

WEBINAR

Webinar on National Programs for Electrification of Transport: A Tale of Two Geographies: Outcomes

The International Council on Clean Transportation (ICCT), in partnership with ET Auto, organized a webinar on 16th July 2024, addressing the key role that national-level policies can play in promoting the electrification of the transport sector. The transport sector in India accounts for about 14% of the country's energy-related carbon dioxide (CO₂) emissions and is the fastest-growing source of overall carbon emissions in the country. Road transport, meanwhile, is responsible for 90% of the sector's energy consumption. Electric vehicles (EVs) are the most important technology for decarbonizing the transport sector. Hence, sustained and comprehensive policies at the national level can play an instrumental role in accelerating the transition to electric mobility. The webinar shed light on the second phase of the Faster Adoption and Manufacturing of Electric Vehicles (FAME II) scheme, one of India's flagship EV demand promotion policies and the Inflation Reduction Act (IRA), the national-level EV promotion policy of the United States of America, and how these policies have helped in overcoming EV-uptake related challenges.

Sumati Kohli, Researcher at ICCT and the author of the report presented findings from the recent study: ["Electric vehicle demand incentives in India: The FAME II scheme and considerations for a potential next phase"](#), published in July 2024.

The webinar discussed:

- » Insights into the FAME II scheme
- » Presented the impact of FAME II purchase subsidies on the cost dynamics of EVs
- » Explored the opportunity of extending such subsidies to segments that are not yet covered under the scheme
- » Policy recommendations for a possible third phase of the program

Speakers included members from the government, private sector, civil society and financial institutions.

Mrityunjay Sharma, Consultant, NITI Aayog (E-mobility), Vinkesh Gulati, Vice President, Automotive Skills Development Council, Aditya Ramji, PhD, Director, Global South Clean Transportation Center, Institute of Transportation Studies at the University of California, Davis, Mansha Sehgal, Transport Specialist, The World Bank, were speakers during the webinar.

Amit Bhatt, India Managing Director, ICCT, gave the introduction and set the context for the webinar. Sumati Kohli, Researcher, ICCT, presented the findings and results of the “[Electric vehicle demand incentives in India: The FAME II scheme and considerations for a potential next phase](#)” study.

HIGHLIGHTS FROM THE WEBINAR

The key highlights from the presentation by Sumati Kohli, Researcher, ICCT, were:

- » Of the INR 11,500 earmarked under the FAME II scheme, a total of 69% of the funds were utilized by the end of the scheme.
- » Segment-specific target achievements:
 - » Two-wheelers: 75% of target
 - » Three-wheelers: 84% of target
 - » Passenger cars: 55% of target
 - » Buses: 66% of target
- » **Cost barriers for electric two-wheelers:** High upfront cost electric two-wheelers are a challenge to their widespread adoption. To facilitate cost parity with conventional two-wheelers, the government could implement purchase subsidies from 2025 to 2027, beginning with ₹15,000/kWh of battery capacity, (capped at 40% of the ex-showroom price), and gradually reducing the subsidy as EV costs decrease.
- » **Financing-related barriers for electric three-wheelers:** Lack of availability of financing, high interest rates and shorter loan payback period pose significant challenges. Policymakers could consider measures such as lower interest rates, longer payback periods, and credit guarantees through notified agencies such as government banks to accelerate EV uptake.
- » **Subsidies for private passenger cars:** Despite representing 97% of the passenger car market in India, private electric cars did not receive subsidies under the scheme. Introducing subsidy of at least ₹10,000/kWh (capped at 20% of ex-showroom price), could improve cost parity of with conventional cars.
- » **Electric bus financing:** The limited availability of financing is a key hurdle in the uptake of electric buses by the private sector. To encourage adoption, the government could prioritize the electrification of private inter-city buses by facilitating access to favourable financing through interventions such as interest subvention, longer loan tenures, and credit guarantees.
- » **Battery electric truck adoption:** The upfront cost of battery electric trucks is approximately 4 times that of the diesel trucks. To promote adoption, purchase subsidy of ₹20,000 per kWh (capped at 40% of ex-showroom price), for battery electric trucks could be considered.
- » **Targeted subsidy programs for trucks:** Implementing targeted purchase subsidy programs, initially focusing on trucks deployed in government operations and eventually extended to private fleet operators, could help kickstart battery electric truck adoption.

KEY QUOTES

“The Inflation Reduction Act (IRA) and the Bipartisan Infrastructure Law (BIL) made a pivotal shift in the policy scenario for vehicle electrification in the USA. The IRA transformed the way incentives were given to EV consumers. Demand incentives were made available to EV end users and these incentives were combined with very strong localization requirements pertaining to crucial mineral sourcing and battery component value addition for the manufacturers. This has helped in spurring innovation in the segment. In addition to this, the BIL created a very strong line of funding for the development of charging infrastructure by allocated close to seven and a half billion dollars for EV and alternate fuelling infrastructure. Despite the availability of incentives, strong corporate average fuel economy (CAFE) regulations are required to drive

scale in the market. The US government recognized this and passed stringent CAFE regulations for both light-duty and heavy-duty vehicles, which has helped in aligning the country's electrification policies with its electrification targets.”

—*Aditya Ramji, PhD, Director, Global South Clean Transportation Center, Institute of Transportation Studies at the University of California, Davis*

“There is a strong push from the government to transform the mobility sector. Although, electric trucks were not focussed upon in FAME II, facilitating the electrification of this segment through provision of demand incentives in the possible next phase of the FAME scheme is under consideration by the government. Interventions such as the payment security mechanism, which has been made available for the financing of electric buses, has facilitated in overcoming some of the financing related challenges and has contributed to building confidence among the stakeholders. Such solutions can also be explored for financing of the electric trucks.”

—*Mrityunjay Sharma, Consultant, NITI Aayog (E-mobility)*

“Upskilling of the workforce will contribute to the success of the electric mobility transition. The Automotive Skills Development Council (ASDC) offers a variety of course on electric mobility which aim to make the workforce EV-ready. ASDC has also tied up with the Bihar Skill Development Mission to train 350 women in driving e-carts. Courses on electric bus safety, operation, maintenance and best practices are also being offered.”

—*Vinkesh Gulati, Vice President, Automotive Skills Development Council*

“Financing of EVs continues to be a challenge due to issues including uncertain residual value, higher perceived technology risk, lack of long-term warranty and insurance and lack of secondary market for EVs. This leads to costly financing terms, shorter loan tenures and lower loan-to-value ratio. These challenges get aggravated for the heavy-duty vehicle segment because the cost of the asset is high. For kickstarting battery electric truck adoption, the government can identify highway corridors that have significant traffic of trucks and buses and these corridors can be prioritized for the development of HDV charging infrastructure.”

—*Mansha Sehgal, Transport Specialist, The World Bank*

“Electrification of the transport sector is the way forward. It is inevitable that the transport sector will transition towards electric mobility. However, financing of EVs continues to be a major challenge, especially in the heavy-duty vehicle segment. Additionally, for the EV transition to be successful, considerable reskilling of the automotive workforce will be required.”

—*Amit Bhatt, Managing Director India, The International Council on Clean Transportation*

RESOURCES

1. [Webinar Recording](#)
2. [Presentation](#)
3. [Electric vehicle demand incentives in India: The FAME II scheme and considerations for a potential next phase](#)

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