

Toronto Report



Conclusions, key messages
and outcomes

World Water Congress & Exhibition 2024



Organised by



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Supporting partner



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Introduction



From 11 to 15 August 2024, the IWA World Water Congress & Exhibition gathered a 7000-strong global audience of utility and industry practitioners, experts, academics, government officials, NGO representatives, technology and service providers, consultants, media, and others in Toronto, Canada.

Under the banner of 'Shaping our water future' and featuring more than 900 presentations and 200 sessions, the 2024 IWA Congress & Exhibition presented the collective and state-of-the art knowledge and practice through keynote speakers, technical presentations, posters, workshops, discussions, technology showcases, dialogues on emerging issues, and leadership forums.



The event was of particular relevance to the climate change agenda and the UN Sustainable Development Goals (SDGs) – especially the need and opportunities for progress with sanitation. But including and beyond these two critical themes, the programme was notable for its richness and diversity, thanks to the contributions of IWA’s membership and its leading network of respected water professionals. With content proposals hugely oversubscribed, the programme committee had a wealth of excellent content from which to select, and this was evident from the quality and breadth of the presentations and workshops.

Discussions were focused around six main thematic tracks: water utility management; wastewater and resource recovery; drinking water and potable reuse; city-scale planning and operations; communities, communication and partnership; and water resources and large-scale water management.

Staged with the support of the Canadian Water and Wastewater Association and the Canadian Association on Water Quality, the event enjoyed visibility of local expertise, with the Canadian water sector showcasing cutting-edge innovations in water reuse, sustainable groundwater management practices and smart urban water solutions, serving to inspire water professionals from around the world.

The Congress once again served as a vital platform for a range of initiatives and programmes, bringing together water professionals from across the globe. IWA provides a world-leading platform for water utility interests and

“As the world grapples with the challenges of climate change, water and food insecurity, poverty, health inequality, natural disasters and conflict, our Congress provides an environment where complex problems can be unravelled and solutions explored and championed.”

Tom Mollenkopf AO, IWA President 2020-2024

key events in Toronto included the Utility Leaders Forum, which attracted an influential audience of more than 250 utility professionals, and the 9th International Water Regulators Forum.

Additionally, the Congress featured two dedicated forums that addressed specific sectoral needs—one focused on groundwater issues and another on the challenges faced by large industrial water users, exploring local solutions and best practices.

Young Water Professionals (YWPs) stood out prominently at the Congress, enjoying an even greater profile than in previous editions. Several key announcements highlighted their contributions and opportunities: the first cohort of IWA LeaP, IWA’s leadership programme, were announced; the Chapter of the Year was recognised, and the continuation of the IWA and Grundfos Youth Action for SDG 6 Fellowship Programme was confirmed. Additionally, the new YWP Steering Committee began their mandate, marking the start of their initiatives and leadership efforts. These developments underscore the significant role of young professionals in advancing water management and sustainability.



As an important part of its activities, IWA honours exceptional contributions within the global water sector. The Toronto Congress served as the stage for the latest round of recognition, providing the platform for celebrating IWA's esteemed Global Awards Programme, its member honours and awards programme, and the IWA Project Innovation Awards.

The Exhibition show floor featured an extensive Business Forum programme, with a variety of presentations from Exhibitors and Sponsors. The Exhibition itself hosted 250 exhibitors from around the world, including the various sponsors and a strong Canada pavilion. Other country pavilions included those from United Kingdom, Denmark, Malaysia / Sarawak, Netherlands, India, China, Tokyo / Japan, and USA. A special pavilion was dedicated to start ups and scale ups: the Innovation pavilion, organised by Isle Utilities. In addition to all this, the exhibition hosted an Operations Challenge with 10 teams from Canada, USA and Europe.

“Water is not just a resource; it's a defining feature of who we are as a city.”

Olivia Chow, Mayor of Toronto

“The theme of this Congress is ‘Shaping our water future’, a title that is both empowering and challenging. Our water future is something that we as professionals must mould. There is an opportunity for lasting implications for future generations. I am optimistic that this Congress will facilitate conversations that put people at the heart of water management, encourage collaboration, and align technology's potential with human needs.”

Kala Vairavamoorthy, IWA, Executive Director

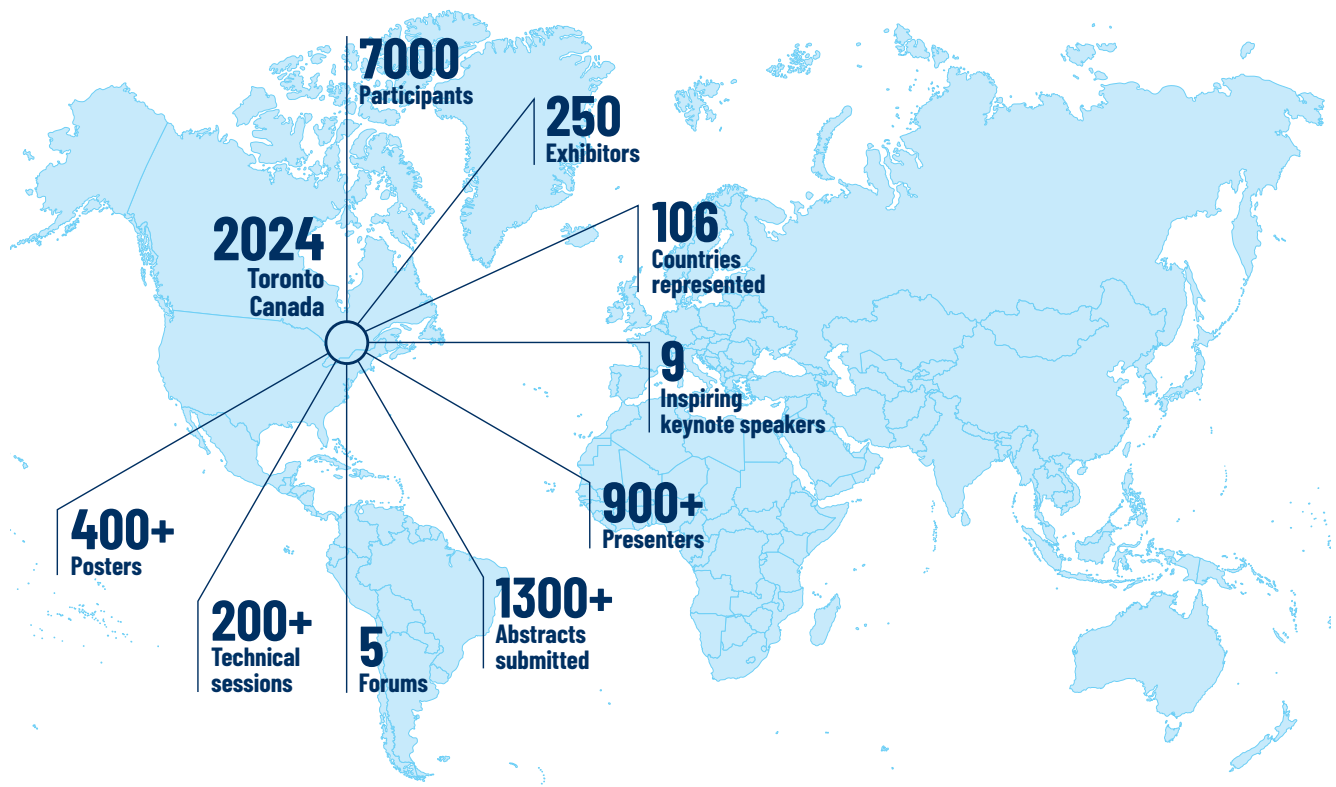
“At this conference, we have both fundamental research development, universities and institutions and the applications in utilities and industry. And we really need both. We need wild ideas and theoretical operations, which are the basis for all developments. And we need applications that scale up the implementation and adoption in society.”

Eveline Volcke, Co-Chair of the Programme Committee

The congress in numbers

The 2024 World Water Congress & Exhibition in Toronto, Canada was the latest success in IWA's flagship event series. It drew an overall footfall of 7000 participants from across the globe.

The Congress programme featured 900+ presenters, 200+ sessions, 400+ poster presentations, 5 forums, 9 keynotes, 6 plenary panel discussions, with the integral Exhibition bringing together 250 exhibitors.



Survey - Participant Satisfaction



28

Utility Stories celebrated as a part of Climate Smart Utilities Programme

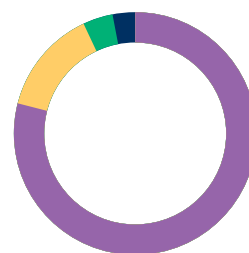


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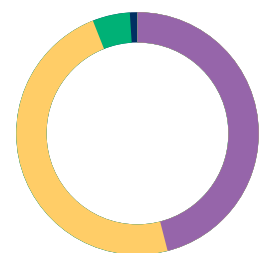
IWA Awards presented



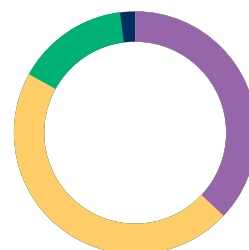
Hit **112,000** LinkedIn followers



Overall Congress Rating

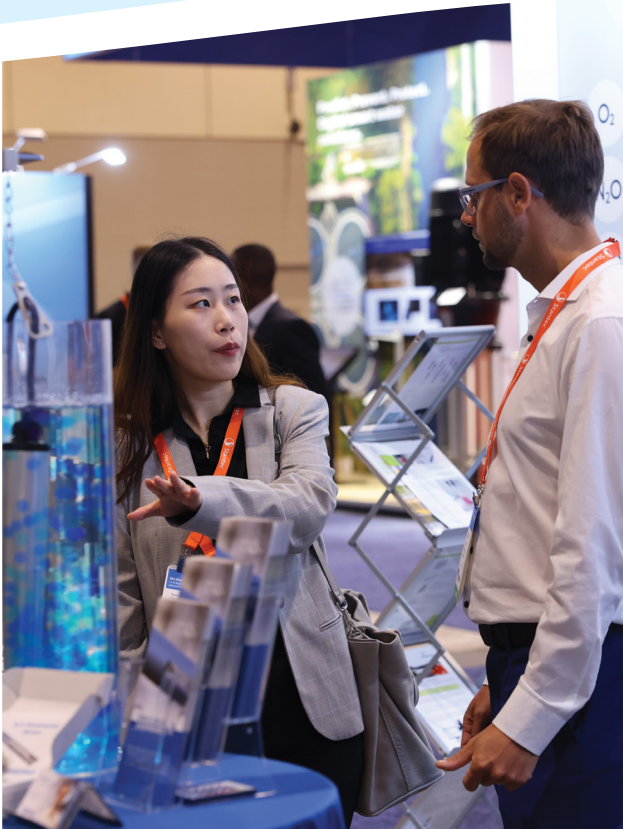


Quality of Speakers



Quality of Sessions

Very Satisfied
Satisfied
Neutral
Not Satisfied



Showcasing global thought leadership

The past, present, and future of water



Peter Gleick, Co-founder, Pacific Institute, USA

“Efficiency is key to reducing water wastage. Today, we use less water than 40 years ago and have advanced in cleaning, recycling, and treating contaminated water. California, for instance, recycles 18% of their water. We also know how to desalinate water and are learning to restore natural resource systems.

“The core of my message is that we’re living in a remarkable time, a time when we’re in a transition from the challenges that we all are working on to a positive, sustainable future, what I call the Third Age of Water. We need a new age of water. We need a new way of thinking and doing.”

Peter Gleick has dedicated decades to studying the intricate dynamics of water policy and sustainability.

He has consistently underscored the critical role of water in shaping human history, the environment, and the global economy. During his keynote speech at the IWA World Water Congress & Exhibition, Gleick provided a comprehensive framework for understanding humanity’s evolving relationship with water through his concept of the Three Ages of Water.

In his address, Gleick traced water’s centrality to human civilisation, from its cosmic origins in the First Age of Water, through the hydrological and technological advances of the Second Age, to the mounting ecological and social crises of the present day. His analysis combined scientific insights, historical context, and an

urgent call to action, highlighting the dire consequences of unsustainable water practices. However, his message was not without hope. Gleick laid out a vision for transitioning into the Third Age of Water, a sustainable future marked by equitable water access, ecosystem restoration, and innovative management strategies.

Peter Gleick is a leading scientist, innovator, and communicator on water and climate issues. He co-founded the Pacific Institute in Oakland, California, USA, in 1987 – one of the most innovative, independent non-governmental research centres, creating and advancing solutions to the world’s most pressing water challenges, including work on the human right to water, water and climate, and water, peace, and security issues.

Resilience in practice: Avoiding planning traps



Paul Brown, *President, Paul Redvers Brown Inc., USA*

“It is wrong to blame anyone for forecasting inaccurate predictions in an unpredictable world. Let’s be more conscious of the limitations of our predictions and intuitive beliefs. Let’s manage quick fixes and small steps, making them adaptable and capable of expansion.”

At the Congress, Paul Brown presented a visionary approach to reimagining water systems for an unpredictable future. Drawing parallels to a ‘heart transplant’, he highlighted the complexities of integrating large-scale water recycling facilities into existing urban infrastructures. Brown urged a shift away from rigid, large-scale infrastructure investments toward adaptive, flexible solutions. Advocating for real options analysis and incremental implementation, he emphasised enhancing resilience, preserving future flexibility, and ensuring sustainable water management in an era of uncertainty.

Paul Brown, an AICP and IWA Fellow, has over 40 years experience in project planning and programme management, emphasising multi-agency collaboration, public stakeholder participation, process facilitation, and multi-objective decision making.

Smart and AI-enabled PUB



Ong Tze-Ch'in, *Chief Executive, PUB, Singapore's National Water Agency, Singapore*

“With a mission to address coastal and flood resilience, PUB is a key climate adaptation agency for Singapore, and data and AI presents a huge opportunity for us to overcome our climate change challenges.”

At the Congress, Ong detailed PUB’s innovative strategies to tackle rising water demand and climate risks. He showcased AI-driven initiatives, including predictive maintenance, real-time flood monitoring, and reservoir management using drones. Emphasising on data-driven decision-making and workforce development, Ong unveiled PUB’s ambitious vision for a smart, AI-enabled future. He highlighted the critical need for collaboration, adaptability, and the relentless pursuit of innovation in securing water resilience for Singapore’s future.

Ong Tze-Ch'in is Chief Executive of PUB, Singapore’s National Water Agency. In this role, he is responsible for the supply of clean water, the reclamation of used water, the management of stormwater, and the protection of Singapore’s coasts against sea level rise. Prior to PUB, Ong was Deputy Secretary (Resilience) at the Ministry of Sustainability and the Environment where he oversaw water and food policies, as well as the Ministry’s international relations, communications and engagement, and emergency planning functions.

The water sector and the slow pandemic of antimicrobial resistance



Prof. Amy Pruden, *University Distinguished Professor, Virginia Tech, USA*

“We talk about the need for a One Health framework to combat the spread of Antimicrobial Resistance (AMR) globally; the environmental dimension is not up to speed with the level of the others. Wastewater treatment plants are not the culprit here. They are part of the solution.”

Amy Pruden’s keynote at the Congress highlighted the global challenge of antimicrobial resistance (AMR). AMR enables microbes to resist treatments like antibiotics due to genetic factors and rapid evolution, amplified by DNA sharing among bacteria. She emphasised the role of wastewater as a hotspot for AMR spread due to pharmaceutical residues and bacteria. Effective wastewater treatment can mitigate AMR risks, yet challenges persist. Global initiatives, like the WHO’s One Health framework and wastewater-based monitoring, aim to address AMR. Pruden’s research demonstrates the value of sequencing technology and targeted policies to reduce AMR’s spread, especially in underserved regions.

Prof. Amy Pruden is the W. Thomas Rice Professor and University Distinguished Professor in Civil and Environmental Engineering at Virginia Tech. She focuses on microbial ecology to control pathogens and antibiotic resistance in water systems. Pruden has published over 200 research articles and co-led the UNEP report ‘Bracing for Superbugs: Strengthening environmental action in the One Health response to antimicrobial resistance’.

Taps and toilets in the time of change: A new era for water and sanitation regulation



Batsirai Majuru, *Technical Officer, Water, Sanitation, Hygiene and Health Unit, World Health Organization, Switzerland*

“We know that data is key for effective regulation. But it is not just about data; it is about getting the right data and thereafter using that data to drive action. It has to be data that is actionable. But to that I would add and highlight – it is only actionable if you have the power to act on that data. So this question of regulatory autonomy and regulatory power is really at play and really critical at this time.”

Batsirai Majuru’s keynote emphasised the transformative power of regulation in addressing water and sanitation challenges. She highlighted a case study of a country improving water safety and sanitation access through strong governance and effective regulatory frameworks. Majuru discussed issues like underinvestment, climate change, and the complexity of extending services to underserved populations. She stressed the importance of actionable data, regulatory autonomy, and collaborative regional efforts, showcasing successful initiatives in Latin America, Africa, and the Arab region. Majuru concluded by urging a focus on enabling environments for regulators to protect public health and achieve sustainable development goals.

Batsirai Majuru is a Technical Officer in the Water, Sanitation, Hygiene and Health unit at the World Health Organization headquarters in Geneva, Switzerland, where she leads WHO’s work on drinking water and sanitation regulation, including coordinating WHO’s International Network of Drinking-water and Sanitation Regulators (RegNet). In this role she works with regulators and policymakers, as well as various international partners working on water and sanitation regulation.

Financing water solutions for climate resilience



Saroj Kumar Jha, *Global Director, Water Global Practice, World Bank Group, USA*

“By the end of 2030, an alarming number of people may face even lesser access to water than when the SDGs were first launched. To address this urgent issue, it’s critical to build a compelling case for why governments must prioritise investment in Water infrastructure.”

Saroj Kumar Jha discussed the urgent need for greater political prioritisation and investment in water at the IWA World Water Congress & Exhibition. Highlighting a World Bank report, he revealed that developing countries allocate only 1.2% of their budgets to water, with worsening access gaps. He identified technology adoption, governance, and capacity building as critical challenges. Jha outlined the World Bank’s initiatives, including a Global Challenge Programme for water security and climate adaptation, and partnerships like the Singapore Water Center. Stressing the importance of collaboration, he called for unified platforms to scale impact and accelerate progress on SDGs.

Saroj Kumar Jha leads the Global Practice senior management team at the World Bank, which drives the policy direction of the practice and oversees a portfolio of \$27 billion in water-related investments, analytical work, multi-donor trust funds and global partnerships.

The economics of water and beyond



Henk Ovink, *Executive Director, Commissioner, Global Commission on the Economics of Water, USA*

“The younger generation is carrying a significant burden. Everyone needs a seat guaranteed at the table, with a special focus on prioritising women and girls. We often forget that the water cycle is a hydrological cycle that connects us. This cycle involves more than just blue and green water.”

Henk Ovink emphasised the urgent need to recognise and address the interconnectedness of water’s hydrological cycle, incorporating both blue and green water. He stressed that the cycle’s imbalance exacerbates climate change and impacts vulnerable communities, particularly the youth, women, and marginalised groups. Ovink called for collective action across generations, sectors, and policies to integrate water into economic and development strategies. He underscored that investments in water yield benefits that extend to food security, sustainability, and resilience. Ovink’s message highlighted the necessity of global partnerships and intergenerational collaboration to safeguard water security and achieve sustainable development goals.

Henk Ovink is the Executive Director and founding Commissioner for the Global Commission on the Economics of Water. He was the first ever global water ambassador, appointed in 2015 by the Dutch Cabinet as Special Envoy for International Water Affairs. In this capacity he co-led the second UN Water Conference in 2023, the first since 1977. Henk served on President Obama’s Hurricane Sandy Rebuilding Task Force where he led the long-term innovation, resilience, and rebuilding efforts and developed and initiated and led the groundbreaking ‘Rebuild by Design’ competition.

Youth, technology and water



Farokh Kakar, *Environmental Engineer, Brown and Caldwell Consultants, Canada*

“We need decision making. We need the government, the authorities, the funding agency, to focus more on what matters.”

Farokh Kakar discussed the impact of social media, sharing her personal journey of using it to build a community in Canada after moving there. She highlighted both the benefits and challenges of social media usage, especially among youth. Kakar emphasised the rapid growth of technology like AI, AR, and VR, and the widening gap between technological advancement and its integration into education and industry. She criticised the lack of focus by authorities on proactively addressing these issues and updating curriculums. Kakar encouraged the audience to leverage social media for positive change and stay connected, while advocating for a balanced approach to technology integration.

Farokh Kakar is an award-winning young professional, an Environmental Engineer at Brown and Caldwell Consultants and the Founder of Blue College of Water and Technology. She is the founding member and President of the IWA Young Water Professionals in Canada and sits on the Strategic Council of IWA.

Path-shifting to address global challenges: Transformative adaptation in practice



Prof. Juliet Willets, *Research Director, Institute for Sustainable Futures, University of Technology Sydney, Australia*

“The climate is changing faster than we are adapting, and this calls for transformative leadership rooted in values that prioritize collective good, equity, and the health of our planet. The time for transformative adaptation is now.”

Juliet Willets emphasised the need for transformative adaptation to address global challenges like climate change and water scarcity. She highlighted the importance of shifting values and assumptions, restructuring power dynamics, and finding windows of opportunity for path-shifting. Key points included the need to move beyond incremental adaptation; the role of transformative leadership in driving change; the importance of engaging diverse stakeholders and questioning embedded assumptions; and examples of restructuring global climate policy and advancing gender equality in the water sector. Willets called for building connections, reflecting on personal values, and embracing transformative leadership to drive the necessary changes.

Professor Juliet Willets is Research Director at University of Technology Sydney's Institute for Sustainable Futures (UTS-ISF). She leads applied, innovative research to inform water and sanitation policy and practice in Asia and the Pacific for urban and rural services. Her contributions cover climate change, technical, environmental, governance, behavioural, gender equality and public health aspects, partnering with governments, UN agencies, research institutions and bilateral, multilateral and civil society organisations.



Highlights from the IWA Agenda

Climate Smart Utilities

Utilities are facing the impacts of climate change today and need to anticipate increasing challenges in the future. At the same time, utilities have a role to play in contributing to reducing GHG emissions, from their own emissions to those of their supply chain and those associated with their products usage.

RECOGNITION PROGRAMME

Under the IWA Climate Smart Utilities Initiative, the 2024 edition of the Recognition Programme identified and recognised water and sanitation utilities for their efforts in tackling climate change. This year's recognition was presented in two categories; the Achiever (utilities that have already made substantial progress in their Climate Smart journey) and Entrant (utilities that have prioritised the climate agenda and have started their Climate Smart journey) categories.

Building upon the successes of the 2022 and 2023 editions, this programme provided an excellent opportunity for utilities to reflect on their Climate Smart journeys, present their initiatives to an international audience, and share their aspirations for achieving a climate-smart water sector on three interconnected pillars for action: adaptation, mitigation, and leadership. The Climate Smart Utility Recognition Programme recognised 28 utilities across the two categories (Achiever category – 12 and Entrant category - 16). The programme identified the top three utilities in each category as the most inspiring considering their overall commitment to the climate agenda. The 2024 edition of the recognition programme was powered by Xylem.

WORKSHOPS

A dedicated workshop on the CSU Recognition Programme during the congress allowed the top three utilities in both categories to share their experiences on adaptation, mitigation and leadership. These utilities were Water & Sanitation Company SANEPAR (Brazil), Taipei Water Department (Chinese Taipei), Metropolitan Water Reclamation District of Greater Chicago (USA), Ruhrverband (Germany), Igua Saneamento (Brazil) and Odisha Water Supply and Sewerage Board (India).

Key discussions focussed on the need for utilities to manage resources efficiently and reduce water loss to be well adapted to the changing climate. Some strategies shared centred around investment in infrastructure, leveraging on advanced technologies for water monitoring as well as partnerships with leading academic and research institutions to explore innovative technologies. Also, the need to improve energy efficiency and neutrality for all industries/companies in the fight against climate change was highlighted. Most of the utilities are committed to achieving net zero emissions and a shift to renewable energy to support this agenda. In terms of leading the transition to Climate Smart, the utilities provided examples of how they have inspired other stakeholders in the transition through knowledge exchange and the development of innovative, equitable solutions for climate adaptation and GHG emission reduction.

All the 28 recognised utilities who took part in the Recognition Programme within the framework defined by IWA were honoured on stage and provided with a certificate of recognition at the end of the workshop. During the congress's closing ceremony, the top three utilities in both categories were acknowledged for their outstanding performance in tackling climate change.

POSTERS

Some of the recognised utilities had the opportunity to share their climate journey through posters submitted as part of the Recognition Programme. A total of 14 posters were received from the following utilities: Taipei Water Department (Chinese Taipei), Jūrmalas ūdens (Latvia), Baguio Water District (Philippines), Arrow Utilities (Canada), Odisha Water Supply & Sewerage Board (India), Water & Sanitation Company SANEPAR (Brazil), Aquapolo (Brazil), Eau de Paris (France), Iguá Saneamento (Brazil), Moulton Niguel Water District (USA), NWSDB (Sri Lanka), Scottish Water (Scotland), Water Authority of Fiji (Fiji), and Shenzhen Shenshui Longgang Water Group (China). These utilities from diverse backgrounds shared their expertise on specific issues related to adaptation, mitigation and leadership.

Inclusive Urban Sanitation

The 2024 IWA World Water Congress & Exhibition in Toronto emphasised the importance of Inclusive Urban Sanitation (IUS) and Diversity, Equity, and Inclusion (DEI) in the global water and sanitation sectors. The event showcased four IUS videos from Kenya, Brazil, Ghana and India, highlighting how various urban stakeholders are contributing to Sustainable Development Goal 6 (SDG 6). These videos, available on IWA's YouTube channel, aim to inspire further discussion and action toward advancing inclusive sanitation in low- and middle-income countries.

Two key workshops were held on Citywide Inclusive Sanitation (CWIS). The first workshop, “Enhancing Urban Sanitation: CWIS Framework Consultation”, addressed the progress of CWIS, focusing on areas such as stakeholder



coordination, sustainable financing, capacity building, data systems, and the importance of leadership in sanitation efforts. A need for a unified CWIS framework and actionable guidance was identified.

This year's congress showcased the growing significance of DEI within the organisation and the broader water and sanitation sector, featuring a dedicated DEI session during the SG Leaders' Forum, the launch of the IWA Women Leadership Network, and three workshops on gender-inclusive leadership. Notably, all recipients of this year's IWA's prestigious awards (Global Water Award, Young Leadership Award, and Gender Diversity and Water Award) were women.

Additionally, the Congress saw release of the second CWIS discussion paper, “Citywide Inclusive Sanitation: Reviewing the State of the Art”, which outlined recent developments and the growing uptake of CWIS over the past decade. It emphasised the importance of consultation to develop a unified CWIS framework and provide practical guidelines for real-world implementation.

At the Congress's closing ceremony, the outgoing President announced the approval of the IWA DEI Policy by the Association's Board, marking a significant step toward a more inclusive and equitable IWA.





Utility Leaders Forum

The World Water Congress & Exhibition once again hosted a high-level Utility Leaders Forum, marking the event as a highlight in the global agenda for advancing the management of water utilities around the world. The two-day 2024 Utility Leaders Forum brought together prominent water utility leaders with impactful case studies to share experiences and knowledge. The event's structure facilitated an open and interactive dialogue with experienced utility practitioners around some of the most critical challenges in water management and climate adaptation. About 230 participants joined the Forum to discuss and share comparative experiences, address proposed questions, and suggest recommendations to support utility management.

The forum focused on three main sessions:

- Building water security and resilience
- Utility breakthroughs on climate adaptation
- Utilities working to improve the circular economy

During the forum, PUB (Singapore) presented use of innovative technologies like pyrolysis and slag gasification to transform waste into valuable resources. BIOFOS (Denmark) highlighted the importance of resource recovery in wastewater treatment, focusing on biogas, biomethane, and other critical resources essential for sustainability. The City of Toronto (Canada) presented their city's Circular Economy Roadmap, showcasing how Toronto drives innovation and reduces emissions through optimised water management practices. Vitens (Netherlands) introduced the Living Lab project, a blueprint for sustainable and scalable drinking water

solutions in the Netherlands, setting new standards for future-ready water systems. Tucson Water (USA) shared a comprehensive approach (the One Water 2100 Plan) to water sustainability that emphasises resource diversification and conservation to ensure long-term resilience. Yarra Valley Water (Australia) emphasised integrated water management as key to building resilient communities. Scottish Water (Scotland) discussed climate challenges and the need for infrastructure adaptation, highlighting initiatives like Glasgow's Smart Canal, which enhances floodwater management.

Ontario Clean Water Agency (Canada) showcased their approach to resilient infrastructure, focusing on energy efficiency, climate change adaptation, and resource recovery, particularly in wastewater management. Lastly, Eswatini Water Services Corporation (Eswatini) highlighted the climate vulnerabilities of Eswatini, with a focus on energy management, water storage, and disaster risk reduction as key strategies to enhance resilience.

The forum emphasised the importance of collaboration across sectors, leveraging crises for change, and fostering adaptation and resilience in utility management. Key points included the need for partnerships with scientific providers, governments, and non-profits, and the integration of efforts beyond borders. Utilities were encouraged to use crises to attract funding and drive initiatives, while also focusing on public engagement to build trust and political advocacy. The adoption of innovative technologies like digital twins and AI was recommended to enhance water management practices, alongside developing leadership skills in negotiation and relationship-building.



The 9th International Water Regulators Forum

The 9th International Water Regulators Forum (IWRf) in Toronto, Canada gathered global water and sanitation regulators to address evolving challenges, promote collaboration, and explore innovative regulatory frameworks. With around 50 participants from diverse regions, the forum focused on ‘The Road to 2030: What Lies Ahead for Water and Sanitation Regulators’. Key themes included the necessity of collaboration between regulators and utilities, sustainable finance for climate-resilient services, and the use of technology for data-driven decision-making. The event aimed to promote innovative solutions, enhance regulatory efficiency, and develop strategies to achieve Sustainable Development Goal 6 and other related water and sanitation targets.

The Regulators Forum comprised three sessions that addressed critical themes in water and sanitation regulation. The first session emphasised the importance of adaptability, stakeholder engagement, and flexible regulation, with insights from Brazil and New Zealand on balancing economic and quality regulation through collaboration between regulators and utilities. The second session focused on sustainable finance for climate-resilient water services, highlighting the role of regulatory frameworks in securing necessary funding, as demonstrated by Brazil and Malaysia’s experiences. The third session explored innovation, resilience, and efficiency in WASH regulation, with Zambia and Brazil advocating for technological advancements and data-driven decision-making to improve transparency and service delivery.

The IWRf aims to foster collaboration, innovation, and sustainable finance in water and sanitation regulation, advancing progress toward global Sustainable Development Goals (SDG). The Forum serves as a platform for sharing best practices and promoting international cooperation in an increasingly dynamic regulatory environment.

Emerging Water Leader’s Forum

The 2024 Emerging Water Leaders Forum (EWLF), held on August 14 during the IWA World Water Congress & Exhibition in Toronto, brought together over 83 delegates, primarily young water professionals (YWP) from diverse regions. The Forum, organised by the IWA Secretariat and the YWP Steering Committee, aimed to foster discussions on critical water and sanitation challenges, focusing on the theme ‘Harnessing Data and AI to Address and Solve Global Water Challenges’.

Discussions revolved around leadership development, sustainability, and innovation in water technologies. The forum featured engaging sessions with experts discussing the integration of AI into traditional practices, emphasising the need for ethical considerations and addressing the digital divide.

Keynote speaker Wim Audenaert advocated for a balanced approach to digitalisation, promoting collaboration between human expertise and AI. Panel discussions explored career opportunities for YWPs in a digitalised water sector, emphasising necessary skills and the importance of innovation. Interactive workshops encouraged YWPs to navigate the complexities of AI and digital tools, fostering a collaborative atmosphere for knowledge exchange.



Industrial Water Forum

Industry is a significant consumer of water and energy, with over 22% of global water withdrawals used for industrial purposes. This figure is projected to rise rapidly in the coming years and decades. The decreasing availability of clean water poses a risk to industries across North America and many other regions. Currently, less than 15% of industrial water is reused, highlighting a vast potential for innovation.

The purpose of the Industrial Water Forum, held during the 2024 World Water Congress & Exhibition, was to engage, inspire, and share knowledge to address the challenges of investing in water efficiency. The forum attracted more than 120 participants from across the water sector, including industrial end-users, technology suppliers, regulators, and academia.

To cover the broad topic of industrial water, the day was divided into three sessions. These focused on industry best practices, collaboration with regulators and research institutes, and concluded with a panel debate on strategies to overcome the long return on investment in water technologies, as well as approaches to sharing responsibility and risk effectively.

Inspiration was drawn from new and existing technologies, with examples including PFAS remediation, energy conservation in open cooling water systems, and targeted resource recovery from high-strength sources. A recurring theme for success was the need for cross-sector collaboration to address both current and future water challenges, and how to avoid the 'valley of death' for innovation when transferring solutions between sectors, such as from research to industry.

Collaboration has been at the very core of the forum, as the organising committee had representatives from Xylem, Veolia and Grundfos.

Groundwater Forum

The Groundwater Forum emphasised the critical role of groundwater in achieving Sustainable Development Goals and building resilient, futureproof water supplies, particularly in times of conflict and climatic crises. The forum highlighted the need for high-level political action to prioritise groundwater, aligning its private and social costs, and ensuring its sustainability through technical expertise and holistic leadership. It underscored the importance of safeguarding both groundwater quality and quantity, addressing knowledge gaps in its role in climate change adaptation, and fostering inclusive decision-making that involves end-users, especially in rural and developing communities. The discussions advocated for integrated water resources management as a societal endeavour, essential for sustainable water solutions.

IWA Awards



IWA's prestigious Awards programme honours outstanding achievements and thought leadership by individuals, companies, and organisations in the water sector.

The awards distinguish those who have displayed conspicuous service to the profession and highlight exceptional performance in the research and practice of water management. The IWA Awards featured the Global Water Award, the Gender Diversity and Water Award, and the Young Leadership Award, as well the Project Innovation Awards with 18 winners in six categories including a grand winner.



Global Water Award

Dr. Joan Rose, *Michigan State University's Center for Advancing Microbial Risk Assessment (CAMRA), Center for Water Sciences (CWS), USA*

Dr. Joan Rose is the winner of the 2024 IWA Global Water Award. She is an international authority on water microbiology, water quality, and public health safety, a global leader on wastewater surveillance, and co-directs both Michigan State University's Center for Advancing Microbial Risk Assessment (CAMRA) and its Center for Water Sciences (CWS).

Joan's work on water reuse, pathogen removal, and climate and waterborne diseases, which focuses on the

application of new molecular methods, surveillance of pathogens, removal of pathogens by water and wastewater treatment, and quantitative microbial risk assessment, has contributed to international understanding of the impact of water quality on health. Her career has addressed the pressing problems of cryptosporidium and protozoa, with her research producing leading, globally respected, academic papers on the subject.

Joan has been a chair of the IWA Specialist Group on Health-related Water Microbiology, she is an IWA Distinguished Fellow, was an IWA Board Member from 2016 until 2021 and chaired the IWA COVID-19 Task Force.



Gender Diversity and Water Award

Juliet Willetts, *Institute for Sustainable Futures, University of Technology Sydney, Australia*

Professor Juliet Willetts is the Research Director at the University of Technology Sydney's Institute for Sustainable Futures (UTS-ISF). A global leader in water and sanitation research, she drives applied, innovative solutions to inform policy and practice across urban and rural settings in Asia and the Pacific. Her multidisciplinary work addresses critical issues including climate change, technical and environmental challenges, governance frameworks, behavioural change, gender equality, and public health, creating impactful partnerships with governments, UN agencies, research institutions, and a wide array of bilateral, multilateral, and civil society organisations.

Juliet's pioneering contributions have earned her numerous accolades, including recognition as one of the Australian Financial Review's 100 Women of Influence. With a PhD in Environmental Engineering from the University of New South Wales, she has established herself as a leading academic voice, authoring over 150 peer-reviewed articles that have shaped global understanding of sustainable water and sanitation solutions.



Young Leadership Award

Sabrina Rashid Sheonty, *Tetra, Canada*

Sabrina Rashid Sheonty is a young water resources engineering professional. She was born in Bangladesh, a developing country with diverse water problems. From a very young age, she had dreams of working on these problems. Thus, she pursued her studies majoring in water resources engineering at the top engineering school in Bangladesh. She completed her Bachelors and master's in water studies from Bangladesh and Canada. She has worked in various national and international WASH and climate projects in Bangladesh and North America in the last 5 years.

During her undergrad study, she founded a social innovation startup called Tetra, a social innovation startup aiming to provide innovative solutions to ensure safe drinking water access for the underprivileged coastal community of Bangladesh, targeting SDG 6 and SDG 13. She has conducted profound research in water and climate sectors in the last 6 years and published over 20 technical journal and conference papers till now.

In recognition of her effort in the water sector and sustainable development, her team became a regional finalist for the prestigious HULT Prize and won the championship of the UNDP Unilever Safe Water Challenge.



2024 IWA Project Innovation Awards

The Project Innovation Awards highlight world-leading achievements and contributions in the delivery of water-related projects around the globe. Recognition is given across six distinct categories. Each entry has been rigorously evaluated by our panel of expert judges, who considered the innovative nature, key outcomes, and broader impact potential of each project. Three winners are selected for each of the six Project Innovation Award categories. The overall winner receives the Grand Innovation Award.

GRAND INNOVATION AWARD

This prestigious honour recognises the most groundbreaking achievement in the water industry, chosen from among the six gold winners of the Project Innovation Awards.

Winner: Committee of China Concept Wastewater Treatment Plant, CSD Water Service Co., Ltd. for their project 'Inspiring Technological and Market Transformation: Practice of the China Concept Wastewater Resource Facility'.

CATEGORY: MARKET-CHANGING WATER TECHNOLOGY AND INFRASTRUCTURE

- **GOLD:**
Inspiring Technological and Market Transformation: Practice of the China Concept Wastewater Resource Facility, by Committee of China Concept Wastewater Treatment Plant, CSD Water Service Co., Ltd., China
- **SILVER:**
The Linear Path to Circularity!, by Águas do Tejo Atlantico, Portugal
- **BRONZE:**
South African Sanitation Technology Enterprise Programme (SASTEP), by Water Research Commission, South Africa

CATEGORY: BREAKTHROUGHS IN RESEARCH AND DEVELOPMENT

- **GOLD:**
Redefining Wastewater Treatment Technology – Design, Construction, and Operation of the World's First Mainstream Partial Nitrification-Anammox Wastewater Treatment Facility, by Beijing Drainage Group Co., Ltd.; Beijing University of Technology, China
- **SILVER:**
Integration of TADOX® Technology to achieve Net Zero in Textile Wastewater Treatment, by The Energy and Resources Institute (TERI), India
- **BRONZE:**
IntensiCarb, All in One Process, by Brown and Caldwell, Trojan Technologies, US Peroxide Technologies, USA



CATEGORY: GOVERNANCE, INSTITUTIONS AND SOCIAL ENTERPRISE

- **GOLD:**
Wollert Community Farm, by Yarra Valley Water, Australia
- **SILVER:**
Tetra Safe Drinking Water Project: Leveraging Solar Energy to Support Lower Income Communities in Bangladesh's Coastal Region, by Tetra Private Limited, Bangladesh
- **BRONZE:**
Jaldoot Programme, by Public Health Engineering Department & Jal Jeevan Mission, Assam, India

CATEGORY: EXCEPTIONAL PROJECT EXECUTION AND DELIVERY

- **GOLD:**
Ontario Wastewater Surveillance Initiative (Ontario WSI), by Ministry of the Environment, Conservation and Parks (MECP), Canada
- **SILVER:**
Huangxiao River and Airport River Water Environment Comprehensive Treatment PPP Project, Wuhan Municipal Water Affairs Authority, Wuhan Bishui Group Co., Ltd., China Construction Third Eng. Bureau Co., Ltd., C&S China Municipal Eng. Design and Research Inst. Co., Ltd., China State Construction Fund Mge. Co., Ltd.
- **BRONZE:**
120 MLD SWTP 9 Stage 6 Phase 1, Jubail in the Kingdom of Saudi Arabia, by VA Tech Wabag Ltd, India

CATEGORY: PERFORMANCE IMPROVEMENT AND OPERATIONAL SOLUTIONS

- **GOLD:**
Government-led City-wide COVID-19 Sewage Surveillance in Hong Kong with Engineering and Smart Technology Applications, by Environmental Protection Department, Hong Kong SAR Government, China
- **SILVER:**
Whole Life Cycle Management System of Municipal Pipe Networks in Developing Areas by Three Gorges Smart Water Technology Company Limited and Shanghai Investigation, Design & Research Institute, China
- **BRONZE:**
All-factor Collaborative Digital Governance Demonstration for Pollution and Waterlogging of the Shenzhen River Basin, by Shenzhen Water and Environment Group Co., Ltd., China

CATEGORY: SMART SYSTEMS AND THE DIGITAL WATER ECONOMY

- **GOLD:**
Digital Twin Platform for Water Distribution System in Fuzhou, by Fuzhou Water Group Co., Ltd., China
- **SILVER:**
Digital Dosing for Sustainable Sewer Protection, by The University of Queensland, Australia
- **BRONZE:**
The AI-Acoustic Underground Leak Detection System: A Case Study of Taiwan Water Corporation, by Taiwan Water Corporation (TWC), Industrial Technology Research Institute (ITRI), Chinese Taipei

IWA Honours and Recognition

IWA Honorary Membership

Recipients: **Jiuhui Qu**, **Darryl Day**, **Cheryl Davis** and **Anders Bækgaard**



Jiuhui Qu

Dr. Jiuhui Qu, a professor at the Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, and Distinguished Professor at Tsinghua University, is an IWA Distinguished

Fellow and member of multiple prestigious academies, including the CAE, U.S. NAE, and TWAS. Founding Editor-in-Chief of Blue-Green Systems and Water & Ecology, Prof. Qu developed a framework for safe drinking water and championed water restoration and resource recovery. His accolades include the IWA Project Innovation Award and China's National Science and Technology Progress Award. Prof. Qu has published nine books, holds 150+ patents, and authored 700+ papers with nearly 54,000 citations.



Darryl Day

Darryl, a civil engineer passionate about the water-energy-food-ecosystem-health nexus, has been involved with the International Water Association (IWA) since 2002, serving on the Governing

Board and Strategic Council. He co-chaired the SIWW Water Convention since 2009 and led the IWA Australia National Committee from 2012-2018. An IWA Distinguished Fellow (2018), Darryl is also a life member and former President of the Australian Water Association (AWA), earning AWA's highest honour in 2023. Darryl has held leadership roles, including CEO of the Peter Cullen Trust, and continues to mentor and advise on water policy and strategic initiatives globally.



Cheryl Davis

Cheryl has been in the water industry since 1983, when she accepted her first management position at the San Francisco Public Utilities Commission, which provides regional water and

wastewater services. She joined IWA in 2000, attending the first IWA World Water Congress & Exhibition held in Paris and noted for its Gala Dinner at the Louvre. Cheryl currently chairs the IWA Specialist Group on Sustainability in the Water Sector.



Anders Buur Bækgaard

Anders, a civil engineer from the Technical University of Denmark (1976), began his career with the National Geological Survey for Denmark and Greenland. He later served as CEO of the Danish Water

and Wastewater Association (DANVA) from 1989 to 2005, and CEO of VCS Denmark Ltd from 2005 to 2017. He held numerous board roles, including Chairman of the National Geological Survey and President of EurEau. An Honorary Member of DANVA and past Congress President for the IWA World Water Congress, Anders received the Danish Groundwater Award, Danish Initiative Award, and John Snow, Nordic Chapter Award in 2022.

IWA Honours and Recognition

IWA Outstanding Service Award

Winners: **Helle Katrine Andersen** and **Dr. Jean-Luc Bertrand-Krajewski**



Helle Katrine Andersen

Helle is the COO of the Danish Water and Waste Water Association (DANVA), has extensive international experience and is a prominent figure in the Danish and Nordic water sectors. Since joining DANVA in 2002,

she has focused on governance, policy, and regulation in the water sector. An active IWA member since 2004, Helle has chaired the Danish National IWA Committee since 2012 and served on the IWA Strategic Council, the Finance International Committee, and as an IWA Board member from September 2016 to April 2021. She also chaired the host country committee for the 2022 World Water Congress in Copenhagen, aligning Danish utilities with IWA strategies and programmes.



Jean-Luc Bertrand-Krajewski

Jean is a professor of Urban Hydrology at INSA Lyon, France, and has been co-president of the OTHU French Research Federation since 2023. Formerly the director of the DEEP Laboratory (2014–2020),

his research focuses on urban water systems, including stormwater management, SUDs, and pollutant transport modelling. An active IWA member for over 30 years, he has chaired the IWA Urban Drainage Specialist Group, served on the Strategic Council, and led its Specialist Groups sub-committee. He became an IWA Fellow in 2018 and received the Urban Drainage Specialist Group Career Achievement Award in 2021.

IWA Outstanding Contribution to Water Management & Science

Winners: **Dr. Silver Mugisha** and **G Mathi Vathanan**



G. Mathi Vathanan

G. Mathi is the Principal Secretary of the Department of Housing and Urban Development in Odisha, India. Since 2023, he has been a member of the IWA Advisory Board for Inclusive Urban Sanitation. He

leads initiatives like the Jaga Mission, which provides land rights to slum dwellers, and the 24X7 Drink From Tap Water Supply programme, ensuring all urban households access clean water. His decentralised, community-driven approach has shaped the Odisha model of urban governance. His work has earned global recognition, including the World Habitat Awards, Global Water Leader Distinction Award, and WRI Ross Prize for Cities.



Dr. Eng. Silver Mugisha

Silver is the Managing Director of National Water and Sewerage Corporation (NWSC) Uganda, a leading water and sanitation utility in Africa. With over 30 years of experience, he holds a Ph.D. in

Engineering and Economics from Makerere University, an MSc in Sanitary Engineering from IHE Delft, and a BSc in Civil Engineering. Dr. Mugisha has led organisational and performance improvements in utilities across Uganda and other African countries. He served as IWA Board Member (2014-2016) and Vice President (2016-2018), and is currently the President of the African Water and Sanitation Association (AfWASA).

IWA Honours and Recognition

IWA Publishing Award

Every two years, the IWA Publishing Award recognises significant leadership and service to IWA Publishing activities by a person who has shown initiative and leadership to enhance the publication landscape in in the water field and the portfolio of IWA.



Professor Hong Ying Hu

This year, on the recommendation of the IWA Publications Committee, the International Water Association recognised Professor Hong Ying Hu from the Tsinghua University, for his exceptional leadership in

elevating the journal's reputation and global influence during his 4-year tenure as the co-editor-in-chief of the journal *Water Reuse*, which has resulted in the journal becoming one of the top-tier journals in the field of Water Resources.

Poster Awards

Theme 1

(Water Utility Management)

Winner: Embrey Bronstad, Brown and Caldwell, USA with the poster 'Fugitive Methane Emissions at a Water Resource Recovery Facility: Preliminary Results from A Top-Down | Bottom-Up Field Campaign'.

Theme 2

(Wastewater Treatment and Resource Recovery)

Winner: Yujie Chen, Tohoku University, Japan with the poster 'High-rate Nitrogen Removal Using HAP-PNA (partial Nitrification | anammox) Granular Sludge', and Xiaonan Tang, The George Washington University, USA, with the poster 'Identification and Environmental Behavior of Bacteria-Associated Enteric Viruses in Wastewater'.

Theme 3

(Drinking Water and Potable Reuse)

Winner: Polly Grundy, Cranfield University, UK with the poster 'Understanding the Chemistry of Brominated Disinfection By-Product Formation'.



Theme 4

(City Scale Planning and Operations) and Theme 5 (Communities, Communication, and Partnerships)

Winner: Faruque Mia, York Region (The Regional Municipality of York), Canada with the poster, 'Beyond the Pipes: York Region's Comprehensive Approach to Tackling I&I In Wastewater Systems'.

Theme 6

(Water Resources and Large-Scale Water Management)

Winner: David Renfrew, Imperial College London, UK with the poster 'Circularity Assessment of High Value-Added Resource Recovery; Ectoine Production from Biogas'.

Exhibition



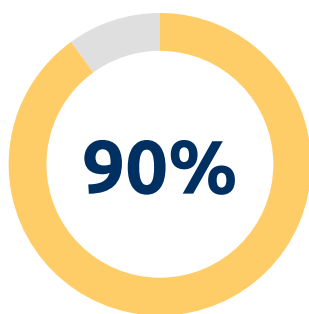
The IWA World Water Congress & Exhibition 2024 in Toronto, Canada, provided a comprehensive snapshot of the global water sector, bringing together key stakeholders, including technology providers, water utilities, governments, consultants, and contractors. The exhibition showcased their contributions to sustainable solutions in the water industry. The exhibition hosted 250 global exhibitors and featured prominent country pavilions, including those from the United Kingdom, Denmark, Malaysia/Sarawak, Netherlands, India, China, Tokyo/Japan, and the USA, alongside a strong representation from Canada.

A key feature of the exhibition was the Innovation Pavilion, organised in collaboration with Isle Utilities, which showcased startups and scale-ups from around the world, offering cutting-edge solutions for water management challenges.

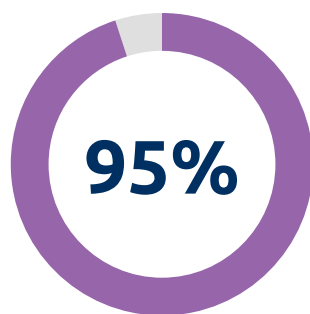
Another notable highlight was the Operations Challenge, where 10 teams from Canada, the USA, and Europe competed in categories including Maintenance, Collection Systems, and Safety, promoting team spirit and collaboration across utilities. The top performers were the Durham Sludgehammers, who claimed first place, followed by RMWEA Elevated Ops in second, and York Weir Wolves in third.

The IWA Pavilion, hosted by the IWA Secretariat and IWA Publishing, acted as a central hub for knowledge sharing, offering programme updates, book launches, and high-level discussions. It also provided a platform for new and existing IWA members to learn more about the association's activities and its new membership platform, Connect Plus.

The exhibition floor also featured an extensive Business Forum programme, offering exhibitors and sponsors an opportunity to showcase their latest innovations and updates, furthering the discourse on emerging technologies and sustainable water solutions in the global water sector.



90% of exhibitors conclude that the IWA WWCE 24 met or exceeded their overall expectations.



95% of exhibitors see the IWA WWCE 24 as a global event.



100% of exhibitors agree that the quality of contacts at the IWA WWCE 24 met or exceeded their expectations.

Publication Launches in Toronto



Women in Water: How to Support Everyone's Contribution

IWA has published *Women in Water* by Cheryl Davis, Andrée De Cock, Arlinda Ibrahimllari, Liudmyla Odud and Siyka Radilova.

In this book, women working in the water industry across the globe discuss their challenges and lessons learned in relation to opportunities and advancement, disrespectful behaviour, self-confidence, age, work-life balance, and mentoring. Their individual experiences reflect ways in which beliefs and practices relating to gender can limit the contributions of women.

The World Water Congress & Exhibition hosted several of the authors and contributors who discussed why, given the severity of the water supply, water quality, and climate challenges before us, everyone's best contributions will be needed to protect water, our communities, and the planet.

What are the barriers that prevent women from bringing all their knowledge, skills, and capabilities to their work? Why is the failure to fully utilise everyone's capacities a survival issue?

Full utilisation of everyone's capacities is a goal that needs to be accepted and acted on by the water industry, not only for the sake of women, but in order to fulfil our responsibilities to the communities we serve and the planet we need to protect.

“Gender inequality is not just morally and ethically wrong, it is also a form of stupidity.”

Cheryl Davis

Sanitation for All: A Women's Perspective

Author Blanca Jimenez Cisneros attended the conference to launch *Sanitation for All*.

In 2022, 43% of the world's population lacked access to safely managed sanitation. Poor sanitation is linked to the transmission of diarrhoeal diseases, exacerbates stunting, and contributes to the spread of antimicrobial resistance. In low-income countries, 5% of deaths are associated with unsafe sanitation. Poor sanitation affects mental well-being and safety, especially for women and children. Lack of sanitation costs around 2% of GDP (a figure that increases rapidly with epidemic outbreaks) because of income losses from trade and tourism and the impact on water quality.

This book is an attempt to compile with a critical and complementary point of view challenges, solutions and dilemmas we (men and women) face to achieve the goal of *Sanitation for All*.

How can we advance on a subject that:

- Mainly concerns middle and low-income regions which have a long list of other pressing needs.
- Is, by far, a service much more complex to provide than drinking water, technically, socially and financially.
- Is not only per se a Human Right, but it is indispensable to achieve many of the other Human Rights. Just at the 2030 Agenda, sanitation is needed to reach the goals on Poverty, Health, Education, Gender, Water, Equity, Cities and Sustainable Environment.
- Is a continuously growing problem, due to population increase and the need to raise the level of the services up to the standard being provided in high income regions.
- The financial and human resources necessary are insufficient and, there is simply no political will to address the challenge.

Achieving 'Sanitation for All' implies special efforts of the few sanitation policy and decision makers working worldwide, but if they succeed it could change the life of many people in the world. Thus, it is an effort that cannot be performed alone, it is necessary to engage us all: politicians, other sectors, donors, and the society at large, including and foremost, women.

IWA's Dynamic Membership



IWA Fellows and Distinguished Fellows

IWA Fellows and Distinguished Fellows are individual water professionals who receive recognition from their peers for their sustained outstanding contribution to the water profession and the industry, and to helping deliver IWA's mission of creating a water-wise world, improving the wellbeing of societies and the environment. IWA announced 7 new IWA Distinguished Fellows and 28 new IWA Fellows in Toronto.

New IWA Distinguished Fellows

Michael Storey, *Australia*; **Jiangyong Hu**, *Singapore*;
Harsha Ratnaweera, *Norway*; **Jo Burgess**, *South Africa*;
Dragan Savic, *Netherlands*; **Norbert Jardin**, *Germany*;
Mooyoung Han, *Republic of Korea*.

New IWA Fellows

Ameet Pinto, *USA*; **Amit Chanan**, *Fiji*; **Bing-Jie Ni**, *Australia*;
Blanca Antizar-Ladislao, *United Kingdom*; **Defeng Xing**, *China*;
Eakalak Khan, *USA*; **Giorgio Mannina**, *Italy*;
Helen Stratton, *Australia*; **Ismail Koyuncu**, *Turkey*;
Jan Hofman, *United Kingdom*; **Jayant Bhagwan**, *South Africa*;
Julia Gathu, *Kenya*; **Junwei Jin**, *China*; **Kazuya Naito**, *Japan*;
Liu Ye, *Australia*; **Maite Pijuan**, *Spain*; **Melissa Meeker**, *USA*;
Nupur Bahadur, *India*; **Philip De Souza**, *Australia*;
Raziye Farmani, *United Kingdom*; **Regina Sommer**, *Austria*;
Rong Chen, *China*; **Sankaralingam Mohan**, *India*;
Stuart Khan, *Australia*; **Susan Petterson**, *Australia*;
Wen-Wei Li, *China*; **Yongmei Li**, *China*; **Zhiyong Jason Ren**, *USA*



Young Water Professionals at the Congress

IWA's commitment to empowering young water professionals remained steadfast throughout the Congress. YWPs actively participated in various events, making significant contributions as presenters and co-chairs in workshops and technical sessions, as well as serving as rapporteurs during forums. They also engaged in networking activities and took part in the World Water Camp, organised by the Canada YWP Chapter, the host chapter this year. Additionally, the IWA YWP Steering Committee held their in-person meeting in Toronto, marking an important moment for the global YWP community. IWA also continued to dedicate a plenary for young water professionals.

This year, we proudly celebrated the Spanish YWP Chapter, which was awarded the 2024 IWA Young Water Professionals Chapter of the Year, in recognition of their outstanding achievements and contributions to the water sector. We also announced the continuation of the IWA and Grundfos Youth Action for SDG 6 Fellowship, alongside the introduction of IWA LeaP, the International Water Association's Leadership Programme for Young Water Professionals, aimed at developing the next generation of water leaders.

Young Water Professionals also played a key role in the Emerging Water Leaders Forum, an inclusive platform designed for young and emerging water leaders—both IWA members and non-members. This forum fosters collaborative exploration and contributions to discussions about the future of the water and sanitation sector. The theme for this year, 'Harnessing Data and AI to Address and Solve Global Water Challenges', was a focal point of the dialogue, emphasising the transformative role of digital tools, such as Artificial Intelligence (AI), in advancing water management and governance.



IWA Specialist Groups

The IWA Specialist Group Leaders played a pivotal role at the World Water Congress & Exhibition 2024 in Toronto, contributing expert knowledge and facilitating critical discussions on global water challenges. Across the four days, they actively participated in panel discussions, chaired workshops, and showcased innovative water management technologies in exhibition areas. Their contributions extended to poster presentations and the publication of research papers, helping disseminate cutting-edge advancements in water science.

Throughout the event, Specialist Groups held open meetings, offering members the chance to engage directly with leadership and fellow experts, fostering dialogue on ongoing projects, future initiatives, and emerging trends. These meetings served as crucial hubs for collaboration and knowledge exchange, strengthening networks and promoting the strategic direction of the groups.

The 2024 SG Leaders Forum (10 August), themed 'Uniting IWA Specialist Groups for Sustainable Progress, Inclusivity, and Innovation in Water Management', focused on collective action for sustainable solutions and innovation. Through World Café roundtables, SG Leaders discussed key topics, including effective SG management, promoting inclusivity, fostering collaboration, and enhancing IWA programmes. With diverse experts contributing, the Forum provided a platform for shaping future water management strategies that emphasise inclusivity, collaboration, and innovation, crucial for tackling global water challenges.

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Acknowledgements

From all at the International Water Association, we would like to express our deepest appreciation to the following for their tireless and important work done to make the 2024 edition of the IWA World Water Congress & Exhibition such a success! Thank you.

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