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# Chhattisgarh State Electric Vehicle Policy 2022



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## 1. Background

There is an imminent shift in the nature of transportation from internal combustion vehicles (ICV) to vehicles that run on electricity. The shift to electric vehicles is being driven by a need to reduce the challenges of deteriorating air quality, reduction in India's oil import bill and to further the energy security of the country. The thrust for electric vehicles go hand in hand with India's efforts to expand renewable energy capacities.

Formed in the year 2000, the state of Chhattisgarh is fast emerging to be an important tourist centre and an industrial hub. Its strategic location and easy accessibility along with its cost effective transport system have majorly contributed to the development of this state.

The roadways in Chhattisgarh state comes under the purview of Chhattisgarh Transport Department. This department performs and supervises over various activities related to transportation, keeping in mind the public convenience and vehicle population in this state. A variety of computerized services are provided to the citizens here, including e- sewa, license, online permit system, dealer point registration, online permit frequency etc. The State has also successfully implemented Vahan (A national portal for vehicle registration) and Sarathi (A national portal for driving license).

The length of the roadways here is about 35,388 Kms, with connectivity, throughout the country including about 2,184 Kms for NHs, about 3,611 Kms for SHs and the remaining by district roads and village roads. State government's proposal for 442 city buses for 21 cities in Chhattisgarh has been approved by Central Government. Twin cities of Bhilai-Durg region have been allotted the maximum of 110 buses, 50 buses for Bilaspur, 42 for Korba, 35 for Ambikapur, 20 for Rajnandgaon and others for Mahasamund, Chirmiri, Kanker, Jagdalpur, Dhamtari etc.

*Table 1: Different categories of vehicles registered in the State since its incorporation*

S.No.	Vehicle Type	No. of Vehicles Registered	% of Vehicles
1	Goods Vehicles	2,43,327	3.68%
2	4 Wheelers (Commercial)	20,091	0.30%
3	Buses	60,240	0.91%
4	3 Wheelers	44,084	0.67%
5	2 Wheelers	53,97,457	81.53%
6	4 Wheelers (Non Commercial)	4,36,800	6.60%
7	Others	4,18,428	6.32%
	<b>Total</b>	<b>66,20,427</b>	

From the above table, it is found that two wheelers constitute > 81% of the total vehicle population of the State. Among the rest, 4 wheelers constitute 6.90%, Goods vehicles 3.68%, others 6.32% and lastly Buses only 0.91%.

Basing on the techno-economic development in the EV sector, there is need to formulate a policy for promotion of Electric vehicles in Chhattisgarh to keep pace with other states of India.



## 2. Vision & Objectives

To make Chhattisgarh a leader in adoption of electric vehicles as the predominant mode of transportation as well as establishing a sustainable environment to support manufacturers, start-ups and investors in EV market development.

The objectives are:

- i. Work towards ensuring a healthy environment for sustainable future of citizen of Chhattisgarh.
- ii. Plan, address, minimize the causes of rising concerns of rapidly increasing toxic gas emission from vehicles, etc. leading to deteriorating Air Quality Index.
- iii. To drive rapid adoption of Battery Electric Vehicles (BEVs) so that they contribute to 15% of all new vehicle registrations by 2027 and bring about a material improvement in Chhattisgarh's environment by bringing down emissions from the transport sector
- iv. To accelerate the pace of EV adoption across vehicle segments, especially in the mass category of two wheelers, public/shared transport vehicles and goods carriers
- v. To make Chhattisgarh a manufacturing hub for electric vehicles and ancillary equipment; creating unbound employment opportunities for youth of the state
- vi. To create a talent pool of engineers, designers, technicians and researchers to address the needs of the industry towards a sustainable development

## 3. Title

This policy shall be known as the "Chhattisgarh State Electric Vehicle Policy-2022"

## 4. Operative Period

- i. This policy shall be valid for a period of five years commencing from 01-04-2022 and extendable to 10 years based on State Government's discretion.
- ii. All provisions of this Policy shall be applicable during the Operative Period unless mentioned otherwise.

## 5. Abbreviations & Definitions

- i. "AC" shall mean Alternating Current;
- ii. "ARAI" shall mean Automotive Research Association of India;
- iii. "BEV" shall mean Battery Electric Vehicle;
- iv. "BMS" shall mean Battery Management System;
- v. "Central Government" shall mean the Government of India;
- vi. "CIRT" shall mean Central Institute of Road Transport;
- vii. "DBT" shall mean Direct Bank Transfer;
- viii. "DC" shall mean Direct Current;
- ix. "DisCom" shall mean Electricity Distribution Licensee - Chhattisgarh State Electricity Board (CSEB);

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- x. "EV" shall mean Electric Vehicle;
- xi. "EV Charging Station" shall mean a Consumer of electricity, whether purchasing electricity from the DisCom or through Open Access, utilizing electricity with a primary purpose of charging of electric vehicles, either with a commercial intent or otherwise. More than 90% electricity purchased by the EV Charging Station shall be used and recorded towards charging of EVs. The auxiliary consumption shall be less than 10% and shall include facility lighting, inefficiency of charging equipment, etc.;
- xii. "FAME" shall mean the Faster Adoption and Manufacturing of (Hybrid and) Electrical Vehicles in India Scheme notified by the Department of Heavy Industries, Ministry of Heavy Industry & Public Enterprises, Government of India along with its amendments from time to time;
- xiii. "Fast Charging Station" shall mean an EV charging station consisting of "Fast Chargers", wherein the charging capacity of each individual Fast Charger shall be at least 15 kilowatts.
- xiv. "FCEV" shall mean Fuel Cell Electric Vehicle;
- xv. "G.R." shall mean Government Resolution;
- xvi. "ICV" shall mean Internal Combustion Vehicle;
- xvii. "MSME" shall mean Micro, Small and Medium Enterprises;
- xviii. "NEMMP" shall mean the National Electric Mobility Mission Plan notified by the Department of Heavy Industries, Ministry of Heavy Industry & Public Enterprises, Government of India along with its amendments from time to time;
- xix. "NOC" shall mean No Objection Certificate;
- xx. "OEM" shall mean Original Equipment Manufacturer;
- xxi. "PHEV" shall mean Plug-in Hybrid Electric Vehicle, which may have multiple forms of deriving motive power, but characterized by the ability to (i) be plugged into an electrical outlet to be charged, and (ii) travel solely using an electric drivetrain among other modes. Micro, mild and full hybrids shall not qualify as PHEV;
- xxii. This "Policy" shall mean this Chhattisgarh State Electric Vehicle Policy-2022 notified by the Government of Chhattisgarh vide G.R. No. 539 dated 26.08.2022;
- xxiii. "PSU" shall mean Public Sector Undertaking;
- xxiv. "RFID" shall mean Radio Frequency Identification;
- xxv. "RTO" shall mean Regional Transport Office;
- xxvi. "SGST" shall mean State Goods and Services Tax;
- xxvii. "SIAM" shall mean Society of Indian Automobile Manufacturers;
- xxviii. "SME" shall mean Small and Medium Enterprises;
- xxix. "SPV" shall mean Special Purpose Vehicle

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- xxx. "State" shall mean Chhattisgarh;
- xxxi. "State Government" shall mean the Government of Chhattisgarh;
- xxxii. "VGI" shall mean Vehicle to Grid Integration.

## 6. Policy Overview

The Fiscal Incentives being offered under the policy would be in addition to the demand incentives available in the FAME India Phase-II scheme of Government of India. The following **policy drivers** have been proposed to boost EV adoption in the State:

- i. Financial Incentives - Purchase incentives, Scrapping incentives
- ii. Waiver of road tax and registration fees
- iii. Establishment of a wide network of charging stations and swappable battery stations, and development of publicly owned database of the same
- iv. Administration of the policy including constitution of State EV Development Corporation Limited, and developing an intensive public outreach programme focused on creating the awareness about the benefits of electric vehicles and key elements of the policy
- v. Setting up of Skill Centers with provision for training related to jobs in the EV eco-system and creation of jobs
- vi. Setting up of Recycling Ecosystem for Batteries
- vii. Creation of an umbrella, non-lapsable 'State EV Fund', to be funded through the air ambience fund, levy of additional taxes, cess, fee etc. on inefficient or polluting vehicles
- viii. All the incentives available for manufacturing industries under MSME Policy, 2016 shall be made available to EV manufacturers.
- ix. Chhattisgarh's EV Policy success shall be made of the following aspects of its Industrial Policy:
  - a. A well-articulated Industrial Policy supporting / complimenting the EV policy/vision
  - b. Top-down planning with well-defined and clear development targets and measures adapted to achieve them.
  - c. Under its state EV vision, Chhattisgarh can establish high-level industrial plans that set clear targets supporting states EV vision. These plans and targets should be the backbone for policy continuity in driving EV growth.
  - d. Well aligned environmental, industrial and energy goals – Linking Chhattisgarh's EV Policy goals to air quality, industrial competitiveness and energy efficiency is powerful and effective measure as it aligns multiple government stakeholders around the same interests; reducing barriers to implementation and encourages additional policy levers usages.

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- e. Additional policy levers – Platforms (Chhattisgarh Investment Board) & Programs (Invest Chhattisgarh)

This policy is applicable only to EVs and the components that are integral to its manufacturing and operation (EV charging or BEV (Battery Electric Vehicle) battery swapping infrastructure).

Private Transport: In order to achieve the above-mentioned goals and objectives, the policy targets a substantial substitution of currently registered ICE vehicles being used with various electric vehicles throughout Chhattisgarh.

Public Transport: Through this policy the existing intracity/ intercity bus fleets in the state will be augmented (or substituted) by electric buses to reduce energy consumption, harmful emissions in public transport sector and improve local and global air quality. Cities of the state where electric bus operations are not warranted due to low population, e-rickshaws, e-carts will be promoted as modes of public transport. Assimilation of electric buses in current public transport bus fleets throughout the state.

Charging infrastructure: This policy will provide the guidelines for development of adequate charging infrastructure for various EVs, both as public and private transit entities and usage of renewable energy in charging infrastructure.

Introducing an online portal for information regarding EVs, applying for EV related incentives, information regarding charging infrastructure etc.

## 6.1 EXPECTED OUTCOMES

- i. To embrace electric mobility as a tool to promote shared mobility and clean transportation and ensure environmental sustainability, pollution reduction, energy efficiency and conservation and to create an ecosystem for manufacturing EV components in Chhattisgarh.
- ii. To encourage reliable, affordable and efficient EVs that meet performance and price through Government - collaboration for promotion and development of indigenous manufacturing capabilities, required infrastructure, consumer awareness and technology.
- iii. Reduce primary oil consumption in transportation.
- iv. Facilitate customer adoption of electric and clean energy vehicles.
- v. Encourage cutting edge technology through adoption, adaptation, and research and development.
- vi. Improve transportation used by the common man for personal and goods transportation.
- vii. Reduce pollution in state. The number of vehicles on the road will get reduced with the introduction of modern shared transport systems like air-conditioned electric buses, e-cabs and e-rickshaws.
- viii. Create EV manufacturing capacity that is of global scale and competitiveness.





- ix. Creation of inclusive EV infrastructure by providing city wide accessibility (including unserved and under-served areas) of all the components of EV value chain.
- x. Enabled environment for recycling and reuse batteries.
- xi. Regular operation and maintenance of existing and proposed EV's infrastructure.
- xii. Attract investments and create employment opportunities in a sun-rise sector around power electronics, battery pack assembly, battery management system, electric motors, accessories and skilled areas like IT and R&D etc.

## 7. Institutional Structure

### 7.1 STEERING COMMITTEE

A Steering Committee has been proposed to be formed as follows:

- |  |                 |
|--|-----------------|
| i. Incharge Secretary , Transport                    | Chairman        |
| ii. Transport Commissioner                           | Member-Convener |
| iii. Incharge Secretary, Industries / Nominee        | Member          |
| iv. Incharge Secretary, Finance/ Nominee             | Member          |
| v. Incharge Secretary, Housing/ Nominee              | Member          |
| vi. Incharge Secretary, Revenue/ Nominee             | Member          |
| vii. Incharge Secretary, Energy / Renewable/ Nominee | Member          |

### 7.2 FUNCTIONS OF STEERING COMMITTEE

- i. Monitor and ensure timely release of relevant Orders/Government Resolutions/Government Notifications and amendments required.
- ii. Approve the framework/modalities of implementation proposed to the Committee in a time-bound manner.
- iii. Bring about inter-departmental coordination in respect of matters related to this Policy.
- iv. Review the best practices across India and take steps to try them in Chhattisgarh
- v. Review the work of the Executive Committee in implementation and effectiveness of the policy every six months and take corrective measures/changes/amendments, if required.
- vi. Monitoring of State EV Fund

### 7.3 EXECUTIVE COMMITTEE

For implementation of the decisions of the Steering Committee to streamline the EV adoption in the State, an Executive Committee is proposed to be formed as under:

- |                           |                            |
|---------------------------|----------------------------|
| i. Transport Commissioner | Chairman & Member-Convener |
|---------------------------|----------------------------|

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ii.	MD, CSIDC	Member
iii.	MD, CSPDCL	Member
iv.	CEO, SUDA Chhattisgarh	Member
v.	Member Secretary, State Pollution Control Board	Member
vi.	Joint Secretary, Finance Department	Member
vii.	Commissioner/Director Land Record	Member
viii.	Director Rural Development	Member

Comment: - The Members are nominated by concern Officer.

## 7.4 FUNCTIONS OF THE EXECUTIVE COMMITTEE

It is the Executing Committee for Steering Committee.

- i. The Committee will anchor EV promotion by ensuring that the incentives approved in the policy reach to the end-users.
- ii. The Committee by utilizing a network of expertise across different working groups will aim to shape the future course of e-mobility in Chhattisgarh.
- iii. The scope of the Committee would be to recommend action on the strategies to promote EVs in Chhattisgarh. An implementation strategy/ detailed action plan shall also be worked out.
- iv. To review the functioning of the State EV Development Corporation Limited. Shall be responsible for EV related requisite permissions and enact as an enabling factor for EV prosperity in the State.
- v. Executive Committee to release guidelines with respect to Advertising rights across charging stations. The revenue collected through advertisement shall form a part of EV State fund.
- vi. Executive Committee shall propose/ recommend Viability Gap Funding (VGF)/ fund requirement/ appropriate Modus Operandi/ procurement model to the competent authority for sanction.
- vii. Executive committee shall also detail out Business/ operational model guideline, performance level benchmarking, KPIs, etc. Any incentives / funding may also be linked with this as applicable.
- viii. Engagement with partners having experiences in managing Urban Public Transport Programmes, EV charging programmes for all business models to meet the specific goals.

## 7.5 STATE EV DEVELOPMENT CORPORATION LIMITED

The Steering Committee shall promote a State EV Development Corporation Limited. Govt. of Chhattisgarh may revise the role of this SPV (defined below) or create new SPVs during the operational period of this policy as per the State requirements.

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## 7.5.1 Structure of the SPV

The State level SPV will be established as a Limited Company under the Companies Act, 2013 and will be promoted by the State of Chhattisgarh. The SPV shall be 100% owned by State Government.

To ensure financial sustainability of the SPV and availability of funds for effective implementation of EV policy in the State, equity stake from private sector or financial institutions could be considered subject to majority shareholding being withheld by the State Government.

## 7.5.2 Raising and utilization of funds by the Company (SPV)

The Steering Committee shall ensure that a dedicated and substantial revenue stream is made available to the SPV so as to make it self-sustainable and could evolve its own credit worthiness for raising additional resources from the market and

The funds given by the State Government to the SPV will be in the shape of tied grants and kept in a separate Grant Fund. These funds will be utilized only for the purposes defined and subject to the conditions laid down by the State Government.

The SPV will also access funds from other sources such as debt, user charges, taxes, surcharges, etc

## 7.5.3 Board of Directors

The Board of Directors will have representatives of State Government from all related departments and Independent Directors, in addition to the MD and Functional Directors. Additional Directors (such as representative of parastatal) may be taken on the Board, as considered necessary. The Company and shareholders will voluntarily comply with the provision of the Companies Act 2013 with respect to induction of independent directors.

The Board of this Special Purpose Vehicle (SPV) shall be decided by the Steering Committee.

Below, are given the broad terms of appointment and role of the SPV Board:-

- (a) Chairman may be nominated by State Government.
- (b) Transport Commissioner shall be the ex-officio Managing Director of the SPV.
- (c) The functions of the SPV include:
  - i. Overseeing and managing the general conduct of the day-to-day operations of the SPV subject to the supervision and control of the Board.
  - ii. Entering into contracts or arrangements for and on behalf of the Company in all matters within the ordinary course of the Company's business.
  - iii. To formulate and submit to the Board of Directors for approval a Human Resource Policy that will lay down procedures for creation of staff positions, qualifications of staff, recruitment procedures, compensation and termination procedures.
  - iv. Recruitment and removal of the senior management of the Company and the creation of new positions in accordance with the Company's approved budget and the recruitment or

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increase of employees in accordance with the Human Resource Policy laid down by the Board.

- v. Supervising the work of all employees and managers of the Company and the determination of their duties, responsibilities and authority;
- (d) The Independent Directors will be selected from the data bank(s) maintained by the Ministry of Corporate Affairs and preference will be given to those who have served as independent directors in the Board of Companies fulfilling Clause 49 of the listing agreement of Securities and Exchange Board of India (SEBI).

## 7.5.4 Key functions and responsibilities of the SPV:

The SPV shall be empowered to the following, subject to approval by the steering committee:

- (a) Design the EV routes within the entire state, lead its implementation, and work as Monitoring Unit to oversee the operations & maintenance of the routes. This shall include operations of both electric vehicles and charging station for both public and private transportation.
- (b) On-boarding Consultants to conduct feasibility study, bid process management, project/ progress monitoring, etc. for all the proposed EV projects.
- (c) Operate as a single window facility for operations of electric vehicles on the designed routes. This shall include appointment of concessionaires on all the routes for EV/ charging stations and collection of revenue as per proposed financial model.
- (d) Gather land on the routes for setting up of charging station majorly through private concession. This shall include co-ordination with revenue department, Rural/urban department, local bodies, PWD and any other Government authority on mutually agreed terms and conditions for establishing charging stations/ public bus transportation.

The primary reasons for the creation of an SPV for the Chhattisgarh EV Policy 2022 is to ensure operational independence and autonomy in decision making and mission implementation.

The above provisions will be included in the Articles of Association of the SPV.

## 8. Targets & Roadmap

Table 2: Summary of segment wise projected policy targets figure for Five Years.

S.No.	Classification of EV	2022-23	2023-24	2024-25	2025-26	2026-27	Total
1	2-Wheelers	2,000	8,000	20,000	54,000	85,000	1,69,000
2	3-Wheelers	200	800	2,000	4,000	10,000	17,000
3	4-Wheelers (Non-Commercial)	200	400	1,400	3,000	7,000	12,000
4	4-Wheelers (Commercial)	10	40	100	300	650	1,100
5	Buses	10	25	65	200	600	900
	<b>Total</b>						<b>2,00,000</b>

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Tip : -year wise figures are for calculative purpose & time to time subject to changes.

## 9. Legislative & Regulatory Context

### 9.1 LAWS, RULES AND REGULATIONS (CENTRAL)

- i. The Motor Vehicles Act, 1988 (Amended in 2019) including:
  - a. Central Govt. Notification (Ref: REGD. NO. D. L.-33004/99; No. 4142 dated 18<sup>th</sup> Oct'2018) – Exemption of Permit on electric vehicles
  - b. Central Govt. Notification (Ref: REGD. NO. D. L.-33004/99; No. 547 dated 7th August'2018) - *"In case of Battery Operated Vehicles, the registration mark shall be exhibited in Yellow colour on Green background for transport vehicles & for all other cases, in White colour on Green background"*
- ii. The Motor Vehicles Rules, 1989 (Including all amendments) including
  - a. Conversion of IC engine to electric engine as per Section 52, Central Motor Vehicle Rules.
- iii. National Building Code, 2005
- iv. Draft Guidelines for Setting up, Authorization and Operation of Authorized Vehicle Scrapping Facility (AVSF), 2018
- v. Ministry of Road Transport & Highways (MORTH) Guidelines / Circulars
- vi. Charging Infrastructure for Electric Vehicles (EV) – Revised Consolidated Guidelines & Standards released by Ministry of Power dated 14<sup>th</sup> Jan'22 and any amendments thereafter
- vii. State Renewable energy act
- viii. Battery Management and Handling Rules, 2001 released by Ministry of Environment and Forests and amendment dated 4<sup>th</sup> May'2010

### 9.2 LAWS, RULES AND REGULATIONS (STATE)

- i. Chhattisgarh Motor Vehicle Act, 1991
- ii. Chhattisgarh Motor Vehicle Taxation Rules, 1991
- iii. Chhattisgarh Motor Vehicles Rules, 1994
- iv. Chhattisgarh State Municipal Corporation Act
- v. Chhattisgarh State Municipal Council Act
- vi. Chhattisgarh Bhumi Vikas Adhiniyam

### 9.3 OPERATIONAL CONTROLS/ GUIDELINES

Chhattisgarh State Electric Vehicle (EV) Policy 2022 and all applicable guidelines, circulars and any other regulations issued by Government of India (GoI) and Government of Chhattisgarh.



## 9.4 REVISION OF TRANSPORT REGULATIONS FOR EVS

- i. All regulations below are applicable only for FCEVs (Fuel Cell Electric Vehicle) and BEVs (Battery Electric Vehicle) using advanced battery technologies with energy/power density similar or more than that of a Lithium-ion battery. This shall also include plug on hybrid vehicles/ aluminum/ steel battery technologies.
- ii. Electric commercial public transport will be given permits on priority by transport department.
- iii. Only Electric Autos/rickshaws will be allowed in certain areas to avoid congestion.
- iv. All the aggregator service providers to mandatorily have at-least 30% of e-vehicles in their fleet.
- v. Organizations will be allowed to own and operate electric vehicles for last & first mile connectivity for their employees.
- vi. Registration will be allowed for 2 wheelers, 3-wheelers and 4-wheelers retrofitted with an electric motor and an electric powertrain using advanced battery technologies and certified by all government recognized/ approved agency.
- vii. In order to avoid congestion in cities, EVs will be mandated in cities while phasing out polluting vehicles in parallel.
- viii. Electric mobility blueprint will be created for the entire state for a phase wise transition to EVs.
- ix. Transport department shall facilitate the online registration of EVs.
- x. There shall be a 100% waiver of Road tax on all the EVs purchased during the first 2 years from the date of commencement of this policy. The waiver shall be 50% and 25% on Road tax on all the EVs purchased during the next 2 years and 1 year respectively. The road tax amount on which waiver shall be computed would be one-time payment in case of 2W/3W/4W and first year annual payment for buses/ goods vehicles and others.

## 10. Scope & Eligibility

- i. This Policy shall be applicable to all classes of Electric Vehicles including 2-wheelers, 3-wheelers, passenger cars and commercial/ heavy vehicles that are either manufactured and/ or registered in Chhattisgarh
- ii. The Policy shall be applicable to all classes of electric vehicles that have taken subsidy under the Government of India's FAME II scheme dated 8th March 2019, F. No 1(1)/2019-AEI and any amendments thereafter.
- iii. The incentives for setting up a charging station shall be applicable to charging stations meeting the guidelines and standards of the Ministry of Power Circular, dated 1st October, 2019 and any amendments thereafter.
- iv. The policy encourages involvement of local people of Chhattisgarh including investors, manufacturers, etc. to collaborate with Multi-national agencies to boost supply of electric vehicles and setting of charging infrastructure in the State. This would be in line to the idea of Central Government Make-in-India scheme to generate employment and boost economy.

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## 11. Driving Electric Vehicle Adoption

To drive large scale adoption of EVs and maximize reduction of vehicle emissions, this policy will therefore focus attention on:

- i. Incentivizing the purchase and use of electric vehicles (EV) and also supporting the charging/battery swapping infrastructure of public/shared transport.
- ii. Create a skilled workforce which is attuned to the needs of EV ecosystem and promote usage of Electric Vehicle (EV's) to enable transition to environment friendly cities.

## 12. Incentives

In order to achieve large scale adoption of Electric Vehicles in the State and to maximize reduction of vehicular pollution, the Policy focuses attention on incentivizing the purchase and use of Electric Vehicles particularly in the segment of two wheelers, public/shared vehicles and goods carriers.

### 12.1 PURCHASE INCENTIVES

The State Government shall provide capital subsidy with an objective of minimizing the viability gap between an ICV and an EV of similar specification and performance. This capital subsidy shall be fixed as a percentage of the EV's base cost (excluding all taxes). To avail the purchase incentives, the e-vehicles shall have to fulfill the minimum performance & efficiency standards as per FAME India Phase-II notified by Govt. of India.

The State will support up to 10% of the cost of the vehicle (excluding tax) or Rs. 1.5 lacs whichever is lower, for Purchase of the electric vehicles, either under individual use or commercial use, for five years till 2026-27.

Vehicles sold and registered as fully electric vehicle will be eligible for purchase incentives. For vehicles sold as hybrid electric vehicle will be eligible for 50% purchase incentive provided to fully electric vehicle. Time to time Steering committee will decide the purchase incentives for electric vehicle according to viability gap between an ICV and an EV .

*Table 3: Capital subsidy (as % of Capital Cost, excluding taxes) of EVs in Chhattisgarh up to 31<sup>st</sup> Mar'27*

#### 12.1.1 Additional Incentives for 2Ws/3Ws/4Ws

- i. Government Departments/Offices, Public Sector Undertakings will give preference to hire EVs for Official use and the above purchase incentives will be applicable for the private Owners to purchase these vehicles. Government Department/ Offices/ Public Sector Undertakings will purchase EVs when such purchase is necessary and is allowed.
- ii. Public parking: Municipal authorities will provide 50% subsidized parking for all personal EVs. Individual Towns/Cities will prepare city parking plan to encourage provisions for on-street parking places for EVs with subsidized fees and EV charging stations.
- iii. Exemption of Registration fees on purchase of EVs for the operational period of this policy.

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## 12.1.2 Additional Incentives for Buses

- i. 100% SGST on the sale of electric buses sold and registered in the State will be reimbursed during policy period.
- ii. 100% exemption on registration fees for the first five years shall be made available.
- iii. The bus operators who wish to scrap/ decommission their existing diesel-powered buses and replace them with electric buses shall be provided additional monetary aid over the existing rule, (Scrap & ULBs) if any through dedicated Transportation Fund.

## 12.1.3 Incentives for Goods/ Other Vehicles

- i. The policy recognizes the importance of light commercial goods carriages and committed to extend incentives for use of EVs of this category.
- ii. 100% SGST on the sale of electric goods carriages sold and registered in the State will be reimbursed for the policy period.
- iii. 100% exemption on registration fees for the policy period will be made available.
- iv. Electric goods carriages in the above category shall be exempted from prohibition on plying and idle parking on identified roads of the State during specified timings as notified by the local authorities from time to time.

## 12.2 MANUFACTURING RELATED INCENTIVES

In order to develop sustainable EV manufacturing industries, the Government of Chhattisgarh will take the following measures:

- i. SGST reimbursement for manufacturing of EVs in the State during the policy period.
- ii. All the incentives under the MSMED Act, 2006 will be extended to the manufactures as applicable/ eligible under Industrial Policy, Govt. of Chhattisgarh 2019-24 (as amended from time to time).
- iii. The MSME EV Battery manufacturing Units will be facilitated with the following incentives as per MSME Policy, 2016:

S.No.	Category of Enterprise	Quantum of Assistance
1	New MSME Enterprise	25% of Capital Investment made in plant & machinery subject to an upper limit of Rs.1 crore
2	New MSME Enterprise owned by SC/ ST/ Differently-abled/ Women/ Technical (Degree/ Diploma) Entrepreneur	30% of Capital Investment made in plant & machinery subject to an upper limit of Rs.1.25 crore
3	New MSME Enterprise set up in industrially backward districts	Additional Capital investment subsidy @ 5% investment made in plant & machinery with already prescribed at Sl. No.1 & 2 above



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- iv. For extension of incentives to Battery Assembling Units, necessary provisions shall be made in the MSME Policy
- v. Commerce & Industries Department of the Government of Chhattisgarh has notified the "Industrial Policy 2019-2024" with a primary objective to build a self-reliant and ever-progressing economy in the State through an integrated, inclusive and sustainable industrialization. All provisions (including incentives) of the Chhattisgarh Industrial Policy-2019, its subsequent policies and government resolutions (G.R.), as amended from time to time, shall be applicable to parties intending to set up or upgrade their facilities for manufacturing in the EV sector.
- vi. Government of Chhattisgarh will create platforms and programs for industry participation and explore possibilities of entering into MoU with Lithium Cell Manufactures/ EV auto components to start EV components and assembly in the State.
- vii. Govt. shall allocate 500-1000 acres of land for developing EV Parks with plug and play internal infrastructure, common facilities and necessary external infrastructure. This industrial park will attract manufacturers across the EV eco-system. An incubation center for handholding startups will also be planned in the EV Park.
- viii. Developers of Auto Clusters and Automotive Suppliers Manufacturing Centers (ASMC) specific to EVs shall be provided financial assistance of 50% of fixed capital investments in building and common infrastructure, up to a maximum of INR 20 Crore.
- ix. Capital subsidy of Fixed Capital Investment (FCI) in the following amounts:
  - o 25% of FCI upto a maximum of INR 15 Lakhs for Micro industries
  - o 20% of FCI up to a maximum of INR 40 lakhs for Small and 50 lakhs for Medium Industries
  - o 10% of FCI up to a maximum of INR 10 Crores for first two units, under Large industries, in each segment of EV, battery and charging equipment
  - o 10% of FCI up to a maximum of INR 20 Crores for first two units, under Mega category, in each segment of EV, battery and charging equipment
  - o Additionally, special incentives will be given according to their need for Mega, Mega Integrated automobile projects and Ultra-Mega battery manufacturing plants on a case to case basis.
- x. Tax, stamp duty, tariff incentives and other policy support will be provided to attract private investment in dedicated areas/ zones for manufacturing of Lithium Ion Batteries and electric vehicles in the long run



## 12.3 Incentives for Proliferation of Charging Infrastructure

- i. Incentives provided through this section of the Policy shall be applicable to charging infrastructure as well as battery swapping and charging stations.
- ii. The State Government shall promote charging infrastructure of different capacities (Levels 1, 2 and 3) and promote variety of business models as a part of the overall learning process. Private-owned, DisCom-owned and Investor-owned charging stations are encouraged through this Policy.
- iii. All EV charging stations shall adhere to the protocols approved by the Government of India.
- iv. Incentives shall also be provided on shift from thermal to renewable sources of energy.

### 12.3.1 Private Charging Points:

- i. The existing residential and non-residential building Owners shall be encouraged to install private charging points within their premises which will provide shared access for charging of EVs of residents of group housing societies and multistory apartments. Setting up of Charging Infrastructure shall be mandated in the Housing Policy.
- ii. The customers under all the Electricity distribution Companies in the State shall purchase Private Charging points with the grant supplied by Govt. and request the DisCom to install the same in their premises. The installation charge as approved by Government may be collected through electricity bills.
- iii. Setting up charging stations and dedicated parking space for EVs in housing board/residential welfare societies, public parking and parking of shopping malls for the upcoming residential & commercial buildings may be mandated in building bye-laws. Some percentage of space in these buildings may be kept for EV parking & charging stations called as "EV Ready." The Building Bye-Laws also incorporate the provisions for additional power requirement for setting up charging points with all safety factors adhering to the guidelines & standards as issued by Ministry of Power, Govt. of India from time to time.

### 12.3.2 Public Charging Infrastructure:

- i. Public & Private operators shall be invited to set up charging and battery swapping stations across all the cities and along the NH & SH in phases by porting and providing locations at bare minimum rental lease. A list of such locations shall be rolled out by the State EV Development Corporation Limited within a reasonable period. Such Stations can also be setup outside the locations as approved by the Regional Transport Office (RTO) depending on the demand and suitability of public access.
- ii. RTO shall give NOC after taking permissions from various line departments certified by Government from time to time. RTO shall tender out the advertisement space available in

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- the charging station (in its jurisdiction) as per the instructions received in various Govt. circulars issued by Steering Committee.
- iii. Government shall provide capital subsidy of 25% to the selected Energy Operators on the charging equipment/ machinery to the first 300 fast charging stations commissioned in the State upto a maximum of INR 10 Lakhs per station.
  - iv. Government will also provide 100% SGST reimbursement to the Energy Operators for purchase of batteries to be used in switching / swapping stations.
  - v. Provision of mobile charging vans to provide on-road assistance for EV users who run out of charge shall be explored so that they can reach the nearest charging station with minimum travel.
  - vi. Govt. will explore the fast charging facility at bus stands/ stops for e-buses to reduce the battery size.
  - vii. Highway re-fueling stations will be encouraged to set up fast charging stations for top up charging.
  - viii. Corporate Offices/ Educational Institutes/ULBs/ Housing Societies/ Government Buildings will be encouraged to set up charging infrastructure in their premises to meet the social responsibility and necessary incentives shall be extended to them.
  - ix. Municipal corporations shall provide reserved public spaces under flyover bridges with free or priority parking for 2-wheelers and adequate charging infrastructure to promote last-mile connectivity.
  - x. Charging points for personal EVs of Government employees shall be provided at Government office parking areas.
  - xi. Electricity tariff as applicable for charging stations shall be notified by the Chhattisgarh Electricity Regulatory Commission. All the public charging station operators shall be encouraged to use low cost and renewable sources of power through the State Electricity Regulatory Commission.
  - xii. Electricity tariff applicable for all Public and Captive charging stations for commercial use (i.e., charging facilities used by fleet owners) shall be as notified by the State Electricity Regulatory Commission. Government shall endeavor to work out special tariff for EV charging.
  - xiii. The Transport Department may take lead role in setting up charging points/ stations than other private parties. The number of charging points to be established will be maintained by the Energy Distribution Companies.
  - xiv. Transport Department will be the Nodal Person for setting up & monitoring of charging stations.



- xv. Any entrepreneur who desires to install charging station in his/her own land then permission can be granted through Transport Department & will be eligible to avail prevailing incentive to setup charging station.

## 13. Electricity Tariff for EV Charging

It is intended to simplify the electricity tariff structure for charging of electric vehicles as per the details below:

- i. The State Distribution Licensees (DisCom) shall allow charging of EVs from the existing connection of a Consumer at the tariff applicable to such connection, except from agriculture connection which is highly subsidized.
- ii. The DisCom shall provide connections for setting up independent EV Charging Stations at the tariff applicable to similar category of Consumers with an option to avail concessional night tariff as per the tariff schedule.
- iii. The State Government shall recommend to the Chhattisgarh Electricity Regulatory Commission to exempt the Consumers setting up EV Charging Stations to draw electricity from DisCom for charging the EVs from payment of fixed/ demand charges up to 31 March 2027. This promotional measure shall be recommended so that the higher burden of fixed charges is avoided during the initial phase of deployment when utilization factor of such EV Charging Stations is expected to be low.
- iv. Based on the provisions in (i) and (ii) above, no separate tariff for EV charging shall be required with respect to purchasing power from the DisCom grid.
- v. Once the Consumer of a particular category, including an EV Charging Station, purchases electricity (from the DisCom or through Open Access), such Consumer shall not need any Distribution License to further set up and operationalize an EV charging infrastructure either for self-consumption or commercial sale of electricity for EV charging.
- vi. There are 3 cases which emerges out:
  - (a) In Case-I, a Residential Consumer may set up an EV charger (including a Fast Charger) within its own premises without altering its consumer category. In case the Residential Consumer intends to augment its sanctioned load due to the addition of the EV charger, the same may alter the Consumer's tariff due to addition in load, but not result into any change in the Consumer's category (i.e. he/ she shall remain a Residential Consumer).
  - (b) In Case-II, similar to Case-I, an Industrial, Commercial or any other Non-agriculture Consumer may set up charging ports within its premises and provide charging power to EVs.
  - (c) In Case-III, which is a dedicated EV Charging Station, such stations may avail benefits such as promotional tariffs and subsidies.

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- vii. The charging station operator can charge only service charge to the consumer and the ceiling price of the service charge shall be fixed by Executive Committee and may amend from time to time

(\*To be modified as per State Govt laws)

## 14. Roadmap for use of Renewable Energy

- i. The EV policy should clearly speak on the percentage increase of renewable energy over conventional electric energy for the next 5-10 years.
- ii. In order to reduce the burden of electrical load on the DISCOM and to promote renewable energy (RE) power in charging stations, capital subsidy provisions may be introduced for development of RE based charging infrastructure (setting up solar rooftop grid connected plants). This will be helpful in developing charging stations at petrol pumps, colonies, public places, housing societies, shopping malls, etc.
- iii. Existing policies on renewable energy to be linked with this policy

## 15. RESEARCH AND INNOVATION

As EVs are still in their nascent stages of development and deployment, substantial research and innovation is still envisioned in terms of development of technology, means of reducing costs, deployment of innovative business models, and so on. This Policy prescribes specific thrust areas for research, development, innovation, pilots and incubation as follows:

- i. **Domains for Development:** EV technology is cross-cutting and consequently, the thrust is prescribed in relevant domains including but not limited to energy storage, hydrogen and fuel cells, grid integration as well as social engineering and consumer behavior.
- ii. **Vehicle to Grid Integration (VGI):** In addition to basic mobility, EVs can provide value propositions through VGI. EVs can act as distributed energy sources and provide ancillary grid services such as demand response and frequency regulation. Thrust is prescribed in terms of establishment of communication protocols, smart metering, tariff models and pilots, which may eventually be mandated through appropriate electricity regulations.
- iii. **EV Components/ Equipment:** While many companies have started assembling EVs in India, most of its components are still imported. Except for battery cells, most of these components such as motors, motor controllers, on-boards chargers, DC/ DC converters, battery packs, battery management systems (BMS), charging stations, etc. can completely be manufactured by local industries. Thrust is prescribed in product development, efficiency and performance improvement, battery swapping, retrofitting, testing and certification through industry-led industry-academia partnerships.



Pilots and then large-scale deployment of EVs would result into extensive amounts of data related to vehicle performance, battery utilization, grid integration, consumer behavior, and so on, which would have substantial bearing on multiple sectors such as energy, transportation and society at large. Hence, it becomes critical to establish an information repository followed by data analytics, which would pave way for further decision-making and technology scale-up.

IIT-Bhilai along with NIT Raipur shall be serving as a platform for research, innovation, testing, piloting and capacity-building by collaborating with relevant organizations such as Society of Indian Automobile Manufacturers (SIAM), Automotive Research Association of India (ARAI), Central Institute of Road Transport (CIRT) on one hand and State and Central Government Agencies/ Departments/ Ministries on the other. The knowledge base developed in the process may be utilized by all stakeholders including innovators, researchers, academia, industries and the government.

IIM Raipur shall be the think tank for identification, assessment and implementation of revenue generation streams through deployment of e-vehicles in the State. This would also include active participation in formation of advertising and parking policy for e-vehicles & public transport platforms.

## 16. Convergence

- i. The National Electric Mobility Mission Plan (NEMMP)-2020 and the Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME) Scheme are promoted by the Department of Heavy Industries under the Ministry of Heavy Industry & Public Enterprises.

NEMPP and FAME primarily focus on four areas viz. (a) technology development, (b) demand creation, (c) pilot projects and (d) charging infrastructure. The provisions of this Policy shall be construed in synchronization with the NEMMP & FAME, and the incentives provided in this Policy shall be over & above the incentives provided in NEMMP & FAME, unless mentioned otherwise.

- ii. As indicated in Section 13, the electricity tariff for EV Charging Stations shall be applicable to similar category of Consumers with additional concessions as indicated in this Policy and as notified by Chhattisgarh Electricity Regulatory Commission, and as amended from time to time.
- iii. As indicated in Section 12, all incentives for manufacturing of EVs and their components shall be as per the provisions laid out in Chhattisgarh Industrial Policy-2019-24.



## 17. Nodal Departments & Agencies

- i. Transport Department shall be the nodal Department in Government of Chhattisgarh and shall be responsible for planning, implementation and review of the policy.
- ii. All incentives and provisions towards setting up manufacturing facilities for EVs and/ or its components shall be availed through the Commissioner/ Director Industries, Commerce & Industries Department of the Government of Chhattisgarh
- iii. IIT Bhilai shall be the nodal Institute for research, training, incubation and other activities by providing a platform for various stakeholders including innovators, researchers, academia, industries and the government.

## 18. Recycling Ecosystem – Battery and Electrical Vehicles

- i. EV batteries typically need to be replaced once they have degraded to operating at 70- 80% of their capacities. EVs are therefore going to outlive the batteries powering them, with a vehicle requiring about two batteries in a 10-year life span.
- ii. Batteries that have reached their end of life will need to be either reused or recycled. Lack of adequate reuse or recycling will have a high environmental cost. Not only do EV batteries carry a risk of giving off toxic gases if damaged during disposal, but core materials such as lithium and cobalt are finite and very expensive to extract.
- iii. Chhattisgarh State Electric Vehicle (EV) Policy 2022 will encourage the re-use of EV batteries that have reached the end of their life and setting up of recycling businesses in collaboration with battery and EV manufacturers that focus on 'Urban Mining' of rare materials within the battery for re-use by battery manufacturers.
- iv. To promote replacement of existing ICE installations with electric kit in the vehicles. This may also be taken up at AVSF centers setup in the State. This shall also include conversion of existing ICE vehicles to hybrid vehicles with both ICE and electric kit provisions.

### 18.1 REUSE OF EV BATTERIES

- i. Energy Operators (EOs) and Battery Swapping Operators (BSOs) will operate as end of life battery recycling agencies. EV owners can deposit vehicle batteries that have reached their end of life at any charging point or swapping station operated by an Energy Operators (EOs) or Battery Swapping Operators (BSOs) and in return get a remunerative price for this battery. Disposal of EV batteries in any other manner – e.g., in landfills or as scrap, will not be allowed.
- ii. A nodal agency shall be appointed by Govt. of Chhattisgarh to act as an aggregator to facilitate and monitor sale and purchase of EV batteries that are at least 70% of rated capacity. These batteries will be purchased from Energy Operators (EOs) and Battery Swapping Operators (BSOs) and will then be re-used as 'power banks' to store renewable energy.

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## 18.2 END-OF-LIFE BATTERY AND EV RECYCLING

End-of-life battery and EV recycling shall be governed by Battery Management and Handling Rules, 2001 released by Ministry of Environment and Forests and amendment.

## 19. Electric Mobility Safety Guidelines (Safety Norms)

- i. Workplace Safety
  - a. During Maintenance of electrical and undercarriage components
  - b. During Charging ( Depot, Terminal and On the move)
  - c. During Washing, Cleaning and Body Repair
  - d. Battery Handling (Swapping, replacing)
- ii. On Vehicle Safety
  - a. Fire Detection and Suppression
  - b. Crew Responsibility and Guidelines
  - c. Do's and Don'ts for passengers
- iii. Consumer Safety – Residential, Commercial/ Public Use and Industrial

## 20. EV State Fund

- i. Cess on one time tax on motorized vehicles.
- ii. Cess in the form of Green Tax imposed on registration of old and new vehicles
- iii. The funds from Central or State Govt.
- iv. The funds received from industries to carry out social responsibilities.
- v. Advertising rights funds generated through charging stations
- vi. Cess from Polluting Industry/ Trade-off from Carbon Credits
- vii. Any other fund to be decided time to time for this purpose.



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## 21. Policy Review – Calibrating/ Refining/ Course Correction

State Government may undertake a review of this policy every year or as and when the need arises in view of any technological breakthrough or to remove any difficulties or inconsistency with respect to any other State Govt. policy and smooth implementation of EV policy. Various initiatives for calibration, refining or course correction of the EV policy could include

- a. City Challenge Programs
- b. Most Sustainable EV Platforms
- c. Combination of favorable new energy vehicle treatment in the license plate quota and traffic control policies prompting a rush of new energy vehicle buying.

## 22. Power to Issue & Interpret

If there is any confusion or dispute about the meaning, intent or purpose of any provision of this Policy, the interpretation given by Transport Department, Government of Chhattisgarh shall be final and binding to all concerned.

This "Policy" shall mean this Chhattisgarh State Electric Vehicle Policy 2022 notified by the Government of Chhattisgarh vide transport department file No. F 3-11/VIII-Trans/2022 and notification number 539 dated 26/08/2022.