Indian Automotive Industry

GS – III - Economy, Infrastructure & Energy

GS – II – Government policies & Initiatives for development of various sectors

Why in the News?

Having completed 10 years, the Make in India initiative has significantly transformed India's automobile industry, fostering domestic car production and accelerating electric vehicle (EV) manufacturing.

How automotive industry fares in Indian economy?

- It is one of the fastest-growing sectors.
- **Development** – It entered a tra*nsformative phase in 1991 with de-licensing* of the sector and subsequent opening up for 100 % Foreign Direct Investment (FDI) through the 'automatic route'.
    - It has attracted $36 billion in FDI over the past 4 years
- **Globalisation** – Since then, almost all the *global majors have set up their manufacturing facilities* in India.
    - Major automobile giants like Hyundai, Toyota, and Mercedes -Benz expanding their production in India.
- **Supports employment opportunities** – As per the Annual Report 2024-25 of the Ministry of Heavy Industries, *around 30 million jobs* are supported.
- **Economic value –** It accounts for *6% of India's GDP*.
- Its production had grown from 2 million vehicles in 1991 -92 to 28 million in 2023 -24 and its turnover is about USD 240 billion.
- *Exports reached 4.5 million units* in FY24 while industry exported vehicles and auto components amounting to about USD 35 billion.
- **Global position**



Status of auto component industry
• **Auto components** – It covers a broad spectrum of products, including engine parts, transmission systems, braking systems, electrical & electronics components, body and chassis parts, etc., • It supplies critical *parts to domestic vehicle manufacturers and exporting* to major global markets. • **Significance** – It contributes 2*.3% to India's GDP*, directly employing over 1.5 million people. • **Exports –** It exports *over 25% of its production annually* and are valued at $21.2 billion in FY24. • Major exports are to Europe (US$ 6.89 billion), followed by North America (US$ 6.19 billion) and Asia (US$ 5.15 billion).

> *Indian Government has set a target to reach the $100 billion export target in auto component by 2030*

How 'Make in Initiative' supports India's automobile industry growth?

Make in India
• It is an initiative under Atma Nirbhar Bharat Abhiyan. • **Launched in** - 2014. • **Role** - To promote entrepreneurship, innovation, and skill development in India's manufacturing, infrastructure, and service sectors. • **Pillars** - New processes, new infrastructure, new sectors, and new mind set. • **Significance** - It was one of the *first 'Vocal for Local' initiatives* that exposed India's manufacturing domain to the world.

- **Localization & self -reliance** – It boosted domestic production of advanced automotive technology (AAT) products.
- **Development of manufacturing hub** – Major automobile giants like Hyundai, Toyota, and Mercedes -Benz has base in India.
- **Infrastructure development** – It promotes expansion of highways, EV charging networks, and vehicle testing facilities.
- **Innovation** – It encourages the development of EV technology, battery manufacturing,

and charging infrastructure.

- **Leveraging China plus one strategy** – It is used to boost exports of auto components through make in India scheme.

> *The **China Plus One (C+1) strategy** is a supply chain strategy where companies diversify manufacturing activities away from China to reduce risks.*

- **Promotes electric vehicles (EV) market** – It strengthens domestic lithium -ion battery manufacturing, leveraging lithium reserves in Jammu & Kashmir.

What are the government initiatives to promote electric vehicles in India?

- India is also advancing in sustainable mobility, with 4.4 million Electric Vehicles (EV) registered by August 2024.
- ***Ministry of Heavy Industries*** aims to promote electric vehicles (EVs) through the following schemes
- **FAME India Scheme Phase-II** – Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles incentivise e-2Ws, e-3Ws, e-4Ws, e-buses and EV public charging stations.
- **Production Linked Incentive (PLI) Scheme for Automobile and Auto Component Industry** – It was notified in 2021 for enhancing India's manufacturing capabilities *for Advanced Automotive Technology (AAT) products*.
- **PLI Scheme for Advanced Chemistry Cell (ACC)** – It aims to establish a competitive domestic manufacturing ecosystem for 50 GWh of ACC batteries.
- **PM E-DRIVE Scheme** – PM Electric Drive Revolution in Innovative Vehicle Enhancement was notified in 2024.
- It is a 2-year scheme which aims to support electric vehicles including e-2W, e-3W, e-Trucks, e-buses, e-Ambulances, EV public charging stations and upgradation of vehicle testing agencies.
- **PM e-Bus Sewa-Payment Security Mechanism (PSM) Scheme** – It was notified in 2024, which aims to support *deployment of more than 38,000 electric buses*.
- **Scheme for Promotion of Manufacturing of Electric Passenger Cars in India (SMEC)** – It was notified in 2024 to promote the manufacturing of electric cars in India.

Initiatives by other ministries	
Ministry of Power	• It has issued guidelines and standards for EV Charging Infrastructure. • It outlines standards and protocols to create a connected & interoperable EV charging infrastructure network in the country.
Ministry of Finance	• It has *reduced GST on EVs* from 12% to 5%.
Ministry of Road Transport & Highways (MoRTH)	• It announced that the *battery-operated vehicles will be given green plates* and be exempted from permit requirements.

Ministry of Housing and Urban Affairs	• It has *amended the Model Building Bye-Laws*, mandating the inclusion of charging stations in private and commercial buildings.

Interoperable EV charging networks enable EVs to charge at any station, regardless of the network operator

What lies ahead?

- Government can increase focus on hydrogen fuel -cell vehicles and biofuels.
- Attracting more FDI by Encouraging global OEMs to expand R&D and manufacturing operations in India.
- Strengthening local battery production & supply chain.
- Increasing production of automatic transmissions & high -tech auto components.
- Expanding EV charging infrastructure in rural and semi -urban areas.

Reference

PIB |Revolutionizing Mobility in India

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