# **Government of West Bengal**

Electric Vehicle Ecosystem Policy 2022



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## **Preamble**

## 1. Reference to EV ecosystem Policy of WB

India's transport sector accounts for 17% of total energy consumption in the country amounting to about 108 million tonnes of oil equivalent (MTOE) energy as of 2019. If India were to follow the current trends of energy consumption, it would require an estimated 170-200 MTOE of energy supply annually, by the year 2030 to meet the demand of this sector.

At present most of this energy requirement is being met by fossil fuels as the penetration of electric vehicles in India is less than 1% of total vehicle. In order to address this, the Government of India had undertaken multiple initiatives to promote manufacturing and adoption of electric vehicles in India.

In line with this objective, the West Bengal government has released a comprehensive Electric vehicle policy in June 2021 encompassing the impetus of the state government of electrification of vehicles in the state.

There is an ever-increasing need of creating a manufacturing eco-system conducive for the production of electric vehicles in the state coupled with access to local market propelled by demand side incentives.

This policy focuses on encouraging manufacturing of electric vehicle components as well as entire vehicles in the state of West Bengal by outlining the possibilities for Original Equipment Manufacturers (OEMs) investing in the state and the state providing demand incentives for creating a local market.

This policy shall be read alongside the EV policy of West Bengal released in June 2021 and SAIP (Scheme Approved Industrial Parks). The incentives and benefits encompassed in this policy shall be over and above the ones mentioned in the existing policies.

## 2. Advantage West Bengal

West Bengal is the 4th most populous state in India having a density of 2,700/sq. mi. Highest density of population is in Kolkata which is the capital of West Bengal. Further the state is rural dominated with about 68.13% of the population residing in rural areas and 31.87% in urban areas. The literacy rate in West Bengal is significantly higher at 77.08%.

At current prices, the state's Gross State Domestic Product (GSDP) is estimated at INR 13 trillion in FY21, this represents a growth of about 8% over the previous year, where the GDP stood at INR 12.1 trillion. This growth has been achieved in spite of the state seeing challenging times as the COVID-19 pandemic struck the country. The CAGR for Nominal GSDP growth for West Bengal from FY15 to FY20 (pre pandemic) has been about 11 % as per GSDP figures released by the Reserve Bank of India (RBI).

While, from an automotive demand perspective, West Bengal contributes about 6% in terms of the overall number of vehicles (including two wheelers) sold in the Country in FY21. Further the state was ranked 6th in terms of vehicle sales in India in FY21 as reported by SIAM. West Bengal and its neighbouring states account for almost 1/3rd of the three wheeler sales in India in FY21, which positions it well from an E-3W manufacturing perspective.

Also, geographical proximity to the far eastern countries also places the state in beneficial position from an imports perspective for the short term with respect to components such as battery cells and other items

## 3. Key facts of the Electric vehicle manufacturing policy

#### a. Reduction in CO2 levels

India's transport sector contributed an estimated 272 Million Tonnes of CO2 emissions in 2016 as per the energy statistics released by Central statistics Office, Government of India.

Keeping in view the climate change commitments made by Government of India during the COP26 Summit to reduce emission intensity by 45% by 2030 as well as the net zero target by 2070, it is pertinent to introduce alternative means in the transport sector which can be coupled with India's rapid economic growth, rising urbanization, travel demand and country's energy security.

In line with the national as well as global objective of reducing greenhouse gas (GHG) emissions, West Bengal is focused towards bringing down the carbon footprint of the transport sector by playing an active role in terms of EV adoption as well as production.

## b. Technology

The state has a rich history of manufacturing Industries coming from the state in the fields of Auto components, steel, Jute, batteries as well as petrochemical products such as plastics and polymers.

The entities operating in the state have been at the forefront of their respective Industries in terms of technological breakthroughs and the state envisages to further build on this legacy in the electric vehicles space as well.

The policy is focused towards encouraging technological development in the EV space by means of facilitating establishment of dedicated EV Research hubs as well as a centre of excellence focusing on emerging technologies in the EV space.

## c. Employment

West Bengal is among the leading states in India in terms of Human capital by virtue of access to world class educational institutions.

Further, as per statistics on Indian states released by RBI in 2021, West Bengal is the second largest state in terms of people employed in MSMEs (data available till FY16), while it is the 9<sup>th</sup> largest state in terms of workers employed in Industries (data available till FY19).

This policy envisages to further brighten this vibrant environment of employment generation and paves way for the state to become a leading state in terms of employment in the Electric vehicle sector as well by providing tailor made solutions to entities seeking to set up large scale employment based EV manufacturing projects in the state.

#### d. Investments

The state has seen healthy participation from the Industry in the Metals and mining, Foundry, petrochemical as well as battery segments in the past in terms of Greenfield investments.

The government's focus now is to tap in to the next big Industrial revolution which is to be driven by the electrification of the transport segment in India and West Bengal aims to be the forerunner of this revolution by playing the role of key manufacturing hub for OEMs and component manufacturers alike.



## **Vision**

The policy aims to transform West Bengal into a leading state in manufacturing of Electric Vehicles and develop the allied ecosystem that facilitates development of EV ecosystem and deployment of Electric Vehicles in the state.

## **Mission**

- To make West Bengal an attractive investment destination for EV
- To reduce air pollution caused by usage of fossil fuels
- To focus on new age technologies that facilitate investment and provides employment thereby contributing to the overall state economy
- To ensure adoption of Electric Vehicles & Energy Storage Systems in the State
- To reduce cost of transportation for personal and commercial purposes

## **Objectives**

The Government of West Bengal envisions to create a comprehensive EV ecosystem in the State by attracting investments in the sector. The broad objectives of this policy will include:

- Make West Bengal the preferred destination for Electric Vehicle and component manufacturing.
- Create a pool of skilled workforce for the industry and create new jobs
- Promote research and development, innovation, and skill development across the EV ecosystem.
- Encourage cutting-edge research and innovation in Electric vehicles, battery technologies and other emerging technologies
- Promote Recycle and Swapping of Batteries
- Create robust infrastructure for electric vehicles including adequate power supply and network of charging points with favorable power tariff.
- Endorse a shift in mobility by increasing adoption of electric vehicles
- Generate demand for EV and battery storage solutions by providing EV adoption incentives and supply side incentives for manufacturing
- To support creation of EV charging Infrastructure and create market for commercially viable EV Charging business

## Coverage

The Government of West Bengal will focus on policy interventions envisioned to encourage EV manufacturing and marketing in the State. Incentives and concessions will be offered by the Government of West Bengal to promote investments in Electric Vehicle Manufacturing, EV Battery Manufacturing, EV Charging Infrastructure equipment manufacturing including installation and setting up of the same, and Equipment Manufacturing Enterprises. The incentives and benefits will be applicable for a period of five years. The State's approach to each class of enterprises will be as follows:

#### 1. EV manufacturers

With the intent of promoting investment in the EV manufacturing space, the Government of West Bengal will implement policy interventions, both fiscal and non-fiscal. A wide array of incentives including investment subsidies, tax rebates, interest subvention, etc. would be provided for EV manufacturers setting up in West Bengal. Further, the Government would also ensure availability of land in clusters, with readymade facilities for power, water sewage and testing facilities along with dedicated testing tracks. The incentives will also extend to preferential treatments, creation of EV Research Hubs, and creation of Center of Excellence etc. In order to further provide a conducive environment for EV manufacturers, the Government will also provide assistance across various procedures including Patent Filing, and Skill Development etc.

Additional benefits	Description
For Original Equipment	Prototyping facilities, Testing facilities, Logistics parks, Free trade warehousing
Manufacturers	zones
Suppliers and vendors	Exclusive EV parks, Plug and Play manufacturing facilities to commence
	production with minimal capital investment

## 2. Research and Development (R&D) entities

The Government of West Bengal will formulate incentives and benefits for encouraging Research and Development in the EV space. The Government will also develop a dedicated facility to house EV R&D centers by domestic and global EV players. Government will also offer additional incentive to encourage start-ups and research hubs working towards manufacture of modular design lithium-ion batteries.

<u>Policy tenor:</u> 5 years. Once an entity avails benefit under the said policy it would not qualify for any additional incentives under any other state policy except the one under Electricity Policy released in June 2021 by the power department and SAIP (Scheme Approved Industrial Parks).

## **Supply side incentives**

#### 1. Fiscal benefits

The Government of West Bengal will focus on policy interventions, both fiscal and non-fiscal, to encourage EV manufacturing as well as EV marketing in the State. To new industrial investments in the State under the Electric Mobility and Energy Storage space, incentives and concessions will be offered by the Government. The Government shall extend tailor-made benefits to the investment projects on a case to case basis. The various fiscal incentives will include the following:

## 1.1. Investment Promotion Subsidy

A capital subsidy of 20-35% will be given on eligible investments made in fixed capital over 10 years, depending upon the size of investments. This will be applicable for projects in manufacture of EVs, for development of intermediate products used in the manufacture of EV and charging/swapping infrastructure. The capital subsidy will be payable on eligible investments made in the State for a period of 5 years from the date of commencement of production for all projects registered under this policy within the policy period. The details of the subsidies to be provided shall be as under:

Parameters	Small Projects	Large projects	Mega Projects
Investment Size (in fixed capital)	Up to Rs. 50 crores	Rs 50-200 crores	> Rs 200 crores
Capital Subsidy (as a proportion of fixed capital)	40%	35%	35%
Total subsidy amount (to be capped to)	Rs 20 crore	Rs 40 crore	Rs 50 crore

#### 1.2. SGST Reimbursement

The Government of West Bengal will offer reimbursement up to 100% of the SGST paid on the sale of EVs manufactured, sold and registered for use in the State. The total reimbursement will be given for sales by manufacturers within this policy period and will be capped at Rs 2-10 crore per year per company based on the size of the project.

Parameters	Small Projects	Large projects	Mega Projects
Investment Size (in capital)	Up to Rs. 50 crores	Rs 50-200 crores	> Rs 200 crores
SGST Subsidy (as a proportion of SGST)	50%	80%	100%
Total subsidy amount (to be capped to)	Rs 2 crore	Rs 5 crore	Rs 10 crore

#### 1.3. Electricity Tax Exemption

Electric Mobility, Energy Storage and charging infrastructure manufacturing industries in the State will be provided 100% exemption on electricity tax from the date of commencement of production for a period of 5 years. The exemption will be capped at Rs 50 lakh per year per company.

#### 1.4. Power tariff discount

The state will provide a subsidy of 25% within the policy period cumulatively capped at Rs. 50 lakh. Tariff for EV charging (or, input electricity tariff for the public charging station) could be in- around INR 6/kWh (per Unit) within the policy period

### 1.5. Exemption from Stamp Duty

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. The state will also offer concessional registration charges for all loan documents, sale deeds, etc. The exemption will be applicable within this policy period.

#### 1.6. Interest subvention

The Government of West Bengal will offer an interest subvention of up to 6% on investment in plants and machinery by EV related and charging infrastructure manufacturing industries in the State, for a period of five years from start of manufacturing. The same shall be applicable in cases where more than 50% of investments in Plant and Machinery is through term loan. The benefit will be capped at maximum of Rs 10 crore.

#### 1.7. Employment Incentive

The State will provide reimbursement of minimum wages for all new unskilled and semi-skilled jobs created by the manufacturer in EV related and charging infrastructure manufacturing industries in the State. The minimum monthly wages of employees will be capped at Rs 1,000 per month from the start of manufacturing.

## 1.8. Special incentives for EV Battery manufacturing

The Government of West Bengal will offer a capital subsidy of 20% of the eligible investment over 20 years for companies which are involved in EV battery manufacturing. The state shall also provide government land/industrial parks at 20-50% subsidy to these industries at IGR rate, on a case-to-case basis. The capital subsidy will be payable on eligible investments made in the State within this policy period.

## 1.9. Subsidy for Effluent treatment plants

The Government of West Bengal will also offer a one-time capital subsidy up to 50% of the cost of ETP with a ceiling of Rs 50 Lakh for MSME EV manufacturers and Rs 200 lakh for larger enterprises. The incentive for ETPs will be available from the date of commencement of manufacturing.

#### 2. Non - Fiscal benefits

The Government of West Bengal will also offer attractive non-fiscal incentives to promote the manufacture of electric vehicles and auto components. The manufacture of electric vehicles and auto components will be provided a special package of incentives. The various non-fiscal incentives will include the following:

#### 2.1 Preferential Market Access

The Government will implement preferential market access in Government procurement for locally (within the state) manufactured Electric Mobility, Energy Storage and charging infrastructure in all Government of West Bengal departments.

## 2.2 Migration to EV environments

For promoting the adoption of EV, the Government of West Bengal will exempt any state/municipal tax payment for all electric non-transport and transport vehicles including e-rikshaw within the policy period. Additionally, the Government will also provide capital subsidy for service providers including charging stations, battery switching / swapping stations etc.

#### 2.3 Transition support for manufacturers

The Government will exempt those manufacturers moving into production of EV related and charging infrastructure from maintaining base volume production for expansion projects. Further, existing automobile manufacturing companies will be provided a one-time re-skilling allowance for every existing employee in the production line, for expanding into EV.

#### 2.4 EV manufacturing Parks

The Government of West Bengal have identified Manufacturing Clusters and Industrial Parks for promotion of EV & Energy Storage manufacturing companies. The Government will also create Plug and Play manufacturing facilities where industries can commence production with minimal capital investment in land and building. In addition the government will also extend its support to all investments made under the policy of SAIP (Scheme Approved Industrial Parks). The government will also offer 100% waiver on land conversion as well as mutation fees within the policy period.

## 2.5 Creation of Vendor Ecosystem

In order to create a vendor ecosystem that will serve OEMs, Government will develop exclusive facilities in areas which have potential to attract EV investments. Common facilities will be provided to the industries for prototyping, testing, training, etc. in EV parks. Government will also promote Logistic Parks and Free Trade Warehousing Zones for better inventory management.

## 2.6 Assistance to companies

In order to further provide a conducive environment for EV the Government will provide assistance to companies across various procedures. These will include Assistance in Patent Filing, Reimbursement of Quality Certification costs, Cleaner Production cost reimbursement, 100% Skill Development Assistance through state agencies.

## 2.7 Battery recycling landscape

The West Bengal government shall encourage recycling of EV batteries in stationary energy storage applications. The government shall catalyze collaboration between cell/ battery manufacturers, EV manufacturers, energy storage operators & recyclers to provide for recycling of used EV batteries Charging Stations shall be encouraged to operate as end-of-life battery recycling entities, acting as deposit points for customers to deposit their used EV batteries which shall then be recycled according to due processes.

#### 3. Other benefits

Other benefits / incentives offered by the Government of West Bengal will include the following:

#### 3.1 EV Research Hub

The Government of West Bengal will develop a dedicated facility to house EV R&D centers by domestic and global EV Majors. Government will also offer additional incentive to encourage to start-ups and research hubs working towards manufacture of modular design lithium-ion batteries

#### 3.2 Center of Excellence

The Government of West Bengal will partner with premier Technical Institutes and research establishments across the state to establish Center of Excellence (CoE). The CoE will conduct market-focused research on Battery Technologies, motors, controllers etc.

## 3.3 Start-up funds and Incubation centres

The Government shall also offer financial support to Start-ups for research and innovation in EV & Battery technologies. Opportunities will also be created to for the start-ups to avail collateral-free funding from financial institutions at lower costs. The State will also offer incubation services to start-ups in the form of office space, common facilities and mentoring support

## 3.4 Upskilling, training and Job creation

The Government of West Bengal intends to develop skill enhancement centres for delivering vocational courses on the EV ecosystem in partnership with Industry. It will also aim to amend existing courses and/or create new courses on electric vehicle ecosystem to be offered by the state Industrial Training Institutes.

#### 3.5 Policy implementation

The Government of West Bengal shall form an apex Steering Committee to guide and monitor the implementation of the policy. The committee shall also consider providing incentives to new emerging technologies as and when these technologies may become more popularly available. The steering committee can form sub-committees or special task forces on priority areas, as may be required.

## **Demand side incentives**

#### 1. Purchase incentive

The Government of West Bengal envisages purchase incentives for consumers (buyers/end users) in the form of an upfront reduced purchase price of electric vehicles within the policy period.

Following categories of vehicles shall be eligible for purchase incentives.

- a. Buses (only Battery Electric Vehicles BEVs)
- b. Four Wheelers (only BEVs)
- c. Three-wheeler including Registered E-Rickshaws (only BEVs)
- d. Two Wheelers and e-cycles (only BEVs)

#### **Quantum of incentives**

		Number			Total Fund	
Sr. No.	Vehicle Segment	of	State Incentive (Rs/kwh)	Maximum	support from	
		vehicles		incentive	West Bengal	
		to be		cap	government	
		supported			(INR crore)	
1	E-cycles	20,000	25% of vehicle cost	5,000	10	
2	Registered e-2 Wheelers	70,000	5,000	10,000	70	
3	Registered e-3 Wheelers (eRikshaws/ekart)	10,000	5,000	10,000	10	
4	E-3 wheelers (passenger auto)	12,000	5,000	30,000	36	
5	E-3 wheelers (goods carrier)	3,000	5,000	30,000	9	
6	E-4 wheelers	7,500	5,000	1,50,000	113	
7	e-Buses	1,000	10% of vehicle cost	10,00,000	100	
Total Demand side incentives					348	

The maximum permissible ex-factory price to avail subsidy will be as per Government of India's FAME II scheme guidelines. Only those models registered under FAME II will be considered for the state government purchase incentives.

## 2. Early Bird Incentive

The Government of West Bengal shall also offer "Early Bird discount" of Rs. 5,000 / kWh of the vehicle battery capacity, for all the buyers, purchasing the EVs (except e-buses) before December 31, 2022. This discount shall be provided over and above the purchase incentive mentioned in the above table. The Early Bird Discount shall be capped at Rs. 50,000 per vehicle.

#### 3. Concessional interest rate for buyers

The Government of West Bengal will encourage financial institutions to provide concessional interest rate for EV purchased under hire purchase scheme. Also, the state government shall provide interest free loans to its employees to buy EVs for faster transition.

## 4. Road Tax and Registration charges exemption

The Government of West Bengal shall provide for 100% exemption of road tax and registration charges to all the EVs sold in the state during the duration of the policy.

## 5. Parking charge exemption

The Government of West Bengal shall provide reserved parking and 100% parking fee waiver to all electrical vehicles (private as well as commercial) at government operated parking spots in the state during the policy period.

#### 6. Use of EV in e-commerce industry

The Government of West Bengal will encourage e-commerce and delivery companies to use EVs for their fleet of 2/3 wheelers used for their delivery purposes. It will set a target for converting all e-commerce fleet to EVs by 2025.

## 7. Tech-enabled and web-based incentive delivery portal

The Government of West Bengal shall develop a tech-enabled and web based incentive delivery portal for policy implementation and early disbursement of subsidy/incentives. Subsidy to be disbursed through an e-enabled framework and mechanism, where customers will log-in their claims for reimbursement of subsidy, through local vehicle dealer, post registration of vehicle. The fiscal incentive (subsidy) to be disbursed directly in customer's bank account, through Direct Benefit Transfer (DBT) mode.

#### 8. EV zones

The Government of West Bengal shall priorities tourist spots, eco-sensitive areas, and reserve forests etc for only EV Zones for more sustainable tourism and development.

## 9. EV charging Infrastructure

## a. Facilitating Charging Points Installation and Enabling a Digital Operational Framework

- Charge-point Operators (CPOs) will be invited to set-up EV charging facilities and battery swapping stations across the State in multiple phases through 'Concessional Locations' for charging stations. The following points relate to their implementation and proposed digital operation:
- The 'Concessional Locations' for charging stations at bare minimum lease rentals will be carved-out from existing public parking zones and other locations

- A list of Concessional Locations for the first phase of rollout will be identified by the EV Charging Infrastructure Working Group under the EV Accelerator Cell.
- An open, publicly owned data-base/ State charge-point registry powered by Big Data (AI & ML-driven) will
  be developed which can provide real-time information on public charging infrastructure.
- The state-level charge-points registry can be accessed freely by in-vehicle navigations systems and various charge-point apps/ maps. A unified access and payment interface (UPI) for ease of utilisation for EV charging services from different service providers will be developed. This can be further improvised through the introduction of a state-level Smart Mobility Card.

#### b. Facilitating Public Charging Infrastructure for EVs through DISCOMs

- Electricity Distribution Utilities (DISCOMs) could be encouraged to establish public EV charging stations in their respective license areas within the state (as well as in the designated highways/ expressways corridors) and expenditure for the same can be allowed to pass through in the ARR until there is a significant impact on retail tariff
- Provisions as laid-down under the Section-51 of the Electricity Act maybe followed as revenue earned by those public charging stations and the benefits could be passed on to the consumers (with a justification of tariff reduction)
- Tariff for EV charging (or, input electricity tariff for the public charging station) could be in- around INR 6/kWh (per Unit) single part tariff so as to keep the end-user service charge from those public charging stations attractive for EV owners (it will reduce operating/ running cost of an EV).

## c. Exemption from Stamp Duty and land

- EV charging infrastructure stations in the State that obtain land by sale or lease shall be entitled to 100% exemption on stamp duty. The state will also offer concessional registration charges for all loan documents, sale deeds, etc. The exemption will be applicable within this policy period.
- The government will also offer 100% waiver on land conversion as well as mutation fees within the policy period.