## REGIONAL PROCESS SESSION DESCRIPTION FORM 2.

## 10TH WORLD WATER FORUM

***This Regional Session Description Form 2 is for the specified program of the session.*** **Please complete this form no later than 10th of March 2024.**

**The Regional session description 1 (online form) is separately requested for the Regional session coordinators to deliver a concise session outline with the contact info and the logistical requests.*

**Regional Session Code and Title:**

RP1

River Basin Management under Changing Climate

**Regional Session Coordinators (Name, Position, Organization, email, mobile number):**

1. Ms. Zhou Zhulin/Division Chief/Changjiang Water Resources Commission/zhouzhulin@hotmail.com/+86 13607177690
2. Ms. Liu Yuan/Program Officer/Changjiang Water Resources Commission/751122878@qq.com/+86 15391555086

**Regional Session Description including objectives and expected outcomes (500 words maximum):**

River basin management is becoming a mainstreamed tool to enhance water security and more effectively respond to climate change, and its broad deployment is enabled and empowered by maturing and innovative technological capabilities such as digital twin, smart water conservancy, early warning, risk assessment and management.

This could be witnessed in China through:

- Much intensified legislative efforts in the last five years, in particular, when the legislators took the first step to stipulate separate laws to strengthen integrated river basin management and water-based ecological integrity for the Yangtze and the Yellow rivers respectively;

- Setting time-bound national action targets to build a national water network by 2035, enabled by smart technologies; and,

- While protection and conservation is adopted as top priority, water resources utilization, governed by laws and regulations and enabled by smart solutions, are expected to be managed and delivered in respect of ecological boundaries and play the due role of enhancing climate resilience.

In Republic of Korea:

- Large dams are rapidly adapting low-carbon green growth by developing eco-friendly renewable energy technologies that use water surface and water temperature, in addition to their traditional role of hydroelectric power generation

- The hydrothermal energy, which uses deep water from the dam reservoir, has a current capacity of about 6,500RT and is expected to reach 1.0 GW by 2030 contributing to energy savings and greenhouse gas reduction as well as create quality jobs in the region and revitalize the around Dam site.

- The floating photovoltaic power generation (FPV) facilities which utilize the huge water surface of the dam without harming environment. The largest FPV facility in South Korea, with a capacity of 41MW and an area equivalent to 65 soccer fields. It began commercial generation at Hapcheon Dam last year after testing for more than 20 years. Particularly, it has been designed to promote local coexistence, tourism, and social value enhancement, such as sharing profits with residents and providing jobs.

And in Japan:

- Following up the Kumamoto Initiative for Water at the 4th Asia-Pacific Water Summit, Japan will proactively contribute to the solution of water-related social issues faced by the Asia-Pacific region by developing "Quality Infrastructure" capitalizing on Japan's advanced technologies.

- Based on the new policy, "River Basin Disaster Resilience and Sustainability by All", related laws were revised to take comprehensive and multilayered actions by all stakeholders. To enhance the action by all stakeholder in each river basin, it is important to share the risk assessments information tailored for each stakeholder and to disseminate lessons learned from past disasters.

- Effective use of existing dams by operational improvement such as preliminary release operation utilizing ensemble rainfall prediction and by renewal and upgrading of dams such as enhancement of discharge facilities and raising the dam height are hybrid technology to implement both climate change adaptation and mitigation measures.

- Reservoir sedimentation management is also important both for reservoir and river basin sustainability by recovering sediment routing system in entire river basins.

This session is designed to create a NE Asia regional platform for key stakeholders and partners to:

1. Share pioneering practices and the cases made in the region in order to scale deployment of smart-tech-enabled river basin management;
2. Convene leading expertise and institutional capability to explore how to overcome hurdles and bridge the gaps next to achieve accelerated deployment of river basin management through partnership and collaboration;
3. Strengthen relevant measures to encourage financing at scale to invest in river-basin projects for enhanced water security and climate resilience.
4. Establish government policies such as laws and regulations, etc.
5. Stimulate efforts and participation awareness of stakeholders (dam management entities, power production companies, local residents, civic environmental groups, etc.)
6. Promote continuous technology development.

**Detailed Regional Session Plan:**

| ESTIMATED TIMING | ITEM DESCRIPTION / ROLE | SPEAKERS | SPEAKERS STATUS (OK OR TBC) |
|---|---|---|---|
| 2min | Introduction | Wu Daoxi/Vice Commissioner of CWRC | OK |
| 10min | Opening Remarks | Li Guoying/Minister of Water Resources of China | OK |
| | | Representative of Japan or Republic of Korea or UNESCO | TBC |
| 15min | Keynote Speech | Ma Shuishan/General Manager of South-to-North Water Diversion Middle Route Water Resources Co., Ltd | OK |

| | | | |
|---|---|---|---|
| 48min | Technical Presentation | Kyung-taek Yum/Professor of Graduate School of Water Resources in SUNGYUNKWAN University | OK |
| | | Takaya TANAKA/Director of JICE | OK |
| | | Zhu Yonghui/ Division Chief, Changjiang River Scientific Research Institute of CWRC | OK |
| | | Shahbaz/UNESCO Multi-sectorial Regional Office for East Asia | OK |
| | | Seongyeol Park/Korea Water Resources Corporation | OK |
| | | Tetsuya SUMI/Professor of Kyoto University, Vice President of ICOLD | OK |
| 10min | Discussion | | TBC |
| 5min | Closing | Wu Daoxi/Vice Commissioner of CWRC | OK |