

A photograph of Mount Fuji, a large snow-capped mountain, centered in the background. The sky is a mix of soft orange, pink, and blue, suggesting a sunset or sunrise. In the foreground, there are dark, silhouetted mountain ranges and a layer of white clouds or mist. The text is overlaid on this scenic background.

Country Report of Japan

The 25th FNCA Ministerial Level Meeting
December 12, 2024

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1. Basic Policy for Nuclear Energy

1. Background and Objective

- A compass to show long-term directions for government policy on nuclear energy
- Revised in February 2023 in light of changes in the environment surrounding nuclear energy

2. Important Initiatives

① *Reflections and Lessons from the Fukushima Daiichi Nuclear Power Station Accident*

② *Use of nuclear energy for stable energy supply and carbon neutrality* ➡ P3

- | | | |
|---|---|------|
| ➤ Restarting existing nuclear power plants | ➤ Development and construction of innovative nuclear reactors | ➡ P4 |
| ➤ Efficient safety examinations | ➤ Expansion of spent fuel storage capacity etc. | |
| ➤ Long-term operation of nuclear power plants | | |

③ *Nuclear energy in the global context*

④ *Peaceful use of nuclear energy: securing non-proliferation and nuclear security*

⑤ *Rebuilding public trust and confidence in the use of nuclear energy*

⑥ *Decommissioning of nuclear stations and the radioactive waste management under the involvement of the government*

⑦ *Promoting the utilization of radiation and radioisotopes* ➡ P5

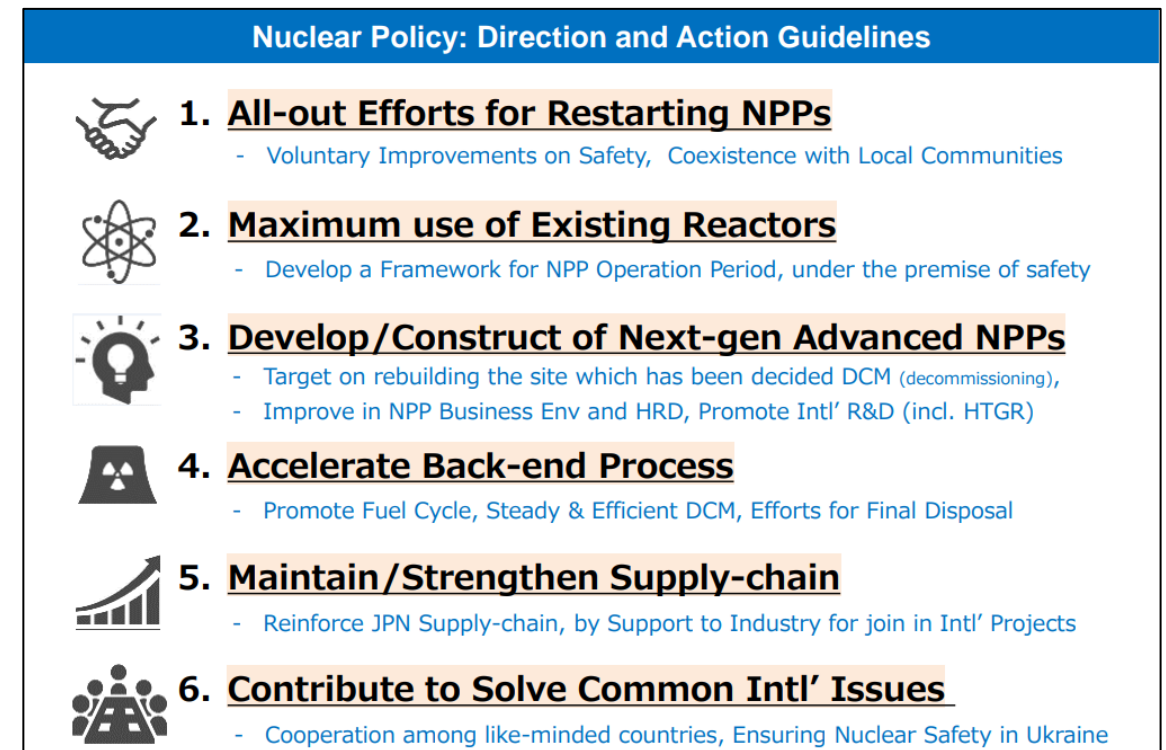
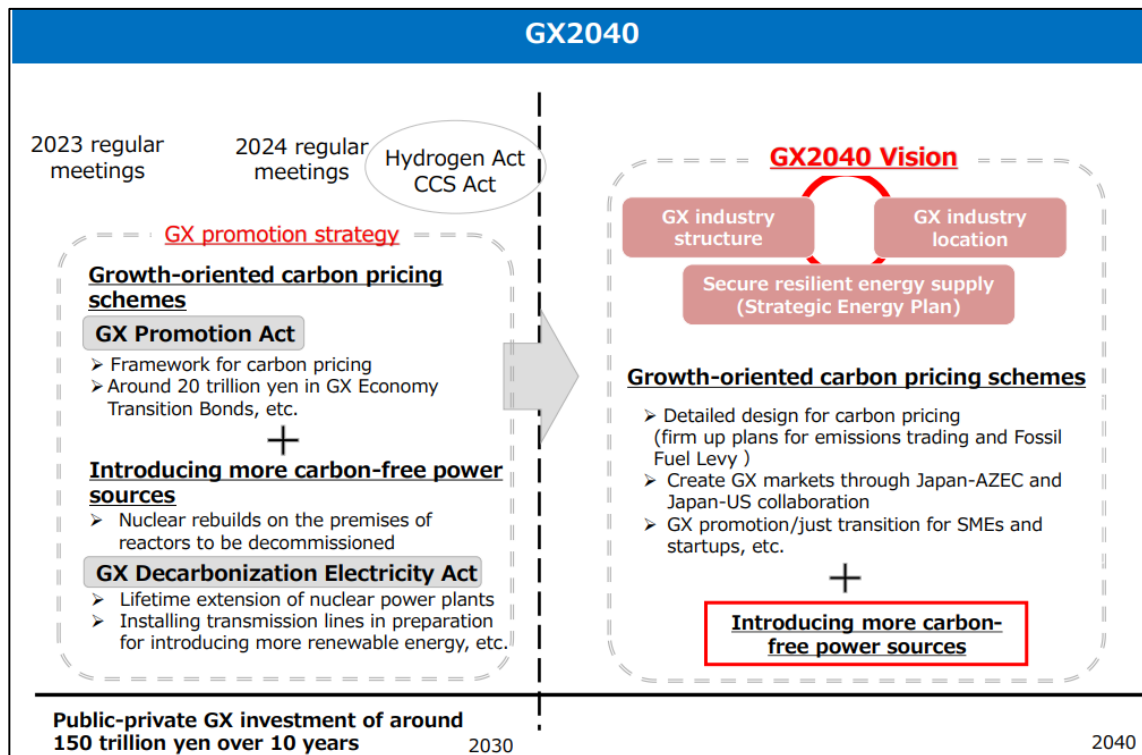
⑧ *Initiatives to create nuclear innovation*

⑨ *Strengthening nuclear human resource development* ➡ P6

2. Direction of Energy and Nuclear Policy

Direction of Future Energy Supply

- “Basic Policy toward Realization of GX (Green Transformation)” – Cabinet Decision in Feb 2023
- “Basic Policy for Nuclear Energy” was revised by Atomic Energy Commission in Feb 2023
⇒ GX related Acts were made in May 2023
- Discussions towards the 7th Strategic Energy Plan are continuing. The outlook for the government's overall energy policy, including nuclear power, is expected to be presented.



3. Energy Policy Objectives and Future Power Generation

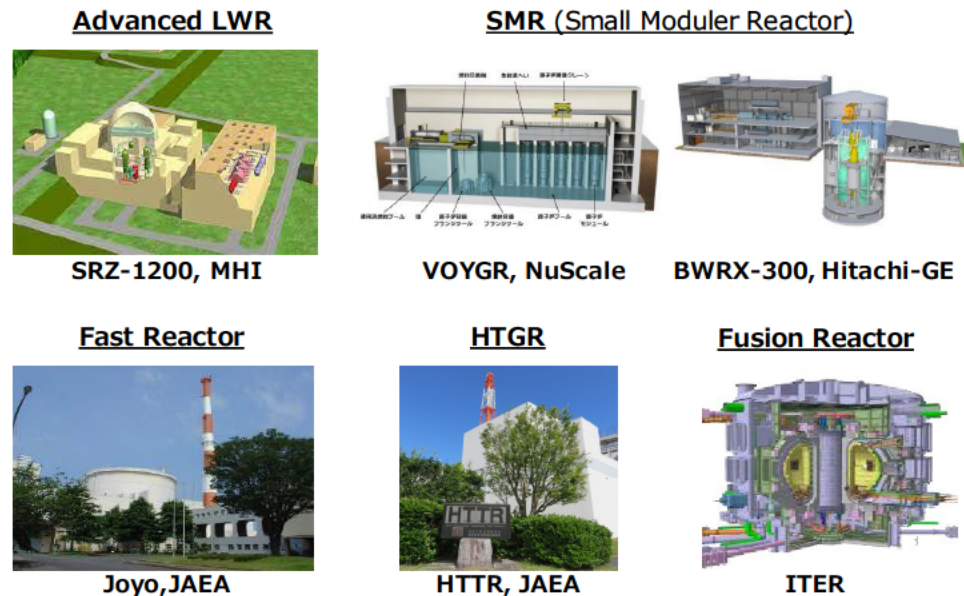
1. Promoting research, development and innovation

- Based on the "GX Promotion Strategy, discussions will be held at the METI and MEXT regarding development and construction of Next-generation Advanced Reactors.
- In order to demonstrate fusion power generation in the 2030s, in August 2024, the expert meeting was held to begin discussions on revising the current strategy.
- In October 2024, JAEC, Cabinet office of Japan held the 25th Anniversary Symposium of FNCA focus on Next generation innovative reactor.

2. Strengthening infrastructures for R&D

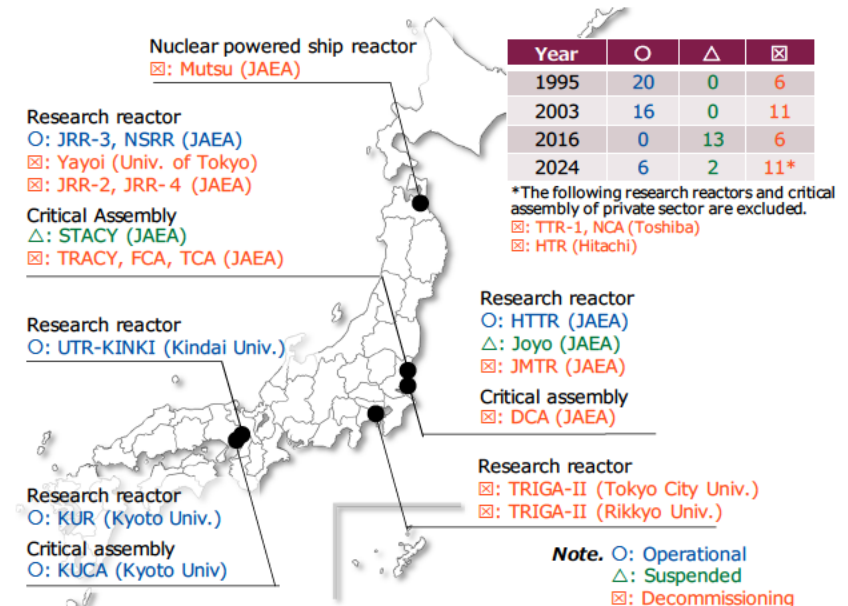
- JAEC Static Experiment Critical Facility (STACY) is scheduled to resume operation in August 2024, and the experimental fast reactor Joyo is scheduled to resume operation in 2026.

The next-generation advanced reactors



Source: : Modified from METI/ANRE, 55th Strategic Policy Committee, 2024.

Status of research reactors and critical assemblies



Source: Modified from the material provided by MEXT, 2024.

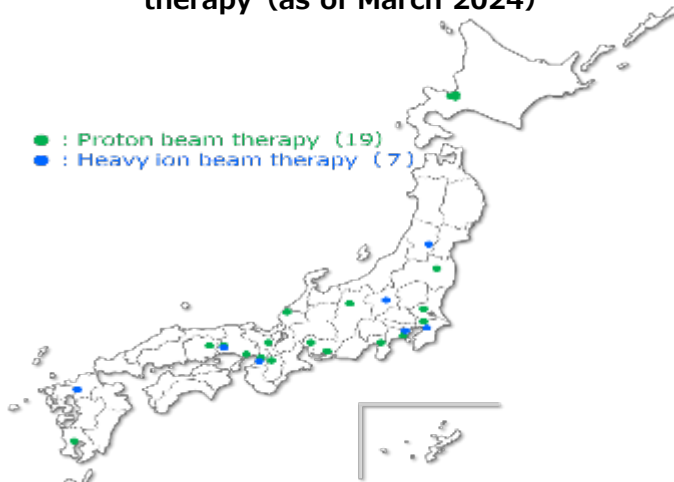
4. Promotion and Utilization of Medical Radioisotopes

Radiotherapy and radiodiagnosis

- Follow up the JAEC's Action Plan for Promotion of Production and Utilization of Medical Radioisotopes.
- The Japanese government hosted side events at 68th General Conference of the IAEA, "Alpha-emitting radiopharmaceuticals, as an effective treatment for metastatic cancer - Clinical trial and its applications in society -"
- In January 2024, the Order for Enforcement of the Radioisotopes Control Law was enforced to resolve the dual regulation* on some unapproved radiopharmaceuticals.

*the Medical Care Act and the Act on the Regulation of Radioisotopes, etc.

Medical institutions offering particle beam radiation therapy (as of March 2024)



Source: Modified from MHLW, List of Medical Institutions Providing Advanced Medical Care, 2024.

68th IAEA General Conference Side Event
Alpha-emitting radiopharmaceuticals, as an effective treatment
for metastatic cancer – Clinical trial and its applications in society –



5. Human Resource Development in Nuclear Field

1. Human Resource Development

- The Nuclear Human Resource Development Network, a collaboration of more than 80 organizations from industry, academia, and government, planned and implemented the establishment of relationships with domestic and foreign organizations and the development of human resources.
- **ANEC** (Advanced Nuclear Education Consortium for the Future Society) is the consortium of Japanese nuclear education and training established in October 2021.
The “Nuclear Energy Open Campus” for high school students was jointly held by ANEC and the Atomic Energy Research Institute of Tokyo Science University, providing the students with an opportunity to learn and explore career options in July 2024.
- MEXT is promoting cooperation in developing nuclear human resources for Asia through the Instructor Training Program and the Nuclear Researchers Exchange Program and JAEA/ISCN* programs in nuclear non-proliferation and nuclear security.
(*) Integrated Support Center for Nuclear Nonproliferation and Nuclear Security

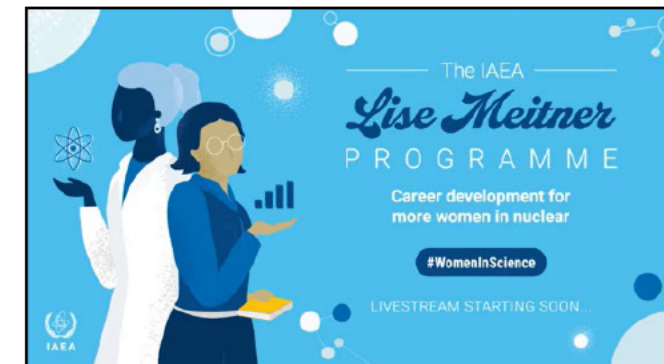
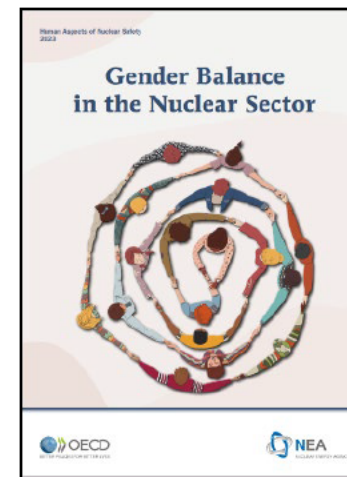


Outreach activities at
Science of Tokyo (July 23rd, 2024)



2. Diversity

- Dr. OKADA Yukiko, Commissioner of JAEC, is working as a Bureau at OECD/NEA HG-GB.
- Japan intent to host IAEA Lise Meitner Programme in 2025.



6. Initiatives related to FNCA 25th Anniversary

1. Speech at the 68th General Conference of the IAEA

- In September 2024, Dr. UESAKA Mitsuru, Chairperson of JAEC, gave a general discussion speech.

【abstract】

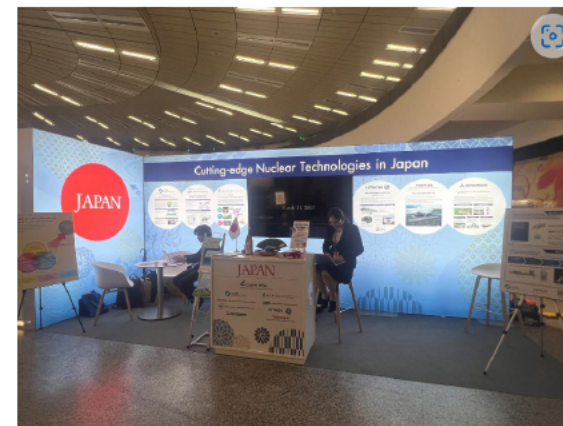
• Peaceful uses of nuclear energy. It is one of the three pillars of the NPT and contributes to achieving the SDGs.

-We also promote international cooperation in this field, including within the framework of the Forum for Nuclear Cooperation in Asia which celebrates its 25th anniversary this year.



2. Exhibition of activity results

- For commemoration of 25th anniversary of the FNCA, FNCA activities were shown in the Exhibition Hall during the 68th IAEA general Conference in Vienna in September 2024.
- A panel introducing the results of 25 years of activities and a video created with the cooperation of member countries were exhibited, and many people visited.




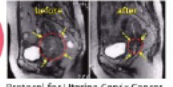


Cabinet Office MEXT MINISTRY OF EDUCATION, CULTURE, SPORTS, SCIENCE AND TECHNOLOGY JAPAN

FNCA: A Quarter Century of Asian Nuclear Cooperation

FNCA, Forum for Nuclear Cooperation in Asia, celebrates its 25th anniversary this year. FNCA aims to enhance socio-economic development through regional partnership among Asian and Pacific countries. Japan serves as FNCA Secretariat.

Examples of Project Outcomes and FNCA Member Countries

Mutation Breeding Project	 Disease Resistant Bananas	
Electron Accelerator Application Project	 Plant Growth Promoter	
Radiation Oncology Project	 Protocol for Uterine Cervix Cancer	

Thank you for your attention.

