

**Draft Summary**  
**2019 HLPF Side Event**  
**Scaling Up Climate Action through Integrated Water and Energy Solutions:**  
**Delivering on the Paris Agreement and the 2030 Agenda**  
**15 July 2019**

**Opening Segment**

**DESA**

1. Mr. Minoru Takada (Team Leader, Division for Sustainable Development Goals, DESA) opened the event by welcoming all the participants and thanking the co-host organizations, ITAIPU and the Mission of Spain to the UN. He explained that after four years of implementation of the 2030 Agenda, there is the urgent need to take stronger action on the SDGs and that integrated approaches on water and energy will help to scale up action on climate change.
2. Ms. Bertha Rocafort, (Director of Administration, Cervantes Institute) welcomed everyone to this second-year water and energy event at the Institute.

**Opening Remarks**

**Spain**

3. Ms. Cristina Gallach, (High Commissioner for the 2030 Agenda, Spain) expressed her concern for a more accelerated and effective effort to the global implementation of the 2030 Agenda. She indicated that Spain is pleased to sponsor integrated water and energy solutions that support sustainable development. She explained that water, energy and climate change are major priorities for Spain and that Spain is aiming to generate 70% of its electricity from renewable energy by 2030 and 100% by 2050. She thanked ITAIPU for its leading effort on integrated sustainable water and energy solutions.

**ITAIPU Binacional**

4. Mr. Jose Alberto Alderete (Director-General, ITAIPU Binacional Paraguay) welcomed participants including the Director General of ITAIPU Brazil, Mr. Joaquim Silva e Luna, and the Ambassador of Paraguay to the UN, Mr. Julio Arriola. He highlighted the importance of ITAIPU as a unique world example of successful binational cooperation. He explained that through many years the Parana River has united the countries of Brazil and Paraguay instead of keeping them apart and that ITAIPU has been a major source of prosperity for the region. He expressed great appreciation for the innovative partnership between UNDESA and ITAIPU which promotes sustainable water and energy solutions representing a major global effort to share best experiences and practices and relevant knowledge. ITAIPU has been implementing a comprehensive approach to sustainable development since its beginnings generating clean and reliable electricity while addressing economic growth, social well-being and environmental protection for the region. He emphasized the key role that the private sector plays in issues related to water, energy and climate change and that tackling these issues in a sustainable manner represent opportunities for job creation and for moving towards a green economy. He concluded his remarks by indicating that ITAIPU is committed to support the 2030 Agenda and the Paris Agreement.

## **Panel Presentations**

### **ESCWA (Moderator)**

5. Ms. Roula Majdalani (Director, Sustainable Development Policy Division, ESCWA), acting as the Moderator of this Panel, introduced the panelists and expressed her appreciation for the creation of the Sustainable Water and Energy Solutions partnership and network. The theme is extremely relevant, especially because of the strong interlinkage to climate change mitigation and adaptation.

### **The Netherlands**

6. Mr. Henk Ovink (Special Envoy for International Water Affairs, the Netherlands) stressed the importance of worldwide collaboration on water, energy and climate change. In relation to water, critical issues for the future are recycling, reusing, increasing efficiency and desalination. Energy plays a critical role in these processes. In relation to hydropower, he indicated that infrastructures of the past continue to create challenges in the present and in the future. He recommended to consider three major issues while formulating sustainable solutions: (1) the complexity of these factors and the need to follow an integrated approach, (2) the need to consider the value of water in all its dimensions, and (3) the need for proper governance, management and collaboration.

### **International Hydropower Association**

7. Mr. Richard Taylor (Chief Executive Officer, International Hydropower Association) provided reflections about the Global Hydropower Conference that took place in Paris in May 2019 with participation of 77 countries and over 300 organizations. He discussed the role of hydropower in helping to minimize the variability resulting from the use of other renewable energy sources in electricity generation. He further explained that many hydropower plants will need modernization and updating in the future and that about \$190 billion investment is expected in 2019 in hydropower projects worldwide.

### **ITAIPU Binacional**

8. Mr. Ariel Scheffer da Silva (Head of Environmental Management, ITAIPU Binacional, Brazil) described the integrated approach used by ITAIPU Binacional with respect to water, energy, climate change and sustainable development. He indicated that ITAIPU's mission includes sustainable development in its social, economic and environmental dimensions. The approach followed by ITAIPU is at a macro level in which many activities are conducted in an interrelated fashion taking into consideration all the stakeholders of the region. He spoke about the structural and functional resilience with respect to climate change. He further commented on the comprehensive programmes of water related activities, the trinational biodiversity corridors, the monitoring stations and the territorial management programme.

### **SPAIN**

9. Mr. Manuel Menendez (Water General Director, Ministry of Ecological Transition, Spain) indicated that Spain depends on hydropower for about 16% of its electricity capacity and that hydro storage represents an important fraction of its capacity. He stressed that for Spain water is a critical factor and that climate change scenarios indicate a possible 20 to 40%

reduction on water availability in the future. Desalination is already playing an important role, with about 675 cubic meters of annual production, although its future growth is limited due to cost and distribution challenges. He spoke about a good example of an integrated water and energy project (Chira-Soria) in the Canary Islands that is using wind and solar energy for the production of water using desalination techniques. The system uses the excess electricity from solar and wind to pump water to an upper reservoir further allowing hydro storage power.

### **US Department of Energy**

10. Ms. Diana Bauer (Senior Technical Manager for Strategy, US Department of Energy) described the Water Security Grand Challenge programme of the US Department of Energy. She listed five major priority areas for the programme: (1) desalination technologies, (2) recycling wastewater from energy systems, (3) reducing water impacts from thermoelectric plants, (4) water recovery from municipal wastewater, and (4) modular water-energy systems for multiple applications. She stressed that the programme supports investment in R&D and that a major result from the programme is the creation of a water-energy desalination hub in the future.

### **Guatemala**

11. Mr. Alex Guerra (Director, Climate Change Research Institute, Guatemala) explained that in Guatemala about 15% of the electricity is generated from biomass almost entirely produced from sugarcane. The electricity is generated using the bagasse from sugarcane avoiding over 4 million tons of CO<sub>2</sub> emissions. He indicated that the efficiency of this process has doubled and that the carbon footprint from the electricity generated by the sugar industry in Guatemala has decreased dramatically. He stressed that the process is also becoming a lot more efficient in relation to water use due to innovative irrigation techniques including the use of wastewater from mills. He concluded by talking about the Guatemala's programme on Green Infrastructure and Integrated Watershed Management Actions in the Pacific Basin of Guatemala.

### **UNICEF**

12. Ms. Rakshya Rajyashwori Thapa (Energy and Climate Specialist, UNICEF) explained that over 780 million people still lack basic drinking water services and that by 2040 one in four children will live in areas of extremely high-water stress. She emphasized the many negative impacts of climate change particularly in children. She identified three major programmes being conducted by UNICEF in this regard: (1) Climate Resilient WASH Services, (2) Sustainable energy and disaster risk reduction in health centers, and (3) Disaster risk reduction and sustainable energy in schools. She further discussed specific programmes and projects including the Global Solar Water Pumping Programme being implemented in over 35 countries many of them in Africa. Another important project is the Solar Photovoltaic Desalination project in the Gaza Strip and the Multi Use Water Systems programme that ensures most efficient water uses improving resilience against droughts and with innovative uses of renewable energy. The programme is being implemented in countries such as Jordan, Madagascar, Ethiopia, Maritania and the Pacific Islands.