DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS

HIGH-LEVEL POLITICAL FORUM ON SUSTAINABLE DEVELOPMENT

SUSTAINABLE WATER & ENERGY SOLUTIONS NETWORK

Side Event – 2024 HLPF

Sustainable, resilient and innovative solutions on water and energy: Reducing poverty, promoting sustainable agriculture and combating climate change

Summary
11 July 2024 – In Person Event

1. On 11 July 2024, UNDESA held an event aimed at fostering the exchange and dissemination of knowledge and experiences on integrated and sustainable water and energy solutions. Aligning with the objectives of the Global Network on Sustainable Water and Energy Solutions, the gathering brought together a diverse group of stakeholders to discuss and showcase effective initiatives addressing the water-energy nexus across different world regions.

2. The event was inaugurated by the secretariat and moderated by **Ms. Sara Castro de Hallgreen**, *Sustainable Development Officer, UNOSD*. Ms. Castro de Hallgreen provided opening remarks and introduced an expert panel comprising eight representatives from Member States, public, private, and nonprofit organizations, as well as international organizations and academia. The discussions centered around sustainable water and energy solutions aimed at supporting poverty reduction, sustainable agriculture, and climate change mitigation and adaptation.

3. **Mr. Raul Alfaro Pelico**, *Director, Knowledge, Policy and Finance Center, IRENA* emphasized the interconnectedness of water, food, and energy resources, highlighting how climate change complicates securing these requirements to achieve sustainable development. He underscored the transformative potential of renewable energy, such as solar power and bioenergy, in enhancing agricultural productivity and improving water quality. He cited examples from India and Rwanda, demonstrating how solar irrigation systems boosted farmers' incomes and crop yields, directly benefiting communities. Additionally, Mr. Pelico discussed renewable energy's role in desalination technologies for water-scarce regions and stressed the importance of water-saving measures in green hydrogen production in high water stress areas.

4. **Mr. Vijay Modi**, *Professor, Columbia University,* focused on the complexities of implementing renewable energy solutions, emphasizing that water issues require localized, non-cookie-cutter approaches. He highlighted the need for decentralized power in communities, citing examples from Zambia where irrigated plots significantly enhance livelihoods but face challenges in scalability due to limited water sources and small land holdings. He pointed out the importance of clustering farmers to optimize power use and leveraging social capital for better resource management. Mr. Modi also discussed the potential of solar irrigation in regions like Senegal and Ethiopia, stressing the need for integrated efforts across different ministries and the effectiveness of using local talent for data collection to address water challenges.

5. **Ms. Andrea Bolaños**, *Sustainability Director – ASAZGUA, UNALA*, highlighted their organization's efforts in promoting sustainable practices within the Latin American sugar industry. She emphasized their focus on efficient resource use, including water management and clean energy production from sugarcane biomass. ASAZGUA's programs contribute significantly to economic development through job creation and social initiatives like empowering women in rural communities. They also prioritize environmental sustainability, having planted millions of trees and implemented technologies to reduce water usage and improve soil health. Ms. Bolaños underscored their commitment to the UN Sustainable Development Goals (SDGs), particularly in sustainable agriculture, clean energy, and environmental conservation, demonstrating the sector's crucial role in regional development and global sustainability efforts.

6. **Mr. David Villareal**, *Climate Change and Alliances Lead, Iberdrola, Spain*, highlighted Iberdrola's global role in electricity production, distribution, and retail, emphasizing a commitment to sustainability and renewable energies. He underscored the urgency of addressing climate change, pollution, biodiversity loss, and energy security by transitioning away from fossil fuels. Mr. Villareal discussed technological advancements in renewable energy, such as wind and solar power, and highlighted the economic and social benefits of transitioning to renewables, including job creation and industry growth. He emphasized the importance of supportive policies, investment acceleration, and collaboration across sectors and stakeholders to achieve a sustainable energy future.

7. **Ms. Laura Paterson**, *Representative and Coordinator to the UN and Other International Organizations in North America, WMO,* underscored the critical role of weather, climate, and water data in global decision-making. As a UN agency, WMO coordinates international efforts to gather and disseminate meteorological data, crucial for everything from daily weather forecasts to informing sustainable energy decisions and disaster management. Ms. Paterson highlighted challenges in data access, particularly in developing countries, where capacity gaps hinder effective dissemination to vulnerable communities. She emphasized WMO's support for projects like sustainable energy systems in South Africa, integrating weather data to optimize resource allocation and job creation. WMO's broader efforts include policy development for climate resilience and enhancing global coordination to ensure that weather and climate information reaches decision-makers worldwide. She underscored the importance of collaborative, community-focused approaches in achieving sustainable development goals.

8. **Mr. David Peral**, *ESG Analyst, Canal de Isabel II, Comunidad de Madrid, Spain,* noted that Canal de Isabel II is the biggest public water company serving the Madrid region and plays a pivotal role in managing the entire water cycle locally. Celebrating 174 years of service, Canal de Isabell II supplies water to 179 municipalities and manages wastewater recycling, emphasizing their contribution to sustainability through efficient water use and climate action. The company aims to produce as much energy as it consumes by 2030, utilizing renewable sources like solar energy and biogas. Their social initiatives include support for vulnerable populations with reduced water tariffs, promoting responsible water consumption. Mr. Peral mentioned that efforts also extend to sustainable urban drainage

systems and promoting the use of recycled water for non-potable purposes, significantly reducing strain on drinking water resources. They address climate challenges through innovative water management strategies, including adapting to reduced rainfall and increasing population demands. Their commitment to SDGs 1 (No Poverty) and 13 (Climate Action) underscores their comprehensive approach to sustainable water management and community welfare in the Madrid region.

9. **Mr. Gustavo Paredes**, *International Representative, ICC, Guatemala,* emphasized the crucial role of collaboration in addressing climate change across Central America. His organization, a nonprofit, works closely with the private sector and governments to implement projects focusing on mitigation and adaptation strategies. Highlighting the unique challenges faced by Central America, he stressed the importance of integrating climate action into broader agendas such as biodiversity conservation and sustainable agriculture. ICC facilitates partnerships between sectors to ensure holistic approaches to climate resilience, emphasizing community needs and local contexts. Their initiatives span afforestation, disaster risk management, and sustainable water and land use, aiming to empower communities and enhance environmental sustainability. Mr. Paredes emphasized the necessity of aligning efforts across stakeholders to effectively tackle climate challenges in the region.

10. **Mr. Miquel Muñoz Cabré**, *Senior Scientist, SEI,* discussed the severe water, energy, and poverty challenges facing indigenous Wayuu communities in La Guajira, northern South America. He highlighted the region's extreme poverty and the critical scarcity of basic resources such as water and energy. Despite abundant wind resources, access to water remains a significant issue, relying on sporadic rainfall and expensive water trucking. He detailed successful initiatives involving a wind farm and a solar PV desalination plant which provides sustainable water access through community-led governance, addressing local issues of trust and cooperation effectively.

11. **Ms. Castro de Hallgreen** provided closing remarks and encouraged participants to continue engaging in further dialogue, cooperation and networking that support the development and implementation of sustainable water and energy solutions critical to reaching the objectives of the other SDGs on poverty reduction, sustainable agriculture and climate change mitigation and adaptation.

Annex I – Agenda
Sustainable, resilient and innovative solutions on water and energy:
Reducing poverty, promoting sustainable agriculture and combating climate change
11 July 2024 (13:15 - 14:45) New York Time

Agenda

Moderator: Ms. Sara Castro de Hallgren, Sustainable Development Officer, **UNOSD**
• Mr. Raul Alfaro Pelico, Director, Knowledge, Policy and Finance Center, **IRENA** • Mr. Vijay Modi, Professor, **Columbia University** • Ms. Andrea Bolaños, Sustainability Director-ASAZGUA**, UNALA** • Mr. David Villareal, Climate Change and Alliances Lead, **Iberdrola, Spain** • Ms. Laura Paterson, Representative and Coordinator to the UN and Other International Organizations in North America, **WMO** • Mr. David Peral, ESG Analyst, **Canal de Isabel II,** Comunidad de Madrid**, Spain** • Mr. Gustavo Paredes**,** International Representative, **ICC, Guatemala** • Mr. Miquel Muñoz Cabré, Senior Scientist, **SEI**
Discussion and Questions