

05 April 2019: UPSC Exam PIB Summary & Analysis

NITI Aayog & RMI Release Technical Analysis of FAME II Scheme

Context :

- The NITI Aayog and the Rocky Mountain Institute (RMI) released a report on opportunities for the automobile sector and government under the Faster Adoption and Manufacturing of Electric Vehicles II (FAME II) scheme.

Details :

- The technical report titled '*India's Electric Mobility Transformation: Progress to Date and Future Opportunities*' quantifies the direct oil and carbon savings that the vehicles incentivized under FAME II will deliver.
- RMI is an Indian and global nonprofit organisation focused on driving the efficient and restorative use of resources.
- The report also quantifies the catalytic effect that FAME II and other measures could have on the overall Electric Vehicle (EV) market. According to the analysis, if FAME II and other measures – in public and private space - are successful, India could realize EV sales penetration of 30% of private cars, 70% of commercial cars, 40% of buses and 80% of two and three-wheelers by 2030.
- Extrapolating from the same, the lifetime cumulative oil and carbon savings of all-electric vehicles deployed through 2030 could be many-fold larger than the direct savings from FAME II. For example, achieving these levels of market share by 2030 could generate cumulative savings of 846million tonnes of CO₂ over the total deployed vehicles' lifetime.
- The FAME II scheme, which was notified by the Union Cabinet in February 2019, aims to further accelerate the government of India's commitment to a clean mobility future, sees the electrification of transportation as a primary focus area. FAME-II intends to catalyze the market for faster adoption of EVs to ensure durable economic growth and global competitiveness for India's automotive industry.

Key highlights from the report:

- Effects of FAME II will go beyond the vehicles that are eligible under the FAME II
- There are considerable energy and CO₂ savings associated with the two, three, and four-wheeled vehicles and buses covered by FAME II over their lifetime, as well as the potential savings associated with greater adoption levels by 2030
- The electric buses covered under FAME II will account for 3.8 billion vehicle kilometres travelled (e-vkt) over their lifetime
- In order to capture the potential opportunity in 2030, batteries must remain a key focal point as they will continue to be the key cost driver of EVs.
- Vehicles eligible under FAME II scheme can cumulatively save 5.4 million tonnes of oil equivalent over their lifetime worth Rs 17.2 thousand crores.
- EVs sold through 2030 could cumulatively save 474 million tonnes of oil equivalent (Mtoe) worth INR 15 lakh crore and generate net CO₂ savings of 846 million tonnes over their operational lifetime.
- India needs the auto industry's active participation to ease electric mobility transition. The auto and battery industries could collaborate to enhance customer awareness, promote domestic manufacturing, promote new business models, conduct R&D for EVs and components, consider new business models to promote EVs
- The government should focus on a phased manufacturing plan to promote EVs, provide fiscal and

non-fiscal incentives for phased manufacturing of EVs and batteries. Different government departments can consider a bouquet of potential policies, such as congestion pricing, ZEV credits, low emission/exclusion zones, parking policies, etc. to drive adoption of EVs.

- India's electric vehicle market is poised for growth with a blend of policies, such as FAME II, and the automotive industry's willingness to provide new mobility solutions to the citizens of the country. Such a transformation will create enormous economic, social and environmental benefits for the citizens of India.

