

Power

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March 20, 2026

Coverage Universe

Name of the Company	Rating	CMP (INR)	TP (INR)
Adani Energy Solutions	Accumulate	1,005	1,090
CESC	BUY	154	204
Coal India	Hold	454	436
Indian Energy Exchange	Hold	118	135
NTPC	BUY	374	423
Power Grid Corporation of India	BUY	296	324
Tata Power Company	Hold	398	359

Tarapur Atomic Power Station – Plant Visit

Quick Pointers

- Nuclear power contributes to ~2% of India's power capacity as on YTD FY26. The government has set an ambitious target to scale this capacity to 100GW by 2047, taking the share to 5%
- Government estimates that achieving this target will require an investment of approximately INR 19,000 billion by 2047.

We visited Tarapur Atomic Power Station (TAPS) in Palghar district of Maharashtra. Discussions at the plant centered on types of reactor technologies, status of small module reactors (SMRs), and safety measures followed at the site. The Sustainable Harnessing of Advancement of Nuclear Energy for Transforming India (SHANTI) Bill, 2025, is a positive long-term policy signal for India's nuclear value chain (developer, EPC, component manufacturer), as it opens the sector to private participation and caps vendor liability, materially reducing risks.

About TAPS: Located in Tarapur, Maharashtra, TAPS is India's first commercial nuclear power plant, commissioned in 1969 and operated by NPCIL. With a total capacity of ~1,400MW, it comprises 2 older boiling water reactors (BWRs) of US origin and 2 indigenously developed pressurized heavy water reactors (PHWRs). The BWRs rely on imported enriched uranium, while PHWRs use domestic natural uranium.

Nuclear share in power capacity to increase: India has ~8.8GW of installed nuclear power capacity across 7 sites, contributing to ~2% of the country's electricity capacity. The government aims to scale nuclear capacity to 100 GW by 2047 (5% share), requiring ~INR 19,000 billion of investment along with policy reforms and private participation. Spending will be largely driven by Reactor Island (36%) and Turbine Island (25%), together forming ~61% of total costs. Balance of Plant (14%) and EPC (12%) make up about a quarter, while site preparation (8%) and insurance & compliance (5%) are smaller but essential components.

Nuclear sector value chain: India's nuclear value chain spans multiple segments, with power developers like NTPC, Adani, Tata Power, and JSW Energy participating at the ownership level. The equipment and component ecosystem is supported by players such as L&T, BHEL, MTAR, Walchandnagar, and ISGEC (refer exh 9). In EPC and engineering, companies like Power Mech, HCC, and Engineers India play a key role.

SMRs in nascent stage: Under Union Budget 2025–26, India has allocated Rs200bn for the Nuclear Energy Mission. SMRs are envisioned for diverse uses including replacing aging coal plants, supplying industrial captive power, supporting off-grid needs, and enabling hydrogen production. The BSMR program, jointly led by BARC and NPCIL, targets a 60–72 month construction timeline, with initial deployment at existing DAE sites and support from PSUs like BHEL and Engineers India for engineering execution.

About Tarapur Atomic Power Station

- Located at Tarapur, Maharashtra, TAPS is India's first commercial nuclear power plant, commissioned in 1969. Owned and operated by the Nuclear Power Corporation of India Ltd (NPCIL) under the Department of Atomic Energy (DAE).
- TAPS has a total installed capacity of ~1,400MW and consists of 4 units. Units 1 & 2 (2×160MW) are BWRs, while units 3 & 4 (2×540MW) are PHWRs.
- The BWR units are based on early US technology, whereas PHWRs are indigenously developed Indian designs, improving self-reliance. Fuel sourcing differs: BWRs use imported enriched uranium, initially supplied by the US, later sourced from countries like France and Russia after 1974 disruptions.
- While PHWRs operate on domestic natural uranium, supported by India's nuclear fuel cycle, aligned with India's 3-stage nuclear program. Spent fuel is reprocessed within India, supporting long-term **thorium-based ambitions** (strategic angle).
- TAPS uses Arabian Sea water as the primary cooling source (once-through cooling system). Dedicated intake/outfall channels prevent thermal recirculation and improve efficiency.
- TAPS is one of India's oldest nuclear plants and serves as a key site for testing and deploying newer small reactor technologies (SMRs/BSMRs).

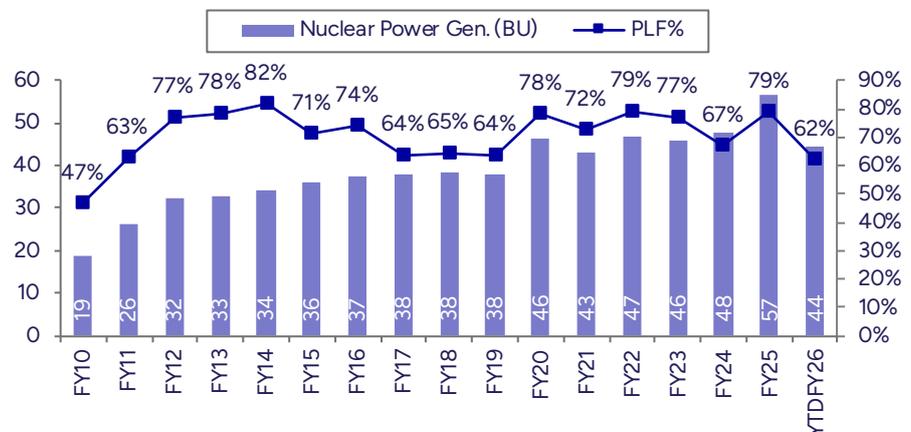
Safety Measures

- Epidemiological surveys for health assessment of employees working in close proximity to radiation and their families at each of the operating nuclear power plants in India are carried out by local medical colleges in association with the Tata Memorial Centre, Mumbai, with primary emphasis on incidence of cancer and congenital anomalies. These studies have established that there has not been any rise in cancer morbidity, birth defects, or any other ailments among the employees.
- Studies have indicated that the prevalence of congenital disabilities among children, who have undergone health checkup at Kaiga and Rawatbhata (Rajasthan), is 9.9 and 3.0 per 1,000 live births, respectively. These are substantially lower than the national prevalence of congenital disabilities, which is 30 per 1,000 live births.
- As far as incidence of cancer is concerned, a limited survey conducted recently by an NGO in the villages near Kalpakkam has also indicated that the cancer prevalence in these villages is comparable to that observed in other parts of the country.

Nuclear Power in India

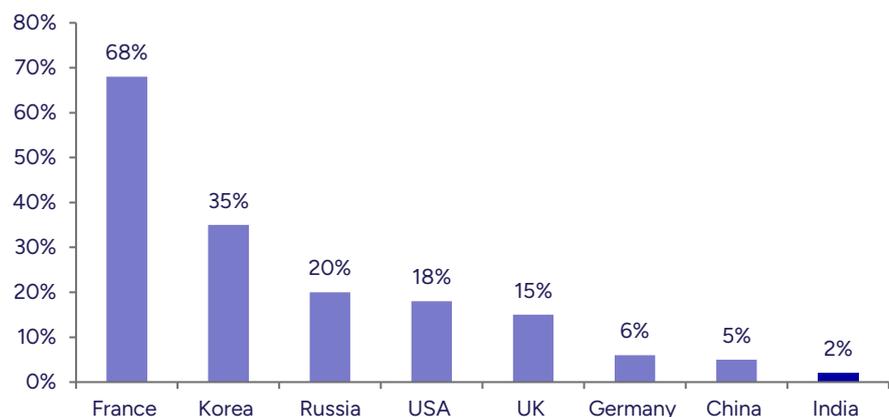
- India has ~8.8GW of installed nuclear power capacity across 7 sites, contributing to ~2% of the country's electricity generation.
- The government has set an ambitious target to scale this capacity to 100GW by 2047, making nuclear a key component of India's clean energy transition and energy security strategy. The roadmap emphasizes deployment of indigenous PHWRs, large PWRs/VVERs, and advanced technologies such as FBRs and SMRs. Achieving this target is expected to require ~INR19,000bn of investment, alongside policy reforms to enable private participation and strengthen the nuclear supply chain.
- 8 nuclear reactors are under construction with a total capacity of about 6,600MW. Projects include Kudankulam units 3–4, Rajasthan RAPP-8, Gorakhpur units 1–2, and the prototype FBR at Kalpakkam.
- India's nuclear generation has remained largely stable in the 3.5–5.0BU monthly range, with periodic fluctuations driven by maintenance outages and refueling cycles. PLF has broadly remained in the 65–85% range, indicating consistently high utilization and strong baseload reliability.

Exhibit 1: Nuclear plant utilization: YTD FY26 PLF at 62%



Source: CEA, PL

Exhibit 2: Electricity contribution by nuclear power: Country wise



Source: PL

Operational Nuclear Plants in India

India has 7 operational power plant sites, most of them with indigenously designed PHWRs, along with a few BWRs (Tarapur) and VVER-PWRs (Kudankulam). Operational plants are in Maharashtra, Rajasthan, Tamil Nadu, Karnataka, Gujarat and Uttar Pradesh, providing reliable baseload power with low carbon emissions.

Exhibit 3: Operational nuclear plants

Project	Unit	Capacity (MW)	Commissioned date	Technology used	EPC	Reactor supplier	Project cost (INR bn)	Cost (INR mn/MW)	Fuel
Tarapur, Maharashtra	1-2	320	Oct-69	BWR	Bechtel	GE, USA	1	2.8	Imported
	3-4	1080	Sep-2005 – Aug-2006	PHWR	Gammon India, L&T, BHEL	NPCIL	57	52.4	Domestic
Rawatbhata, Rajasthan	1-2	300	Dec-1973 – Apr-1981	PHWR	HCC	AECL, Canada	2	5.8	Imported
	3-4	440	Jun-2000 – Dec-2000	PHWR	HCC, L&T	NPCIL	25	57.1	Imported
	5-6	440	Feb-2010 – Mar-2010	PHWR	HCC, L&T	NPCIL	24	53.7	Imported
	7	700	Mar-20	PHWR	L&T, BHEL	NPCIL	60	85	Domestic
Kalpakkam, Tamil Nadu	1-2	440	Jan-1984 – Mar-1986	PHWR	L&T, BHEL	NPCIL	2	5.6	Domestic
Narora, Uttar Pradesh	1-2	440	Jan-1991 – Jul-1992	PHWR	HCC, L&T	NPCIL	7	16.4	Domestic
Kakrapar, Gujarat	1-2	440	May-1993 – Sep-1995	PHWR	HCC, L&T	NPCIL	14	31	Imported
	3	700	Jun-23	PHWR	L&T, BHEL	NPCIL	114	163	Domestic
	4	700	Feb-24	PHWR	L&T, BHEL	NPCIL	114	163	Domestic
Kaiga, Karnataka	1-2	440	Mar-2000 – Nov-2000	PHWR	L&T, BHEL	NPCIL	29	65.8	Domestic
	3-4	440	May-2007 – Jan-2011	PHWR	L&T, BHEL	NPCIL	29	65.4	Domestic
Kudankulam, Tamil Nadu	1	1000	Dec-14	PWR (VVER)	HCC, L&T	Rosatom, Russia	86	86.4	Imported
	2	1000	Aug-16	PWR (VVER)	HCC, L&T	Rosatom, Russia	90	90	Imported
Total		8880							

Source: CEA, PL

Underconstruction Nuclear Plants in India

- As on date, 8 reactors are under construction in India, with total capacity of 6.6GW. Major sites include Rawatbhata, Kudankulam, Gorakhpur and Kalpakkam. Technologies used include PHWR (indigenous), VVER-PWR (Russian), and FBRs.
- Additionally, 7,000MW of nuclear capacity is under various stages of planning and approval.

Exhibit 4: Underconstruction nuclear plants

Project	Unit	Capacity (MW)	Expected date of commissioning	Technology used	EPC	Reactor supplier	Project cost (INR bn)	Project cost (INR mn/MW)
Rawatbhata, Rajasthan (RAPP-8)	8	700	Mar-26	PHWR	L&T, BHEL, HCC	NPCIL	60	86
Kudankulam, TN (KKNPP-3 & 4)	3 & 4	2,000	Mar-26 & Nov-26	PWR (VVER)	HCC, L&T	Rosatom, Russia	390	195
Kudankulam, TN (KKNPP-5 & 6)	5 & 6	2,000	Jun-29 & Mar-30	PWR (VVER)	HCC, L&T	Rosatom, Russia	390	195
Gorakhpur, Haryana (GHAVP-1 & 2)	1 & 2	1,400	Mar-31 & Mar-32	PHWR	L&T, BHEL	NPCIL	200	143
Kalpakkam, TN (PFBR)	1	500	Dec-26	FBR	L&T, BHEL, WIL	BHAVINI	57	114
Total		6600						

Source: CEA, PL

Exhibit 5: Planned nuclear power plants

Project	Location	Units	Capacity (MW)	Technology	Status	Reactor
Kaiga 5 & 6	Karnataka	2	1400	PHWR	Pre-project	NPCIL
Gorakhpur 3 & 4	Haryana	2	1400	PHWR	Pre-project	NPCIL
Chutka 1 & 2	Madhya Pradesh	2	1400	PHWR	Pre-project	NPCIL
Mahi Banswara 1 & 2	Rajasthan	2	1400	PHWR	Pre-project	NPCIL
Mahi Banswara 3 & 4	Rajasthan	2	1400	PHWR	Pre-project	NPCIL

Source: CEA, PL

NPCIL Power Cost vs NTPC

- While nuclear power tariffs (INR6–6.6/unit) appear higher than coal and renewables, this is largely due to high capital costs and delays in projects such as Kudankulam, which increased interest during construction. Importantly, nuclear power has very low fuel costs (Rs0.8-1/unit) and provides stable baseload supply, making it competitive on a lifecycle basis.

Exhibit 6: Avg tariff & fuel cost comparison – NPCIL and NTPC

	FY22	FY 23	FY24	FY25
NPCIL (INR/unit)				
- Avg tariff	3.4	3.5	3.8	3.9
- Fuel cost	0.8	0.9	1.0	1.1
NTPC (INR/unit)				
- Avg tariff	3.6	4.0	4.3	4.6
- Fuel cost	2.0	2.4	2.6	3.1

Source: Company, PL

Roadmap: 100GW by 2047

- India plans to increase nuclear capacity from ~8.8GW currently to 100GW by 2047, implying more than 10x expansion over the next 2 decades. This requires an average capacity addition of ~4GW per year, positioning nuclear as a key pillar of India's clean energy transition.
- The roadmap prioritizes indigenous 700MW PHWRs as the mainstay for near-term additions, alongside deployment of large PWRs/VVERs, FBRs and SMRs to diversify technology and scale capacity.
- To accelerate nuclear expansion, the government plans reforms to the Atomic Energy Act, 1962, and Civil Liability for Nuclear Damage Act, 2010, supported by the proposed SHANTI Bill, to enable private sector participation (up to 49% equity), clarify supplier liability and attract global technology providers. These changes are expected to unlock private capital, strengthen the nuclear supply chain and accelerate project execution required for the 100GW roadmap.
- Achieving the 100GW target is expected to require INR19,000bn of investment, creating significant opportunities across the nuclear value chain, including EPC contractors, heavy engineering companies, component manufacturers, fuel cycle services and plant O&M providers.

Exhibit 7: Installed capacity build up (GW)

Year	Coal (incl. lignite)	Gas	Nuclear	Large hydro	PV	Wind	Other RE	Total	BESS	PSP
FY27E	237	20	10	48	176	63	17	571	6	5
FY32E	291	20	16	61	356	113	20	877	37	44
FY36E	315	20	22	78	509	155	22	1121	80	94
FY47E	258	10	100	99	1187	435	NA	2089	NA	NA

Source: CEA, PL

Exhibit 8: Installed capacity composition

Year	Coal (incl. lignite)	Gas	Nuclear	Large hydro	PV	Wind	Other RE	Total
FY27E	42%	4%	1.8%	8%	31%	11%	3%	100%
FY32E	33%	2%	1.8%	7%	41%	13%	2%	100%
FY36E	28%	2%	2.0%	7%	45%	14%	2%	100%
FY47E	12%	1%	4.7%	5%	57%	20%	NA	100%

Source: CEA, PL

Exhibit 9: Capex break up of Rs 19trn for 100GW nuclear power capacity

Component	% Share	Rs lakh crore	Beneficiaries
Reactor Island	36%	6.8	L&T, BHEL, Walchandnagar , KSB , ISGEC
- Reactor Vessel	10%	2.0	
- Steam Generator	7%	1.4	
- Containmnet Building	5%	1.0	
- Safety Systems	4%	0.8	
- Coolant Pumps	4%	0.7	
- Control Systems	3%	0.5	
- Others	2%	0.4	
Turbine Island	25%	4.8	BHEL, L&T , Thermax
- Turbines	10%	1.9	
- Condensers & Feedwater	7%	1.4	
- Cooling Systems	7%	1.4	VA Tech Wabag
Balance of Plant	14%	2.7	Siemens, ABB, BHEL, L&T, Thermax
- Electrical Systems	4%	0.8	
- Auxillary Systems	4%	0.7	
- Waste Management	3%	0.5	
- Others	4%	0.7	
EPC	12%	2.3	L&T, HCC, EIL, Powermech
- Procurement & Logistics	5%	0.9	
- Constuction Labour	4%	0.8	
- Design and management	3%	0.6	
Site Preparation	8%	1.5	L&T, HCC, EIL, Powermech
- Land	2%	0.5	
- Transportation	2%	0.4	
- Utilities	2%	0.3	
- Others	2%	0.4	
Insurance & Compliance	5%	1.0	
- Compliance & Licensing	2%	0.4	
- Insurance	2%	0.4	
- Ragulator & Others	1%	0.3	
Total	100%	19.1	

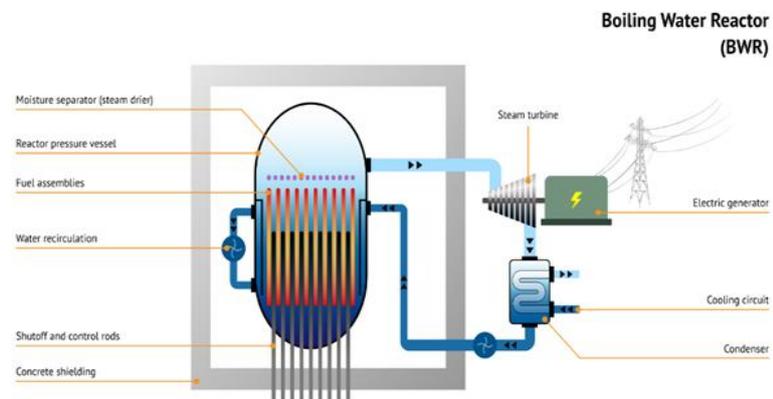
Source: CEA

Types of technologies/ reactors

Light water reactors

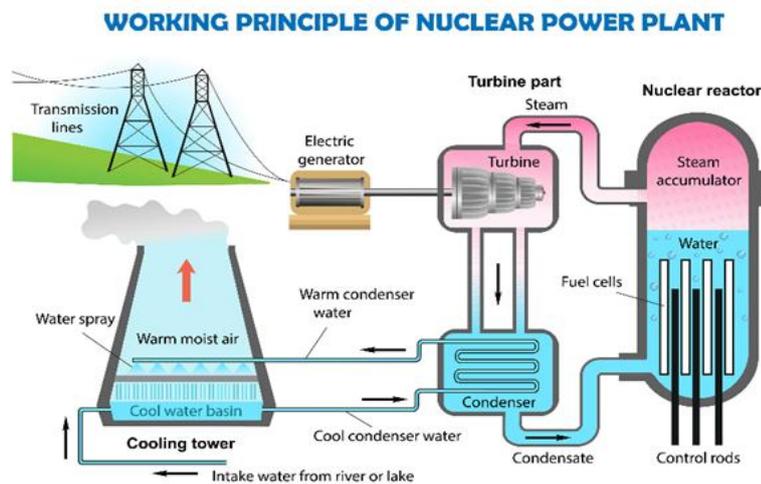
- Light water reactors (LWRs) use ordinary water (H₂O) as both coolant and moderator and enriched uranium fuel. They are of 2 main types—BWRs and PWRs—which differ primarily in how steam is generated and transferred to the turbine. LWRs are the most widely used nuclear reactor technology globally due to their proven design and operational reliability.
- In BWRs, ordinary water acts as both coolant and moderator and is directly boiled inside the reactor core. The generated steam is fed directly to the turbine to produce electricity, making it a single-loop system. BWRs are relatively simple in design, but involve radioactive steam passing through the turbine system.
- In PWRs, ordinary water acts as both coolant and moderator but is kept under high pressure to prevent boiling. Heat from the reactor is transferred to a secondary loop via a steam generator, where steam is produced to drive the turbine. This 2-loop system enhances safety, as the steam reaching the turbine is non-radioactive.

Exhibit 10: BWR process



Source: PL

Exhibit 11: PWR process

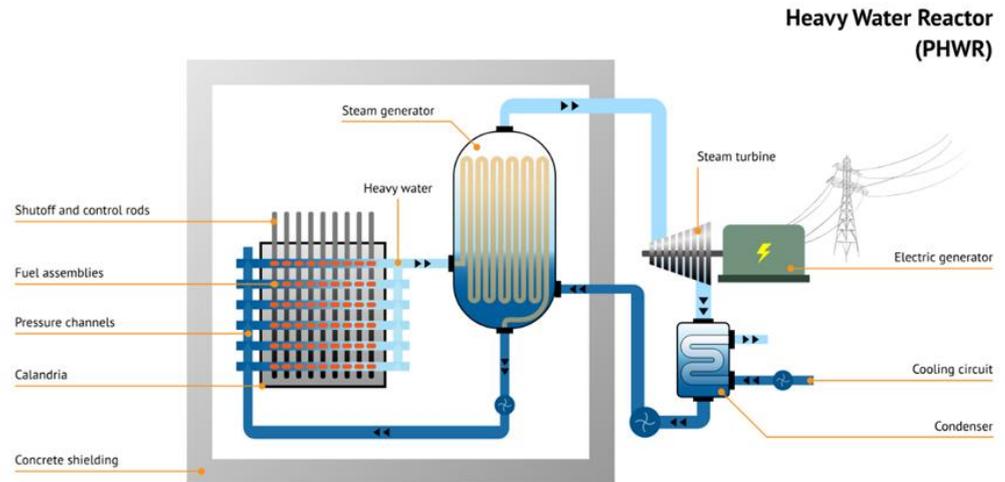


Source: PL

Heavy water reactors

- PHWRs, also known as heavy water reactors, use heavy water (D₂O) as both coolant and moderator and typically operate on natural uranium fuel. Unlike LWRs, they do not require enriched uranium, making them well-suited to India's resource profile.
- India has 18–19 operational PHWRs, forming most of its nuclear fleet. In addition, 8 PHWR units are under construction (mainly 700MW fleet-mode reactors like Kakrapar, Rajasthan, Gorakhpur). The government has also approved ~10 more PHWRs (700MW each) in pre-project stage, indicating strong pipeline visibility.

Exhibit 12: PHWR process



Source: PL

Exhibit 13: Difference between LWR (BWR and PWR), PHWR and FBR

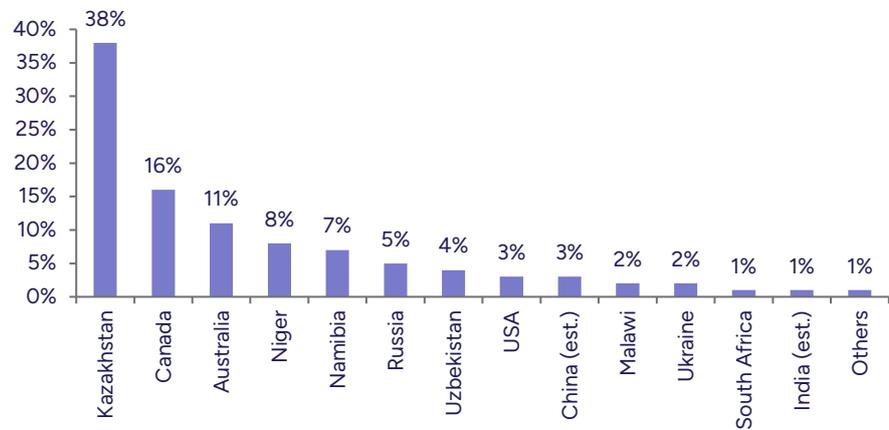
Parameter	BWR	PWR	PHWR	FBR
Working principle	Water boils inside reactor; steam directly drives turbine	Water kept under high pressure; steam generated in secondary loop	Uses heavy water as moderator & coolant; natural uranium fuel	Uses fast neutrons; breeds more fuel than it consumes
Fuel type	Enriched uranium	Enriched uranium	Natural uranium (no enrichment needed)	Plutonium + Uranium (mixed oxide fuel)
Moderator	Light water	Light water	Heavy water	No moderator (fast reactor)
Efficiency	Moderate	High (better control & safety)	Moderate	Very high (fuel utilization efficiency)
Fuel efficiency	Low to moderate	Moderate	Better (due to heavy water use)	Very high (can generate more fuel)
Capital cost	Lower (simpler design)	Higher (complex design)	Moderate	Very high (complex technology)
Safety	Slightly lower (radioactive steam loop)	High (separate loops improve safety)	High (low pressure operation)	Complex safety (high temp, fast neutrons)
Usage in India	Limited (Tarapur reactors)	Used in Kudankulam (Russian reactors)	Dominant technology in India	Under development (Kalpakkam PFBR)

Source: PL

Nuclear Fuel: Import + Domestic Sourcing

- Domestic fuel availability:** Domestic uranium production meets only 25–30% of total requirement, due to limited high-grade reserves and low ore quality. Current production stands 150-200t annually, supporting a limited portion of PWR-based capacity. Domestic reserves, i.e., ~76,000t, are insufficient for long-term expansion, making India structurally import-dependent.
- Imported fuel supply:** India imports 70% of its uranium requirement, with annual consumption at 1,800–2,000t. Major supplier countries are Kazakhstan (35-40%), Canada (30-35%), with a small share coming from countries like Namibia, Australia, Uzbekistan and Russia.
- Demand outlook:** India’s uranium demand is expected to increase significantly in line with nuclear capacity expansion, rising from 1,800–2,000t/year currently to over 5,000t/year by 2047. Growth will be driven by the target of 100GW nuclear capacity, implying multi-fold fuel requirements. Given limited domestic production, incremental demand will be largely met through imports, increasing reliance on long-term international supply agreements.

Exhibit 14: Uranium production: Kazakhstan mines account for 38% of global production



Source: CEA, PL

SHANTI Bill for Decarbonisation

- The SHANTI Bill, 2025, proposes amendments to (1) the Atomic Energy Act, 1962, enabling private sector participation in nuclear power, and (2) the Civil Liability for Nuclear Damage Act, 2010, capping liability exposure for equipment vendors. These changes are aimed at reducing entry barriers and reviving investments in the nuclear value chain.
- Currently, private players are restricted to EPC execution and component manufacturing, while ownership, fuel sourcing, fuel exploration, and plant operations remain with DAE/ NPCIL. The SHANTI Bill allows up to 49% equity participation by private players and limited participation across select nuclear activities. Importantly, rationalization of vendor liability is a key trigger that could unlock a fresh nuclear capex cycle.
- Strategically, the SHANTI Bill aligns with India's long-term decarbonization and energy security goals, signalling a gradual shift away from coal. However, near-term economics remain unfavourable: nuclear power tariffs (e.g., NTPC's 2.8GW Mahi Banswara at ~INR6/kWh + fuel) are significantly higher than coal-based power (~INR4/kWh + fuel in recent Adani Power bids) and BESS-linked tenders (PGCIL bids at ~INR3/kWh + power to charge battery). Hence, nuclear power is unlikely to displace coal or BESS on tariff competitiveness and remains a strategic baseload option, rather than a near-term economic alternative.

SMRs: Still at a nascent stage

- Under the Nuclear Energy Mission announced in Union Budget 2025–26, a total budgetary provision of Rs200bn has been made for the research, design, development and deployment of SMRs.

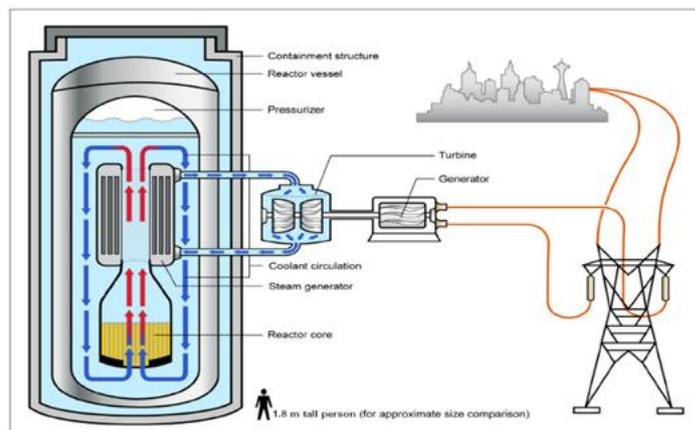
Exhibit 15: Cost outlay for SMR projects

Reactor	Cost outlay (INR bn)
Development and construction of BSMR 200MW	60
Development and construction of SMR 55MW	70
Design and construction of HTGCR	3
Design, engineering & development works for new reactors	8
Civil and general infrastructure development for reactor complex	5
Others	55
Total	200

Source: Ministry of Power, PL

- The proposal for administrative and financial approval of BSMR-200 has been cleared by AEC and is now being forwarded to the Cabinet Committee for consideration.
- The designs are based on established PWR technology, which minimizes technological risks and supports faster commercialization following successful demonstration. TAPS in Maharashtra has been identified for the lead units of BSMR-200 and SMR-55, while BARC’s Vizag facility in Andhra Pradesh has been earmarked for the HTGCR.
- SMRs are being positioned for multiple applications, including repurposing aging coal plants, providing captive power for industries such as steel and cement, and supporting off-grid requirements. High-temperature SMRs are also being explored for hydrogen production, extending nuclear energy’s role beyond electricity to clean industrial applications.
- BSMR is being jointly developed by BARC and NPCIL, with an estimated construction timeline of 60–72 months from the receipt of administrative and financial approvals.
- The initial SMR units will be developed by DAE at its existing sites. Public sector companies such as Engineers India and BHEL have already been engaged for detailed engineering work.

Exhibit 16: SMR (Small Module Reactor)



Source: PL

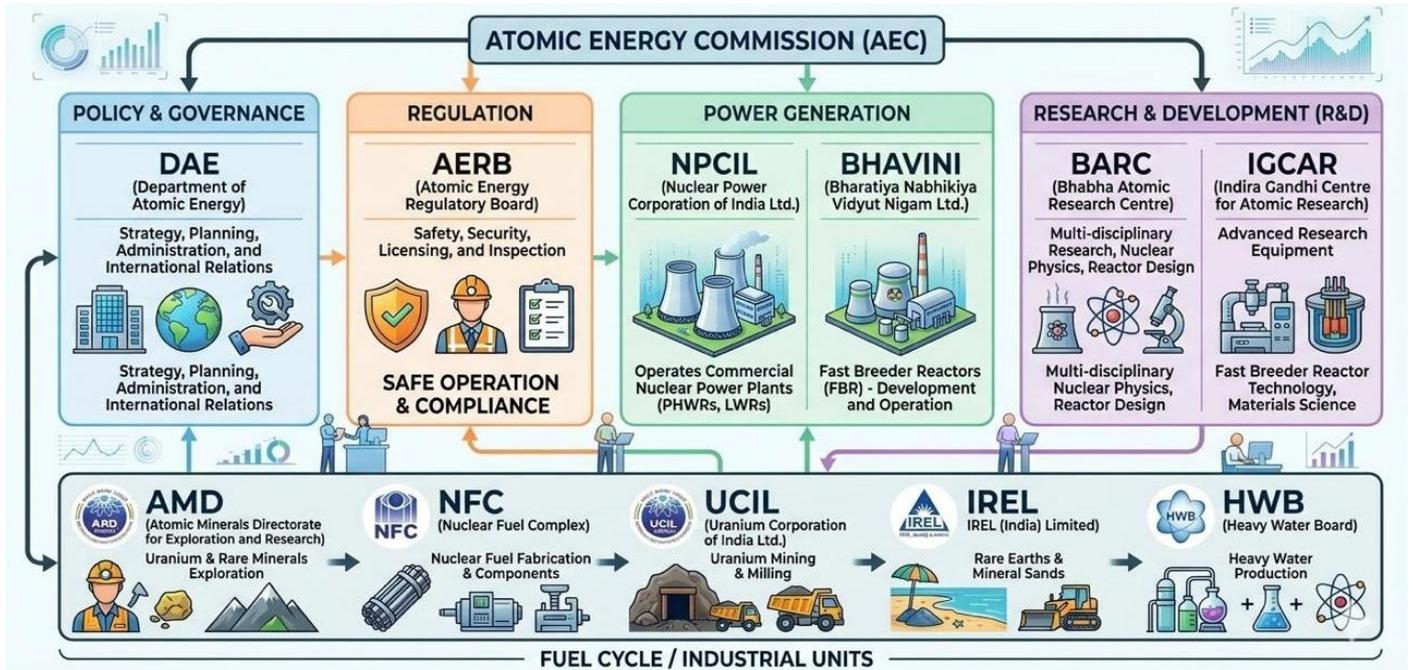
NTPC's Role in Nuclear Power

- NTPC has forayed into the nuclear power segment through joint ventures with NPCIL, with key involvement in the Mahi Banswara Atomic Power Project (2,800MW). Capital cost for nuclear PWR/PHWR plants typically ranges from INR180–220mn/MW, implying a total project cost of INR500–620bn for this capacity. With NPCIL:NTPC ratio at 51:49 in the JV, NTPC's equity exposure is expected to be in the range of INR75–91bn. The project received siting consent in May'25, with the foundation stone laid in Sep'25. The first unit is expected to be commissioned by FY33, while the remaining units are likely to be operationalized between FY35 and FY37.
- NTPC also incorporated a wholly owned subsidiary NTPC Parmanu Urja Nigam Ltd (NPUNL) in FY25. This entity will act as the vehicle for nuclear expansion, focusing on advanced nuclear technologies and project execution. NTPC has applied for approval to build, own and operate nuclear power plants via NPUNL; this will shift dependency from JV to an independent nuclear developer/operator over time.
- NTPC has identified multiple potential sites and signed MoUs with Madhya Pradesh and Chhattisgarh governments. One of the sites in Andhra Pradesh is in advanced stage of acquisition. Once the site is finalized, tendering for the PWR technology will be started.
- The company is actively working on tie-ups with global nuclear technology providers like EDF (France) and Rosatom (Russia). The focus is on using the PWR technology, which has large scale proven reactor designs.
- NTPC is also looking at advanced nuclear technologies (including SMRs) through NPUNL. SMRs are in the pilot stage. No final investment decision has been made so far.
- NTPC has set up a nuclear training center in Noida to build internal capabilities and technical expertise. This indicates preparation for large-scale execution and long-term presence in nuclear energy.

Initiatives by private players post SHANTI Bill

- **Adani Group:** Following the enactment of the SHANTI Bill, which opened India's nuclear sector to private participation, the Adani Group has entered the space through the incorporation of Adani Atomic Energy Ltd. The move aligns with its strategy to build a diversified portfolio combining renewable and baseload clean energy. The regulatory shift enables private players to participate in nuclear projects through partnerships, supply chains, and potential ownership structures. However, execution remains subject to regulatory approvals, technology tie-ups, and long gestation periods, implying limited near-term earnings impact. Adani's entry also signals increasing private sector interest, which could enhance competition in upcoming nuclear projects.
- **Tata Power:** The company has initiated steps to enter the civil nuclear energy segment, with a strategic focus on SMRs in the 20–50MW range. The company has begun site identification and formed a dedicated internal team to track regulatory developments and evaluate project opportunities. The management has indicated preference for SMRs over large reactors, given their scalability and lower capital intensity. Tata Power is also actively participating in policy consultations, positioning itself to capitalize on private sector opportunities in India's targeted 100GW nuclear capacity by 2047.
- **Reliance Industries:** The company has expressed its intent to enter the nuclear power segment, with a focus on deploying SMRs for captive industrial consumption. The company aims to integrate nuclear energy with its existing renewable and green hydrogen initiatives to ensure reliable 24/7 clean power supply. The management has also outlined plans to explore regional opportunities, including positioning Assam as a clean energy hub. Reliance is evaluating multiple project sites in collaboration with other private players, signalling a broader push to participate in India's expanding nuclear ecosystem.
- **JSW Group:** JSW Energy has entered the nuclear energy space alongside other private sector players, evaluating opportunities in India's expanding nuclear program. The company is assessing participation across 16 identified project sites, aimed at supporting the country's 100GW nuclear capacity target by 2047. JSW is particularly focused on SMRs and advanced reactor technologies under the proposed Nuclear Energy Mission. This move aligns with its broader strategy to diversify into firm, low-carbon power sources and complement its renewable energy portfolio.

Exhibit 17: Structure of Atomic Energy Commission of India



Source: AEC, PL

Analyst Coverage Universe

Sr. No.	Company Name	Rating	TP (INR)	Share Price (INR)
1	Adani Energy Solutions	Accumulate	1090	961
2	Ashoka Buildcon	BUY	183	153
3	CESC	BUY	204	154
4	Coal India	Hold	436	419
5	Dilip Buildcon	Accumulate	514	454
6	H.G. Infra Engineering	Accumulate	724	666
7	Indian Energy Exchange	Hold	135	127
8	IRCON International	Hold	153	153
9	KNR Constructions	Hold	148	152
10	NCC	BUY	200	156
11	NTPC	BUY	423	356
12	PNC Infratech	BUY	291	232
13	Power Grid Corporation of India	BUY	324	270
14	PSP Projects	BUY	1028	750
15	Rail Vikas Nigam	Sell	183	314
16	RITES	BUY	276	223
17	Tata Power Company	Hold	359	366

PL's Recommendation Nomenclature (Absolute Performance)

BUY	: > 15%
Accumulate	: 5% to 15%
Hold	: +5% to -5%
Reduce	: -5% to -15%
Sell	: < -15%
Not Rated (NR)	: No specific call on the stock
Under Review (UR)	: Rating likely to change shortly

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