

First Greenfield Refinery-Cum-Petrochemical Complex

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Why in News?

Recently, the prime minister inaugurated India's 1st greenfield integrated refinery-cum-petrochemical complex at Pachpadra, Rajasthan.

- **Greenfield refinery** - It is an oil or chemical processing facility built entirely from scratch on a previously undeveloped, "clean" site.
- **Petrochemical complex** - Large facility converting petroleum and natural gas into high-value chemical products.
- The facility combines crude oil refining and chemical manufacturing into a single site to improve operational efficiency and profitability
- **Developed by** - HPCL and the Government of Rajasthan.
- **Capacity** -
 - 9 million metric tons per annum (MMTPA) crude oil process.
 - 2.4 MMTPA petrochemical production.
- **Nelson Complexity Index** - 17.0 (among the most sophisticated globally).

Nelson Complexity Index (NCI) is a scoring system used to measure the sophistication and technological advancement of an oil refinery

- **Petrochemical Yield** - >26% (benchmark efficiency).
- **Energy Security** - Reduces dependence on imported petrochemicals; strengthens supply chains.
- **Industrial Growth** - Anchors downstream industries (plastic parks, textiles, automotive components, packaging, agriculture films).
- **Diversification** - Shifts Rajasthan's economy beyond agriculture and mining towards industrial resilience.

Reference

[Economic Times | Greenfield refinery](#)

