives of EV Policy | 08 |
| VIII | Policy Measures | 09 |
| | A. Electric cars and Two Wheelers | |
| | B. Electric Vehicle in Shared Mobility | |
| | C. Electric Vehicle in Public Transport | |
| | D. Electric Vehicle in Educational Institutions | |
| | E. Electric Vehicles in Goods Carriers | |
| IX | Demand-Side Incentives | 11 |
| | A. Incentives for Purchase of Electric Two Wheelers | |
| | B. Incentives for Three-Seater Auto-Rickshaw | |
| | C. Incentives for Transport Vehicle such as Taxi, Tourist Cars, etc., | |
| | D. Incentives for Goods Carriers (including Three Wheelers) | |
| | E. Incentives for Private Car Purchase | |
| | F. Incentives for Charging Stations | |
Tamil Nadu is one of the most advanced states in India. It is one of Asia’s most preferred investor destinations. It is the second largest state economy in the country, which contributes to 8.4% of India’s GDP. It is also an industrial powerhouse of the nation with a very strong and diverse industrial base.

Tamil Nadu has a highly developed industrial ecosystem and is very strong in sectors like automobiles and auto-components, textiles, leather products, light and heavy engineering, pumps and motors, electronics software and hardware. Many globally renowned companies have set up their manufacturing facilities in Tamil Nadu.

The State Government, in its mission to further enhance the position of Tamil Nadu as the most preferred state for manufacturing, with a reputation for efficiency and competitiveness, is guided by the objective of having an environmentally sustainable growth in consonance with the Sustainable Development Goals framework of the United Nations.

Globally, the automove industry is at the cusp of a great revolution in electric mobility. The twentieth century was fuelled by the development and diffusion of Internal Combustion Engines, primarily on account of accessibility of vehicles and affordability of fuel. Clean transport remains
I. Preamble

Tamil Nadu is one of the most advanced states in India. It is one of Asia’s most preferred investor destinations. It is the second largest state economy in the country, which contributes to 8.4% of India’s GDP. It is also an industrial powerhouse of the nation with a very strong and diverse industrial base.

Tamil Nadu has a highly developed industrial eco-system and is very strong in sectors like automobiles and auto-components, textiles, leather products, light and heavy engineering, pumps and motors, electronic software and hardware. Many globally renowned companies have set up their manufacturing facilities in Tamil Nadu.

The State Government, in its mission to further enhance the position of Tamil Nadu as the most preferred state for manufacturing, with a reputation for efficiency and competitiveness, is guided by the objective of having an environmentally sustainable growth in consonance with the Sustainable Development Goals framework of the United Nations.

Globally, the automotive industry is at the cusp of a great revolution in electric mobility. The twentieth century was fuelled by the development and diffusion of Internal Combustion Engines, primarily on account of accessibility of vehicles and affordability of fuel. Clean transport remains
one of the most pressing questions of this century. The shift to clean transport has become necessary due to rapid depletion of fossil fuel and increase in fuel cost, vehicle population and environmental pollution. These push factors are driving governments and vehicle manufacturers to invest in developing vehicles based on alternate propulsion systems including electric mobility on rechargeable batteries. The electrification of transport is important for achieving goals of reducing GHG emissions and improving local air quality. Electric Vehicles (EVs) are generally considered to be safer than their Internal Combustion Engines (ICE) counterparts because of a low centre of gravity due to the low position and density of the battery pack, and increased frontal crumple zone. EVs generally have an increased crumple zone since electric motors take up much less space than ICEs which makes EVs much safer.

Adoption of Electric Vehicles (EVs) for road transport contributes to a wide range of goals. These include better air quality, reduced noise pollution, enhanced energy security and in combination with a low carbon power generation mix - reduced greenhouse emissions. In addition to being
very efficient in reducing local air pollution, EVs can also lead to a reduction in overall pollution when electricity is generated from clean or renewable sources. This is particularly relevant for the State of Tamil Nadu which is the leader in renewable energy with an installed capacity of 12,180 MW.

In this decade alone, there has been tremendous innovation in EV Technology which has led to a decrease in battery costs and increase in performance and range. This progress can be expected to continue at an accelerated pace. Within the next decade, there is a clear possibility of cost reduction in electric mobility through advancements such as:

a) Battery cost is expected to decrease by half.

b) Electric Vehicle performance is expected to improve by two-folds.

c) Charging time is expected to decrease from 5 hours to less than 1 hour, thereby, reducing the range anxiety.

II. Electric Vehicles in India and FAME India Guidelines

In 2013, Government of India launched the National Electric Mobility Mission Plan 2020. Under the mission plan, the Scheme for Faster Adoption and Manufacturing of (Hybrid) Electric Vehicles in India (FAME India) was launched in March, 2015 for two years as Phase-I, which was subsequently extended up to 31 March, 2019.

The Government of India in its Automotive Mission Plan 2016 has laid a vision of “Safe, Comfortable and Efficient mobility” with an eye on environmental protection and affordability through Public and Personal Transport. After review of the Phase-I, Government of India came up with FAME India Phase-II (FAME II) for period of three years from 1 April 2019 with verticals such as Demand Incentives, Establishment of Network of Charging Station and Administration of Scheme.
FAME II aims to boost electric mobility and increase the number of electric vehicles in commercial fleets with an outlay of ₹10,000 crore (₹ 100 billion) for three years till 2022. The Government will offer the incentives for electric buses, three-wheelers and four-wheelers to be used for commercial purposes. Plug-in hybrid vehicles and vehicles with a sizeable lithium-ion battery and electric motor will also be included in the scheme. Fiscal support shall be offered based on the size of the battery.

Several states have announced their EV Policy to complement the National scheme and to address state-specific needs. The EV30@30 campaign, launched in 2017 under Electric Vehicle Initiative (EVI), a multi-governmental policy forum, of which India is a member, sets a collective aspirational goal for all members to have EVs contribute up to 30% of all vehicle sales by 2030.

### III. Vehicle Population in Tamil Nadu

Sustained economic development and expanding road network have led to rapid increase in the number of motorized vehicles in Tamil Nadu. The total number of registered motor vehicles in Tamil Nadu has increased from about 3.21 lakhs in 1981 to over 2.77 crores (27.7 million) in 2019; recording a compounded annual growth rate (CAGR) of 12.4%. As on 31.03.2019, there were 12.7 lakh (1.27 million) transport vehicles and 2.64 crore (26.4 million) non-transport vehicles plying in the State. As of 31.07.2019, Tamil Nadu accounts for 6.4% electric vehicles sold in India.
The projected total vehicle population for the year 2030 is 9.8 crore vehicles. Given that the transportation sector currently accounts for nearly one-fourth of GHG emissions and the projected growth of the fleet in the State, there is an immediate need to transition to an alternate cost-effective fuel that creates less pollution.

IV. Need for Electric Vehicle Policy in Tamil Nadu

Tamil Nadu has the second highest vehicle population in the country with 2.77 crore vehicles. This accompanies an increase in air pollution and accidents in the state. Tamil Nadu has the highest rate of urbanisation in the country with close to 50% of its people residing in urban areas. The Government of Tamil Nadu has led many initiatives to reduce air pollution and congestion on roads. At the end of FAME Phase I, the electric vehicle penetration remained low in Tamil Nadu. A dedicated strategy to address price of EVs, public charging infrastructure and investment in EV manufacturing and charging infrastructure is required to promote adoption of EVs in the state.

The Vision 2023 Tamil Nadu envisages Tamil Nadu to be the most prosperous and progressive state free from poverty, and where its people enjoy all the basic services of a modern society and live in harmonious engagement with the environment and with the rest of the world. In order to attain the objectives as per the priorities of the State of Tamil Nadu and the Government of India, the formulation of a dedicated Electric Vehicles Policy has become imperative.
V. Advantage of EV Ecosystem for Tamil Nadu

Tamil Nadu is on the verge of transitioning to new mobility solutions and has an established ecosystem for its vibrant automotive sector with a large pool of technical manpower, robust R&D capabilities, ancillaries auto components and manufacturing expertise.

The sector has deep backward linkages with metal industries, capital equipment, trucking, warehousing, and logistics. In addition, it also has strong linkages with dealership, retail, credit and financing, repair and maintenance, gas stations and service parts.

Chennai is home to major automobile manufacturing companies in India, such as Hyundai, Ford, Nissan, TVS, Mahindra, Daimler, etc. It has a huge scope for upgradation and expansion for producing Electric Vehicles within the existing manufacturing facilities. The first EV SUV made in India was manufactured in Tamil Nadu by Hyundai. The Government of Tamil Nadu supported this project with a very innovative model of financial incentives and facilitations through an MoU signed with Hyundai during the Global Investors Meet, 2019.
Tamil Nadu is one of the power surplus states with two nuclear plants and many thermal and hydro-electrical power stations in the State offering a steady source of electricity required for the EV ecosystem. In particular, the State has one of the highest installed capacity for renewable energy such as wind energy and solar energy. This offers a reduction in overall pollution in addition to reduction in local air pollution.

The state has many technical institutions that provide a pool of skilled workforce for the industry. On the demand side, there is predominant and growing urban population augmented with a high growth of vehicles.

This makes Tamil Nadu a unique destination for developing electric mobility ecosystems.

VI. Scope and Applicability of EV policy

Vehicles, companies and charging infrastructure firms need to fulfil the FAME II guidelines issued by the Ministry of Heavy Industry, Government of India, as mandated and in order to be eligible for demand side incentives from the State Government. Charging infrastructure and its components should fulfil the guidelines and norms issued by the Ministry of Power, Government of India. In the case of supply side incentives to promote EV Manufacturing within Tamil Nadu as mentioned in Para X subsequently, the manufactured products must conform to either national or international standards.

The term EVs as used in the policy refers to battery electric vehicles (BEV), plug-in electric vehicles (PEV), plug-in hybrid electric vehicles (PHEV) and strong hybrid electric vehicles (SHEV).
VII. Objectives of EV Policy

It is the vision of the Government of Tamil Nadu to attract ₹50,000 crore (₹500 billion) of investment in EV manufacturing and create a comprehensive EV ecosystem in the State. Such investment is expected to create 1.5 lakh new jobs. The broad objectives of this policy are the following:

i) Create robust infrastructure for electric vehicles including adequate power supply and network of charging points with favourable power tariff.

ii) Promote innovation in EV for automotive and shared mobility by providing the ecosystem and infrastructure to make Tamil Nadu, the EV Hub of India.

iii) Create a pool of skilled workforce for the EV industry through the technical institutions available in the State and create new jobs in the EV industry.

iv) Make Tamil Nadu the preferred destination for Electric Vehicles and component manufacturing units including battery and charging infrastructure.

v) Create a conducive environment for Industry and Research Institutions to focus on cutting edge research in EV Technologies and reap the benefit from the outcome.

vi) Recycle and reuse used batteries and dispose the rejected batteries in an environment friendly manner to avoid pollution.
It is the vision of the Government of Tamil Nadu to attract ₹50,000 crore (₹500 billion) of investment in EV manufacturing and create a comprehensive EV ecosystem in the State. Such investment is expected to create 1.5 lakh new jobs. The broad objectives of this policy are the following:

I) Create robust infrastructure for electric vehicles including adequate power supply and network of charging points with favourable power tariff.

ii) Promote innovation in EV for automotive and shared mobility by providing the ecosystem and infrastructure to make Tamil Nadu, the EV Hub of India.

iii) Create a pool of skilled workforce for the EV industry through the technical institutions available in the State and create new jobs in the EV industry.

iv) Make Tamil Nadu the preferred destination for Electric Vehicles and component manufacturing units including battery and charging infrastructure.

v) Create a conducive environment for Industry and Research Institutions to focus on cutting edge research in EV Technologies and reap the benefit from the outcome.

vi) Recycle and reuse used batteries and dispose the rejected batteries in an environment friendly manner to avoid pollution.

VII. Objectives of EV Policy

The Government of Tamil Nadu will focus on policy interventions intended to encourage EV manufacturing as well as EV marketing in the State. To promote investments in Electric Vehicle Manufacturing, EV Battery Manufacturing or Assembly and EV Charging Infrastructure manufacturing, and Equipment Manufacturing Enterprises, incentives and concessions will be offered by the Government of Tamil Nadu. Further, it is envisaged that network and diffusion effects shall spur early market creation through demand side incentives and creation of charging infrastructure will promote the culture of EV usage in the State. The State’s approach to each class of vehicles will be as follows.

A. Electric Cars and Two-Wheelers

Nearly 25 lakh personal cars have been registered in the State, so far. Nearly 85% of vehicle population is two-wheeler and there is a great potential for cars and two-wheelers in the EV segment. The two-wheeler segment has relatively lower battery capacity requirements which enables fast charging solutions through standard charging infrastructure. The conversion to EV will be encouraged through fiscal concessions and creation of charging network.

B. Electric Vehicle in Shared Mobility

The State will promote conversion of all Auto Rickshaws in six major cities - Chennai, Coimbatore, Trichy, Madurai, Salem and Tirunelveli to EVs within a span of ten years. This will be extended to other cities and towns in a gradual manner. Similarly, the State will support conversion of all taxis and app-based transport operators and aggregators in the six major cities to EVs within a span of ten years.

C. Electric Vehicle in Public Transport

Around 21,000 Public Transport buses are operated by State Transport Undertakings (STUs) in the State. STUs will strive to replace
around 5% of the buses as EV every year and around 1000 EV buses may be introduced every year.

Buses are expected to be charged at the Bus Depots using 3-Phase electric connection. In addition, small top up charging can be done en-route at station or bus terminals. One slow-charging unit for every electric bus and one fast-charging station for every 10 electric buses shall be provided.

Private Operators of buses will also be encouraged to transition to EV buses. The Private Bus owners shall convert ICE buses into electric buses at their choice. Conversion of the buses operated to pilgrimage centres, tourist places, national parks, etc. into EVs will be encouraged.

D. Electric Vehicle in Educational Institutions

There are 32,000 buses, mini buses and vans run by Educational Institutions such as schools and colleges in the State. These institutional vehicles will be encouraged to transition all their vehicles to EVs gradually.

E. Electric Vehicles in Goods Carrier

Small commercial vehicles used for delivering light loads such as mini goods vehicles in cities will be encouraged to convert to EVs. E-commerce and delivery companies in Tamil Nadu will be encouraged to transition their vehicles to mini goods EVs gradually. Due to the current battery capacity constraints, goods transport lorries may require longer to transition to EVs as the technology evolves.
IX. Demand-Side Incentives

A. Incentives for Purchase of Electric Two Wheelers
   i) 100% road tax exemption will be provided till 30.12.2022.
   ii) Waiver on Registration charges/fees will be done as per Government of India's notification.

B. Incentives for Three-Seater Auto-Rickshaws
   An Open Permit System will apply to approved e-Auto Permits to be issued. The list of approved e-autos will be notified by the Department of Transport. The following further incentives will be offered:
   i) Auto Rickshaw permit fees will be waived for e-autos till 30.12.2022.
   ii) 100% Road Tax exemption for e-autos till 30.12.2022.
   iii) Waiver on Registration charges/fees will be done as per Government of India's notification.

C. Incentives for Transport Vehicles such as Taxi, Tourist Cars, etc.
   i) Taxi permit fees will be waived for Electric Transport Vehicles till 30.12.2022.
   ii) 100% Road Tax exemption for all Electric Transport Vehicles till 30.12.2022.
   iii) Waiver on Registration charges/fees will be done as per Government of India's notification.
   iv) STUs will be provided with subsidy to enable purchase of EV buses.

D. Incentives for Light Goods Carriers (including Three Wheelers)
   i) There will be no requirement of permit for the three-wheeler goods, e-carriers as well as electric Light Goods carrier.
   ii) 100% Road Tax exemption for all e-carriers registered till 30.12.2022.
iii) Waiver on Registration charges/fees will be done as per Government of India's notification.

E. Incentives for Private Cars

i) Private car owners shall be encouraged to switch over to electric cars.

ii) Waiver on Registration charges/fees will be done as per Government of India's notification.

iii) Road tax exemption will be enhanced from 50% to 100% till 30.12.2022.

F. Incentives and Support for Charging Stations

Experience in other cities across the globe indicates that availability of charging stations is a key driver for EV adoption. The objective of this policy is to create an enabling environment to provide private and public charging infrastructure in the State. In this regard, the State Government commits to the following:

i) Adequate policy support will be provided for the development of charging infrastructure in cities and other places.

ii) The State will invest in setting up charging stations, with the active participation of public sector units including TANGEDCO and private players.

iii) The Government will develop schemes with appropriate capital subsidy to enable private operators to set up public charging stations.

iv) Provision for charging stations will be made in commercial buildings such as hotels, shopping malls, cinema halls, apartments, etc.

v) The Government will take effort to set up 3*3 Grid charging stations in Chennai, Coimbatore, Trichy, Madurai, Salem and Tirunelveli.

vi) One charging station will be set up at 25 km intervals on both sides of NHAI and State Highways.
vii) Charging points will be provided in the Government office parking lots in Chennai, Coimbatore, Madurai, Trichy, Salem, Tirunelveli and other places based on the requirements.

viii) TANGEDCO will invest in setting up both slow and fast charging networks in Government buildings and other public places.

ix) TANGEDCO will setup the charging infrastructure on its own or through private operators using appropriate Public Private Partnership models.

x) EV charging service providers can also setup their own renewable energy generating stations at their premises for charging Electric Vehicles.

xi) The tariff applicable for domestic consumption shall be applicable for Private Charging Station at home and classified as LT Tariff-IA-230 Volt /415 Volt as per Tariff order T.P.No:1 of 2017 dt 11.08.2017 (LT Tariff-IA). Typically, most of the slow charging or overnight charging for EV (2 Wheelers, 3 Wheelers or small 4 Wheelers) may be done from this domestic service connection. Private charging in case of Offices, Malls, Gated Community, etc can be done in the common supply with the LT Tariff-V of TANGEDCO.

xii) Tariff for the supply of electricity to Public Charging Stations (PCS) will be determined by TNERC and it will be endeavoured to fix the tariff as not more than the 15% above the average cost of supply.

xiii) Supply of Renewable Energy will be ensured on preferential basis at for EV charging stations with zero connection cost.
X.Supply-Side Incentives to Promote EV Manufacturing Within Tamil Nadu

The Government of Tamil Nadu offers attractive incentives to promote new industrial investments in the State under the Tamil Nadu Industrial Policy. The manufacture of electric vehicles, their auto components, particularly EV batteries and manufacture of charging infrastructure will be provided a special package of incentives.

The condition of eligibility for availing incentives under the special package shall be that the units engaged in EV, their component or charging infrastructure manufacture shall make investments above ₹50 crore (₹ 500 million) and create at least 50 direct jobs in the form of new projects or expansion projects. Investments made from April 1, 2018 will be considered eligible for availing incentives. The incentives will include the following:

A. Reimbursement of SGST

100% of the SGST paid on the sale of EVs manufactured, sold and registered for use in the State will be reimbursed to the manufacturing companies. The reimbursement will be given for sales by manufacturers effective till 31.12.2030. The reimbursement will be given up to 100% of the eligible investment.

B. Capital Subsidy

In the case of intermediate products used in the manufacture of EV and charging infrastructure, where SGST reimbursement is not applicable, a capital subsidy of 15% will be given on eligible investments over 10 years. The capital subsidy will be payable on eligible investments made in the State till 31.12.2025. The cost of land shall not exceed 20% of the total eligible investments reckoned for the purpose of capital subsidy.
C. **Electricity Tax Exemption**

EV related and charging infrastructure manufacturing industries in the State will be provided 100% exemption on electricity tax till 31.12.2025.

D. **Stamp Duty Exemption**

EV related and charging infrastructure manufacturing industries in the State that obtain land by sale or lease shall be entitled to 100% exemption on stamp duty for transactions till 31.12.2022.

E. **Subsidy on Cost of Land**

EV related and charging infrastructure manufacturing industries in the State that obtain land from SIPCOT, SIDCO or other Governmental agencies will be provided a 15% subsidy on the cost of land, and will be provided 50% subsidy if the investment is in Southern districts. This incentive is subject to the condition that the land cost is already not claimed as part of capital subsidy. This subsidy will be available on allotments made till 31.12.2022.
F. Employment Incentive

EV related and charging infrastructure manufacturing units will be provided an employment incentive in the form of the reimbursement of employer's contribution to the EPF for all new jobs created till 31.12.2025. This incentive shall be paid for a period of one year and shall not exceed ₹48000 per employee.

G. Special Package for EV Battery Manufacturing

The Government will provide higher capital subsidy of 20% of the eligible investment over 20 years in cases where manufacturing units are engaged in EV battery manufacturing. Such units shall also be provided land at 20% subsidy and at 50% subsidy in Southern districts. The special package will be applicable for investments made till 31.12.2025.

H. Creation of EV parks and Vendor Ecosystem

The Government recognises that major investments by the EV OEMs can be attracted only if there is a dedicated infrastructure and developed vendor eco system. To create the same, the Government will develop exclusive EV parks in major auto manufacturing hubs and also in areas which have potential to attract EV investments.

These EV parks will enable the creation of a vendor ecosystem that will serve OEMs. Common facilities will be provided to the vendor industries for proto typing, testing, training, etc. in these EV parks. Incentives under various schemes applicable to the MSME sector and major Industries shall be extended to these industries, subject to their eligibility.

The Government will also promote Logistic Parks and Free Trade Warehousing Zones for better inventory management. Further, Plug and Play manufacturing facilities will be created where vendors and OEMs can commence production with minimal capital investment in land and building.

I. Special Incentives for the MSME Sector

An additional capital subsidy of 20% will be offered over and above the eligibility limit for capital subsidy under the existing capital subsidy
scheme to MSME units that are engaged in E-Vehicle component or charging infrastructure manufacturer. Further, for such E-Vehicle component and charging infrastructure manufacturing firms falling under the Medium Industries category that avail loans from Tamil Nadu Industrial Investment Corporation, 6% interest subvention will be provided as against 3% under the existing scheme. These incentives will be applicable for units that are set up till 31.12.2025.

J. Transition Support

With a view to assisting existing investors to transition into the EV manufacturing system, the principle of maintaining base volume production for expansion projects will not be applicable for EV manufacturers. Further, existing automobile manufacturing companies will be provided a one-time re-skilling allowance for every existing employee in the production line.

K. Institutional Mechanism

The incentives mentioned in Clauses A-J above shall constitute the ‘EV Special Manufacturing Package’. It will be sanctioned to eligible industries by the Government based on the recommendation of the Tamil Nadu Industrial Guidance and Export Promotion Bureau. The existing institutional mechanism for disbursal of investment related incentives to major industries and MSME sector shall be applicable to the
In order to distinguish the Electric Vehicles (battery operated vehicles) from other vehicles, Registration Mark (Vehicle number plate) shall be exhibited in yellow colour on a green background for transport vehicles and white colour on green background for all other EVs. All the vehicles should fulfil conditions stipulated to register under Central Motor Vehicle Rule.

The respective Industrial Guidance Bureaus for Large industries and MSME sector shall provide the necessary handholding services for EV-related investments in the State. The Industries Department will notify the list of eligible auto-components and charging infrastructure components whose manufacture will be eligible for concessions under this chapter based on the advice of a technical committee constituted for this purpose.

XII. City Building Codes

Tamil Nadu has a good young demographic and skilled manpower in all trades which is critical to support any industrial operations. The State will identify the nature and level of skills required by the EV industry to develop and execute training programmes on EV design, development, & manufacturing through various channels.

Higher education Department will redesign the curriculum in Engineering as well as Polytechnic colleges in Electrical and Electronics, Mechanical and Automobile courses to suit to the EV industry requirements, including setting up of Centres of Excellence. Similarly, ITI curriculum will also be updated accordingly.

XIII. Capacity Building and Skilling

In order to distinguish the Electric Vehicles (battery operated vehicles) from other vehicles, Registration Mark (Vehicle number plate) shall be exhibited in yellow colour on a green background for transport vehicles and white colour on green background for all other EVs. All the vehicles should fulfil conditions stipulated to register under Central Motor Vehicle Rule.
XII. City Building Codes

i) Amendment to building and construction laws will be made to ensure that charging infrastructure is integrated at the planning stage itself for all new constructions and apartments in cities.

ii) All existing apartment associations with 50+ families will be encouraged to provide charging points in parking lots.

iii) Existing Residential Townships with 500 + families will be encouraged to install charging stations.

iv) At least 10% of Parking Space will be earmarked for EVs in commercial buildings such as hotels, shopping malls, cinema halls, apartments, etc. and charging stations will be set up in the earmarked space.

XIII. Capacity Building and Skilling

Tamil Nadu has a good young demographic and skilled manpower in all trades which is critical to support any industrial operations. The State will identify the nature and level of skills required by the EV industry to develop and execute training programmes on EV design, development, & manufacturing through various channels.

Higher education Department will redesign the curriculum in Engineering as well as Polytechnic colleges in Electrical and Electronics, Mechanical and Automobile courses to suit to the EV industry requirements, including setting up of Centres of Excellence. Similarly, ITI curriculum will also be updated accordingly.
Tamil Nadu Skill Development Corporation (TNSDC), in the lines of National Skill Development Corporation (NSDC), is a not-for-profit company under Companies Act, 2013 that was established in 2013 to provide skill training to the required industries. This will provide the finishing and short term skilling to the existing technical person on the EV based on the skill qualification approved by NSDC.

Short term (4-6 months) finishing course post completion of graduate Engineering course will be introduced in select Engineering Colleges and Premier Technical Institutes in collaboration with TNSDC. These courses will be designed in consultation with EV Industry and will include short internship module at partnering OEMs. The Government will focus on training in light and precision assemblies, electrical powertrains and mechatronics.

A high-level Committee shall be formed to monitor the implementaon of E-Vehicle with Chief Secretary, Government of Tamil Nadu as the Chairman and the following Committee Members:

- Additional Chief Secretary, Home Department
- Principal Secretary, Transport Department
- Principal Secretary, Finance Department
- Principal Secretary, Energy Department
- Principal Secretary, Highways Department
- Principal Secretary, Industries Department
- Principal Secretary, MA & WS Department
- Chairman, TANGEDCO
- Commissioner of Transport
- MD & CEO, TN Industrial Guidance Bureau
- Upto Five experts from various fields pertaining to E-Vehicles manufacture, battery charging etc.,
A high-level Committee shall be formed to monitor the implementation of E-Vehicle with Chief Secretary, Government of Tamil Nadu as the Chairman and the following Committee Members:

- Additional Chief Secretary, Home Department
- Principal Secretary, Transport Department
- Principal Secretary, Finance Department
- Principal Secretary, Energy Department
- Principal Secretary, Highways Department
- Principal Secretary, Industries Department
- Principal Secretary, MA & WS Department
- Chairman, TANGEDCO
- Commissioner of Transport
- MD & CEO, TN Industrial Guidance Bureau
- Upto Five experts from various fields pertaining to E-Vehicles manufacture, battery charging etc.,
XV. Implementing Agencies

The Industries Department will be the nodal department for the implementation of all manufacturing related incentives under Electric Vehicle Policy in Tamil Nadu. The Energy Department will ensure that public and private charging stations are provided with all necessary facilitations and incentives. The Transport Department shall be the nodal department for issuing guidelines to achieve the other objectives of the policy.
A. Working Group

The Government of Tamil Nadu will constitute Working Groups for development of necessary technologies from concept to market in the areas of Drive Technologies, Battery Technologies, Charging Infrastructure and Network Integration, Standards and Certification; Materials and Recycling; Quality and Training, etc.

B. Centre of Excellence

The State Government will partner with premier Technical Institutes and research establishments across the State for establishing Centres of Excellence for conducting market focussed research on Battery Technologies, Battery Management, EV Motors and Controllers. The State Government will seek industry participation and leverage with Government Of India to provide grant to these centres. Research programs in collaboration with EV industry with a focus on battery innovation will be introduced in Engineering Colleges / Universities.

C. Incubation Centres

The Government of Tamil Nadu will encourage start-ups in the E-Vehicle sector and will offer incubation services to them in the form of office space, common facilities and mentoring support.

D. EV Venture Capital Fund

An EV Venture Capital Fund will be created by the Government to offer financial support to EV start-ups to enable them to scale up their business.
The Government will encourage the re-use of EV batteries that have reached the end of life and is setting up recycling business in collaboration with battery and EV manufacturers that focus on “Urban Mining” of rare materials within the battery for re-use by battery manufacturers.

Charging Station Operators will be encouraged to operate as end-of-life battery recycling agencies. Electrical Vehicle owners can deposit their vehicle batteries that have reached their end of life. The Government of Tamil Nadu will invite battery recycling business to establish their presence in Tamil Nadu. Appropriate protocols and investment subsidies for setting up such a business shall be notified by the Government of Tamil Nadu after consultation with stakeholders. OEMs should take responsibility of recycling of old batteries and its components.

The Tamil Nadu Electric Vehicle Policy and package of incentives and concessions shall come into effect from the date of issue of Government Order and will be valid for a period of ten years or till a new Policy is announced.