

Summary of Side Event

Accelerating Innovation in Technology and Policy Mechanisms to Promote Sustainable Energy Development

4 May 2023, [08:30-10:30 New York Time, 20:30-22:30 Beijing Time]

Background on the event

Entering the 21st century, a new round of energy revolution led by solar, wind, hydropower, and other clean energy to accelerate development, is profoundly changing the landscape of the world. Establishing a clean, low-carbon, safe and efficient energy system is a golden key to promote sustainable human progress. Energy is also like a golden link that widely connects the basic elements of sustainable development and profoundly affects the relationship of human-nature, human-human, and human-society. At present, promoting energy transition and sustainable development is still an arduous task. Innovation is the fundamental driving force to address the above three major challenges. Technological innovation can significantly improve the production, distribution and utilization of clean energy and reduce energy costs. Innovation in policy mechanism is crucial to create a favorable policy environment, attract investment and financing in line with clean energy transition, and at the same time coordinate the relationship between clean and traditional energy to achieve a fair, just and inclusive energy transition. GEIDCO (Global Energy Interconnection Development and Cooperation Organization) has conducted research on these issues, and released a report named Towards Sustainable Development at this side event, which co-hosted during the Eighth Multi-stakeholder Forum on science, technology, and innovation for the Sustainable Development Goals (the 2023 STI Forum) with UNDESA, WMO (World Meteorological Organization), and SDSN (Sustainable Development Solutions Network). At the side event, the guests discussed the content of the report and how to promote sustainable energy development.

Key Issues discussed

1. United Nations 2030 Agenda for Sustainable Development Goals.
2. Ensure access to affordable, reliable, sustainable and modern energy for all(SDG7).
3. Accelerate innovation in technology and policy mechanisms to promote sustainable energy development.
4. "The Road to Sustainable Development", released by GEIDCO, is connect with the implementation of the 2030 Agenda for Sustainable Development.

5. Share ideas, initiatives and concrete practices of different regions and countries regarding energy technology innovation.
6. Share good practices and lessons learned of different regions and countries regarding innovation in energy policy mechanisms, and foster dialogues and exchanges in this regard.

Key recommendations for action

1. In view of the multiple crises facing the world, we need to speed up the progress of SDGs, especially the SDG7 (ensure access to affordable, reliable, sustainable and modern energy for all). We must accelerate fair, inclusive, and equitable energy transition, increase investment in electricity, improve energy utilization efficiency, and enable the world economy to grow sustainably.
2. Since energy is closely linked with issues such as climate change and water shortage, we should give priority to energy transition, focus on future renewable energy, and enhance transition resilience and early warning capabilities. We also need a more scientific and effective monitoring and service system. All countries need to fulfill their emissions reduction commitments, and let energy play a better role in the realization of SDGs.
3. Achieve carbon neutrality by the middle of this century, we need to innovate in both policy and technology.
4. In terms of policy, we should formulate long-term plans in advance, build a zero-carbon energy system, and accelerate the grid interconnection between countries, especially across regions. In terms of technology, we should encourage the application of smart grid, green hydrogen, and nuclear energy, improve the level of electrification in society, and build an energy system dominated by renewable energy.
5. According to the report of Towards Sustainable Development, GEI(Global Energy Interconnection) provides a holistic solution for sustainable development, which will achieve the 17 SDGs in nine areas: speeding up clean energy deployment, expanding power grid interconnection, enhancing the level of electrification, ensuring safe and cost-effective electricity supply, reducing pollution and carbon emissions, enhancing technology and model innovation, promoting industrial development and employment, increasing trade and investment in electricity, and building a platform for international cooperation.
6. Through clean and low-carbon energy transition, GEI will contribute to the realization of 17 Sustainable Development Goals (SDGs) of the 2030 Agenda and provide an effective sustainable development solution for countries worldwide. Persistent innovation in GEI-related key technology, development model and engineering application will be an enabler for energy transition and sustainable development.