Report on India's Priority Corridors for Zero-Emission Trucking

***Prelims**: General issues on Environment| Sustainable Development | Current events of national and international importance.*

Why in News?

Recently, Principal Scientific Adviser (PSA) to the Government of India released a report on India's Priority Corridors for Zero-Emission Trucking.

Zero-Emission Trucking (ZET)
• **Need** – Nearly 40% of fuel consumption and transport emissions in India originate *from long-distance trucks.* • It is crucial for decarbonising the logistics sector, reducing air pollution, and strengthening India's energy security. • **Zero-Emission Trucks (ZETs)** – Thay are vehicles *powered by clean energy sources* like electricity or hydrogen, *producing no tailpipe emissions.* • They can *lower carbon emissions* by 44% to 79% compared to diesel trucks and are more sustainable transport mode. • It can help India improve logistics efficiency, lower costs, improve air quality, and reduce environmental impact.

- **Report** – It is the result of a rigorous, data-driven assessment designed to support India's vision of Atmanirbhar Bharat and economic goals.
- **Developed with the support of** - Centre of Excellence for Zero Emission Trucking (CoEZET) - IIT Madras, Rocky Mountain Institute, and pManifold as knowledge partners.
- Objectives – To guide future investments in charging infrastructure, public-private partnerships, and regulatory support mechanisms.
- **Selection of ZETs corridors** – The report ***identifies the top 10 high-impact corridors*** most suited for early ZET deployment, laying the groundwork for a dedicated national ZET infrastructure network.
- They were identified through a 3-phase process by a quantitative and qualitative assessment using parameters such as
    - Toll traffic data and mapping of supply/demand centres
    - Stakeholder consultations
    - Detailed field research
- It also considered factors such as high freight traffic, industrial activity, availability of ancillary services, grid infrastructure readiness, corridor length relative to battery range, and strategic stakeholder inputs.
- **Significance** – It will serve as a strategic *guide for policymakers and industry actors* with comprehensive insight into the three-part corridor identification process.

- By strategically targeting these corridors, India can accelerate its ***transition to a zero-emission freight sector*** while boosting competitiveness and resilience.
- It can also serve as a *reference for the PM E-DRIVE scheme.*

PM E-DRIVE scheme *was launched in 2024 by the Ministry of Heavy Industries to promote the adoption of zero-emission transport (ZET) solutions.*

Reference

PIB| Release of Report on India's Priority Corridors for ZETs

Related News – PM E-DRIVE Scheme

