Interactive Dialogue 2 "Water for Sustainable Development" Statement
by Dr. Yongdeok Cho, Secretary General of Asia Water Council (AWC)

2 questions for Dr. Cho for his statement to be delivered during his intervention

Q1. Having observed the "scarcer" water around the globe and increasing mandate for WEFE (water-energy-food-ecosystem) Nexus, it is utmost important to engage stakeholders across various sectors and areas. Given this said, how does one develop mechanisms for multi-stakeholder engagement, and how do we co-generate solutions for water scarcity?

A1.

I would humbly like to stress that we, here I mean the stakeholders from all the relevant sectors, truly need to understand (1) how every drop is spent and (2) who and where demands this every drop, and this will have to be regional, understanding the very essence of integrated water resources management.

In order for the effective management of the shared resource in the frame of WEFE nexus, we need for inclusive multi-stakeholder platforms, where actors from different sectors can disseminate data and information, co-monitor supply and demand, and develop innovative solutions jointly to the issues around the scarce water and increasing demand.

Coming back to the regional aspect, Asia and the Pacific clearly is experiencing the problem of WEFE nexus, as vast fraction of the region is agriculture-intensive, where rapid industrialization and population growth are maximizing the demands for water in more diverse sectors.

By 2030, around 55% of the population in the region will be living in the cities and this will increase water demand for urban water supply and resilience, energy and food production, while causing water quality and sanitation problems.

Recognizing this water problems in the region, Asia Water Council (AWC) was established in 2016 after the 7th World Water Forum to solve Asian water problems. AWC has the two main pillars, which are (1) to spread water agendas of Asia to the world, and (2) to identify tangible solutions for the shared water issues through its Water Projects. It is the stakeholder mechanism for water, looking closely into the aspects of the nexus, not simply sharing agendas and make statements, but also to develop answers that can be implemented locally to address the balanced demands across sectors and to apply innovation.

AWC focuses on the "complexity" among the variables around water issues in order to solve the problems. The Water Project emphasizes the regional sense, receiving proposals from the member countries and develop concept papers for solutions by water experts and AWC members embracing this complexity. Since 2016, there have been 24 projects implemented by AWC, and many of them had been successfully developed into tangible projects such as ODA and cooperative projects with international organizations.

In this regard, I would like to call for development of a mechanism, where we can invite all stakeholders in the decision-making system, where they can gather to discuss agendas and the tangible implementations for such agendas and can put them in place altogether.

Q2. We understand that making the sectors less "water-intensive" could be one of the key solutions for water scarcity. How do you see the possible ways for decreasing water intensity in the sectors, and how could we further promote the sectors to be less water-intensive?

A2.

Achieving the balance and making less "water-intensive" across the sectors involved in WEFE Nexus are the key to resolve global challenges that we face today.

One of the essential aspects to achieve less water intensity is innovation. Application of innovative technologies and solutions to balance water demands will help to achieve effectively the stress from water scarcity.

Looking closely into the energy sector, generation of renewable energy is crucial for the global transition to a low-carbon economy in addressing the climate challenges. However, we understand that several forms of renewable energy require significant amount of water. Moreover, there is a dilemma between clean and cheap energy production and resources availability for water supply with good quality. That is, the traditional hydropower generation creates conflict and dilemma for securing water resources for discharge and also for stable water supply services. And water discharge for hydropower generation will also affect the natural flow of rivers, creating possible variables for resource availability in the downstream.

In this regard, innovative technologies can help first to collect data and monitor to help the decision-makers in balancing the resources, and second to decrease water demands in the energy sector.

K-water, the presiding organization of AWC, is South Korea's largest hydropower provider, and is leading the country's renewable energy transition of country by increasing floating photovoltaic power and hydrothermal energy.

At the same time, K-water is applying the 4th Industrial Revolution technologies such as AI, Big Data and Digital Twinning in the entire water cycle, to ease the dilemma I mentioned earlier.

Innovation would be difficult to achieve if we solely depend on the voluntary transition of practitioners. We need to build national and regional platforms, which can support the industry to apply innovation, and at the same time, tangible policies, regulations and financial incentives can help the industry to adopt innovative means for sustainable water management.