STATEMENT BY GHANA DURING THE MINISTERIAL CONFERENCE ON NUCLEAR SCIENCE, TECHNOLOGY AND APPLICATIONS AND THE TECHNICAL COOPERATION PROGRAMME

26 – 28 November 2024,

IAEA Headquarters, Vienna International Centre, Vienna, Austria

Chair, Excellencies, delegates from Member States, ladies and gentlemen,

Ghana is honoured to co-chair the Ministerial Conference on Nuclear Science, Technology, and Applications with Finland and extends its gratitude to DIRECTOR GENERAL RAPHAEL MARIANO GROSSI FOR HIS VISION AND LEADERSHIP IN EFFICIENTLY WORKING TOWARDS ENSURING THAT NUCLEAR ENERGY PLAYS A CRITICAL ROLE IN ADDRESSING GLOBAL CHALLENGES.

GHANA IS ALSO GRATEFUL TO THE International Atomic Energy Agency (IAEA) for its extensive support across several key sectors such as agriculture, health, nuclear energy, industry, radiation safety, nuclear security, and human resource development. Ghana looks forward to further strengthening and expanding this partnership.

Mr. Chair,

In October and November 2023, Ghana hosted the first-ever Pan African Nuclear Energy Summit and the International Framework for Nuclear Energy Cooperation (IFNEC) Ministerial Conference. Both events were highly successful. With IAEA's support in advisory services, education and skills development, Ghana's nuclear power programme reached Milestone 1, and Phase 2 activities are underway. Ghana is committed to continuing its collaboration with the IAEA to achieve Milestones 2 and 3 in the near future.

Mr. Chair,

The Ghana Nuclear Regulatory Authority (NRA) continues to benefit from IAEA's Technical Cooperation (TC) Projects, including workshops, expert missions, fellowships, and scientific visits. In 2023, two expert missions provided valuable insights on the review and assessment of nuclear power plant license submittals. These included a workshop on Site Selection and Evaluation and an IAEA National Workshop on Managing the Regulatory Review and Assessment for Nuclear Power Plants, where participants learned from experts from Turkey, Pakistan, and Egypt. This knowledge exchange has helped Ghana strengthen its regulatory processes for nuclear installations. Additionally, the NRA has commissioned a portable portal monitor with IAEA support to enhance emergency preparedness and response capabilities.

Mr. Chair,

To improve cancer care, Ghana plans to evaluate its National Cancer Control Plan to align it with the updated Non-Communicable Diseases Policy and Strategy for 2022-2030. Ghana is seeking TC support for a technical mission to develop bankable documents for expanding radiotherapy infrastructure and improving the quality and accessibility of cancer care.

Mr. Chair,

With IAEA and Netherlands' assistance, Ghana established the Accelerator Research Centre, which utilizes Ion Beam Analytical techniques for various applications in health, agriculture, mining, environment, art, cultural heritage, and forensics. This facility has made significant contributions across multiple sectors. Ghana is seeking support to explore the utilization of accelerator technology for mutation breeding.

Mr. Chair,

Ghana has also benefited from three national TC projects focused on Isotope Hydrology. Through these projects, Ghana has determined recharge rates for the Densu River basin and identified the origin of groundwater salinization in the coastal zone. The Isotope Hydrology Laboratory at GAEC now trains IAEA fellows from other African countries, contributing to regional knowledge sharing.

Mr. Chair,

As part of the IAEA's NUTEC plastic initiative, Ghana is working to improve its capacity for sustainable plastic waste management, leveraging radiation technology for recycling and marine environmental monitoring. Ghana is seeking IAEA's support to acquire an electron beam irradiator to replace the existing Co-60 Gamma Irradiation Facility, which will aid research and development in plastic management and enhance the broader applications of irradiation technology.

Mr. Chair,

In the field of food and agriculture, Ghana has expanded its capacity to apply nuclear science for plant breeding, climate-smart agriculture, and pest control. As the first and only IAEA Collaborating Centre in Plant Breeding and Genetics, GAEC's Biotechnology and Nuclear Agriculture Research Institute (BNARI) has trained fellows from several African countries, contributing to capacity building on the continent. GAEC-BNARI is also advancing the use of nuclear technology in agriculture through public lectures, webinars, and participatory farmer demonstrations. GAEC-BNARI's efforts has helped transfer nuclear science applications to more than one thousand local farmers, improving productivity and sustainability in Ghana's agriculture and food systems.

Mr. Chair,

Ghana continues to use the Ghana Research Reactor-1 (GHARR-1) for elemental analysis and reactor studies. Industries in Ghana also apply radiation sources for geological resource exploration and petrochemical development. Ghana appreciates the IAEA's support through GAEC and NRA in ensuring the safe and secure use of these technologies. Additionally, Ghana and the IAEA are collaborating on the design of a borehole geological repository for the safe disposal of radioactive materials.

Mr. Chair,

The School of Nuclear and Allied Sciences (SNAS), University of Ghana, Atomic, continues to offer advanced training in nuclear science and technology at the M.Phil and PhD levels. Ghana is working with the IAEA and is at an advanced stage of establishing a new M.Phil programme in Applied Human Nutrition and Nuclear Techniques at SNAS to train students from Ghana and the sub-region. SNAS also provides radiation protection and safety training for English-speaking African countries through its Post Graduate Education Certificate Course (PGEC). Ghana seeks continued opportunities to enhance the expertise of trainers and experts to further develop human resources in Ghana and across Africa.

Mr. Chair,

Ghana assures the IAEA of its continued support for TC programmes and requests the Agency's ongoing assistance in the peaceful application of nuclear science and technology for sustainable development. Ghana looks forward to further strengthening its partnership with the IAEA to continue leveraging nuclear technologies for the benefit of its citizens and the wider African region.

Thank you for the opportunity to address the Conference.