Water Breakthrough Challenge 2 Webinar

32:03

**Rhys Herriott** 00:05

Okay, I think we can probably start here. So thanks everyone for coming along this afternoon to hear a little bit more about Breakthrough 2. I will hand over to Marc Hannis from Ofwat who will kick us off this afternoon.

**Marc Hannis** 00:19

Thanks Rhys - also welcome along from me too, welcome to the webinar, in which we hope to provide you with all the key information you need about our latest competition, the Water Breakthrough Challenge 2. My name is Marc Hannis, and I'm part of the innovation team at Ofwat involved in the initial competitions that we've run so far, and we're really looking forward to seeing what comes forward in the latest competition, which opened just earlier this week. A quick note, before we start, we'll be doing a q&a session at the end, so please post your questions using the Q&A function in zoom, and one of the things we need to let you know is that we are recording this session. Okay, so a little bit on the agenda. It is as follows, and between myself and colleagues at Nesta, and and others, we will walk you through all these items that you can see we're first going to talk broadly about what the Fund is all about some of our underlying principles and what has happened so far. Then we'll get into the new competition itself - What has changed from previous competitions? And what are the timelines for this new one? After that, we'll cover what information entrants we need to provide, how that will be assessed, and what good entries will need to demonstrate - Yeah, what good entries we need to demonstrate within their entry to hopefully be successful. And following that we'll discuss the process of entering, support we're making available and some other events that are upcoming. And we'll conclude with the Q&A, as already noted. And so please do get your questions in. Okay, so this slide shows the delivery partner consortium. The vast majority of contact you may have as you inquire about the competitions or indeed enter the competitions will be with Nesta, Arup, and Isle, our partners. Our role at Ofwat is to oversee the overall approach, the shape, the design of the competitions, determine some of our policy positions, and ultimately make make final decisions, including decisions around who the winners are, and so on. Next slide, please. So just a bit of background first, to get us in the swing of things. The Innovation Fund came out of the 2019 price review and set aside £200 million to help England and Wales water sector to grow its capacity to innovate and meet the needs of customers, society and the environment both now but also looking forward into the future as well. Importantly, the £200 million was drawn down from customer bills and so we're really mindful of ensuring that the competitions we run and the funding we award have customers and how they will ultimately benefit from any initiatives that we fund at its heart. So that's going to be a key theme as we go through some of this stuff. And we'll talk about the competitions we've run so far in a moment. But the fundamentals of our competitions have remained the same from our first competition, which opened in January through to the competition we've opened this week, we're looking for all sorts of types of projects, including enabling projects that will benefit the whole sector, as well as technology innovations and any other new approaches that might come forward and this slide draws out the innovation enablers that we believe are and will continue to be critical to growing our sectors capacity to innovate. And we'll be looking to support entries that continue to bring these areas. So I quickly just run through these - starting with collaboration. This is about building and strengthening collaboration and partnerships across companies, the supply chain and outside the water sector. And we're beginning to see some really encouraging signs of how this is developing already, following our first two competitions. Openness, and this is about sharing data insights and ideas within the water sector and with other sectors - our position here is about being open by default, which is a familiar phrase I'm sure you're aware of. Adaptability, flexibility and openness to try new ways of working is what that's all about. Under innovation, risk management, this is all about delivering value from all innovation projects, particularly those more experimental ones, even if they fail, and this acceptance and acknowledgement for myself what that not every project is going to succeed. So what can we take? And what can we learn from those that that don't succeed? Scalability and deployability. This is really important too - this is about improving the use of scaling up and rolling out of proven innovations within the sector. And the final one here is on long term view. And this is about taking both a longer term and broader perspective to better meet the evolving needs of customers, society, and the environment. So really key that as you consider entering the competitions that you bear those in mind. Now to further guide our entries to our competitions we've developed in consultation with the sector and stakeholders five strategic themes, under which we hope to see a good variety of entries and again, this is hopefully helpful guidance to give you a sense of what we're looking for. So again, let's have a look at these. So the first one is about responding and adapting to climate change, including how to meet the sector's ambition of net zero emissions. Second one is about restoring and improving the ecological status of our water environments, protecting current and future customers from the impacts of extreme weather, and pollution. Number three is about understanding long term operational resilience and infrastructure risks to customers and the environment, finding solutions to mitigate those risks in sustainable and efficient ways. The fourth one is about testing new ways of conducting core activities to deliver wider public value. And the fifth one is about exploring the opportunities associated with open data, stimulating innovation and collaboration. And the example we often give here is around encouraging new business models and service offerings that might benefit customers, particularly those perhaps in vulnerable circumstances. And to date, we've seen a good balance of entries coming through against each of those themes, which has been really encouraging. And as we take decisions on awarding funding, having a balanced portfolio of winning projects across these themes. It's very important to us it has been historically and it certainly will be moving forward. Caroline?

**Caroline Pradier** 06:00

Thanks Marc. So let's see how far we've been to take us to today. So almost a year ago to the day Ofwat announced the Water Innovation Fund. And this year, we've launched two competitions so far. So in January, the first iteration of the... Sorry, I muted myself... and then in May the first iteration of the Breakthrough Challenge. And then after that we paused a little bit and did an industry wide engagement. That is that has taken us to today and this week where we've opened the Breakthrough 2 challenge and now we are also focusing on post-pilot activity and see what will come next in the in the story of the of the Innovation Fund. Next please. And so, as we said there were a few changes between the first rounds of the competition and now the Breakthrough 2. And so between the two challenges, we conducted some interviews, some workshops and survey and gathered some insight and feedback on how we should best design the competition moving forward. We've also conducted a public consultation on the IPR policy. And then this, this took us to design the Water Breakthrough 2 challenge which is a combination of two separate challenges into one single competition with two streams of funding available. And you know, in a in a bid to kind of streamline the process for entrants. And so the few things to note is that we've actually closed the bridge of funding. And so now the funding available ranges from £100,000 to £10 million. Before there was a gap of funding between £250,000 and £1 million which now you can bid for, for projects. And you know, if you would want to simplify things a little bit, you have the Catalyst Stream, which would be closer to what the Innovation in Water Challenge was and the Transform Stream that is closer to what the first Breakthrough Challenge was. But you will see when we go into detail that the Catalyst Stream has also some interesting IPR provisions so we can try on how to better respond to IPR needs when it comes to these types of challenges. Next slide, please. And so the timeline so while the two challenges run in parallel, the timelines are different. So please do pay real close attention to the dates and the different steps. So both competitions have opened on the 11th of October. The Catalyst Stream, which is a single entry process closes on the eighth of December. And we will aim to announce the winners towards mid to end March of next year. The Transform Stream, which is a two stage process, the first stage four entries close on the 16th of November, and then it reopens in the 15th of December for people who have been invited through to stage two. And then it will close again on the eighth of February, with an aim to announce the winners towards late April next year. So, please, based on you know, on the stream you will pick, do pay attention to the timelines. Because, yes, it would be a shame to to miss one of the one of the deadlines. And also when it comes to funding... So, for Catalyst, there's up to £5 million available for projects between £100,000 and £1 million. And for the Transform Stream, there is up to £34 million available, where you can bid for projects between £1 million and £10 million. And I'm going to pass on to Catherine, who will go into the details of the assessment categories.

**Catherine Thompson** 10:10

And thank you very much, Caroline. So those of you who may have entered before, we've got three assessment categories. And these you will recognize from from previous rounds. But those three kind of categories of assessment are - positive impact for consumers, or customers, society and the environment. And so really what here we're looking at what what positive benefits are you aim to achieve. Innovation enablers and innovative solutions and being the kind of Wate Breakthrough Challenge you're looking for really things that really and then finally capacity, capability and commitment deliver. So are you actually able to kind of execute this entry effectively. We'll now just jump into a bit more detail on each of these and the actual criteria that can make these up. So we've got, effectively, overall 13 criteria set into those three groups. And so within that kind of positive impact for water customers, society and the environment, we're looking for four key things in strong entries. So firstly, that addresses a significant need for customers, society and the environment. So we really want to kind of have that focus on on one of those groups - it doesn't need to be all three but obviously if it is all three that will strengthen the entry even further. Align with one or more of Ofwat's strategic innovation themes which you kind of heard earlier today, but to be really clear as well, what we're looking here is strength of alignment - it doesn't need to align with with all of them, we're looking for really kind of a depth and strength of that alignment, kind of within particular innovation themes. And then will could be effective in addressing these problems or opportunities, we're really trying to look and understand your hypothesis and your evidence that your approach that you set out will actually address the problems that you've set out earlier in your entry. And then finally, in this category, looking at setting out a realistic reflection of external risks and how the potential benefits to customers, society and the environment outweigh these risks. You may recognize if you've entered before, there's a slight kind of update and tweak to the two criteria categories that we had before. And really try to focus in on what we're looking for here. And really what we're looking for is kind of you to think through kind of these are all the all the challenges that this entry is going to have to overcome, and despite all the challenges, the kind of light at the end of the tunnel, the potential transformation that can happen, or the potential innovation that could happen as a result of this makes that risk worth taking, kind of looking at kind of really external things out of your control things that potentially you could look at kind of mitigating in some ways, but but largely kind of will be out of your hands, whether those things happen, look at kind of how you can manage that risk, and therefore kind of make sure that those benefits outweigh those risks. And looking into our second category. This one's all about innovation, how innovative is it, how novel is it, and how appropriate is it to be kind of addressed here. We're really looking at kind of a combination of so both using innovative approaches and solutions, which would not be funded as part of your kind of business as usual, as well as developing innovation enablers that can come back to that original point that Mark mentioned earlier about kind of really building the capacity of the sector, what innovation enablers will you try and experiment with and use in your entry that will ultimately potentially kind of lead to greater capacity in the sector to be able to kind of use innovation, you know how can you try out a new approach which then can be used in other places, and really accelerating that practice beyond business as usual. And then finally in this section set out plans for reproduction at scale across the whole sector. And to be really clear, this isn't about per se, this is exactly how to happen. And this is how it's within our control, its more thinking through pragmatically, what barriers are there to adoption of these approaches, solutions within the sector currently, and how can we overcome those. And thinking that through and thinking about kind of how you might be able to, particularly in the Transform Stream, really kind of think about dissemination and scale to really kind of by the end of the project, really make it so that project has the best chance of being able to scale across the sector even if it's kind of out of your actual control. So it's very much about setting up plans, thinking through those barriers and thinking pragmatically, rather than necessarily having the full control over that scaling itself Finally in our third category, and this is really about kind of proving that you are going to deliver it, you've got the best team, best plan to actually make that possible. I think this is one of those things where we're really looking for you to kind of embrace that really high innovation risk - those things where there's really a high level of uncertainty. However, to temper that uncertainty, you need to have a really great program plan, risk management approach, and an excellent team with kind of relevant skills, experience, and also the flexibility to kind of manage and overcome any challenges, you may may come across in your kind of super high risk, uncertain project. And so we really want to kind of see you show commitment entry, and I'm here particularly looking for kind of senior support, but also kind of recognition of that support through obviously, financial contributions, which is mandatory, also captured through further in kind contributions from partners or even kind of organizations beyond your partnership. And having that kind of team with the relevant skills and experience. And one of the key things we didn't see so much of in the first round is going to be pulling out all of the skills and experience rather than kind of those skills experience and just kind of the experts or leaders within the organization. Set out kind of a realistic achievement program, one that kind of makes sense that's got the right stage gates and milestones. Demonstrate a realistic, considered costing which makes effective use of customer funds. So we're thinking for your budget, again, acknowledging that there might be some uncertainty, and that's as well as demonstrating a clear approach proportionate approach to addressable risks are really thinking through what are the risks that are likely to come across in your project, and how you can address those. So the assessment process itself is obviously slightly different in the different streams, but in general will kind of always follow this cycle. So you'll have your entry, your submission, and then following that kind of entry, there will quite often be a very small kind of eligibility check. And so you may kind of receive a phone call from us to just to check something's correct in the day after you submit your entry. And then it'll go across to our technical assessors, and so Arup and Isle are kind of leading the way on kind of these technical assessors in the two streams and following that kind of technical assessment it then will go through to judging. Within transform, there is actually two stages of technical assessment before it goes to the judges. But generally, this is the steps - Technical assessors, then it will go through to the judges, following the judges review they'll make recommendations to Ofwat and Ofwat will make that final decision based on the assessment criteria and other aspects set out in the entrant handbooks. So who can enter - as in previous rounds, there does need to be a water company or NAV or water company including NAVs in England and Wales as the lead entrant, but they can partner with any organizations or any group of organizations. So we were really thrilled to see a really wide range of different organizations, and significant and large partnerships and previous rounds, I think we've had to kind of consortium around the average of nine partners. And we've had a range from from kind of in the for on one hand through to kind of over 20 partners in each entry. So please do have a look at forming kind of partnerships as well as significant and larger consortium as well. So there's a couple of requirements for successful entries and please do read the terms and conditions in a lot of detail to kind of understand these a bit better and these are also set out in the handbook, but just say you know there will be requirements for successful entries regarding particularly how to use the funding and effectively that's using it in line with your entry. Akey focus on making sure that your project uses principles of open data by default. And the 10% financial contribution which I mentioned before. Monitoring and reporting requirements. Regulatory reporting, reporting to Ofwat. Intellectual property rights, publicity, conflicts of interest and the settlement arrangement. And the majority of these will focus on requirements for the lead entrant. And so any questions on these, please do let us know. I'm now going to hand back over to Marc.

**Marc Hannis** 19:09

Thanks, Catherine. Okay, so let's let's talk about IPR. I guess our treatment of IPR has always been one of the critical areas. For those who attend these webinars, we often get a lot of questions on it. So let's let's go through that. Now. Worth saying that the full details are contained within the terms and conditions, so please do take a good look at those, a good hard look at them, because that's really, really important. And before we get into it, I just wanted to reiterate a point I made a little bit earlier about customers, and that our position on IPR is governed strongly by the fact that this is customer money. And as such, we need to ensure that customers benefit in one way or another from the approach we employ here. So just just have that in the back of your mind as you consider what I'm about to say. So firstly, let's talk about the Trasform Stream -for Transform our IPR policy remains unchanged from previous rounds. This is our default policy position for IPR. And in simple terms, all foreground IP developed through the entry must be shared royalty free with all water companies, and where background IP is required to access or use the foreground IP, this too, must be made available at no cost. So that's our broadly in high level terms, our IPR default policy policy position, which applies wholly to Transform. But we also leave open the option for entrants to propose alternative IPR arrangements where a slightly different approach can be suggested, which is outside of the default IPR position. And we look at those on a case by case basis and decide if, if those cases meet our two key objectives in this area, which are, the applications clearly show how the project will benefit all customers or water companies. And secondly, that it does not result in additional costs to customers. And so will will ask you if you go down that route of proposing an alternative version of IPR to demonstrate and provide answers, substantively to those questions. So for Transform then, there's no change. For Catalyst however, there is some change and as you can see, from the graphic on the screen there we have split the Catalyst pot in half, £5 million becomes £2.5 million on either side. In one half the same rules will apply as I've just outlined for Transform - So just to reiterate, all foreground IP developed through the entry must be shared royalty free with all water copies and where background IP is dependent - Sorry, where foreground IP is dependent on the background IP, then the background IP must also be made available at no cost. And again, the option to propose an alternative IPR approach is there for you in that route. Now in the other half, we're trying a new approach to how we are treating background IPR. You may have seen our short consultation on this, which went out over the summer and responses were generally very positive, and in favor of opening up the IPR rules a little bit. And we're doing this on a trial basis to see what impact that may have on the types of entries we receive, and also the types of partnerships that we begin to see. So that's what we've done. And I reiterate again, this is on a trial basis. This is not our default IPR policy position but we want to see how this works and what it looks like and the potential outcomes. Worth saying that we will review after after this round of the competition, what our overall IPR policy position will be, and there will probably be quite a substantial consultation around all matters relating to years three to five of the competition, and I'm probably including that at some point in the next six months or so. So let's get into the details a little bit. Under this trial route. Any foreground IP developed through the entry must be shared royalty free with all water companies, as is the standard across all our competitions. But a license fee can be charged for use of the background IPR. If it is needed to receive the benefits of the foreground IPR. We'll be asking you to confirm if you intend to charge for some or all of the background IPR that is needed for use of a foreground IPR. And you'll see in the terms of conditions that we we refer to this is specific background IPR, the stuff you really want to charge for general background IPR. And again, more detail on that. So as you might expect, though, you'll be asked to set out how this arrangement will not result in restricted benefits to customers and to confirm that ultimately, any additional cost to customers in respect of charges for the use of the background IPR how they will represent value for money for customers. So we'll be asking you how and why you consider that the proposal or the process by which you may charge future users for the background IP is fair, reasonable and non discriminatory. Now, important also to recognize that it may be more difficult to provide this information for projects that are at an early stage of development. You may not know what the background IP charges might be, or even how you might work them out until much later into the lifecycle of a project and we completely accept this, that this will be the case and in some circumstances in some circumstances, but hopefully it won't be the case in all circumstances. We will be asking that entrants clearly state what information you can and cannot provide at the point of submitting your entry and also to tell us why that why that is the case. So I guess in summary, and importantly, here, the key is you have to choose which route in the Catalyst work stream is going to work best for you, you cannot put the same projects into both halves of the catalyst funding pot, it's one or the other. And in deciding which is the best option for your projects, we encourage entrants to consider the extent to which the use of background IPR is core to realizing the benefits of foreground IPR that your entry will deliver, that will certainly influenced your decision. So summarizing, then if you if you want to propose charging a fee or any royalties for the use of background, IPR, the trial route is the way to go. For any other approach, the default policy route is the way to go. So I hope that's clear. More information is contained within within the competition materials, as I've said, and we'll be pleased to answer any further questions on this a little bit later, we'll get to q&a.

**Rhys Herriott** 25:06

Thank you, Marc. I will now sort of take us through some of the details of how you can get involved and enter this next round of competition and some support that we have available to you over the coming weeks and months as well. So entries for both streams of Breakthrough 2 should be submitted online via the Submittable platform which you can access from our website. As Caroline noted before, the Catalyst Stream has a single stage entry process which is closing on the eighth of December. So by this date, you will need to submit your completed online entry form as well as a completed risk register template which you can also download from our website, and also in the entrant handbook. The Transform Stream as we noted earlier, uses a two stage entry process. So this is designed to try and make sure that entrants are able to focus their time working on proposals with the greatest chance of being awarded funding. So entries to stage one, we'll be closing on the 16th of November, as well as the online entry form that you'll need to submit at this time, you'll also need to book a slot to record a four minute pitch via Zoom and you must register your slot to record a pitch no later than the fifth of November. So when we send the slides around after this session, we'll make sure that you have the links to hands to be able to book that in. And then as Caroline noted before, as part of this two stage process on 15th December, we'll be inviting a number of entrants to submit a stage two entry, they will have until the eighth of February next year to complete that stage two entry. At that stage, it'll be another online entry form, you'll need to complete an entry template which includes the budget and risk register templates in there as well. And you'll have the opportunity to resubmit or re-record your pitch video if you wish. But you're not on your own. With pulling all of this information together, we do have a number of support options available to entrants in Breakthrough 2 and you'll be able to read more about all of these on our website and I have the link on the screen there for you. So the first thing to note is that we're holding this webinar, and we'll share these slides around afterwards and we'll be publishing the recording on the website in due course if there's anything that you want to go back and look at or if you have partners who couldn't make it today who want to get up to speed feel free to send them this webinar so they can get across the get across the fundamentals. After this webinar, your first point of call for all the detailed information you need to get involved in Breakthrough 2 is the entrant handbooks for each stream. They sort of bring together all of the information that you need to prepare an entry into a single spot so definitely encourage you to take a look at those in detail as soon as possible. We'll also be holding some one to one surgery sessions starting from this week. So those are your opportunity to book a quick conversation with one of the delivery partners and have that opportunity to sort of ask questions about the program, clarify any of the publicly available information that we've put out there so there's something that you're seeing online or reading in the handbook or hearing today and you just want to make sure that you're understanding it correctly those surgery sessions are the are the opportunity to do that. If you are looking to sort of establish a new partnership to get involved in Breakthrough 2 whether you're a water company or someone who would like to be working with a water company, we encourage you to take a look at our Find a Partner page, which, again, we'll share a link to after this session. In particular on there, we've recently launched a Water Innovation Directory. So for water companies, that's an opportunity for you to head online and review pitches from innovative suppliers who are interested in working with the sector. For suppliers, if you're interested in working with water companies, there's a link on that page for you to register your interest and we'll work with you to get a pitch video online so you can showcase your your solution to the sector. Finally, as a sort of new offer of support for Breakthrough 2, we're also working with Science Practice to provide some additional support to entrants. So this is the team who will be working with entrants in Breakthrough 2 - Science Practice are a research and design agency who work with people to try and identify important problems and design effective programs to solve them. So they've worked with innovators across a range of domains and disciplines over the years, and worked with them to strengthen their proposals in areas from healthcare to diagnostics, to solutions for renewable energy, nutrition, and sort of closer to the water sector, issues around water filtration, surface water drainage and fecal sludge management in terms of the support that they're providing, so we've brought them on board to provide guidance and coaching that builds on feedback from assessors in previous rounds, and helps entrants to communicate clear and compelling entries in line with the challenge criteria. So just to be very, very clear on the scope of this support, this is not a bid writing service. This isn't ideation support to help you generate innovative solutions. This isn't part of the sort of brokerage offer to try and find new partnerships. And this support isn't about sort of clarifying the entry process or, or terms and conditions. So that's very much what the surgery sessions are for. So instead, this is about helping you to write a compelling entry. Science Practice will be tailoring the support that they're offering based on what entrants need. So if you are an eligible lead entrant, so that is a water company or NAV in England and Wales then please complete the EOI survey by next Monday. So I believe someone from Science Practice will be dropping a link to that in the chat if they haven't already. So make sure you're filling that in. You can also register for the first part of their support offer, which is a workshop next Friday, which is going to focus on writing a strong entry to Breakthrough 2 just quickly before we move into the q&a, as well. The final event that I'd like to flag for you are our lunchtime learning sessions that we've recently recently launched called On the Menu. So these events are focused on sharing innovation knowledge and approaches with water company staff. And so our next session will be on Thursday, the 28th of October. That'll be with Nesta's senior foresight lead, who's going to be exploring how the water sector can make use of a range of techniques under the umbrella of participatory futures. So these are methods that can help the sector go beyond workshops and surveys, and try and really actively engage with stakeholders to tackle some of the sectors, most pressing challenges. So again, if this is something that you're interested in hearing a little bit more about, if you think that might get the sort of creative ideas flowing ahead Breakthrough 2 please register and come along.