

**The  
DRAFT**

**Goa Electric  
Mobility  
Promotion  
Policy-2021**

## **1. INTRODUCTION**

- 1.1** Adoption of Electric Vehicles ('EVs') for daily commute is essential for a wide range of goals, including better air quality, reduced noise pollution, enhanced energy security along with lowered carbon dioxide and greenhouse gas emissions. With vehicular pollution being a persistent source of reduced air quality within the State, rapid adoption of zero emission vehicles is of great importance.
- 1.2** Under the National Electric Mobility Mission Plan (NEMMP), Government of India has envisioned 6-7 million electric and Hybrid vehicles on Indian roads by 2020. Towards this goal, the Faster Adoption and Manufacturing of Hybrid and Electric vehicles (FAME) scheme has been launched by Department of Heavy Industries, Government of India. Its target is saving 120 million barrels of oil and 4 million tons of CO<sub>2</sub> as well as lowering of vehicular emissions by 1.3 % by 2020. FAME India scheme has four focus areas– technology development, demand creation, pilot projects and charging infrastructures.
- 1.3** Based on the recent techno-economic developments in EV sector and the vision of Government of India, a need is felt by Government of Goa to formulate a policy for promotion of this sector in Goa. Building on indigenous strengths of tourism and IT industries, Government of Goa aims to make Goa as a model State in EV.
- 1.4** With a coastline of about 104 kms and inland waterways of about 250 kms, Goa is among the fastest growing states in the country. The Goan economy is largely dependent on tourism as annual tourists are almost five times that of the local population. Goa has a total population of 15 lakh and receives about 75 lakh tourists every year. The movement of these seasonal tourists is largely dependent on unorganized transportation including unmetered taxis, motorcycles, ferry boats and rickshaws.
- 1.5** Despite the unorganized nature of the transport sector, Goa stands on top in the country in terms of per capita vehicles with 625 vehicles for every 1,000 people in the state and is also ranked 15 in the world in terms of vehicle density. According to estimation by Goa Automobile Dealers Association (GADA), on an average, every Goan household has about 2 bikes and one car. With an urbanization rate of 62%, these numbers are only expected to grow. Hence, there is an eminent need to ensure growth of this sector does not further environmental degradation. Adoption of new energy vehicles (NEVs) would also be supported by utility growth in the state.
- 1.6** In terms of utilities, Goa is a power surplus state. Out of the state's 580 MWh power demand, approximately 18% is currently met by clean energy sources.

## 2. ***VISION:***

- 2.1 To establish Goa state as a model of International Standards for Electric Vehicle adoption across passenger and commercial segments, supported by a world-class charging infrastructure and eco-system. This would be achieved by active incorporation of all sustainable initiatives including smart-city development, promotion of energy conservation and creation of integrated transport mechanisms.

## 3. ***TITLE:***

- 3.1 This policy shall be known as the “**Goa Electric Mobility Promotion Policy-2021**”.

## 4. ***KEY DEFINITIONS***

### 4.1 ***Electric Vehicle (EV)***

A vehicle which is powered exclusively by an electric motor whose traction energy is supplied exclusively by traction battery installed in the vehicle and has an ‘Electric Regenerative Braking System’. For the purpose of this policy EV would also include hybrid electric vehicles, plug-in hybrid electric vehicles and mild hybrid vehicles.

### 4.2 ***EV Components***

Major components of EV include motor controller, electric engine (motor), regenerative braking, drive system, and related parts/assemblies.

### 4.3 ***EV Battery***

An electric-vehicle battery (EVB) or traction battery is a battery used to power the propulsion of battery electric vehicles (BEVs). Vehicle batteries are usually a secondary (rechargeable) battery. For the purpose of this policy, only advance chemistry cell and batteries will be considered.

### 4.4 ***EV Charging Station & Equipment***

An electric vehicle charging station, electric recharging point, charge point and EVSE (electric vehicle supply equipment), supplies electric energy for the recharging of electric vehicles. The charging station equipment shall include charging posts, charging cabinets, fully automated charging stations integrated with power distribution equipment, etc. For the purpose of this policy both fast-charging and slow-charging stations shall be considered.

### 4.5 ***EV Charging Infrastructure***

The policy envisages two main types of charging facilities, viz. Public charging stations:-

**4.5.1** Commercial – at fuel stations, roadside, malls, offices state highway etc.

**4.5.2** Public institutions – schools, government buildings, bus depots etc.

**4.5.3** Private charging stations:-Residential localities, residential buildings etc. Domestic user facility (individual).

## **5. *PIONEER EV UNITS***

**5.1** The first two mega projects, with fixed capital investment (FCI) of over INR 250 crores, for manufacturing of EVs, EV components and/or batteries in the State.

## **6. *MEGA EV ENTERPRISES***

**6.1** Mega EV enterprise is a manufacturing enterprise where fixed capital investment (FCI) on manufacturing facility is more than INR 250 crore or which creates direct employment for at least 500 persons.

**6.2** Ultra-mega EV enterprises, is a manufacturing enterprise where fixed capital investment on manufacturing across the state is INR 1500 crore which generates 3000 employment.

## **7. *MSM EV ENTERPRISES***

**7.1** As per Industries Department of Goa, MSME is defined as those units with investment in plant & machinery ranging from under INR 25 lakhs and up to, but not exceeding, INR 10 crores. For the purpose of this policy - MSME shall include FCI between INR 10 crores and INR 100 crores.

## **8. *OBJECTIVES***

- 30% of annual vehicles registered in Goa, starting from the year 2025, would be electric.
- To convert 50% of all ferries to electric by 2025.
- To create 10,000 direct and indirect jobs in the sector by 2025.
- To encourage start-ups and investment in the field of electric mobility and associated sectors.
- To promote service units which would include electric vehicles and battery repair and maintenance stations?
- To promote R&D, innovation and skill development within the EV sector.
- Financial Incentives - Purchase incentives, Scrapping incentives, Interest subvention on loans.
- To provide waiver on road tax and registration fees.
- To establish a wide network of charging stations and swappable battery stations, and develop publicly owned database of the same.

## **9. ADMINISTRATION**

- 9.1** Department of New and Renewable Energy shall be responsible for administration of the policy including constitution of State Electric Vehicle Board, with officials from Govt. of Goa, Department of Transport, Goa Electricity Department, Goa Energy Development Authority & Convergence Energy Services Limited (CESL) as its key members, establish a dedicated EV cell, and develop an intensive public outreach programme focused on creating awareness about the benefits of electric vehicles and key elements of the policy.
- 9.2** To create 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.

## **10. OPERATIVE PERIOD**

- 10.1** This Policy shall be applicable for a total of 5 years, from the date of its notification in the official Gazette. All provisions of this Policy shall be applicable during the Operative Period unless mentioned otherwise.

## **11. SCOPE AND ELIGIBILITY**

- 11.1** This Policy shall be applicable to all classes of Electric Vehicles including 2-wheelers, 3-wheelers, passenger cars and commercial light/heavy vehicles that are registered and operated in Goa. This Policy shall be applicable to Battery Electric Vehicles (BEV), Hybrid Vehicles and Plug-in Hybrid Electric Vehicles (PHEV), as per FAME-II notifications and provisions.

## **12. MANUFACTURING INCENTIVES**

- 12.1** Incentives to units engaged in manufacturing of electric vehicles, batteries, EV components, EVSE etc., shall be applicable as outlined below. Units that qualify for incentives under this policy shall not avail any other incentives from Government of Goa.

## **13. PIONEER, MEGA AND LARGE UNITS**

- 13.1** The package of incentives to Pioneer, Mega and Ultra-Mega units manufacturing Electric Vehicles and associated components shall be given with the recommendation of the High-Power Committee formed under this policy.
- 13.2** The following incentives shall be given:-
- Capital subsidy of up to 20% of Fixed Capital Investment (FCI).
  - 100% net SGST reimbursement for 5 years.
  - 100% stamp duty exemption.

## **14. MICRO SMALL AND MEDIUM ENTERPRISES (MSME)**

### **14.1 MSMEs**

**14.1.1** Under this policy, manufacturing MSME's will be eligible for incentives as per schemes in force through EDC, Directorate of Industries, Trade and Commerce etc. Built-up space with ready factory sheds will be developed to be used by MSME units by GIDC

### **14.2 Micro Units**

- A capital subsidy of 30% of the cost of capital provided the subsidy on building/office is restricted to Rs 5 lakh.
- 100% net SGST reimbursement for 5 years.
- 100% stamp duty exemption

### **14.3 SMALL & MEDIUM UNITS**

- A capital subsidy of 30% of the cost of capital provided the subsidy on building/office is restricted to Rs 10 lakh.
- 100% net SGST reimbursement for 5 years.
- 100% stamp duty exemption.
- Price preference at the rate of 15% on the purchase made by the Government Departments is available to the registered Small- Scale Units.

### **14.4 UTILITIES**

- 100% electricity duty reimbursement for 5 years.
- Support in construction of effluent treatment plant (ETP) with 50% capital subsidy

## **15 ELECTRIC TWO WHEELERS**

**15.1** As more than two-thirds of new vehicle registrations in Goa comprise of two wheelers (i.e., motorcycles and scooters), with the most popular segments being motorcycles between 110-125 cc and scooters between 90-125 cc, any attempt at electrification of Goa's vehicle fleet needs to address these segments to achieve significant reduction in air pollution.

**15.2** The demand generation incentives for two wheelers offered under the policy shall be based on battery capacity (i.e. energy content measured in kWh) used in vehicles. The incentives listed below shall be available only for the electric two wheelers with Advanced Batteries and subject to a maximum incentive of INR 30,000 per vehicle.

**15.3** To avail the demand incentives, the electric two wheelers shall have to fulfill the following performance and efficiency eligibility criteria

S no.	Criteria	Threshold value
1.	Min. top speed	40 km/hr
2.	Min. acceleration	0.65 m/s <sup>2</sup>
3.	Max. electric energy consumption	Not exceeding 7 kWh/100km
4.	Warranty	At least 3 years comprehensive warranty including that of battery from manufacturer

- 15.4** Two wheeler Original Equipment Manufacturers (OEMs) shall have to register their e- vehicle models, including swappable battery models, meeting eligibility criterion tabulated/specified above with the Department of Transport, Govt. of Goa. Applications for registration by the two wheeler OEMs shall have to be supported with certification from testing agencies recognized under Rule 126 of Central Motor Vehicle Rules, 1989. The Department of Transport shall register and publish online the list of e-vehicles models eligible for the two wheeler incentives, based on these applications.
- 15.5** A purchase incentive of INR 10,000/- per kWh of battery capacity shall be provided per vehicle to the registered owner and subject to maximum incentive of INR 30,000/- per vehicle. Registered owner of two wheeler (i.e., two wheeler eligible for the Purchase Incentive) shall also be eligible for a Scrapping Incentive for scrapping and de-registering old ICE two wheeler registered in Goa. Up to INR 5,000/- of the incentive shall be reimbursed by the Department of New and renewable Energy Govt. of Goa to the registered owner of two wheeler, subject to evidence of matching contribution from the dealer or OEM, and Confirmation of scrapping and de-registration of the ICE vehicle by the RTO
- 15.6** Ride hailing service providers shall be allowed to operate electric two-wheeler taxis, subject to operating within the guidelines to be issued by the Department of Transport, Govt. of Goa. It is expected that the incentives provided by the policy shall encourage delivery service providers (e.g., food delivery, e-commerce logistics providers, couriers) and operators renting two wheelers to tourist, to switch to using electric two wheelers.
- 15.7** To ensure the switch happens in a time bound manner, all two wheelers involved in commercial activity operating in Goa shall switch to complete electric by 31<sup>st</sup> December, 2025. For beyond 31<sup>st</sup> December 2030, all the two wheelers sold in the state of Goa to be 100% electric. However, the existing registered ICE vehicles shall be allowed to operate until their end of life.

**15.8** Individuals, delivery service providers, two wheeler rental operators etc., who commit to switch to electric two wheelers, shall be eligible for financing support from Convergence Energy Services Limited (CESL). CESL also to collaborate with electric two wheeler OEMs for creating new and innovative financing model to lower the cost of purchase of these vehicles.

**16. *ELECTRIC AUTO RICKSHAWS ( E-AUTOs )***

**16.1** Govt. of Goa aims to incentivise the purchase and use of new electric autos ('e- autos') instead of ICE equivalents and simultaneously promote replacement of existing CNG/petrol/diesel autos by e-autos. Incentives listed below shall be provided under the policy by the Govt. of Goa to all Electric L5M Category (passenger three wheelers or auto rickshaws) vehicles with advanced batteries listed as being eligible under FAME India Phase II (having fulfilled all the eligibility and testing conditions as specified under the scheme) and shall also include swappable models, where battery is not sold with the vehicle.

**16.2** To support self-employment and wide ownership of e-autos, following incentives shall be provided to all individuals with an e-auto permit.

**16.3** Purchase Incentive of INR 10,000/- per kWh of battery capacity per vehicle (subject to a maximum incentive of INR 30,000/- per vehicle) shall be provided by Govt. of Goa to the registered owner of the e-auto.

**16.4** Interest subvention on loans and/or hire purchase scheme for purchase of an e-auto from Convergence Energy Services Limited.

**16.5** Registered owner of e-autos (i.e., vehicles eligible for the Purchase Incentive) shall also be eligible for a Scrapping Incentive for scrapping and de-registering old ICE auto rickshaws registered in Goa. Up to INR 10,000/- of the incentive shall be reimbursed by the Department of New and Renewable Energy Govt. of Goa to the registered owner of electric auto, subject to evidence of matching contribution from the dealer or OEM, and confirmation of scrapping and de-registration of the ICE vehicle as well as surrender of existing permit.

**16.6** The auto-rickshaw permits linked to the de-registered ICE vehicle can be surrendered and exchanged for an e-auto permit at no additional cost.

**17. *E-RICKSHAWS AND E-CARTS***

**17.1** This policy aims to support the use of E-rickshaws and E-carts that are safe and driven in compliance with regulations. Following incentives shall be provided to all individuals with a valid driving license, who want to purchase an E-rickshaw or E-cart. These incentives shall be available only for the purchase of one E-rickshaw or E-cart per individual.

**17.2** A Purchase Incentive of INR 30,000/- per vehicle shall be provided to the registered owner for the purchase of one E-rickshaw or one E-cart per individual. This incentive shall apply to all E-rickshaws and E-carts, including the models with Lithium ion batteries and swappable models, where battery is not sold with the vehicle.

**17.3** In addition, for purchase of E-rickshaws and E-carts with an advanced battery (i.e., for models certified by ARAI as an E-rickshaw or E-cart and having an advanced battery), interest subvention on loans and/or hire purchase schemes shall be provided by Convergence Energy Services Limited.

## **18. *ELECTRIC BUSES***

**18.1** Substantial addition of buses to the public transport fleet is expected in the period 2021- 2025. The Govt. of Goa commits to providing appropriate incentives and other support necessary to ensure that pure electric buses constitute at least 50% of all new stage- carriage buses (i.e., for all public transport vehicles with 15 seats or more) procured for the city fleet including for last mile connectivity, with target induction of 500 pure electric buses by 2025.

## **19. *GOODS CARRIERS ( I.E., L5N and N1 VEHICLES )***

**19.1** 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 fleet. Incentives listed below shall be provided by the Department of New and Renewable Energy Govt. of Goa and shall be applicable to all Electrical Vehicles in the category of L5N (three wheeled goods carriers) and N1 (goods carrier having gross vehicle weight not exceeding 3.5 tons) with advanced batteries listed as being eligible under FAME India Phase II (having fulfilled all the eligibility and testing conditions, as specified under the scheme) and shall also include swappable models, where battery is not sold with the vehicle.

**19.2** Individuals and fleet owners shall be encouraged to adopt electric goods carriers ('e- Carriers') by providing a Purchase Incentive of INR 30,000/- per e-Carrier registered in Goa after the notification of this policy.

**19.3** Interest subvention of 5% on loans and/or hire purchase scheme for purchase of e-carriers shall be provided by Convergence Energy Services Limited.

**19.4** Electric goods carriers in the above categories shall be completely exempted from the prohibition on plying and idle parking of lights goods vehicles on identified roads of Goa during specified timings as notified by the Department of Transport, Govt. of Goa from time to time.

**19.5** The Purchasers of e-carriers (i.e. vehicles eligible for the Purchase Incentive) shall also be eligible for a Scrapping Incentive for scrapping and de-registering old ICE goods carriers registered in Goa. Up to INR 10,000/- of the Incentive shall be reimbursed by the Department of New and Renewable Energy Govt. of Goa to the purchase of e-carriers, subject to evidence of matching contribution from the dealer or OEM, and confirmation of scrapping and de-registration of the ICE vehicle.

## **20. *FOUR WHEELERSs (E-CARS)***

**20.1** A Purchase Incentive of INR 10,000/- per kWh of battery capacity shall be provided per electric four-wheeler (subject to a maximum incentive of Rs.1, 50,000/- per vehicle) to the registered owners of e-cars to be registered in Goa after the notification of this policy. The incentive shall be applicable only to electric four-wheeler with advanced batteries listed as being eligible under FAME India Phase II (having fulfilled all the eligibility and testing conditions as specified under the scheme) and shall also include swappable models, where battery is not sold with the vehicle.

**20.2** To establish the feasibility for large scale adoption of electric passenger four wheelers, Govt. of Goa shall take the lead in transitioning its entire fleet to electric. All leased/hired cars used to commute Govt. of Goa officers shall be transitioned to electric within a period of one year from the date of notification of this policy. All such leasing/hiring should be done through Convergence Energy Service Limited (A wholly owned subsidiary of Energy Efficiency Services Limited which is a JV company of PSUs under Ministry of Power Government of India). The Department of New and Renewable Energy shall be the nodal authority on behalf of Govt. of Goa to enable this transition.

## **21. *PROVISIONS APPLICABLE ACROSS VEHICLE SEGMENTS***

**21.1** Road Tax and registration fees shall be waived for all Battery Electric Vehicles during the period of this policy.

**21.2** The Purchase/demand incentives offered under the policy (i.e., Purchase and Scrapping Incentives) for all Electric vehicles shall be given directly to the registered owners by Department of New and Renewable Energy Govt. of Goa, based on claims made by individual buyers after the purchase of the vehicle.

**21.2** If the battery is not sold with vehicle, 50% of the Purchase Incentive shall be provided to the vehicle owner & the remaining amount of up to 50% would be provided to Energy Operators for defraying the cost of any deposit that may be required from the end users for use of a swappable battery.

- 21.3** Operational guidelines for delivery of all demand incentives offered under the policy (i.e., Purchase and Scrapping Incentives) shall be issued from time to time by the Department of New and Renewable Energy Govt. of Goa.
- 21.4** The interest subvention of 5% being offered in the vehicle categories of E-Autos, E- rickshaws, E-carts and Goods carriers would be applicable, only if the loan is availed from the Convergence Energy Services Limited (CESL).
- 21.5** All electric vehicles registered in Goa shall be issued a green number plate in accordance with the notification No. F. No. RT-11028/03/2018-MVL dated 07.08.2018 of the Ministry of Road Transport and Highways, Govt. of India.
- 21.6** Specific areas to be identified like – Panjim Smart City, Heritage Zones, Tourist Zones, Airport and Railway stations etc. which will move towards 100% mandatory electric vehicles by 2025.

## **22. CHARGING INFRASTRUCTURE**

- 22.1** Experience in other cities across the globe indicates that availability of charging infrastructure is a key driver of Electric Vehicle adoption. The objective of this policy shall be to create an enabling environment for the provision of private as well as public charging infrastructure.

## **23. SUPPORT FOR CHARGING INFRASTRUCTURE**

- 23.1** The State shall endeavour to have a charging station at every 25 kilometers on highways and every 3 kilometers within city limits. Battery swapping and fast charges are also included in the ambit of this policy and would be promoted.
- 23.2** All EV charging stations, both private and public, shall adhere to the protocols approved by the Government of India, as updated on date 1<sup>st</sup> October 2019 i.e. Bharat EV Charger AC-001 and Bharat EV Charger DC-001, and any other protocols as and when notified. Additionally, solar-powered stations would be given top priority and encouraged in the case of both private and public charging stations.

## **24. PRIVATE CHARGING STATIONS**

- 24.1** Following changes in residential and commercial building bye laws will be made to make home and workplace parking “EV ready”.
- 24.2** All new and renovated non-residential buildings, as well as individual and other residential buildings, Co-op, Group Housing Societies and colonies managed by Residents Welfare Associations (RWAs), with parking demarcated for more than 10 equivalent car spaces (‘ECS’) will need to

have at least 20% ‘EV ready’ ECS spots with conduits installed.

- 24.3** Designation of smaller conduits as “green buildings” that will be operating on clean energy as a model for other residential areas to follow.
- 24.4** Power distribution companies (DISCOMS) will work with owners of residential and non-residential buildings, RWAs and Co-op Group Housing Societies to ensure adequate supply infrastructure is made available for the installation of these charging points.
- 24.5** All housing and commercial establishments shall compulsorily register with Goa Electricity Department for installing charging stations with designated parking spaces. Additional duties on electricity will be waived.

## **25. *PUBLIC CHARGING INFRASTRUCTURE***

- 25.1** Providing accessible public charging facilities within 3 km travel from anywhere in Goa is a key objective of this policy. Considering that there are several stakeholders involved in the implementation of public charging infrastructure within Goa, a Working Group on Accelerated Rollout of Charging Infrastructure in Goa (‘Charging Infrastructure Working Group’) to be established by Department of New and Renewable Energy and Goa Electricity Department, along with Convergence Energy Services Limited.
- 25.2** Convergence Energy Services Limited will assist Govt. of Goa to set up charging and battery swapping stations across Goa in multiple phases. Govt. of Goa through Department of New and Renewable Energy will provide Concessional Locations for charging station at bare minimum lease rentals. These Concessional Locations shall be carved out from existing public parking zones such that they offer easy entry and exit. A list of Concessional Locations for the first phase of rollout shall be identified by the Charging Infrastructure Working Group within two months of notification of the policy. Locations to include but not limited to industrial estates, tech parks, petrol pumps, existing auto/bus stands.
- 25.3** Govt. of Goa shall provide a capital subsidy for the cost of chargers installation. No operational subsidies shall be provided for operating the chargers. The subsidy shall only be applicable for chargers being installed within one year of the allocation of a Concessional Location.

## **26. *CAPITAL SUBSIDY***

- 26.1** The State Government will incur all electricity infrastructure cost, up to INR 8,00,000/- associated with installation of EVSEs and charging stations.
- 26.2** In the case of solar-powered charging stations, the state shall provide a 20% capital subsidy for installation.

## **27. UTILITIES SUBSIDY**

- 27.1** Electricity will be provided at a lowered power tariff, currently of INR 4.2/unit, as determined by the Joint Electricity Regulatory Commission (JERC) on an annual basis. Standard tariff would be applicable in all areas where stations are, including commercial, residential and industrial.
- 27.2** Regulators should also be recommended to waive off Fixed Demand Charges during the policy term.
- 27.3** In addition to these private and public stations to be installed by interested parties, Department of New and Renewable Energy would take responsibility for the following solar-powered stations, accounting for electric 2W/3W/4W and e-bus charging.
- 27.4** Installation of first 50 charging stations in the state – at selected Kadamba Transport Corporation Ltd. (KTCL) bus depots.  
Installation of 5 fast-charging stations at the international airport.  
Installation of 10 slow charging stations at Central Secretariat in Panaji.

## **28. FAVOURABLE ELECTRICITY TARIFF FOR CAPTIVE AND PRIVATE CHARGING FACILITIES**

- 28.1** 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 Joint Electricity Regulatory Commission (JERC).
- 28.2** Tariff concessions outlined in para below shall also be extended to all Private Charging Points as well.
- 28.3** Charging stations operators shall be encouraged to use low cost and renewable sources of power. In consultation with JERC, the Govt. of Goa shall endeavour to provide: (a) Open Access without the condition of having contracted demand of 1 MW and above at every charging station or swapping kiosk. (b) Power banking –The Charger Operators who set up captive renewable energy facilities shall be given power banking facilities with Goa Electricity Department for operating in Goa over a period of one year. This shall encourage generation and use of renewable power.

## **29 Payment Infrastructure and Information Sharing**

- 29.1** The Charger Operators shall be expected to accept payments through multiple modes such as cash, cards, mobile wallets and UPI. Option for payments through the common mobility card payment system shall also need to be offered.

**29.2** An open, publicly owned database shall be developed by Department of New and Renewable Energy along with Convergence Energy Services Limited offering historical and real time information on public charging infrastructure i.e., kWh, session length, vehicle type if available, number of events, location (latitude, longitude) of the charger, number of chargers at site, site classification, payment amount, pay structure (by hour, or by kWh, or by session), as well as payment rate.

**29.3** The Charger Operators shall have to provide data to this public database. The database can be used free of charge by in- vehicle navigation systems and charging apps and maps.

### **30. *RECYCLING ECOSYSTEM***

**30.1** Electric Vehicle 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. Batteries that have reached their end of life shall have to be either reused or recycled. Lack of adequate reuse or recycling shall 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.

**30.2** The Policy shall encourage the reuse 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.

**30.3** Also, Convergence Energy Services Limited to develop a use case for second life of electric vehicle batteries since even after degrading to 70-% of their capacity, they can be used for energy storage.

### **31. *FUNDING***

**31.1** The Govt. of Goa shall seek to fund a high proportion of the incentives proposed in the policy using the ‘feebate’ concept i.e. by adopting measures by which inefficient polluting vehicles incur a surcharge (fee) while efficient ones receive a rebate (bate).

**31.2** Funding for the various incentives being offered under the Goa EV Policy shall be obtained from the various sources indicated herein below and aggregated and given to Goa Energy Development Agency ( GEDA).

**31.3** Pollution Cess on the sale of diesel and petrol is proposed to be applicable in the state of Goa at 75 paise per litre . The amount collected shall be transferred to State EV Fund on a monthly basis.

**31.4** Pollution cess on all ICE Vehicle sold in the State after notification of this

policy.

- 31.5** Road Tax called “Green Tax” levied on registration of diesel and petrol vehicles shall contribute to State EV Fund. The additional tax shall be based on a sliding scale with high price vehicles paying the highest additional road tax and low price two wheelers incurring a small addition. Revised Road Tax rates in line with this principle may be notified by the Department of Transport, Govt. of Goa and the “Green Tax” thus collected shall be allocated to the State EV Fund.
- 31.6** Congestion Fee shall be levied on all trips originating or terminating within Goa and taken using cab aggregator and ride hailing services. This tax shall be waived for rides taken in e-two wheeler, e-auto or e-cab. Tax due shall have to be deposited with the Department of Transport, Govt. of Goa every month and shall be transferred to the State EV Fund under Department of New and Renewable Energy
- 31.7** Monthly CSR contribution from industries to the State EV fund shall be enforced.
- 31.8** Any gap left after funding from the State EV Fund is exhausted, shall be filled through allocations including budgetary, as may be decided and deemed appropriate by the Government from time to time.

**32. *SUPPORT FOR RE-SKILLING AND UP-SKILLING.***

- 32.1** Skill development courses in EV maintenance and component assembly will be started in ITI s and Polytechnics’ to skill the workforce to augment the manpower required for the EV promotion and maintenance.
- 32.2** A stipend of up to 50% of the cost of course fee subject to a limit of INR 10,000/- per year per student in all skill development and re-skilling courses affiliated to Board of Technical Education and State Council for Vocational Training shall be offered.

**33. *EASE OF DOING BUSINESS (EoDB)***

- 33.1** Single Window System: As part of the Government of Goa’s endeavour to promote EoDB in the state.
- 33.2** The Investment promotion Board will give single-window clearance for all types of investments in the state with a special focus on EV Manufacturing. Through the single window portal, the Government will also provide a channel for the units to provide policy inputs to the Government.
- 33.3** Through the single window system, all decisions regarding incentive approvals and payments will be provided within 90 working days, subject to due compliance of all procedures by the applicant.

## **34. FRAMEWORK FOR IMPLEMENTATION**

**34.1** State Electric Vehicle Board constituted with officials from Department of New and Renewable Energy, Department of Transport, Goa Electricity Department, Goa Energy Development Authority & Convergence Energy Services Limited (CESL), will be the Nodal Authority for the implementation of the Goa Electric Vehicle Promotion Policy.

## **35. INSTITUTIONAL STRUCTURE**

**35.1** A High-Power Committee will be constituted at the state level to monitor the implementation of this policy and develop procedures and modalities wherever required. The composition of the High-Power Committee will be as follows:

1. Secretary, New & Renewable Energy	Chairperson
2. Secretary, Finance	Member
3. Secretary, Transport	Member
4. Secretary, Industries	Member
5. Secretary, Power	Member
6. Secretary, (TCP)	Member
7. Secretary, Urban Development	Member
8. Secretary, Panchayat Raj	Member
9. Secretary, Skill Development	Member
10. Secretary, P.W.D	Member
11. Secretary, Tourism	Member
12. CEO, Investment Promotion Board	Member
13. Director, NRE	Member Secretary
14. Director of Transport	Member
15. Managing Director, KTCL	Member
16. Member Secretary, GEDA	Member
17. President of GSIA	Member
18. MD&CEO, CESL	Member

**35.2** The High-Power Committee may invite representative from any Department, Corporation or Association or a person of eminence in the relevant field for its meeting as per need.

### **35.3 CHARTER OF HIGH-POWER COMMITTEE.**

- Approve the framework of implementation proposed by the Committee in time bound manner.
- Ensure that incentives are disbursed by relevant departments in stipulated timeframe.
- Monitor and ensure timely release of relevant orders/Government

Resolutions/Government Notifications and amendment required.

- Bring about inter-departmental co-ordination in respect of matters related to this policy.
- Review the definition of EV, EV components, Battery and Charging Station or any other related definitions and approve the amendments as may be appropriate.
- Review the best practices.
- The High-Power Committee shall review the implementation and effectiveness of the Policy every six months and corrective measures/changes/amendments if required shall be done.
- Put in place an institutional mechanism required to implement this policy (e.g. notifying the list of approved vehicles, identifying public charging spaces and battery swapping locations etc.)

