

Release of Report and Panel Discussion

India's Nuclear Energy Vision: Strategic Pathways for SMR Deployment

Background Note

India's journey towards Viksit Bharat by 2047 will require a secure, reliable, and clean energy system that can support sustained economic growth while advancing decarbonisation goals. In this context, nuclear energy is emerging as a key pillar of India's future energy mix, not only as a source of firm, round-the-clock low-carbon power that can complement renewable energy expansion, but also as a driver of energy security, industrial growth, and technological advancement. With a national ambition of achieving 100 GW of nuclear capacity by 2047, and recent policy reforms such as the Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India Act, 2025 (SHANTI Act) enabling greater private sector participation, India's nuclear sector is entering a transformative phase.

As the sector moves from policy reform to implementation, the focus now shifts to building the broader ecosystem needed to support long-term growth. This includes developing a skilled human resource base, strengthening public awareness and confidence in nuclear energy, enabling effective private sector participation, and evolving regulatory frameworks to address both large conventional reactors and emerging technologies such as Small Modular Reactors (SMRs). Against this backdrop, the report examines the regulatory and institutional pathways needed to support India's nuclear expansion.

Key themes for Panel Discussion:

- **Public Perception and Awareness:** Strengthening public trust and awareness through transparent communication, engagement, and outreach.
- **Support for Private Sector Participation:** Enabling private sector participation through regulatory direction, implementation support, and investment facilitation.
- **Upcoming Regulatory Frameworks:** Shaping adaptive regulatory pathways for both large conventional reactors and emerging technologies such as Small Modular Reactors (SMRs).
- **Human Resource Development:** Building the skilled talent and institutional capacity required to support a growing nuclear ecosystem.

Agenda

Title: Release of Report – India’s Nuclear Energy Vision: Strategic Pathways for SMR Deployment

Date: 12 May 2026

Time: 10:00-14:00 IST

Venue: Juniper Hall, India Habitat Centre, New Delhi

Time (IST)	Agenda Item
10:00 - 10:30	Registration
Session I – Inaugural Session and Report Launch	
10:30 - 10:35	Welcome Address: Dr Vibha Dhawan, Director General, TERI
10:35 – 10:50	<ul style="list-style-type: none"> • Context Setting: Mr K Ramanathan, Distinguished Fellow Emeritus, TERI • Overview of the Report: Dr Arunendra K Tiwari, Fellow, TERI
10:50 - 10:55	Chief Guest Address: Dr P. K. Mishra, Principal Secretary to the Prime Minister, PMO, Government of India
10:55 - 11:10	Official Release of Report: India’s Nuclear Energy Vision: Strategic Pathways for SMR Deployment
11:10 - 11:50	Special Remarks <ul style="list-style-type: none"> • Mr Ghanshyam Prasad, Chairman, Central Electricity Authority (CEA) • Dr Garima Sharma, Head-Safety Security & Safeguards, DAE • Dr G. Vaidyanathan[#], Retired Scientist and Former Director, Fast Reactor Technology Group, Indira Gandhi Centre for Atomic Research (IGCAR), Department of Atomic Energy
	Vote of Thanks: Mr Alekhya Datta, Director, TERI
Session II – Policy, Regulation and Market Readiness for Nuclear Deployment in India	
12:00 - 13:15	Panel Discussion: Enabling Ecosystems for Small Modular Reactors – Governance, Financing and Implementation Pathways Moderator: Mr K Ramanathan, Distinguished Fellow Emeritus, TERI Panellists: <ul style="list-style-type: none"> • Dr Garima Sharma, Head-Safety Security & Safeguards, DAE • Mr Prasenjit Pal, Former Executive Director & Head NTPC Parmanu Urja Nigam Ltd. • Ms Sama Bilbao y Leon[#], Director General, World Nuclear Association • Mr Anil V. Parab, Director & Sr. Executive Vice President (Heavy Engineering & Manufacturing) L&T • Mr Alok Mishra[#], Country Director, Westinghouse India • Q&A
13:15 onwards	Lunch

Virtual
