



# PRIVATE SECTOR ENTRY IN INDIA'S NUCLEAR SECTOR


Prime Minister Narendra Modi has said that the government is moving towards opening up the nuclear sector for private players.

## India's Nuclear Sector


 Nuclear power plants in India are **owned and operated only by Nuclear Power Corporation of India Ltd (NPCIL)**.

 **Key legislations** - To allow private sector participation the government has proposed amendments to key legislations.


 **Atomic Energy Act, 1962**, a framework for nuclear energy development and regulation.

 **Civil Liability for Nuclear Damage Act, 2010**, ensuring compensation mechanisms for nuclear incidents.


## Additional Information - Nuclear Energy

 **Definition** - Nuclear energy is the **energy released during nuclear reactions**, either through fission (splitting of atomic nuclei) or fusion (merging of atomic nuclei).

## Status of Nuclear power capacity in India

 **Nuclear power capacity of India - 8,180 MW**, spread across 24 nuclear power reactors.

 **Nuclear power capacity target - 100 GW by 2047**


 **Capacity Expansion: 10 new reactors (totaling 8 GW) under construction across Gujarat, Rajasthan, Tamil Nadu, Haryana, Karnataka, and Madhya Pradesh.**


## NUCLEAR POWER PLANTS UNDER OPERATION IN INDIA


 **RAJASTHAN ATOMIC POWER PLANT-1 (RAPS-1)**  
(RAPS-2), (RAPS-3), (RAPS-4), (RAPS-5), (RAPS-6)  
KOTA, RAJASTHAN


 **NARORA ATOMIC POWER PLANT-1 (NAPS-1, 2)**  
NARORA, UTTAR PRADESH

 **KAKRAPAR ATOMIC POWER PLANT-1, (KAPS-1)**  
TAPI, GUJARAT

 **TARAPUR ATOMIC POWER PLANT-1 (TAPS-1), (TAPS-2), (TAPS-3)**  
BOISAR, MAHARASHTRA

 **KAIGA GENERATING STATION-1 (KGS-1)**  
(KGS-2), (KGS-3), (KGS-4)  
KAIGA, KARNATAKA

 **MADRAS ATOMIC POWER PLANT-1 (MAPS 1,2)**  
KALPAKKAM, TAMIL NADU

 **KUDANKULAM NUCLEAR POWER STATION-1 (KKNPS 1,2)**  
KUDANKULAM, TAMIL NADU

