

Leadership Perspective

Thinking Inside the (Sand) Box Could Help Solve Water Industry Challenges

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It will come as no surprise that the UK's water industry is struggling. A perfect storm of challenges, ranging from aging infrastructure to the threat of climate change, alongside growing demand and the emergence of pollutants, such as micro-plastics has the sector urgently seeking not just one solution, but a range of innovations.

Since it was published, the Cunliffe Review has been poured over by experts and those working in the sector, many focusing on governance and regulatory reforms. But, buried in its 400 pages is a recommendation with game changing potential – not just for the water industry, but for the wider economy and business community.

Finding the solutions needed to help the water industry is no easy task. Historic issues are being compounded by rising temperatures and ever-changing weather patterns.

And while rapid innovation is needed, traditional processes can take years due to regulatory approval systems needed to approve new approaches, leaving promising solutions stuck in pilot limbo. And at a time when trust is low, urgent responses are needed more than ever.

This is where regulatory sandboxes come in. These controlled environments allow innovators to trial bold ideas without the full weight of compliance slowing the process.

This concept is well proven. In 2017, Ofgem launched its Energy Regulation Sandbox, allowing energy firms to pilot innovations such as peer-to-peer energy trading and flexible grid services that could not operate under existing rules.

For the water sector the possibilities are endless, for example it could support the development of AI driven leak detection which combines satellite imaging, acoustic sensors and predictive acoustic sensors, and predictive algorithms to cut leakage rates.

Sandboxes could also help us seek out nature-based wastewater treatments, giving the industry space to examine using reedbeds, wetlands or algae systems to deliver low carbon alternatives to conventional treatments.

I think it is possible for sandboxes to help bridge the gap between prototype and deployment in the water sector, unlocking innovation while also protecting the public trust, the environment and consumer interests.

While there are risks including public perception that these could breed a system of 'light touch regulation', or companies misinterpreting flexibilities within the sandboxes, that does not mean we should not try.

With the right guardrails in place such as oversight, public reporting of results and transparent entry and exit criteria, sandboxes should be an option we are actively pursuing not just in the water sector but across the business community.

Industries around the world are attempting to react to increasingly difficult conditions. Whether those are caused by the economic climate, climate change or more sector specific problems. Right now, there is a need for investment, innovation and space for the right solutions to be found.

If the water sector is serious about creating a long-term solution and system that can serve the UK for years to come, we need to innovate quickly. And by introducing sandboxes, we could be industry to take the lead and show others that thinking inside the box might be answer.



About RSE

RSE is a trusted water technology company solving today's water challenges. From treatment to controls, we design, manufacture and integrate the technologies and systems that keep water moving. Working across municipal and industrial markets, we deliver solutions spanning water and wastewater treatment, chemical dosing, automation, offsite modular build and lifecycle support.

Our integrated approach combines specialist engineering, manufacturing and digital expertise to help customers improve performance, resilience and sustainability. Through innovative modular solutions and a commitment to continuous improvement, RSE is transforming how water infrastructure is designed, delivered and managed.