Subsidy on Electric vehicles

Why in News?

Under the **Electric Vehicle Policy**, the Rajasthan government has constituted an **e-vehicle promotion fund** of Rs 200 crore to **promote electric vehicles.**

Key Points

- **About the Fund:**
  - The State Government's **"Electric Vehicle Policy-2022"** includes a provision to **reimburse the State GST amount** and offer a **one-time grant from the E-Vehicle Promotion Fund to buyers of electric vehicles** equipped with modern batteries, following the guidelines of **FAME-2.**
  - The reimbursement and one-time grant amount will be payable on vehicles purchased from 1st January 2022 and registered in the state.
  - **The Process:**
    - To avail the subsidy, firstly the vehicle manufacturer is required to **register on the departmental portal.**
    - After verification, the department will allow the vehicle buyer to apply for the grant.
  - Under this policy, **all types of electric vehicles ranging from two-wheelers to heavy vehicles** have been included.
  - The government aims to **encourage more people to use electric vehicles instead of diesel and petrol,** reducing **pollution** and preserving environmental balance.
- **Advantages of Electric Vehicles:**
  - It produces zero tailpipe emissions, contributing to cleaner air and improved public health.
  - Electricity can be cheaper than gasoline, leading to lower fuel costs per kilometer.
  - Electric motors produce significantly less noise than gasoline engines.
  - Electric motors convert a higher percentage of energy into useful power than gasoline engines.

Electric Vehicles

- Electric vehicles are types of vehicles that use one or more electric motors for propulsion, instead of conventional **internal combustion engines (ICE)**, which burn gasoline or diesel.
- **Types of Electric Vehicles:**
  - **Battery Electric Vehicles (BEV)**: These rely solely on battery power for propulsion and produce zero tailpipe emissions.
  - **Plug-in hybrid electric vehicles (PHEV):** Combine an electric motor with a gasoline engine. These can be charged externally and run on battery power for a limited distance, then switch to the gasoline engine for longer trips.
  - **Hybrid electric vehicles (HEVs):** These use both an electric motor and a gasoline engine, but the battery cannot be charged by plugging in directly.