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India's Electric Vehicle (EV) Policy Initiatives

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मनोहर पर्रिकर रक्षा अध्ययन एवं विश्लेषण संस्थान

India's Electric Vehicle (EV) Policy

India's electric vehicle (EV) policy drives the transition through the [national PM e-DRIVE scheme](#), the Production Linked Incentive (PLI) scheme for advanced chemistry cell batteries, and localized state regulations. These measures target an ambitious 30% to 80% electrification across various vehicle segments by 2030. India's electric vehicle (EV) policy operates on a two-tier framework. The Central Government sets the national direction and supplies industrial manufacturing incentives, while State Governments manage direct buyer reliefs, road taxes, and registration exemptions. Together, these policies focus on building local supply chains, lowering buying barriers, and deploying public charging infrastructure.

The central policy framework has shifted from pure consumer subsidies to a dual focus on demand generation and aggressive domestic manufacturing.

PM E-DRIVE Scheme

The [PM Electric Drive Revolution in Innovative Vehicle Enhancement \(PM E-DRIVE\) Scheme](#) is the Government of India's flagship programme for accelerating electric mobility and developing a [comprehensive electric vehicle \(EV\) ecosystem](#) in the country. [Approved by the Union Cabinet on 11 September 2024](#) and

officially notified by the **Ministry of Heavy Industries (MHI)** on **29 September 2024**, the scheme replaced the [Faster Adoption and Manufacturing of Electric Vehicles \(FAME-II\)](#) programme after its completion. The scheme has an approved financial outlay of **₹10,900 crore** and was originally designed for implementation over two years until **31 March 2026**. Recognising the need for sustained policy support for India's transition towards clean transportation, the Government extended the overall duration of the scheme until **31 March 2028** without increasing the original financial allocation.

The principal objective of the [PM E-DRIVE Scheme](#) is to accelerate the adoption of electric mobility while simultaneously strengthening India's domestic EV manufacturing ecosystem and reducing dependence on imported fossil fuels. The Government intends to reduce greenhouse gas emissions, improve urban air quality, enhance energy security, promote indigenous manufacturing under the "Make in India" and "Atmanirbhar Bharat" initiatives, and develop a globally competitive EV industry. Unlike the earlier FAME-II scheme, which primarily focused on providing purchase incentives for electric vehicles, PM E-DRIVE adopts a more integrated approach by simultaneously supporting vehicle demand, charging infrastructure, testing facilities, domestic value addition, and emerging

vehicle segments such as electric trucks and electric ambulances.

According to the Ministry of Heavy Industries, the scheme seeks to create a complete electric mobility ecosystem capable of supporting [India's long-term climate commitments, including the goal of achieving net-zero carbon emissions by 2070](#), while fostering industrial development and technological innovation within the country.

A major feature of the PM E-DRIVE Scheme is the provision of demand incentives for eligible electric vehicles to reduce their upfront purchase cost and encourage wider consumer adoption. Financial assistance is provided for electric two-wheelers, electric three-wheelers, e-rickshaws, e-carts, commercial electric four-wheelers, electric ambulances, electric trucks and electric buses, subject to technical eligibility criteria and localisation requirements prescribed by the Ministry. The incentive structure is linked to battery capacity and vehicle category, with incentives initially fixed at ₹5,000 per kilowatt-hour during the first year of implementation and subsequently reduced to ₹2,500 per kilowatt-hour for the following year, subject to prescribed caps on the maximum subsidy and the ex-factory price of the vehicle.

Another important pillar of the PM E-DRIVE Scheme is the creation of a

nationwide public charging infrastructure to address one of the major barriers to EV adoption—range anxiety. The Government has allocated substantial resources for the [installation of approximately 72,000 public charging stations across the country](#). These charging stations are planned to be established in metropolitan cities, smart cities, major urban centres, national highways, state highways, fuel retail outlets, airports, railway stations, toll plazas and other high-demand locations to ensure convenient access for both private and commercial EV users. The objective is to develop a reliable and interoperable charging network that [supports increasing EV penetration](#) while enabling long-distance travel and commercial fleet operations.

The Ministry has also [issued detailed operational guidelines](#) regarding the implementation of charging infrastructure, eligibility conditions, technical standards and phased rollout to facilitate coordinated deployment by implementing agencies.

Electrification of Public Transport

The PM E-DRIVE Scheme also places unprecedented emphasis on the electrification of public transport, particularly through financial support for electric buses. [The Government considers public transport electrification essential](#) for reducing urban air pollution, lowering operating costs for transport authorities,

decreasing diesel consumption and improving passenger comfort. Assistance is provided for the procurement and deployment of electric buses in eligible cities under notified implementation guidelines. In addition, PM E-DRIVE expands the scope of government support to include electric ambulances and electric trucks, which were not covered under FAME-II.

The Government has earmarked ₹500 crore each for these two new vehicle categories. [Electric ambulances](#) are intended to modernise emergency healthcare transportation by reducing emissions and operational costs, while electric trucks target one of the highest-emitting segments of the transport sector. To encourage fleet modernisation, subsidy for electric trucks is linked to the mandatory scrapping of eligible old vehicles through authorised vehicle scrapping facilities approved by the Ministry of Road Transport and Highways, thereby integrating clean mobility with the national vehicle scrappage policy.

Strengthening India's automotive testing and certification infrastructure

Beyond vehicle incentives, the PM E-DRIVE Scheme seeks to strengthen India's technological capabilities through investments in automotive testing and certification infrastructure. The Government has allocated approximately

[₹780 crore for upgrading testing agencies with advanced facilities for battery testing, EV certification, power electronics, hydrogen technologies and safety validation](#). This investment aims to improve the quality, safety and reliability of domestically manufactured electric vehicles while reducing dependence on foreign testing and certification services. Simultaneously, the scheme encourages the development of indigenous manufacturing capabilities for batteries, electric motors, controllers, power electronics and charging equipment through localisation requirements under the Phased Manufacturing Programme. Manufacturers seeking incentives must comply with prescribed domestic value addition norms and obtain approval from the Ministry of Heavy Industries, thereby ensuring that government support contributes directly to the growth of India's domestic EV manufacturing ecosystem rather than increasing reliance on imported components.

Infrastructure Policies

The Government of India has adopted a corridor-based approach for the deployment of electric vehicle (EV) [charging infrastructure on national highways](#) as part of its broader objective of enabling long-distance electric mobility. The Ministry of Heavy Industries (MHI), in coordination with the Ministry of Road

Transport and Highways (MoRTH), the National Highways Authority of India (NHAI), and the Ministry of Petroleum and Natural Gas (MoPNG), has identified highway corridors as priority locations for establishing a nationwide public charging network. The policy recognizes that while EV adoption has increased in urban areas, long-distance travel remains constrained by the lack of reliable charging infrastructure.

The Government's policy builds upon earlier initiatives undertaken by the National Highways Authority of India (NHAI). In January 2023, NHAI issued [comprehensive Guidelines](#) for Setting up Electric Vehicle Charging Infrastructure on National Highways and Expressways, which provide the planning framework for charging stations along highway corridors.

According to these guidelines, EV charging stations should ideally be available at intervals of 20–30 kilometres on both sides of national highways and expressways, depending on traffic density, EV demand and land availability. For heavy commercial electric vehicles such as buses and trucks, fast-charging facilities are proposed at suitable logistics hubs, transport terminals and designated freight corridors where higher-capacity charging infrastructure can be economically sustained. The [guidelines also encourage the co-location of charging stations](#) with

existing fuel retail outlets, wayside amenities, food plazas and highway rest areas to minimise land acquisition costs and improve user convenience.

Local Manufacturing Strategy

India's EV policy places strong emphasis on developing a domestic manufacturing ecosystem rather than relying on imported electric vehicles and components. The Government of India aims to establish an [integrated EV value chain](#) covering vehicle assembly, electric motors, power electronics, battery packs, battery cells, charging equipment, software, and advanced automotive components. This strategy is intended to reduce dependence on imports, strengthen supply chain resilience, generate skilled employment, and position India as a global manufacturing hub for electric mobility. Further, the [Scheme to Promote Manufacturing of Electric Passenger Cars in India \(SPMEPCI\)](#) allows eligible global manufacturers to import a limited number of EVs at a concessional customs duty of 15%, provided they invest at least ₹4,150 crore in domestic manufacturing facilities, begin production within three years, and achieve minimum domestic value addition targets of 25% by the third year and 50% by the fifth year. This policy reflects India's strategy of using market access as an incentive to attract long-term manufacturing investment, technology

transfer, and supplier development rather than encouraging permanent dependence on imported vehicles.

Make in India and Electric Vehicles

The [Make in India initiative](#) serves as the foundation of India's EV manufacturing strategy by encouraging companies to manufacture products domestically instead of importing finished goods. Within the electric vehicle sector, the initiative seeks to attract both domestic and foreign investment in manufacturing facilities, increase industrial competitiveness, create employment opportunities, promote exports, and develop advanced manufacturing capabilities. Electric vehicles have become one of the priority sectors under Make in India because they integrate multiple high-value industries, including automotive engineering, electronics, battery technology, renewable energy, and software development. Government policies therefore encourage manufacturers to establish production facilities in India while progressively increasing the use of locally manufactured components. The broader objective is to build an [indigenous EV ecosystem](#) that contributes to economic growth, enhances technological capability, and supports India's transition towards clean mobility while reducing dependence on imported automotive technologies and critical components.

Phased Manufacturing Programme (PMP)

The Phased Manufacturing Programme (PMP) is a localization strategy designed to gradually increase the proportion of electric vehicle components manufactured within India. Rather than requiring complete localization immediately, the programme allows manufacturers to initially import high-value components while progressively shifting production to domestic suppliers as manufacturing capabilities develop. Under this approach, manufacturers typically begin with vehicle assembly using imported components, followed by local production of chassis, frames, wiring harnesses, plastic parts, battery packs, motors, controllers, and eventually advanced components such as battery cells and power electronics. The programme is closely linked with Domestic Value Addition (DVA) requirements, whereby manufacturers must demonstrate that an increasing percentage of a vehicle's total value is created within India to qualify for government incentives. [By promoting gradual localization](#), the PMP strengthens domestic supplier networks, reduces import dependence, encourages technology transfer, and develops India's manufacturing capacity without disrupting industrial growth.

Production Linked Incentive (PLI) Scheme

The Production Linked Incentive (PLI) Scheme is one of the Government of India's flagship industrial policies to strengthen domestic manufacturing across strategic sectors, including electric vehicles and advanced automotive components. Unlike traditional subsidy programmes, the PLI scheme provides financial incentives based on incremental production and sales achieved by manufacturers operating in India. Within the automotive sector, the government introduced the PLI Scheme for Automobile and Auto Components, with an outlay of approximately ₹25,938 crore, to encourage the production of advanced automotive technologies such as electric vehicles, hydrogen fuel vehicles, electric drivetrains, and high-value EV components. A complementary [Advanced Chemistry Cell \(ACC\) Battery PLI Scheme](#), with an outlay of ₹18,100 crore, supports large-scale domestic manufacturing of battery cells, one of the most expensive components in electric vehicles. [According to government data](#), PLI schemes across sectors had attracted investment commitments of about ₹1.76 lakh crore and generated more than 12 lakh jobs, with the automobile and auto-component sector accounting for nearly ₹29,500 crore of committed investment and around 45,000 jobs. These incentives are intended to improve India's global

manufacturing competitiveness, encourage technology adoption, increase exports, and reduce dependence on imported automotive technologies.

Battery Manufacturing

Battery manufacturing is a central pillar of India's electric mobility strategy because lithium-ion batteries account for nearly one-third to two-fifths of an electric vehicle's total manufacturing cost. Historically, India has relied heavily on imported battery cells despite assembling battery packs domestically. To address this challenge, the Government of India introduced [the Advanced Chemistry Cell \(ACC\) Battery PLI Scheme](#), which supports large-scale domestic manufacturing of advanced battery cells through performance-linked financial incentives. The scheme aims to establish indigenous manufacturing capacity, reduce import dependence, improve energy security, lower battery costs over time, and strengthen the domestic EV supply chain. In addition to cell manufacturing, the policy encourages investment in battery pack assembly, battery management systems, recycling infrastructure, and research into next-generation battery technologies. Recent government allocations under the ACC programme have supported companies in establishing gigawatt-scale manufacturing facilities, reflecting India's long-term objective of creating a self-

reliant battery ecosystem capable of meeting growing domestic demand while supporting exports and future technological innovation.

Efforts of State Governments to Support India's Electric Vehicle (EV) Policy

State governments play a critical role in implementing India's electric mobility transition because they are responsible for sectors such as road transport, urban planning, electricity distribution, industrial development, and public transport. While the central government provides the overall policy framework, state governments complement these efforts by introducing their own EV policies, financial incentives, manufacturing support measures, charging infrastructure programmes, and regulatory reforms.

According to the [India Electric Mobility Index 2024](#) published by NITI Aayog, **29 States and Union Territories had notified EV policies by June 2025**, reflecting widespread commitment to promoting electric mobility across the country. These state policies typically combine fiscal incentives, industrial promotion measures, infrastructure development, skill development programmes, and public awareness initiatives to accelerate EV adoption and strengthen the domestic EV ecosystem.

Financial Incentives for EV Adoption

Many state governments have provided [additional financial incentives beyond central government subsidies](#) to reduce the purchase cost of electric vehicles. These incentives include purchase subsidies, exemption from road tax and registration fees, scrappage incentives, interest subsidies, and reduced permit charges for commercial electric vehicles. States such as Delhi, Maharashtra, Gujarat, Uttar Pradesh, Tamil Nadu, Telangana, Karnataka, and Odisha have introduced various fiscal measures to encourage consumers and commercial fleet operators to switch to electric mobility. By complementing central demand incentives, these state-level benefits improve EV affordability and encourage faster market adoption across different vehicle categories.

Promotion of EV Manufacturing and Industrial Investment

[Several states have adopted industrial policies](#) that promote investments in electric vehicle manufacturing, battery production, component manufacturing, and research and development facilities. States including Tamil Nadu, Karnataka, Maharashtra, Uttar Pradesh, Telangana, and Gujarat offer incentives such as capital subsidies, stamp duty exemptions, land concessions, electricity duty exemptions, and support for research and innovation

centres. These policies seek to attract domestic and international manufacturers, develop local supply chains, generate employment, and position individual states as manufacturing hubs within India's broader Make in India initiative.

Skill Development, Research and Innovation

State governments are increasingly supporting workforce development and technological innovation by collaborating with universities, technical institutions, industry associations, and private companies. Their initiatives include establishing centres of excellence, promoting EV-focused research, supporting start-ups, and introducing specialised training programmes for battery technology, EV maintenance, charging infrastructure, and advanced manufacturing. These efforts aim to create a skilled workforce capable of supporting India's expanding electric mobility industry while encouraging innovation across the EV value chain.

India's Current Progress and Future EV Targets

India has witnessed rapid growth in EV sales over the past five years, making it one of the world's fastest-growing EV markets. Electric two-wheelers and three-wheelers have experienced the highest adoption because of lower purchase costs, favourable government incentives, and reduced

operating expenses. However, electric passenger cars continue to represent a relatively small share of total car sales due to higher upfront costs, limited charging infrastructure in some regions, and consumer concerns regarding driving range. According to government and industry assessments, India is making steady progress but still needs to accelerate annual EV sales growth and infrastructure deployment to meet its 2030 objectives.

Collectively, these targets are expected to result in approximately 80 million electric vehicles on Indian roads by 2030, significantly reducing greenhouse gas emissions and oil imports while supporting the growth of India's domestic EV manufacturing industry. The Government of India, through NITI Aayog, has established ambitious electric mobility targets for 2030 to support sustainable transportation, reduce dependence on imported fossil fuels, and achieve its climate commitments. The major targets include:

Vehicle Category	2030 Target
Private Cars	30% of new vehicle sales
Commercial Vehicles	70% of new vehicle sales
Buses	40% of new vehicle sales
Two-wheelers and Three-wheelers	80% of new vehicle sales

India's Long-Term Vision

India's EV policy extends beyond increasing the number of electric vehicles on the road. The government's long-term vision is to establish India as a global hub for electric vehicle manufacturing under the Make in India and Atmanirbhar Bharat initiatives. This includes expanding domestic production of batteries, motors, power electronics, semiconductors, and charging equipment while increasing local value addition and reducing reliance on imports. In the longer term, the transition to electric mobility is expected to contribute to India's commitment of [achieving net-zero greenhouse gas emissions by 2070](#), improve urban air quality, strengthen energy security, and create large-scale employment in advanced manufacturing and clean energy industries.

Non-Traditional Security Centre

This digest has been prepared by the Non-Traditional Security Centre, Manohar Parrikar Institute for Defence Studies and Analyses, New Delhi.



Manohar Parrikar Institute for Defence Studies and Analyses

No.1, Development Enclave, Rao Tula Ram Marg,
Delhi Cantt., New Delhi - 110 010

Tel.: (91-11) 2671-7983 Fax: (91-11) 2615 4191

Website: <http://www.idsa.in>