Statement by Mr Hua Liu

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Excellencies, Ladies and Gentlemen,

I am delighted to be here today on behalf of the International Atomic Energy Agency (IAEA) at the ESCAP session on 'Leveraging Digital Innovation for Sustainable Development in Asia and the Pacific.' First and foremost, I extend my heartfelt congratulations to ESCAP on its 80th Anniversary.

The IAEA, guided by its 'Atoms for Peace and Development' motto, is committed to supporting countries in their pursuit of the Sustainable Development Goals (SDGs). Today, I would like to highlight how the IAEA is actively leveraging digital innovation to contribute to sustainable development in Asia and the Pacific, both through our key initiatives to address cancer, zoonotic disease and plastic pollution, and our regional approaches.

The nuclear industry plays a crucial role in supplying one-third of the world's low-carbon electricity, which is essential for powering digital technology and achieving the 1.5°C climate goals. Seen from the other side, digital innovation is integral to nuclear operations. Already we see digital innovation in the use of digital twins for safety during nuclear facility decommissioning and in the use of Artificial Intelligence to monitor nuclear infrastructure.

The IAEA, as a science and technology-based organization, is an early adopter of innovation, and recognizes the importance of embracing digital technology in its work. Through our technical cooperation programme, the IAEA's primary vehicle for delivering development services to our Member States, the IAEA applies digital technology to scale up projects rapidly, facilitate knowledge sharing, and maximize impact across diverse development areas such as human health, food and agriculture, ocean health, and climate change. These activities contribute directly to the achievement of at least 9 of the 17 SDGs.

Each year, cancer causes some 5 million¹ deaths in the Asia-Pacific region. In 2022, the IAEA launched the Rays of Hope initiative to address the shortage of cancer care capacity, particularly in countries without adequate access to radiotherapy services. The expanded use of telemedicine for patient consultations, tumour board meetings and treatment planning has enabled efficient healthcare delivery with fewer on-site personnel and has also reduced space requirements. The IAEA has further advanced digitalization by developing e-learning tools, resource database and guidelines in nuclear medicine, radiology, radiotherapy, and nutrition, such as the comprehensive e-learning platform (CeLP), the Directory of Radiotherapy Centres (DIRAC), the IAEA Medical Imaging and Nuclear Medicine Global Resources Database (IMAGINE), and international guidelines for transitioning to digital recording in Patient Radiation Exposure Monitoring for Medical Imaging.

Plastic pollution is a global challenge that threatens ecosystems, food safety and human health. NUTEC Plastics, another IAEA flagship initiative, helps countries to addresses this challenge by promoting efficient recycling of plastic, and by supporting the monitoring of microplastics in the marine environment using

¹ <u>Mortality from cancer | Health at a Glance: Asia/Pacific 2022 : Measuring Progress Towards Universal Health</u> <u>Coverage | OECD iLibrary (oecd-ilibrary.org)</u>

nuclear and nuclear-derived techniques. Over 10 countries in the Asia-Pacific region are participating in IAEA-led recycling activities, with pilot countries including Indonesia, Malaysia, and the Philippines, at the forefront, successfully moving from the research to the development phase. The IAEA recognizes the role of digitalization in plastic waste control and in particular in sharing relevant information: a joint working group is currently developing an online portal to enhance information sharing and collaboration among stakeholders.

The Zoonotic Disease Integrated Action (ZODIAC) initiative, launched in 2020, aims to help countries prevent of pandemics caused by diseases originating in animals. The initiative supports coordinated joint research, training, the delivery of expertise, and technology packages to enhance pathogen surveillance and disease diagnostics. iVetNet, an online information platform developed in collaboration with the Food and Agriculture Organization, connects veterinary diagnostic laboratories around the world. It facilitates the sharing of knowledge and the exchange of know-how to prevent and control transboundary animal and zoonotic diseases.

Nuclear technologies such as plant mutation breeding and food irradiation make important contributions to enhance agricultural and livestock productivity, reduce food losses, ensure food safety, and adapt to climate change. In 2023, IAEA, jointly with FAO, launched a new initiative - Atoms4Food - to offer tailored solutions to address food insecurity affecting over 300 million² people in the Asia and the Pacific region. We believe that the integration of nuclear techniques and digital technology will unlock the potential of this initiative to empower smallholders, enhance information access, streamline supply chains, and reduce operational costs. The IAEA emphasizes the pivotal role of

² ADB's Work on Agriculture and Food Security: In-Depth | Asian Development Bank

partnership and collaboration in developing this initiative, and we look forward to exploring digitalized nuclear solutions to combat hunger with a range of partners.

The IAEA is committed to promoting South-South cooperation, triangular cooperation, and regional collaboration. This is visible in regional approaches like the Regional Cooperative Agreement for Research, Development, and Training Related to Nuclear Science and Technology for Asia and the Pacific (RCA) and the Sub-regional Approach to the Pacific Islands (SAPI). Notably, the Asia-Pacific Radiation Oncology Network (ASPRONET) engages radiotherapy professionals across 19 countries in the region, providing a platform for mutual support among Member States. Our Sub-Regional Approach to the Pacific Islands provides fit-for-purpose solutions for enhancing agricultural productivity, improving healthcare, monitoring the marine environment, and managing water resources effectively. Digital technology continues to play a positive role in reducing travel costs to remote areas without compromising the effect of training and capacity building in these countries.

Ladies and Gentlemen,

The IAEA looks forward to strengthening its collaboration with ESCAP and other partners to deliver impactful programmes and initiatives in support of the Sustainable Development Goals. By leveraging digital innovation, we aim to foster sustainable development, particularly in Least Developed Countries (LDCs) and Small Island Developing States (SIDS), ensuring a more secure, inclusive, and resilient future for the region.

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