



AUSTRALIAN PERMANENT MISSION TO THE UNITED NATIONS IN VIENNA

Australian Statement to the IAEA Ministerial Conference on Nuclear Science and Technology

28 – 30 November 2018

Thank you, Chair,

As a wholehearted supporter of the IAEA's nuclear applications and technical cooperation activities, Australia welcomes this first IAEA Ministerial Conference on Nuclear Science and Technology.

The peaceful uses of nuclear science and technology make immense contributions to human prosperity and are relevant to no fewer than 9 of the 17 Sustainable Development Goals. As a world-leading supplier of reactor-produced nuclear medicines, Australia has an acute understanding of the importance of nuclear science and technology in improving the health and well-being of people.

Australia was the first major supplier to produce molybdenum-99 - the basis for 80 per cent of nuclear medicine procedures - exclusively from low enriched uranium. Australia chose to eliminate highly enriched uranium from nuclear medicine production not because it was convenient, but because in doing so we eliminated an unnecessary nuclear proliferation risk. We are very pleased that in recent years other major producers, including the Netherlands and South Africa, have chosen to do likewise. Together, we have eliminated HEU from 760 per cent of the world's molybdenum-99 supply chain, proving it both technically and economically feasible.

We urge those countries in the process of converting their HEU-based methods to stay the course. We also discourage countries establishing or considering new nuclear medicine production capabilities from using HEU-based methods. Doing so unnecessarily introduces new and avoidable risks of nuclear proliferation, and requires more rigorous nuclear security measures.

On securing the world's supply of molybdenum-99, "hot" commissioning of our new ANSTO Nuclear Medicine facility is functionally complete. We have successfully completed our first validation runs. Upon final regulatory approval, Australia will be able to supply approximately 20 to 25 percent of current world molybdenum-99 needs.

Australia has commenced construction of the world's first industrial scale Synroc waste treatment plant to manage the liquid waste from nuclear medicine production. The facility will demonstrate the viability of Synroc as a modern, highly versatile waste form, with improved volume reduction and proliferation resistance.

We are also supporting the development of new diagnostic and therapeutic isotopes such as lutetium-177, which shows increasing potential for treatment of a variety of conditions. Earlier this year, the Australian Nuclear Science and Technology Organisation – ANSTO - and the Peter MacCallum Cancer Centre conducted the first large-scale clinical trials using this isotope in the treatment of advanced, metastatic prostate cancers. The results were highly encouraging.

Australia supports the IAEA's nuclear applications and technical cooperation activities in a number of ways.

ANSTO is an IAEA Collaborating Centre, and is home to a variety of landmark nuclear science infrastructure, including the OPAL multi-purpose reactor and the Australian Synchrotron. These facilities are open to a range of user programs, granting access to researchers and collaborators from across Australia and around the world. These facilities also enable Australia to contribute to some 34 Coordinated Research Projects.

Much of Australia's contribution to technical cooperation is made through participation in the Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology for Asia and the Pacific, which plays a vital role in the transfer of the peaceful uses of nuclear science and technology throughout our region.

Australia takes its responsibility to share these peaceful uses extremely seriously, including in fulfilment of the third pillar of the Treaty on the Non-Proliferation of Nuclear Weapons.

Australia is a strong supporter of the Renovation of the Nuclear Applications Laboratories at Seibersdorf. The ReNuAL and "ReNuAL plus" projects are important in modernising the Agency's technical capabilities. Australia has made a substantial contribution to ReNuAL, however we note that the project is not yet fully funded. We urge Member States that have not yet contributed to ReNuAL or "ReNuAL plus", and are in a position to do so, to consider making a contribution. We would also welcome an increased focus by the Secretariat on resource mobilisation from non-traditional donors.

Australia strongly believes reaching gender parity at the IAEA is not only an important objective on equity grounds but also important in delivering organisational efficiency and effectiveness. The diverse communities delivering and benefiting from Nuclear Applications and Technical Cooperation activities will be best served by an IAEA that reflects their diversity. Gender mainstreaming in the Agency's Nuclear Applications and Technical Cooperation projects is critical to maximising their effectiveness and reach. Australia urges the IAEA and all Member States to proactively support the increased representation of women in nuclear science and technology, and in the nuclear industry more broadly.

Thank you.
