

Twelfth Annual UK-Japan Nuclear Dialogue (Summary of Discussions)

Date: 5 December 2023

Venue: County Hall, London

Co-Chairs:

Mr Chris HEFFER (Director, Nuclear Power and Decommissioning, Department for Energy Security and Net Zero, UK)

Ms HAYASHI Mitsuko (Deputy Director General, Ambassador, Disarmament, Non-Proliferation and Science Department, Ministry of Foreign Affairs, Japan)

Background

The 'Japan-UK Framework on Civil Nuclear Energy Cooperation', annexed to the joint statement at the Japan-UK summit meeting in April 2012, stated that Japan and the UK would launch an annual Dialogue at senior level to strengthen bilateral cooperation across the full range of civil nuclear activities. The twelfth annual meeting was hosted in London by the UK Department for Energy Security and Net Zero (DESNZ) on 5 December 2023.

Session 1: Nuclear Policy

Both sides gave overviews of their nuclear energy policies. Japan's Ministry of Economy, Trade and Industry (METI) shared updates on their Green Transformation policy announced earlier this year, and the UK's Department for Energy Security and Net Zero (DESNZ) shared progress on current new nuclear reactor construction and plans. The two sides discussed the benefits of a long term, fleet approach to nuclear reactor construction and offered to continue to share experience in effective policy for new nuclear. Both sides welcomed the ongoing and growing collaboration between their respective supply chains across the nuclear lifecycle.

The two sides emphasised the importance of reducing reliance on Russia from their domestic and like-minded partner's nuclear fuel supplies, and discussed areas that their respective supply chains could contribute to this effort.

The UK also presented on their Advanced Modular Reactor (AMR) programme. The UK's National Nuclear Laboratory (NNL) gave an overview of NNL and Japan Atomic Energy Agency's (JAEA) collaboration on High Temperature Gas Reactors (HTGRs). The two sides noted the particular benefits of bringing together the expertise from Japan's knowledge on HTGRs with the UK's experience of long-term operations of fleets of gas-cooled, graphite-moderated reactors.

The UK's DESNZ and Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT) gave an overview of plans and progress on fusion energy. Both sides highlighted existing collaboration including on harmonising regulation and expressed a keen interest in exploring opportunities to build fusion collaboration further.

Session 2: Decommissioning and Environmental Remediation

Japan's Ministry of Economy, Trade and Industry (METI) presented on the Advanced Liquid Processing System (ALPS) treated water discharge from the Fukushima Daiichi Nuclear Power Station (FDNPS). METI also shared an overview of domestic decommissioning and waste management policy, progress and structures.

The UK reiterated its support for the science behind the discharge of ALPS treated water at FDNPS and Japan's close collaboration with the IAEA on this matter.

The UK Nuclear Decommissioning Authority (NDA) presented on UK decommissioning progress across its 17 sites. The two sides discussed opportunities for Japan to benefit from lessons learned in setting up NDA organisational structures.

The NDA also gave an overview of research and development (R&D) for decommissioning, and the importance of R&D to tackle decommissioning challenges. The two sides noted the number of shared decommissioning challenges between the UK and Japan and discussed the potential for further enhancing shared R&D to meet these challenges.

Japan's Ministry of the Environment (MOE) shared progress on offsite decontamination in the affected area of Fukushima and recycling of removed soil.

Session 3: Public Communication

The UK's DESNZ presented on progress towards a Geological Disposal Facility (GDF) progress and efforts to build skills and grow the workforce on nuclear energy in the UK.

Japan expressed appreciation for the support and understanding provided by the UK toward Japan's discharge of ALPS treated water from FDNPS starting in August 2023.

Japan's Atomic Energy Commission (JAEC) gave an update on public opinion on nuclear energy in Japan, highlighting how favourable impressions for nuclear power have gradually reverted to pre-Fukushima accident levels, and Japan's Ministry of Foreign Affairs (MOFA) presented a case study of Japan's domestic and international communications related to ALPS treated water discharge. Japan emphasised the importance of constant delivery of accurate information focused on scientific facts to the audience. Both sides discussed the opportunity to further share experience on public communications and the importance of proactive, open communications across nuclear issues.

The two sides discussed the vital importance of skills and human resource development and the potential for collaboration in this area, and suggested looking at opportunities to further build Japan-UK people-to-people links on nuclear energy.

Session 4: Safety and Regulation

Japan's Nuclear Regulation Authority (NRA) shared detail of recent changes to Japan's regulatory regime for Long-Term Operation of nuclear power plants, and gave an update on progress in approvals of restart of nuclear reactors, regulatory activities for ALPS treated water discharge and cooperation between the UK's Office for Nuclear Regulation (ONR) and NRA.

ONR gave an overview of UK regulation focusing on regulation for innovation and regulation of Advanced Nuclear Technologies.

Both sides welcomed the renewed NRA and ONR collaboration signed since the previous Dialogue, as well as the ongoing secondment programme bringing a Japanese regulator to the ONR during 2024.

Session 5: Research and Development

The UK and Japan welcomed 10 years of joint research on decommissioning under the joint UK-Japan civil nuclear research fund administered by the UK's Engineering and Physical Sciences Research Council (EPSRC) and Japan's MEXT, and looked forward to continuing R&D under this collaboration.

The UK Atomic Energy Authority (UKAEA) presented UK-Japan collaborations in robotic applications for nuclear environments spanning fission and fusion applications, including under the LongOps programme. The two sides discussed the particular potential for further collaboration in remote robotics collaboration.

Japan's MEXT gave an overview of Japan's nuclear R&D landscape including government-supported R&D programmes, progress on decommissioning of research reactors and other facilities, and efforts to develop nuclear energy-related education and training.

Closing remarks

The co-chairs, Mr. Chris HEFFER and Ms. HAYASHI Mitsuko, recognised the breadth and depth of UK-Japan collaboration on nuclear energy, and opportunity to further grow collaboration going forward.

The co-chairs also reaffirmed that the UK and Japan share common values and see each other as natural partners to pursue further opportunities and deepen what is an historic relationship for the long term, tackling climate change through enhancing low-carbon nuclear energy.

Both sides were pleased to have met in person in London and looked forward to meeting again in Japan in 2024 for the Thirteenth Japan-UK Nuclear Dialogue.

Site Tour

A site tour to EDF Energy's Hinkley Point C site preceded the Dialogue.