Sector challenges and Water 2020
Cathryn Ross, Chief Executive
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It is great to be able to talk to you all directly about some of the challenges facing the sector, what they mean for the sector and what we think they mean for our regulation of it.

Challenges and opportunities

The water sector provides a vital public service in every sense and it is important that we talk about where the sector is going. But before we do that let's take a moment to remember where it has come from.

The privatisation of the sector 25 years ago has helped to deliver enormous improvements in the quality of that service. We are probably all familiar with the statistics:

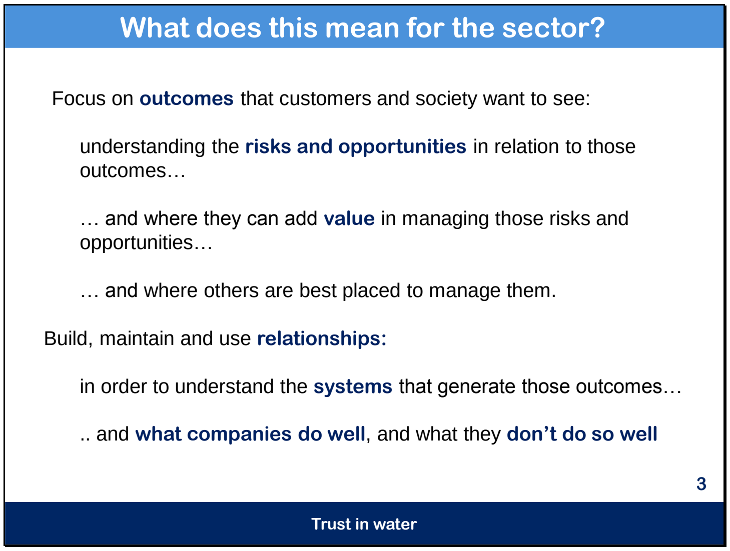
- More than £125bn of privately financed investment, that has delivered:
- Big improvements in service, with customers
  - 5 times less likely to suffer from unplanned supply interruptions,
  - 8 times less likely to have their homes flooded by sewage, and
  - 100 times less likely to suffer from low pressure.
- It has also delivered massive environmental improvements – we now have more than 200 blue flag beaches, salmon in the Thames and in the Mersey
- And we now have bills that are a third lower than they would otherwise have been as a result of efficiencies achieved.

But we also know that the sector faces some real challenges.

- Many of those changes go to the very heart of what the sector does – the delivery of wholesome water through the tap, the taking away of waste water and its safe return to the environment.
  - Our population is rising, and becoming more concentrated in the south and east, where water is scarcest
  - Single occupancy households, which use more water per head than others, are rising too.
- Climate change is exacerbating these challenges, with more extreme weather events and ultimately less water when and where we need it, more water when and where we don't.
- These challenges will inevitably make it harder for companies to deliver the services on which we all depend, in a way that is truly resilient, and at a price customers can afford.
- On the opportunity side, technology is opening up massive potential for doing things differently. But these opportunities bring challenges too - including the use and abuse of customer data, and information security. Realising the full potential of these technological changes will require new approaches and new skills.
- As many of you will understand better than most, there are also macroeconomic changes and changes in financial markets for the sector to deal with. I'm conscious that many people have said this over the last few years... But surely

the sort of low inflation, low interest rate conditions that have persisted for years now will change at some point, and at the very least one would have to say the outlook was uncertain.

What does this mean for the sector?



There are really significant challenges. And challenges that the sector - not the regulator but the sector - will need to meet.

What do they mean?

Well, many of the things that Ofwat has been saying for sometime will remain important.

The sector will only meet these challenges successfully if it focuses on outcomes, if it really understands and manages the risk associated with these outcomes, and if companies make sensible decisions about whether they are best placed to manage those risks or where they should contract with others to do so.

But of course, focussing on outcomes, no matter how efficiently they are delivered won't be enough. Relationships - how customers, but also other stakeholders - feel about their interacts matter too.

All of these things underpinned PR14.

And they underpin our strategy, which sets out our vision for the sector of trust and confidence in water and waste water services. A vision that we share with the sector itself, and many of its stakeholders.

So far... So predictable...

If that's what you are thinking, then I'm afraid it is time for a wake up call.

I know Ofwat has been talking about the challenges that face the sector for a while. But now there has been some really good work done by companies - Anglian and Yorkshire - pulling together and considering some of these trends. And I was lucky enough to be part of a panel at the Institute of Water conference in the summer where they were discussed, with the input of a couple of leading futurologists. There is a growing body of evidence and analysis here.

And I think there is a consensus now around two things.

First, that the challenges the sector faces at this moment are more complex and more dynamic that at any point since privatisation.

And second, that it is absolutely imperative that the sector is successful in meeting them. Imperative so that customers and society in 5, 10, 20, 50 years time can continue to receive they services they depend on, at a price they can afford. But also imperative the sector seen right now as being capable of delivering these outcomes, and maintaining its relationships over the long term.

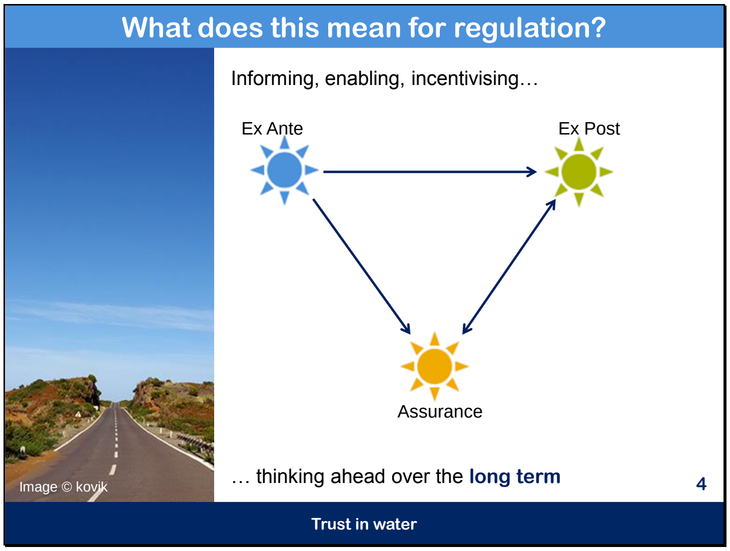
Because if it isn't it will lose legitimacy. And if vital public services like these lose legitimacy, it won't happen quietly. It will happen on the front pages of the newspapers, in the TV studios and in the Houses of Parliament. And if that happens, you don't need me to tell you, the investability of the sector will be at risk.

Now, there is now getting away from the fact that the challenges I have talked about are for the sector. We will not, we cannot, insulate the sector from them.

But, as the economic regulator, we do have an important role to play in helping the sector to meet them.

And given what I have said about those challenges being more complex and dynamic than at any point since privatisation, it should come as now surprise that they have implications for our regulatory approach.

What does this mean for regulation



The essence of economic regulation does not and should not change – it is about the use of incentives (which we create through the allocation of risk) to align the interests of capital and company management with those of customers.

But beyond this, the regulatory tool kit, and in particular the emphases that regulators put on different tools can and should change over time.

If our regulation of the sector is going to help it meet those challenges, building and maintaining trust and confidence as it does. We need to make sure we are using the right tools in the right way - our regulatory approach needs to evolve.

You can see our direction of travel on the slide. There are two aspects to it.

First, we are moving from a model that placed great emphasis on ex ante regulation, a rather prescriptive, administrative, one size fits all approach that put the regulator at the centre of the industry.

Towards one that is much more framework based, a framework that is pro-market, that enables much more proportionate and targeted regulatory interventions and that instead put the customer at the heart of the industry.

This direction of travel relates directly back to those challenges the sector faces and their complex and dynamic nature.

Let's be clear - the sector is not going to deliver against those challenges if it doesn't learn how to do more with less. Not just doing things a bit cheaper but making the best use of scarce resources and doing things in new and different ways.

Markets are important part of the answer here. I have said it before but I will say it again - by 'market' I do not mean competition. I mean simply places where buyers meet sellers and where transactions take place. And they are important here because markets enable choices – whether a water company should contract with a farmer to allow his field to flood because it is a cheaper solution to flooding than building big attenuation tanks, whether a supermarket with a big roof and a big car park should invest in rainwater harvesting or attenuation measures. And they reveal information about costs and values that will make for better choices over time.

If you cast your mind back to our recently published 5 year business plan, you will immediately recognise each of these two aspects of our direction of travel reflected in two of our major work programmes. The first being Water 2020 and the second being our Finance and Governance programme.

I want to take this opportunity to share with you some of our current thinking in relation to each of them.

Water 2020: value creation – value allocation

As I said earlier the key to the sector's ability to meet those complex and dynamic challenges rests is in doing more for less.

Or to put it another way creation of value. Because only if value is created can there then be a discussion about how that value is allocated, between investors (and investors have to get something out of this otherwise it won't happen), customers and the environment.

That is what our Water2020 programme is all about. Not about 'regulation and PR19' over here and 'markets' over there – but how we can build on what we all achieved in PR14 to use markets **and** regulatory tools to enable companies to create value to the benefit of everyone.

We set out in July some of the questions we thought were in scope for Water2020. We asked about:

- Where might we free up more scope for markets in the value chain and where better price signals would be helpful
- The impact of retail market opening in April 2017
- The future of customer engagement
- How we might use particular aspects of the regulatory tool kit, including how the RCV might evolve post 2020, and how specific incentives could evolve

We also opened what have been calling the 'marketplace for ideas'. There are some interesting thoughts there from companies… and I am really pleased to see their contribution. It is good to see the open debate and constructive approach. And it does reinforce our view that we don't have a monopoly on good ideas. It would be really great to see some investor contributions!

That said, I should probably take the opportunity to make clear that this is **not** about Ofwat outsourcing its policymaking. This is about getting the very best ideas and thinking on the table. So that ultimately we can take the best informed, most robust, most effective decisions about how we move forward. But be under no illusion – those decisions will be our decisions.

Right now, we are developing the thinking that we will set out in December. This delivers on the commitment I made when we started Water2020 that although we were putting some big issues on the table, we would not leave things open for too long. We would deliver our policy framework for PR19 earlier in the control period than we did for PR14. And in particular, I said we would set out some specific proposals on RCV allocation and indexation around the end of 2015. This we will do.

Having said that we are developing our thinking, I can share with you today some of where we have got to.

Let's start with markets.

We see big opportunities - opportunities that are not being utilised right now - in the upstream value chain, in particular for water resources and sludge.

Let's talk sludge. In case you are in any doubt, I am taking here about the stuff that is left over after you have treated sewage.

Historically sludge was a problem, a bi-product that had to be treated disposed of. And since its disposal was needed as a result of treating sewage, something that statutorily appointed water companies are required to do, sludge treatment and disposal activities were included in the regulated business, with the idea that price controls were needed to provide an incentive to do those activities more efficiently.

But times have moved on.

With new technology, and changes in prices of related products, Sludge is now an asset. A source of energy.

Indeed, analysis suggests that it actually costs companies more just to get rid of it than it costs them to (net of the revenue they can earn) by recovering energy from it and creating fertiliser products. the costs of disposing of it - just getting rid of it - are consistently greater than companies can recover from selling energy generated from sludge and fertiliser products. You could easily imagine a world in which sludge treatment providers didn't charge water companies to provide that service, but paid them to take the sludge away.

In short, we are teetering on the edge of a market for sludge.

If that market were to develop could reveal information on available capacity and costs and allow optimisation across company boundaries. It would enable companies to choose whether to invest in new sludge treatment capacity themselves or contract on a commercial basis with a third party. It would enable them to use their existing assets to take in sludge from other companies, bringing in revenue and possibly delivering economies of scale. It would also provide incentives with to maximise value from sludge, which would have environmental benefits.

The sludge market seems to us - and indeed to some of the companies who are at the cutting edge of sludge treatment - to have real potential for value creation.

Water trading is another area where we see scope for value creation if we can make better use of markets.

If you look at that well known Environment Agency map that shows water resource zones, with areas of abundance coloured blue and areas of scarcity coloured red, it is immediately apparent that there are areas of scarcity right next to, or pretty close to, areas of abundance. And where that is the case within the boundary of a water company, you often see some form of interconnection between the zones. But where it is across companies boundaries, you very rarely see that.

The move to totex in PR14 has helped to remove one barrier to trading that our regulatory regime had created. But despite this, the volume traded between companies has remained constantly low at about 4–5% of total supplies.

At PR14, companies' business plans showed that only a small number of additional trades are planned over the next five years. And yet:

- back in March 2010, we identified about £1 billion of potential savings in England and Wales from more water trading compared with the proposals in companies' draft WRMPs; and
- in May 2010, the Environment Agency published work by the Water Resources in the South East (WRSE) group that identified £500 million of potential savings from sharing resources in the south-east of England alone.

To be clear, I am not underestimating some of the challenges that would need to be dealt with to realise these opportunities through better use of markets.

We need to think carefully about:

- What stays regulated and what we can deregulate - and the boundary between the two
- How new and existing assets are treated, especially in relation to the RCV and cost recovery
- How best to balance risk and reward, and how best to share value that is created between investors, customers and the environment.
- How we could be confident that markets would deliver resilience over the long term.

But in our view the opportunities here do make doing this thinking worthwhile.

It is also worth reiterating - I know you have heard me say this before - that we also attach importance to a more effective market for corporate control in the sector.

In the face of those complex and dynamic challenges. And as markets reveal new information and opportunities. It is important that owners have opportunities to respond, and adjust their exposure according to reflect those risks that best match their portfolio and their advantage in managing them.

I fully recognise that in the past the combination of the special merger regime - with its automatic full inquiry for pretty much all water company-water company mergers, coupled with our emphasis on comparative econometric modelling to set a single integrated price control across companies had a chilling effect. This is changing. The Water Act 2014 creates the possibility for undertaking in lieu of a phase 2 reference (or it will do when the Government has commenced the relevant provisions). And we have indicated very clearly our willingness to discuss transactions early with those involved, providing our view and, if we have any concerns, discussing possible remedies upfront. This will reduce parties' exposure to regulatory risk around the merger regime. We have also indicated that, especially if we are able to make more use of market testing and comparators from the beyond the sector, we will be less reliant on intra-industry comparators than we have been. And of course, Jonson has particularly flagged, in his recent Policy Exchange speech, that we would be very interested to see transactions that would bring genuine innovations in company structure and the provision of services.

Ok. So there you have just three examples of where we see opportunities for markets to enable value creation. Clearly, how we take that thinking forward will have a big impact on our approach to PR19. So for that - and many other reasons - we don't yet have our PR19 methodology.

But I can share with you today some of the things we do already know will be important for PR19.

And I want to say now that if you thought PR14 was a challenging review, and you're expecting an easier time of it in PR19, you need to think again.

PR14 was challenging in a lot of ways. We made quite a few changes to the way we did our price controls. Outcomes, customer engagement, totex, financeability levers, a different balance of risk and reward, the risk based review. They were all new. They ushered in a new price control framework. That was challenging for companies. We were asking them to do things differently, and have a very different style of conversation with us.

All these elements - and the principles on which it is based - will remain for PR19.

But we always saw PR14 as a transitional price review; we always intended to build on it in subsequent reviews. We need to go further to help the sector meet those challenges I set out.

And let's just take a moment to think about the backdrop to PR19 ... and why I think it will be so much more challenging than PR14.

Let's be honest too. PR14 took place against the backdrop of a massive reduction in the cost of capital. In PR09 we set a cost of capital of 5.1pc. In PR14 we set a cost of capital of 3.74pc at the appointee level. Our 3.6pc wholesale cost of capital was the lowest ever for a regulated sector in the UK. Frankly, I think we could have gone slightly lower - I know some of you do too. The cost of capital accounts for roughly a third of the average bill. Ultimately, the effect of that massive drop in the cost of capital was that everyone could have more of everything. We got that more for less.

But how hard did the companies have to work to deliver that? How hard did they have to challenge themselves to reduce the cost of actually running their businesses, to use scarce resources more efficiently, to innovate?

Now, with gearing being what it is and 75pc of debt costs being embedded, I wouldn't rule out a somewhat lower cost of capital in PR19. But I can't see it being in the order of 2 percentage points lower again...

Which means that if this sector is going to deliver more for less it is going to have to do it the hard way.

What does that mean?

I want to draw your attention to three themes.

First, we are not going to stand still in relation to our efficiency challenges.

In PR14 we moved from an average efficiency benchmark to an upper quartile one. But it was still historic upper quartile. And we still used a glide path.

In what competitive market place does a customer say to a company 'I know you are way more expensive and high cost than the other guy, but I'm going to give you five years to get down to a price that is 30 percent more than his is now ...'

And that PR14 upper quartile was still based on water company - water company comparators. And I have to tell you that I am not convinced water companies always have the most efficient ways of doing things.

Second, we have a lot more to do on customer engagement. Or rather companies do...

There were some pockets of real innovation here - our two enhanced companies, South West Water and Affinity Water were real stand outs here. But there was still too much emphasis on customer surveys - admittedly of different types - in the context of business planning and not enough evidence of companies really getting to know their customers. All their many many different types of customers, with their different priorities and preferences, through all the different channels through which they interact with them. And too many companies not having the difficult conversations with customers.

I have heard members of company boards tell me that they will be underinvesting in this control period because it was 'too difficult' to get 'customer support' for schemes for example where the effects were intergenerational. Not good enough. And not true. And if that company thinks we are going to give it more money in PR19 to do the stuff it should have done in this control period but didn't, because it couldn't talk to its customers about the impact on their grandchildren, it is quite wrong.

Third, we are going to put more emphasis on what companies do in period. It will be much harder to pull a rabbit out of a hat in the business plan.

This is in part because our risk based review will take account of in-period performance - did the company do what it said it would do?

But it is also because the quality of the evidence based we will expect at the next review is going to be higher. We will expect you to demonstrate a real understanding of the outcomes you are trying to deliver and the risk associated with them, and to do a thorough appraisal of the most cost effective ways of reducing that risk. We will want to see evidence of proper market testing. And I would love to see evidence based on companies having tried things in this control period - experimented, if you like, - and having learned as a result. Maybe from success, maybe from failure. But having learned.

So... You will have heard quite a bit recently about Ofwat getting in shape for PR19. We are.

But the message I need companies to hear now is that they need to get in shape too.

And as investors you need to hear that message too - you need to challenge and support companies to do what they need to do. And you need to do it now.

Because if your companies are not setting themselves up to outperform the PR14 settlement...

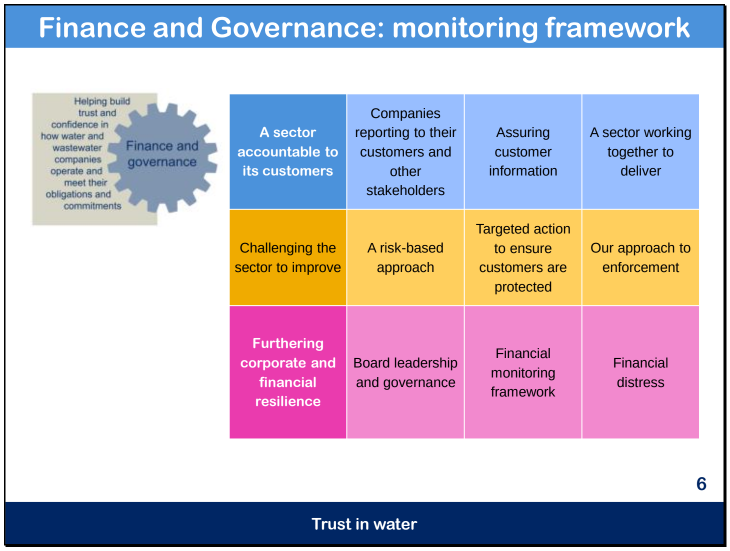
... If they are not building those deep, genuine, day in day out relationships with all those different types of customers they have...

... If they are not building their understanding of what they need to do, works and what doesn't, not by commissioning consultancy studies, but by testing the market, by trying things out...

... If your companies are not doing all these things now...

... those companies are already behind the curve for PR19.

Finance and governance: monitoring framework



Before I finish, I want to say a little about that third pillar on our regulatory model. As I said, we may be moving from an ex ante, prescriptive, administrative, once size fits all approach to something more ex post, framework based, pro-market, proportionate and targeted approach. But we are not going to do that blindly.

We need to know what is going on in the sector. How is the sector performing, how is managing all those critical relationships. That information is vital if we are to continue to do our job. And you know have vital that is for the legitimacy, for the investability of the sector.

But more than that, we believe it is important for others to know what is going on to. For others to be able to raise questions, to prompt and challenge companies.

Now I know that transparency can be uncomfortable. But getting this information out there is a really important part of our strategy. An important part of our regulatory model. In part because transparency creates accountability. And accountability creates legitimacy. It is in itself an important driver of that vital trust and confidence in the sector. But more than that, because having that information out there, creating that ability for others to question, challenge, prompt and hold to account, is a really important source of assurance for us that risks will be identified, understood and managed well. This is why consulting on the information we ask want to see published, and how it is presented is so key. And I would urge you to be part of that discussion because you are an important part of the audience for it.

Put simply, if we get it right, having that information out there is one of the things that will enable us to give companies that flexibility, and that ownership, to create value.

Always knowing of course that where companies haven't stepped up, we will step in to protect customers.

So the tool kit you are seeing us develop around regulatory reporting, market intelligence and assurance isn't some nice to have. Neither - and I know some of you will rue this - is it a return to the June return. This is different information for a different purpose. And it is a key element of our regulatory model.

And of course it amplifies all those points I was making earlier.

It means that not only is PR19 going to be even more challenging than PR14...

... Not only do companies need to be getting in shape now...

... It will be increasingly clear whether they are or not.

Ok for some companies - some look like they have made a good start already. Pretty uncomfortable for others.

But a great opportunity for you as investors - especially those of you with interests in the sector beyond 2020 - to take action now, to have those conversations with company managements, to improve your chances of being one of the PR19 winners.