

#### Virtual Event

# Sustainable Water and Energy Solutions Addressing Climate Change during the Decade of Action

# **Summary** 12 July 2021

- 1. On Monday, July 12, 2021, the Sustainable Water and Energy Solutions Network held the Sustainable Water and Energy Solutions Addressing Climate Change during the Decade of Action event. Energy and water are intertwined resources that affect the daily lives of people across the globe. As such, sustainable, affordable energy and water are important goals for government worldwide. However, the challenges faced to obtain these resources hinges on poverty eradication, global prosperity, and economic growth. In the wake of the COVID-19 pandemic the relationship between water, energy, and climate has become increasingly evident. The Sustainable Water and Energy Solutions Network seeks to create a world in which every person has access to clean water and energy with sustainable management. With this, the network and its partners call for integrated approaches to and international cooperation to achieve this goal within the 2030 Agenda for Sustainable Development. The main objectives for this event were to launch a synthesis report on Sustainable Water and Energy Solutions, showcase experiences and innovative integrated water and energy systems, disseminate knowledge, and discuss effective actions to satisfy SDGs 6, 7, and 13.
- 2. Opening remarks: **Minister Alberto Esteban Caballero Gennari**, *DPR Paraguay Mission to the UN*, introduced the event. He recognized the distinguished members taking part in this discourse and stated Paraguay's dedication and Itaipu commitment to sustainable water and energy solutions. Mr. Caballero then congratulated DESA on its initiatives regarding sustainable water and energy and gave the floor to Mr. Minoru Takada, Team Leader, Sustainable Energy, UNDESA, who introduced the moderator, Mr. Manuel Menéndez Prieto.
- 3. Moderator: **Mr. Manuel Menéndez Prieto**, Special Advisor, Cabinet of the Secretary of State for the Environment, Ministry for the Ecological Transition and the Demographic Challenge, Spain; and Vice-President, UNESCO Intergovernmental Hydrological Programme

- 4. Launching session: **Mr. Ivan Vera**, *Senior Advisor*, *Sustainable Water and Energy Solutions Network*, *UNDESA*, presented a summary of a report on "*Sustainable Water and Energy Solutions addressing Climate Change*". The presentation focused on the interrelationship between water, energy, and climate. It described innovative technological solutions to creating and disseminating clean, affordable energy. The summary also noted that these solutions are in relation to the 6<sup>th</sup>, 7<sup>th</sup>, and 13<sup>th</sup> Sustainable Development Goals, as well as systems using water for energy. Mr. Vera also went over multiple solutions including, green hydrogen, desalination using renewable energy and offshore wind. The presentation ended with emphasizing leaving no one behind. Distributed systems and micro-grids can assist with providing poorest segments with necessary energy and water solutions.
- 5. **Ms. Maria Eugenia Alderete Corvalán,** *Environmental Engineer, International Center for Hydroinformatics, Itaipu Binancional, Paraguay.* Ms. Corvalán presented Itaipu's efforts towards sustainable energy through multiple endeavors. In the 70's Itaipu began replanting trees in an effort to restore the forest ecosystem, leading to the founding of a tree nursery. Currently, the company has planted over 26 million trees. In addition, Itaipu monitors climate variability and greenhouse gas emissions to streamline their processes and increase sustainability.
- 6. **Mr. Alex Guerra**, *General Director*, *Private Institute for Climate Change Research*, *ICC*, *Guatemala*. Mr. Guerra spoke on the importance of sugarcane to Guatemala as its main form of bioenergy. Approximately 15% of electricity in Guatemala is generated from sugarcane biomass. As such, Mr. Guerra noted that the country needs to focus on eco-friendly cultivation and harvesting, including efficient irrigation systems, electrification of irrigation, forest restoration, and harvesting without the use of fire. It was also noted that ICC seeks to educate citizens through workshops and programs. To date ICC has hosted more than 900 events reaching over 50,000 people.
- 7. **Mr. Oliver Hillel**, *Programme Officer*, *Secretariat of the Convention on Biological Diversity*. Mr. Hillel urged attendees to consider using nature as the basis of energy. The solutions to the problems facing our environment are likely not going to be man-made. Rather, we must use nature to cure nature. Furthermore, existing manmade technological solutions require the management of nature to effectively reduce harm to the environment. Mr. Hillel also referenced the Edinburgh process, a declaration that calls on governments to take substantial action on global biodiversity.
- 8. **Mr. David Peral Pozo**, *Sustainability Analyst, Canal de Isabel II, Comunidad de Madrid, Spain*. Mr. Peral detailed the Canal de Isabel's compliance with SDGs 6, 7, 13 and 15. The Canal has installed several energy solutions to efficiently treat and disseminate water in the region. Mr. Peral noted that increased population leads to increased water consumption, but Madrid experienced a downturn in water availability in 2005. The company tackled the problem through regenerated water production,

communication campaigns, water tariffs, and other techniques. The Canal group recycles 134 hm3 of water, while the communication campaigns educate the masses on water conservation. Furthermore, smart-metering has been implemented to ensure families have the ability to track water usage, detect leaks, and increase efficiency. The group has also taken on the task of restoring La Alberca dam. The project aspires to protect bats and amphibians, maintain the dam's gallery, reuse construction materials, and recover vegetation for various species.

- 9. Open discussion: Mr. Menéndez Prieto opened the floor to discussing posing the question on what the greatest challenges are to achieve an integrated and effective management of water and energy. The panelists agreed that financing, Governance, Training and education must come together to support the sustainable integration of water and energy solutions. Mr. Ivan Vera stressed the importance of governance and fostering communication between countries, states, and local governments. Also, education and awareness are necessary to avoid negative tradeoffs between water and energy. Mr. Hillel once again emphasized transforming our processes to work with nature.
- 10. Closing remarks: **Ambassador João Genésio de Almeida**, *DPR Brazil Mission to the UN*, thanked all the participants for a very interesting event. He further emphasized the need to continue working following an integrated approach on water, energy and climate change. He acknowledged the contribution of Itaipu in this field and he thanked the organizers of the event.

### Annex I – Agenda

# Sustainable Water and Energy Solutions Addressing Climate Change during the Decade of Action

12 July 2021 (7:30 – 9:00) New York Time

Total time: 90 minutes

10 minutes	Master of Ceremonies
10 minutes	
	Mr. Minoru Takada, Team leader, Sustainable Energy, Division for  Sustainable Daysland Contact LINDESA
	Sustainable Development Goals, UNDESA
	Moderator
	• Mr. Manuel Menéndez Prieto, Special Advisor, Cabinet of the
	Secretary of State for the Environment, Ministry for the Ecological
	Transition and the Demographic Challenge, Spain; and Vice-
	President, UNESCO Intergovernmental Hydrological Programme
	Opening Remarks
	Minister Alberto Esteban Caballero Gennari, Deputy Permanent
	Representative, Permanent Mission of Paraguay to the United
	Nations
60 minutes	Launching Session
	Mr. Ivan Vera, Senior Advisor, Sustainable Water and Energy Solutions Network, UNDESA
	Panel Presentations
	Ms. Maria Eugenia Alderete Corvalán, Environmental
	Engineer, International Center for Hydroinformatics, Itaipu Binancional, Paraguay
	• Mr. Alex Guerra, General Director, Private Institute for Climate Change Research, ICC, Guatemala
	Mr. Oliver Hillel, Programme Officer, Secretariat of the
	Convention on Biological Diversity
	• Mr. David Peral Pozo, Sustainability Analyst, Canal de Isabel II, Comunidad de Madrid, Spain
15 minutes	Discussion and Questions
5 minutes	Closing Remarks
	Ambassador João Genésio de Almeida, Deputy Permanent
	Representative, Permanent Mission of Brazil to the United Nations