The Trial Reservoir: accelerating the pace of water technology adoption

Xylem, in partnership with water consultancy Isle Utilities, has introduced an industry-first approach to funding and scaling for breakthrough water technologies. Called The Trial Reservoir, the initiative will tackle one of the major sticking points in the industry’s transformation: the pace of technology adoption. Piers Clark, the founder and chairman of Isle Utilities, and Sivan Zamir, head of Xylem Innovation Labs, explain.

A cross the global water sector, new partnerships are sparking innovation and helping to fast-track solutions to the world’s most urgent water challenges. “At Xylem, our innovation ecosystem is at the heart of how we solve water; we are constantly exploring new ways to join the dots between stakeholders and forge creative alliances across the sector,” says Sivan Zamir, head of Xylem Innovation Labs.

“Our new partnership with water consultancy Isle Utilities will tackle one of the major sticking points in our industry’s transformation: the pace of technology adoption. Through The Trial Reservoir’s innovative approach to funding, we hope to scale up the breakthrough water technologies we know can help to solve current challenges,” says Zamir.

Piers Clark of Isle Utilities continues: “With the launch of The Trial Reservoir, we’re aiming to get to the heart of a problem that impacts the whole of the water sector – the fact that adoption of technology is simply taking too long. Technology trials and pilots are usually a precursor to deployment but, time and time again, we see trials that deliver on their objectives but fail to move to full-scale implementation, whether because of process complexity, cost or other factors.

Even the most innovative utilities risk becoming caught in this cycle of trials without ever embedding the technologies in their day-to-day operations. The Trial Reservoir will change that. It brings together all the players needed to take new technologies to market – utilities, investors, start-ups, non-profits – helping to overcome the barrier of who pays for the trial and more clearly defining the path and processes to expedite adoption.

Clark says that The Trial Reservoir works by giving water technology innovators access to capital for pilot projects and embedding best practices throughout the process. The model makes a pool of funding available to early-stage technology companies, giving them the capacity to undertake full-scale deployments with water utilities. The ‘reservoir’ of funding will be replenished from the proceeds of commercial contracts, when the trials move to full deployments. If trials do not move to commercialisation, the cost is borne by The Trial Reservoir, thereby reducing the burden on the vendor.

By removing financial uncertainty and often serve as a bottleneck in streamlining the adoption of new technologies. From droughts to flooding, we’re seeing examples of escalating water challenges driven by climate change every day, all underscoring the need to move faster in the race to secure water. The good news is that amazing innovation is happening across the sector to tackle challenges such as water accessibility, affordability and resilience to climate impacts. There is also innovation happening in financing and business models, and The Trial Reservoir is among those initiatives setting up the industry to bring these new technologies to the market more quickly and with greater certainty.

The fact is that bringing new technologies to market is not incumbent on any one party, it’s an ecosystem problem that can only be solved by bringing all players together. The Trial Reservoir is an opportunity to do that. Isle Utilities, as the third-party consultant or broker, brings a level of objectivity to help broker the process, which brings confidence to the municipalities and lowers the financial risk to technology companies.

What type of innovations can we expect to see? “The Trial Reservoir is open to technology vendors around the world, actively supporting trials in high, medium and low-income countries. The only requirement is that the technology being tested must help reduce the carbon footprint of the water system, be that a municipal utility or an industrial or commercial water user,” responds Clark.

“We’ve hit the ground running since The Trial Reservoir launched and we already have over 45 technology companies from around the world – North America, Europe and Africa – working through the application process. We’re seeing a good spread of technologies, from leakage solutions to decentralised water treatment technologies,” he adds. Sivan Zamir continues: “The Trial Reservoir is focused initially on technologies that support the decarbonisation of water infrastructure. Innovation and new approaches to water management will be essential for cities and communities to solve their increasing water challenges and decrease their carbon footprint.”

We’re already seeing significant momentum in the water industry’s effort towards net-zero emissions, but the reality is that to deliver on our net-zero commitments, we need to smooth the path for water operators. That means ensuring operators have ready access to the innovations – both existing and new – that can get them to net zero quickly and affordably,” he says.

Clark sees The Trial Reservoir as a win-win for technology vendors and utilities alike. It provides the tech companies with access to trial funding, it enables water utilities to adopt technology with minimal financial risk, and it ensures best practice is adopted during trial programmes that benefit both parties. The potential ramp up in the pace of adoption is game-changing.

There is incredible innovation happening in all corners of the water sector, says Zamir. The Trial Reservoir is an opportunity to ensure that more entrepreneurs can get their technologies into the market at lower risk, and that utilities can confidently embed these solutions to solve pressing water challenges and support their net-zero targets.

Extracted from an online article published on Xylem’s Making Waves. trialreservoir@isleutilities.com

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