

# **Preparatory Committee for the 2026 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons**

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## **Enhancement of peaceful uses of nuclear science and technology**

### **Working paper submitted by Japan**

#### **I. Introduction**

1. The peaceful uses of nuclear energy, enshrined in the Treaty on the Non-Proliferation of Nuclear Weapons as an inalienable right of all the Parties to the Treaty, have contributed to peace and prosperity of the world, and their significance has been repeatedly confirmed at the past Review Conferences of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. Japan is of the view that more should be done to enhance peaceful uses of nuclear science and technology, recognizing that such uses have the potential to make a tangible contribution to effectively addressing global challenges for sustainable development and environment in such a way as to contribute to achieve the 2030 Agenda for Sustainable Development Goals.

2. Japan considers it indispensable to raise awareness among the public in general across the world of the tangible benefits made available by, and the potential of, nuclear technology for the welfare of humankind. Raising public awareness is key to ensuring the financial and human resources necessary for States to fully realize the potential of such technology.

3. In this regard, the role of the International Atomic Energy Agency (IAEA) is indispensable, and Japan highly appreciates the Agency's long-standing contribution to the promotion of peaceful uses of nuclear energy and its active engagement in addressing global and emerging challenges, including climate change.

#### **II. The important elements of peaceful uses of nuclear science and technology**

4. With the above recognition, Japan stresses the importance of the following elements for the enhancement of peaceful uses of nuclear science and technology.



## **A. The improvement of the level of accessibility to nuclear science and technology**

5. The level of accessibility to nuclear science and technology should be further improved for the benefit of the largest possible number of people. Capacity-building, provision of equipment, building cooperation networks, facilitating cooperation among countries and promoting regional cooperation mechanisms such as the African Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology, the Cooperative Agreement for Arab States in Asia for Research, Development and Training related to Nuclear Science and Technology, the Regional Cooperative Agreement for the Promotion of Nuclear Science and Technology in Latin America and the Caribbean and the Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology for Asia and the Pacific will serve to meet this objective. In this regard, Japan will continue its positive contributions in this field, as one of the major contributors to the IAEA Technical Cooperation Fund. Japan firmly believes that Member States and the IAEA secretariat should make efforts to ensure that the Technical Cooperation Programme is implemented effectively under the efficient management by the IAEA secretariat.

## **B. The utilization of nuclear science and technology in diverse areas**

6. Nuclear science and technology should be utilized in diverse areas to better meet fundamental needs of people in State Parties. In this regard, Japan has supported various projects in the IAEA, including the Zoonotic Diseases Integrated Action project, the Nuclear Technology for Controlling Plastic Pollution project, the Rays of Hope project and the Marie Skłodowska-Curie Fellowship Programme through the IAEA Peaceful Uses Initiatives.

## **C. The highest standards of safety, security and safeguards**

7. The promotion of the peaceful uses of nuclear energy must be accompanied by commitments to the highest standards of safety, security, as well as effective safeguards. These are the integral elements which enable sustainable and responsible peaceful uses of nuclear energy.

8. In this regard, Japan has been advancing the decommissioning of the TEPCO<sup>1</sup> Fukushima Daiichi nuclear power station and environmental restoration activities off site with the reviews from the IAEA (for further details of Japan's efforts and reviews by IAEA on Advanced Liquid Processing System treated water at the TEPCO Fukushima Daiichi nuclear power station, please see the annex).

## **D. Nuclear safety, security and safeguards in Ukraine**

9. The situation at Ukraine's nuclear facilities caused by Russia's actions has been a matter of great concern, from the perspective of nuclear safety, security and safeguards. The restoration of sovereignty and territorial integrity of Ukraine, as well as implementation of the mandate of IAEA within Ukraine, should be the way forward to ensure nuclear safety, security and safeguards. The aggression by the Russian Federation and its related actions hereto should be condemned in the strongest terms. Japan reiterates the importance of the IAEA Director General's "seven indispensable

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<sup>1</sup> Tokyo Electric Power Company.

pillars on nuclear safety and security” derived from IAEA safety standards and nuclear security guidance. Japan also supports the “five principles” to help ensure the nuclear safety and security at the Ukraine’s Zaporizhzhya nuclear power plant, which IAEA Director General Grossi presented in his briefing at the Security Council on 30 May. Japan firmly supports efforts of IAEA to provide assistance for the safe and secure operation of Ukraine’s nuclear facilities, as well as proper safeguards activities. In this regard, Japan has provided approximately €12 million in total towards the IAEA work related to Ukraine so far.

## Annex

### **Further details of Japan's efforts and reviews by IAEA on Advanced Liquid Processing System treated water at the TEPCO Fukushima Daiichi nuclear power station**

1. As part of the decommissioning process, the Government of Japan announced the “Basic Policy” in April 2021, which selects discharge of the ALPS (Advanced Liquid Processing System) treated water into the sea as the method for disposing the water at the site based on more than six year long process of comprehensive study on multiple disposal methods by experts and reviews by the International Atomic Energy Agency (IAEA).<sup>1</sup> Japan has assessed the discharge into the sea to be the most reliable and responsible method that is able to manage risks through monitoring in accordance with IAEA safety standards. The IAEA Comprehensive Report<sup>2</sup> stated that “the recommendations made by the ALPS Subcommittee are based on a sufficiently comprehensive analysis and on a sound scientific and technical basis” and the discharge into the sea is “technically feasible”.

2. In order to ensure the safety of the discharge of the ALPS treated water, the Government of Japan has been taking measures strictly abiding by relevant international law as well as giving due consideration to international practice while undergoing the review by IAEA which has high level of expertise based on scientific knowledge and is authorized to establish or adopt, and provide for the application of, international safety standards in the field of nuclear energy under the IAEA Statute.

3. In July 2021, Japan and IAEA signed the Terms of Reference on Reviews of Safety Aspects of Handling ALPS treated Water. Based on the Terms of Reference, IAEA officials and international experts selected by IAEA have conducted a series of strict “Safety Reviews” and “Regulatory Reviews”<sup>3</sup> on the discharge of the ALPS treated water against IAEA Safety Standards, which were produced with the involvement of all Member States and serve as a global reference for protecting people and the environment. In this context, it should be noted that IAEA safety standards are applied to all nuclear power plants. The safety of the water discharged from nuclear facilities, regardless of whether they have experienced an accident or not, is to be determined on the basis of the aggregate effects of all the radionuclides, contained in the water released therefrom (there is no radionuclide that is not considered).

<sup>1</sup> Review Report, IAEA INTERNATIONAL PEER REVIEW OF MID-AND-LONG-TERM ROADMAP TOWARDS THE DECOMMISSIONING OF TEPCO'S FUKUSHIMA DAIICHI NUCLEAR POWER STATION (Fifth Review) Vienna, Austria Tokyo and Fukushima Prefecture, Japan, June–August 2021. Available at [www.iaea.org/sites/default/files/21/08/review-report-270821.pdf](http://www.iaea.org/sites/default/files/21/08/review-report-270821.pdf). Mission Report, IAEA INTERNATIONAL PEER REVIEW MISSION ON MID-AND-LONG-TERM ROADMAP TOWARDS THE DECOMMISSIONING OF TEPCO'S FUKUSHIMA DAIICHI NUCLEAR POWER STATION (Fourth Mission) Tokyo and Fukushima Daiichi NPS, Japan, 5–13 November 2018. Available at [www.iaea.org/sites/default/files/19/01/missionreport-310119.pdf](http://www.iaea.org/sites/default/files/19/01/missionreport-310119.pdf).

<sup>2</sup> See [www.iaea.org/sites/default/files/iaea\\_comprehensive\\_alps\\_report.pdf](http://www.iaea.org/sites/default/files/iaea_comprehensive_alps_report.pdf).

<sup>3</sup> See the following:

[www.iaea.org/sites/default/files/report\\_1\\_review\\_mission\\_to\\_tepco\\_and\\_meti.pdf](http://www.iaea.org/sites/default/files/report_1_review_mission_to_tepco_and_meti.pdf)

[www.iaea.org/sites/default/files/report-2-review-mission-to-nra.pdf](http://www.iaea.org/sites/default/files/report-2-review-mission-to-nra.pdf)

[www.iaea.org/sites/default/files/3rd\\_alps\\_report.pdf](http://www.iaea.org/sites/default/files/3rd_alps_report.pdf)

[www.iaea.org/sites/default/files/report-4-review-mission-tepco-and-meti.pdf](http://www.iaea.org/sites/default/files/report-4-review-mission-tepco-and-meti.pdf)

[www.iaea.org/sites/default/files/5th\\_alps\\_report.pdf](http://www.iaea.org/sites/default/files/5th_alps_report.pdf)

[www.iaea.org/sites/default/files/first\\_interlaboratory\\_comparison\\_on\\_the\\_determination\\_of\\_radionuclides\\_in\\_alps\\_treated\\_water.pdf](http://www.iaea.org/sites/default/files/first_interlaboratory_comparison_on_the_determination_of_radionuclides_in_alps_treated_water.pdf).

4. On 4 July 2023, IAEA published its Comprehensive Report, summarizing the outcome of the review missions from an objective and professional standpoint based on scientific evidence. In the report, IAEA has concluded that: (a) the approach to the discharge of the ALPS treated water into the sea and associated activities are consistent with relevant international safety standards; and (b) the discharge of the ALPS treated water will have a negligible radiological impact on people and the environment; and expressed (c) its commitments to engaging with Japan on the discharge of ALPS treated water not only before, but also during and after the treated water discharges occur.

5. Furthermore, the IAEA Comprehensive Report acknowledges that “The Government of Japan, TEPCO, and [Japan’s Nuclear Regulation Authority] have provided information to and engaged in consultations with the parties that are affected by the planned discharge of ALPS treated water. This includes both international and domestic, interested parties”. In fact, Japan has held more than 120 explanation sessions to the Diplomatic Corps in Tokyo since the Great East Japan Earthquake in 2011, and 15 sessions since the announcement of the Basic Policy on Handling of ALPS Treated Water in 2021. Besides, the Government of Japan maintains dialogue with interested parties, such as the Republic of Korea, Pacific Islands Countries, among others, based on a scientific approach.

6. The Government of Japan will continue to provide necessary information to the international community in a transparent manner based on the conclusion of the Comprehensive Report and will continue efforts to gain further understanding from the international community regarding the handling of ALPS treated water. The Government of Japan also reiterates that it will take every possible measure to ensure the safety of discharge, and that it will not allow any discharge that would harm the health of Japanese and foreign citizens or the marine environment. Japan will continue to, even in a strengthened way, make public monitoring information in a transparent and prompt manner while undergoing the review by IAEA, and should a problem be detected during this monitoring process such as unusual value of concentration of the radioactive materials, Japan will take appropriate measures, including immediate suspension of the discharge, as stipulated in the discharge plan reviewed by IAEA.

7. The Government of Japan strongly opposes any arguments lacking scientific basis and the irresponsible dissemination of fake information, which exacerbates the reputational damage and causes unfounded anxiety among the people of the world, especially those in neighbouring countries and regions. This could also hinder the promotion of peaceful uses of nuclear energy.

8. The Government of Japan will make a decision on the specific timing of the discharge of ALPS treated water into the sea after ensuring safety and assessing the efforts to address reputational damage.