

Uttar Pradesh Electric Vehicle Manufacturing and Mobility Policy 2019

Background

Electric Vehicles are widely gaining market across the globe. Due to high pressure and fast depletion of fossil fuels, electric mobility has become necessary to reduce impact of transportation on environment and climate change. The recent Paris Agreement enforced in November 2016 provides to limit Carbon dioxide emissions to control global warming and threats of climate change. Electrification of automotive industry aims at achieving the set objectives by decarbonising the transport system.

Indian automobile industry is one of the largest growing industry in the world, and the sector promises further growth in manufacturing sector driving country's economic growth. Since presently the automobile industry largely contributes to pollution, the government is promoting electric mobility towards this.

In 2018, the global electric car fleet exceeded 5.1 million from 2 million in the previous year and almost doubling the number of new electric car sales. With rapid expansion in electric mobility, the private and public charging infrastructure has been continuously expanding. Annual growth rate of publicly available charging infrastructure was higher than the electric car stock growth rate on global level.

The Electric Vehicle market in India is set to go enormous and is estimated to be around 80 lacs by 2020, and approximately 5 crores by 2030¹. Prices of Lithium Batteries are rapidly going down, thereby making EVs cheaper. Electric Vehicles Storage Opportunities (in GW) in India is anticipated to grow at CAGR 44% till 2022².

In a recent report published by FICCI and Rocky Mountain Institute, it has been estimated that India's shift to shared, electric and connected mobility could help save up to INR 20 Lakh Cr in oil imports and nearly 1 Giga Tonnes of carbon dioxide emissions by 2030. The report further states that the sales of 4-wheel EVs is expected to exceed that of internal combustion engines (ICEs) in India by 2027³.

In order to boost the manufacturing of hybrid and electric vehicles in India, Government of India has launched The Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles in India (FAME Scheme) in 2015, under National Electric Mobility Mission Plan (NEMMP) with an aim to promote eco-friendly vehicles in the country. It has set an ambitious target of 6-7 million sales of hybrid and electric vehicles year on year from 2020 onwards in India⁴, thereby creating wide opportunities in EV

¹ NITI Ayog and RMI analysis, 'Enabling the transition to Electric Mobility in India', November 2017. Refer https://www.rmi.org/wp-content/uploads/2017/11/report_electric_mobility_india_FICCI_RMI.pdf

² Enincon research, IESA. Refer https://enincon.com/wp-content/uploads/2017/07/Flyer-EV-Market-in-India_enincon.pdf

³ Refer <http://ficci.in/PressRelease/2938/ficci-press-nov20-smart2.pdf>

⁴ Press Releases: Ministry of Heavy Industries & Public Enterprises, Refer <http://pib.nic.in/newsite/PrintRelease.aspx?relid=154119>

manufacturing. Extending the Scheme, Government of India has come up with FAME II, and National Mission on Electric Mobility & Battery Storage has been launched.

Indian automobile industry became the 4th largest in the world by producing a total of nearly 30.92 million vehicles including passenger vehicles, commercial vehicles, three wheelers, two wheelers in April-March 2019 as against 29.09 million in April-March 2018 registering a growth of 6.26% over the same period last year. Domestic automobile production increased at 7.08 % CAGR between FY 2013-18.

India is also a prominent auto exporter where automobile exports grew 15.54% during April-March and now the country is also on course to become the third largest producer of car in the world. Transforming this large sector, Government of India is determined to curb polluting emissions from automobile industry and envisions to switch to 100% hybrid or electric vehicles by 2030.

1. Advantage Uttar Pradesh

Since Uttar Pradesh is country's largest consumer base, the Electric Vehicle market is set to boom in the State. Uttar Pradesh is country's 4th largest economy, contributing nearly 8% to country's GDP. Uttar Pradesh is amongst the top 5 manufacturing state and has highest number of MSME units with strong foothold in automobile industry.

1.1. Enabling Infrastructure

Strategically located along the Golden quadrilateral, the State is well connected to major national and international airports. 57% catchment area of the Eastern Dedicated Freight Corridor (EDFC) passes through UP and connects to the eastern part of the country. Similarly, 8.5% catchment area of Western Dedicated Freight Corridor (WDFC) falls in UP. Nonetheless, the upcoming international airport at Jewar will be country's largest international airport in North India.

Known as the State of Expressways, the existing Yamuna and Agra-Lucknow Expressway connect the NCR to the State capital. To add to this advantage, Poorvanchal Expressway, Bundelkhand Expressway, is coming up to ensure seamless connectivity to eastern and central India. The NW 1 waterways connecting Allahabad to Haldia sea port is a unique project connecting the State export hubs to the eastern ports. With an existing strong logistics infrastructure, Uttar Pradesh is coming up multi modal logistics/ transport hubs at Noida, Boraki and Varanasi.

1.2. Large Market Base

Home to nearly 16.5% of India's population, the state is a promising market for automobile industry. State ranks 3rd in number of vehicles registered in India, sharing 10.3% of total vehicles registered in India (2012). Almost 81% increase in vehicle registration was accounted in the state between 2010 and 2015⁵.

⁵ Motor Vehicles - Statistics as on 31-03-2015, Ministry of Roads, Transport & Highways.

Demand of the motor vehicle can easily be gauged by the no. of registrations for authorised driver in the state. No. of authorised driving licenses issued by the Transport department in the state was nearly 1.39 million in year 2015⁶, which makes it one of the largest consumer base in the country.

With a growing middle class the automobile industry in India is all set to become the largest sector in Indian economy. With 34% of Indians living in urban areas, India is rapidly urbanizing. The decadal growth rate in urban population is nearly 31% (2001-11). With 44.4 million urban populations, Uttar Pradesh constitutes nearly 12% of total Indian urban population. Uttar Pradesh has a high percentage of urban population to total population in the State at 22.27% (Census 2011) and is continuously rising.

As the cost of running the EVs is as low as INR 1 per km and that of petrol vehicles is about INR 5.5 per km, it shows a great running economics for the owners of EVs. Given to the transition process to boost electric vehicle mobility, Uttar Pradesh has been the 3rd largest beneficiary under the FAME scheme (2019)⁷, and has the highest registered EVs amounting to 1.39 Lakh⁸.

The State's capital - Lucknow is one of the 10-cities identified for pilot project of Multi-Modal Electric Public Transport under FAME India Scheme of Government of India⁹. The e-rickshaw market is already booming in the State, and transition to EVs in 2-wheelers, 4-wheelers and specifically in public transportation sector will be witnessed gradually.

1.3. Key Investment Zones

The industrial corridors in the NCR region, including Noida Industrial Area, Greater Noida Industrial Area and Yamuna Expressway Industrial Area and state capital Lucknow are major contributors to the growth of automobile industry in UP.

Uttar Pradesh shares a considerable part of NCR Cluster of Automobile & Automobile components manufacturing hub¹⁰, and hosts manufacturers including India Yamaha Motors, Honda Siel Cars India, New Holland Agriculture/CHN, etc. at Greater Noida, and Tata Motors at Lucknow. In 2016, Tata motors launched Hybrid Electric buses for which the module was designed in their Lucknow plant.

Besides, given to the large SME manufacturing base in automobile sector, Kanpur, Lucknow, Noida, Ghaziabad, Aligarh, Agra, Meerut, Jhansi are other investment zones. Other zones involved in manufacturing battery in the State are located across Greater Noida, Ghaziabad, Fatehpur, Kanpur, Lucknow, Gorakhpur, etc.

⁶ Data accessed from <http://uptransport.co.in/license.aspx>

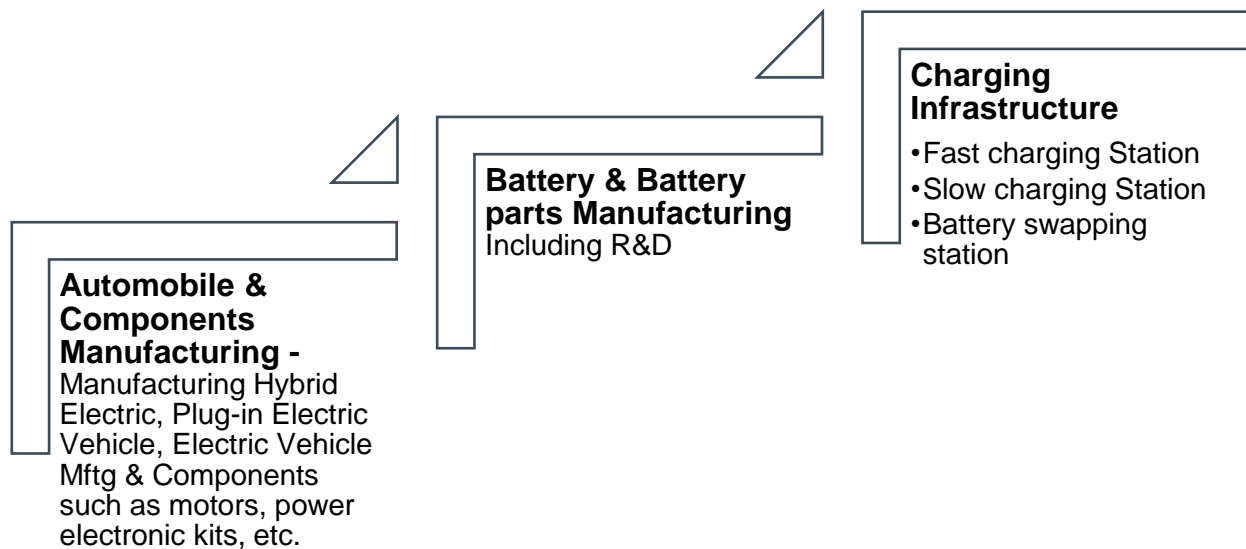
⁷ FAME Dashboard <http://www.fame-india.gov.in/#> (Accessed on 10-1-2018)

⁸ Response to Lok Sabha Question, July 2019

⁹ Press Releases: Ministry of Heavy Industries & Public Enterprises, Refer <http://pib.nic.in/newsite/PrintRelease.aspx?relid=174902>

¹⁰ <http://www.makeinindia.com/article/-/v/india-s-automobile-hubs>

1.4. Key Opportunities



2. About Policy

Towards this, the Uttar Pradesh Electric Vehicles Manufacturing and Mobility Policy 2018 provides attractive fiscal and non-fiscal to attract investments to promote Electric mobility in the state. The policy also promotes early adoption of EVs in the state as well as create demand in the sector. Therefore, the policy contains 3-components:-

- (1) Manufacturing
- (2) Charging infrastructure
- (3) Demand Creation.

This policy complements the UP Industrial Investment and Employment Promotion Policy (UP IIEP), 2017. Besides the department of infrastructure & industrial development, department of transport, department of power and department of urban development play pivotal role in the implementation of this policy.

2.1. Objectives of the Policy

- To promote adoption of EVs in state to create greener environment in the state.
- To establish Uttar Pradesh as preferred destination for attracting investments in manufacturing of Electric Vehicles (EV).
- To create employment opportunities both from supply side and demand side of Electric Vehicles.
- To create a conducive environment for shift from Internal Combustion (IC) engines to Electric Vehicles (EVs).
- To encourage use of Hybrid EVs (HEVs) and Plug-in-electric vehicles (PEVs) during the transition phase.

- To develop human capital and augment the power capacity to meet the needs of the industry promoting electric mobility in the state
- To develop a strong and sustainable ecosystem for battery management, right from production stage to disposal stage

2.2. Policy Targets

1. To attract investments of over INR 40,000 crore in the next 5 years across the electric mobility ecosystem with an employment potential for 50,000 people
2. To launch 1000 electric buses (BEVs/FCEVs) and achieve 70% EV public transportation on identified green routes in identified 10 EV cities by 2030.
3. To phase out all conventional commercial fleets and logistics vehicles and achieve 50% EV mobility in Goods Transportation in identified 10 EV cities by 2024 and all cities by 2030.
4. To roll out nearly 10 lakh EVs, combined across all segment of vehicles, by 2024.
5. To bring in manufacturing units of high density power storage of at least 5GWh capacity in the next 5 years for smooth electric mobility
6. To set up nearly 2 lakh slow and fast charging, swapping stations by 2024

2.3. Definitions

- 2.3.1. **Electric Vehicle (EV)** refers to all automobiles using an electric motor that is driven by either batteries, ultra-capacitors, or fuel cells. This includes all 2-wheeler, 3-wheeler and 4-wheeler Hybrid Electric Vehicles (HEV), Plug in Electric Vehicles (PHEV), Battery Electric Vehicles (BEV), and Fuel Cell Electric Vehicle (FCEV).
- 2.3.2. **Electric Vehicle Battery** refers to all energy storage systems used in the defined EVs above. This includes Lithium ion batteries, nickel metal hydride batteries, lead acid batteries, ultra-capacitors and even fuel cells (direct methanol, alkaline, phosphoric acid, molten carbonate, solid oxide and reversible fuel cells).
- 2.3.3. **Electric Vehicle Manufacturing units (EVMUs)** – All manufacturing enterprises manufacturing Electric Vehicles as defined in this policy (section 2.2.1.) will be eligible for incentives and concessions under this policy.
- 2.3.4. **EV Battery Manufacturing or Assembly Units (EBUs)** – All EV battery or fuel cell manufacturing (as mentioned in section 2.3.2) will be eligible for incentives and concessions under this policy.
- 2.3.5. **Service Units** – Units providing facility of fast/slow charging stations and/or battery swapping stations or Hydrogen refuelling stations for 2-wheelers, 3-

wheelers, cars, buses and other 4-wheeler Electric Vehicles. Battery recycling units will also be considered as service unit in this policy.

2.3.6. **DISCOM** refers to the Power distribution companies of Uttar Pradesh. This includes all the 5 DISCOMs viz., Paschimanchal Vidyut Vitran Nigam Ltd., Madhyanchal Vidyut Vitran Nigam Ltd., Kanpur Electricity Supply Company Ltd., Purvanchal Vidyut Vitran Nigam Ltd. and Dakshinanchal Vidyut Vitran Nigam Ltd.

2.4. Investment Criteria

2.4.1. **Mega Anchor Project** will be an integrated project and will have EV powertrain assembly, press shop, body shop, EV battery assembly or Fuel cell assembly, assembly line, paint shop etc. either on its own or in consortium or joint venture mode in the same location, investing atleast INR 1000 crores which will bring ancillary units of a minimum of INR 200 crore investment within 3 years of establishment.

2.4.2. Anchor units

Anchor EVMU	Indian Original Equipment Manufacturers (OEM) that design, manufacture Electric Vehicles as defined in this policy, investing at least INR 500 Cr and brings along at least 10 vendor units as defined in this policy in the same cluster
Anchor EBU	Indian Original Equipment Manufacturer (OEM) which design, manufacture or assemble EV battery or fuel cell with recycling set up, investing at least INR 300 Cr and brings along at least 10 vendor units as defined in this policy in the same cluster

2.4.3. **Vendor units (EVMU/EBU)** - Units which are located in the same cluster as Anchor unit (EVMU or EBU) and supply at-least 50% of its end product to the Anchor unit.

2.4.4. Large projects

Large EVMUs	<ul style="list-style-type: none"> Fixed capital investment of atleast INR 200 crores or creating at least 1000 direct employment in Bundelkhand region Fixed capital investment of atleast INR 300 crores or creating at least 1500 direct employment in rest of UP (except Bundelkhand)
Large EBUs	Fixed capital investment of more than equal to INR 100 crores or creating at least 1200 direct employment.

2.4.5. **MSME units** – Government of Uttar Pradesh will follow the MSME definition laid out by Government of India for MSME as per MSME Act 2006 (as

amended from time to time) as applicable under UP IIEPP 2017. This policy specifies incentives for MSME firms manufacturing components and end products that are part of the electric mobility ecosystem. These firms can be suppliers to both EVMUs and/or EBUs, or can be Service units providing repair and maintenance services.

2.4.6. **Ultra-Mega Battery Plant** - A plant setup for manufacturing batteries with an annual output of 1 GWh or above, or fuel cell with an annual output of 1.5 GW or above integrated with recycling facilities with a minimum investment of INR 1,000 Crores.

2.4.7. **Service units criteria:** The following criteria will be considered –

Slow charging	Set up with minimum capital investment (excluding land cost) size of INR 25 lakh, providing charging range of more than 15kms but less 80 kms per hour of charging at 10-50 kW power level
Fast category	Set up with minimum capital investment (excluding land cost) size of INR 50 lakh, providing charging range of more than 80 kms per half an hour of charging at 50-150 kW power level
Swapping Station	Set up with minimum capital investment (excluding land cost) size of INR 20 lakh, providing integrated services for battery swapping, repair and maintenance atleast at 5 places in a city.

3. Policy Framework

- 3.1. **EV Manufacturing Zones/Parks** – The Government of Uttar Pradesh envisages to create quality infrastructure with comprehensive facilities to develop the state as EV manufacturing hub – including EV manufacturing and EV Battery (including fuel cell, etc.) manufacturing. Towards this, EV manufacturing zones and parks will be incentivised and will be well equipped with common infrastructure including waste disposal, sewage treatment, testing facilities, etc.
- 3.2. **EV mobility** – 10 cities including Noida, Ghaziabad, Meerut, Mathura, Agra, Kanpur, Lucknow, Allahabad, Gorakhpur and Varanasi will be declared as model EM cities in first phase to adopt EVs, charging & hydrogen refuelling infrastructure and new EV enabling building codes. Noida will be the pilot city for all new mobility initiatives in the first phase till 2020. Government of Uttar Pradesh will support CSR initiatives in the Electric mobility ecosystem, as per the guidelines of Government of India.
- 3.3. **Transition to Electric Vehicles** – In order to favour transition from combustible vehicles to EV vehicles, Govt of Uttar Pradesh will promote hybrid electric vehicles and give incentives to boost demand of HEVs in the state.

- 3.3.1. **Hybrid EVs (HEVs) during Transition phase-** HEVs are combinational vehicles from both internal combustion engine propulsion system and electric motor propulsion system. Use of HEVs not only reduces the air pollution in the environment, also helps in conservation of natural resources. Therefore, State of UP will encourage use of HEVs during the transition phase in the state so as to overcome the barriers in migrating to EVs from ICE Vehicles upto 2022. Thereafter, the State aims at promoting use of fuel cell based vehicles, to smoothen transition and reduce pollution. In the transition phase, the State will encourage use of EVs in Public transportation and Goods transportation.
- 3.3.2. **Public Transportation** - In order to promote EV vehicles in Public Transportation, 1000 EV buses will be introduced by the State by 2030, in phases. 25% in phase I by 2020, remaining 35% in phase II by 2022, and rest 40% in phase III by 2030. Further in this context, green routes will be promoted in the 10 model EM cities (section 4.2 of this policy) to ensure 70% EV public transportation on these routes. Also, all forms of government vehicles, including vehicles under government corporations, boards and government ambulances etc. will be converted to electric vehicles by 2024.
- 3.3.3. **Private Transportation** - State Government will promote adoption 2-wheeler EV taxis for short distance mobility, and also encourage transition of Cabs, School buses/vans, Ambulances, etc. towards adoption of electric technology. Further in 10 model EM cities, 50% electric mobility in these segments will be targeted by 2024.
- 3.3.4. **Goods Transportation** – State will promote adoption of EV in Goods transportation and will encourage EV-3 Wheelers, 4-Wheelers mini Goods vehicles in 10 Model EM cities. The State aims at achieving 50% EV in Goods Transportation in these top 10 cities by 2024, and all cities by 2030.

Lastly, the State Government will promote EV battery and charging equipment manufacturing in Uttar Pradesh. Also, the state will incentivise manufacturing of Hydrogen-powered fuel cells and Sower powered cells, as an alternative clean energy source.

- 3.4. **Charging Infrastructure** – Government of Uttar Pradesh will promote development of charging infrastructure as a commercially viable business venture in the state. Towards this -
- 3.4.1. Public Sector units will be encouraged to set up ‘Charging infrastructure’ in the state. State will facilitate acquisition of land to such PSUs at concessional rates in designated areas.
- 3.4.2. The DISCOM will invest in setting up both slow and fast charging networks in government buildings and other public places. These charging points will be accessible to both government as well as private vehicles. DISCOM

will plan to setup 100 DC public charging stations in each of the 10 model EM cities (section 4.2 of this policy).

- 3.4.3. Charging infrastructure in public buildings, and public places shall be developed, and provisions to set up charging outlets, regular electric supply, etc. will be promoted. UPSRTC depots, bus terminals and bus stops will have charging stations. Public parking spaces will be mandated to have charging stations.
- 3.4.4. In addition to these, to promote EV mobility on prominent highways, such as Yamuna Expressway, Agra-Lucknow Expressway and upcoming expressways including Purvanchal Expressway, with heavy density of vehicles, fast charging stations, battery swapping infrastructure, at every 50kilometers will be promoted.
- 3.4.5. New apartments, high rise buildings, technology parks in the state will be encourage to make provisions for charging infrastructure for EVs. All new permits for commercial complexes, housing societies and residential townships with a built-up area 5,000 sq.mt and above will mandate charging stations.
- 3.4.6. In this context, UPERC is already planning Special Power Tariff Policy to facilitate low-cost EV Charging. Time of day sale of power to EVs will be considered to provide cheaper power during non-peak hours.

Nonetheless, the state will develop a strategy towards disposal of EV Batteries and will promote companies engaged in Battery disposal.

- 3.5. **Development of Fuel based EV**– Since the prime objective of promoting Electric Vehicles is to de-pollute the transportation system, it is important to reduce the dependency of EVs on traditional sources of electricity or polluting batteries. Adopting a sustainable approach, Government of Uttar Pradesh aims at promoting use of clean fuel for EVs under this policy.

In the transition phase, the state shall promote use of methanol fuel cells for Electric Hybrid Cars. Further, to overcome the hazards of lithium batteries, the State aims at promoting development and use of Hydrogen powered fuel cells and Solar-powered cells. Also, Private developers will be allowed to setup hydrogen stations. Electric Vehicle Battery Units (EBUs) and Service providers will be incentivised to adopt such technologies in UP.

- 3.6. **Battery recycling ecosystem** – The Battery recycling sector will certainly expand with expansion in EV mobility. The State Government through this policy aims to develop a management ecosystem for electric car batteries from production to disposal. This will restrict the hazardous materials from entering the waste stream, both at the end of a battery's useful life, as well as during its production. So, the policy will incentivise the battery recycling units using smelting, direct recover or intermediate processes. The State Government would encourage EV manufacturers in the state to establish recycling service outlets

and cooperate with battery manufacturing units and scrap merchants to build regional recycling systems.

- 3.7. **Research and Development** – As EV technologies are still maturing, it is important to encourage participation of academia, industry and other stakeholders to develop low cost technologies, smart design and promote transition to EVs in the state. Towards this, the policy intends to promote development of Battery technologies, charging infrastructure, certification and training. Also, the policy will support development of R&D ecosystem in EV technologies, particularly clean fuel technologies in EVs in the state.
- 3.8. **Start up and Innovation** – To strengthen the research and innovation ecosystem promoting EV manufacturing and developing relevant technologies in the state, the Govt of UP will also promote startups in this area. Incubation centres facilitating EV mobility or innovative business models will be encouraged at leading engineering institutions. Start-up Fund created under UP IT and Startup Policy 2017 shall also be put to use to promote Startups in this context.

4. Fiscal Incentives

4.1. Incentives to manufacturing units (EVMUs and EBUs) –

- 4.1.1. **Land Subsidy** – Mega Anchor Project and Ultra mega battery plant as defined in this policy will be reimbursed upto 25% of the cost of land at prevalent circle rate or purchase price, whichever is less. This incentive will be provided only on land purchased in the notified areas in Uttar Pradesh. Such notification will be issued by Government of Uttar Pradesh from time to time.
- 4.1.2. The defined Large, Anchor EVMUs/EBUs and MSME units will be provided incentives at par to those provided to industrial units under UP IIEPP 2017. These incentives include capital interest subsidy, infrastructure interest subsidy, industrial quality subsidy, Stamp duty and electricity duty exemption, SGST reimbursement, etc.
- 4.1.3. **Technology Transfer for alternate Clean Fuel Mobility** – EBUs manufacturing alternate clean sources of fuel for electric mobility, including hydrogen based fuel cells or methanol/biofuel based fuel cells or solar based cells, etc. will be supported in technology transfer –
- 4.1.3.1. **Mega Anchor EBU** (first) will be reimbursed 100% cost of technology transfer towards its vendor units subject to maximum INR 50 lakh towards each vendor unit in the same cluster.
- 4.1.3.2. **Anchor EBUs** will be reimbursed 100% cost of technology transfer towards first 5 vendor units and 75% towards next 5 vendor units,

subject to maximum INR 50 lakh towards each vendor unit in the same cluster.

- 4.1.3.3. **Ultra mega Battery plant** will be reimbursed 50% cost of technology transfer, subject to maximum ceiling of INR 10 lakh per annum and overall ceiling of INR 50 lakh. Only 5 such projects will be considered over the period of this policy.

NOTE 1: The incentive will be provided to eligible units after they have obtained a validation certificate on the prototype from Department of Transportation or Uttar Pradesh Pollution Control Board, Government of Uttar Pradesh.

4.2. Incentives to Service Units –

The Service units as defined under this policy will be provided following incentives –

- 4.2.1. **Capital Subsidy** @25% on fixed capital investment (excluding land cost) to **first 1000 charging** stations subject to maximum Rs 6 lakh per charging station.
- 4.2.2. **To set up Hydrogen enabled refuelling Infrastructure** – 50% Capital interest subsidy on fixed capital investment (excluding land cost) will be provided for setting up hydrogen generation and fuelling plants in the form of reimbursement to first 10 units in UP, subject to maximum INR 50 lakh per unit over the period of this policy.

4.3. Environment Protection Incentives –

The Large, Anchor EVMUs/EBUs and Service units will be provided following incentives for adopting sustainable and green production measures –

- 4.3.1. **Setting up Waste Treatment plant** – The Large & Anchor EVMUs/EBUs will be provided subsidy of 50% on annual interest on loan taken in form of reimbursement to set up Waste Treatment Plant for 5years upto maximum INR 1 crore per unit
- 4.3.2. **For Battery Recycling** – Large, Anchor EBU and Service units will be provided Capital Interest Subsidy @50% per annum for 5years in the form of reimbursement on loan taken for procuring equipment/machinery for battery recycling subject to maximum ceiling of INR 1 lakh per year for 5years.

5. Private EV Parks –

The Government of Uttar Pradesh will provide incentives to the developers of private EV parks & clusters with plug and play facilities. The park must be developed over more than 150 acres of land and must include –

- Manufacturing area (components, sub-components, sub-assemblies, etc.)
- R&D and Testing Centres
- Battery manufacturing/ handling areas
- Common facilities
- Recycling ecosystem, waste treatment facilities, etc.

Towards this, the Government of Uttar Pradesh will provide incentives at par to those provided to Private Industrial Parks & Estates in the state to Private EV Parks & Clusters. (Refer UP IIEPP 2017, Section 3.2.3)

6. Research & Development

Through this policy, Uttar Pradesh not only aims to be green automobile manufacturing hub, but also to be an R&D hub focusing on next generation of battery management systems, drive train components, battery chemistries, fuel cell systems and intelligent transportation systems. Towards this, following provisions will be made -

- 6.1. **Incubation & Start-ups** – Incubation centres facilitating EV mobility or innovative EM models will be provided incentives as per prevailing UP Startup Policy. The Start-up Fund shall also be mobilised to promote Startups promoting electric mobility in the State.
- 6.2. **Academic tie up & Research** – Government of Uttar Pradesh will encourage Universities (in India and abroad) with excellence in automobile manufacturing, training and research to tie up with universities, engineering colleges in the State to enhance pedagogy and R&D promoting Electric mobility. Focus will be on next generation battery chemistries, fuel cell systems, powertrains, automotive electronics and electrical road systems (ERS).
- 6.3. **Patent & quality certifications** – The MSME units as defined in this policy will be provided financial assistance towards expenses incurred for patent registration and for quality certifications. The financial assistance will be limited to 75% of the cost, subject to a maximum of 25 lakhs for obtaining patent registration and 50% of all charges, subject to a maximum of 5 Lakhs paid for obtaining quality certification.

- 6.4. **Testing Facilities** – Government of Uttar Pradesh shall strive to set-up quality testing centre for EVs. These facilities would be accessible to all manufacturers and service providers in the sector.

NOTE 2: All incentives to eligible EVMUs, EBUs and Service units as defined in this policy in the form of reimbursement, subsidies, exemptions etc., will be subject to a maximum of 100% of fixed capital investment, subject to annual ceiling of 20% of fixed capital investment.

7. EV mobility incentives –

In order to induce demand and create market for Electric Vehicles in the state, Government of Uttar Pradesh will extend following incentives -

- 7.1. First 1,00,000 buyers of Private EVs manufactured within the State of Uttar Pradesh over the period of this policy will be provided following exemptions -
- 7.1.1. 100% exemption from Vehicle registration fees
 - 7.1.2. 100% exemption on road tax for 2-wheeler EVs and 75% road tax exemption for other EVs
- 7.2. Department of Industries, Government of Uttar Pradesh will integrate the mobility incentives provided by Government of India to promote Electric Vehicle and Mobility.

8. Ease of business

Taking forward the vision and mission of State's Industrial Investment and Employment Promotion (IIEP) Policy, 2017, this policy also ensures ease of business in the state.

- 8.1. **Single Window** – All required approvals to EV manufacturing/ EV battery manufacturing units and service providers shall be provided under one roof through single window system of the state directly monitored by the Chief Minister's office.
- 8.2. **Single Sanction:** All incentive payments in the form of reimbursement, subsidies, etc. under the policy will be made with a single sanction order and from a single head of account by the nodal agency.
- 8.3. **Simplifying procedures** – This policy ensures to rationalise existing regulatory regime and simply procedures by supporting self-certification, deemed approval and third party certification. Towards this goal, the Government of Uttar Pradesh will regularly review all its existing acts, rules and procedures related to

industrial services/ clearances/ approvals/ permissions/ licenses and wherever possible.

- 8.4. Quality Power-** Government of Uttar Pradesh is committed to supply 24X7 reliable, quality power to EV/EV Battery manufacturing industry as per provisions in Industrial Investment & Employment Promotion Policy 2017.
- 8.5. Power Permits-** DISCOM shall release supply to charging/battery swapping stations within 15days of application. Municipalities shall issue provisional permissions online immediately to setup charging/battery swapping stations. Any verification shall only be post sanction of provisional permission.
- 8.6. Industrial Security –** Government of Uttar Pradesh will provide safe and secure industrial environment in the state. Towards this, dedicated police force headed by specialised officer will be deputed at industrial clusters/ areas in regions and integrated police cum fire station will also be established.

9. Implementation of the Policy

- 9.1. This policy will come into effect on the date of its notification and will remain in force for a period of 5 years.
- 9.2. If at any stage a situation arises which necessitates any amendment or supersession of the policy, only the cabinet will be authorised to approve such amendments/ supersession.
- 9.3. In case of any amendment in this policy, if any package of incentives is already committed by the state government to any unit, will not be withdrawn and the unit will continue to remain entitled to the benefits.

Note 3 – All EVMUs, EBU, Service units and related MSME units availing incentives from any other policy or those sanctioned by the departments of the State government, will also be entitled to avail incentives/benefits mentioned in this policy provided the same kind of benefits/incentives are not being availed from any other policy.
