



High-Level Political Forum Side Event:

Adaptation Mitigation and Monitoring: Innovative Science-based Climate Action Solutions

13:15 – 14:30, 8 July 2024, Conference Room 3, United Nations Headquarters, New York

1. Background and Objectives

On 8 July on the occasion of the 2024 High-Level Political Forum on Sustainable Development (HLPF), the International Atomic Energy Agency (IAEA), the International Telecommunication Union (ITU), the United Nations Office for South-South Cooperation (UNOSSC), the Permanent Mission of Namibia to the United Nations and the Permanent Mission of the United States to the United Nations hosted at a side event on Adaptation Mitigation and Monitoring: Innovative Science-based Climate Action Solutions.

Science and technology, including nuclear science and its applications, can contribute to addressing global crises and play a key role in countries' climate adaptation and mitigation efforts. Due to the urgency of climate action needs, countries should consider all available technologies to progress toward achieving SDG 13 and bolster their efforts through regional and international partnerships.

The side event highlighted the critical role played by science-based data in decision-making, helping Member States make progress toward achieving SDG 13, 'Climate Action,' through climate adaptation, mitigation, and monitoring actions. Member States from different regions of the world and UN Agencies shared experiences and concrete examples of how integrating science and technology with South-South Cooperation mechanisms can bring together complementary methods and technologies to accelerate progress toward the achievement of SDG 13.

2. Summary of Discussions

Moderator: H.E. Ambassador Vivian Okeke, IAEA

- Welcomed speakers and participants.
- Emphasized the importance of collaboration for achieving the Sustainable Development Goals (SDGs).



Opening Remarks

Mr. Hua Liu, Deputy Director General, IAEA

- Welcomed participants and thanks co-organizers for the collaborative efforts towards this important agenda.
- Highlighted IAEA's range of initiatives aimed at the achievement of SDG 13 on Climate Action, and the support the IAEA has provides to countries, including through South-South and triangular cooperation.
- Highlighted the South-South and triangular cooperation modality as a key mechanism for facilitating knowledge sharing, partnerships, and solution replication on all SDGs.
- Mentioned the current partnership among IAEA and UNOSSC, and highlighted the joint publication the two organizations are currently working on.
- Explained how nuclear science and technology contribute to SDG 13, from groundwater management to low-carbon energy solutions.
- Highlighted the importance of democratizing access to these solutions, including through initiatives such as UNOSSC's South-South Galaxy platform.

H.E. Ambassador Geng Shuang, People's Republic of China

- Thanked organizers and acknowledged climate change as humanity's greatest challenge, with the potential of affecting the achievement of all SDGs.
- Highlighted China's sustained efforts in not only raising awareness of the importance of climate action, but also in becoming a pioneer in the development of green technologies which support the achievement of climate goals.
- Stressed the importance of multilateralism for climate action, and of the United Nations as a convener and a forum for collaborative action.
- Emphasized China's commitment to a green, low-carbon transition and international cooperation based on innovation, collaboration, and technology.
- Noted China's leadership in electric vehicles, solar, wind and hydropower, as well as nuclear energy.
- Highlighted China's engagement in South-South cooperation towards a green transition, mentioning a solar power initiative with the United Arab Emirates, and a wind power development project in Pakistan.
- Reaffirmed China's ambitions carbon neutrality goal and support for COP29.



Panel Discussion

Ms. Dima Al-Khatib, Director, UNOSSC

- Highlighted South-South and triangular cooperation as a key enabler of climate action, serving as a means for developing, testing, implementing, monitoring, and evaluating science-based climate solutions, and disseminating good practices.
- Emphasized the importance of knowledge and technology exchanges in facilitating the adaptation of innovative approaches into context-specific and sustainable climate solutions.
- Highlighted the role of inclusive partnerships in allowing a more diverse set of perspectives to be heard, translating into more effective policies and development strategies.
- Mentioned UNOSSC's role as a broker of knowledge and partnerships, and the role of digital platforms such as South-South Galaxy, the South-South and Triangular Cooperation Solutions Lab and the South-South Global Thinkers in eliminating barriers to entry and facilitating virtual collaboration, knowledge production and exchange, and access, visualization and analysis of data. She also mentioned the South-South Development Expo.

H.E. Ambassador Neville Gertze, Namibia

- Highlighted environmental constraints faced by arid countries such as Namibia. These constraints are being exacerbated by climate change, producing compounding challenges to water management, agricultural production and food security.
- Since 2009, partnerships with IAEA have supported enhancements to Namibia's agricultural capacities. The partnership has supported the development of improved seed varieties, drought- and disease-tolerant crops, ensuring steady increases in agricultural outputs and improving food and nutrition security.
- Highlighted Namibia's water challenges due to prolonged droughts and collaboration with IAEA for small-scale drip irrigation systems and soil monitoring, which supported a 30-40% reduction in water use for irrigation while increasing yields.
- Highlighted the importance capacity-building efforts, including training technicians, in achieving positive results, and improving the resilience of arid regions and their populations to the effects of climate change.

Mr. Hua Liu, Deputy Director General, IAEA

- Discussed innovative tools for measuring soil moisture and monitoring glacier retreat.
- Highlighted IAEA's support to projects using isotope hydrology technology for mapping and tracking shared water resources and providing accurate real-time data in the Sahel.



- 30 to 40% reduction in water use for irrigation.
- Use of solar panels.
- Other techniques for improving soil production.
- Improve crop use.

Ms. Ursula Wynhoven, Director and Representative to the United Nations, ITU

- Introduced the Green Digital Action initiative to enhance collaboration and industry-wide solutions to climate change.
- Focused on digital data accessibility and highlighted the upcoming COP 29, COP30, and the Summit of the Future as important spaces for member states and other stakeholders to focus their collective efforts towards climate action and to promote a green and digital transition.

Ms. Dima Al-Khatib, Director, UNOSSC

- Mentioned UNOSSC's role as a convener and broker of solutions and partnerships, and the role of digital platforms in facilitating access to knowledge and data and multiplying their impact.
- Highlighted the current revamp of the South-South Galaxy platform, which offers improved access to South-South and triangular cooperation-relevant data on all SDGs, including a comprehensive portfolio of solutions around SDG 13, integrating diverse technologies and techniques for a holistic approach.

Mr. Hua Liu, Deputy Director General, IAEA

- Highlighted that since 2022 the IAEA and the World Meteorological Organization have been working together on a project to help countries determine the origin of greenhouse gas (GHG) emissions. The project uses stable isotopes to measure the release of GHGs and provide data to decision-makers to help countries take action to reduce emissions.
- Mentioned collaboration examples in the United Arab Emirates on the development of a power plant and the role played by South-South cooperation in facilitating research and technology development with Khalifa University.

Ms. Ursula Wynhoven, Director and Representative to the United Nations, ITU

- Addressed the tech industry's responsibility for 1.4-4% of GHG emissions and the need for enhanced and strategic data collection and transparency to ensure the industry can effectively target interventions to curb its climate impact.
- As the Union's contribution to such data availability and transparency, ITU aims to create a tech GHG emissions open database and set clear standards for emissions.

Open Floor Discussion

H.E. Ambassador Mathu Joyini, South Africa

- Discussed the Nuclear Energy Management School's role in training African experts on nuclear technology, which, as mentioned in the diverse interventions from this panel, can be a key ally towards climate action.
- Beyond climate change, highlighted the diverse health applications of nuclear science, including in the treatment of cancer, radiology, and medical imaging.
- Highlighted the importance of funding other key initiatives and nuclear technology applications, mentioning its potential from malaria control to the prevention of rhino poaching.

H.E. Minister Jesus Enrique G. Garcia, The Philippines

- Presenting a Climate Science youth programme, he highlighted the efforts of the Republic of the Philippines in promoting and facilitating climate science and nature-based solutions, like reforestation and mangrove restoration.
- Mentioned the need to promote the exchange of experiences and good practices in technology transfer for climate action, emphasizing the willingness of the Philippines in collaborating through South-South cooperation.

Closing Remarks

H.E. Ambassador Michele Sison, United States of America

- Underlined the importance of technology, innovation, and collaboration for achieving SDG 13 and congratulated speakers and organizers on the diversity of initiatives and efforts towards climate action.
- Highlighted the United States of America's support for nuclear-related solutions for climate action and resilient food systems.
- Recognized the IAEA's water monitoring laboratory as an important example of collaborative initiatives that contribute to climate action and resilience.
- Highlighted the work of UNOSSC as a complement to the United States' efforts, especially through the United States Agency for International Development (USAID) in promoting collaborative solutions towards the SDGs.
- Thanked IAEA, ITU, UNOSSC and other organizers, as well as all participants in the room, before closing the session.