

## SHIFT IN INDIA'S NUCLEAR POLICY - ECONOMY

**NEWS:** India is planning a major policy shift by allowing up to 49% Foreign Direct Investment (FDI) in the nuclear energy sector, aiming to boost nuclear capacity, reduce coal dependency, and move toward achieving its 'net zero' carbon emissions target by 2070.

### WHAT'S IN THE NEWS?

#### Current Status and Challenges in India's Nuclear Sector

##### a. Government Monopoly and Limited Output

- The nuclear power sector in India continues to be **state-dominated**, primarily managed by public sector undertakings like the **Nuclear Power Corporation of India Ltd. (NPCIL)**.
- It contributes **only around 2% of India's total installed electricity capacity**, amounting to just over **8 GW**, despite its potential to provide **carbon-free baseload power**.

##### b. Strategic Caution and Legal Restrictions

- Historically, India's nuclear policy has been governed by **strategic autonomy and national security concerns**, limiting transparency and private involvement.
- Key legislative instruments like the **Atomic Energy Act, 1960**, and the **Civil Liability for Nuclear Damage Act, 2010**, have **restricted participation from private and foreign players** due to legal and liability concerns.

##### c. Supplier Liability Concerns

- Even after the landmark **2008 India-US Civil Nuclear Agreement**, global suppliers such as GE and Westinghouse **remained reluctant to enter the Indian market**.
- The **strict liability norms** under Indian law impose potentially **unlimited liability on suppliers** in case of nuclear accidents, unlike the operator-only liability model followed in many other countries.
- This has **discouraged foreign investment and technology transfer**, slowing down the growth of the nuclear energy sector.

#### Recent Policy Proposals and Their Potential Impact

##### a. Opening the Sector to FDI

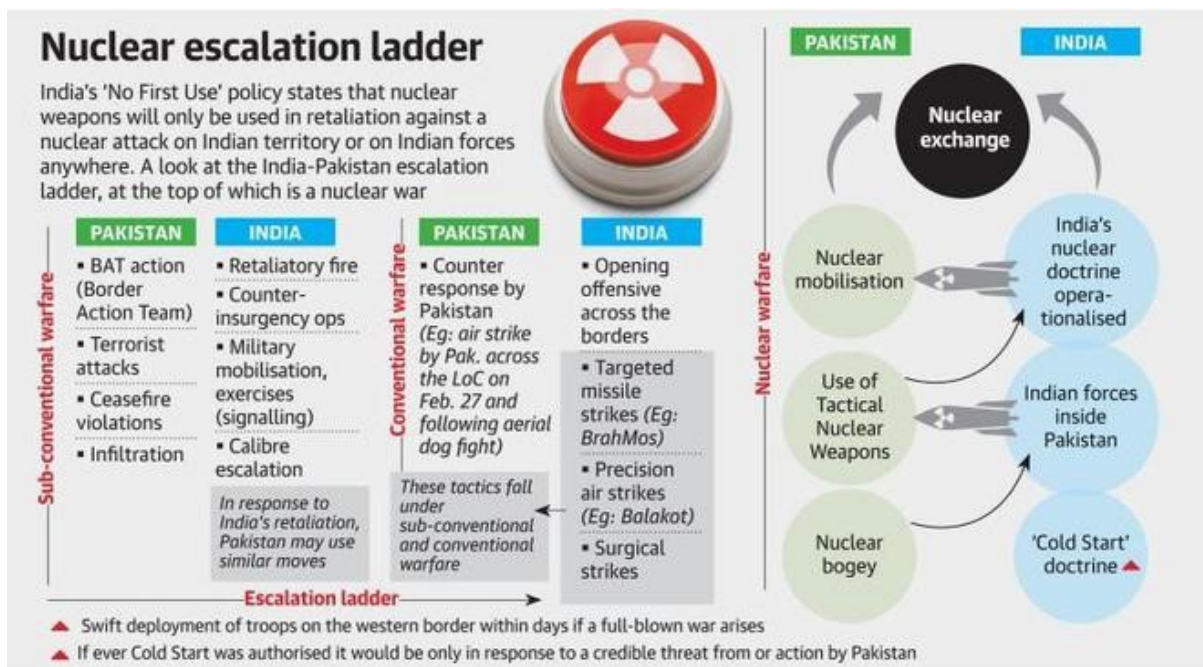
- The Indian government has proposed allowing up to **49% Foreign Direct Investment (FDI)** in the nuclear energy sector under **government route**, marking a **significant policy shift**.
- This liberalisation is intended to **attract global capital and advanced technologies**, addressing the current investment stagnation and technological gap.

##### b. Private Sector Entry and Liability Reform

- The policy shift also includes plans to **amend nuclear liability laws** and permit the **entry of domestic private companies** into nuclear power generation and component manufacturing.
- These reforms could **transform the sector into a more competitive and innovation-driven market**, similar to what was seen in India's telecom and space sectors post-liberalisation.

### c. Strategic Trade and Diplomatic Leverage

- A liberalised nuclear sector could be a **valuable tool for diplomatic engagement**, particularly with nuclear technology-exporting nations like the **United States, France, and Russia**.
- It could **strengthen India's position in international nuclear supply chains and deepen strategic partnerships** under frameworks like the Nuclear Suppliers Group



(NSG).

## Opportunities and Safeguards for the Future

### a. Ambitious Capacity Expansion Goals

- India has outlined a vision to expand its nuclear power capacity to **100 GW by 2047**, which is **12 times the current capacity**.
- Meeting this target would require **massive foreign and domestic investment**, robust infrastructure development, and long-term policy commitment.

### b. Building a Robust Indigenous Supply Chain

- Liberalising the sector could catalyse the creation of an **indigenous ecosystem** for nuclear technology development, component manufacturing, and skilled workforce generation.
- This would reduce **dependence on imports**, promote **self-reliance**, and ensure **sustainability and resilience** in nuclear infrastructure.

**c. Maintaining Sovereign Control and Safety Oversight**

- While encouraging FDI and private participation, it is essential that **sovereign control over nuclear regulation, safety protocols, and strategic oversight** is strictly maintained.
- The **Atomic Energy Regulatory Board (AERB)** and other statutory bodies must ensure that **public safety, environmental concerns, and national security interests are not compromised**.

Source: <https://telanganatoday.com/editorial-big-shift-in-indias-nuclear-policy>