

Annex A – SIWW 2021 Thematic Webinars

Thematic webinars will present case studies, solutions and panel discussions on topics of emerging interest such as resource recovery, climate resilience and digital transformation of utilities. Most of these webinars are jointly organised with SIWW Strategic Partners, Sponsors, and Supporting Organisations. Please also reference the SIWW website for more sessions.

22 June 2021, Tuesday

Webinar	Synopsis	Speakers & Panellists
TW.1 Water Resilient Cities – Lessons from Recent Extreme Events <i>(Co-organised with Water Convention Programme Committee)</i>	The threats posed to water security and the liveability of our cities have been on the rise. In this webinar, experts across globe will share their experiences, solutions and shortfalls in the responses to recent extreme events. The lessons learnt, solutions and broad principles of practice for building resilience in our cities and people.	• Henk Ovink, Special Envoy to UN (the Netherlands) • Louise Ellis, Associate, Arup (UK) • Edwin Lau, Chief Engineer, Land Drainage, Drainage Services Department (Hong Kong) • Geoffrey Wilson, Senior Water Resources Specialist, Asian Development Bank (Philippines) • Suresh Rohilla, Senior Director, Centre for Science and the Environment, New Delhi (India) • Mark Fletcher, Global Water Business Leader, Arup (UK) – Moderator
TW.2 Lee Kuan Yew Water Prize Laureates Roundtable: "Game-changing Technologies for a Sustainable Water Future" <i>(Co-organised with PUB, Singapore's National Water Agency)</i>	The Lee Kuan Yew Water Prize was established in 2008 to honour the best minds in water solutions. To-date, eight Laureates have been awarded this prestigious Prize to recognise their contributions towards solving the world's water challenges by developing or applying innovative technologies, policies or programmes which benefit humanity. This roundtable brings our past Laureates together for the first time in a special webinar as they share their insights on the global trends and advances in science and innovation.	• Professor Rita R. Cowell, 2018 Laureate • Professor John Anthony Cherry, 2016 Laureate • Mike Markus, Orange County Water District, 2014 Laureate • Professor Mark van Loosdrecht, 2012 Laureate • Dr James Barnard, 2011 Laureate • Dr Andrew Benedek, 2008 Laureate • Bernard Koh Eng Wah, Assistant Chief Executive, PUB, Singapore's National Water Agency • Prof Shane Snyder, Executive Director, Nanyang Environment and Water Research Institute - Moderator

Webinar	Synopsis	Speakers & Panellists
TW.3 Digital Water Hackathon – DemoDay@SIWW <i>(Co-organised with Ripple2Wave Incubator (R2WI) and Singapore University of Social Sciences (SUSS))</i>	Selected applicants go through a week of bootcamp workshop and pitched to get shortlisted into the “3 months Deep Mentoring Phase”. These finalists are now ready to present their solution in addressing the respective Digital Water Problem Statements to a panel of esteemed judges.	• Dr Helge Daebel, Managing Director, Ripple2wave • Professor Cheah Horn Mun, Assistant Provost and Dean (College of Lifelong & Experiential Learning), SUSS • Tan Jiale, Co-Founder, ESGnie • Choo Jingyuan, Co-Founder, Neptune – WaterFutureTech • Alex Wong, Co-Founder, Groundup.ai • Clement Collignon, Fieldbox.ai • Sumanta Bose, Datakrew • Wong Liang Jie, Teredo Analytics • Tyler Huang, Memsing
TW.4 Celebrating Women in Engineering <i>(Co-organised with Jacobs)</i>	To celebrate International Women in Engineering Day, we put a spotlight on outstanding female leaders who will discuss their early beginnings in engineering, challenges and highlights of their career journey, how they made their mark in the water industry and how they are contributing to a more sustainable water future across the world today.	• Susan Moisiso, Vice President & Global Market Director Water, Jacobs • Hazel Khoo, Director Coastal Protection, PUB, Singapore’s National Water Agency • Dr Holly Shorney-Darby, Head, Technology Application and Piloting, PWNT • Lucia Cade, Chair, South East Water • Don McCarthy, Vice President, Growth & Sales Asia, Jacobs - Moderator
TW.5 Sustainability Leadership in Water: Experiences from Industry and Utility	This session invites leaders from both the industry and utility to share their journey on balancing economic growth with sustainable use of precious resources like water. Learn about their imperatives for embarking on sustainability efforts and hear about ongoing and future initiatives that demonstrate their commitment towards the environment.	• Professor Asit Biswas, Honorary Professor, Glasgow University • Philippe Rohner, Co-founder and Managing Partner, Abic Partners LLC • Debra Tan, Head, China Water Risk • Diane D’Arras, Immediate Past President of the International Water Association • Chua Soon Guan, Deputy Chief Executive (Policy & Development), PUB, Singapore’s National Water Agency • Professor Cecilia Tortajada, Professor in Practice - Environment innovation, University of Glasgow – Moderator
TW.6 Utilities of the Future – Is Smarter Water Better Water? (Session 1) <i>(Co-organised with Water Convention Programme Committee)</i>	Digitalisation offers opportunities for utilities to redefine existing business processes. However, significant risks remain. This two-part webinar aims to assess what problems are best addressed through digitalisation and where they may not have a place. This session will cover the lessons learnt from early	• Dragan Savic, Chief Executive Officer, KWR Water Research Institute (the Netherlands) • William Yeo, Chief Information Officer, PUB, Singapore’s National Water Agency • Louise Dudley, Chief Executive Officer, Queensland Urban Utilities (Australia) • Kishia Powell, Chief Operating Officer and Executive Vice President, DC Water (USA) • Adam Lovell, Executive Director, Water Services Association of Australia (Australia) - Moderator

	adopters of “smart water” and take stock of the past decade of “smart water” innovation.	
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24 June 2021, Thursday

Webinar	Synopsis	Speakers & Panellists
TW.7 A Career in the Water Profession <i>(Co-organised with Environmental Engineering Society of Singapore (EESS))</i> <i>*free-to-air content</i>	This session welcomes youths and students interested in pursuing a career in the water sector to join us. Find out about the exciting developments in the water industry and hear from a panel of successful young water professionals from the government, industry and academia who will share with you their career journey.	• Dave Flinton, Senior Vice President & Chief Innovation, Technology & Products Officer, Xylem Inc • Tan Mei Xi, Application Engineer, Xylem Inc. • Jasmine Hui, Manager, Centre of Excellence, Sembcorp • Kelven Lam, Sector Specialist (Water), Emerald Technology Ventures • David Pong, Chief Executive Officer and Co-founder, Watroam • Dr Cai Qinqing, Research Fellow, National University of Singapore • Phua Kian Ming, Planner, PUB, Singapore's National Water Agency • Dr Lim Fang Yee, Senior Research Fellow, NUS Environmental Research Institute - Moderator
TW.8 Utilities of the Future – Is Smarter Water Better Water? (Session 2) <i>(Co-organised with Water Convention Programme Committee)</i>	Digitalisation offers opportunities for utilities to redefine existing business processes. However, significant risks remain. This two-part webinar aims to assess what problems are best addressed through digitalisation and where they may not have a place. Following yesterday's webinar, this session will discuss the unanswered questions and unsolved problems with “smart water” implementation in utilities and provide an outlook for the future.	• Professor Judith Germano, Distinguished Fellow, New York University (USA) • Michael Arceneaux, Managing Director, Water Information Sharing and Analysis Center (WaterISAC) (USA) • Melvin Koh, Director, Joint Operations, PUB, Singapore's National Water Agency • George Hawkins, Founder and Executive Director, Moonshot Missions (USA) • David Gadis, Chief Executive Officer and General Manager, DC Water (USA) • Joone Kim-Lopez, General Manager, Moulton Niguel Water District (USA) • Albert Cho, Senior Vice President, Chief Strategy and Digital Officer, Xylem Inc (USA) - Moderator

25 June 2021, Friday

Webinar	Synopsis	Speakers & Panellists
Virtual Denmark-Singapore Dialogue on Water Resource Recovery	Denmark and Singapore have been collaborating in the water space for the past many years, with the most recent five-year environmental collaboration agreement (MoU) between Singapore and Denmark, including water, signed in February 2020. Join us, as we dive into Singaporean and Danish collaboration during Singapore International Water Week. Do not miss your chance to ask questions on all things water resource recovery related as the event splits into dual panel debates with leading professionals from both Singapore and Denmark.	• Sandra Landi, Ambassador of Denmark to Singapore and Brunei • Lea Wermelin, Minister for the Environment, Denmark • Grace Fu, Minister for Sustainability and the Environment, Singapore • Finn Mortensen, Executive Director, State of Green • Kunal Shah, Council Member to the Singapore Water Association and Managing Director of Anaergia Inc • Mads Leth, CEO at VCS Denmark • Lars Schrøder, CEO at Aarhus Vand A/S • Dines Thornberg, Head of Development, BIOFOS • Carl-Emil Larsen, Executive Director, DANVA • Dr. Pang Chee Meng, Chief Engineering and Technology Officer, PUB, Singapore's National Water Agency • Dr. Adrian Yeo, Senior Vice President, Sembcorp Industries • Allan Han-Huei TEO, Managing Director, Quercus Group in Singapore • Nerea Uri Carreno, Industrial PHD Researcher • Prof. Shane Snyder, Executive Director, Nanyang Environment & Water Research Institute (NEWRI), Nanyang University of Technology, Singapore • Prof. Ng How Yong, Director, NUS Environment Research Institution (NERI), National University of Singapore • Professor Peter Steen Mikkelsen, DTU Environment, Head of Water, Technical University of Denmark DTU

28 June 2021, Monday

Webinar	Synopsis	Speakers & Panellists
TW.9 Digital Utilities – Preparing for the Future (Co-organised with KPMG Singapore)	The session will cover the following broad themes - 1. Technology developments and impact on utility sector 2. Leading and best practices of leveraging technology in water sector / utilities. 3. Future trends - smart meters, remote monitoring, predictive maintenance, AI and block chain amongst others	• Charles Koh, CEO, Sembcorp • Josh Millen, Associate Partner, IBM • Patrick Keaney, Worldwide Director of Development AWS Water (US) • Sharad Somani, Partner & Head of Infrastructure, Asia-Pacific KPMG Singapore - Moderator
TW.10 Dealing with the Deep Uncertainty of Sea Level Rise	There are different types of uncertainties – unpredictability (e.g. global emission scenarios) incomplete knowledge (e.g. limited data availability) and ambiguity (e.g. differing stakeholders'	• Hazel Khoo, Director of Coastal Protection, PUB, Singapore's National Water Agency • Dr Dale Barker, Centre for Climate Research Singapore • Assistant Prof Naomi C. Hanakata, Department of Architecture, National University of Singapore

(Co-organised with Coastal Protection Department, PUB, Singapore's National Water Agency) <i>*free-to-air content</i>	perspectives). To manage uncertainties, adaptive planning is necessary to safeguard the future and interests of Singapore. This thematic webinar invites you to catch a glimpse of some of the uncertainties associated with sea level rise, decision making tools and building with nature as a future proof strategy.	• Dr Laura Vonhogen-Peeters, Deltares Singapore Office / NUS Deltares • Prof Vladan Barbovic, Department of Civil & Environmental Engineering, National University of Singapore – Moderator
TW.11 Resource Recovery – From Policy to Practice (Session 1) (Co-organised with Water Convention Programme Committee)	Conventional waste streams contain valuable resources like nutrients, heavy metals and inorganic minerals that can be extracted for reuse. Resource recovery is necessary to close the gaps in the water, carbon and energy cycles to ensure environmental sustainability. This session, the first of two, will discuss the broader principles, challenges and economics of resource recovery and explore its application through the Tuas Nexus Integrated Waste and Water Treatment Facility case study.	• Andrew Shaw, Associate Vice President, Black & Veatch (USA) – Moderator • Professor Kartik Chandran, Columbia University (USA) • Dr Arne Panesar, Head of Program, giz (Germany) • Bettina Kamuk, Global Market Director Waste to Energy, Ramboll Group (Denmark)

29 June 2021, Tuesday

Webinar	Synopsis	Speakers & Panellists
TW.12 Climate Change, Water Quality and Health (Co-organised with Water Convention Programme Committee)	Climate change poses an array of uncertainties that threaten water quality which, if not addressed, could ultimately lead to a deterioration of public health. This webinar discusses these uncertainties and explores adaptation strategies such as the diversification and conservation of water supplies, resilient infrastructure and public health preparedness.	• Bruce Gordon, Coordinator of WASH, World Health Organisation (Switzerland) • Diarmid Campbell-Lendrum, Team Leader, Climate Change and Health, World Health Organisation (Switzerland) • Professor Monica Emelko, University of Waterloo, (Canada) • Professor Guy Howard, University of Bristol, (United Kingdom) • Professor Kensuke Fukushi, University of Tokyo, (Japan) • Dr Raya Muttarak, Program Director, Population and Just Societies Program, International Institute for Applied Systems Analysis, Wittgenstein Centre (Austria) • Dr Robin Price, Managing Director, Water Resources East (United Kingdom) • Professor Paul Hunter, University of East Anglia (United Kingdom)

		• Dr Lim Mong Hoo, Senior Consultant, Water Quality Department, PUB, Singapore's National Water Agency • Dr Tom Panella, Director, Environment, Natural Resources, Agriculture Division, East Asia Department, Asian Development Board (Philippines) - Moderator
TW.13 Resource Recovery – From Policy to Practice (Session 2) <i>(Co-organised with Water Convention Programme Committee)</i>	Conventional waste streams contain valuable resources like nutrients, heavy metals and inorganic minerals that can be extracted for reuse. Resource recovery is necessary to close the gaps in the water, carbon and energy cycles to ensure environmental sustainability. This session will look more closely at advances in various resource recovery technologies and the applications of the recovered resources.	• Professor Kartik Chandran, Columbia University (USA) • Peter Fiske, Executive Director, National Alliance for Water Innovation, University of California, Berkeley (USA) • Nikolay Voutchkov, President, Water Globe Consultants (USA) • Luc Kox, Commercial Manager, Hazer Group (Australia) • Professor Willy Verstraete, Ghent University (Belgium)
TW.20 IDA Business Forum on Desalination and Water Reuse <i>(Co-organised with International Desalination Association)</i>	The IDA is a founding Strategic Partner of the SIWW and is pleased to present the Desalination and Water Reuse Business Forum covering desalination and Water Reuse solutions to meet water scarcity needs. Distinguished speakers will discuss the global market for non-conventional treatment solutions, financing of such projects, the water-energy-food nexus and the impact these solutions have on meeting current and future water sustainability needs.	• Shannon McCarthy, Secretary General, International Desalination Association (IDA) • Carlos Cosin, President, International Desalination Association and Chief Executive Officer, Almar Water Solutions • Nicola Saporiti, Senior Investment Occider, Water Sector Global Product Specialist Transaction Advisory services, International Finance Corporation • Julie Carles, Co-Chair IDA Financial Institutions Advisory Committee and Principal Investment Officer-MENA, International Finance Corporation • Devesh Sharma, Vice President, International Desalination Association and Managing Director, Aquatech International • Professor John Lienhard V, Dean IDA Academy, Officer of IDA Board of Directors; Abdul Latif Jameel Professor of Water and Mechanical Engineering, Director, Massachusetts Institute of Technology • Borja Blanco, IDA Board Director and Chief Executive Officer, Aquadvice – Moderator

30 June 2021, Wednesday

Webinar	Synopsis	Speakers & Panellists
TW.14 Singapore Water Exchange (SgWX) Water Utilities Series:	Millions of people in Bangladesh are navigating the COVID-19 pandemic with the added challenge of living without access to safe water. Now, more than ever, access	• Taqsem Khan, Managing Director and Chief Executive Officer, Dhaka Water Supply and Sewerage Authority (DWASA) • Sultana Afroz, Honorable Secretary to the Government of Bangladesh and Chief Executive

Uncovering Water Opportunities in Bangladesh <i>(Co-organised with PUB, Singapore's National Water Agency and Singapore Water Association)</i>	to safe water is critical to the health of families in Bangladesh. This webinar presents the water challenges faces by Bangladesh and explore how investment in infrastructure improvements and technologies can tackle these challenges.	Officer of Public Private Partnership Authority (PPPA) • Takuya Lamata, Practice Manager, South Asia Water II Unit, Water Global Practice, The World Bank • Vinod Singh, Director of Growth and Sales (Asia); Director, Digital, Data and Cyber (Asia), Jacobs - Moderator
TW.15 Water Industry Transformation to Achieve SDG2030 – Overcoming Bottlenecks <i>(Co-organised with Water Convention Programme Committee)</i>	With 2030 closely approaching, the concern for the global community to achieve the Sustainable Development Goals (SDG) is rising. This workshop will discuss how SDG 6, Water and Sanitation, interlinks with the other goals and identify the barriers, bottlenecks and low-hanging fruit in policy, technology and implementation.	• Tony Wong, Chair, CRC for Water Sensitive Cities (Australia) • Federico Properzi, Chief Technical Adviser, UN Water (Switzerland) • Adam Lovell, Executive Director, Water Services Association of Australia (Australia) • Bertrand Garnier, Applications and Solutions Leader, Technology, Suez (France) • Chong Mien Ling, Director, Policy and Planning, PUB, Singapore's National Water Agency
TW.16 Reinventing Membranes – Present to Future <i>(Co-organised with Water Convention Programme Committee)</i>	This webinar will provide an overview of present membrane technologies, their evolution and the new challenges they aim to address today. Experts from across the globe will discuss the latest in polymeric membranes, ceramic membranes, biomimetic membranes and what the future has in store.	• Professor Gary Amy, Clemson University (USA) • Craig Bartels, VP Technology, Hydranautics (USA) • Dr Holly Shorney-Darby, Head, Technology Application and Piloting, PWNT • Professor Claus Helix-nielsen, Technical University of Denmark (Denmark) • Professor Eric Hoek, University of California, Los Angeles (USA) • Professor Wang Rong, Nanyang Technological University (Singapore) • Nikolay Voutchkov, President, Water Globe Consultants LLC (USA) • Jonathan Clement, Global Technology Officer, Nanostone Water (the Netherlands) • Professor Seungkwan Hong, Korea University (South Korea) – Moderator

1 July 2021, Thursday

Webinar	Synopsis	Speakers & Panellists
TW.17 ABC Waters - Embracing Sustainable Blue-Green Solutions for Urban Cities <i>(Co-organised with Institution of</i>	Join us in this seminar as we discuss how Active, Beautiful, Clean Waters (ABC Waters) Design concepts in Singapore are brought to life from design to construction. Awardees of the ABC Waters Gold certificate will also be	• Alfred Lee, Director and Landscape Architect, STX Landscape Architects • Sherman Stave, Principal and Landscape Architect, STX Landscape Architects • Hoo Xin Yu, Deputy Director (Landscape Implementation), Housing & Development Board

<i>Engineers Singapore and PUB, Singapore's National Water Agency)</i> <i>*free-to-air content</i>	sharing on how they have managed to successfully integrate the blue and the green into their urban designs.	• Goh Eng Kwang, Executive Director (Project Management & Water Services), Keppel Infrastructure • Leong Tatt Man, Director of Projects, Tierra Design Studio Pte Ltd • Damian Tang, Senior Director, Park Management & Lifestyle Cluster, National Parks Board – Moderator
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2 July 2021, Friday

Webinar	Synopsis	Speakers & Panellists
TW.18 Partnering Agility to Achieve Leading Edge Water Management <i>(Co-organised with SUEZ)</i> <i>*free-to-air content</i>	Discover how the water management industry is reinventing itself through fruitful partnerships with operators through Joint Venture, DBO, BOT, One-city One-operator to meet their objectives of becoming best in class of a global sustainable water management on their territory. Listen to testimonials from Shanghai Chemical Industrial Park, Medan BOT and State authorities in India which are the levers for flexibility and more performance!	• Nicolas Bockhoff, Chief Operating Officer, Water Services, SUEZ India • Sun Jianguo, Deputy General Manager, Shanghai Chemical Industrial Park (SCIP) • Herve Lienhardt, Operation Director, SUEZ Japan • Didier Sachot BOT Vice President, SUEZ • Kusitarini Trishanti, General Manager, PT. Tirta Lyonaise Medan (TLM) • Capt. RR Doddihal, Task Manager, Karnataka Urban Infrastructure Development and Finance Corporation (KIUDFC) • RK Agarwal, General Manager, Uttar Pradesh Jal Nigam (UPJN)

Information accurate as at 18 June 2021.