

Regulating for Innovation: Evaluating Ofwat's Innovation Fund

Since its inception in 2020, Ofwat's Innovation Fund has allocated over £140 million to 74 projects aimed at enhancing the water sector's capacity to innovate and address long-term challenges such as climate change, resource efficiency, and resilience. [Ofwat](#)

Breakthrough Challenge; and the **Water Discovery Challenge**. Through the **Innovation in Water Challenge** and the **Water Breakthrough Challenge** we have awarded over £140 million to 74 water company-led innovations. Through the **Water Discovery Challenge**, we have awarded £5.5 million and a package of non-financial support to help new innovations to launch and succeed in the water sector.

Notable Projects and Technologies

- **Bio-polymers in the Circular Economy:** A £6.2 million project led by United Utilities focusing on extracting bio-polymers from wastewater treatment processes. [Ofwat](#)

About the Biopolymers in the Circular Economy project

The Biopolymers in the Circular Economy is a £6.2m project is led by United Utilities that aims to bring innovative solutions to sludge management through biopolymer extraction. Wastewater treatment bacteria produces naturally occurring polymers that have been shown to exhibit a wide range of beneficial properties, making them suitable to replace the fossil-derived polymers used in a range of applications including water treatment processes, paints, coatings, biostimulants for plants and fire retardants. Partners in the project include Royal HaskoningDHV, Aquaminerals, Cellvation, Cranfield University, Glasgow Caledonian University, Severn Trent Plc, South West Water Limited and Yara.

- **Dark Fibre for Leak Detection:** An initiative utilising unused fibre optic cables to detect leaks in water pipes, aiming to improve maintenance efficiency. [Ofwat](#)

Already, over £100 million in funding has been granted to innovative projects, with every major water company and over half of the new appointees ('NAVs') involved in at least one entry, with projects from using fibre optic cable to detect leaks, to recultivating native seagrass for carbon capture, to finding more effective ways of communicating with vulnerable customers completing in this first period – all three of these have case studies in the report! The impact of this funding is tangible and shows the Fund has been effective in fueling innovation.

- **River Deep Mountain AI:** A project employing artificial intelligence to enhance data collection on water-body pollution, facilitating environmental improvements.

Metrics of Success – Uptake, Impact, Replication

- **Project Completion:** As of July 2024, 12 funded projects have been completed, with two receiving additional funding for further development. [Ofwat](#)

We've seen 12 more projects conclude – several of which have progressed to develop their ideas further than originally funded, and bring these closer to delivering for customers, society and the environment, as evidenced in the case studies later in this document. Others are actively sharing what they have learnt for the benefit of the whole sector. With another 16 projects due in 2024/25, and this pipeline of work continuing well into the latter part of this decade, we expect to see more results delivered in the coming years than before.

- **Collaboration:** The Fund has encouraged partnerships, with 178 organisations participating in the Water Breakthrough Challenge, indicating a broad engagement across the sector. [Ofwat](#)

Water companies have led 38 entries to the Water Breakthrough Challenge, with 178 organisations taking part

- **Knowledge Sharing:** Efforts are ongoing to enhance the dissemination of project learnings, with Ofwat publishing annual reports and open data on funded projects. Barriers – Procurement Rules, Adoption Culture, Funding Scale

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- **Procurement Challenges:** Strict procurement regulations can impede the trial and adoption of innovative solutions, particularly for smaller enterprises. [Ofwat](#)

From a technology company perspective an external barrier is that procurement of solutions from SMEs by water companies is challenging as many do not meet the supplier requirements. Even after successful trials, this can then leave the innovation left unadopted. Considering the startup life cycle of technology companies is under 5 years, this leads to them failing or moving in to a new market which is a loss to the water sector as a whole.

- **Adoption Culture:** A risk-averse culture within some organisations may slow the integration of new technologies, necessitating a shift towards embracing innovation. [Ofwat](#)
- **Funding Scale:** While the Fund is set to increase to £400 million for 2025–2030, ensuring adequate support for scaling successful innovations remains crucial. [Ofwat](#)

The Ofwat Innovation Fund will double to £400 million to support projects that could transform the water sector to meet and solve the many challenges it faces.

Stakeholder Perspectives

- **Water Companies:** Generally supportive of the Fund's objectives, emphasising the need for streamlined processes and support for scaling solutions.
- **Innovators:** Appreciate the opportunities provided but express concerns over complex application procedures and the need for clearer pathways to market adoption. [Ofwat](#)

There is a need for Ofwat to understand and allow for risk when introducing innovation in the water sector and create a safe space for implementation of innovation and not funding fully developed solutions.

Within Innovate UK, we expect all projects to deliver an exploitation plan that outlines how the solution will be brought to market and commercialised. This is reviewed and updated during the life of the project and is a key document to be approved at project closure. A similar approach could be undertaken by Ofwat to ensure that projects are considering how to share and expand the innovation beyond the project life, as well as how the projects are benefitting customers, society and the environment in real terms.

- **Customers:** Stand to benefit from improved services and sustainability, with the Fund's cost per household estimated at approximately £2.13 per year between 2025 and 2030. [Ofwat](#)

About the Ofwat Innovation Fund

In December 2024, Ofwat published the final determinations for the 2024 Price Review (PR24) – a £104bn package over the next five years, designed to accelerate work to deliver cleaner rivers and seas along with improved services and strengthened supply resilience for customers. The boosted Innovation Fund is a part of this package and will cost each household in England and Wales about £2.13 per year between 2025 and 2030.

Conclusion

Ofwat's Innovation Fund has initiated a range of projects aimed at transforming the water sector. While progress is evident, addressing procurement challenges, fostering a culture of innovation, and ensuring the scalability of successful projects are essential for maximising the Fund's impact.

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