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Arunachal Pradesh Electric Vehicle Policy-2021



Prepared by Arunachal Pradesh Energy Development Agency (APEDA)



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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 **CO₂** 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.</p> <p>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.