


Stockholm World Water Week 2025: Asia Pacific Focus

1. Decarbonizing Asia's Water Infrastructure: Roadmap for a Low-Carbon, Climate-Resilient Future

25 August (Mon) 9:00 - 10:30 am CEST (Room C1, Level2 and Online)




Session ID: 12148







25 AUGUST 2025 • 9:00 – 10:30 CEST

Decarbonizing Asia's Water Infrastructure: Roadmap for a Low-Carbon, Climate-Resilient Future

This session explores how water infrastructure across Asia and the Pacific can contribute to climate goals through decarbonization, while enhancing resilience, equity, and water security. By examining practical and strategic approaches, the session aims to identify high-impact solutions that align with national climate commitments and sustainable development objectives. Experts will share case studies, tools, and collaborative strategies to define priority actions and foster a regional community of practice, thereby accelerating low-carbon transitions in the water sector.

Program Detail: [Click Here](#) or Scan 

World Water Week OFFICIAL SESSION

Session Description

The water sector in Asia and the Pacific plays a critical yet often overlooked role in greenhouse gas (GHG) emissions, driven by energy-intensive water supply, wastewater treatment, irrigation, and methane from reservoirs. This session will explore practical, high-impact pathways to decarbonize the region's water systems while ensuring resilience, equity, and sustainability. Experts will share tools, case studies, and strategies to cut emissions through sanitation, energy efficiency, renewable energy, improved water resource management, and climate-smart agriculture.

Key discussion areas include:

- Integrating water demand into climate strategies to align clean energy and carbon sequestration with sustainable water management and Paris Agreement goals
- Cutting GHGs from sanitation to enable low-emission, climate-resilient water infrastructure
- Deploying solar irrigation with strong groundwater governance to prevent over-extraction
- Reducing rice production emissions via Alternate Wetting and Drying (AWD), boosting water productivity, and leveraging carbon markets
- Achieving carbon neutrality at basin scale through optimized dams, water systems, and forest management
- Using global standards such as the FAST-Infra Label to attract private capital, ensure ESG and climate performance, and prioritize high-impact mitigation and adaptation projects
- Reaching net-zero in the water sector through renewables, efficiency, and cross-sector planning across all emission scopes
- Assessing trade-offs, co-benefits, and cost-effective solutions

Conveners:

- APWF
- International Water Management Institute (IWMI)
- Global Water Institute, UNSW, Australia
- Stockholm Environment Institute (SEI), Asia
- University of Queensland
- Global Infrastructure Basel Foundation (GIB)

The session will highlight how Asia-Pacific leadership can drive global collaboration and accelerate the transition to low-carbon water systems.

Program

9:00-9:03 CEST	Session Introduction/ Setting the scene Ms. Yumiko Asayama, Chief Manager, APWF Secretariat c/o Japan Water Forum
----------------	---

<p>9:03-9:45</p>	<p>7 Speaker's Presentations:</p> <ol style="list-style-type: none"> 1) Prof. Greg Leslie, Director, UNSW Global Water Institute c/o Professor, School of Chemical Engineering, UNSW, Australia (Onsite) 2) Opportunities for climate mitigation in sanitation systems Dr Daniel Ddiba, Research Fellow, Sustainable Sanitation Initiative Stockholm Environment Institute (SEI) (Onsite) 3) Role of Solar Irrigation in Decarbonizing Water Infrastructure across Asia Dr Mohsin Hafeez, Strategic Program Director – Water, Food and Ecosystems c/o Lead AoW- WEF Nexus Policy, Policy Innovations Science Program , International Water Management Institute (IWMI) (Onsite) 4) Alternate wetting and drying (AWD) to reduce GHG emissions and improve water productivity in rice production systems Mr. Hiz Jamali, Senior Climate Change Officer, Climate Change, Resilience, and Environment Cluster, Climate Change and Sustainable Development Department, Asian Development Bank (ADB) (Onsite) (Onsite) 5) Japan's "River basin-wide Integrated Water Management " for Carbon Neutrality Mr. Takaya Tanaka, Director, Water Resources Planning Division, Water and Disaster Management Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT) c/o Counselor, The Secretariat of the Headquarters for Water Cycle Policy, Cabinet Secretariat, Japan (Onsite) 6) The FAST-Infra Label “Finance to Accelerate the Sustainable Transition-Infrastructure” Label Mr. Chengchen Qian, Senior Manager, Global Infrastructure Basel Foundation (GIB) (Onsite) 7) Decarbonising Water Systems – Opportunities to meet the global challenge
------------------	--

	<p>Prof Steven Kenway, Australian Centre for Water and Environmental Biotechnologies, The University of Queensland (online)</p>
	<p>Panel Discussion among Speakers</p> <ul style="list-style-type: none"> • Panelists: Above all, the speakers • Prof. Taikan Oki, Special Advisor to the President, Professor, University of Tokyo c/o Vice President, JWF/APWF Secretariat (2024 Stockholm Water Prize Laureate) • Online Moderator: Ms. Yumiko Asayama, APWF
	<p>Audience Q&A & Reflections</p>
<p>10:25- 10:30</p>	<p>Wrap up/ Closing Summary</p> <p>Final Remarks from each speaker</p> <p>Summary of key takeaways and highlights priority actions.</p>