

MP-IDSA *Commentary*

Mapping Australia in India's Broader Uranium Strategy

Niranjan Chandrashekhar Oak

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S*ummary*

The India–Australia uranium supply agreement helps India diversify its uranium import sources and meet its target of achieving 100 GW of nuclear energy capacity by 2047.

During Prime Minister Narendra Modi's visit to Australia between 8 and 10 July 2026, India and Australia finalised the Administrative Arrangements (AA) to enable the export of Australian uranium to India, thereby operationalising the India–Australia Nuclear Cooperation Agreement (IANCA) of 2015. The Third India–Australia Joint Summit Communiqué specifically mentions the conclusion of the administrative arrangements for uranium trade “for exclusively peaceful purposes and under IAEA safeguards”.¹ This development follows a long-term, multi-billion-dollar uranium supply agreement established with Kazakhstan in February 2026 and with Canada in March 2026.²

India is concluding these uranium supply agreements with multiple countries for two reasons—to diversify uranium import sources and to meet its target of achieving 100 GW of nuclear energy by 2047. India is currently in good standing in securing uranium from multiple sources, which was not the case a few years ago. Against this backdrop, the brief assesses India's current uranium stocks and future requirements. It situates the India–Australia uranium supply arrangement within broader trends in India's uranium imports over recent years.

India–Australia Uranium Deal

The IANCA, signed in September 2014 and operationalised in 2015, defines the scope of bilateral nuclear cooperation, going beyond the uranium trade to include the production and application of radioisotopes, the exchange of scientific and technical information, technology transfer, and equipment exchange, among others.³ However, the IANCA was not designed to be a self-executing agreement and would need an administrative arrangement to implement it. Foreign Secretary Vikram Misri noted that the administrative arrangement *vis-à-vis* the uranium trade was concluded but not operationalised due to reporting-related differences between the two countries.⁴

Australia's uranium export policy mandates accounting for amounts of Australian-Obligated Nuclear Material (AONM) as it moves through the nuclear fuel cycle.⁵ When

¹ [“Third India-Australia Annual Summit Joint Statement”](#), Ministry of External Affairs, Government of India, 9 July 2026.

² [“Kazatomprom Intends to Supply Large Batch of Uranium Concentrate to India”](#), Interfax Information Services Group, 20 February 2026; [“India-Canada Joint Leaders' Statement”](#), Ministry of External Affairs, Government of India, 2 March 2026.

³ [“Agreement between the Government of Australia and the Government of India on Cooperation in the Peaceful Uses of Nuclear Energy”](#), Department of Foreign Affairs and Trade, Government of Australia, 5 September 2015.

⁴ [“Transcript of Special Briefing by MEA on the Official Visit of Prime Minister to Australia”](#), Ministry of External Affairs, Government of India, 9 July 2026.

⁵ [“Australia's Uranium Export Policy”](#), Australian Safeguards and Non-proliferation Office (ASNO), Department of Foreign Affairs and Trade, Australian Government.

accounting for the by-products specifically resulting from the AONM, it becomes challenging to identify the source of uranium, as uranium sourced from different countries is utilised as an input in the reactor during a particular nuclear cycle. Thus, with the AA finalisation, reporting procedures and reporting protocols were put in place to satisfy “the expectations of both sides about the supply, the handling, and the accounting and reporting of”⁶ AONM.

The two countries have been closely engaged with each other over the past two years, as a result of which they operationalised administrative arrangements during PM Modi’s visit. However, finalisation of the administrative arrangements is just the first step denoting clearance from both governments. Now, nuclear-related establishments in India will need to enter into agreements with Australian companies engaged in uranium exports.

Article VI of the IANCA talks about the reprocessing and enrichment of nuclear material provided by Australia. It mandates that such reprocessing and enrichment shall be carried out in International Atomic Energy Agency (IAEA)-safeguarded facilities. Moreover, it adds a condition and refers to the modalities described in Article 6 (iii) of the India–US Civil Nuclear Deal,⁷ which gives India an exception to reprocess US-origin nuclear material under specific conditions, such as dedicated reprocessing facilities being placed under IAEA safeguards and a requirement to come up with a subsequent agreement to operationalise Article 6(iii).⁸ Accordingly, India and the US have come up with a separate document titled the ‘Arrangements and Procedures Agreed Between the Government of the United States and the Government of India, Pursuant to Article 6(iii) of Their Agreement for Cooperation Concerning Peaceful Uses of Nuclear Energy’ (Arrangements and Procedures) regarding the implementation of Article 6(iii).⁹

The India–Canada Nuclear Cooperation Agreement of 2010 or the India–Kazakhstan Nuclear Cooperation Agreement of 2011¹⁰ does not incorporate the modalities outlined in the India–US nuclear accord and solely stipulates that the reprocessing

⁶ [“Transcript of Special Briefing by MEA on the Official Visit of Prime Minister to Australia”](#), no. 4.

⁷ [“Agreement between the Government of Australia and the Government of India on Cooperation in the Peaceful Uses of Nuclear Energy”](#), no. 3.

⁸ [“Agreement For Cooperation between the Government of the United States of America and the Government of India Concerning Peaceful Uses of Nuclear Energy”](#), U.S. Department of State, 10 October 2008.

⁹ [“Arrangements and Procedures Agreed Between the Government of the United States and the Government of India, Pursuant to Article 6\(iii\) of Their Agreement for Cooperation Concerning Peaceful Uses of Nuclear Energy”](#), U.S. Department of State, 29 March 2010.

¹⁰ [“Agreement between Kazakhstan and India for Cooperation in the Peaceful Uses of Nuclear Energy”](#), Ministry of External Affairs, Government of India, 15 April 2011.

of nuclear material shall be conducted at facilities safeguarded by the IAEA.¹¹ Thus, the IANCA stands out in that it includes a clause from India's nuclear agreement with a third country, the US, in this case. The reason for this extra caution is Australia's strict uranium export policy,¹² which permits uranium sales only to NPT signatories with IAEA Additional Protocols (AP).

However, the country has made a historic exception for India, which is not a signatory of the NPT but has signed and ratified an AP with the IAEA. This shift opens a vital trade route: Australia holds over a quarter of the world's uranium reserves and ranks as the fourth-largest producer, while India is a massive, highly reliable energy customer. The road to this partnership has been long. From a strict export ban in 2010¹³ to the finalisation of administrative arrangements in July 2026, the relationship has been transformed. This breakthrough is a direct result of India's unblemished non-proliferation record and the rapidly warming strategic ties between the two democracies in the Indo-Pacific in an increasingly unstable global environment.

India's Current Uranium Situation

The Nuclear Power Corporation of India Limited (NPCIL) operates 24 nuclear reactors in India, the majority of which use Pressurised Heavy Water Reactor (PHWR) technology. In contrast, others run on Light Water Reactor (LWR) technology. Both Pressurised Water Reactors (PWR) and the Boiling Water Reactor (BWR) are variants of the LWR. The PHWR reactors use natural uranium, while the LWR reactors run on enriched uranium. The fuel for Units I and II of the Kudankulam nuclear power plant (PWR) in Tamil Nadu and the BWRs at Tarapur, Maharashtra, is imported from Russia.¹⁴ For running LWR reactors of 160 MW and 1000 MW, the annual Low Enriched Uranium (LEU) requirements are 6 tons [85 per cent Capacity Factor (CF)] and 25 tons (90 per cent CF), respectively.¹⁵

¹¹ [“Agreement between the Government of the Republic of India and Government of Canada for Co-operation in Peaceful Uses of Nuclear Energy”](#), Ministry of External Affairs, Government of India, 27 June 2010.

¹² [“Australia's Uranium Export Policy”](#), no. 5.

¹³ [“Australia Rules Out Selling Uranium to India”](#), *The Hindu*, 6 April 2010.

¹⁴ [“20th Report by the Committee on Public Undertakings \(2025-2026\) on Nuclear Power Corporation of India Limited \(NPCIL\) and the Department of Atomic Energy \(DAE\)”](#), Lok Sabha Secretariat, Government of India, 11 December 2025.

¹⁵ [“Uranium as Fuel for Nuclear Reactors”](#), Unstarred Question No. 3206, Rajya Sabha, 31 March 2022.

For the eight PHWR reactors under domestic safeguards,¹⁶ the fuel requirement is met by the Uranium Corporation of India Limited (UCIL), a public sector enterprise under the Department of Atomic Energy (DAE).¹⁷ However, India imports natural uranium for reactors operating under IAEA safeguards in the form of Uranium Ore Concentrate (UOC), Natural Uranium Dioxide (UO₂) pellets, and Enriched UO₂ pellets.¹⁸ For running 220 MW, 540 MW and 700 MW of PHWR at 85 per cent CF, the annual natural uranium (UO₂) requirements are 45, 100 and 125 tons, respectively.¹⁹

Currently, the country imports 800 tons of uranium annually for the PHWR reactors under the IAEA safeguards.²⁰ As nuclear power generation rises from the current 8.7 GW to around 27 GW (when the under-construction and pre-project activity phase reactors go live), India will have to import approximately 5,400 tonnes per annum (TPA).²¹ According to the government estimate, considering the planned expansion of nuclear energy, India needs to import 9000 metric tonnes units (MTU) of natural uranium for the 2025–2033 timeframe.²² The domestic uranium reserves are estimated to last only for 40 years if no new reserves are added.²³

Trends in India's Uranium Imports

Five trends can be discerned from recent uranium deals with Australia, Canada and Kazakhstan. First, it takes a long time to operationalise nuclear material supply deals, and even longer for the supply to begin. The India–Canada Nuclear Agreement was forged in 2010, and the one with Australia in 2014. It took more than a decade to realise the uranium supply from both of these important sources. Second, one lesson from the Covid-19 pandemic was to adopt shorter supply chains, which would be less likely to be disrupted. However, due to limited domestic resources, India has to rely on uranium from other countries. Therefore, India should take into account the possibility of future disruptions to supply chains.

¹⁶ [“Parliament Question: Nuclear Power Generation”](#), Press Information Bureau, Department of Atomic Energy, Government of India, 11 March 2026, p. 19.

¹⁷ [“Uranium as Fuel for Nuclear Reactors”](#), no. 15.

¹⁸ [“Parliament Question: Nuclear Power Generation”](#), no. 16.

¹⁹ [“Uranium as Fuel for Nuclear Reactors”](#), no. 15.

²⁰ [“20th Report by the Committee on Public Undertakings \(2025-2026\) on Nuclear Power Corporation of India Limited \(NPCIL\) and the Department of Atomic Energy \(DAE\)”](#), no. 14, p. 34.

²¹ Ibid., p. 35.

²² Ibid., p. 35.

²³ Ibid., p. 64.

Third, the nuclear trade requires a certain degree of trust between the trading nations. While Australia, Canada and Kazakhstan signed nuclear agreements with India only after the country received the Nuclear Suppliers Group (NSG) waiver in 2008, India's relations with Australia and Canada improved in step with the country's improved ties with the US in the first decade of the 21st century. It is, therefore, important that India–Australia and India–Canada relations stand on their own and are not affected by New Delhi's relationship with a third country. The uranium supply deal is a good starting point for forging a trusted bilateral relationship.

Fourth, with uranium supply deals with Kazakhstan on the one hand and Australia and Canada on the other, India is integrating itself into both Western and non-Western uranium supply chains. In the event of an unforeseen supply disruption from any source, India can be assured of an uninterrupted uranium supply, unless all the uranium-exporting countries decide to form a uranium cartel, as a few tried to do in the 1970s.²⁴

Fifth, the conclusion of the successive uranium deals underscores India's focus on pursuing the goal of 100 GW of nuclear power by 2047. As more countries seek to harness nuclear energy as a clean energy source, demand for uranium is expected to increase in the near future.²⁵ The price of uranium per pound has more than doubled since 2020.²⁶ Therefore, the country should leverage its favourable external relations with uranium-exporting countries to build a uranium buffer, which would help address future contingencies.

Conclusion

India has a significant requirement for uranium to achieve its net-zero carbon emissions target by 2070, and the India–Australia uranium deal fits the bill. India's uranium import agreements in 2026 demonstrate India's focus on nuclear energy. India's integration into the Western and non-Western nuclear supply chains is an emphatic diplomatic success. India should use this opportunity to build uranium buffers, which would help the country in any future contingency, including supply chain disruptions, exponential price rises and uranium cartelisation. However, the latter is very unlikely, though not impossible.

²⁴ [“The Uranium Cartel”](#), *The Washington Post*, 26 June 1977.

²⁵ [“Uranium 2024: Resources, Production and Demand”](#), Nuclear Energy Agency, 31 October 2025.

²⁶ [“Uranium Price”](#), Cameco.

About the Author



Mr. Niranjana Chandrashekhar Oak is Research Analyst at the Manohar Parrikar Institute for Defence Studies and Analyses, New Delhi.

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