



Government of Punjab
Department of Transport



PUNJAB ELECTRIC VEHICLE POLICY
[PEVP] 2022 (DRAFT)

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List of Abbreviations

#	Abbreviation	Full Form
1	2W	Two Wheelers
2	3W	Three Wheelers
3	4W	Four Wheelers
4	AKIC	Amritsar Kolkata Industrial Corridor
5	ASDC	Automotive Skill Development Council
6	BEV	Battery operated Electric Vehicle
7	CMVR	Center Motor Vehicle Rules
8	COE	Centre of Excellence
9	DLIC	District Level Implementation Committee
10	E2W	Electric Two Wheelers
11	E3W	Electric Autos, E-Rickshaws & E-Karts
12	E4W	Electric-Passenger Carrier, LCV, State Carriage, Maxi Cabs & Taxis
13	EV	Electric Vehicles
14	EVI	Electric Vehicles Initiative
15	FAME	FAME India Scheme [Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India]
16	FCI	Fixed Capital Investment
17	G.S.R.	General Statutory Rules
18	GST	Goods & Service Tax
19	IEC	Information, Education and Communication
20	kVAh	Kilo Volt Ampere Hours
21	LCV	Light Commercial Vehicles
22	MBBL	Model Building Bye-Laws
23	MoHUA	Ministry of Housing & Urban Affairs
24	MoRTH	Ministry of Road Transport & Highways
25	NATrIP	National Automotive Testing & R&D Infrastructure Project
26	NEMMP	National Electric Mobility Mission Plan
27	NRSE	New and Renewable Sources of Energy (NRSE) Policy
28	OEM	Original Equipment Manufacturer
29	PEDA	Punjab Energy Development Authority
30	PEPSU	PEPSU Road Transport Corporation
31	PEVP	Punjab Electric Vehicle Policy
32	PSDM	Punjab Skill Development Mission
33	PSERC	Punjab State Electricity Regulatory Commission
34	PSPCL	Punjab State Power Corporation Limited
35	PUNBUS	Punjab State Bus Stand Management Company
36	R&D	Research & Development
37	RFP	Request for Proposal
38	RTA	Road Transport Authority
39	RWA	Residents Welfare Association
40	SDGs	Sustainable Development Goals
41	SLNA	State Level Nodal Agency

1. Context and Need for Policy

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 gas emissions.

To enable this paradigm shift in road transport, Government of India formulated a roadmap-National Electric Mobility Mission Plan 2020 with a vision to facilitate EV sales of 6-7 mn units by 2020. As a part of the plan, FAME (Faster Adoption and Manufacture of (Hybrid &) and Electric Vehicles) pilot scheme was launched in 2015 with an objective to promote electric vehicles. In 2019, the second phase of the FAME scheme (FAME-II) was launched with much bigger budget to enable demand and infrastructure creation to support the mobility transformation. Additionally, the Phased Manufacturing Program has been launched to promote indigenous manufacturing of EVs & EV components and provide a thrust to EV manufacturing in India. It is estimated that the success of FAME II coupled with other policy initiatives including state policies would result in EV sales penetration of 30% of private cars, 70% of commercial cars, 40% of buses and 80% of 2Ws and 3Ws by 2030.¹

1.1. Need for a Punjab EV Policy:

With various initiatives/schemes launched by the Government of India, both EV adoption and manufacturing are expected to be bolstered in the next decade. Now, the impetus must come from States & Cities to develop policy and implementation frameworks to provide necessary enablers and ecosystem to drive EV manufacturing and adoption.

Punjab is well placed as an auto & auto ancillary manufacturing destination **with leading players already present in the State, access to large consumer markets and state of art infrastructure**. Further, Government of Punjab recognizes the need for promoting cleaner mobility considering high level of vehicular emissions in major cities- Ludhiana, Jalandhar, Patiala, Amritsar & Bhatinda that contribute to more than 50% of vehicular emissions in the State.

Therefore, Government of Punjab recognizes the potential of EVs as a long-term sustainable solution and has decided to develop a dedicated policy for promoting EVs & EV component manufacturing and supporting EV adoption in the state with a prime focus on promoting cleaner mobility and creating jobs.

¹India's Electric Mobility Transformation, NITI AAYOG, April 2019

- 1.2. Policy Period:** The policy shall be valid for a period of 5 years from the date of notification with a detailed review to be undertaken annually, the incentives shall be extended only for the policy period unless otherwise mentioned/notified. The Department of Transport may modify the policy period or any other clauses in this policy with suitable notifications.

2. Objectives of the Policy

Punjab EV policy has been developed with an aim to drive adoption to have 25% of annual vehicle registrations as Electric Vehicles in the last year of policy. The Policy has the following objectives, designed for direct and indirect impact on multiple UN Sustainable Development Goals (SDGs).

- 2.1. Reducing Vehicular Emission** - To bring about reduction in vehicular emissions by end of policy
- 2.2. Infrastructure** - To promote creation of public and private EV charging infrastructure in the state.
- 2.3. Manufacturing** - To establish Punjab as a favoured destination for manufacturing electric vehicles, components, and batteries.
- 2.4. R&D-** To establish Punjab as a R&D hub in electric vehicles led by a Centre of Excellence (CoE).
- 2.5. Human Resource** - To enable job creation and introduce vocational (skilling and up-skilling) and academic training programmes for catering to human resource needs of EV ecosystem.
- 2.6. Ensuring sustainability** - To minimize damage to environment by promoting recycling and reuse of discarded batteries.

3. Developing a Robust EV Ecosystem

Almost half of the vehicular emissions in Punjab are contributed by 5 cities – Ludhiana, Jalandhar, Patiala, Amritsar & Bhatinda. Additionally, there is a large inter-state vehicular movement in Mohali being a part of tri-city. These cities shall be collectively referred as ‘**Target Cities**’ under this policy.

The most emitting vehicle segments² in these cities are buses, taxis, LCVs, 3W and 2W. EV adoption in these segments would maximize reduction in vehicular emissions. Government of Punjab recognizes that catalysing adoption in these segments would require incentives towards making EVs cost-competitive and development of adequate charging infrastructure. Hence, this policy focuses on:

- a) Driving adoption of two wheelers through fiscal incentives
- b) Supporting adoption of electric vehicles for public, shared and goods transport (buses, taxis, LCVs and 3W)
- c) Creation of adequate provisions for EV Charging Infrastructure

3.1. Encouraging Adoption of EVs

To encourage adoption of EVs in the state, the policy focuses on a combination of fiscal and non-fiscal incentives for electric two-wheelers, three-wheelers segments and supporting the electrification of public/shared transport and goods carriers.

3.1.1. E-Two Wheelers: More than three-fourths (76%) of new vehicle registrations in the state comprise of 2Ws (motorcycles, mopeds, and scooters) during the period 2013-19. This policy aims to increase the share of e-2Ws significantly to reach 25% of new sales over the policy period.

3.1.1.1. In addition to the incentives under the FAME phase-II scheme, a purchase incentive of INR. 3,000 per kWh of battery capacity shall be provided per vehicle, subject to maximum incentive of INR. 10,000/- per vehicle to the first 1,00,000 registered owners of electric two-wheelers.

3.1.1.2. To promote adoption of EVs in last mile delivery services, commercial fleet & delivery companies will be encouraged to achieve maximum transition towards electric in ‘target cities’ in a phased manner.

²Excluding HCVs and Tractors

3.1.2. E-Cycles: The state has been the leading producer and exporter of cycles in the country with over 10 million units produced annually. The most recent iteration to the traditional cycle is the electric-bicycle (e-cycle) which aims at reducing manual labour and has the potential to transform the micro-mobility segment. With recent announcement of the Govt. of India to extend Performance Linked Incentive (PLI) to e-cycles will provided the much-needed thrust to the sector.

3.1.2.1. *E-bicycles (e-cycles)* are electrically assisted pedal cycle i.e. bicycle with an integrated electric motor that can assist the riders exclusively if they pedal simultaneously. These vehicles have a speed of less than 25 km/h and usually weigh less than 60kg.

3.1.2.2. *Cargo Electric Bicycle (e-cargo cycle)* are an electrically assisted pedal cycle, either two-wheeled or three-wheeled (e-trike) with an integrated electric motor like e-cycle. The e-cargo cycles are installed with a payload carrier at the front or the rear of the cycle.

3.1.2.3. To promote adoption of e-cycles, the Policy shall provide purchase incentives to e-cycles in the state, subject to e-cycles fulfilling the following performance and eligibility criteria:

3.1.2.3.1. Max. speed of the e-cycle should not exceed 25km/hr.

3.1.2.3.2. Unladen weight (excluding battery weight) of the vehicles should not exceed 60kg

3.1.2.3.3. Min. Range of e-cycle (passenger) should be 20km, while that of e-cycle (cargo) should be 40km

3.1.2.3.4. E-cycles should be powered by Advanced battery (as per FAME-II)

3.1.2.4. The purchase incentive shall be applicable first 20,000 owners of e-cycles as elaborated in Table 1:

Table 1: Purchase incentive across e-cycle segments along with maximum applicable incentive.

S.no.	E-cycle Segment	Maximum applicable incentive per cycle	Applicable for first users
1	Passenger E-cycle	25% of Max. Sale Price or INR. 5,500 per cycle (whichever is lower)	10,000
2	Cargo E-cycles	33% of Max. Sale Price or INR. 15,000 per cycle (whichever is lower)	10,000

3.1.3. E-3W- Electric Autos (L5M category vehicles): The total number of passengers 3Ws sold during the period FY14-21 was 36,839 vehicles in Punjab, of which more than 75% fleet is diesel based. This scenario presents an attractive opportunity to leapfrog from diesel autos to e-autos. This policy aims to increase the share of e-autos significantly to reach 25% of new sales over the policy duration period in the target cities.

3.1.3.1. E-autos will be given preference for fresh permits in 'target cities'. Fleet owners will be allowed to obtain and hold e-auto permits subject to guidelines issued by Department of Transport, Government of Punjab.

3.1.3.2. In addition to the incentives under FAME phase-II scheme, a purchase incentive of INR. 3,000 per kWh of battery capacity shall be provided per vehicle, subject to maximum incentive of INR. 30,000/- per vehicle to the first 10,000 registered owners of electric auto-rickshaw (e-auto).

3.1.4. E- Rickshaws & E-Carts: The number of registered e-rickshaws sales during the period FY'14-21 was 2548. However, this number seems less as compared to the visibility of e-rickshaws in the state. This may be because of many these vehicles are not registered. E-rickshaws provide an excellent value proposition for last mile connectivity and have also emerged as a livelihood opportunity. The policy will aim to support the use of e-rickshaws that are safe and driven in compliance with regulations.

3.1.4.1. In addition to the incentives under FAME phase-II scheme, a purchase incentive of INR. 3,000 per kWh of battery capacity shall be provided per vehicle, subject to maximum incentive of INR. 30,000/- per vehicle to the first 10,000 registered owners of e-rickshaw.

3.1.4.2. The purchase incentive on e-rickshaw will be available for individual purchasers only, and for one E-rickshaw per individual.

3.1.4.3. A purchase incentive of INR. 3,000 per kWh of battery capacity shall be provided per vehicle, subject to maximum incentive of INR. 30,000/- per vehicle to the first 5,000 registered owners of e-cart.

3.1.4.4. Fleet owners shall be allowed to avail the purchase incentive available on e-carts under this policy.

3.1.5. Electric Light Commercial Vehicles (L5N and N1 category): Light commercial vehicles used as goods carriers are useful for low capacity, short haul deliveries in congested areas of the city. The policy

recognizes their importance and shall seek to incentivize rapid electrification of this vehicle segment.

3.1.5.1. A purchase incentive of INR. 3,000 per kWh of battery capacity shall be provided to first 5,000 registered owners of e-LCV (L5N and N1 category vehicle) subject to maximum incentive of INR. 30,000/- per L5N category vehicle, and maximum incentive of INR. 50,000/- per N1 category vehicle.

3.1.5.2. The applicable purchase incentive of INR. 5,000 per kWh of battery capacity (not exceeding INR. 50,000 per vehicle) shall be reserved for first 2,500 garbage collection vehicles (excluding vehicles applicable for incentive under 3.1.5.1); these vehicles could be of L5N and N1 category.

3.1.5.3. Commercial fleet businesses will be encouraged to achieve maximum transition towards electric vehicles through the purchase incentive in 'target cities' in a phased manner.

3.1.6. Vehicles in Public fleet (Owned or Contracted by Govt.): Government of Punjab would target to achieve maximum transition of public fleet to electric in a phased manner. BEVs would be given priority in all fresh procurement of vehicles/services.

3.1.7. Corporate Fleets: All corporates/institutions in the 'target cities' will be encouraged to sign up for a phased transition of their fleet. Government of Punjab shall organize special felicitation to recognize and encourage such corporates.

3.1.8. Waste disposal fleets: Government of Punjab would target to achieve 100% transition to electric waste disposal vehicles from existing conventional vehicles during the policy period in the target cities.

3.1.8.1. In accordance with clause with 3.1.5.3, to support the transition of waste disposal vehicles, purchase incentive shall be applicable on first 5,000 vehicles across target cities.

3.1.8.2. To achieve this, the state will develop proposal to access earmarked funds under the 'Swachh Bharat Kosh'.

3.2. Buses

3.2.1. Currently, almost 90% of bus fleet in Punjab is diesel based. The policy shall focus on progressively replacing 25% of bus fleet operating in Punjab to eliminate old buses in coming 3 years. Department of Transport would identify:

3.2.1.1. High Volume inter-city bus routes to be considered for transition to EV on priority

- 3.2.1.2.** City Bus fleet within target cities to be considered for transition to EV
- 3.2.2.** PUNBUS/ PRTC would be encouraged to procure/operate electric buses.
- 3.2.3.** Private Bus Operators would be encouraged to operate electric buses on identified routes
- 3.2.4.** The state will endeavour to participate in any/all e-bus aggregation scheme under the Govt. of India's FAME phase-II scheme.

3.2.5. Registration Fee and Road Tax

- 3.2.5.1.** In line with the notification G.S.R. 525(E) dated 2nd August 2021 in Central Motor Vehicles Rules, 1989, Rule 81; the Policy will also exempt EVs from the payment of fees for the purpose of issue or renewal of registration certificate and assignment of new registration mark.
- 3.2.5.2.** In addition to the registration fee, Road Tax on all registered Electric Vehicles (or BOVs) registered in Punjab shall be exempted during the policy period.

IMPORTANT NOTE:

- *The Transport Department, Government of Punjab shall notify a detailed operational guideline to disburse purchase incentive across various vehicles segment within 1 month from the notification of this Policy.*
- *All purchase incentives listed above shall be applicable only to advance cell chemistry based (Lithium-ion battery) vehicles recognized under the Govt. of India's FAME phase-II guidelines.*

3.2.6. Green Number Plates

- 3.2.6.1.** In line with the notification G.S.R. 749I dated 7th August 2018 in Central Motor Vehicles Rules, 1989, Rule 50, after sub-rule (2) a provision for green number plates has been made for commercial and private vehicles. This shall be suitably implemented in State of Punjab.
- 3.2.6.2.** Following incentives shall be provided under Punjab EV Policy to vehicles with Green Number Plates:
- 3.2.6.3. Tolls and Parking:**
- a) Tolls on select state highways, as notified by Government of Punjab, shall be waived off for Electric Vehicles with Green Number plates

- b) Reserved slots shall be made available in all major public parking spaces across target cities and charging infrastructure installation shall also be promoted in these slots
- c) Designated street parking spots to be identified and to be equipped with street-pole charging facility in 'target cities'.

3.2.6.4. Green zones & Green Transportation Corridors

- a) Special 'Green Zones' shall be declared at strategic locations where only electric vehicles shall be permitted entry in 'target cities'.
- b) Special transport routes will be demarcated as 'Green Corridors' that shall encourage plying of electric vehicles or other non-polluting vehicles on the route.
- c) Department of Transport shall notify Green Zones & Green Corridors from time to time. Special focus shall be laid on developing charging infrastructure in the Green Corridors.

3.2.7. IEC efforts - Information, Education and Communication (IEC) efforts shall be undertaken by Department of Transport, Government of Punjab to make public at large aware about Electric Vehicles and advantages of adoption.

3.2.8. Old Vehicles - Department of Transport shall notify a detailed scrapping policy in line with the draft scrapping guidelines of MoRTH. Efforts would be made to incentivize EV buyers through transition credits.

3.2.9. Electric Micro Mobility- to enable last mile connectivity - Government of Punjab recognizes the significance of micro mobility as last mile mobility mode in the cities and through this policy would encourage private players to establish clean last mile micro mobility options in consultation with District Level Implementation Committee.

4. Developing Network of EV Charging Infrastructure

Availability of robust charging infrastructure is a prerequisite and key driver for adoption of Electric Vehicles. The policy will aim to deploy a widespread network of charging infrastructure across the state of Punjab, with priority to the 'Target Cities' and Highways.

4.1. Key Principles -The key principles for deploying charging infrastructure in Punjab are:

- 4.1.1.** As EV charging is a rapidly evolving technology, the policy will take a technology agnostic approach, and provide a facilitative environment for different solutions, including battery swapping.

- 4.1.2. The policy will encourage deployment of charging stations for priority vehicle segments.
- 4.1.3. The policy will identify EV charging use cases based on charging requirements for different population/market segments viz. passenger vehicles, fleet owners for passenger and freight, delivery service providers, and public transport vehicles.
- 4.1.4. The policy will identify statutory, regulatory and market impediments to setting up EV charging stations and take steps to mitigate the impact of these impediments.
- 4.1.5. The policy will provide business model flexibility for private operators of charging stations.

4.2. EV Charging/Battery Swapping Use-Cases in Punjab - Based on Punjab's vehicle profile, mobility patterns, and parking characteristics, this policy identifies four use-cases for EV charging:

- 4.2.1. **Public Charging Stations:** Public charging stations refer to EV charging infrastructure on public land which will have unrestricted access for all EV users. These charging stations will primarily cater to the needs of inter-city travel, shared mobility (e-autos, e-rickshaws) and aggregators (cabs and delivery service providers). They will also supplement the emergency charging needs of private and fleet vehicles, and help in reducing 'range anxiety'.
- 4.2.2. **Semi-Public Charging Stations:** Semi Public charging stations refer to EV charging infrastructure on lands which are public in nature but have restricted access. These includes charging stations set up in public parking spaces of malls, government offices/institutional buildings, workplaces, hotels, shops, group housing societies etc, where EVs will have high dwell times. These charging stations will primarily cater to charging needs of EV users without access to designated parking and top-up charging needs of private EVs.
- 4.2.3. **Private/Captive Charging Stations:** Private/Captive charging stations refers to EV charging infrastructure which has restricted access for specific individuals, families, or fleets. Majority of EV charging in Punjab will take place at homes due to access to designated parking space.
- 4.2.4. **Battery Swapping Stations:** Battery swapping stations refers to stations where a discharged or partially charged battery of an EV (primarily 2 & 3 wheelers) can be swapped for a fully charged battery. Under the policy, Battery Swapping stations shall be considered at par with Charging Stations.

4.3. Targets for EV Charging/Swapping Infrastructure - The policy aims to provide accessible public charging stations to people across the state of Punjab. To achieve this:

- 4.3.1.** Within the first three years of the notification of the policy, there will be at least 1 public/semi-public charging point or battery swapping station for every 10 electric vehicles in the 'Target Cities'.
- 4.3.2.** Within the 5-year tenure of the policy, there will be at least 1 public/semi-public charging point or battery swapping station for every 15 electric vehicles in the State.
- 4.3.3.** Within the tenure of the policy, a public/semi-public charging/battery swapping station will be available within 3 km of travel anywhere in the 'Target Cities'.
- 4.3.4.** Within the first three years of the notification of the policy, there will be a fast-charging stations (DC charging, Level 2 or above ³) for every 25 kms of travel on both sides of the national and state highways in the State.

4.4. Institutional Mechanisms for Deploying EV Charging/Battery Swapping Infrastructure

- 4.4.1. Working Group for Accelerated Roll-Out of Charging/Battery Swapping Infrastructure:** An inter-agency Working Group for accelerated roll-out of charging/battery swapping infrastructure in the state will be formed. The Working Group will identify challenges, develop strategies, ensure coordination among stakeholder agencies, and monitor the progress of roll-out of EV charging/battery swapping infrastructure in the state. It will report to the State EV Committee and shall be chaired by the Transport Secretary, Department of Transport. It will comprise of the:
- i. CMD, Punjab State Power Corporation Limited (State Nodal Agency)
 - ii. Director, Punjab Energy Development Agency (PEDA)
 - iii. Chair of the District Level Implementation Committee
 - iv. State Transport Commissioner
 - v. Director, Local Government, Department of Local Government
 - vi. Director, Punjab Urban Development Authority
 - vii. Director, Department of Rural Development and Panchayats

³ As defined in Annexure III of the 'Charging Infrastructure of Electric Vehicles (EV) - the revised consolidated guidelines and standards-reg'' notified by the Ministry of Power, Government of India on 14/01/2022 or in any subsequent amendments to it

- viii. Any other special invitees as decided by the Chair of the Working Group

4.4.2. State Nodal Agency for Charging Infrastructure: Punjab State Power Corporation Limited (PSPCL) will be the State Nodal Agency (SNA) for deployment of EV charging/battery swapping Infrastructure in the State. PSPCL will create a Comprehensive Annual Action Plan (CAAP) each year for the deployment of EV charging/battery swapping Infrastructure in the State within one month of the notification of the policy and submit it to the Working Group for its deliberation and approval. For developing the CAAP, it will be supported by the State EV cell.

- 4.4.2.1.** The CAAP should include deployment of public, semi-public, and private charging stations as well as of battery swapping stations in the state (including highways) as envisaged by the policy.
- 4.4.2.2.** It will aggregate demand from across the district or the state to float unified tenders for the deployment of charging/swapping stations.
- 4.4.2.3.** It will also develop model RFPs for setting up charging stations on highways, on parking lots, in public/institutional buildings etc.
- 4.4.2.4.** In coordination with District Level Implementation Committee, it will act as a “Single Gate” and set up a dedicated desk for quick and easy approvals for all permissions required for setting up EV charging/battery swapping infrastructure.
- 4.4.2.5.** It will set up single window mechanism for installing charging points in semi-public and private spaces.
- 4.4.2.6.** A dedicated desk for quick and easy approval for permission, creation of EV charging provision and inspection of private/fleet EV charging infra will be setup under PSPCL (State Level Nodal Agency).
- 4.4.2.7.** It will work with PEDDA to develop renewable energy powered charging/battery swapping infrastructure.

4.4.3. Incentives for setting up EV Charging/Swapping Infrastructure:

- 4.4.3.1.** The DLICs will identify feasible locations along busy routes/highways, public parking zones, bus depots, terminals etc. for installation of charging/swapping stations within 2 months of the notification of the policy. Concessional lease rentals shall be charged for establishment of public charging stations on the identified locations. The framework for assessing the feasibility of a

location for setting charging or swapping stations will be developed by the Working Group.

- 4.4.3.2. Government of Punjab will provide capital subsidy, including for augmentation of upstream electrical infrastructure, for installation of charging/swapping stations in the State. The nature, quantum, and process for providing capital subsidy will be decided by the Working Group.
- 4.4.3.3. For setting up of semi-public and private charging points, the Government of Punjab will provide subsidy of INR. 3,000/charging point for first 8000 Level 1 Light EV AC charging points and INR. 10,000/charging point for first 2000 DC charging points ⁴.
- 4.4.3.4. PSPCL shall set in place a single window process for selection, order, installation, and net-of subsidy payment of Level 1 Light EV charging points eligible for subsidy. It can also include non-subsidised chargers in the single window process.
- 4.4.3.5. All charging and swapping stations, irrespective of their nature of use (public, semi-public or private) will be provided special tariffs as decided by the Punjab State Electricity Regulatory Commission (PSERC).
- 4.4.3.6. Incentives/Benefits under the New and Renewable Sources of Energy (NRSE) Policy shall also be made available for Solar Charging Infrastructure set-up under EV policy.
- 4.4.3.7. Subject to the approval of PSERC, wheeling charges will be waived off for renewable energy powered charging/battery swapping stations.
- 4.4.3.8. PSCPL will provide 'Power Banking' for setting up captive renewable energy facilities over a period of one year. This shall further encourage generation and use of renewable power.

4.4.4. Regulatory support for EV charging/battery swapping

- 4.4.4.1. On the submission of an application (complete in all respects) for electricity connection for EV charging/battery swapping station, PSPCL will provide connection within a period not exceeding 7 days in the 'target cities, 15 days in all other municipal areas, and 30 days in rural areas. PSERC can specify a time limit less than the above specified limit. If providing supply requires extension of

⁴ As defined in Annexure III of the 'Charging Infrastructure of Electric Vehicles (EV) - the revised consolidated guidelines and standards-reg'' notified by the Ministry of Power, Government of India on 14/01/2022 or in any subsequent amendments to it.

distribution mains, or commissioning new sub-stations, PSPCL will provide electricity within a period as specified by PSERC.

4.4.4.2. Subject to the approval of PSERC, a special EV meter will be allowed to be installed for the same consumer to enable accessing of the benefits of EV tariffs.

4.4.4.3. PUDA will make amendments to the building byelaws to ensure EV Charging infrastructure availability in both residential and non-residential buildings is in line with Amendments in Model Building Byelaws (MBBL-2016) for EVCI by Ministry of Housing and Urban Affairs. (MoHUA) as under:

- i. Non-Residential (Shopping complexes, malls, hotels, office spaces etc.) with parking demarcated for at least 10 cars – At least 1 Electric Charging Spots (ECS) for every 3 parking slots and 100% EV ready with conduits in place for New and Renovated Buildings
- ii. Residential (housing societies run through co-operatives, group housing and those managed through RWAs) with parking demarcated for at least 10 cars – At least 1 Electric Charging Spots (ECS) for every 5 parking slots and 100% EV ready with conduits in place for New and Renovated Buildings.

4.4.4.4. PUDA will also mandate all corporates/developers/RWAs in “Target Cities” to establish EV charging/battery swapping infrastructure in their respective existing premises.

4.5. Recycling/Reuse of EV Batteries - The global stockpile of EV batteries is forecasted to exceed the equivalent of about 3.4 million packs by 2025⁵. Since, EV batteries are usable for additional years post their primary useful life, there is a need to create an effective mechanism for re-use and recycle of these devices.

4.5.1. Reuse of EV batteries:

4.5.1.1. Disposal/Dumping of EV Batteries in trash and landfills will be prohibited, a separate notification would be issued in this regard.

4.5.1.2. OEMs and private eco system players will be encouraged to operate schemes for Battery buy back; Government would encourage creation of an e-marketplace for resale of used batteries

4.5.2. Recycling of EV Batteries:

4.5.2.1. OEMs and private eco system players will be encouraged to set up recycling facilities for batteries.

⁵Source: Bloomberg NEF Data

4.5.2.2. The CoE shall support the state in adopting suitable methods of disposing and recycling of batteries and create solutions for challenges facing the industry.

4.5.2.3. The state will facilitate setting up of recycling units for EV batteries with suitable incentives.

5. Encouraging Manufacturing Ecosystem for EVs in Punjab

The Government of Punjab aims to create an enabling environment for manufacturing of EVs, manufacturing facilities for EVs, EV components, batteries, and EVSE. In addition, the state shall endeavour to create a robust R&D ecosystem so that the state can attract investments expected in the sector. Under the Punjab Industrial and Business Development Policy 2017, all the benefits for 'thrust areas' shall be provided to these industries irrespective of location of manufacturing unit in the state.

5.1. Manufacturing units

5.1.1. Definition – Under the Policy end to end ecosystem i.e., battery manufacturing, EV Manufacturing, EV Component Manufacturing- motors, controllers, power trains, battery management systems, charging equipment, swapping equipment, power convertors, telematics, solar systems for EVs shall be included in the 'thrust areas' as defined in under Punjab Industrial and Business Development Policy 2017.

5.1.2. Manufacturing units of EVs (and related facilities) shall be included to the list of service enterprises under MSME or large category eligible for fiscal incentives under Punjab Industrial and Business Development Policy 2017.

5.1.3. To attract 'Anchor Units' – the Policy shall provide special incentives to encourage EV manufacturing and setup special facilities in the automobile park to be developed as a part of Amritsar Kolkata Industrial Corridor (AKIC).

5.1.4. Further EV would also be added as Sector for Anchor Units with Minimum Fixed Capital Incentive of INR. 50 Cr. or Minimum Direct Employment Generation of 500.

5.1.5. The Government of Punjab shall enable creation of infrastructure in the form of readymade Flatted Factories with power, water, sewage and testing facilities on a ready built basis to enable ancillaries to be set up. EV-related technology companies for telematics, autonomous driving and other related electronics/IT units shall also be facilitated for setting up in vicinity of factories.

5.1.6. The following additional incentives shall be provided to manufacturing units:

5.1.6.1. Concessional Land – The Government of Punjab shall create an Industrial Land Bank which will be facilitated by the Punjab Bureau of Industrial Promotion (PBIP) and provide suitable land to EV manufacturing units at concessional prices. The State EV Committee will provide the framework for assessing the suitability of land for EV manufacturing.

5.1.6.2. Industrial Hubs – PBIP shall facilitate creation of EV manufacturing Hubs at locations with proximity to state/national highway and connectivity to Dedicated Freight Corridor (DFC) and airport. Further, 100% exemption from CLU/EDU charges will be applicable for all eligible EV units.

5.1.6.3. Infrastructure Development – PBIP shall ensure development of all required infrastructure for the sector specific parks like approach roads, water supply, 24x7 industrial power, and common effluent treatment facilities. Roads will be developed to provide connectivity to the nearest national/state highway, railway station and airport.

5.1.6.4. Stamp Duty/Transfer Duty/Registration Fee Reimbursement – 100% waiver on first transaction, and 50% waiver of second per entity shall be available.

5.1.6.5. GST Reimbursement: For EVs manufactured in Punjab, 100% reimbursement of gross SGST on Intra-state sales and 50% reimbursement of gross SGST on Inter-state sales will be provided for a period of 10 years subject to maximum 200% of fixed capital investment.

5.1.6.6. Electricity Duty: 100% exemption from electricity duty for 15 years.

5.1.6.7. Employment Subsidy: employment generation subsidy of INR. 36,000 per male employee per year for a period of 5 years and INR. 48,000/ per employee per year for a maximum period of 5 years in case of females and SC/ST/OBC employee (as certified by a government agency). This will be applicable without any domicile restriction.

5.1.6.8. Labour Flexibility: Subject to applicable guidelines on security for night shifts, anchor units will be eligible to run three shifts (24x7) operations.

5.1.6.9. Single Window Clearance/Facilitation Desk - PBIP (and Invest Punjab) shall create a single window clearance process

for manufacturers to access these incentives and support identification of suitable locations to set up their manufacturing facilities. The facilitation desk, in addition to providing all information, shall also be responsible to ensure minimal delays in SGST reimbursements and other challenges.

All other incentive for Start-ups/ MSME/ Large units as defined under Punjab Investment and Business Development Policy would be applicable for eligible EV Units.

5.2. Hi-tech Cycle Valley, Ludhiana

5.2.1. To begin with, the state will encourage setting up EV/Battery units in the new industrial park located over 380 acres in Dhanansu village of Ludhiana district.

5.2.2. The valley has already emerged as the hub of e-bikes. It is being equipped with state-of-the-art infrastructure including common facilities for effluent treatment, water treatment plant, design facilities, convention and exhibition centre, warehousing, and logistic services amongst other facilities.

5.3. Special concessions for EV Units

5.3.1. **Giga Battery Manufacturing Unit:** State will actively encourage and engage with EV battery manufacturers to enable setting up of at least one Giga battery manufacturing unit in the state. Incentives for the same will be customized on case-to-case basis.

5.3.2. **E-tractor manufacturing:** Punjab is the leading manufacturer of tractors in the country and envisions being the leader in e-tractors manufacturing and usage. The state will encourage existing and new tractor OEMs to develop prototype suitable for Indian conditions. The state will encourage proposals from the industry to set up dedicated anchor units to manufacture e-tractors in the state and shall provide additional incentives over and above those applicable for anchor units of other EVs. These shall be decided on merit of proposals received by the State.

All above listed incentives would be paid in accordance with 'Detailed Scheme and Operational Guidelines' 2018 for availing fiscal incentives under Industrial and Business Development Policy' 2017'

5.4. Strategic Initiatives–R&D and Innovation

5.4.1. Punjab E Mobility Centre of Excellence (CoE) - The state will enable development of a Centre of Excellence in e-mobility in partnership with an academic partner or an industry association. The State shall encourage premier technical institutions in the state to partner on merit basis for setting up this centre, along with the industry. It is expected that the CoE would set world class benchmark in design, development, and validation for EVs and smart mobility.

PEDA can partner with Punjab E-Mobility Center of Excellence (COE) for development of latest Battery technologies/Solar PV port charging and other latest technologies in this field.

Following would be the broad scope of work for the CoE:

Domain	Broad scope
Analytics	Provide analytics to the state in terms of adoption, vehicular emissions and other electric mobility related parameters for policy implementation evaluation and improvement
Collaboration	It shall establish tie-ups with leading international and national institutions for effective knowledge transfer and development of technology
Standards& related guidance	Provide guidance/ set up of state standards (as needed) for EV Charging infrastructure, vehicles and other related items considering guidelines by Central Government and state needs
Research &Development	The CoE shall act as a focal point for Research & Development in the state, across EV value chain, including research towards reduction of battery costs, increasing range of vehicles and assimilation of global developments in EV technology.
Incubation	Provide necessary incubation support/ facilities to E-Mobility start-ups in collaboration with 'Startup Punjab'
Skill Development	Facilitate skill development in EV sector by involving all relevant stakeholders
Special state needs	Tractors in Punjab account for one of the largest shares in vehicular emissions, the CoE shall encourage R&D for development of electric tractors in collaboration with industry players

5.4.2. EV Testing Centre: a state-of-the-art testing, validation and R&D infrastructure is critical for creating a robust EV ecosystem in the state. The state will explore the possibility of setting up a new test centre in Punjab with appropriate authorization, which could cater to requirements of the entire region.

5.4.3. Start-ups & Entrepreneurship: Innovation led entrepreneurship is key to development of a fast-emerging sector like EV. Acceleration to EV adoption shall be led by start-ups offering innovations in e-mobility to users and manufacturing companies

- a) The mobility start-ups shall be supported by incentives to incubators and start-ups laid down in Punjab Industrial and Business Development Policy, 2017.
- b) The state shall encourage participation of Start-ups in public procurements by waiving off prior experience or turnover requirements so long as the product meets the desired specifications in line with notification No.Cos/Start-ups/2019/11288 dated August 16, 2019.

5.5. Skilling Initiatives for EV Ecosystem

Availability of skilled manpower for the sunrise sector of e-mobility is critical for creation of a robust ecosystem. In this regard, the state will undertake the following:

- a) **Masters' Programs:** State will encourage technical institutions under Dr B R Ambedkar National Institute of Technology (NIT) - Jalandhar, Punjab University and IIT Ropar to develop and run specialised master's programs dedicated to smart mobility solutions. Education institutions will be encouraged to rope in industry partners in designing the curriculums and training required for such programs. The state shall establish a scholarship program for the first 2000 students, for training of new engineers in EV domain.
- b) **Skilling Centre:** In line with the aim of setting up one skill centre for each identified industrial cluster, the Government will set up at least one skill centre under the aegis of the Punjab Skill Development Mission dedicated to smart mobility solutions in the vicinity of the Hi-tech cycle valley.
- c) **Short-term Courses:** To satisfy the immediate needs of the EV industry, re-skill people working in existing auto/auto-ancillaries industries and manpower required for repair/maintenance of EVs, short term courses of 3-6 months will be introduced in partnership with technical institutions and NSDC training providers. Education institutions will also be encouraged to explore partnership with global universities and leading industries to roll out certified short-term courses.
- d) **Punjab Skill Development Mission (PSDM)**in collaboration with Automotive Skill Development Council (ASDC) shall introduce courses related to maintenance and manufacturing of Electric Vehicles in existing

skill development initiatives being implemented and collaborate/support 'EV Units' for launching Apprenticeship Program.

6. State EV Fund

The Government of Punjab shall seek to fund a high proportion of proposed incentives through feebates. A 'feebate' structure—where polluting vehicles incur a fee while efficient ones receive a rebate— can provide an additional means of funding for the EV Policy and effectively cross-subsidize EVs.

6.1. The Government of Punjab shall explore creation of an umbrella, non-lapsable 'State EV Fund' which shall be utilised to promote EVs in the state and can aggregate disincentives from the following sources:

6.1.1. Pollution Cess -From the date of notification of the Policy, a "pollution cess" of INR. 10paise per litre on diesel shall be levied to all vehicle owners. The details of the cess shall be notified by the Department of Transport, Government of Punjab. The collected cess shall be allocated exclusively to the State EV Fund.

6.1.2. Road Tax -Additional road taxes shall be levied on ICE vehicles, especially luxury vehicles and a fixed proportion of the incremental revenues collected shall be allocated to the State EV fund. The revised road tax rates shall be notified by the Department of Transport.

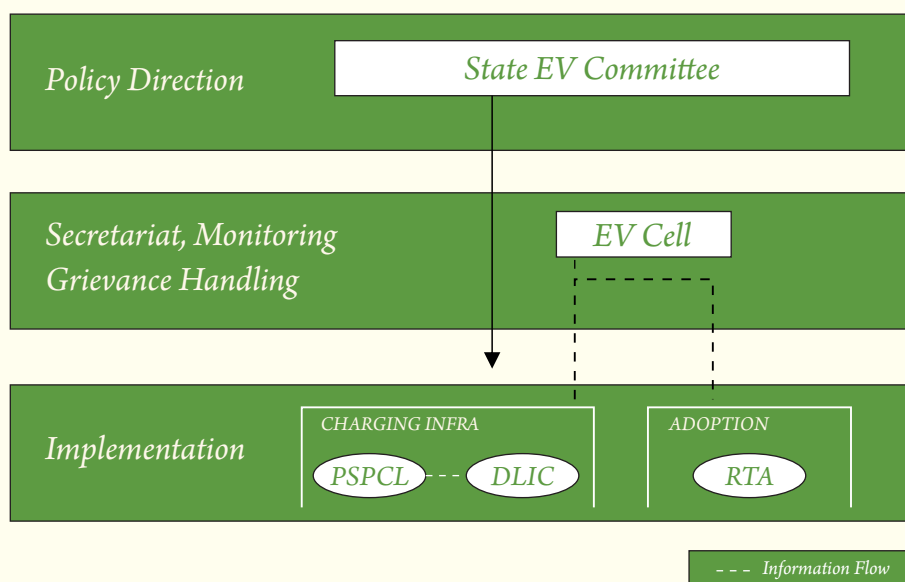
6.1.3. Other Source -Any gap left after funding from the State EV Fund is exhausted, shall be filled through budgetary allocations.

The fund shall be used to channel incentives for EVs through the disbursement process. The disincentives outlined in the policy shall be reviewed periodically to ensure the amounts levied and collection mechanisms are effective and sufficient to be a primary contributor towards funding demand incentives.



7. Policy Implementation and Institutional Structure

The Department of Transport Government of Punjab will be the nodal department for the implementation of Punjab State EV Policy. Following measures shall be taken to ensure a smooth implementation of various



proposals in the State EV Policy:

7.1. EV Cell:

A dedicated EV cell shall be established for effective day-to-day implementation of the EV Policy. It will be led by a Chief EV Officer, a professional with sufficient experience in the field of electric mobility, who shall be supported by adequate and competent staff to exclusively deal with all matters related to electric mobility & this policy including grievance handling.

7.2. State EV Committee:

a) State EV Committee shall be the apex body for effective implementation of the State EV Policy. It will be chaired by the Hon'ble Minister of Transport, Government of Punjab, and comprise of the following members:

- Chief Secretary, Government of Punjab
- Principal Secretary, Department of Transport (Member Secretary)
- CEO- Punjab Bureau of Investment Promotion, Department of Industries
- Principal Secretary- Local Government, Department of Local Government
- Principal Secretary- Department of Housing and Urban Development
- Principal Secretary- Power, Department of Power
- Principal Secretary – New & Renewable Energy
- Member Secretary, Punjab Pollution Control Board

- State Transport Commissioner, Department of Transport
 - Chief EV Officer, Government of Punjab
 - Industry Experts from the EV industry to be nominated from the domains of OEM-vehicles, OEM-Batteries, Charging Infra Operators, and others key EV ecosystem stakeholders
- b) The State EV Committee shall be fully empowered for the various incentive schemes and projects emanating out of the State EV Policy. The Committee will meet at least once every three months (or as necessary) and will perform the following roles:
- i. Review the implementation and effectiveness of the policy and undertake necessary and sufficient corrective measures / changes / amendments if required to achieve the objectives desired under the policy including but not limited to formulating detailed operating guidelines and issue relevant notification as per the Policy.
 - ii. Put in place relevant institutional decisions necessary to implement this policy (e.g., notifying list of approved vehicles, identifying public charging spaces and battery swapping locations etc.)
 - iii. Bring about inter-departmental coordination in respect of matters related to this Policy.
 - iv. Review the definitions of EV, EV components, Battery and Charging Station or any other related definitions and approve the amendments as deemed appropriate.
 - v. Invite industry to understand their challenges and take appropriate policy decisions to meet the challenges
- c) Broad responsibilities of each of the departments of the Committee are as follows:
- **Department of Transport**
 - As a nodal agency of this policy, the department shall undertake periodic review of the policy as per local needs and directives/guidelines from Central Government
 - Issue notifications/directives for smooth implementation of the policy
 - **Department of Industries**
 - The department shall be responsible for making arrangements of funds for providing incentives to electric mobility businesses setup in the state.
 - Punjab Bureau of Investment Promotion shall facilitate activities for attracting investment in EV sector.

- **Department of Local Government& Department of Housing and Urban Development**
 - The department shall make suitable changes to the building byelaws
 - Implementation of modified byelaws at city level
 - Facilitate land and other relevant approvals
- **Department of Power**
 - The department shall periodically review tariffs and consider special incentives on power usage for EV Charging Infrastructure.
 - The department shall periodically consider power related guidelines issued by Central Government and adapt the same for state.
 - It shall also issue directives to electricity distribution companies for facilitating required connections for Public and Private EV Charging infrastructure on a priority basis.
- **Punjab Pollution Control Board**
 - Board shall monitor vehicular emissions in the State to support policy strategies and evaluate effectiveness

District Level Implementation Committee (DLIC)

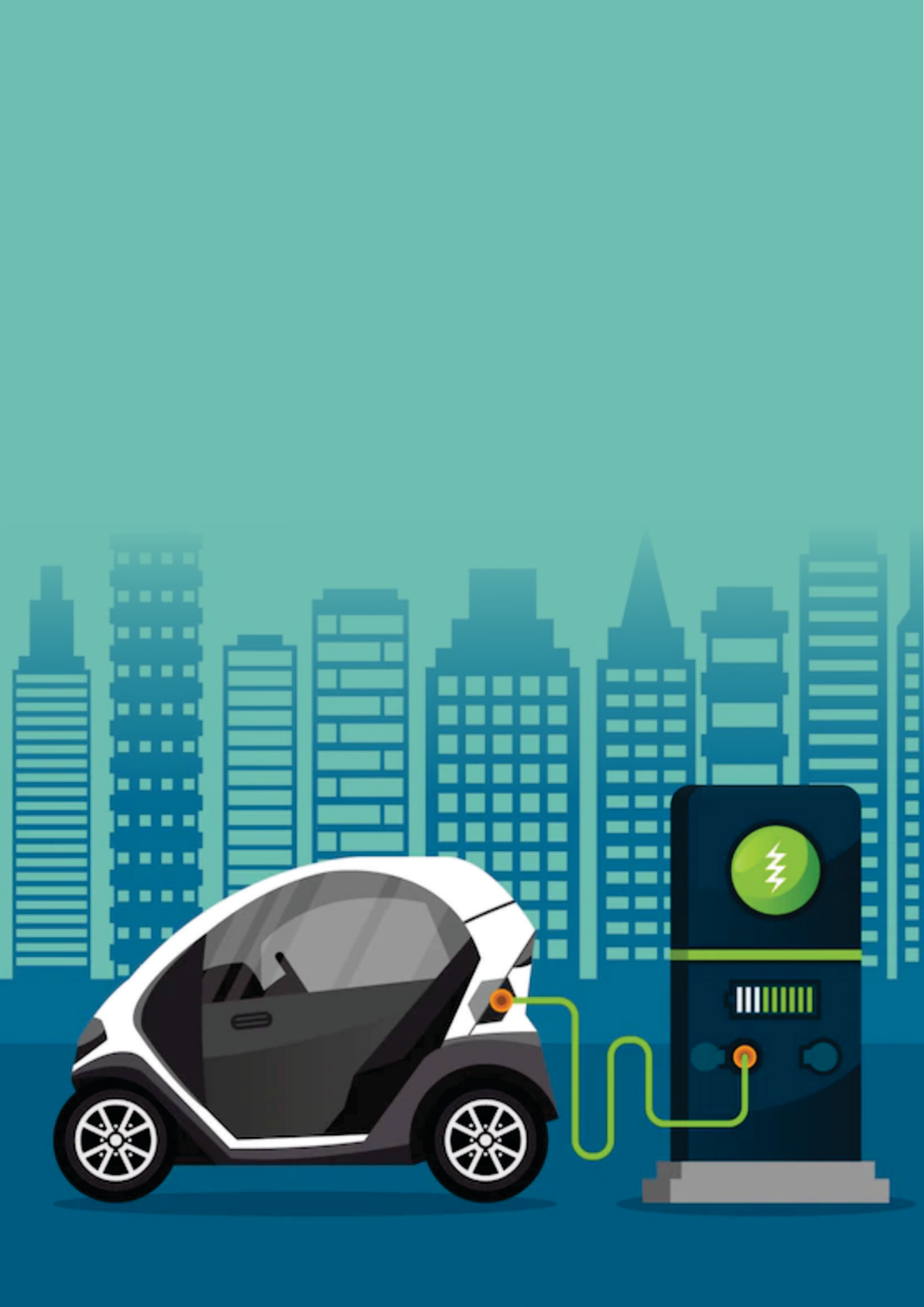
A District Level Implementation Committee shall be formed to operationalize the policy in the 'target cities'. The committee shall oversee the implementation of policy initiatives special projects and provide necessary approvals for the city as decided by the State EV Committee. The committee shall provide necessary progress reports to the State EV Committee. The committee shall be District Collector and co- chaired by Municipal Commissioner of the city and shall be comprised of following members:

- District Collector
- Commissioner, Municipal Corporation/ ULB (Member Secretary)
- CEO Area/City Development Authority.
- In-charge, Regional Transport Authority
- Senior Representative of local Power Distribution Company
- Manager, District Industries Center
- Representative of Department of Town and Country Planning
- District representative of Punjab Pollution Control Board
- Representative from Fire Department
- Representative from PEDDA

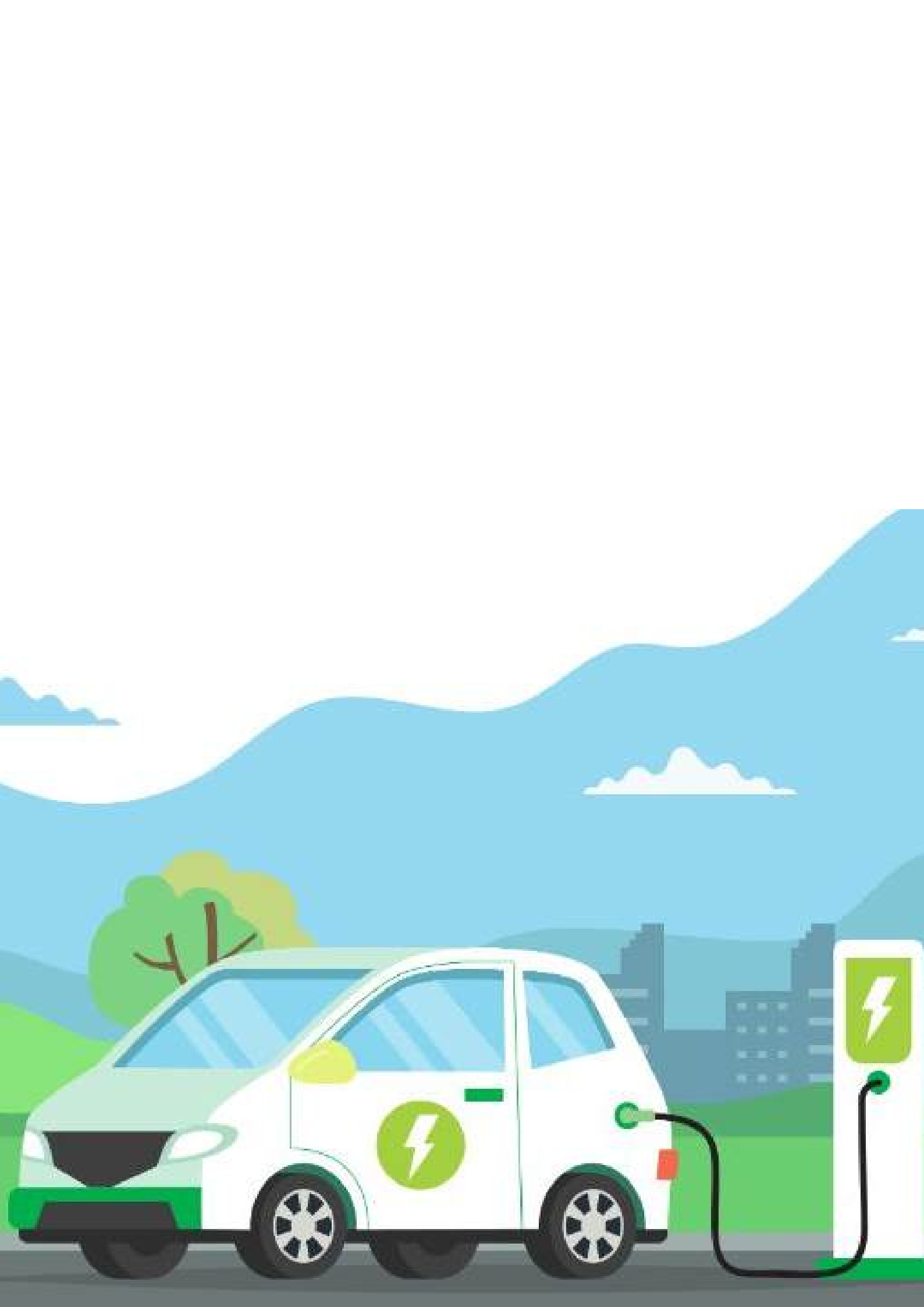
Broad responsibilities of departments are as follows:

- i. **Transport Department** –Policy interpretation and coordination with state EV Cell. Enable implementation of incentives related to the department
- ii. **Urban Development Department/ ULB/ SMART City** - dovetail funds such as SMART City funds and other urban development funds; Town and Country Planning rules amendments at local level to facilitate establishment of such infra
- iii. **Urban Local Body (City Government)** - act as a nodal agency for setup of city level infrastructure, identification of charging locations & facilitation and dovetailing of funds from various sources. Facilitate for city level implementation through RFPs developed by State Level Nodal Agency.
- iv. **Power Distribution Company** - establish public charging infrastructure or provide power supply to Charging Infra on best effort basis

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**Government of Punjab
Department of Transport**

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