



INDIAN PETROLEUM INDUSTRY: ECONOMY

NEWS: Fueling Growth and Innovation

WHAT'S IN THE NEWS?

India's petroleum industry is critical to its energy security, economic growth, and global positioning, with significant progress in exploration, refining, and green energy initiatives, and a focus on sustainability by 2030.

Introduction to India's Petroleum Industry

- The industry includes exploration, production, refining, distribution, and marketing of petroleum products.
- Divided into upstream (extraction), midstream (transportation/storage), and downstream (refining/distribution).
- 19 public sector refineries, 3 private refineries, and 1 joint venture refinery.
- India's refining capacity grew from 215.066 MMTPA (2014) to 256.816 MMTPA (2024).

Historical Development

- India's petroleum journey began in 1867 with the first oil well drilled in Digboi, Assam.
- The Indian Oil Corporation (IOC) was established in 1959 to refine and distribute petroleum products.

Industry Growth and Modernization

- The 1990s saw economic liberalization and increased private and foreign investments.
- Key public sector companies like ONGC and IOC have been instrumental in exploration and refining.
- Modern refineries like the Jamnagar Refinery have made India a refining hub.

Exploration and Reserves

- India holds 651.8 million metric tons of crude oil and 1,138.6 billion cubic meters of natural gas.
- Plans to increase exploration acreage to 1 million square kilometers by 2030.

Updates and Reforms

- Domestic LPG prices are among the lowest worldwide.



- The exploration and production approval process has been streamlined.
- The Oilfields (Regulation and Development) Amendment Bill supports policy stability.

Foreign Trade and Export

- India's refining capacity exceeds 250 million metric tons annually, meeting both domestic and export demand.
- Key export markets include South Asia, Africa, and Europe.
- Special Economic Zones help boost petroleum exports.

Economic Contribution

- The petroleum sector's Gross Value Addition (GVA) grew from Rs. 1.56 lakh Crore in 2012-13 to Rs. 2.12 lakh Crore in 2022-23.
- Direct and indirect employment supports industries like petrochemicals and logistics.

Global Positioning

- India ranks among the top five globally in refining capacity and exports refined petroleum products.
- India is the second-largest ethanol blender and the third-largest biofuel producer globally.

Technological Advancements

- Adoption of enhanced oil recovery (EOR) techniques and AI for better exploration and production.
- Green technologies are being integrated in refineries to reduce environmental impact.

Government Initiatives

- Pradhan Mantri JI-VAN Yojana promotes bio-ethanol production.
- Strategic Petroleum Reserves ensure energy security.
- The Ethanol Blending Program targets 20% ethanol blending by 2025-26.

Green Energy and Sustainability

- SATAT Initiative promotes compressed biogas production.
- Mission Green Hydrogen aims for 5 million metric tons of green hydrogen by 2030.



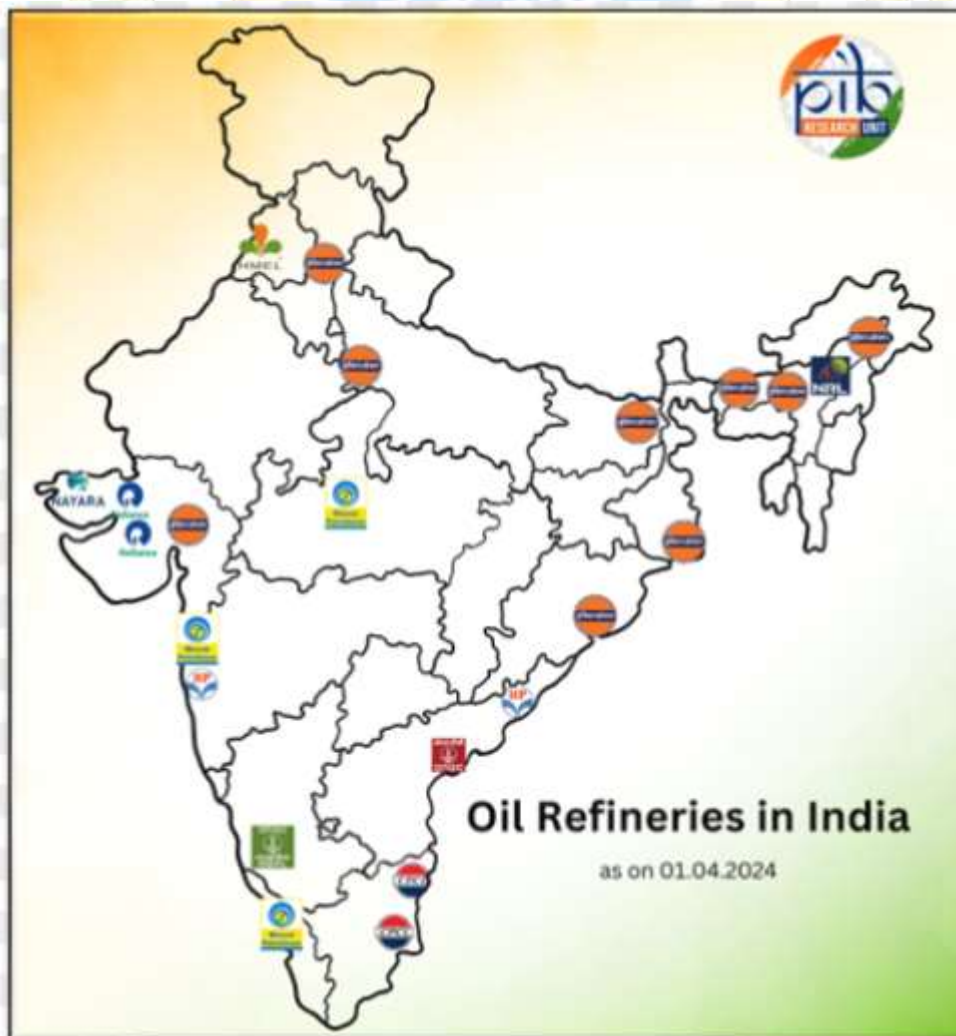
- National Bio-Energy Program focuses on bio-energy production.

Implications for Growth and Development

- Drives economic growth, foreign exchange, and industrial expansion.
- Contributes to political and energy independence.
- Improves rural development and energy access.

Conclusion

- India aims for significant growth in refining capacity, green energy, and exploration by 2030, enhancing its global leadership in energy while addressing environmental goals.



Source: <https://pib.gov.in/PressReleasePage.aspx?PRID=2096817#:~:text=Over%20the%20decades%2C%20the%20sector,global%20and%20domestic%20energy%20challenges.>