

# World Water Week Talkshow: Unlocking cultural change and collaboration: perspectives from a UK regulator transcript - 26 August 2024

## Speakers:

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Kanika Thakar: Hello, and welcome to World Water Week. Innovation could solve some of the biggest challenges facing the water sector, but regulation often hinders change. Today we're learning how Ofwat, the economic water regulator for England and Wales, is working to transform the sector using a £200 million Innovation Fund.

To join me in this conversation, I'm here today with Jeannette Henderson, the Principal of the Ofwat Innovation Fund, who works on the design and delivery of the Ofwat Innovation Fund. Elettra Pellanda is a Programme Manager at Challenge Works and manages the £40 million Water Breakthrough Challenge as part of the Ofwat Innovation Fund. And Bart Schoonbaert is from Arup, and is a water advisory lead with a national and international focus.

Welcome panelists. Thank you for being here.

Jeannette Henderson: Thank you.

KT: Jeannette. I'd like to start with you. The fund is now in its fourth year and has so far distributed over £150 million to over 90 projects. Could you give us some background about why Ofwat thought the fund was necessary and what it's achieved to date? And maybe also some of the biggest learnings you've seen?

JH: Thank you. Historically there's been quite low levels of innovation in the water sector in the UK. In 2019, Ofwat did a review of innovation maturity and found that it was quite patchy across the different water companies. So they decided to strengthen some of their incentives for innovation, including introducing the £200 million Ofwat Innovation Fund.

We launched our first competition. We decided to do it through competitions, and we launched our first competition in 2021, the Innovation in Water Challenge. It was a small scale competition with relatively small amounts of money available. Having learned from that, we launched a bigger competition called Transform, and then we established an annual cycle of the Water Breakthrough Challenge, which awards about £40 million a year to water companies and their partners. That's a really crucial thing is that all bids have got to be done in collaboration so we can strengthen one of those areas that were seen to be quite low in the UK.

At the end of the pilot period, we did an evaluation and we found that some of the innovators outside of water companies weren't necessarily getting access to water companies weren't getting access to the fund, so we introduced something called the Water Discovery Challenge, which is aimed specifically at non-water companies, so innovators, SMEs, and others, to try and bring new voices and new ideas into the sector. And that's been really successful. We had over 250 applications, and we've brought new people into the sector and they

have had coaching and mentoring from the water companies themselves, which has helped change some of the culture and the ideas and the way that water companies are working. They also get support from our delivery partners, Challenge Works, Arup and Isle.

We've seen a really wide range of projects through this approach across the whole water cycle from collecting water from the environment through to distributing people's homes and treating, collecting it and treating it and putting it back into the environment again.

But we've also seen a real wide change in diversity in the scale of projects. So we've had some really small scale projects, such as projects, trying to understand different faith and cultures and how they use water so that water companies can target water efficiency messages more effectively, all the way through to really large scale projects, like our Net Zero Hub led by one of the water companies, but that's got partners from all of the water companies and they're doing some really, really innovative things, trying to create the world's first retrofit carbon-zero waste water plant, so that's been really, really exciting.

And we've been evaluating the program as we go along. So we've seen some real interesting things happening in the water sector. The first, as I mentioned a couple of times is collaboration. We made it a key component of the fund, and we've really seen huge levels of collaboration, which is driving change in the sector. We've seen an average of about 13 and a half partners in each individual project, which is a really massive thing. If you can imagine, we make everyone have partnership agreements, that's a really big thing to do. And we've had over the competitions, we've had 450 entries with 750 different partners, so that's a fantastic thing. And it includes not just water companies and their supply chain, NGOs, universities, local authorities, and a wide range of innovators. So what we're seeing from that is that there's been real change in, well there's starting to be a real change in the culture of water companies. They're starting to think more strategically about some of their big problems that they've got to face around bio-resources and Net Zero. They're working more collaboratively and pooling resources. And it's been a real help and benefit to the UK water sector.

And we want to do more. So we're going to continue the fund into the next five year regulatory cycle period, starting next year. It should be about £400 million. And we want to do more with that fund. So we want to do some stuff to implement some of the projects we've seen. We've got 93 fantastic projects we've funded so far. We'd like to see some of those implemented and implemented at pace. We want to do more cross sector collaboration. So we've been doing some work with Ofgem around the energy and water nexus, but we also have been working with the European Space Agency looking how space technology can actually benefit the UK water sector, and we'd love to do more from that. So we're introducing a dedicated cross sector fund. And knowledge sharing is a really important part of innovation. So it's a key component, and we want to do more of that in the next AMP.

KT: Wow. I mean, it sounds like you're, it sounds like you're tackling a lot there, but also with many different partners. And I think that's really interesting that you're actively going out and seeking those outside of the sector. You want to bring those new voices in, and I think that's really quite novel, so very interested to hear more about that.

But first I'd like to go to Elettra. We've heard from Jeannette here about, you know, that power of competition and that challenge works, and there is a huge opportunity for strengthening collaboration within the sector. I mean, we've heard about all these different partners that could be potentially coming in. So your organization aptly named Challenge Works, is one of the delivery partners of the Fund and is using competition to find new solutions. So how does this collaboration with the regulator work in practice, and how have you, sorry, and what have you observed regarding collaboration, how it's developing and changing within the sector?

Elettra Pellanda: Thank you, Kanika. I think our collaboration has been in place for a few years now, this partnership. So there is great collaboration and trust, and I think that's because we are all bringing different expertise and experiences to the partnership.

So at Challenge Works, for example, we are open innovation experts, which means we help innovators in all sorts of sectors and across the world to challenge, difficult problems that are already known. So we focus very much on the impact and the problem, and we leave to them to find a solution and we partner with different organizations. So for example, for the Ofwat Innovation Fund, we've got Arup and Isle who are critical in bringing their expertise for technical assessment of the entries that we receive, and also the monitoring of the projects that get the funding from the Ofwat Innovation Fund. But also Ofwat are the most important probably of the delivery partners because they unlock the funding available for the winners, as well as enabling that communication and engagement with the water sector stakeholders, which is very important for the Fund's success.

Another good example outside the Ofwat Innovation Fund would be the Manchester Prize that we're delivering in the UK. This is currently enabling 10 innovator teams to look at solutions for public good that use AI for public good. And this is a very interesting prize because the solutions are going to be developed through this one are likely going to have kind of ripple effects and could be utilized and scaled across different sectors, and not only for public services, but also, others, and potentially beyond the UK.

But going back to the Ofwat Innovation Fund that we're here for, your question is about the collaboration that we've seen, enabled by the fund. And I think a good example of that is what was mentioned earlier by Jeannette, the Water Discovery Challenge. So for that, we reached out and engaged with lots of experts who know the sector inside out, academics, engineers, water innovation leads at the water companies, and they've come together and co-created the Water Discovery Challenge with us. And so we've seen very much, good engagement, good traction in the sector, but also, that was kind of meant to bring in new expertise and new fresh thinking into the sector from people who have never worked in the sector before. And we've seen that with the 250 entries that Jeannette mentioned. We selected 20 finalists and out of those 10 winners got the opportunity to get additional funding from the finalist phase to the winning phase, but also capacity building support in the form of masterclasses, coaching and a whole host of activities that enable them to understand the sector challenges better and therefore contribute effectively.

Another challenge that we're looking at now is how we engage the water sector and beyond with a growing body of knowledge that we have from the winning projects. So we've got 93 projects already funded and there's going to be more coming in the next round. So how do we make sure that the learning from these projects can be shared in the sector, and people can take up those solutions that are working, but also learn from those that are maybe not so successful when it comes to delivery and why that wasn't successful and what we can do about that, what we can learn about that. So we have selected a few topic areas that the projects have been working on. And the first of our learning reports has, as they're called, was published a few weeks back, it's already available for free on the, Ofwat Innovation Fund. And it looks at five projects that have been working in the circular economy space. And the second one, excitingly, we're going to be launching here at World Water Week on Wednesday at 12:30 PM at the UK Pavilion. And that is looking at 8 projects that have been engaging with communities to empower them to become more water efficient, which is a one of the key, themes obviously. So everyone, welcome to join us then Wednesday, 12.30.

KT: Great. So we'll definitely see you there for that. But what I'm also taking away from you is, you know, the importance of co-creation. I think that's really interesting that you've brought in those

from the sector to help design and to get that input in, in terms of, well how should we be moving forward, but not just in the sector, also from outside of the sector that's also leading to cross pollination and cross learning, or sorry, co-learning. I think that's really, really interesting and hopefully a lot that we can also take forward into our work, that type of approach.

Bart, I'd like to come to you. You know, Jeannette mentioned the interest in working, reaching international audiences in the future of the fund. You've worked for 15 years in energy and water regulation within England and Wales, but now in your new role with Arup, you have a stronger international focus. So balancing these two, we're really curious to hear from you, what role do you see regulation playing now and in the future, but also what learnings from your international exposure do you think are critically important to bring back to England and Wales?

Bart Schoonbaert: Right. Thank you very much Kanika, and thank you for getting my surname right earlier. That's never happens!

So I was, as you said, I was in regulation for many years, so you wouldn't be surprised to hear that I think regulation is critical overall, and the role of regulators are critical and actually they can drive and stimulate change, not just be a barrier to it. And given the importance of innovation overall, it's critical to think about what is the role of regulation in that. And it's important for regulators to actively think about what their role should be in the space of innovation, which is not an easy question actually.

And so, the Innovation Fund started when I was there, and so Ofwat has had an evolution over time in how it thinks about how to stimulate innovation. It's kind of a simple model where you can kind of just try and promote it or inform it and bring some people together, and that can have some success all the way through to kind of incentivizing it and going, you need to be more efficient, and because if you don't, you're not gonna get the amount of money you want and therefore you're gonna have to innovate. Profound limitations to both of those even in combination, and then really looked at more kind of enabling innovation and putting this Innovation Fund in. So very active decision from a regulator who really thought that through, kind of what are the pros and the cons, because it's not a given that you do this. So, so I think it's critical and clearly it's proving very successful. So that's one thing.

The second thing, there are different regulatory models in different parts of the world, so it'll be different for some to others. But one of the things that, for example, Ofwat can do in its, under its construct, is actually channel money towards innovation. £200 million for this five years, £400 million for the next five, potentially another a £100 million for efficiency innovation. This is £700 million over 10 years, an enormous amount of money, but actually spread over a customer base. And Jeannette, correct me if I'm wrong, it's about £1.50 per bill for, for these five years. So actually, that is not that much on an individual basis if you add it up, you've got huge sums and a regulator can do that. So that's, you know, it has a role basically.

And then on the international dimension, I think, I mean the main point there from seeing is that, um, there was a time when the challenges between the UK, or countries like the UK, and the rest of the world, they diverged. And what really mattered was how quickly do you pick up the phone when I call you with a problem. I mean, those days are a little bit over, that still matters, but the challenges that we're facing are frankly global, right? Too much water, too little water, too dirty water. So I want say a 100%, maybe it's 95% of what the Innovation Fund does, is relevant to everybody here.

And so, you know, one of the main projects is the mainstreaming nature-based solutions. I mean, there's probably 10 sessions on that here. Everyone's talking about that globally. I mean the

answers that they'll come up with, they're gonna be relevant to everybody. So actually, the UK can learn and vice versa, can export whatever comes out of the Innovation Fund.

KT: Brilliant. I mean, what I take away from that is that there's a very interesting role that regulators can be playing here in that we want to maybe embrace that and see that elsewhere. And as you said, while it sounds big at, if we think about the lump sum of £700 million, that sounds enormous, but dispersed over the paying base, the client base, it's quite achievable it seems. And so, I think that's an interesting lesson to take forward.

And as you said, these are not unique challenges. We're talking about challenges that are very similar across many different places and landscapes, so maybe some good learnings that we can be taking from Ofwat here to share with the world.

Jeannette, we don't have so much time, but I do want to hear from you. I'm gonna sneak in our little bonus question here. I do want to hear about one of those projects, because I think it's really interesting for our audience to hear What are you funding? So I'm gonna give you one minute to tell us quickly about one of the projects that you're funding.

JH: Well, we've got 93 of them, but one of them that I joined a learning session last week was something called Alt P. It's about finding alternative ways to remove phosphorus from the wastewater system. They have been trying, normally they use metal coagulants. They have been trialing plant-based coagulants, which have been really successful, but they've been trialing it in combination with other technologies. So one of the things they've been doing is electrocoagulation and they found that while some of them work better than others, actually combining some of these new technologies and these new approaches are having quite significant effects, and potentially can potentially in some circumstance or all circumstances, replace some of the metal coagulants, so that'd be a huge win because you could remove the metals that they're putting into the system to remove the phosphorus.

KT: Brilliant. I mean, and leading back to some of those nature-based solutions that we talked about, which are so on topic this year and I think globally, but yeah, huge opportunities. Thank you so much for sharing.

As we look to the future, I'm really keen to hear from you, how do we think funds like the Ofwat Innovation Fund, will continue to shape, the water sector and will we see more of them? Or will it look entirely different? So Elettra, I'd like to start with you.

EP: Yes. I think I want to expand a little bit more on that, and not only look at what funds like this could do, but the kind of approaches that we need to change more holistically. And I think one thing that really needs to start shifting, and it's been really promising to see the conversations here at World Water Week around this is the, the word value, and, the value that we give to healthy ecosystems and clean water. It cannot only be financial value. We need to go beyond what is financial and look at value at a much more broader level, I think. We also need efficiency. It needs to be hand in hand with sustainability. So as consumers, we need to make sure that we are more efficient in what and how we use. As developers, we need to start thinking about how to build efficiency from the get go. And efficiency is also one of the key priorities for, for Ofwat in the next five years with the £100 million Water Efficiency Fund.

But in terms of sustainability, and that's what is really close to my heart, is the role of nature-based solutions - surprise - that they're going to have in this shift. And obviously nature-based solutions are not a catch-all. They're gonna have to be integrated with other types

of solutions. But I think they have been used and studied for a number of years now, and we can start to see really the benefits of using these and the impact that they can bring particularly for mitigating and sheltering communities and ecosystems from the effects of the climate crisis. So it's not a surprise, I guess, that we're all talking about nature-based solutions, particularly here in this context. We are also running a workshop on nature-based solutions against water disasters

KT: Sorry, Elettra, I'm gonna hold you there. We're just running out of time. I want to make sure that Bart and Jeannette also get the opportunity. So, Jeannette, really quickly, sorry. Can you tell us a little bit about what you think is the future holds?

JH: Hopefully more innovation, but actually implementing that innovation. And what I think is really key in the UK is actually some of the regulators working more effectively together to break down some of the barriers that there might be there, particularly around things like nature-based solutions, things we don't have a really big evidence base for.

KT: Wonderful. And Bart please.

BS: More of these. Regulators thinking about it effectively and, and actually Ofwat coming here every year, hopefully sharing the learnings. So that's a risk actually, that we learn loads, but it doesn't get out there. Absolutely. So we just wanna see more of that.

KT: Brilliant. Thank you so much. Thank you so much to our speakers for joining us today. I really, you know, I want to lean back on what you're saying there, Bart, the importance of learning and the importance of sharing what you've been learning out with everyone. I think it's also really, I mean, this conversation today is so timely, particularly when we think about the scope of this year's theme at World Water Week about bridging borders, and what that important role that cooperation has to play in solving the problems of our water sector, but also in bringing in more innovation and other thinking.

So thank you so much to all of you. We're looking forward to seeing what the fund does in the future. And thank you so much to our audience for joining us today. Goodbye.