



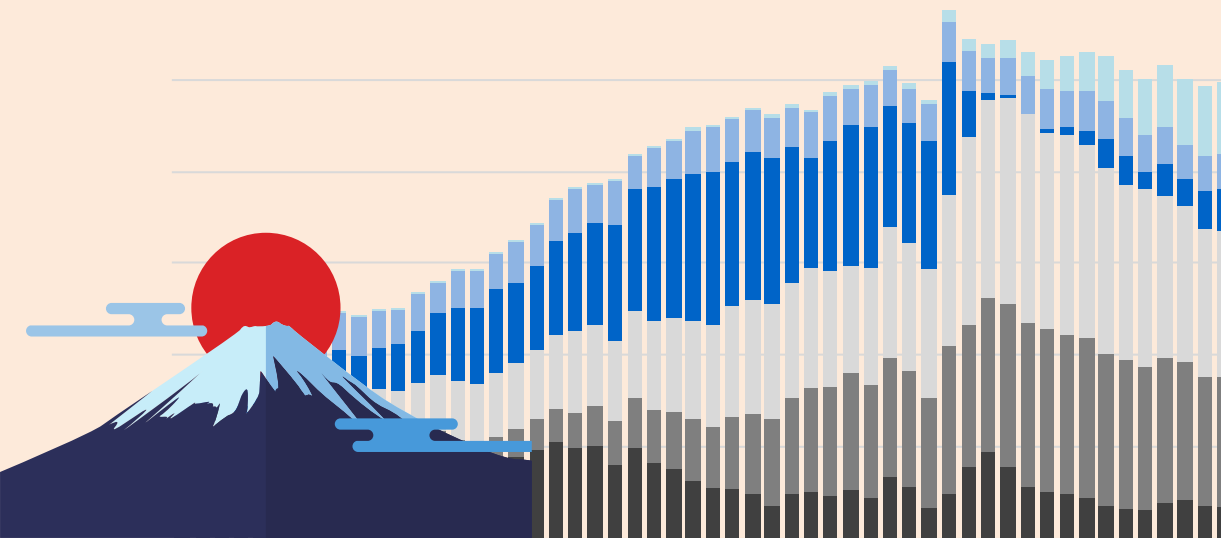
## ASIA CLEAN ENERGY FORUM 2026

Beyond Transition: Building Secure, Resilient, Inclusive, and Intelligent Energy Systems

8-11 June | ADB Headquarters, Metro Manila, Philippines

# Nuclear Energy Policy in Japan

## Walk with Newcomers



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# Triple Breakthrough



**Economic  
Efficiency**

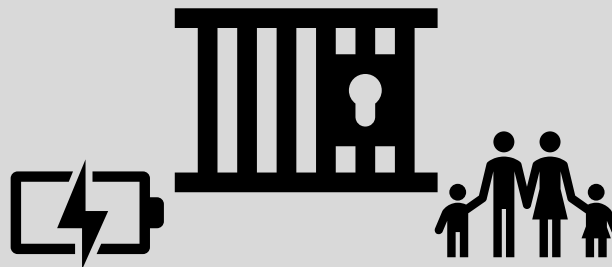


**Energy  
Security**

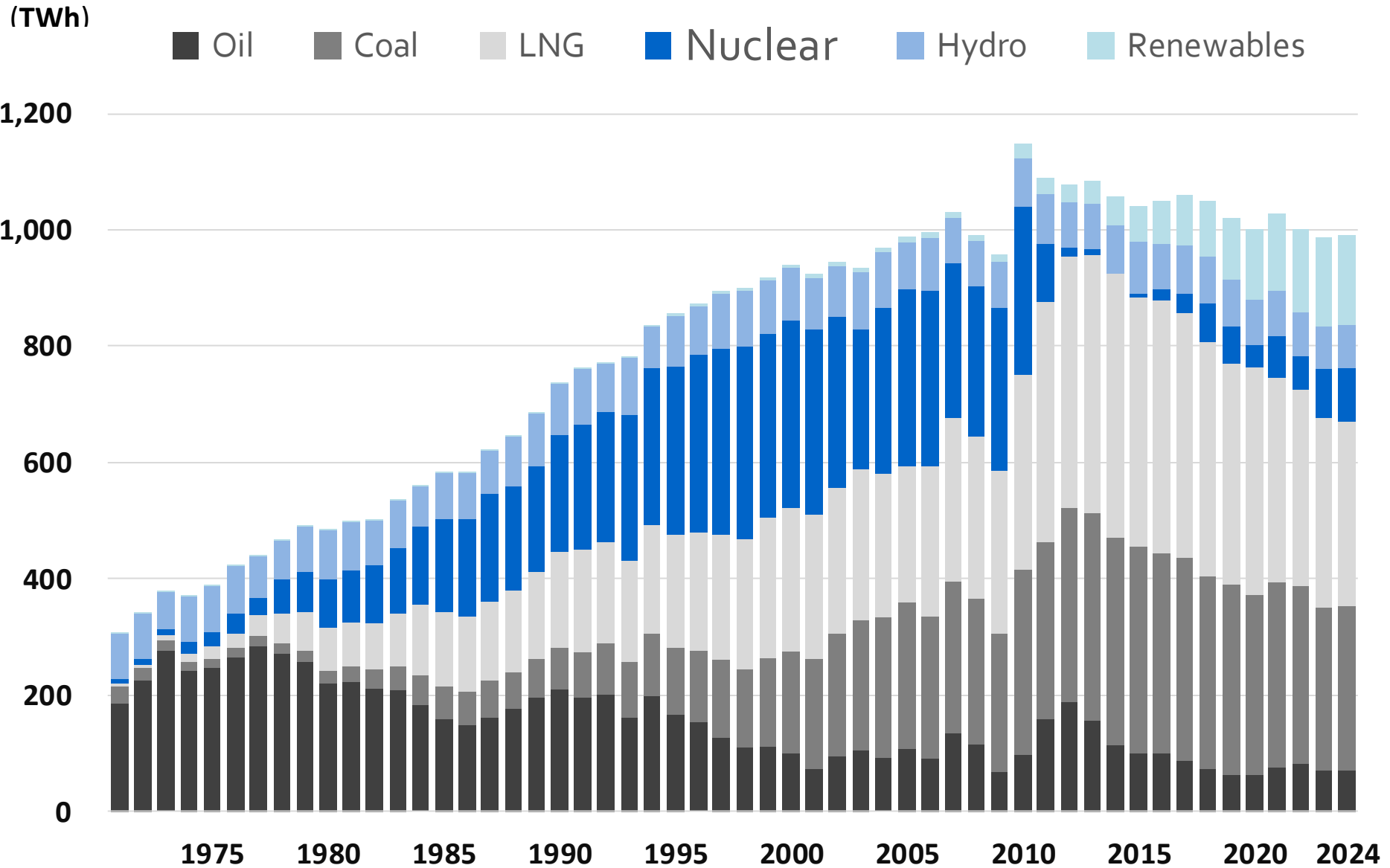


**Environment**

**Safety**



# Japan's **Historical** Power Generation by Source



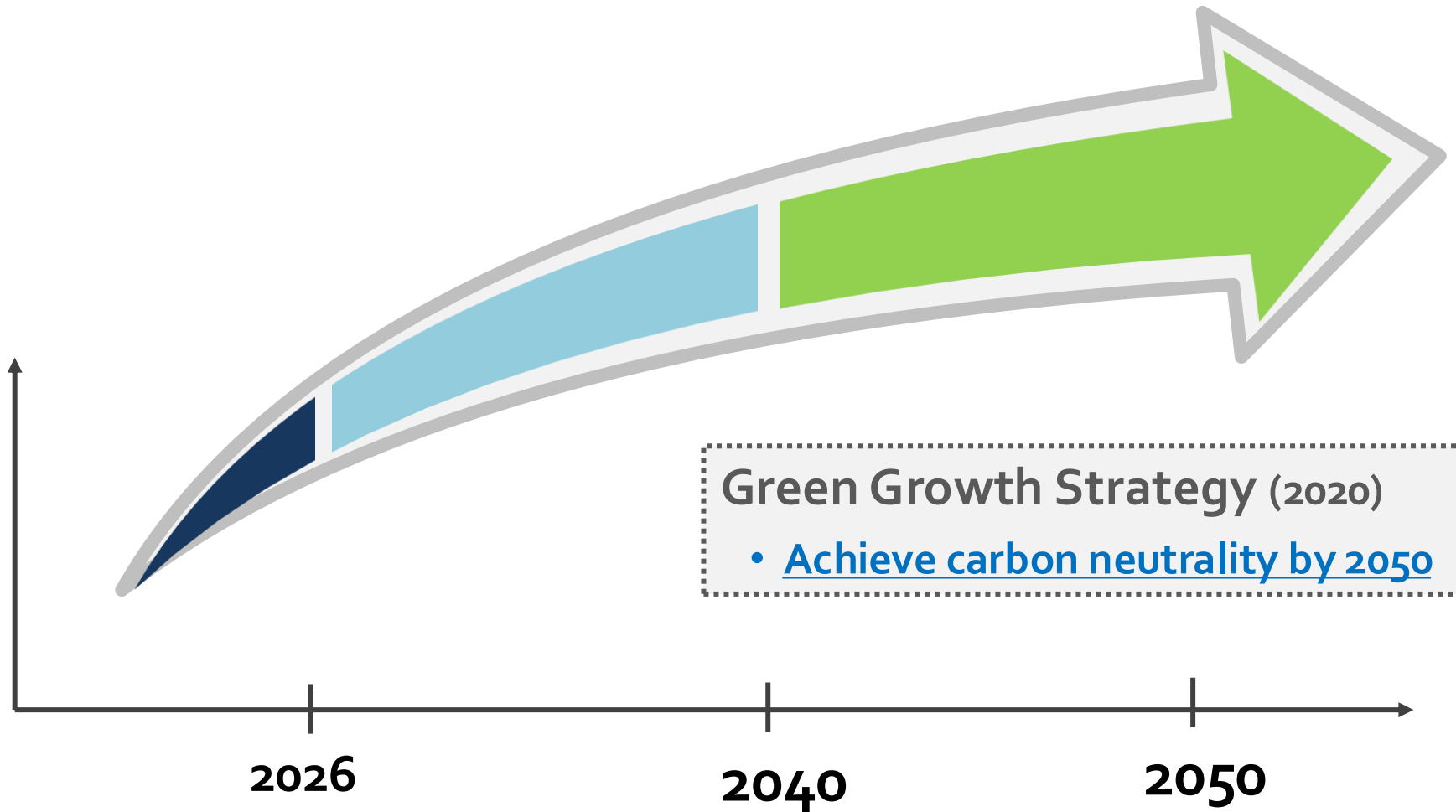
# Nuclear Power as an **Enabler** of GX (Green Transformation)

Basic Policy for GX (2023)

- [Back nuclear with GX Bonds](#)

Strategic Energy Plan (2025)

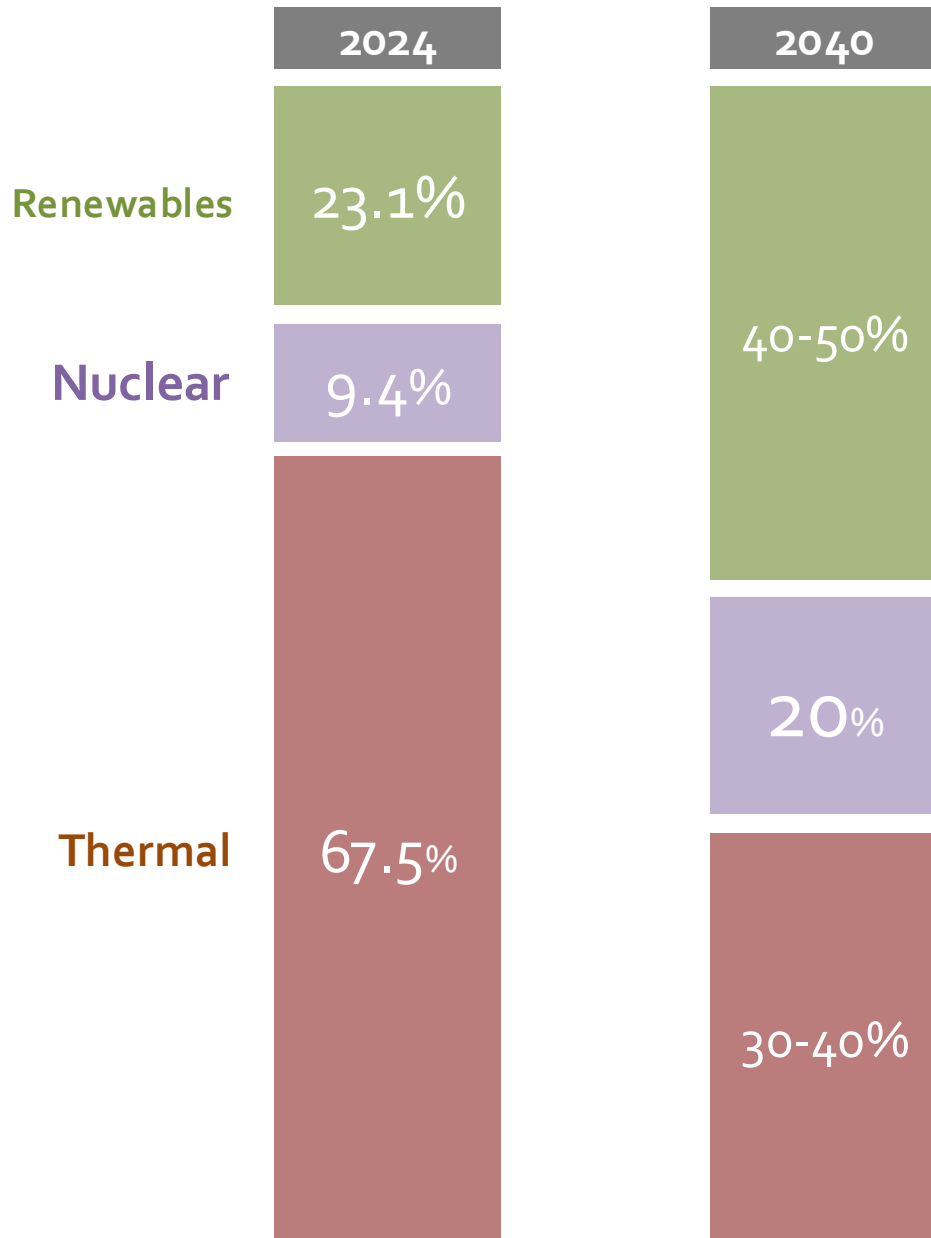
- [Maximize nuclear & renewables](#)



Green Growth Strategy (2020)

- [Achieve carbon neutrality by 2050](#)

# Power Gen. Mix Outlook



Note: 1,100-1,200 TWh total in 2040,  
Power mix is indicative, not a target

# NPPs as of today

**Restarted**  
**15 reactors**

(Date of Restart)

**Passed NRA Review**  
for the Permission for Changes in  
Reactor Installation  
**3 reactors**

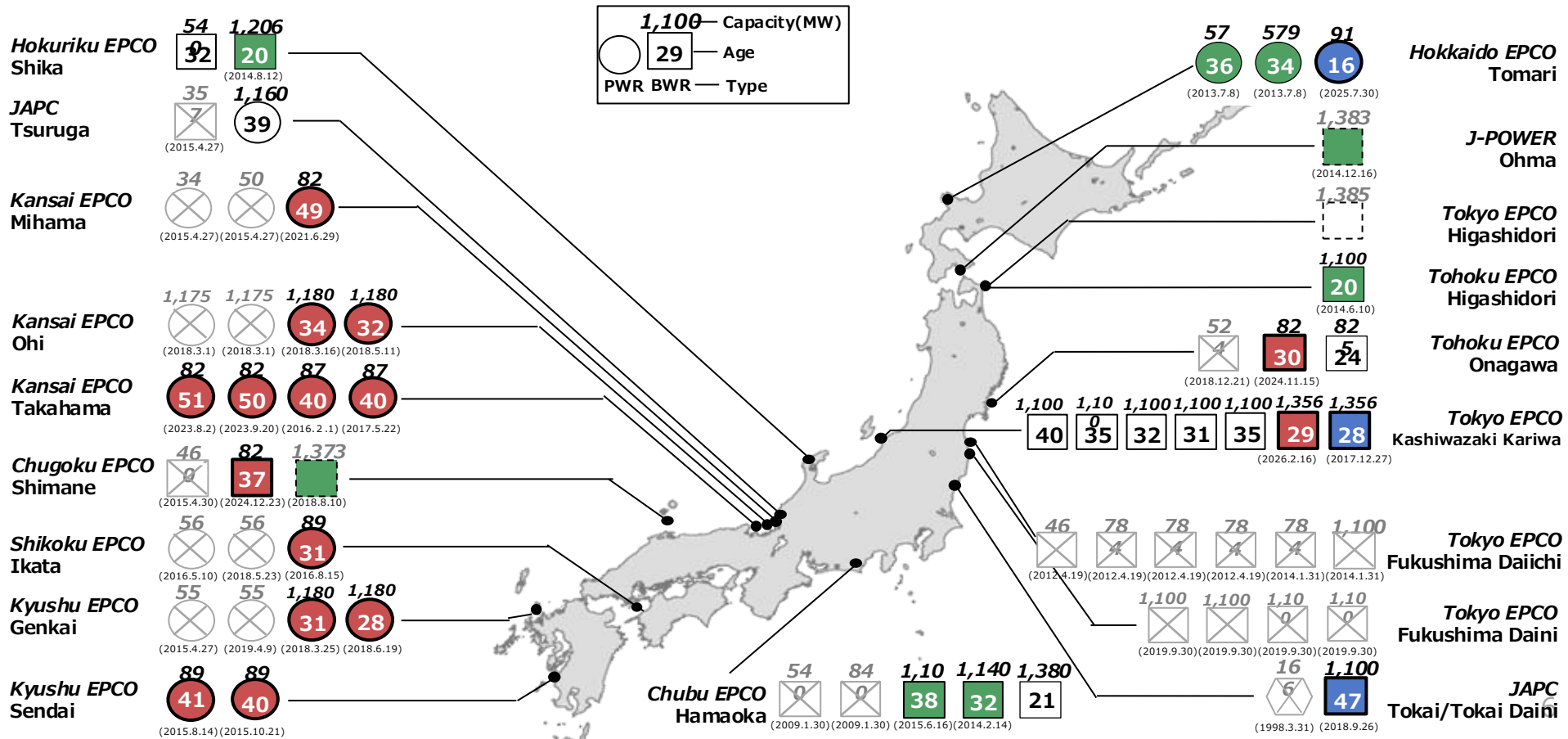
(Date of Approval)

**Under NRA Review**  
**8 reactors**

(Date of Application)

**Not yet Applied**  
**10 reactors**

**Decommission**  
**24 reactors**



# Outlook: Nuclear **Replacement** Needs

2040

20XX

Renewables

40-50%

Nuclear

20%

- ✓ By 2040s: 2.2–5.5 GW ( $\approx$  2-5 large-scale NPPs)
- ✓ By 2050s: 12.7–16.0 GW ( $\approx$  11-14 large-scale NPPs, incl. 2040s)

Thermal

30-40%

Assumptions:

- ✓ 20% nuclear share in 2040s-2050s
- ✓ 1,100–1,200 TWh total generation
- ✓ 70% capacity factor
- ✓ 1 large-scale NPP  $\approx$  4 SMRs
- ✓ Mix is indicative, not a target

# Six Pillars of Japan's Nuclear Energy Policy



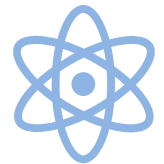
## 1. Preconditions for Long-term Nuclear Use

- Safety improvement, stakeholder involvement, public communication



## 2. Accelerate Restarts and Maximize Existing NPPs

- Digital/AI use, higher capacity factors, efficient O&M, longer operation



## 3. Develop and Deploy Advanced Reactors

- NPP replacement and Gen IV demo reactors toward the 2040s



## 4. Accelerate Back-end Processes

- Closed fuel cycle, decommissioning, waste management, final disposal



## 5. Improve Investment Environment, Supply Chains & Skills

- Bankable policy frameworks, robust industrial base, young talent



## 6. Contribute to Solving International Issues

- Support for Asian newcomers, R&D cooperation, fuel supply chains

# IAEA Milestones Also Matter for Japan

- ✓ The IAEA suggests that the period from initial consideration to operation of the first NPP is about **10–15 years**.
- ✓ Japan is tackling common issues such as safety, financing, stakeholder engagement, and human resource development.



IAEA NUCLEAR ENERGY SERIES No. NG-G-3.1 (Rev. 2)

Milestones in the Development of a National Infrastructure for Nuclear Power

GUIDES





# Contribute to Solving International Issues

- Support for **Asian** newcomers



## 1. Host Technical Tours in Japan

- Training, Seminars and Workshops based on real lessons learned
- Site visit to NPPs, labs and manufacturing facilities

## 2. Dispatch Ad-hoc Missions to your State

- Gov., Industry and Utility experts provide tailored support

## 3. Support SMR Deployment

- HRD, Site selection, F/S, FEED and Construction

# Happy to Host Technical Tours

IAEA (II&SAT)



Indonesia



JICC Seminar



Malaysia



Bulgaria, Romania and Slovakia



Tomari



Fukushima

Hitachi

Tokai

Kawasaki

Yokohama

Shimane

Tsuruga

Tokyo

Kobe

Ghana



Poland



Estonia



Philippines

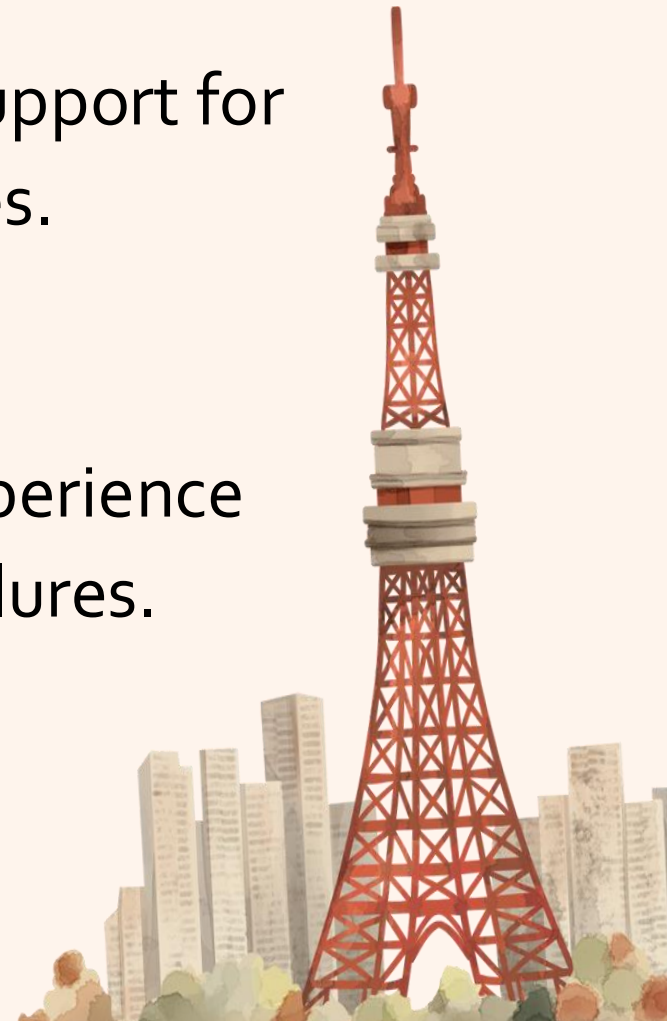


# Tours with **Multiple** Newcomers



## Summary: Japan is ready to walk with you

- ✓ Energy transitions take various pathways — especially nuclear power!
- ✓ Japan is ready to provide tailored support for each country's unique circumstances.
- ✓ Nuclear projects are never easy.
- ✓ Japan has extensive (and tough) experience — let us share our successes and failures.





**Thank you for your attention!**