



**DRAFT**

# **Arunachal Pradesh Electric Vehicle Policy-2021**



Prepared by Arunachal Pradesh Energy Development Agency (APEDA)



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GOVERNMENT OF ARUNACHAL PRADESH  
DEPARTMENT OF POWER, AP CIVIL SECRETARIAT  
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**1. PREAMBLE:**

The past century has been the era of Internal Combustion Engine (ICE) primarily on account of the ease of use, availability and low cost of fossil fuels. The shift to electric mobility has become necessary on account of fast depletion of fossil fuels, rapid increase in energy cost, impact of transportation on the environment and concerns over climate change. So, this Electric Vehicle Policy is framed for Arunachal Pradesh in order to contribute to sustenance of green environment. As per IEA report of 2009, fossil fuel-based transportation is the second largest source of **CO<sub>2</sub>** emissions globally. From 2006 to 2030, the global energy consumption is likely to rise by 53% and about three quarters of the projected increase in oil demand will come from transportation. Electrification of transportation system will help to reduce vehicular emissions, a key contributor to air pollution which causes an average 3% GDP loss every year.

**2. OBJECTIVES:**

- (i) To facilitate and enable faster adoption of Electric Vehicles (EVs) in Arunachal Pradesh by ensuring safe, reliable, accessible and affordable charging Infrastructure and eco-system.
- (ii) To promote affordable tariff chargeable from EV owners and Charging Station Operators/ Owners.
- (iii) To generate employment/ income opportunities for small entrepreneurs.
- (iv) To proactively support creation of EV Charging Infrastructure in the initial phase and eventually create market for EV Charging business.
- (v) To encourage preparedness of Electrical Distribution system to adopt EV Charging Infrastructure.

**3. TITLE:**

This document shall be known as the “Arunachal Pradesh State Electric Vehicle Policy, 2021”

**4. OPERATIVE PERIOD:**

This policy shall take effect from the date of its notification till it is replaced, modified or de-notified. It may be modified as per requirement from time to time.

**5. ROADMAP AND GUIDELINES:**

- (i) Private charging at residences/ offices shall be permitted. Distribution Companies (DISCOMs) may facilitate the same.



- (ii) Setting up of Public Charging Stations (PCS) shall be a de-licensed activity and any individual/ entity is free to set up Public Charging Stations provided that, such stations meet the technical, safety as well as performance standards and protocols laid down herein below as well as any further norms/ standards/ specifications laid down by Ministry of Power and Central Electricity Authority (CEA) from time to time.
- (iii) Any person seeking to set up a Public Charging Station may apply for connectivity and he shall be provided connectivity on priority by the Distribution Company licensee to supply power in the area.
- (iv) Any Charging Station/ Chain of Charging Stations may also obtain electricity from any generation company through open access.
- (v) For these guidelines, Electric Vehicle Supply Equipment (EVSE) shall mean an element in EV infrastructure that supplies electric energy for recharging the electric vehicles.

## 6. INFRASTRUCTURE REQUIREMENTS FOR PUBLIC CHARGING STATIONS:

6.1 Every Public Charging Station (PCS) will have the following infrastructure:

- (i) An exclusive transformer with all related substation equipment including safety appliance, if required.
- (ii) 33/11 KV line/ cables with associated equipment including line termination etc, if required.
- (iii) Appropriate Civil Works.
- (iv) Appropriate cabling & electrical works ensuring safety.
- (v) Adequate space for Charging and entry/exit of vehicles.
- (vi) Public Charging Station shall have, any one or more chargers or any combination of chargers from the table given below in one or more electric kiosk/ boards.

Charger Type	Charger Connectors*	Rated Output Voltage (V)	No. of Connector Guns (CG)	Charging Vehicle Type (W= wheeler)
Fast	(i) Combined Charging System (CCS) – Min. 50KW	200-750 or higher	1 CG	4W
	(ii) Charge-de-Move (CHAdemo) – Min. 50KW.	200-500 or higher.	1 CG	4W
	(iii) Type-2AC – Min. 22KW.	380-415	1 CG	4W, 3W, 2W
Slow/ Moderate	(i) Bharat DC-001(15KW)	48	1 CG	4W, 3W, 2W



	(ii)	Bharat DC-001(15KW)	72 or higher	1 CG	4W
	(iii)	Bharat AC-001(10KW)	230	3 CG of 3.3KW each.	4W, 3W, 2W
<p>*In addition, any other fast/slow/moderate charger as per approved DCT/BIS standards wherever notified.          Note: Type-2AC (min.22KW) is capable of charging e-2W/3W with the provision of an adapter.</p>					

- (vii) Charging Station for e-2W/3W shall be free to install any charger other than those specified above subject to compliance of technical & safety standards as laid down by CEA.
- (viii) Tie-up with at least one online Network Service Providers (NSPs) to enable advance remote/ online booking of charging slots by EV owners. Such online information to EV owners should also include information regarding location, types and numbers of chargers installed/ available, service charges for EV charging etc.
- (ix) Share charging station data with the appropriate DISCOM and adhere to protocols as prescribed by CEA for this purpose. CEA, Central Nodal Agency (CNA) and State Nodal Agency (SNA) shall have access to this database.

6.2 Electric Vehicle Supply Equipment (EVSE) shall be type tested by an agency/ lab accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL) from time to time.

6.3 The above minimum infrastructure requirements do not apply to Private Charging Points meant for self-use of individuals EV owners (non-commercial).

6.4 Captive charging infrastructure for 100% internal use for a company's/ organisation's own/ leased fleet for its own use will not be required to install charges as per para- 6.1 and to have NSP tie ups.

6.5 Charging Station may also be installed by Housing societies, Malls, Office Complexes, Restaurants, Hotels, etc. with a provision to allow charging of visitors' vehicles which are permitted to come in its premises.

**7. INFRASTRUCTURE REQUIREMENT FOR PUBLIC CHARGING STATION FOR LONG RANGE EVs AND/ OR HEAVY DUTY EVs:**

7.1 Fast Charging Stations (FCS) i.e., public charging stations for long range EVs and/ or heavy duty EVs (like trucks, buses etc.) will have the following:

- (i) At least two chargers of minimum 100 KW (200-750V or higher) each of different specification (CCS/ CHAdeMO or any fast charger as approved by DST/BIS for above capacity) with single connector gun each.



(ii) Appropriate Liquid Cooled Cables for high speed charging facility as above 7.1(i), for on board charging of Fluid Cooled Batteries (currently available in some long range EVs) if required.

7.2 Such Fast Charging Stations (FSC) which are meant only for 100% in house captive utilisations, for example buses of a company/ organisation, would be free to decide the charging specifications as per requirement for its in-house company/ organisation EVs.

## **8. LOCATION OF PUBLIC CHARGING STATIONS:**

8.1 In case of Public Charging Stations, the following requirements are laid down with regard to density/ distance between two charging points:

- (i) At least one Charging Station shall be available in a grid of 3KmX3Km. Further, one charging Station shall be set up at every 25Km on both sides of highways/ roads.
- (ii) For long range EVs and/ or heavy duty EVs like buses/ trucks etc., there shall be at least one Fast Charging Station with Charging Infrastructure Specifications as per (7.1) above at every 100Kms., one on each side of the highways/ road located preferably within/ alongside the stations laid in para- 6 above. Within cities, such charging facilities for heavy duty EVs may be located within Transport Nagars, bus depots.

8.2 Additional PCS/FCS can be installed even if there exists a PCS/FCS in the required grid or distance.

8.3 The above density/ distance requirements shall be used by the for the purposes of land use planning for public charging stations as well as for priority in installation of distribution network including transformers/ feeders etc. This shall be done in all cases including where no central/ state subsidy is provided.

8.4 The Government shall also give priority to existing retail outlets (ROs) of Oil Marketing Companies (OMCs) for installation of Public EV Charging Stations (in companies with safety norms) to meet the requirements as laid above. Further, within such ROs, Company owned and Company operated (COCO) ROs may be given higher preference.

## **9. DATABASE OF PUBLIC EV CHARGING STATIONS:**

Central Electricity Authority (CEA) shall create and maintain national online database of all the Public Charging Stations through DISCOMs. Appropriate protocols shall be notified by DISCOMs for this purpose which shall be mandatorily complied by the PCS. This database shall have access as finalised by CEA and Ministry of Power.



## 10. TARIFF FOR SUPPLY OF ELECTRICITY TO EV PUBLIC CHARGING STATIONS:

10.1 The tariff for supply of electricity to EV Public Charging Station shall be determined by the appropriate commission in accordance with the Tariff Policy issued under section 3 of electricity Act 2003 as amended from time to time.

10.2 The tariff applicable for domestic consumption shall be applicable for domestic charging.

10.3 Separate metering arrangement shall be made for PCS so that consumption may be recorded and billed as per applicable tariff for EV charging stations.

## 11. SERVICE CHARGES AT PCS:

11.1 Charging of EVs is a service as already clarified by Ministry of Power vide letter No. 23/08/2018-R&R dated 13.04.2018.

11.2 In such cases where the PCS/FCS has been installed with Government Incentives (financial or otherwise), State Nodal Agency/ State Government/ Appropriate Commission shall fix the ceiling of Service Charges to be charged by such PCS/ FCS.

## 12. ROLLOUT OF PUBLIC CHARGING INFRASTRUCTURE/ STATION:

12.1 The Government will facilitate/ enable setting up of Public EV Charging Stations in the State Capital and District Headquarters of all the Districts and also on state/ national highways within the state by Retail Outlets (ROs) of Oil Marketing Companies and by Local Entrepreneurs by providing subsidy in the following pattern in 5 years period from the date of notification of the Policy.

Sl. No.	Owner of PCS	Subsidy Pattern of State Government
1	Retail Outlet of Oil Marketing Companies.	15% of the cost of putting up Public Charging Infrastructures and Stations will be reimbursed by the State Govt. in the form of subsidy/ incentive.
2	Local Entrepreneurs	25% of the cost of putting up Public Charging Infrastructures and Stations will be reimbursed by the State Govt. in the form of subsidy/ incentive.

Note: The state govt. will facilitate to avail central govt. subsidy, if any by the ROs and Local Entrepreneurs in addition to the state govt. subsidy.

12.2 The subsidy/ incentive for setting up a Public Charging Station/ Infrastructure shall be applicable to those meeting the guidelines and standards of the Ministry of Power as amended from time to time.

12.3 The Bureau of Energy Efficiency (BEE) has been made the Central Nodal Agency (CNA) by the Central Government for rollout of EV Public Charging Infrastructures in the country. The state DISCOM i.e the Department of Power will be the State Nodal Agency (SNA) for rollout of the EV Public Charging Infrastructures in the State of Arunachal Pradesh.



12.4 The State Nodal Agency will work in tandem with Central Nodal Agency for better and faster rollout of the EV Charging Infrastructures/ Stations. In the state.

**13. SELECTION OF IMPLEMENTING AGENCY FOR ROLLOUT:**

13.1 An Implementation Agency may be selected by the State Nodal Agency and entrust the responsibility of arrangement, procurement, installation and maintenance of PCS/ FCS for designated period as per parameters laid down in the Policy. The Implementing Agency may be an Aggregator or Manufacturer of the systems.

13.2 The ROs of Oil Marketing Companies and Local Entrepreneurs who are interested to set up Public EV Charging Stations will get them implemented by the Implementing Agency selected by the State Nodal Agency.

**14. INCENTIVES FOR EARLY ADOPTION OF ELECTRIC VEHICLES:**

14.1 The Government wants to encourage early adoption of Electric Vehicles in the state by all stakeholders viz. Government Departments, Public Sectors/ Undertakings, NGOs, Agencies, Organisations, Private and General Public etc. Therefore, the following incentives will be given by the Government for the first 200 numbers of EVs.

Sl. No.	Vehicle Segment	Number of EVs	State Subsidy Amount
1	2 Wheeler	100 Nos.	Rs.10,000/- per Kwh of battery capacity subject to a maximum of Rs.30,000/- per vehicle.
2	3 Wheeler	50 Nos.	Rs.10,000/- per Kwh of battery capacity subject to a maximum of Rs.50,000/- per vehicle.
3	4 Wheeler	50 Nos.	Rs.10,000/- per Kwh of battery capacity subject to a maximum of Rs.2,00,000/- per vehicle.

14.2 The above incentives from the State Government will be given in addition to the Central government incentive, if any.

14.3 The incentive will be transferred to the account of the EV owners directly by DBT mode through the State Nodal Agency on production of proof of purchase of EVs from dealers.

**15. POWER TO ISSUE AND INTERPRET:**

15.1 In case of any confusion and dispute about the meaning, intent or purpose of any provision under this Policy, the interpretation given by the Department of Power (DISCOM), Govt. of Arunachal Pradesh shall be final and binding.

By order and in the name of the Governor of Arunachal Pradesh.

(.....)  
Commissioner (Power),  
Govt. of Arunachal Pradesh.





## **Acronyms:**

ICE-Internal Combustion Engine

IEA- International Energy Agency

GDP – Gross Domestic Product

EVSE – Electric Vehicle Supply Equipment

EVs – Electric Vehicles

PESO – Petroleum & Explosive Safety Organisation

FAME – Faster Adoption & Manufacturing of Hybrid & Electric Vehicle

NEMMP – National Electric Mobility Mission Plan

APSERC – Arunachal Pradesh State Electricity Regulatory Commission

NOC – No Objection Certificate

NITI Aayog – National Institution for Transforming India

DISCOM – Distribution Company