

## 2025 Update: Who in ASEAN Is Ready for Nuclear Power?

Electricity demand across ASEAN is projected to triple by 2050, rising from 1,200 TWh in 2022 to 4,300 TWh in 2050. ASEAN includes some of Asia's fastest growing economies, including Cambodia, the Philippines, and Vietnam. Nuclear power, including small modular reactors (SMRs), offer a low-carbon solution to support industrialization and rising living standards. Based on the latest [Global Market for Advanced Nuclear](#) map from the Energy for Growth Hub and Third Way, here's where each ASEAN member stands on nuclear readiness:

### Ready by 2030

#### 1. Vietnam

- Vietnam has made significant progress since our last [ASEAN deep dive](#) in 2023. In November 2024, the Vietnamese National Assembly [approved restarting the Ninh Thuan nuclear power project](#), projecting completion of the 4 GW plant by 2030.
- The country has signed a [nuclear cooperation MoU](#) with Russia's state-owned nuclear agency Rosatom and [resumed working-level talks](#) with South Korea on nuclear cooperation.
- The latest national power development [includes nuclear for the first time](#), stating the first plants will come online between 2030-2035, installed nuclear capacity will increase from 4 GW to 6.5 GW, and another 8 GW will be added by 2050.

### Potentially ready by 2030

#### 2. Indonesia

- In May 2025, Indonesia announced [plans to add 10 GW of nuclear](#) by 2040. Earlier this year, Indonesia had also [shared plans to construct 4.3 GW of nuclear capacity](#), but without specifying a timeline.
- Last year, Indonesia's Energy Council [proposed 29 sites](#) for NPP construction. The country hopes to [kickstart its nuclear journey](#) by constructing a reactor on the island of Borneo by 2030 or 2032.

#### 3. The Philippines

- The Philippines is aiming to gradually phase in nuclear power as part of its energy mix. Starting with a [target of 1,200 megawatts](#) (MW) of capacity in 2032,

that it [plans to meet via SMR technology](#), the country hopes nuclear energy will provide 4,800 MW by 2050.

- The country aims to have its first nuclear power plant operational by 2032. In partnership with South Korea, the Philippines is also exploring the [possible revival of the Bataan project](#), its mothballed PWR reactor from the 80s.
- The Philippines signed a [123 nuclear cooperation agreement](#) with the US last year.

#### 4. Thailand

- Thailand is [actively exploring](#) SMR technology. Earlier this month, [Thailand signed an MoU with Korea](#) on SMR technology transfer, feasibility, and training.
- Thailand also signed a [123 agreement with the US](#) earlier this year.

### Potentially Ready by 2050

#### 5. Cambodia

- Cambodia has [taken preliminary steps](#) that signal interest in developing nuclear power.

#### 6. Malaysia

- Malaysia currently hosts one nuclear research reactor.
- A [recent report](#) indicates that Malaysia is preparing itself for the likely use of nuclear power after 2035. However, there has been no concrete progress.

### Unlikely Ready by 2050

#### 7. Singapore

- Singapore has [signed a 123 agreement](#) with the US.
- The government is [reportedly](#) studying potential deployment of nuclear power in the country. No specific timeline or deals.

#### 8. Laos

- No substantial progress.

### Conflict Zone/Internationally Sanctioned

#### 9. Myanmar

- Rosatom-Myanmar [agreed](#) to build a small-scale nuclear facility. No details announced.