

KEYNOTE ADDRESS

by David Cleave, Executive Director of the International Science and Technology Center,

at the African Youth Nuclear Summit 2021

organized by the African Young Generation in Nuclear

(Accra, 25 October 2021)

African Young Generation in Nuclear President Gaopalelwe Santswere,

Ghanaian Young Generation in Nuclear President Johnson Lorlornyo Abusah,

Dear Participants,

To say that I am glad to address the 3rd African Nuclear Youth Summit (ANYS) would be an understatement. We are proud of our partnership with the African Young Generation in Nuclear and its national chapters, for a variety of reasons. Our relations have matured to a deeper level, and aspire after more substantial objectives than what collaboration with civil society is usually taken to imply.

Our contacts with AYGN date from the inaugural African Youth Nuclear Summit in Kenya, in March 2017. ISTC attended this first summit, dubbed “*Nuclear for a Sustainable Future*”, on the invitation of the *Kenyan Young Generation in Nuclear (KYGN)* that hosted it. Last week, at the launch of an ISTC-sponsored Essay Competition in Nairobi, Pamela Kilavi, the KYGN founding President, took the floor to say that ISTC has provided the most substantial financial sponsorship to the first summit, and has thus been instrumental to its taking place. These words demonstrate the trust that ISTC has placed in AYNG from the outset by investing in its creation.

We were also present at, and offered support to, the *AYGN Future Energy East Africa Conference* in Nairobi, in September 2017. It provided ample opportunities for future African leaders to meet senior professionals from international companies such as Siemens, McKinsey, Schneider Electric and others, as well as to talk to government officials, nuclear and energy regulators, and international development partners. An interesting detail was the coincidence between the topic

of the Conference and the motto, “*Future Energy*”, of the EXPO 2017 in Kazakhstan’s capital, Astana, where ISTC Main Office is headquartered. In this vein it is worth to mention that we also enabled representatives from 12 African countries to visit that world exposition.

Moreover, as a follow-up to the Conference in Nairobi, AYGN organized a two-day *International Integrated Workshop on Nuclear Advocacy and Communication*, an activity within the framework of the EU-funded project, implemented by ISTC, entitled *Support to Southern African States in Nuclear Safety and Safeguards*. The workshop gathered over 100 university students, young researchers and industry professionals from a dozen African countries in Nairobi. Interactive discussions among them covered a wide range of topics from communicating the benefits of nuclear science and technology and nuclear risk and crisis communication, to opportunities and challenges for nuclear in Africa.

In August 2018, African YGN carried out yet another successful conference, in Lusaka, Zambia, on *Enhancing Africa’s capacity on Nuclear Safety, Security and Safeguard in SADC countries*, with over 100 participants from seven African countries. It is worth to note that at the closure of this conference, AYGN adopted its first ever Position Statement containing a commitment for advocacy of the “Triple S” approach. AYGN, through the Innovation Officer of *the International Youth Nuclear Congress (IYNC)*, presented the idea of *Innovation for Nuclear (I4N)*, that later became one of the IYNC main missions. To bolster AYGN advocacy efforts, the Zambian chapter was formally launched, while a group of women participants contemplated the setup of the African chapter of “*Women in Nuclear*”.

Another memorable episode in the ISTC – AYGN dialogue took place during the working visit of the ISTC Management to South Africa in July 2019, when ISTC senior officials met young leaders from *AYGN and the South Africa Young Nuclear Professionals Society (SAYNPS)*. The ISTC Management were impressed by the efforts of the young professionals to promote peaceful, safe, and secure uses of nuclear science and technology in Africa.

This probably became one of the reasons for ISTC to accept the invitation to support and participate in the Second African Nuclear Youth Summit, in October 2019, in Centurion, South Africa, under the theme: “*Unlocking the Potential of Nuclear Science and Technology Applications*”

in Africa". The summit brought together young experts from across the African continent to share knowledge and perspectives on various nuclear applications, including in medicine, agriculture, water management, and environmental protection.

Later, in March 2021, ISTC welcomed and contributed to the AFCONE – AYGN webinar: *Capacity Building for Safe and Secure Development in Africa of Peaceful Uses of Nuclear Energy, including Nuclear Power*.

The record of achievements of the ISTC – AYGN partnership that I referred to, though not exhaustive, speaks for itself. It illustrates the intensity of the collaboration, its purposes and main areas of common interest. We share a lot of AYGN objectives and successfully work together to achieve them.

In line with its new ISTC Continuation Agreement and the guidelines on the transition, defined by the ISTC State Parties, the Center proved to be well pre-disposed to cooperate with AYGN and its national chapters, which are committed to ensuring the youth engagement within the nuclear sector, and that are seeking professional opportunities for careers, networking and development. At ISTC we are convinced that the young generation is capable to ensure effective, safe and secure peaceful nuclear applications in Africa, pursuing excellence in education and training, and in research and development.

ISTC's mission is to advance global peace and prosperity through cooperative CBRN risk mitigation by supporting civilian science and technology partnerships that address global security threats and advance non-proliferation. This assignment implies that we are focused on the security-development nexus, by seeking to advance cooperation in the nuclear sector in Africa, while remaining mindful of the need for a higher level of nuclear safety and security culture, in the general and comprehensive meaning of the term.

The ISTC emphasis on international standards for safety, security, and financial responsibility also provides a lower-risk framework for investment. As an intergovernmental organization, with strict oversight by all Parties, the ISTC provides confidence-building assurances along with flexible, efficient, and cost-effective mechanisms for scientific engagement. There exists abundant statistical evidence of our performance, whereby ISTC has worked with hundreds of

Institutes and thousands of scientists and practitioners, handling almost 1.2 billion dollars for over 4,200 funded projects and activities.

ISTC facilitates interactions between scientists and practitioners with their global counterparts, aiming at the integration of such experts into global scientific and economic communities through national, regional, and international research collaboration. That is one reason why we have been and intend to remain ready to assist the AYGN members. The other is that we also work to bridge the generation gap and to ensure a smooth transfer of experience among colleagues of various age categories through knowledge management and training. I guess in AYGN phraseology the process should be described as *“relaying the baton from the afternoon generation to the morning generation”*.

One of the remarkable features of ISTC’s transition is the accession of new State Parties from Africa to the organization. Kenya will join our membership, which thus far comprises: Armenia, the European Union, Georgia, Japan, Kazakhstan, the Republic of Korea, the Kyrgyz Republic, Norway, Tajikistan, and the United States. We hope other African countries will follow. With or without membership, mechanisms for participation have permitted citizens from over 30 African countries to participate in ISTC activities.

Much of what I spoke about explains why today we are present at the 3rd African Youth Nuclear Summit, convened under the motto *“Defining Africa’s Agenda 2063”*. We feel it right and necessary to attend and support the forum of young people and professionals across the continent, from academia, nuclear research institutions, nuclear service providers, prospective and current operators as well as regulators, to exchange ideas and network on matters related to nuclear science and technology.

The topic - *The impact of nuclear science and technology applications on economic recovery in Africa post COVID-19 pandemic* – reflects the urgency of dealing with the consequences of the pandemic and the importance of shared efforts towards the advancement of science, public health, and medicine, in order to address the threat of infectious diseases.

The narrowly focused approach to the theme will reflect the role nuclear applications play and will continue to play in overcoming the virus through targeted programming and material

assistance. Nuclear medicine technology will no doubt remain also essential for cancer treatment, diagnostic imaging, and radiation therapy.

However, economic recovery implies much broader interpretation of the theme.

It evokes the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs). The use of nuclear and isotopic techniques may contribute directly to attaining 9 of them. Some SDGs are specifically relevant, such as SDG 7: *Ensure access to affordable, reliable, sustainable and modern energy for all*; and SDG 13: *Take urgent action to combat climate change and its impacts*. The latter objective is particularly relevant on the eve of the COP26 Climate Summit in Glasgow next week.

In the extensive discussions ahead of that summit, most experts have agreed that combating climate change would be difficult without the expansion of nuclear energy. Recently, the IAEA released its special report *Nuclear Energy for a Net Zero World*. It highlights nuclear power's critical role in achieving the goals of the Paris Agreement, by displacing coal and other fossil fuels, enabling the further deployment of renewable energy and becoming an economical source for large amounts of clean hydrogen. In the report, John Kerry, the US Special Presidential Envoy for Climate, wrote: *"The global clean energy transition will require deploying, at massive scale, the full range of clean energy technologies, including nuclear energy, over the next decade and beyond."* I believe this is a thought-provoking statement.

In conclusion, I would like to say that the theme of the 3rd African Nuclear Youth Summit is challenging, and it requires thorough analysis through a large selection of indicators across the economic, environmental and social dimensions. But I am sure AYGN members, panelists and audience alike, will be equal to the task. At ISTC we know from experience that AYGN always rises to the challenge.

Thank you.