

Review on FAME-INDIA Scheme for Electric Vehicles

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Abstract – The FAME-India scheme aims to raise the relinquishment of electric and hybrid vehicles in India, with the uttermost goal of reducing the country's dependence on fossil energies, reducing air pollution, and mitigating the impact of climate alteration. In this review study, we are introducing this scheme including its features and objectives. Also giving idea about the working of this scheme and elaborate phases.

Key Words: FAME-India, Electrical vehicles, Electrical charging infrastructure, etc.

1. INTRODUCTION

The government scheme FAME-India is Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles. This scheme launched in 2011 in India. This scheme is a part of the National Mission on Electric Mobility.

The scheme provides incentives to manufacturers and buyers of electric and hybrid vehicles and its goal to raise demand for these vehicles by making them more affordable and accessible.

This scheme has extended so many times from its launch date, and its current phase is valid till 2024. Under the scheme, the authority provides incentives to manufacturers of electric and hybrid vehicles to lesser their production expenses and also provides annuities to buyers of these vehicles to make them more affordable.

1.1 What is the FAME India scheme?

- FAME-India is Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles.
- This central sector scheme was launched during the Union Budget 2015 -16 for the electrification of public transportation.
- This scheme is a part of the National Mission on Electric Mobility(NEMMP) – 2020.
- On 1st April 2015 the phase I of FAME India scheme was launched by the Department of Heavy Industry. It was active till 31st March 2019.
- The Financial disbursement of Phase 1 was Rs.895 Crore.

- The phase II of FAME, was began in April 2019, and it will last till 31st March 2024.
- The Financial disbursement of Phase 1 is Rs.10,000 Crore.
- The scheme seeks to promote the usage of electric vehicles. This scheme provides financial subsidies to the buyers who purchase electric vehicle.
- In this scheme subsidies are provided for Electric 2 Wheelers, Electric 3 Wheelers, Electric 4 Wheelers, Electric Buses, and charging stations.
- The main four focus zones of this scheme are-
 - a. Technological progress
 - b. Demand generation
 - c. Pilot projects
 - d. Charging infrastructure

1.2 FAME India scheme: Objectives

The objectives of the FAME India Scheme are follows –

- To accelerate the relinquishment of electric vehicles by lessening the earliest investment.
- To promote electric vehicle manufacturers, suppliers, and related providers to produce a more number of electric vehicles in the country.
- To lessen the country's vehicular emigration and reduce the levels of air pollution.
- To execute electric charging infrastructure across the country.
- To change 30% of overall transportation to electric vehicles by 2030.

2. PHASES OF SCHEME

Phase-I of the scheme was executed by the concerned administrations and concentrated on four key zones: demand creation, technology platform, pilot projects, and charging infrastructure.

During phase I, 427 charging stations were executed by the government, and the scheme was supported by a subsidy of ₹ 895 crores to cover operations. Nearly 2.8 lakh electric vehicles were supported with an amount of ₹ 359 crores.

Phase II of the scheme focuses on the electrification of public transportation. For this phase, the authority has sanctioned a budget of ₹ 10,000 crores. The goal of this scheme is to provide incentives to different categories of electric vehicles.

3. FEATURES OF FAME INDIA SCHEME

3.1 Features of Phase I

- Phase I of the scheme was executed to aim a national fuel security with the help of the upgradation of hybrid and electric vehicles in the country.
- It was launched on 2015 and till 2019.
- The budget disbursement for Phase I was Rs 895 Crore.
- Phase I of the scheme provided 2.8 lakh with demand incentives.
- 425 electric and hybrid buses were sanctioned across the country.
- In four years, 520 charging infrastructures were sanctioned.

3.1 Features of Phase II

- After the successful response of phase I, the FAME India scheme phase II was executed for the faster accumulation of EVs by decreasing the upfront investment charges.
- It was activated from April 2019 till March 2024 for a period of five years. firstly, it was began for 3 years but latterly extended for two more years.
- The budget disbursement for Phase II is raised to Rs 10,000 Crore.
- The following incentives will be allowed under Phase II of the scheme –
 - Demand incentive of Rs 15,000/KWh with a maximum cap of 40% of the cost of two-wheeler vehicles.
 - Demand incentive of Rs 20,000/KWh for electric buses.
 - Demand incentive of Rs 10,000/KWh for the remaining group of vehicles.

- In addition, Phase II will raise the integration of renewable energy sources with charging infrastructure by joining together.
- Charging stations will be executed in metro cities, smart cities, hilly and mountainous states, and million-plus population cities across the whole country.

4. CURRENT STATUS OF FAME INDIA SCHEME - ACCOMPLISHMENTS

Table -1: Accomplishments (Source: Ministry of Heavy Industries)

Phase	Accomplishments
FAME India Scheme Phase 1	<ul style="list-style-type: none"> Supported 2.8 lakh electric and hybrid vehicles with Rs. 360 crore incentives. Deployed 425 electric and hybrid buses with Rs. 280 crore incentives. Sanctioned 520 Charging Stations.
FAME India Scheme Phase 2	<ul style="list-style-type: none"> Supported 4.7 lakh electric vehicles with Rs. 1869 crore incentives. Deployed/Sanctioned 6315 e-buses in more than 65 cities. Sanctioned 2877 charging stations. Revalidation of more than 100 electric vehicle models.

5. HOW DOES THE FAME INDIA SCHEME WORK?

The FAME India scheme will work through the following points given below –

- Demand Incentive
- Authorization of the Scheme which includes data, education and awareness activities.
- deploying charging infrastructure.

5.1 Eligibility Criteria for Demand Incentives

- Demand incentive is the firsthand subsidy that is given to the buyer for the generation demand for EVs.
- The eligible category of vehicles is – Electric buses, e-Four Wheeler, e-Three Wheelers, and e-Two Wheeler.
- All eligible vehicles under FAME India Scheme should be enrolled under the Central Motor Vehicles Rules, 1989.

- The subsidy to an existent will be provided on only one vehicle of a particular group.

5.2 Working

Consider the XYZ two-wheeler Electric vehicle is accessible at an ex-showroom cost of Rs 1,30,200.

After the subsidy under FAME India Scheme, it will be accessible at ₹ 1,15,200.

The original vehicle manufacturer (OVM) will claim this subsidy from the Department of Heavy Industry.

The OVM has to meet minimal technical eligibility standards related to the performance and efficiency of vehicles.

5. WHY THE FAME INDIA SCHEME NEEDED?

• Environmental Pollution –

According to reports, air Pollution is single-handedly responsible for more than 15 lakh deaths in India in 2019, i.e., 17.8% of all deaths. Vehicular emissions are among one the primary sources of air pollution. Hence, it is the need of the hour to bring down vehicular emissions.

• Reduce Oil Import –

The penetration of electric vehicles in society will help India to reduce its oil dependency while solving the challenge of energy scarcity and also reducing the Current Account Deficit (CAD).

• Fulfill Global Commitments –

Globally, India is the fourth highest emitter of carbon dioxide, and at the COP26 in Glasgow, it has pledged to reduce its carbon emissions to net zero by the year 2070. India has also committed to cutting its GHG emissions intensity by 33% to 35% below 2005 levels by 2030

• Self-Reliance in Manufacturing Component –

Presently, India does not manufacture most of the lithium-ion (Li-ion) battery cells. To reduce India's dependence on other countries for its import of battery cells, it is required to implement a policy.

• Low Maintenance Cost –

Electric vehicles are assembled with less number of moving parts. If the moving parts are fewer, then there will be less maintenance required. Hence, it will bring down the maintenance cost of the vehicle.

6. CONCLUSIONS

- By Environmental pollution will be significantly reduced because of the reduction of vehicular emissions.
- By implementing such schemes, India will achieve the target of net zero emission of carbon before 2070.
- The electric charging infrastructure will be set up across the country.
- The citizens will avail of the incentives on the purchase of electric vehicles for personal use.
- The dependence on oil imports will reduce the current account deficit and hence the capital expenditure.
- It will provide eco-friendly public transportation for citizens.

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