



National Mission on Transformative Mobility and Battery Storage

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Union Cabinet has approved setting up of a **National Mission on Transformative Mobility and Battery Storage**.

The objective is to **promote clean, connected, shared, sustainable and holistic mobility initiatives**; Phased Manufacturing Programme (PMP) valid for 5 years until 2024.

Composition

The multi-disciplinary “National Mission on Transformative Mobility and Battery Storage” with an Inter-Ministerial Steering Committee will be chaired by CEO NITI Aayog.

Role

- The Mission will **recommend and drive the strategies for transformative mobility and Phased Manufacturing Programmes for Electric Vehicles, EV Components and Batteries**.
- A **Phased Manufacturing Program (PMP)** will be launched to localize production across the entire EV value chain.
- The National Mission on Transformative Mobility and Battery Storage will determine the PMP and will finalize the details of such a program.
- The **details of the value addition that can be achieved with each phase of localization** will be finalized by the Mission with a clear Make in India strategy for the electric vehicle components as well as battery.
- The **Mission will coordinate with key stakeholders in Ministries/ Departments** and the states to integrate various initiatives to transform mobility in India.

Roadmaps

- A **phased roadmap to implement battery manufacturing at Giga-scale** will be considered with an initial focus on the large-scale module and pack assembly plants by 2019-20, followed by integrated cell manufacturing by 2021-22.
- **Details of the PMP for Batteries shall be formulated by the Mission.** The Mission will ensure holistic and comprehensive growth of the battery manufacturing industry in India.
- The Mission will prepare the roadmap that will enable India to leverage upon its size and scale to produce innovative, competitive multi-modal mobility solutions that can be deployed globally in diverse contexts.
- The Mission will define the roadmap for transformative mobility in “New India” by introducing a sustainable mobility ecosystem and fostering Make-in-India to boost domestic manufacturing and employment generation in the country.

Impact

- The **Mission will drive mobility solutions that will bring in significant benefits to the industry, economy, and country.**
- These solutions will help improve air quality in cities along with reducing India’s oil import dependence and enhance the uptake of renewable energy and storage solutions.
- The Mission will lay down the strategy and roadmap which will enable India to leverage upon its size and scale to develop a competitive domestic manufacturing ecosystem for electric mobility.
- The **actions in this regard will benefit all citizens as the aim is to promote ‘Ease of Living’ and enhance the quality of life of our citizens and also provide employment opportunities through ‘Make-in-India’ across a range of skillsets.**

Background

- Mobility has the potential to drive the economy forward and positively impact the lives of citizens both in urban and rural areas.
- Affordable, accessible, inclusive and safe mobility solutions are primary strategic levers for rapid economic development and improving ‘Ease of Living’.
- Given its commitment to climate goals, India needs to adopt effective strategies to place itself as a key driver of the mobility revolution in the world.

Need for EVs in India

- Rapid urbanization has increased the demand for energy and transport infrastructure.
- India’s commitment to addressing the issue of climate change necessitates the adoption of alternative fuels for environmental sustainability.
- The shift towards renewable energy sources has led to cost reduction from better

electricity generating technologies.

- Advances in battery technology have led to higher energy densities, faster charging and reduced battery degradation from charging.
- High expenses on oil import in the changing geopolitical conditions require India to ensure its energy security by moving towards alternative energy sources.

Factors that hinder the development of the EV industry in India

- **Lack of a stable policy for EV production:** Profit determination becomes uncertain considering the high capital costs and the uncertainty in policies related to EV production. This discourages investment in the industry.
- **Lack of associated infrastructural support:** The lack of clarity over AC versus DC charging stations, grid stability and range anxiety (fear that battery will soon run out of power) are other factors that hinder the growth of EV industry.
- **Domestic factors affecting EV production:** India does not have any known reserve of lithium and cobalt, it is dependent on countries like Japan and China for the import of lithium-ion batteries. Rupee depreciation has also negatively affected such imports.
- **Lack of skilled workers:** EVs have higher servicing costs and higher levels of skills is needed for servicing. India lacks dedicated training courses for such skill development.