



# Nuclear Power Plant in Banswara

## Why in News?

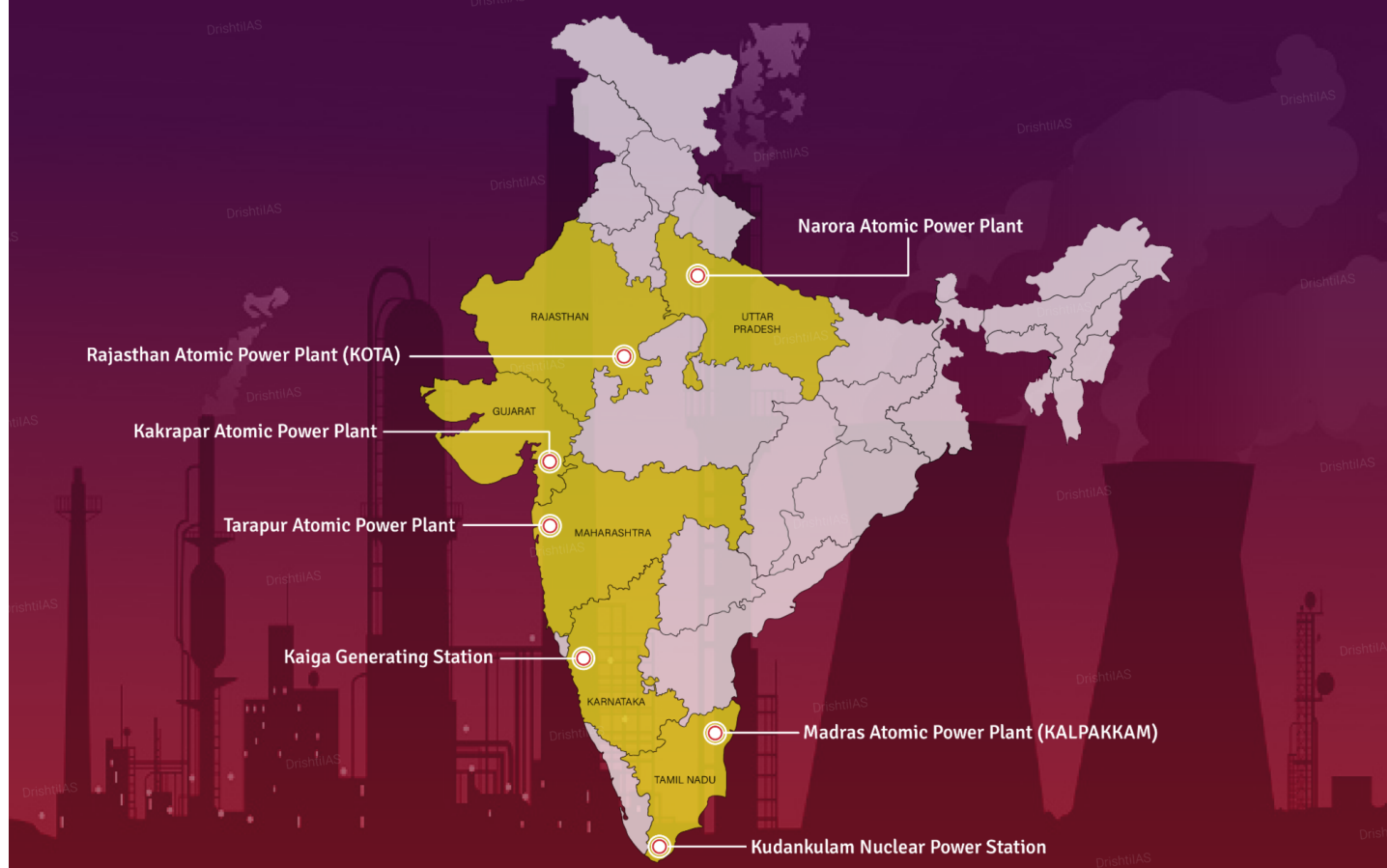
Prime Minister Narendra Modi will lay the foundation stone for the **Mahi-Banswara Nuclear Power Plant** in Rajasthan on 25th September 2025, boosting the state's [energy sector](#).

- The Prime Minister's visit will also see the inauguration of **several other projects** worth over Rs 1.21 lakh crore.

## Key Points

- **About:** The proposed nuclear power plant, set to be built on a 1,366-acre site, will have an **installed capacity of 2,800 MW**, with an expected completion by **2036**.
  - The project, valued at around Rs 50,000 crore, will feature four indigenous 700 MWe pressurized **heavy water reactors (PHWRs)** and is part of India's broader efforts to expand nuclear power capacity.
- **Current Status:** India currently operates **15 PHWRs of 220 MWe, 2 PHWRs of 540 MWe**, and a **700 MWe reactor at Rawatbhata, Rajasthan**.
  - **PHWRs** are a type of **nuclear reactor** that uses **heavy water (deuterium oxide, D<sub>2</sub>O)** as **both a coolant and moderator**, while **natural or slightly enriched uranium** serves as **fuel**.
- **Regulator:** The [Atomic Energy Regulatory Board \(AERB\)](#) is India's national regulatory authority responsible for ensuring the **safe use of nuclear energy** and radiation technologies in the country.
  - Established in **1983** under the [Atomic Energy Act, 1962](#), AERB functions as an **independent body** under the **Department of Atomic Energy (DAE)**.
- **Total Capacity:** India's **nuclear power capacity** is currently **8.18 GW (2024)**, with targets set at **22.48 GW by 2031-32** and **100 GW by 2047**.

# Operational Nuclear Power Plants in India



## FACTS

- Presently, India has 22 nuclear power reactors operating in 6 states, with an installed capacity of 6780 MegaWatt electric (MWe).
- Activities concerning the establishment and utilization of nuclear facilities and use of radioactive sources are carried out in India in accordance with the Atomic Energy Act, 1962.
- Atomic Energy Regulatory Board (AERB) regulates nuclear & radiation facilities and activities.
- **Newest & Largest Nuclear Power Plant:** Kudankulam Power Plant, Tamil Nadu.
- **First & Oldest Nuclear Power Plant:** Tarapur Power Plant, Maharashtra.