CII WATER TECH SUMMIT

"Transforming Water Management with Cutting-Edge Technology: Within & Beyond"

10th - 11th August, 2023: New Delhi

The expansion of scientific knowledge and technological applications can impact the way water and wastewater are managed to cater to human, economic, and environmental needs. Hence, the adoption of new and cutting-edge technologies, digital interventions with a focus on sustainability to create value for society assumes key importance.

Against this backdrop, **CII's Water-Tech Summit 2023, centered on the theme "Transforming Water Management with Cutting-Edge Technology: Within & Beyond,"** was organized as one of the B20 events on August 10-11, 2023, in New Delhi.

The two-day conference witnessed rich exchange of knowledge and high-quality presentations from speakers of national and international repute. Over 35 speakers, including representation from G20 countries – the UK, USA, European Union (Denmark, Netherlands, Sweden), shared their perspectives and good practices to tackle critical issues related to water management. The conference was attended by over 300 participants.

Six sessions focusing on various aspects of the use of technology in water management brought out excellent insights on leveraging technological advancements in water and wastewater management, along with people's participation.

During the opening session, **Mr. G Asok Kumar, Director-General, NMCG, Ministry of Jal Shakti,** while lauding the efforts of the industry in undertaking proactive measures for improved operational efficiencies, also stressed the need to adopt appropriate technologies for judicious water resource management. Many of these technologies exist and are innovative, scalable, and cost-effective, he stressed. Further, availability of reliable, real-time data and measuring and monitoring of water (consumption and quality) will be important for enabling improved decision making and water management and making Indian Industry future ready.

Session on Disruptive Technologies for Water and Wastewater Management and Digital – IoT-Based Solutions focused on innovative digital technologies and data analytics in water management. These include the use of sensors, satellite imagery, AI-ML, to improve water distribution, monitoring, and governance. It was clearly cited that while the application of digitalization and IoT can enhance water use efficiency, the role of human intelligence cannot be replaced.

The session on **Emerging Contaminants: Technologies for Measuring, Monitoring & Controlling** deliberated on the growing threat of emerging contaminants. Discussions on monitoring and controlling pharmaceutically active compounds and personal care products (PCPs) in the water environment, understanding litigation, regulations, analysis, and available treatment of forever chemicals - PFASs (Perfluoroalkyl substances), provided insights into the need for research, monitoring, and regulation.

The session on Financial Sustainability and Successful Approaches/People Participation for Water Supply and Wastewater Management stressed the significance of reducing non-revenue water (NRW). It was emphasized that various initiatives under

programs like AMRUT - 24x7 water supply in cities, NRW reduction, and promoting water reuse must be prioritized. The importance of community responsibility and willingness to pay for water was emphasized.

The session on Waste to Wealth: Good Practices discussed innovative approaches and technological innovations for effective water and wastewater management. discussed innovative approched and technological innovations for effective water and wastewater management. NITI Aayog, in association with CII Water Institute, has recently published "Guidelines on achieving Water Neutrality for Indian Industry." The essence and underlying principles of these newly prescribed guidelines were presented at the forum to enable the adoption of practices and measures for an improved water scenario, considering both water resource availability and water quality.

The session on **Dealing with Residuals from Water and Wastewater Treatments** focused on the management of waste from water and wastewater treatment systems through the application of innovative technologies. Digital interventions make a big difference in recycling industrial and municipal effluents by enhancing performance and thereby resulting in increased savings in energy and chemical consumption. The importance of skill development for ensuring the success of digital transformation in water supply networks was emphasized.

The two-day conference successfully concluded with a rich exchange of insights and knowledge sharing. Overall, the conference raised awareness of various concepts and technologies related to water and wastewater management. Dr. Ajay Popat, Conference Chairman & Chair, Core Group on New and Cutting-Edge Technologies for Wastewater Management, CII National Committee on Water & President, Ion Exchange (India) Limited, applauded the industry's efforts in embarking upon a circular economy by leveraging technological advancements, demonstrating holistic management of water and wastewater. Dr. Popat observed that it is essential for the industry to take effective water management seriously as the variability and availability can compromise their competitiveness in every aspect of their operation.
