CII-TRIVENI WATER INSTITUTE

Confederation of Indian Industry

3rd Conference on Water Neutrality

"Collective Action for a Water Neutral Industry by 2030"

26th February 2026: India Habitat Centre, New Delhi

RETROSPECT

Presented By:

CII Water Institute

Disclaimer

Published by CII-Triveni Water Institute (CII-TWI), 5th Floor, IETE Building, 2, Institutional Area, Lodi Road, New Delhi 110 003 (India) +91-11-40028886; Email: water.events@cii.in Web: www.cii-twi.in

INDEX

About the Conference

Water scarcity has been intensifying globally over the past few decades, with developing countries being particularly affected. According to estimates presented at the UN COP26 Climate Conference, there is expected to be a 40% shortfall in freshwater resources by 2030. This underscores the urgent need for a holistic approach to water resource management - one that goes beyond operational efficiency to achieve long-term sustainability.

Against this context, CII organized the 3rd edition of the Conference on Water Neutrality on Thursday, 26th February 2026, in New Delhi. The theme of the conference is “Collective Action for a Water Neutral Industry by 2030”.

The conference focussed on enhancing sensitization and awareness on Water Neutrality as essential tool for risk mitigation for business continuity. The discussions during the conference provided valuable insights into the roadmap for achieving water neutrality by highlighting effective tools, techniques, and innovative technologies, while addressing critical environmental challenges related to water sustainability.

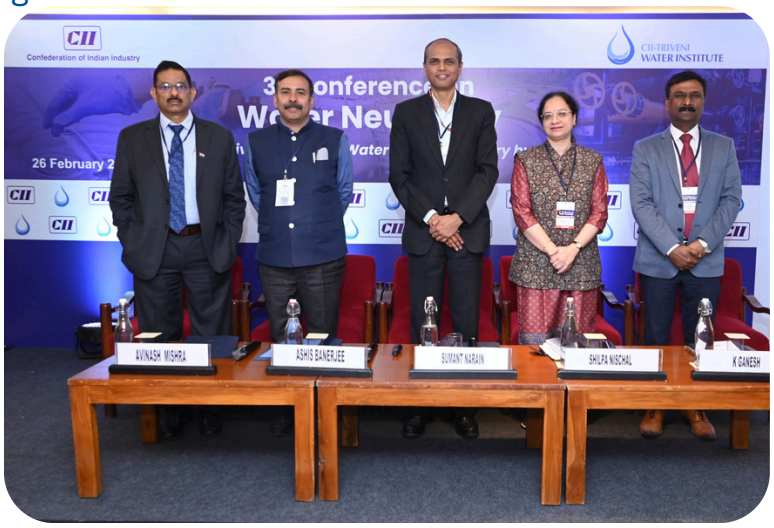
Technical sessions discussed technological interventions, and best practices aimed at enhancing water use efficiency, watershed management and ecosystem health. The deliberations highlighted the need for the industry to move from reactive to proactive approach by embracing technological innovations, the implementation of measuring and monitoring provisions, andadoption of best practices that are followed in various sectors.

The conference witnessed around 150 participants including officers from central government ministries/departments, Industry, Academia and NGOs.

Inaugural Session

India's water challenges require moving beyond dialogue to practical, scalable solutions built through innovation, partnerships and cooperation, said , **Mr Sumant Narain, Joint Secretary, National Water Mission, Ministry of Jal Shakti,** He was speaking at the 3rd Conference on Water Neutrality with the theme "Collective action for a Water Neutral Industry by 2030" organised by CII Water Institute, CII's Centre of Excellence on Water at New Delhi today .

Mr Narain highlighted major opportunities for industry collaboration in India's water sector, including the newly launched Jal Shakti Hackathon that opens government-funded R&D to startups, MSMEs and academia to create low-cost water-efficiency solutions. He urged industries to share good practices for learning and cross learning, leverage incentives for water conservation, and adopt voluntary targets to ensure sustainable water management for future generations.

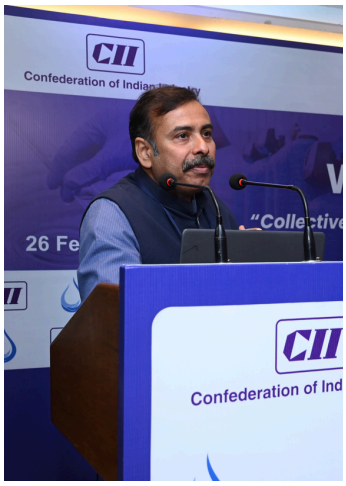


L - R (Mr Avinash Mishra, Senior Advisor, CII-Triveni Water Institute & Former Advisor, NITI Aayog, Mr. Ashish Banerjee, Chief Engineer, Irrigation Management Organization, Central Water Commission, Mr Sumant Narain, Joint Secretary, National Water Mission, Ministry of Jal Shakti, Ms Shilpa Nischal, Executive Director, CII Water Institute, Mr K. Ganesh, Director Sustainability and Corporate Affair, Bisleri International Private Limited)

CII Water Pledge was also launched during the conference. Aligned with the mandate of the National Water Mission (NWM) to improve Water Use Efficiency (WUE) by 20% across irrigation, domestic, and industrial sectors, and in line with the Bureau of Water Use Efficiency (BWUE)'s focus on targeted water efficiency interventions.

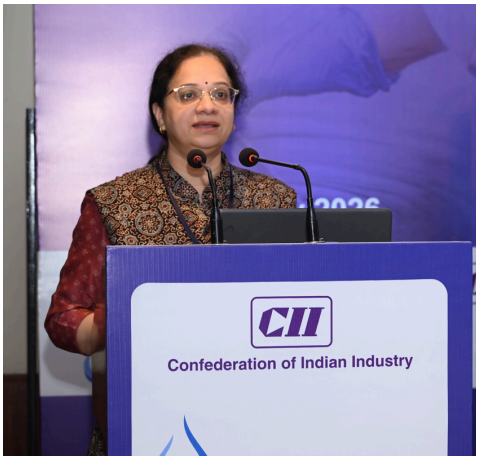
The CII Water Pledge calls on industries across sectors to make voluntary, future-ready commitments to responsible water management, reinforcing India's vision of a water secured future. Through collective action, the pledge aims to drive Indian industry toward achieving Water Neutrality by 2030. Member companies and industry representatives pledged their commitment to becoming responsible, water-conscious enterprises.

Mr. Ashish Banerjee, Chief Engineer, Irrigation Management Organization, Central Water Commission highlighted India's deeply skewed water distribution, with two-thirds of resources concentrated in the Ganga and Brahmaputra basins and 85% of water consumed by irrigation. He stressed the need to enhance efficiency through modernized dams, piped distribution networks, and drip and sprinkler systems to unlock water for growing industrial demand. For industries, he emphasized strict water audits, recycling and reuse, and protecting groundwater quality.



Mr K. Ganesh, Director Sustainability and Corporate Affair, Bisleri International Private Limited underscored Bisleri's commitment to responsible water stewardship through reduce, reuse, recycle, replenish and reporting through comprehensive water stewardship strategy, both within the fence and beyond the fence initiatives. He emphasized lifecycle water assessment and urged industry-wide collaboration to protect water resources for future generations.

Mr Avinash Mishra, Senior Advisor, CII-Triveni Water Institute & Former Advisor, NITI Aayog highlighted the urgent need for industries to voluntarily reduce water consumption as India faces shrinking per-capita water availability and growing risk of water bankruptcy, as flagged by the UN. Aligning with the Viksit Bharat vision, he stressed strengthening water efficiency, enforcing audits, and accelerating reuse, recycling, recharge and replenishment to decouple economic growth from escalating water demand. He shared that the concept of Water Neutrality is gaining recognition in the industry and over 100 plants have adopted the Water Neutrality Guidelines developed by NITI Aayog, focusing on water quantity offsets, quality restoration, and ecosystem health.



Ms Shilpa Nischal, Executive Director, CII Water Institute, emphasized that achieving water neutrality is central to ensuring both water security. She concurred, as water knows no boundaries, basin-level and supply chain-based approaches are essential in estimating water security. She emphasized that water neutrality extends beyond calculations to safeguarding water quality, ecosystem health, preventing misuse, and ensuring responsible water use.

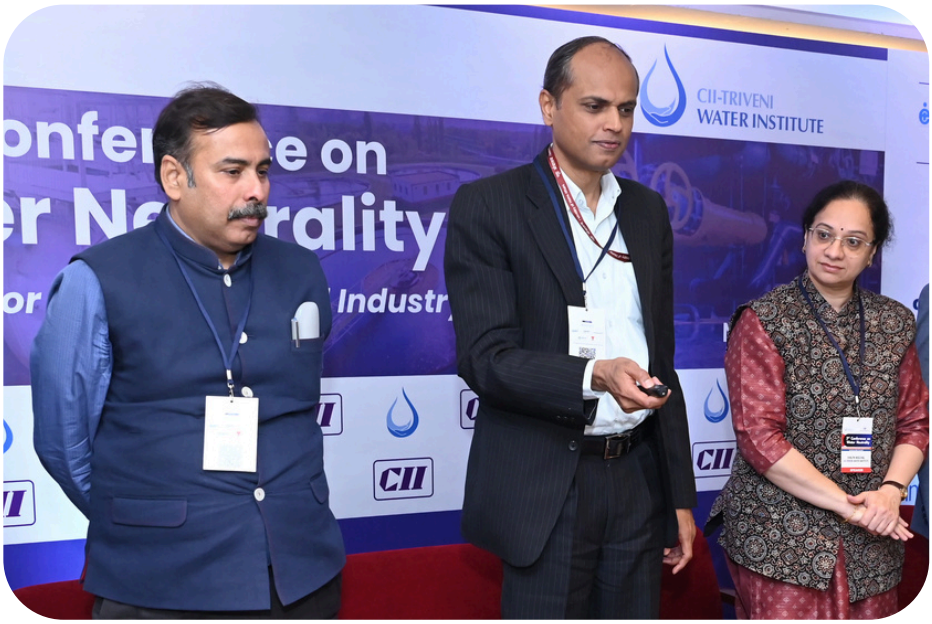
Quote

Mr Sumant Narain, Joint Secretary, National Water Mission, Ministry of Jal Shakti

"Voluntary action by industry today will shape India's water landscape tomorrow. Collaboration and innovation must be our shared pathway forward."

Mr Ashish Banerjee, Chief Engineer, Irrigation Management Organization, Central Water Commission

"Industry must lead the shift toward smarter water management—through strict audits, sector-specific efficiency upgrades, and technologies that minimize losses across storage, distribution and application."



Launch of : CII Water Pledge: Voluntary Targets for Future-Ready Water Management

CII-TRIVENI WATER INSTITUTE

WATER PLEDGE

Confederation of Indian Industry

Aligned with the **Hon'ble Prime Minister's vision** of industrial responsibility, sustainability, and a Viksit Bharat, we commit ourselves to progressively improving water usage in our operations and managing the resource at the watershed level.

We commit to achieve **Water Neutrality,** ensuring that our growth does not compromise the needs of future generations.

Commitment To

Reduce & Reuse

- Reduce freshwater consumption by **10–15%** every year over the next five years
- Increase wastewater reuse & recycling by **10–15%** annually over the next five years

Replenish & Protect

- Increase rainwater harvesting & aquifer recharge
- Conduct watershed & groundwater assessments
- Prevent pollution of rivers, lakes & aquifers

Secure & Sustain

- Climate-risk : Proactive planning for droughts & floods
- Strengthen community water security
- Integrate water neutrality principals into supply chain risk assesment

Measure & Lead

- Map, Measure, audit & transparently disclose water performance
- Adopt effiient, innovative & indigenous technologies
- Forge partnerships across government, industry & communities

We pledge that Indian industry will lead by example —ensuring growth goes hand in hand with environmental responsibility.

Session 1 : Water Neutrality: A Pathway Towards Enabling Decarbonization and Energy Transition

Objective

To discuss role of water neutrality in driving decarbonization and energy transition by examining the water–energy nexus and understanding practical methodologies and solutions that enable efficiency, circularity, and resilient industrial water management.

Moderated by

Mr Avinash Mishra, Senior Advisor, CII-Triveni Water Institute & Former Advisor, NITI Aayog

Speakers

- **Mr Baskar Mohan, General Manager, Digitalization Sales Ion Exchange (India) Ltd**
- **Mr Faraz Ahmad, Counsellor, CII-Triveni Water Institute**
- **Mr Vivek V Nair, Lead technology & Marketing (IWM), Murugappa Water Technology and Solutions**
- **Mr Anil Kumar, Chief Operating Officer, TTI Consulting Engineers (I) Pvt Ltd**

L - R (Mr Faraz Ahmad, Counsellor, CII-Triveni Water Institute, Mr Baskar Mohan, General Manager, Digitalization Sales Ion Exchange (India) Ltd, Mr Avinash Mishra, Senior Advisor, CII-Triveni Water Institute & Former Advisor, NITI Aayog, Mr Vivek V Nair, Lead technology & Marketing (IWM), Murugappa Water Technology and Solutions, Mr Anil Kumar, Chief Operating Officer, TTI Consulting Engineers (I) Pvt Ltd)

Key Discussions

Mr Avinash Mishra highlighted water's central role across industries and its strong linkage with energy consumption and decarbonization. He noted that thermal power generation—accounting for nearly 70% of energy—requires significant water, including 3.5 cubic meters per megawatt. Additionally, 30% of energy is used for water pumping. He emphasized decoupling water use from energy demand through efficiency, recycling, reuse, replenishment, and integrating carbon and water credit frameworks to advance sustainability goals.

Mr Baskar Mohan highlighted water neutrality from an industrial lens, emphasizing the water–energy nexus and its operational and financial risks. He introduced IronSight, an IoT-based intelligent cloud platform enabling real-time monitoring, KPI tracking, predictive analytics, and water balance management across assets. The solution supports ESG goals, efficiency, budgeting, and manpower optimization. With modular models—Connect, Assure, and Optimize—it shifts industries from reactive to proactive management, delivering measurable gains, including 15% chemical and 18% water savings.

Mr Faraz Ahmad, Counsellor, CII-Triveni Water Institute emphasized that hydrogeology is central to achieving true water neutrality and ensuring industrial business continuity. He stressed that neutrality is not mere volume balancing but replenishing the same aquifer within the same hydrological unit, aligned with the NITI Aayog framework. Citing a case study from Rajasthan he demonstrated how scientific assessment, recharge planning, monitoring, and adaptive management enable sustainable groundwater management.

Mr Vivek V Nair highlighted the alarming reality of industrial water withdrawal and the urgent need for sustainable action. Representing Murugappa Water Technology Solutions, he presented in-plant innovations like "Ultra Cool" to recover cooling tower evaporation losses and high-recovery RO systems achieving up to 95% efficiency. He also discussed Aqua Positive's water-benefit initiatives, emphasizing measurable, permanent, and community-focused water-positive projects enabled through technology, monitoring, and transparent volumetric accounting frameworks.

Mr Anil Kumar highlighted digital transformation in water and wastewater utilities, emphasizing AI-enabled optimization, IoT sensors, and SCADA systems for efficient water management. Ahmedabad and Dubai. He shared case studies on smart asset management initiatives from Pune, Rajasthan, the UK, and Singapore demonstrating energy savings, leakage reduction, and automation gains. He stressed that technology, governance, skilled systems, and strong policy alignment are essential for sustainable water neutrality.

Key Takeaways

- Industries must decouple freshwater extraction from energy demand by adopting recycle–reuse–replenish models and minimizing long-distance water conveyance.
- Digital platforms and IoT-driven monitoring enable a shift from reactive to predictive water management by identifying inefficiencies early.
- Hydrogeology is essential for meaningful water neutrality, ensuring that replenishment occurs within the same aquifer through scientifically planned recharge interventions.
- High-efficiency treatment and recovery technologies, combined with externally verified watershed projects and transparent volumetric accounting, offer credible pathways toward water-positive commitments.
- Governance, skilled workforce development, and strong policy alignment are as important as technology adoption.

Session 2 : Collective Action for Water Neutrality: Industry-Led Initiatives

Objective

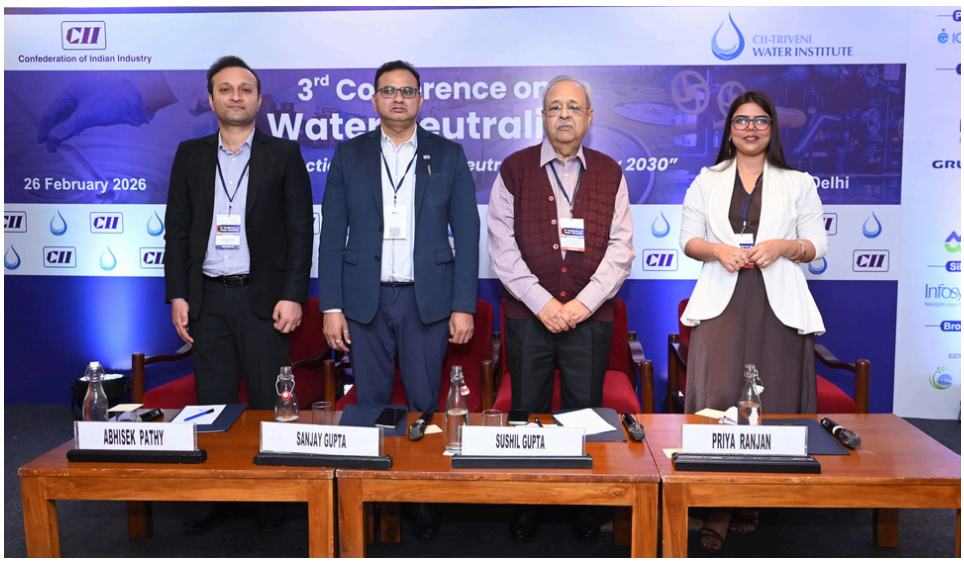
To showcase scalable best practices and Industry-led interventions advancing water neutrality and understanding key learnings from real-world actions in efficiency, treatment, reuse, recycling and basin replenishment.

Moderated by

Mr Sushil Gupta, Former Chairman, Central Ground Water Board, Government of India

Speakers

- **Mr Abhishek Pathy, Dy Manager – Environment & Sustainability, Apraava Energy Private Ltd.**
- **Mr Sanjay Gupta, Senior Counsellor, CII–Triveni Water Institute**
- **Ms Priya Ranjan, Technical Manager, QA Testing Laboratories Pvt Ltd**



L - R (Mr Abhishek Pathy, Dy Manager – Environment & Sustainability, Apraava Energy Private Ltd, Mr Sanjay Gupta, Senior Counsellor, CII–Triveni Water Institute, Mr Sushil Gupta, Former Chairman, Central Ground Water Board, Government of India, Ms Priya Ranjan, Technical Manager, QA Testing Laboratories Pvt Ltd)

Key Takeaways

Dr Sushil Gupta stressed that rather than only focusing on wastewater treatment, improving water-use efficiency is equally important for efficient management of water. Pointing to Inefficient groundwater extraction systems and low-efficiency agricultural pumps that waste significant energy and water he pointed that adopting scientific well design and enhancing pump efficiency can result in substantial energy savings. He concluded that true water neutrality requires conservation, efficiency, and collective, multi-sectoral action.

Mr Abhishek Pathy highlighted that water neutrality is not just about measuring consumption but understanding its long-term environmental impact. He stressed that water, like energy, must be managed efficiently, collaboratively, and sustainably to protect future generations and ensure true environmental responsibility.

Mr Sanjay Gupta emphasized the growing relevance of water neutrality in India amid rising water stress, climate disruptions, industrialization, and pollution challenges. He noted that over 100 locations and 20+ enterprises have adopted water neutrality, guided by national frameworks developed with NITI Aayog and CII. Elaborating on the key principals of water neutrality, he underscored that Water Neutrality is a continuous, collective process toward resilience and sustainability.

Ms Priya Ranjan noted that emerging technologies like AI and semiconductor manufacturing also consume significant water, requiring responsible management. She explained the critical role of water quality testing, compliance, and accurate reporting in ensuring environmental safety. She concluded that sustainable water use, wastewater reuse, ecosystem protection, and behavioral change are essential to safeguard future generations.

Key Takeaways

- The NITI Aayog–CII Water Neutrality Framework offers a practical roadmap, stressing watershed-based replenishment, hydrological boundary mapping, diversified water sources, and integrated water–energy–carbon assessments.
- Achieving water neutrality demands technological upgrades, scientific approaches, responsible consumption, and behavioural transformation to build a long-term culture of conservation.
- Industries must reduce wastewater generation at source and maximize internal reuse before discharge.
- Digital technologies—IoT sensors, digital twins, AI-based optimization, and real-time monitoring—enable a shift from reactive to predictive water management by identifying inefficiencies early.
- Improving water-use efficiency through redesigned wells and efficient pump systems can significantly cut water and energy consumption.
- Strong water-quality validation through NABL- and ISO-certified laboratories is crucial for safe recycling and environmental protection.

Some Glimpses