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PR24 and beyond: Creating tomorrow, together

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About this document

This paper outlines our **initial views on the framework for PR24 and future price reviews**. It discusses our high-level ideas for maximising the potential of price reviews to help the water sector create value for customers, communities, and the environment. Our intention is that this paper will help us and the sector prepare for PR24.

Executive summary

Facing into the future

We face an immediate challenge. Our water sector needs to tackle demands from climate change, customers' increasing expectations for service and the treatment of the environment, and the pressures on people's ability to pay.

Climate change threatens resilience, both of our networks and our water supply. We're already seeing drier summers, more frequent and intense rainfall, more variable river flows and biological changes in water bodies. In Wales, the projected reduction in summer rainfall by 2050 significantly exceeds the projected increase in winter rainfall.¹ In England, it's estimated that there is a 25% chance of the worst drought in recorded history within the next 30 years.²

At the same time, **customers' interests are evolving and their expectations are growing**. Customers are increasingly concerned about damage to the environment from taking water from rivers and chalk streams, discharging waste through storm overflows, and carbon emissions. And companies need to go further to deliver great customer service.

Meanwhile, the impact of Covid-19 has amplified concerns about **affordability**. One third of households in England and Wales already sometimes struggle to pay their household bills,³ and this figure may rise as the impact of the pandemic on jobs becomes clearer. And there is unlikely to be the same scope for bill reductions from falling underlying financing costs that we saw in PR14 and PR19.

Companies and governments have set long-term targets on per capita consumption, drought resilience, leakage, carbon reduction, and water poverty. Further targets are likely to be set under new legislation envisaged by the Environment Bill.

We need to work in new ways to meet these ambitions. **This is the moment for fresh thinking and real change**. Collaborating with others inside and outside the sector can deliver better, more sustainable outcomes. We expect companies to adopt more nature-based solutions and to unleash game-changing innovations to drive up their performance. They will need to embrace the opportunities from capturing, understanding and using data, and from engaging with markets. And balance complex trade-offs carefully over the long term.

¹ Welsh Government, '[Future Wales: The National Plan 2040](#)', February 2021, p. 45.

² National Infrastructure Commission, '[Preparing for a drier future: England's water infrastructure needs](#)', April 2018, p. 5.

³ Online nationally representative survey of 2,100 bill payers in England and Wales. Conducted for Ofwat by panelbase (fieldwork 26 March–1 April 2021).

We also need to play our part. We need to adapt our approaches including the price review frameworks for England and for Wales to ready them for the future. We are keen to hear your views on our suggestions on how to do it.

Our framework for the future

We propose to overcome these challenges and embrace the opportunities by embedding a sharper emphasis on creating value.

We think that means: an increasing **focus on the long term; delivering greater environmental and social value**; reflecting a **clearer understanding of customers and communities**; and **driving improvements through efficiency and innovation**. These proposed goals reflect the outcomes that we want to achieve for customers and the environment. They interlink with and complement each other, and the price review must deliver on them all.

Focusing on the long term

We want the price review to support the right long-term solutions for customers. In PR19, we allowed companies £13 billion for improving services to customers and the environment. Companies will need to continue to enhance their networks, and we need to understand better how their approach in PR24 fits with their long-term strategy. Companies should specify what long-term outcomes they are aiming to deliver, taking account of the long-term ambitions of the UK and Welsh governments. They should show they have carefully considered how best to work towards these outcomes, taking account of uncertainty and affordability constraints. They should also bring together their water resource management plans, drainage and wastewater management plans, and other statutory plans.

We are also looking at other ways we can support the long-term focus. We are proposing to strengthen our approach to resilience so that companies are more strongly incentivised to maintain their assets for the long term. And we will continue our focus on companies' financial resilience. We are also considering whether to provide greater clarity on our approach to future price reviews. This includes both what we expect companies to deliver in future periods from their current allowances and what additional incentives we will provide.

We want to refine the price review process so that there can be more focus on the long term. We are also considering whether we could provide more information to companies in advance of the price review so that they better understand the baseline for the development of their business plans. We are considering whether to combine the assessment of business plans and the draft determination to create a two-step process. We will also simplify our outcomes framework which sets performance levels and incentives for a range of metrics.

Delivering greater environmental and social value

Customers increasingly expect company decisions to be driven by a broad range of environmental and societal factors. This is particularly pertinent to water companies who are key long-term stakeholders in communities, providing services which are both essential and environmentally sensitive.

We recognise that valuing environmental and social impacts is challenging. We expect water companies to work together and with other stakeholders to ensure there is an appropriate degree of consistency in how environmental and social factors are taken into account in their decision making.

Companies' ability to meet these expectations will be increased by a greater focus on the long term. But there may be more we can do. We are considering how we can better incentivise nature based solutions and other opex-based solutions, through reducing the potential bias for capital-based solutions. We also want to provide greater clarity on the role partnerships can play as part of PR24 - in particular in helping water companies to deliver greater public value. And we want to consider how PR24 and future price controls can support companies to meet the challenge of net zero.

Reflecting a clearer understanding of customers and communities

We've observed a culture change in the sector over the last decade, with increased recognition that engaging well with customers is fundamental to delivering services that meet their needs. Companies' priorities are now to focus more on day-to-day engagement with their customers, moving ahead with the pace, creativity and vigour that we can see in other sectors of the economy. This includes efforts to help customers play their part in reducing water consumption and avoiding damage to the wastewater system. And it is more important than ever that careful attention is paid to what customers can afford to pay.

For the price review, we want to develop a simpler, more targeted and more effective approach to capture customers' views. We also want to consider how, and on what issues, customer research can capture customers' views meaningfully. We plan to work with the sector to conduct collaborative customer research for England and for Wales, to complement companies' own engagement. This will focus on aspects of the determinations common across companies so that we can easily compare differences between customer groups. We will aim to publish this information in advance of the submission of business plans.

This research will aim to provide a significant amount of the information on customer views required to inform our determinations, so we propose not to require each company to have a customer challenge group at PR24. Instead, companies would put in place challenge and assurance solutions that meet their specific needs and ambitions. Companies can also continue to use customer challenge groups where they find them helpful for focusing on, and working with, customers, as part of their day to day business outside the price review.

Driving improvements through efficiency and innovation

Since 2011, productivity growth in the water sector has appeared weak. At PR19 some companies really stepped up their commitments to improve services while reducing costs. Given the challenges the sector is facing, all companies need not only to embed these ambitions across their businesses, but to accelerate improvements and create space to do more for their customers and the environment. PR24 needs to ensure consumers do not pay more than they need to, so it will only reward companies that meet these challenges.

We expect companies to develop a much better understanding of how they can efficiently improve service as they deliver PR19. This should include working in partnership with other organisations and making better use of data, including by embracing open data. This insight should inform their PR24 business plans.

Markets can also drive innovation and efficiency. In PR24, where consistent with government guidance, we will further develop markets for developer services, bioresources, water resources and the provision of large infrastructure.

We are also considering setting targeted challenges to encourage a step change in performance on areas where there are long standing sector wide issues. These areas could include water efficiency and reducing harm caused by discharges from the wastewater network. And, building on the experience of our innovation competitions, we will explore whether we can increase incentives or revise the protections in the control to unlock a step-change in innovation.

Next steps

To build a PR24 to meet the challenges ahead, we need your views on the ideas we are setting out. We welcome responses to this document and will carry on the discussion through working papers, workshops and working groups. This will help us further develop the price review framework in advance of our draft methodology, due in summer 2022.

Responding to this document

We would welcome any comments on this document. Please email them to PR24@ofwat.gov.uk. The closing date for responses is 5pm on 22 July 2021.

We will publish responses to this document on our website at www.ofwat.gov.uk, unless you indicate that you would like your response to remain unpublished. Information provided in response to this document, including personal information, may be published or disclosed in accordance with access to information legislation – primarily the Freedom of Information Act 2000 (FoIA), the General Data Protection Regulation 2016, the Data Protection Act 2018, and the Environmental Information Regulations 2004. For further information on how we process personal data please see our [privacy policy](#).

If you would like the information that you provide to be treated as confidential, please be aware that under the FoIA there is a statutory [Code of practice](#) which deals, among other things, with obligations of confidence. In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that we can maintain confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on Ofwat.

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1. Introduction

1.1 Aims of this document

This paper outlines our **initial views on the framework for PR24 and future price reviews**. It discusses our high-level ideas for maximising the potential of price reviews to help the water sector create value for customers, communities, and the environment. Our intention is that this paper will help us and the sector prepare for PR24.

The paper considers the **challenges and opportunities** faced by the sector, and suggests some **ambitions for the price review** in light of these, recognising that some of these issues are also being addressed outside of the price review process. We then outline **initial suggestions on how the price review could work across England and in Wales**, making clear those areas where a different approach may be warranted in the different nations. We are keen to work with stakeholders to develop the form of PR24 further. We ask for views on these suggestions and indicate how we intend to take forward this work.

1.2 The context

The long-term challenges facing the water sector are becoming increasingly urgent. We set out our view of the future [challenges and opportunities](#) facing water companies in December 2020.⁴ These are also reflected in our strategy and take account of our statutory duties⁵ and the Strategic Policy Statements from the UK and Welsh Governments.⁶

The sector needs to step up to deliver, and we need to adapt our framework to drive and support this change. But there are elements of our framework that work well in the face of the current challenges and opportunities. As we outlined in our strategy, we will retain a five-yearly periodic review, based around:

⁴ Ofwat, '[PR24 and beyond: Future challenges and opportunities for the water sector](#)', December 2020.

⁵ The general statutory duties for most of our work as an economic regulator are set out in section 2 of the Water Industry Act 1991 (as amended). These require us (in summary) to set price controls in the manner we consider is best calculated to: further the consumer objective to protect the interests of consumers, wherever appropriate by promoting effective competition; secure that water companies properly carry out their functions; secure that the companies are able (in particular, by securing reasonable returns on their capital) to finance the proper carrying out of those functions; and further the resilience objective to secure the long-term resilience of companies' systems and to secure that they take steps to enable them, in the long term, to meet the need for water supplies and wastewater services. Subject to those duties, we also have duties to (among other things) promote economy and efficiency and contribute to the achievement of sustainable development.

⁶ We expect the existing statements of strategic priorities and objectives for Ofwat from Defra and the Welsh Government to be updated in due course. We will continue to monitor the policy landscape to ensure we take account of all relevant frameworks in the development of PR24.

- **Companies' plans** built on a deep understanding of customers' needs;
- **An outcomes-based approach** with meaningful incentives for outperformance;
- **Separate price controls** where appropriate for distinct markets; and
- **An allowed return** on the regulatory capital value (RCV).

PR24 will **build on the 'totex and outcomes' framework** that was introduced at PR14. But PR24 also needs to refine the approach in the context of the increasing urgency of the challenges we face as well as the **learning from previous price reviews**. We have explored the learning from previous price reviews in our [PR19 lessons learnt exercise](#) and our forthcoming PR14 review. We have also reflected on our Green Recovery process, which has explored approaches which better encourage alternatives to traditional infrastructure solutions and delivering wider value in collaboration with others.⁷

The discussion on PR24 has already begun. Several stakeholders have already made submissions on how to develop the next price review through the [Future Ideas Lab](#), which we have considered in this document. And we have been engaging in detail on some key areas, for example through the consultation on [customer engagement in price reviews](#), and the outcomes working group. These discussions have already helped to shape our thinking.

1.3 Structure of this document

This paper is structured in four parts.

- First (Chapter 2) we outline the challenges and opportunities ahead, and suggest the key aims for the price review and key factors we need to consider in designing it.
- Then we outline the high-level approaches that we could use in England and in Wales to meet the challenges and opportunities. Specifically:
 - Chapter 3 considers the basic regulatory architecture we intend to adopt at PR24, including the role of price controls and markets;
 - Chapter 4 looks at how the price review can encourage companies to focus on the long term, by better holding companies to account for past investments and ensuring that future investments are appropriate given companies' long term targets and ambitions;
 - Chapter 5 looks at how we can complement our outcomes regime and do more for customers, communities and the environment by further incentivising companies to reveal information, spend money efficiently, and innovate to address long term challenges;
 - Chapter 6 considers our approach to reflecting customers' views in the price review; and,
 - Chapter 7 looks at how we can work with other regulators so that our separate processes complement each other.

⁷ Ofwat, '[Green economic recovery: Overview of draft decisions](#)', May 2021, p. 6.

- We then consider further details of the price review for England and Wales:
 - Chapter 8 considers the approach to setting different controls for the sector;
 - Chapter 9 considers how to incentivise good outcomes for customers, communities and the environment in further detail;
 - Chapter 10 looks at how to set efficient cost allowances for companies; and
 - Chapter 11 looks at our approach to risk and return.
- Finally, Chapter 12 sets out our draft timetable for delivering the price review and Chapter 13 summarises our questions for stakeholders on the ideas we have set out in this document.

1.4 Next steps

We want to hear views on the ideas set out in this document from across the sector, including water companies (both regional and new entrant), business retailers, Market Operator Services Ltd. (MOSL), companies in the wider supply chain, as well as public bodies, other regulators, customers and their representative groups and environmental organisations. We invite written submissions by 5pm on 22 July.

We will continue to further develop our proposals over the course of the year. We expect to consult on any necessary licence modifications in late 2021 or early 2022, and will publish our draft methodology in June/July 2022. The responses to this document we receive will help this process, and we also intend to publish working papers and hold workshops on specific issues, alongside working groups on areas such as outcomes, costs, and customer research. We also continue to welcome contributions, from across the sector and beyond, to the [Future Ideas Lab](#). We will consider all submissions as we develop our proposals.

2. Ambitions for PR24

PR24 has to deliver for customers, communities and the environment in the face of considerable and urgent challenges. So we need to set high ambitions for what the price review should do, building on the ambitions set out in our '[Time to Act, Together](#)' strategy and taking account of our statutory duties and the English and Welsh strategic policy statements.

While we recognise that some challenges can be addressed outside of the price review process, we set out here key themes that we suggest PR24 will need to address. A successful PR24 will:

- increase **focus on the long term**;
- deliver **greater environmental and social value**;
- reflect a **clearer understanding of customers and communities**; and
- drive improvements through **efficiency and innovation**.

We then set out our suggested high-level approach to balancing some of the main factors we need to consider when designing the price review, so that we can deliver effectively against these ambitions. These include: providing greater clarity over future price controls whilst retaining the ability to adapt; streamlining the price review without losing its power; and reflecting regional and national diversity whilst maintaining our ability to compare across companies.

Finally, we consider how we can best evaluate our progress in future.

2.1 Challenges for PR24 and beyond

The water sector faces profound challenges in the coming years and decades.⁸ Many of these challenges require a long-term focus, and the price review is a key step in the path to meeting them. With the right approach, the sector can continue to deliver high-quality services for customers, communities and the environment.

First and foremost, climate change has significant implications for the long-term operation of the sector: it threatens the resilience of companies' networks, and of our water supply. We're already seeing drier summers, more frequent and intense rainfall on wet days, more variable river flows and biological changes in water bodies. In Wales, the projected reduction in summer rainfall by 2050 significantly exceeds the projected increase in winter rainfall.⁹ And in England, The National Infrastructure Commission estimates there's a 25% chance that,

⁸ We set out our view of the challenges and opportunities facing the sector in more detail in Ofwat, '[PR24 and beyond: Future challenges and opportunities for the water sector](#)', December 2020.

⁹ Welsh Government, '[Future Wales: The National Plan 2040](#)', February 2021, p. 45.

within the next 30 years, we'll experience the worst drought in recorded history. It has urged the sector to increase water capacity by four billion litres by 2050.¹⁰

There's increasing public concern about the potential harm to the environment from some of the water sector's activities. This includes the impact of abstraction on rivers and chalk streams and, most prominently, the use of storm overflows. There are also wider environmental concerns, including the level of emissions and threats to biodiversity. And customers expect water companies to catch up with the levels of customer service provided by companies in a competitive environment.

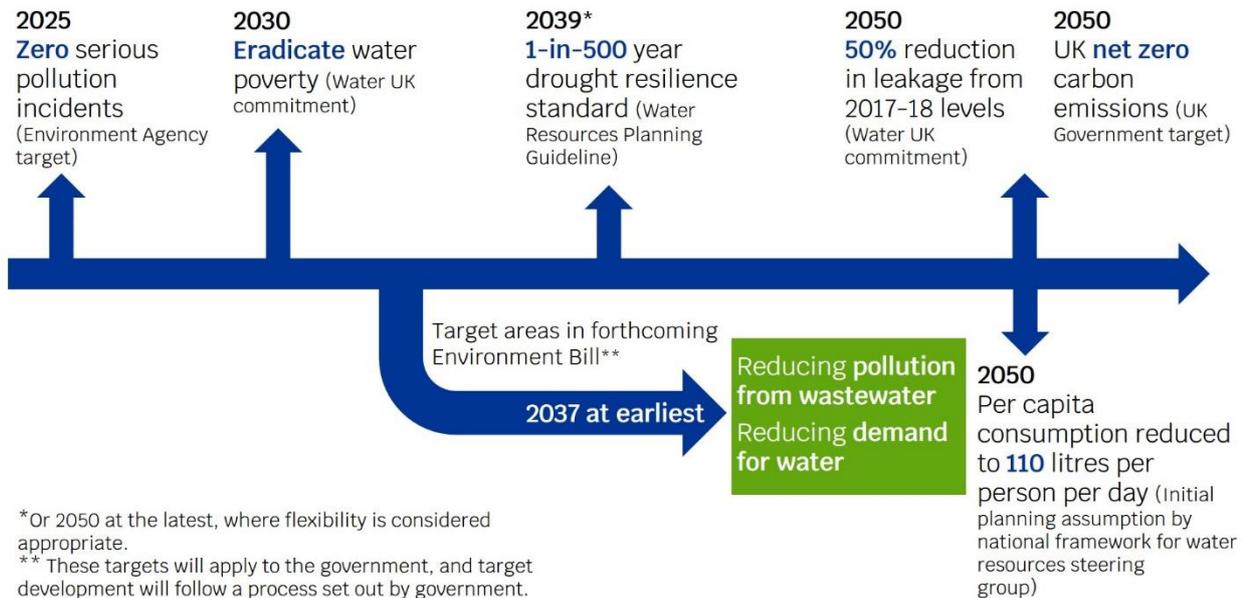
At the same time, the impact of Covid-19 is likely to amplify the issue of affordability at PR24. One third of households in England and Wales already sometimes struggle to pay their household bills,¹¹ and this figure may rise as the impact of the pandemic on jobs becomes clearer. But meeting the numerous challenges we face could bring significant cost pressures on companies. And we don't expect there to be the same scope for bill reductions from falling underlying financing costs as there was at the last two price reviews.

The urgency of these challenges has led to a real focus on what the sector needs to achieve over the coming years and decades. Companies, regulators and governments have set targets on areas that require significant long-term action, such as per capita consumption, drought resilience, leakage, carbon reduction, and water poverty. Further targets are likely to be set under new legislation envisaged by the Environment Bill. Some of these sector-wide targets, commitments and planning assumptions are illustrated in Figure 2.1. Both the Welsh Government and Defra are involved in developing a long-term vision for the water sector in their respective jurisdictions, although this work is still evolving and there is more to bring together aspirations in different areas.

¹⁰ National Infrastructure Commission, '[Preparing for a drier future: England's water infrastructure needs](#)', April 2018, p. 5.

¹¹ Online nationally representative survey of 2,100 bill payers in England and Wales. Conducted for Ofwat by panelbase (fieldwork 26 March–1 April 2021).

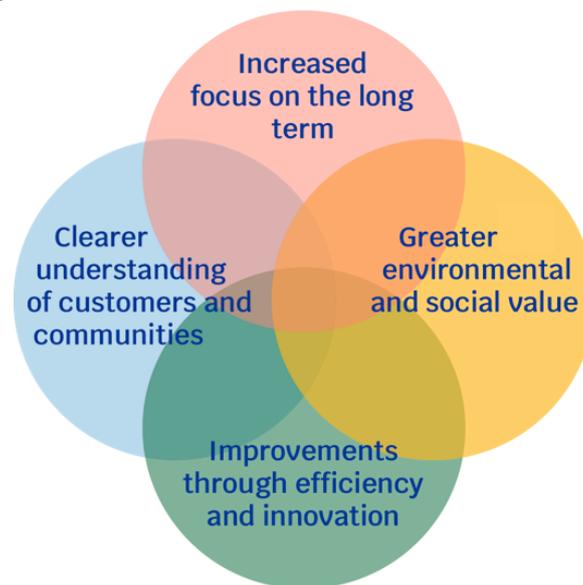
Figure 2.1 Examples of long-term targets, commitments and planning assumptions that impact the water sector



2.2 Our themes for PR24

We want our price review to support the sector to meet these challenges, so that it can deliver for customers, communities and the environment. We suggest four key themes to focus on. These are to increase **focus on the long term**, deliver **greater environmental and social value**, reflect a **clearer understanding of customers and communities**, and drive **improvements through efficiency and innovation**.

These suggested goals interlink with, and complement, each other, so the price review would need to deliver on them all, taking account of our statutory duties and the English and Welsh strategic policy statements.

Figure 2.2 Suggested goals for PR24

Increasing focus on the long term

The environmental and resilience challenges we face demand solutions that work now and into the future. As set out in our [PR19 lessons learnt](#), we consider there is further scope to maximise the long-term benefits to consumers and the environment, for example through increased use of nature-based solutions. We also found that companies don't yet have a full understanding of their own resilience, particularly in the longer term, and some companies were persistently unable to provide robust analysis of risks in their proposals.

Given the long lives of assets in the water sector, decisions made now have impacts on the services that customers experience, and the bills they pay, long into the future. We need to ensure that we can hold companies to account for what they promised to deliver in the past. By planning further investments in a long-term context, companies can identify and sequence what actions they need to take, and when. Their approach should consider affordability constraints and different future scenarios, as well as how best to use innovation to move forward. Society increasingly expects water companies to do this - our engagement with customers and other stakeholders to develop a joint vision for the sector identified a major theme of 'long-term stewardship'.¹²

The price review has a key role in supporting a long-term focus. We want to encourage companies to sequence their investments carefully, in line with wider strategic planning frameworks, to efficiently achieve long-term outcomes.

Delivering greater environmental and social value

Water companies have always had a clear environmental and socioeconomic footprint. They're one of a handful of key long-term stakeholders in their communities, providing services which are both essential and environmentally sensitive, and have a significant role

¹² Ofwat, '[Our vision](#)', October 2019.

to play in helping to address some of the main challenges society faces. There are increasing societal expectations that company decisions are driven by a broad range of environmental and social factors.¹³

At PR24, we want to see companies deliver even more environmental and social value by exploring different approaches to their core activities. We want to encourage companies to routinely consider the wider, long-term benefits to communities and the environment when putting forward solutions, using a systems-oriented approach. For example, nature-based solutions can not only deliver direct benefits like better water quality, but can also improve biodiversity, reduce flooding, reduce emissions, and help to eliminate harm from storm overflows.

Companies should consider what ways of working will deliver the most value: whether it be using markets, collaborating with local stakeholders or business retailers, or working with customers and communities to deliver better outcomes. We support companies working in partnership and coordinating with organisations, both inside and outside the sector, to deliver common goals. Of course, companies shouldn't use customer money to pay for work beyond their own functions, but by working in partnership with third parties picking up a fair share of costs, there is the potential to deliver better outcomes overall.

The price review will be an important tool to enable the delivery of greater environmental and social value. PR24 will need to ensure companies have the freedom to choose options which deliver multiple benefits. It needs to avoid creating perverse incentives, which could encourage sub-optimal solutions. But we also recognise that delivering wider value requires more than a well-designed price review: it will require the sector and regulators playing their part to ensure decision-making processes are geared towards maximising benefits. A good example of this is the ongoing project to reform the Water Industry National Environment Programme (WINEP), with the sector coming together to facilitate solutions with multiple environmental and social outcomes.

Reflecting a clearer understanding of customers and communities

Over the last two price reviews, the sector has increasingly recognised the need to reflect customer preferences in their business plans. Companies have increasingly taken ownership of their engagement with their customers. A clear understanding of what their customers care about can position companies better to deliver services that meet those needs. We've observed a culture change at price reviews, with many companies reporting that they're now better able to view issues through a 'customer lens.'¹⁴

We want companies to continue on the path of improving how they connect, understand and respond to their customers' diverse needs. A key part of this is how companies listen and talk

¹³ Purpose Union and Impact Institute, '[Public Value in the Water Sector](#)', June 2020.

¹⁴ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020, pp. 47-53.

to their customers on a day-to-day basis, rather than simply for the purposes of a price review.

Day-to-day engagement should include efforts to change customers' behaviour, such as reducing water consumption, and not blocking sewers by putting the wrong things down the sink or toilet. It's increasingly important that customers see themselves not just as recipients of services, but as having a key role in the water and wastewater cycle. At the same time, regularly engaging with customers is also fundamental to delivering consistently great service. It's vital that companies understand the changing needs and expectations of their customers, and appreciate the full range of circumstances and experiences across their customer base, including both household and non-household customers. Only then can companies get the basics of service right for all their customers.

The effects of the Covid-19 pandemic on health, finances and jobs means it's becoming more important for companies to support their customers. Evidence suggests that more progress is needed. For instance, despite the impacts of the Covid-19 pandemic on jobs and incomes, we found just 15% of customers were aware of water companies providing financial support.¹⁵ CCW research shows that customer engagement on day-to-day issues has been falling consistently over the past six years in England, while the trend is broadly flat in Wales.¹⁶

We're doing work on these areas outside the price review, for example through our Listen Care Share campaign, which explores how water companies can best support customers struggling to pay, respond to their information needs, and go the extra mile for vulnerable customers and those experiencing mental health issues.¹⁷

But there's also more work to do to better inform the price review by capturing what customers and communities want from their water companies. At PR19, companies conducted more research than ever before, but there were issues with the accuracy and use of that information. We consider that the customer research process can be made more targeted and efficient.

Driving improvements through efficiency and innovation

Improving efficiency allows companies to deliver more for customers, communities and the environment, ensuring customers pay no more than they need to for these improvements. And the evidence suggests there's scope for significant improvement. Since 2011, productivity growth in the water sector has appeared weak, compared to relatively strong

¹⁵ Online nationally representative survey of 2,100 bill payers in England and Wales. Conducted for Ofwat by panelbase (fieldwork 26 March-1 April 2021).

¹⁶ CCW, '[Water Matters Highlights Report](#)', August 2020, p. 9.

¹⁷ Ofwat, '[Listen Care Share](#)', May 2021.

productivity growth in comparator sectors.¹⁸ From 1994 to 2010, the water sector achieved average productivity growth of 3%.

At PR19, some companies really stepped up to reduce costs and improve services, and given the likely cost pressures facing the sector at PR24, it'll be important to build on that progress. We'd like to see water companies reach higher levels of productivity growth, more akin to those seen in competitive industries.

Our price review will expect companies to step up to this challenge. Companies will have to deliver outcomes efficiently to earn their regulatory return, with companies bearing the burden of inefficiency and underperformance. But it will also reward those that really stretch themselves to improve service or find ways to reduce costs. This will require companies to work in new and innovative ways to deliver better outcomes and best value for money, including through partnership working, use of nature-based solutions and markets, and working with customers to change behaviours. As the sector has recognised, there are significant opportunities to embrace transformational innovation and to adopt game-changing solutions more quickly across the industry.¹⁹

Harnessing data to its full potential could also significantly improve levels of productivity. We'd like to see companies maximising their use of data and digitalisation to keep pace with the digital transformation of the wider economy. Companies should continue to explore the benefits of an open data approach to stimulate innovation and collaboration. We'd also expect companies to resolve the known deficiencies in their data, such as their data on their business customers, and to make more extensive use of existing data on customer preferences than was the case at PR19. A clear long-term focus is crucial to making these transformations, as developing and adopting innovations now can reap rewards down the line.

The price review can do a number of things to support this. Alongside our drive to increase company focus on the long term, we can allow companies the flexibility to choose the best ways of delivering outcomes, reward innovation and focus attention on areas where improvement is needed most pressingly.

2.3 How we'll get there

To deliver against these themes, we need to balance carefully a range of considerations in designing the price review.

¹⁸ Frontier Economics, '[Productivity Improvement in the Water and Sewerage Industry in England since Privatisation – Final Report for Water UK](#)', September 2017, p. 3, Figure 2.

¹⁹ We're pleased that the industry has collectively recognised the need to drive transformational change through innovation over the next 30 years, including through collaboration within and outside the sector. See '[UK 2050 Water Innovation Strategy](#)', September 2020.

Providing more clarity about how we'll conduct price reviews in the long term, while retaining the ability to adapt

We consider that a focus on long-term outcomes should drive what water companies do. To develop high-quality long-term strategies, companies need a level of clarity on how our regulatory framework will support that. We also need to be able to hold companies accountable for delivering long-term outcomes from long-term investment.

We recognised the need for regulatory clarity in our strategy, which signalled our continued commitment to using an outcomes-based approach and providing an allowed return on the RCV. But we're considering how to do more to facilitate a coherent, long-term direction for the sector. We'll explore ways to make our outcomes regime clearer and to integrate company plans more substantively into a long-term framework. And we'll consider how we can connect price reviews more explicitly, such as by providing more certainty around the performance incentives we will apply at future price reviews, or increasing our ability to look back at previous price reviews and hold companies to account for their past commitments.

At the same time, we'll retain a level of adaptability in our regulation. We see price reviews as staging posts within a long-term context. This framework gives us the opportunity to review long-term strategies every five years, ensuring they remain appropriate given the latest evidence. Our continued use of outcome delivery incentives also gives companies the freedom and security to adapt their focus where it would lead to better outcomes for customers.

Streamlining the price review without losing the benefits of sophistication

In recent years, the complexity of the price review has increased in some areas – as noted by several stakeholders in our [PR19 lessons learnt](#). This has often helped to deliver better outcomes, including by improving the accuracy and robustness of price controls. At the same time, we've also taken steps to reduce complexity, such as our removal of menu regulation at PR19 in favour of a simpler approach to setting cost-sharing rates.

Streamlining the price review has the potential to sharpen incentives, improve accessibility, allow us to target our regulation where it matters most, and create a more manageable burden on companies, stakeholders and ourselves. This potential has been recognised by a number of reviews of our regulatory framework in recent years.²⁰ It may also be better to conduct some aspects of regulation outside the constrained timetable of the price review.

²⁰ For example, in 2018, the Environment, Food and Rural Affairs Committee highlighted that the economic regulation of water has become 'very complex'. The following year, the National Infrastructure Commission stated that increasing regulatory complexity 'makes it hard for anyone other than regulatory professionals to engage with the process.' See Environment, Food and Rural Affairs Committee, '[Regulation of the water industry](#)', September 2018, p. 33, and National Infrastructure Commission, '[Strategic investment and public confidence](#)', October 2019, p. 40.

And innovations in data capabilities offer the opportunity to reduce regulatory burden, while maximising insights and making our regulation more intricate at the same time.

Simplification isn't an end in itself, and the benefits of simplification must always be considered against any negative consequences. At PR24, we'll evaluate where streamlined processes and approaches can deliver better results for customers, communities and the environment. This includes considering where data can open up new ways to improve the price review, and automating processes where possible.

Reflecting local and national diversity in the price review, while maximising the benefits of comparability across companies

Customers and communities across England and Wales may have different views on what their local water company should do. This can reflect different regional challenges, or variances in demography, outlook and socioeconomic status. At PR24, we'll consider where we can better reflect these differences by adapting our framework. We'll aim to design the price review to account for the needs and preferences of customers and communities, while maximising the benefits of comparability across companies.

Differences in the legal and regulatory framework for England and Wales affect the way we regulate. We also have to act in accordance with the different strategic priorities and objectives of the Welsh and UK governments which they set for us in their strategic policy statements. We're embracing the ways of working set out in the Wellbeing of Future Generations Act in Wales and will continue to ensure that our approach is consistent with the legal, policy and regulatory context which applies to each nation. Our ongoing work to develop a vision for the sector in Wales jointly with our stakeholders has highlighted different customer priorities in Wales and a strong policy focus on tackling climate change. We'll explore where our regulatory approach may need to be tailored to reflect this context.

2.4 Evaluating progress

To understand how far PR24 delivers for customers, communities and the environment, we need to be able to evaluate the progress we make. This helps us learn from our experience and to continuously improve our approach to regulation. For evaluation to be effective, it's necessary to take a long-term perspective and consider now what data and information we'll need to gauge progress.

In some areas, measuring our impact can be difficult. This can be because it is difficult to isolate the impact of our interventions, or to identify sensible, well-developed or standardised metrics. Ahead of PR24, we'll continue to consider how best we can evaluate our impact, including whether there is scope for further work with companies and stakeholders to develop better ways of measuring progress.

2.5 Questions for stakeholders

Q2.1: Do you agree that the themes we have suggested for PR24 are appropriate for England and for Wales?

Q2.2: Do you have comments on the considerations we've identified as relevant to the design of PR24?

Q2.3: How should we evaluate our progress, and how can we best develop or use appropriate metrics to do so?

3. How we regulate

This chapter explains how the monopoly structure of the water and wastewater sector in England and Wales can lead to poor outcomes for customers, communities and the environment. It explains how our regulation addresses these issues, and also facilitates vital social and environmental needs. It sets out, at a high level, the improvements that we are considering in order to:

- **Strengthen incentives for companies to deliver good long-term outcomes** for customers, communities and the environment;
- **Ensure that customers do not pay for more costs than needed** to achieve these outcomes;
- Continue to **align the interests of companies and investors** with those of their customers; and,
- **Improve the effectiveness of markets**, where appropriate.

Further details on these issues are provided throughout the rest of this document.

3.1 Why we regulate

Our price review aims to create value. It does this by setting a framework in which the water sector delivers the outcomes which matter to customers, communities and the environment, while also ensuring that customers do not pay more than they need to for this.

Many sectors rely on competition between firms to protect the interests of customers. When firms compete with one another, they are incentivised to deliver goods and services at the best possible price and quality combination, taking account of customers' preferences. But **the water sector does not lend itself to full competition.** This is because there are large fixed and sunk costs associated with providing water and wastewater services. This makes it inefficient to have multiple operators in the same area, and so there is only one company providing water or wastewater services in any given region. However, monopolies bring inefficiency of their own. Left unchecked, investors and management face weak incentives to keep bills low, improve service and innovate.

The water sector is also part of the environment and delivers a vital service to communities. Regulation is therefore necessary to ensure that the industry protects the environment, tackles climate change, plans for the needs of future generations and provides support to those most vulnerable. **Without regulation, vital environmental and social needs would not be adequately met.**

3.2 Price controls

In the water sector, we have used **price controls** to ensure that regional monopoly companies deliver good outcomes for customers and the environment.²¹ These are set for five year periods and are updated through **price reviews** to take account of further information, changing objectives and new approaches to regulation.

The price control has three key interacting ‘building blocks’ which underpin it. Our **outcomes regime** incentivises companies to deliver service improvements that deliver benefits for customers and the environment. Our **cost assessment** process helps unlock new opportunities for investments which lead to better services, improved resilience and greener outcomes, while also ensuring customers do not pay for more costs than they need to. And our **risk and return** framework helps align the interests of companies and investors with those of customers, by ensuring the sector is attractive to investors but only allowing high returns from great performance.

At PR24, **we plan to keep using price controls where the scope for competition is limited**.²² In this section, we summarise our approach to ensuring companies deliver good outcomes for customers and the environment, our approach to assessing appropriate costs, and how we set allowed returns for companies.

3.2.1 Our approach to delivering the right outcomes

For the sector to succeed, **it is vital that companies deliver the right outcomes** for their customers, communities and the environment. We do this through our **outcomes framework**. This specifies how we will measure progress towards outcomes, with metrics which we call performance commitments (‘PCs’). It then establishes the service levels we expect companies to deliver in these areas, which we call performance commitment levels (‘PCLs’). Finally, it also makes use of outcome delivery incentives (or ‘ODIs’) to incentivise companies to meet these service levels, and to exceed them where this is expected to deliver greater value. We set these PCs, PCLs and ODIs to align with what customers want and need, taking evidence of customers’ preferences into account.

The outcomes framework is a powerful and effective way of incentivising companies to deliver for customers and the environment. Our [lessons learnt from PR19](#) noted how the framework pushed companies to go further than ever before to deliver what their customers wanted.²³ Our forthcoming PR14 review also discusses how it transformed company performance. We therefore intend to retain the regime and commit to it in the long term, giving companies confidence to plan for the future. But we are interested in ideas on

²¹ In practice, we generally set revenue allowances and service packages for individual companies, which will then set charges to keep within these limits in accordance with our [charging rules](#).

²² For more details on which aspects of companies’ operations we are proposing remain subject to price controls at PR24, see Chapter 8.

²³ Ofwat, [‘PR24 and beyond: Our reflections on lessons learnt from PR19’](#), December 2020, p. 54.

how we can further improve the regime to help improve its efficacy, streamline the price review and help us meet our broader ambitions for the sector.

We are therefore considering **reducing the number of performance commitments**, and focusing them on areas of enduring importance to customers and the environment. This should focus companies' attention on the aspects of their services and operations which matter most to customers and the environment in the short and long term. We consider PCs should mostly be common across companies, with fewer bespoke commitments.

We are also considering publishing our **initial views on PCLs that correspond to the base costs** we allow ahead of business plan submission. Companies can then consider whether there is evidence that moving away from these service levels would be in their customers' interests.

And we will look at how to **simplify our approach to setting incentive rates**. As we later outline in Chapter 6, we are proposing to use the findings from collaborative customer research to inform our initial views on ODI rates. This will help identify similarities and differences in customer preferences across the country in a more efficient way. We are also considering how to simplify our approach to setting incentive rates in other ways.

Further, as we discuss in Chapter 4, we are also considering how our outcomes regime can provide **stronger incentives to deliver long-term benefits**. We are assessing a number of options to achieve this – for example, we may provide companies some indication of what ODI rates might be in future price review periods. We want to ensure that companies deliver excellent services for future customers, and address the long-term environmental challenges facing the sector.

We outline the changes we are considering making to our outcomes regime in more detail in Chapter 9.

3.2.2 Our approach to assessing costs

We assess companies' costs to ensure customers get a fair deal and only pay what they ought to for excellent services. We are able to benchmark companies against each other, which gives us a powerful way of estimating efficient costs. Our [PR19 lessons learnt](#) clearly identified the value of this approach – we estimate that at the last price review, robust comparative benchmarking helped save customers £6 billion across England and Wales.²⁴

At PR24, we are proposing to continue using **cost benchmarking to deliver value for customers**. Our ability to benchmark has improved over successive price reviews: our base cost models were more robust at PR19 than they were in PR14, and we have more information on what service levels are achievable from those costs. We also expect our evidence base to

²⁴ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020, p. 63.

improve in future years, as we will have access to more data on companies' outturn performance and costs for delivery of their current plans.

We will use this information to further **improve our benchmarking and extend its use**. This includes exploring ways to better understand **the link between costs and service levels**.²⁵ We are also considering making greater use of historical data to **benchmark enhancement costs**, and will consider using relevant external benchmarks where appropriate. **We will also continue to couple benchmarking with other approaches** such as 'bottom-up' assessments, where appropriate – for instance for some types of enhancement costs.

Our **totex approach**, which sets a single allowance for capital and operational expenditure, gives companies flexibility to use the most efficient means of delivering for customers. As we will set out in our forthcoming PR14 review, this approach has brought benefits to customers. But we are concerned that **the existing framework could still encourage companies to focus too heavily on capital intensive solutions**. We are therefore considering changes which seek to address this, and encourage companies to come forward with alternatives such as **nature-based solutions**.

We are also considering options for **strengthening our approach to operational resilience**. The sector's ongoing work on asset health, including its role in co-developing the asset management maturity assessment, is helping to establish appropriate baselines. But we need to go further.

At PR24, **companies must improve their understanding of resilience risks** so that steps can be taken to safeguard future services. As we note in our [PR19 lessons learnt](#), there may be some benefit to developing common frameworks and data for assessing risks to operational resilience, so that customers in different regions receive equivalent protections against service failure.²⁶ Further, **customers should not pay twice for resilient services** – that is, they should not pay once through base allowances, and again through requests for enhancement funding. So companies will need to demonstrate that their resilience enhancement proposals are properly justified.

We put forward our suggestions on cost assessment at PR24 in further detail in Chapter 10.

²⁵ We acknowledged the issue of connecting service levels to costs in our PR19 lessons learnt exercise: Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020, p. 73.

²⁶ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020, p. 30.

3.2.3 Our approach to assessing allowed returns

At PR24 **we will continue to align the interests of companies and their investors with those of customers**, so that the sector is attractive to investors but companies can only earn high returns from great performance.

We are reviewing our risk allocation framework, to see if we can improve the alignment of customers' and companies' interests. We will seek to optimise our framework of risk allocation mechanisms, reducing complexity where appropriate.

We are also considering whether to update our approach to calculating appropriate returns. This includes, in particular, **whether to index the allowed return on equity** to protect customers and shareholders from forecasting risk, as well as reviewing **the role of balance sheet and index data in setting the allowed return on debt**.

We will also explore our approach to financeability and financial resilience, taking account of how we define the notional capital structure. And we will consider ways of incentivising financial resilience, to protect customers from the adverse outcomes of risky financial structures.

We will consider a further transition towards full CPIH indexation, to further reduce reliance on the discredited RPI measure.

We consider our approach to risk and return at PR24 in further detail in Chapter 11.

3.3 Use of markets

As noted earlier, the cost structure of the sector limits the opportunities for using markets to deliver outcomes for customers. However, **some parts of the water sector lend themselves to competition**. There are different reasons for this. Sometimes, the fixed and sunk costs in certain parts of the value chain are more limited, which makes it possible for more than one company to serve customers in a given region – competition 'in' the market. In other areas, it may be possible for companies to bid to provide certain services – competition 'for' the market. In these circumstances, markets may help to provide effective outcomes for customers. And our price review may facilitate them.

We have opened several markets to date. In April 2017, following the Water Act 2014, we opened the English business retail market to competition – the largest competitive water retail market in the world. We have also looked at ways to develop other markets across the sector, notably for water resources, bioresources and developer services. And we have promoted competitive tendering for major infrastructure development, via Direct Procurement for Customers. The extent of this competition differs in England and Wales,

reflecting the different positions of the UK and Welsh governments regarding the role of competition within the sector.²⁷

We continue to monitor key markets and adapt how we regulate as appropriate. We have found that the markets we have established are delivering benefits for customers, but they have not always reached their full potential. For example, our [review of incumbent company support for effective markets](#) found there is room for companies to play a more active role in supporting the business retail, developer services and bioresources markets. Our most recent '[State of the market](#)' report found that the benefits from opening the business retail water market in England have tended to accrue mainly to high consumption customers, with smaller customers less active in the market. And our [bioresources market monitoring report](#) shows that, while there is a reasonable degree of competition in the markets for sludge transport and sludge disposal, there is little trading of sludge for treatment.

Building on this learning, the key actions we are considering taking at PR24 are as follows:

- **Water resources:** We are exploring options for encouraging greater water trading at PR24, although we are not pursuing the full development of bilateral water resource markets in England. Our approach will take into account any findings from RAPID's forthcoming review of trading and contractual arrangements. We are also considering amending the boundary for the water resource controls,²⁸ which could allow us to set better targeted incentives and better reflect the interactions between different elements of expenditure such as between water resources and treatment. And we will assess whether additional measures are required to promote development of water resources.
- **Bioresources:** Our [draft findings from our 'Review of the Bioresources Market'](#) confirm that there are considerable benefits to customers and the environment from the bioresources market, but that further action is needed to realise its potential. The key changes we are proposing at PR24 to help achieve this are to improve cost allocation between controls, introduce measures to support a bidding market and consider changing the basis of our cost challenge so that it is based on average revenue requirement rather than expenditure.
- **Developer services:** There is evidence that the level of competition in developer services is increasing, and there may be scope to further enhance competition. We have recently published a [consultation on developer services charges in England](#). Our consultants CEPA have recommended that we could either evolve our current regulatory approach, where all developer services continue to be price control

²⁷ For example: business retail competition in England covers all business, charity and public sector customers of English water companies. In Wales the Welsh Government decided not extend retail competition beyond supplies of water to business, charity and public sector customers of Welsh water companies that use more than 50 million litres of water a year (there is no retail competition for wastewater services).

²⁸ See Ofwat, '[PR24 and Beyond: Creating tomorrow, together. Appendix - Examining the boundary of the targeted control for water resources](#)', May 2021.

regulated, or introduce a more fundamental change more reliant on ‘backstop’ regulation of contestable developer services.²⁹ We are proposing to collect more data to help us to identify the best way forward.

- **Major projects:** Finally, to ensure that the considerable investment needed to meet our long term aspirations for the sector can be delivered, at PR24 we will take steps to further incentivise the use of Direct Procurement for Customers. Delivering schemes in this way will lower costs, drive innovation, and enable companies to fund other additional schemes which deliver benefits to customers.

Through our monitoring and reviews, we are constantly learning lessons from past experience and prioritising our efforts accordingly. We recognise that **markets take time to develop**, and that each step the sector takes to increase the scope for contestability may reveal new challenges which need to be addressed. **Our approach will be tailored to the specific characteristics of each potential market**, and we will focus our efforts where there is the greatest scope to deliver benefits for customers. And as we move forward, we will continue to take account of the different positions of the UK and Welsh governments regarding the role of competition within the sector.

We provide more detail on our suggested approach to markets at PR24 in Chapter 8.

3.3.1 Markets and system operation

Water and wastewater companies operate in complex systems. They interact with each other, different bodies across the sector as well as organisations outside the sector. They also interact with the natural environment in many ways. This creates challenges when considering how companies should deliver outcomes for customers and environment. For example, a plausible alternative to using an end of pipe solution to address river pollution may be to enter into contractual arrangements with local farmers. The price review should consider the full range of solutions to identify the best approach for customers, but this can sometimes be hard to do through an analysis of business plans.

This complexity has been acknowledged by stakeholders in submissions to the [Future Ideas Lab](#). For example, United Utilities notes that catchments operate as full ecosystems, with numerous interactions between the different elements of the system. It therefore argues that using catchment systems thinking can help the sector develop more effective interventions, leading to better overall results and greater value in the long run.³⁰ Similarly, Afonydd Cymru argues that companies need to operate in a way that is aligned to the needs of the

²⁹ CEPA, ‘[Approach to the regulation of developer services at PR24](#),’ May 2021.

³⁰ United, Utilities, ‘[Evolving the Water Industry National Environment Programme to deliver greater value](#)’, January 2021, p. 9.

ecosystems in which they are based, and that this will require a move away from traditional delivery mechanisms.³¹

Some stakeholders have suggested that markets might help overcome this issue, if facilitated by a **systems operator**. There are different types of systems operators – some own and operate infrastructure assets, and some don't. For example, National Grid Electricity Transmission ('NGET') owns and operates the high-voltage electricity transmission network in England and Wales, connecting sources of generation to the electricity network and transporting it onwards to the distribution system, while the National Grid Electricity System Operator ('NGESO') is responsible for balancing supply and demand across the electricity system in Great Britain.

One example of a system operator model which is relevant to the water sector is the 'catchment system operator' model.³² Under this approach, new public bodies or 'catchment system operators' could be set up for each of the major water catchments in England and Wales. Each catchment system operator would be responsible for co-ordinating a number of areas including water and sewage services, as well as flooding and pollution from land into water systems. They would mainly discharge their duties through a system of competitive procurements. A national system operator might also be established alongside these catchment system operators, to co-ordinate and align local interests to national priorities.

The UK government has outlined a long term ambition to move towards a system operator approach for managing natural capital. Any decision to implement such an approach sits outside of Ofwat.³³ **At present, there is focus on co-ordination across the sector through a variety of other means**, such as through regional water resource groups, planning frameworks such as DWMPs and WRMPs, and a range of work undertaken by the Environment Agency regarding integrated water management. We have jointly established RAPID, bringing together Ofwat, the Environment Agency and the Drinking Water Inspectorate to co-ordinate regulatory responses to support the development of strategic water supplies. And we are also aiming to promote greater co-ordination through other activities: for example, one of the objectives of the WINEP taskforce is to promote greater collaboration across the sector, by providing greater flexibility to parties on how they co-design, co-deliver and co-fund solutions to environmental challenges.

We remain supportive of efforts for greater co-ordination, where this can deliver benefits for customers, communities and the environment. We have commissioned external advisors to examine **the case for greater co-ordination in the development of water resources infrastructure**. This work is considering the case for co-ordinated action over the lifecycle of infrastructure projects, from planning through to operation. It will also consider how the legal and regulatory framework might develop over time, and how any new framework might be implemented in an adaptive way. We expect to share emerging findings

³¹ Afonydd Cymru, '[Afonydd Cymrus submission Future Ideas Lab](#)', April 2021, p. 1.

³² This approach has been advanced by Dieter Helm: Helm, '[The Systems Regulation Model](#)', February 2019, p. 29.

³³ Defra, '[A Green Future: Our 25 Year Plan to Improve the Environment](#)', January 2018, p. 140.

from this study, and to publish the final report alongside our policy proposals and next steps in the autumn.

We discuss our proposed approach to using the price review to support markets at PR24 in further detail in Chapter 8.

3.4 Next steps

As outlined above, at PR24 we intend to continue relying on both price controls and markets to deliver for customers, communities and the environment. However, we are also considering a set of changes to make our regulation more effective. We seek views from stakeholders on the questions outlined below to help refine our approach.

3.5 Questions for stakeholders

Q3.1: How can we best regulate the water sector to deliver value for customers, communities and the environment? Do you agree, or have comments on, our proposal to maintain our 'building block' approach based on outcomes, costs and risk and return?

Q3.2: To what extent is greater co-ordination required across the sector? In what ways might we promote better co-ordination across companies and with other sectors, and how might this benefit customers?

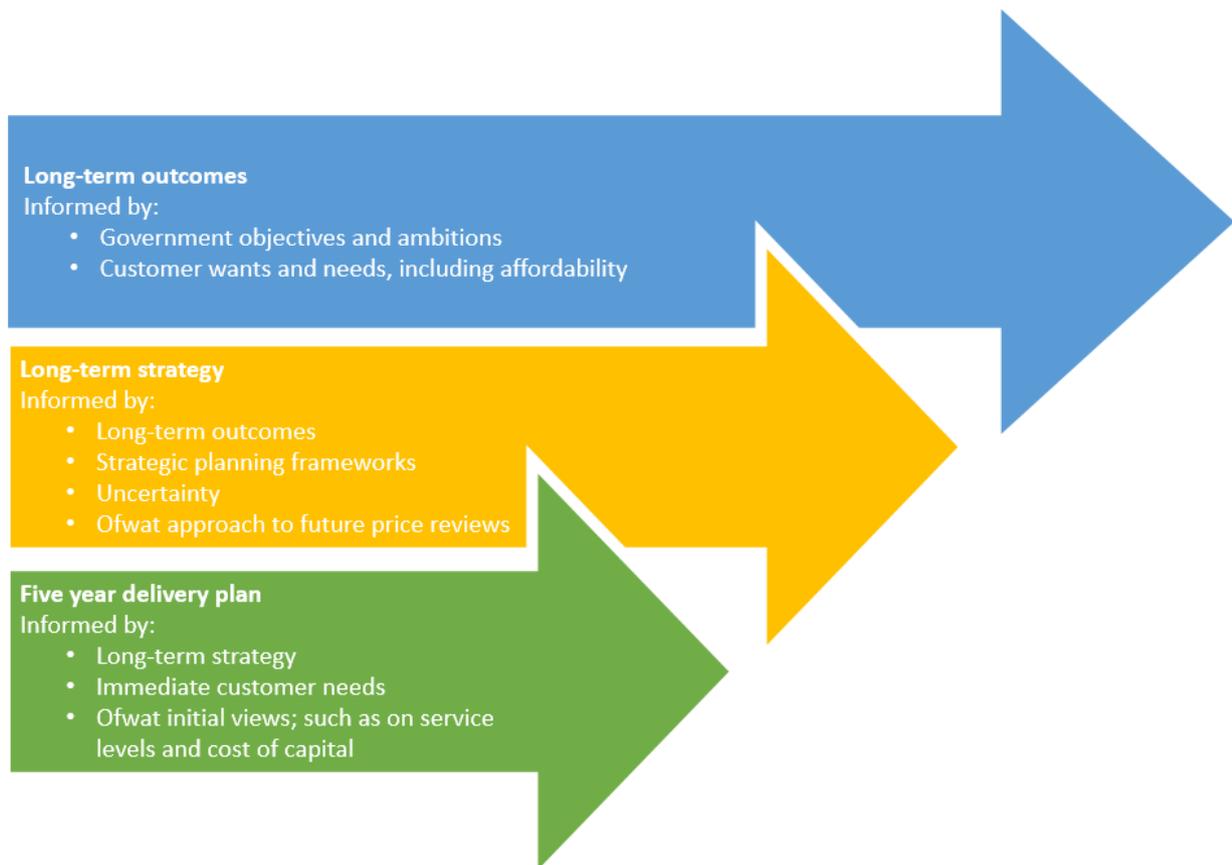
4. Increasing focus on the long term

This chapter explores how we can increase companies' focus on the long term. Given the urgency of the long-term challenges we face, this is one of the key themes we are proposing for the price review. We want the price review to support the right long-term solutions for customers. We also need to ensure customers get the benefits of the long-term investments they have already paid for.

We are considering whether there would be benefits in the following ideas.

- Companies more clearly **positioning their five year business plans in the context of long-term strategies**. In Wales, we are exploring whether these strategies could be developed collaboratively with Welsh stakeholders.
- **Setting out information on base costs, initial views of the service levels that base costs could provide, appropriate incentive rates and financing costs before business plans are submitted**. This could help streamline the price review process, allowing companies to focus their business plans on the long-term enhancements needed over and above this.
- Providing **additional clarity on our expectations for future price reviews**, to allow companies to deliver more robust long-term strategies and allow us to be clearer about whether companies have met our expectations in future reviews. This could include approaches to the delivery of environmental benefits delivered as part of companies' core functions.

These suggestions are illustrated in Figure 4.1.

Figure 4.1 Suggested approach to focusing business plans on the long term

4.1 In it for the long term – the need to keep on course

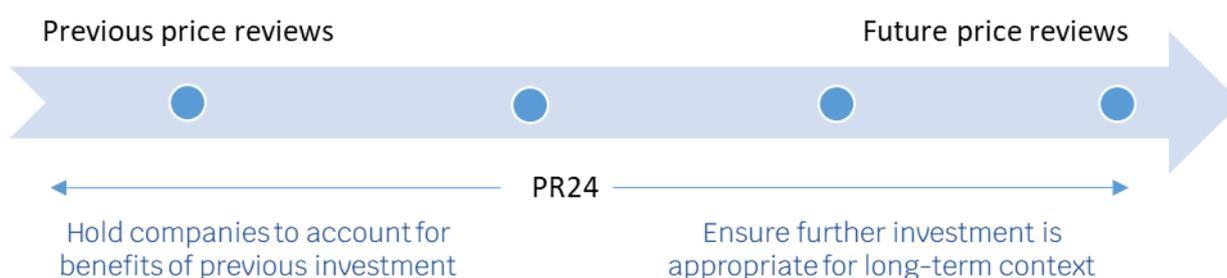
In the 2020–25 period, companies will invest £13 billion to improve their service. Such enhancements are likely to be even more vital in PR24 to meet the long term challenges ahead, and also more complex to get right.

Net zero, in particular, may require a fundamental change in how the sector operates. The UK and Welsh governments are committed to a legally binding target of net zero emissions by 2050, with tightening carbon budgets supporting the pathway towards it. All areas of company operations impact on net zero, and therefore the transition towards it will interact with all other long-term goals and ambitions. Solutions will – for example – need to involve significant innovation including within the supply chain, behavioural changes by customers, and the far greater adoption of nature based solutions.

It is vital that the sector focuses on the long term challenges ahead in order to plan effectively.³⁴ Companies should identify the steps they need to take, and the options they need to explore, in the next five year period and beyond. A wide range of stakeholders' submissions to the Future Ideas Lab discuss the need to deliver to longer-term horizons.³⁵ These echo views that we summarised in our [lessons learnt from PR19](#), which committed us to considering how we can embed longer-term approaches into price reviews. This is also picked up in Water UK's proposed vision for 2050.³⁶

We need to work together to ensure that the right action is taken at the right time to improve the environment while delivering services for the long term that people can afford. And we want to guard against the risk that companies adopt a short-term mindset, for example by underinvesting in maintenance, putting customers at risk now and storing up problems for the future. **Five year price reviews should be staging posts within a long-term context** – as in Figure 4.2.

Figure 4.2 Five year price reviews in a long-term context



There are **already a number of legal and regulatory mechanisms** to help focus water companies' plans on the long term. These include the strategic planning frameworks, set out in Chapter 7, the UK Government's 25 year Environment Plan, and the Welsh Government's national indicators and milestones for the well-being of future generations.

Features of our regulatory model, including the regulatory capital value (RCV), provide confidence for investors to invest for the long term. Companies have spent more than £300 billion since privatisation and will invest £51 billion to maintain and further enhance assets and services they provide over the 2020-25 period.

³⁴ Water companies have already started to do this, for example by considering potential approaches for their operational emissions as part of the Public Interest Commitment 2030 net zero work.

³⁵ Ofwat, ['Time to act together: Ofwat's strategy'](#), November 2019.

³⁶ Water UK, ['Developing a 2050 Vision for the Water Sector: A Discussion Paper'](#) March 2021.

But there are concerns that customers do not always receive the on-going benefits from this investment. And we need to make sure further enhancements to service are appropriate in the long-term context and best serve the needs of current and future customers.

Some stakeholders have suggested we could help increase the long-term focus by lengthening of our periodic review periods. **Our recent strategy confirmed we will retain a five yearly frequency of periodic reviews.**³⁷ Increasing the length of price review periods risks reducing the ability to adapt or update the way forward. This can be overcome by introducing more mechanisms to deal with uncertainty, but this increases the complexity of the process³⁸

We have taken other steps to increase focus on the long term. For example, at PR19 we were disappointed with the evidence supporting decisions on large water resource infrastructure: it was generally unclear why the companies selected the solutions that they did and why these solutions deferred action so far into the future.³⁹ To help overcome these problems we, with other regulators, **established RAPID** and allowed an additional £469 million to help companies work together on developing large water resource options sooner in order to solve long-term drought resilience challenges. In Chapter 8 we set out how we expect to build on this work, and improve the delivery of major projects.

Since PR19, we have co-created an **asset management maturity assessment** with companies to help understand the ways companies manage their assets. We will build on this to strengthen the industry's approach to achieving operational resilience now and in the long term.

But we want to do more. We need to be sure companies are taking clear evidence based decisions on the investment needs for the next five years with the long term context in mind. Below we consider how we can do this. We also consider whether we can help make the long term strategies more robust by providing greater clarity on what will happen in price review periods beyond PR24.

4.2 Focusing business plans on the long term

We are considering whether we could do more to focus business plans on the long term. In PR19, we challenged companies to stretch themselves on what they could achieve for customers within the price review period. The discussion focused on a range of important parameters within that period. Although we asked companies to forecast service levels for 10

³⁷ Ofwat, ['Time to act together: Ofwat's strategy'](#), November 2019

³⁸ For example, at RII0-1, Ofgem set price controls for an eight-year period with a mid-period review after four years to recalibrate specific elements. During this period, the transformation of the energy sector was significantly greater than predicted at the start of the price control, resulting in higher company returns than expected and higher customer bills than were necessary. In setting RII0-2, Ofgem, in agreement with industry, returned to five-year price controls.

³⁹ Ofwat, ['PR24 and beyond: Our reflections on lessons learnt from PR19'](#), December 2020, p. 28.

years beyond the end of the price review period, there was significant inconsistency between company forecasts, and less focus was given to these estimates.

4.2.1 Reducing the focus on the short term

We want to streamline and refine the price review process so that there can be more focus on the long term. Being able to give early guidance in advance of business plan submissions can help with this. This worked well on the cost of capital for 2020-25 – our [lessons learnt from PR19](#) suggested companies found our ‘early view’ helped them develop their business plans.⁴⁰ We are considering whether we could **provide more information** on other aspects of companies’ plans **in advance of business plan submissions**. This may be more feasible in PR24, and future price reviews, as we are increasingly able to draw significant amounts of data from our annual performance reports and potentially from customer research to inform our expectations of some areas of our determinations ahead of receiving water companies’ business plans.

We are considering the following areas.

- **The allowed return on capital, where we could provide an early view as at PR19.**
- **Base costs.** In both PR14 and PR19 we placed considerable weight on our own models in final determinations. We used business plan information predominately as a cross check (except for retail costs, where we used company forecasts more directly). In PR24 we intend to build on our PR19 cost modelling approach and extend our use of benchmarking. We will consider whether it is possible to provide companies with an early indication of potential cost models as well as greater clarity over potential cost adjustments.
- **Performance commitment levels (PCLs) for common performance commitments.** We could be clearer about our expectations for the common performance commitment levels that could be achieved given base costs in advance of the price review. We are considering how to model this using historical information, ahead of business plan submission. We provide further details in Chapter 10.
- **Outcome delivery incentives (ODIs) for common performance commitments,** where we could use our collaborative customer research in advance of the price control process – as we propose in Chapter 6 – to set out information on appropriate incentive rates.

⁴⁰ Ofwat, [‘PR24 and beyond: Our reflections on lessons learnt from PR19’](#), December 2020, p. 75.

4.2.2 Increasing the focus on the long term

Early guidance as discussed above could allow companies to focus their attention more on how they intend to meet long-term challenges.

We suggest that companies' **place their delivery plans for the price review period clearly in the context of long term strategies**. We see the long term strategies being developed as **part and parcel of the five year business plan submission**.⁴¹ To ensure we are able to understand, and refer back to, the long-term strategy, we may need to be more prescriptive regarding the information we require from companies. We welcome views on how best to do this.

We consider that the strategies should cover what long-term outcomes companies are aiming to deliver for customers, bringing together all the strategic planning frameworks, evidence of customer views and affordability constraints. They should take appropriate account for past allowances and show how they have considered the most effective way to prioritise and sequence additional investment, signalling what will be done in this five year period and what will be done in future. They should also show how they consider uncertainty, for example by using simple scenarios to test the strength of a strategy in different states of the world. And highlight where fresh thinking, new ways of working and further innovation needs to be focused in order to meet these challenges.

Companies' long-term outcomes need to take account of **government priorities and ambitions**. Both the Welsh Government and Defra are involved in setting the long-term vision for the water sector in their respective jurisdictions. Both governments set out their priorities and objectives for Ofwat in Strategic Policy Statements (which they are currently revising). In England, the UK Government is also expected to set long-term targets following the Environment Bill. And in Wales we are building a joint vision for the sector together with Welsh Government, Natural Resources Wales, and Drinking Water Inspectorate and other stakeholders.

Some Future Ideas Lab submissions also made further suggestions about how to involve local government and local stakeholders in the development of plans. Yorkshire Water suggested institutions like local authorities and metro mayors could have a bigger role in shaping companies' business plans, particularly within the context of expectations about more partnership working.⁴² Bristol Water suggested companies work with local stakeholders to build consensus around a range of plausible business plan scenarios.⁴³

⁴¹ This approach would be different to previous price reviews. In PR09, for example, we required companies to produce strategic direction statements, but these documents were separate from business plans. And we often struggled to see a clear line of sight from these to the company five-year plan.

⁴² Yorkshire Water, '[PR24 and beyond: 10 years of investment?](#)', March 2021.

⁴³ Bristol Water, '[Regulating for consensus and trust: Modernising economic regulation](#)', April 2021.

Several suggestions were also made about considering different approaches to developing long term strategies in Wales. We discuss these in more detail below.

4.2.3 A collaborative approach to the long term in Wales

Some stakeholders have commented that there may be scope for a more collaborative approach to developing business plans in Wales. One reason may be that the Well-being of Future Generations (Wales) Act 2015 requires certain public bodies to carry out sustainable development. This could present companies with opportunities to work collaboratively with these public bodies, enabling them to jointly develop certain aspects of their plans.

One proponent of an alternative approach is Sustainability First, who argue that given the different social, cultural and political structures in place, there may be a case for using negotiated settlements in Wales.⁴⁴ As we later outline in Chapter 6, we are not proposing to make use of negotiated settlements. We consider that the proposals outlined elsewhere in this document, including our plans for collaborative research, should provide a more effective means of reflecting customers' preferences in companies' price controls than negotiated settlements would.

Nevertheless, there may be scope at PR24 to implement **a collaborative approach to developing Welsh companies' plans**. This approach could involve bringing together Welsh companies and their stakeholders to identify high-level outcomes and long-term objectives for the future. It could build on the joint vision for the sector that we are building together with the Welsh Government, Natural Resources Wales, the Drinking Water Inspectorate and other stakeholders.

This collaborative approach would ensure that the **priorities of the Welsh government** and the **needs of Welsh customers** were closely reflected in plans, while also ensuring these plans remain subject to our rigorous scrutiny regarding cost efficiency and service level stretch. We seek views from stakeholders on the merits of such an approach, and how it might be implemented in practice.

⁴⁴ Sustainability First, '[Ofwat December 2020 consultations: PR19 lessons learnt report; PR24 launch document; and public value discussion document](#)', February 2021, p. 2.

4.3 Increasing clarity over the long-term regulatory framework

We are also considering whether providing more clarity about our regime into the future may help further increase focus on the long term, complementing the development of long-term strategies. Specifically:

- being clearer on how we will **hold companies to account for past investment** to ensure companies have an incentive to deliver the benefits expected from it; and
- providing greater clarity to companies on how **further investment which benefits customers** over the long term **will pay off**.

We discuss in turn how we could do this. We also discuss how we can increase the long-term benefits from investment in the environment as companies deliver their statutory duties.

4.3.1 Holding companies to account for past investment

Most water company investment is added to the RCV. This allows the costs of investment to be paid over time by all customers that benefit from it and provides assurance to the company that it will be able to recover this investment in future price review periods.

But we need to ensure that **customers get the benefits they pay for**, so we benchmark companies to set performance commitment levels which reflect past allowances. We describe in Chapter 10 how we also intend to be clearer in the future about the types of cost we expect to be funded from base funding, and what will be classified as enhancement expenditure – ensuring that customers do not pay twice through both base and enhancement.⁴⁵ We could also provide greater clarity upfront on the impact of enhancement expenditure granted in PR24 on performance commitment levels and costs in PR29 and future price review periods, as enhancement expenditure will often lead to improvements beyond a five year period. This could be part of specifying ‘price control deliverables’, as we explore in Chapter 9.

Chapter 10 also sets out how we want to set out better our expectations on companies maintaining and improving operational resilience. And in Chapter 9 we set out how we will work with the sector to consider how to improve the approach to asset health, both in the price control, and more broadly, through the asset management maturity assessment.

⁴⁵ Ofwat, [‘PR24 and beyond: Our reflections on lessons learnt from PR19’](#), December 2020, p. 66.

4.3.2 Providing greater clarity over future incentives for delivering benefits

The **outcomes regime** also provides incentives for companies to invest. Rather than granting allowances ahead of delivery, it provides payments when outcomes are achieved. This gives companies flexibility to decide on how to invest to improve services, depending on their views of costs, latest technology and how they can make best use of partnership opportunities.

We have been clear about our **long-term commitment to the outcomes regime**. But companies have said that lack of clarity over the details of the regime in future price review periods can inhibit investment.⁴⁶ Greater clarity can come at the expense of reduced flexibility – and so puts greater risk on customers and companies in exchange for incentivising innovation and additional investment. We have considered various approaches to **providing greater clarity** which provide differing degrees of flexibility.

- We could, for example, **fix parameters** such as ODIs over several price review periods. But there is a risk that these may be inappropriate if changes in customer preference or income levels impact on their willingness to pay for improvements. Setting ODIs may also be of less benefit for companies without an understanding of how we are going to set PCLs. And it is likely to be even more challenging to set appropriate PCLs over several time periods. For example, the progress made by the sector within the price review period may reveal that PCLs are inappropriately lax or stretching.⁴⁷
- We could, instead, specify **indicative levels** for the next review, and commit to explaining deviations from these levels if it was necessary due to new information. We would need to be confident that we could estimate appropriate rates for this to be of value.
- Finally, we could provide more detailed **guidance** on our intended approach to setting parameters in future price review periods.

We will also explore if there are other ways in which the incentive framework could reinforce the focus on the long-term, and strengthen incentives for resilience. For instance, rather than provide outperformance payments within a price review period, these could be paid over time, contingent on outcomes continuing to be delivered in future periods. So, outperformance payments for, say, reducing pollution incidents would be deferred to the next price review period and then only paid if the reductions were sustained. We could also stipulate that the company is at risk of underperformance payments if we find that

⁴⁶ For example, [Northumbrian Water, PR19 CMA redetermination – response to provisional findings](#), pp. 35-6, paragraph 158.

⁴⁷ For instance as set out in Cambridge Economics Policy Associates, [Review of the RIIO framework and RIIO-1 performance](#), March 2018, the incentives to reduce interruptions in supply in the eight year price control for electricity distribution network operators that started on 1 April 2015, were quickly found to be lax. While customers receive a better service, the returns are not proportionate to the performance improvement. So far, Ofgem have reported average payments across all operators of over £150m a year.

companies have not maintained their assets or met statutory requirements. These out and under performance payments could be specified as additions to the RCV rather than revenue.

4.3.3 Increasing long-term environmental benefits

Investment to provide long-term protection to the environment is central to each price review. In the 2020-25 period companies will invest more than £4.8 billion to deliver the National Environment Programme (NEP) for Wales and the Water Industry National Environment Programme (WINEP) for England.

In England, we are working with the Environment Agency, Defra and others to **reform the WINEP**. We want to move towards a more outcomes-focused WINEP that encourages water companies in England to pursue more and broader catchment management and nature based solutions to deliver multiple environmental and social outcomes. Companies in Wales operate within the framework of the Water Strategy for Wales, which sets out key principles of sustainable development which aim to enhance the economic, social and environmental wellbeing of people and communities across Wales.

Optimising solutions for the delivery of greater environmental benefits does not necessarily equate to greater cost to companies or customers. Delivering core services differently can entail innovative approaches that are equally or more efficient and it can involve bringing other funding streams to bear, especially where outcomes benefit others beyond companies and their customers.

We are considering **how our regulation needs to change to complement these approaches to focus on long-term outcomes**. We will consider a range of approaches, such as those proposed in United Utilities' submission to the Future Ideas Lab that includes an approach to pay for the delivery of environmental benefits.⁴⁸ We consider further how to increase the long-term environmental benefits that companies deliver by evolving the outcomes framework in Chapter 9 and developing our approach to cost assessment in Chapter 10.

4.4 Next steps

As outlined in this chapter, for PR24 we suggest that companies position their five year business plans clearly in the context of long-term strategies. We will work with stakeholders to consider how companies could demonstrate in business plans that their five year plans will put them in the best position to deliver for the long term. Part of this work will be to consider what common requirements would help us and other stakeholders to understand each

⁴⁸ United Utilities, '[Evolving the Water Industry National Environment Programme to deliver greater value](#)', January 2021.

company's approach. We invite expressions of interest to help develop a proposal. The process to achieve this may follow different routes in England and Wales.

We will also be engaging with Welsh stakeholders through the Wales Water Forum, to explore whether we can implement a collaborative approach to developing plans for PR24.

Finally, we are considering whether we could increase the focus on the long term by providing more clarity on our expectations of costs, service levels and incentives rates ahead of business plan submissions and/or providing additional certainty on our expectations for future price reviews. We expect to publish a paper on this later this year.

We outline some specific questions for respondents below.

4.5 Questions for stakeholders

Q4.1: What are your views on the need for greater focus in companies' regulatory business plans on how they will deliver for the long term?

Q4.2: What should long-term strategies seek to cover and what details should we expect companies to set out in business plans? Would common requirements help us and other stakeholders to understand each company's approach?

Q4.3: How could this build on the work completed in strategic planning frameworks?

Q4.4: How can we allow such strategies and plans to adapt to new information at future reviews while continuing to hold companies to account to deliver expected benefits into the future?

Q4.5: Would providing our views on comparable aspects of companies' plans in advance of business plan submission streamline the price review process?

Q4.6: Should we adopt a collaborative approach to developing Welsh companies' plans at PR24? If so, how should we go about doing this?

Q4.7: What are your views on how we could provide clarity over the long-term regulatory framework?

Q4.8: Are there barriers to water companies changing how they deliver their core functions to deliver greater environmental and social value? How can we address any barriers?

Q4.9: Do you have any further suggestions for increasing the focus on the long term? If so, what are these?

5. Getting more for customers, communities and the environment

This chapter sets out our views on how we can complement our outcomes regime and get more for customers, communities and the environment. This includes incentivising companies to provide accurate information on what they can deliver for customers, do their work as efficiently as possible, and seek out and deploy new innovations.

For PR24, we are suggesting:

- **continuing to use business plan incentives**, as we did with the ‘initial assessment of plans’ (or ‘IAP’) at PR19, to encourage companies to provide stretching, well-evidenced plans that are in line with customers’ interests, with a particular focus on how well companies have set these plans in a long-term context;
- **reducing the number of stages in the price review process** to enable a greater focus on the long term, potentially by merging the initial business plan assessment and draft determinations stages together;
- **retaining cost sharing** to ensure that risks are allocated appropriately; and
- **making use of targeted challenges** to focus minds on areas where the sector needs to step up.

We will also consider whether additional mechanisms may be needed to stimulate **innovation** at PR24, and whether more can be done to reflect the themes of **ethical business regulation** in our approach.

5.1 Business plan incentives

Every five years, we ask companies to submit regulatory business plans. These set out their views on what their customers want and need from future services, typically focused on the next five years. They also set out their plans for delivering these services, what they expect this will cost, and how they intend to recover these costs over time. But they also include proposed out or underperformance payments if they outperform, or fail to meet, service targets. As such, these differ somewhat from commercial business plans produced by firms in competitive markets.

High quality business plans help ensure the success of the water sector. When a company submits a great plan for future services, with sufficient and convincing evidence that it is deliverable, this limits the need for us to intervene to protect customers and the environment. It reduces the burden of regulation. It allows the company to focus less on regulatory process and more on delivering efficiencies, innovation, and better outcomes for customers and the environment. And high quality plans also provide us with information on

what is achievable in the coming price review period, which we can then use to stretch other companies if needed.

Business plan incentives, based on an assessment and comparison of companies' plans, encourage companies to produce high quality plans by offering a range of rewards and penalties. These rewards can take the form of:

- **reputational incentives**, from plans being recognised as industry leading;
- **procedural incentives**, through earlier draft determinations or commitments that elements of draft determinations will not be changed later in the process; and,
- **financial incentives**, such as directly applicable penalties and rewards or favourable cost sharing rates.

At PR19, the IAP resulted in some companies receiving a number of these types of rewards. Customers benefited from this assessment – for example, the incentives package for companies achieving 'fast-track' status encouraged three companies to do more for their customers in order to secure this status.⁴⁹ And the best aspects of companies' plans provided benchmarks which helped us push other companies to deliver more for their customers.

We consider that business plan incentives should remain at PR24.⁵⁰ However, we are also considering making a number of changes to the assessment. We discuss these issues below.

5.1.1 What should the initial business plan assessment focus on?

At PR19, we assessed plans according to a range of test areas. This included:

- how companies' cost projections compared with ours;
- how they engaged with their customers;
- their approach to setting outcomes;
- how their plans addressed affordability and vulnerability concerns; and,
- how they sought and provided assurance of their plans.⁵¹

In Chapter 4, we outline our plans to ensure companies are focused on the long term at PR24. This includes ensuring companies position their business plans in the context of long-term strategies.

⁴⁹ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020, p. 93.

⁵⁰ This position is supported by Sustainability First, who emphasises the importance of reputational incentives in pushing companies to get their plans right first time: Sustainability First, '[Ofwat December 2020 consultations: PR19 lessons learnt report; PR24 launch document; and public value discussion document](#)', February 2021, p. 2.

⁵¹ For a complete summary of the test areas which were covered in our IAP assessment at PR19, see: Ofwat, '[PR19 initial assessment of plans: Summary of test area assessment](#)', January 2019, p. 4.

Therefore, for the initial business plan assessment, we are considering placing **greater emphasis on how well companies' plans position them to deliver in the long term**. The assessment would also consider the extent to which plans deliver greater environmental and social value, reflect a clear understanding of customers and communities, and drive improvements through efficiency and innovation, reflecting the themes we are suggesting for PR24.

The initial business plan assessment may also help prioritise our work, by **reducing our focus on plans which are less likely to pose risks to customers**. We will consider whether the price review process could be streamlined for companies with a strong track record. We could, for example, consider the extent to which companies have delivered above and beyond their PR19 final determinations. We welcome views on how an assessment like this might work in practice.

5.1.2 Should the initial business plan assessment be a separate step in the process?

We are considering whether we should **streamline the price review process**. Depending on how this is done, this may provide us more time to review and understand companies' plans and secure better outcomes for customers. This would be particularly useful in allowing us to understand the long-term context in which they are set. We also note that the strategic planning frameworks have become increasingly complex since PR19, so this change might helpfully mitigate some of this increased complexity. We discuss this in more detail in Chapter 7.

At PR19, we provided early draft determinations as a procedural business plan incentive for companies receiving 'fast-track' status. When we issued draft determinations for companies receiving 'slow-track' and 'significant scrutiny' status, we also amended the draft determinations of those which had received 'fast-track' status, to reflect changes in circumstances which had occurred in the intervening period.⁵² We therefore effectively had a four-step process, as set out in Figure 5.1 below.

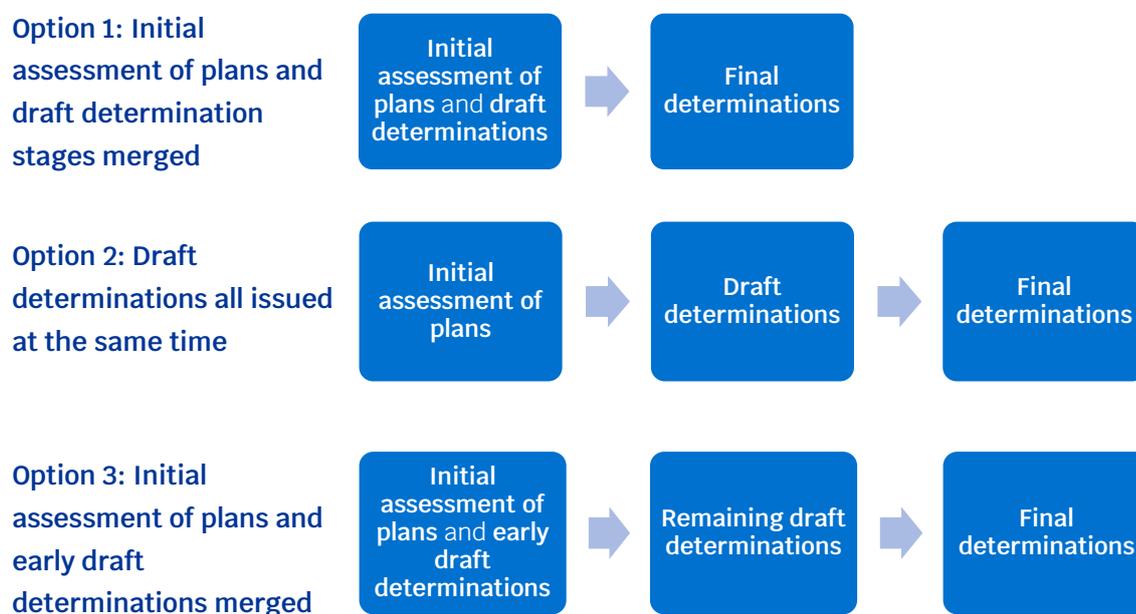
Figure 5.1 Process at PR19



⁵² This excluded changes to areas of plans which were in scope of the 'early certainty' mechanism, which applied at PR19 and which two of the three 'fast-track' companies opted into.

We are currently considering three high level options for how we structure PR24. These are shown in Figure 5.2 below:

Figure 5.2 Options for the PR24 processes



Under **option 1**, we would merge the initial business plan assessment and draft determination stages together entirely. This would see us publish the results of the initial business plan assessment for all companies simultaneously, while at the same time publishing all companies' draft determinations. Companies would not be required to submit a revised plan following the initial business plan assessment. Instead, they would only need to respond to their draft determinations. This would represent a significantly streamlined process.

We understand from our [PR19 lessons learnt](#) exercise that companies valued the feedback we gave them during the price review, in particular following the IAP stage.⁵³ Merging the initial business plan assessment and draft determination stages together could limit the scope for companies to receive continuous feedback from us throughout the process.

But **at PR19, we observed limited movement in key aspects of companies' plans between IAP and draft determinations**, suggesting the additional step may have been of limited value.⁵⁴ And the risk of fewer opportunities for feedback may be mitigated by being clear about what we are seeking from companies' plans. This is especially relevant for any areas where the assessment is new, for instance regarding the long-term context of plans,

⁵³ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020, p. 97.

⁵⁴ For example – in regards to cost allowances – the 'totex gap' between us and the companies at the IAP stage was £6.6 billion at the IAP stage (or 11.9% of companies' cost projections). The gap then dropped to £6.0 billion (or 11.0%) at the draft determinations stage: Ofwat, '[PR19 Final Determinations – securing cost efficiency technical appendix](#)', December 2019, p. 8.

since being clear would enable companies to put forward plans which meet these requirements at the outset.

Option 1 may also impact our ability to make use of procedural incentives, since there would be no scope to offer early draft determinations to companies which submit high quality plans. In section 5.1.3, we consider whether this risk can be mitigated.

Alternatively, under **option 2** we would keep the initial business plan assessment and draft determinations stages separate, while issuing all companies' draft determinations simultaneously. This option would provide greater opportunities for companies to receive feedback from us throughout the process. But this would be at the cost of a less streamlined price review. And there would be no scope to use early draft determinations as an inducement to submit high quality plans.

Finally, under **option 3** we would publish early draft determinations alongside results of the initial business plan assessment, and later publish draft determinations for the remaining companies. This approach would streamline the process overall, while also allowing us to use early draft determinations as an incentive for companies to submit high quality plans.

Depending on whether we are involved in developing plans, we need to consider how appropriate an initial business plan assessment would be. As we explain in Chapter 4, we are considering whether other stakeholders could be more heavily involved in developing Welsh companies' plans. We could also potentially be involved, which may make it less appropriate for us to assess these plans. However, the assessment may still be useful in incentivising Welsh companies to reveal certain types of information. It may therefore be that Welsh plans are considered in some parts of the initial business plan assessment, but not in others.

5.1.3 What incentives should we provide?

We must also consider how best to reward high-quality plans which deliver benefits for their customers, communities and the environment.

We are considering using procedural incentives at PR24. At PR19, we offered early draft determinations and an 'early certainty' mechanism to achieve this. However, feedback from our [PR19 lessons learnt](#) suggests that the 'early certainty' mechanism which applied at PR19 was seen as a relatively weak incentive.⁵⁵ And if we issue draft determinations for all companies simultaneously at PR24, this may further weaken procedural incentives.

It may be possible to strengthen procedural incentives by considering how **a new 'early certainty' mechanism** might work. For example, we could expand the areas of companies' plans which are covered by such a mechanism. This would provide greater certainty to companies regarding the likely shape of their final determinations, giving them confidence to

⁵⁵ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020, p. 92.

begin engaging with the supply chain early. We could also consider one-way ‘do no harm’ mechanisms like those used at PR14 – these ensure companies will not be worse off for accepting their determination, while still allowing them to benefit from changes in the opposite direction for the remainder of the process.

We also propose to keep making use of financial incentives at PR24. We consider this should make use of lump sum rewards, as was offered to companies which achieved ‘exceptional’ or ‘fast track’ status at PR19.⁵⁶ We are also considering using directly applicable penalties, as Ofgem has done for their RIIO-2 controls under the business plan incentive.⁵⁷

Cost sharing mechanisms, described below, can also incentivise companies to submit robust, well-evidenced and stretching plans. Allowing companies with better plans to retain a greater proportion of any savings and/or share a greater proportion of any overspend with their customers should incentivise them to deliver high quality plans.

In its redeterminations for the four disputing companies at PR19, the CMA supported the principle that cost sharing rates can play a role in incentivising the submission of efficient plans.⁵⁸ But it was noted that reducing the amount of outperformance earned by companies by applying low cost sharing rates as a penalty for inefficient plans may weaken incentives to deliver efficiencies during the price review period. This could lead to poor outcomes for customers. It also noted that changes in cost sharing rates across price review periods might distort incentives where schemes require investment over multiple periods.⁵⁹

We will consider the CMA’s assessment of our approach to cost sharing at PR19 as we develop our policy for PR24. If we make less use of cost sharing mechanisms to incentivise high quality plans, there may be greater need to make use of directly applicable penalties to compensate for this, alongside the proposed rewards, in place of cost sharing incentives.

Regardless of which incentives we provide, **rewards for companies must be commensurate with the benefits customers receive through improved plans.**

Customers ultimately pay for these rewards, through higher bills from financial incentives, better outcomes for companies from mechanisms like ‘early certainty’, or – potentially – through greater exposure to cost sharing. Customers might also face risks if we adopt a streamlined price review for companies with a strong record of delivery during the PR19 price review period. We will be mindful of this when calibrating rewards and penalties for business plans at PR24.

⁵⁶ Ofwat, [‘Delivering Water 2020: Our methodology for the 2019 price review Appendix 13: Initial assessment of business plans’](#), December 2017, p. 30.

⁵⁷ Ofgem, [‘RIIO-2 Business Plan Guidance’](#), June 2019, p. 25.

⁵⁸ CMA, [‘Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations’](#) March 2021, p. 601.

⁵⁹ CMA, [‘Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations’](#) March 2021, p. 607.

While the categorisation of plans is yet to be determined, we are considering ways in which we can incentivise poorer performing companies to improve their plans throughout the process. In our [PR19 lessons learnt](#), we heard that there were strong incentives on ‘significant scrutiny’ companies to improve their plans post submission, including the prospect of more favourable cost sharing rates. In contrast, there were weaker incentives on the ‘slow track’ companies to improve their plans post submission.⁶⁰ We will continue to consider incentives which might address this – one approach might involve allowing rewards and penalties to be changed later on in the process, for instance between draft determinations and final determinations. However, we would not want any changes to weaken the incentive for companies to get their plans right on first submission.

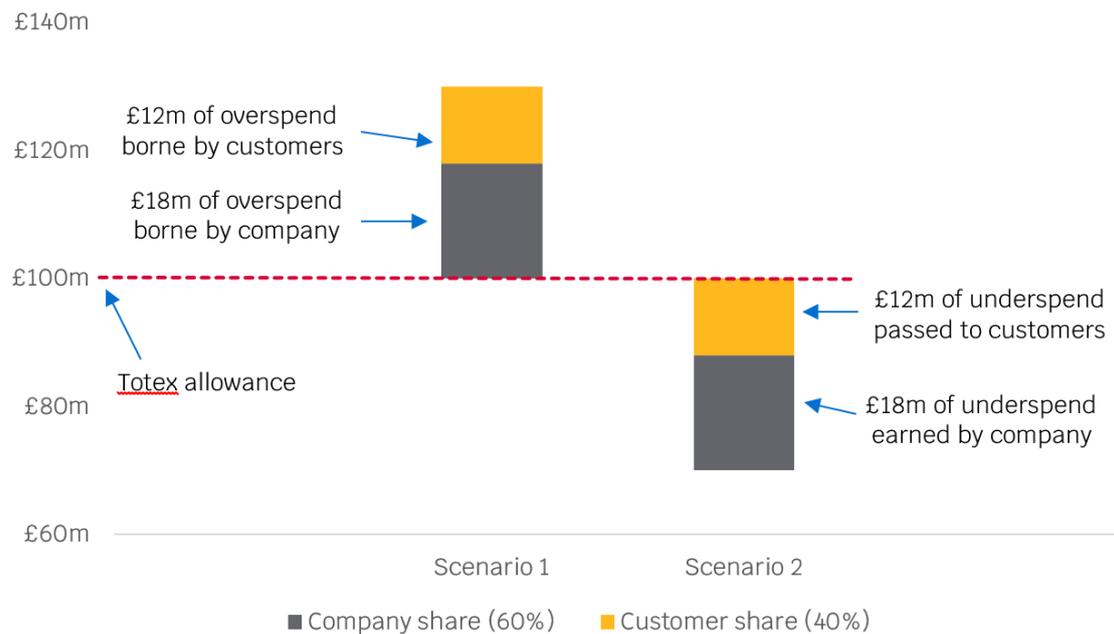
5.2 Cost sharing

We are proposing to use cost sharing at PR24 to share cost risk between companies and their customers. This is consistent with the approach taken in previous price reviews, and recognises that some costs lie outside of companies’ control. Allocating all risk of overspends to companies could result in a high cost of capital, with correspondingly higher bills. On the other hand, allocating all risk to customers would provide no incentive for companies to spend efficiently.

This approach also recognises that **companies spending efficiently is in customers’ long-term interests**. When companies spend more efficiently this automatically lowers bills through cost sharing, but it also provides evidence on the level of efficient costs which then informs future price reviews.

The example overleaf shows what would happen if a company with a £100 million totex allowance, a 60% cost sharing rate for underperformance and a 60% cost sharing rate for outperformance overspent its regulatory allowance by £30 million (Scenario 1) and conversely, if the same company underspent its regulatory allowance by £30 million (Scenario 2):

⁶⁰ Ofwat, [‘PR24 and beyond: Our reflections on lessons learnt from PR19’](#), December 2020, p. 94.

Figure 5.3 cost sharing with £30m over/underspend and 60% sharing rate

We will consider what cost sharing rates are appropriate. Low cost sharing rates could provide limited incentives for companies to spend efficiently. This could also dull innovation, since companies would retain only a limited fraction of the rewards associated with implementing new approaches. Conversely very high cost sharing rates may result in increased risk to companies, not all of which may be in their control, which may impact on efficient financing costs, which are ultimately born by consumers.

High cost sharing rates may also adversely impact on incentives to maintain asset health, since the effects of under-investment are unlikely to be observed in the short term. This might incentivise companies to cut back on asset health, to benefit from savings secured under the high cost sharing rate. If this is the case, **it may be appropriate to set lower cost sharing rates and take account of our ability to monitor companies' asset health status**, to provide additional protection for customers. We discuss our approach to asset health further in Chapter 9.

5.3 Targeted challenges

There are some areas where all companies need to step up in the coming years, to meet the challenges facing the sector. 'Targeted challenges', whereby all companies are pushed to deliver a given improvement within a specified timeframe, are one way of achieving this.

We are considering setting targeted challenges at PR24. These challenges can be a powerful tool for stretching companies where the industry needs to raise its game, following limited improvements in recent years. They can focus minds across the sector. Targeted challenges mimic the kinds of shocks that companies in competitive environments can

experience, for example when a new entrant spots an opportunity to better meet customers' needs. As such, we consider that these types of challenges offer scope to spur innovation.

This was the case at PR19 where, following our challenge to reduce leakage by at least 15% by 2025, some companies responded by proposing more ambitious reductions. Feedback suggests that our clear signal on the need for leakage reductions during the PR19 price review period galvanised the sector to rise to the challenge.⁶¹ We note the significant progress which has already been achieved, with the sector reducing leakage by 7% in 2019–20 and some companies delivering reductions in excess of 10%.⁶² The CMA also supported our position that the average company should be able to deliver a substantial improvement in leakage performance.⁶³

Some have argued that as they are applied uniformly across all companies, targeted challenges risk being seen as arbitrary.⁶⁴ However, in areas where there has been little progress at a sector-wide level, benchmarks may not provide a good indication of what can be achieved.

Two areas we plan to explore are **water efficiency** and **harm caused by discharges from the wastewater network**, since step-changes will be needed in both areas in the coming years. The former may include a specific focus on business customers, building on the joint industry action plan to improve water efficiency in the non-household sector.⁶⁵

We will consider any targeted challenges within the context of the wider regulatory environment, including work being undertaken by the Environment Agency, Natural Resources Wales and the Drinking Water Inspectorate, and – for English companies – any relevant targets resulting from the upcoming Environment Bill.

We are also considering how our outcomes regime can encourage collaboration on key common issues to help drive up performance across the sector. We outline our suggestions on this in Chapter 9.

5.4 Innovation

It is vital that companies innovate in the coming years, so that they can transform services and address complex environmental challenges in a sustainable and cost-effective way.

⁶¹ Waterwise, '[Ofwat and PR24 – Future Ideas Lab – Waterwise Submission](#)', January 2021, p. 2.

⁶² Ofwat, '[Service delivery report 2019–20](#)', December 2020, p. 3.

⁶³ CMA, '[Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations](#)' March 2021, p. 692.

⁶⁴ CCW, '[Lessons Learned From The 2019 Price Review](#)', October 2020, p. 19.

⁶⁵ Ofwat & Environment Agency, '[Delivering greater water efficiency in the business sector: A joint Ofwat – Environment Agency open letter](#)', February 2021.

The mechanisms outlined elsewhere in this document and earlier in this chapter are, in large part, designed to strengthen incentives for companies to pursue new and innovative ways of delivering improvements for customers, communities and the environment. For example, the use of financial ODIs in our outcomes regime provides strong incentives for companies to adopt new and innovative techniques to delivering outcomes throughout the price review period. The introduction of a long-term framework and incentives should give companies greater confidence to exhibit more risk taking and innovative behaviours, particularly where innovations are expected to deliver benefits over long timeframes. And targeted challenges can push companies to innovate in areas where industry performance is stagnating.

We will continue to consider whether these mechanisms offer sufficient incentives to innovate, or whether there is a need for further innovation specific tools like the **innovation fund**. The fund was established to help the industry grow its capacity to innovate and meet the needs of the sector, including those of future generations.⁶⁶ In April this year, we announced the winners of the first round of our '[Innovation in Water Challenge](#)'. We were pleased to see the strong round of bids received for the initial funds, as well as the breadth of projects proposed including in areas like technology, engineering and customer behaviour change. More recently we opened entries for our '[Water Breakthrough Challenge](#)', which gives companies the opportunity to win up to £10 million to develop and implement innovative solutions for common challenges in the water sector.

It is too early to assess how well the innovation fund has been able to drive the change we want to see.⁶⁷ We will continue to monitor its effectiveness in supporting the sector's capacity to innovate, and in enabling the development of innovations which address the big challenges we face. This will help us understand how the innovation fund may need to evolve in the future, or whether we need to explore other mechanisms to drive change across the sector. As we set out in Chapter 10, **we will also consider the innovation fund when assessing the level of productivity improvements** we expect at PR24. This reflects the fact that customers should ultimately benefit from the fund through lower costs in the long term. It also mirrors Ofgem's approach in RIIO-2.⁶⁸

5.5 Ethical business regulation

Some stakeholders have suggested that financial incentives may sometimes cut across, and potentially override, ethical behaviour. They suggest that in these circumstances, it may be better to rely on ethical business regulation (or 'EBR') to ensure companies do the right thing by their customers.

⁶⁶ More information on the fund can be found on [our website](#) as well as the [innovation competitions website](#).

⁶⁷ However, we are pleased to see support for the fund from stakeholders such as Afonydd Cymru, who have welcomed the fund's introduction while also arguing more should be done to bring eNGOs into the process. See: Afonydd Cymru, '[Afonydd Cymrus submission Future Ideas Lab](#)', April 2021, p. 4.

⁶⁸ Ofgem, '[RIIO-2 Final Determinations - Core Document \(REVISED\)](#)', February 2021, p. 50.

EBR is based on the idea that **a trust based approach to regulation is more effective** than one based solely on regulatory deterrence. As such, it advocates for a collaborative approach between businesses, their stakeholders and public officials. While there is no single definition of EBR, the approach emphasises a number of points. This includes:⁶⁹

- that ethical culture in business is an essential component that should be promoted and not undermined;
- that regulation will be most effective where it is based on the collaborative involvement of all parties; and,
- that society needs to be protected from those who seek to break laws, so people expect wrongdoing will receive proportionate sanctions.

EBR has been used in a wide range of sectors, such as finance and aviation.⁷⁰ In Scotland, WICS have used the principles of EBR for their most recent strategic review of charges for Scottish Water, SRC21.⁷¹ And in a submission to the [Future Ideas Lab](#), Bristol Water makes the case for using the themes of EBR to inform our approach to PR24.⁷² It argues that moving towards a ‘trust’ based approach to regulation will require a shift away from regulator incentive decisions towards a process that builds consensus amongst local stakeholders.

We consider that **strong incentives which align the interests of investors and customers are effective**. This is supported by the emerging findings and conclusions of our forthcoming PR14 review. We would be concerned that the absence of such incentives may increase the risk of poor outcomes for customers and the environment.

We reflect many of the themes underpinning EBR in our day-to-day regulatory activity. One example is our continued focus on public value – as outlined in [our strategy](#), we expect companies to see all business decisions as opportunities to add value to customers and the environment, including by going beyond the standards and norms set by regulators, where appropriate. Similarly, we continue to promote transparency through open data. We consider this will help stimulate innovation across the sector, but also recognise it can improve transparency for customers and investors and therefore build trust in the companies.

We are considering how we might reflect EBR in the price review. In general terms, this means being clear at the outset about what we expect to see from companies throughout the process, including in business plans but also in companies’ behaviours. We are also considering whether we can provide more clarity over our approach to estimating costs and stretching outcomes in this review and future reviews. We would expect companies to table plans which are high quality on first submission, taking proper account of allowances in the past and the most efficient way to meet future needs. And as we explain in Chapter 4,

⁶⁹ Department for Business, Innovation and Skills, [‘Ethical Business Regulation: Understanding the Evidence’](#), February 2016, p. 5.

⁷⁰ Specifically, aviation safety.

⁷¹ WICS, [‘Strategic Review of Charges 2021–27: Methodology refinements and clarifications’](#), November 2018, p. 55.

⁷² Bristol Water, [‘Regulating for consensus and trust – modernising economic regulation’](#), April 2021.

we are exploring ways for companies in Wales to develop their plans collaboratively with their stakeholders. As noted earlier, we may also place greater weight on plans where companies demonstrate that they have a strong record of delivery during the PR19 price review period.

Streamlining the price review may also provide opportunities for companies to build trust with their stakeholders. For example as outlined in Chapter 9, at PR24 we are considering streamlining the outcomes regime, including through fewer bespoke performance commitments. This should provide greater scope for companies to make their own pledges regarding their work, potentially allowing their customers and communities to hold them to account directly.

We seek views on how we might usefully promote the themes of EBR through PR24.

5.6 Next steps

We seek views on all of the issues identified in this chapter, including through our Future Ideas Lab. We are keen for views on how we might simplify our process, while strengthening incentives for companies to submit high quality plans. We are also keen for views on how cost sharing and targeted challenges might work most effectively, whether innovation specific mechanisms might be needed at PR24, and how we might promote the themes of EBR throughout the price review.

5.7 Questions for stakeholders

Q5.1: Should we undertake an initial assessment of plans at PR24? If so, what areas should we focus on in this assessment?

Q5.2: Should we consider adopting a more light touch approach at PR24 for companies with a strong track record of delivery during the PR19 price review period? If so, what factors should we consider in our assessment and why?

Q5.3: Should we streamline the price review by combining different steps in the process? If so, which of the three options outlined in this paper should we consider? And are there other options we can usefully consider?

Q5.4: Is a different approach needed for the initial business plan assessment for companies in England and in Wales?

Q5.5: What incentives should we provide for high quality plans at PR24? If we don't make use of early draft determinations, how else might we strengthen incentives to table high quality plans on first submission?

Q5.6: How might we set cost sharing rates at PR24? Should we consider an approach based on our ability to monitor companies' asset health status?

Q5.7: Which areas should we be considering targeted challenges for at PR24, and why?

Q5.8: Should we use innovation specific incentive mechanisms at PR24? If so what would these be, and what would they add in addition to the other mechanisms outlined in this chapter?

Q5.9: In what ways might we promote the themes of EBR through PR24?

6. Reflecting customers' preferences

An understanding of customer preferences is vital to ensure that price reviews deliver what really matters to consumers. Our December 2020 [discussion paper](#) explored potential ideas for gathering and reflecting customers' preferences in future price reviews. The proposals outlined in this chapter take into account the range of views and ideas in the [responses](#) to that paper as well as further engagement with stakeholders related to our proposals and contributions to the Future Ideas Lab.

Our proposals are aimed at making the process of collecting customer views more streamlined and meaningful. With that in mind, we are proposing:

- To work with the sector to explore the design and implementation of a **collaborative approach** to customer research for the price review. This will allow us to consider if and how customers' preferences differ within and across company boundaries and within and across the nations.
- That the findings of the collaborative research **informs common aspects of companies' business plans** and our determinations, such as incentive rates for common performance commitments. We would expect the collaborative research to complement companies' own research.
- This research will aim to provide a significant amount of the information on customer views required to inform our determinations, **so we propose not to require each company to have a customer challenge group at PR24**. Instead, companies would put in place challenge and assurance solutions that meet their specific needs and ambitions
- To work with the sector to **develop and agree minimum standards** for high quality research, ongoing independent customer challenge and independent assurance.

We provide a more comprehensive discussion of the responses to our December 2020 discussion paper in our [Appendix – Reflecting customers' preferences](#), published alongside this document.

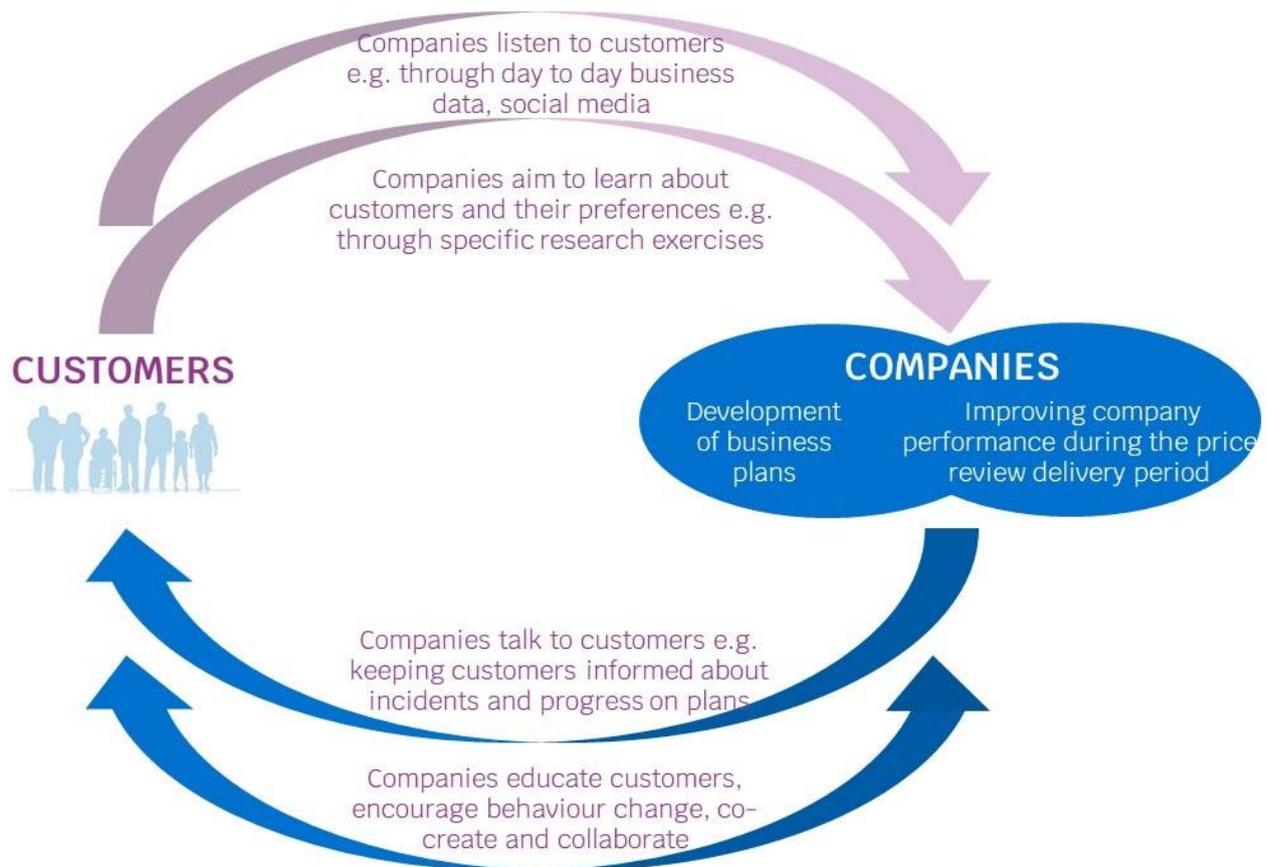
6.1 Rethinking customer engagement

6.1.1 The wider customer engagement landscape

The process of gathering customer views for the purposes of the price review sits within a much wider landscape of customer engagement. Many respondents to our [discussion paper](#) said that it would be helpful to be clearer about this relationship.

We use **customer engagement** to refer to the whole range of opportunities for companies to gain insights from and talk to their customers and the communities that they serve. This includes the full range of customers, including business customers and developers, and their diverse needs both now and in the future. The broad types of customer engagement are shown in Figure 6.1.

Figure 6.1 Forms of customer engagement



It shows how **customer research** can help better understand customers, or groups of customers **for the purposes of the price review** to ensure we deliver what customers want. Insights for the price review can also be gained through other means such as analysis of **business as usual data**, for example on customer complaints or from comments in social media. But this is just part of the picture.

A more detailed understanding of customers and communities is needed to provide **better service** to customers within a price review period. Companies also need to **reflect customers' views** in decision-making and to build customer **trust**. This can lead to improved customer satisfaction scores, which are incentivised through the price control, for example through C-Mex and D-Mex in PR19. It can also help with specific affordability and

vulnerability issues. PR19 had specific incentives aimed at these areas and we are also doing work outside of the price review on these.

In addition, companies need to **talk to their customers** to keep them **informed**, on progress and plans as well as on changes or disruptions to service, for example about supply interruptions. This should also improve customer satisfaction measures.

And they need to encourage and support customers and communities to be **active participants** in the use and development of water services, for example through campaigns aimed at reducing water consumption or co-creation of schemes such as sustainable drainage. This is reflected in outcome measures such as per capita consumption.

We've observed a culture change in the sector over the last decade, with an increased company recognition that engaging well with customers and communities is fundamental to delivering services that meet their needs. That said, we expect that each company's priority is to increase the sophistication, focus and efficiency of their customer insight strategies. We expect this to include the day-to-day engagement with their customers, moving ahead with the pace, creativity and vigour that we can see in other sectors of the economy where customer data drives decision-making. This includes efforts to change customers' habits.

Our [strategy](#) set out that we would also listen to customers and communities more directly to inform our policies. We will improve the body of evidence on people's attitudes and experiences, through customer research, social media, and by working with CCW. In the context of the price review, we said we would consider how we could enable a more consistent approach to customer research to avoid differences in methodology driving results.

6.1.2 The role of customer engagement in price reviews

It is vital that customers' views and needs are reflected in price review proposals and decisions, including on aspects of plans that involve desirable, but costly, outcomes.

We want the process of capturing these views to be as accurate as possible. In PR19, companies conducted more research than ever before. But there were some issues with the collection and use of the evidence. In some cases, customers felt they were not well placed to provide views on technical issues.⁷³ And we found the results from different company's research on customers' valuations of common issues sometimes varied significantly, with no clear underlying reason.⁷⁴ Table 6.1 illustrates this using several common performance commitments. It shows, for example, that companies' PR19 estimates of the value that

⁷³ CCW, '[Engaging water customers for better consumer and business outcomes](#)', May 2020, p. 5.

⁷⁴ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020, p. 6.

customers put on a unit of leakage reduction, for example, varied from £0.03 to £41.58, a factor of 1386.

Table 6.1 Variations in customer valuations of key performance commitments, based on companies' PR19 proposed ODI rates, September 2018, £/household per normalised increment of performance

	Leakage	Per capita consumption	Water supply interruptions	Pollution incidents	Internal sewer flooding
Average	5.79	0.39	0.94	0.43	8.11
Max	41.58	1.10	4.19	0.90	17.25
Min	0.03	0.01	0.10	0.00	1.46
Max as a multiple of min	1386	110	42	N/A	12

Evidence of customer support for proposals also appeared inconsistent. For example, companies sometimes struggled to provide evidence that customers support outperformance incentives, despite providing evidence that customers were willing to pay for enhancement investment and associated improvements in service.

Engagement with customers and communities for the purposes of developing plans also needs to be a proportionate part of a company's overall engagement approach. We are aware that companies spent considerable amounts on customer engagement in PR19. It is imperative that such expenditure leads to meaningful insight that can influence companies' business plan submissions, and our determinations, and so lead to better results for customers.⁷⁵

Within the price review, a significant proportion of enhancement spend is driven by schemes that follow directions from Environment Agency, Natural Resources Wales, Drinking Water Inspectorate or Defra. In PR19, we allowed total expenditure of £51 billion across the 5 year price review period: of the £13 billion allocated for enhancement projects, more than £10 billion, over 75%, was for projects responding to these directions.

In PR24, the proportion of costs for such non-discretionary projects is likely to increase further, given the increase in statutory requirements from the Environment Agency. There may be further requirements driven by long term governmental ambitions, as we set out in Chapter 4. This limits the extent to which customers can influence decisions on this expenditure, although they may have important views on how this is delivered. Chapter 9 of this document also suggests that we could reduce the use of bespoke outcomes at PR24 to streamline the price review process.

⁷⁵ For example, our Asset Management Maturity Assessment framework references the maturity of a company's approach to engaging with customers.

We want to develop a targeted and more effective approach to capturing customers' views for the price review. We are aiming for this to be focused on the aspects of business plans where customer views can have a meaningful influence and to make sure that customers are involved in a meaningful way – in [Appendix - Reflecting customers' preferences](#) we discuss views on what these areas are. Our ambition is to collect such data efficiently and to complement, and not detract from, the engagement that companies do with their customers to make sure their day-to-day decision making and delivery is constantly improving.

6.1.3 Negotiated settlements

Some [respondents](#) to our December 2020 [discussion paper](#) have expressed an interest in exploring the possibility of using negotiated settlements to set price controls at PR24.^{76 77} Sustainability First and Dŵr Cymru's CCG have suggested there may be a case for using negotiated settlements in Wales at PR24, with the latter suggesting this could be done on a trial basis.⁷⁸⁷⁹ Wessex Water has proposed co-creating a negotiated settlement model which could be adopted for PR24.⁸⁰ And last year, Stephen Littlechild proposed using negotiated settlements to help determine the outcome of the PR19 appeals at the CMA.⁸¹

Negotiated settlements are a process whereby a body representing customers' interests – usually a 'customer forum' – negotiates directly with the company on the regulatory determination. It is intended to help the regulator to find the most appropriate outcome. It does not alter or override the legal framework within which the regulator makes its decisions, such as the setting or approval of price controls. Instead, the regulator facilitates negotiation between the parties, provides information to the customer forum throughout the process, and outlines its assessment of the likely service levels and efficiencies which the company can deliver in the coming price review period. The regulator is also responsible for translating any agreement into a draft determination or, if no agreement can be reached, implementing a backstop determination.⁸²

⁷⁶ This included South East Water, Yorkshire Water, Anglian Water and Northumbrian Water. The responses to our December discussion paper can be found on [our website](#).

Yorkshire Water, '[Yorkshire Water Response Future Price Reviews Customer Preferences consultation](#)', January 2021, p. 13.

⁷⁷ South East Water, '[Ofwat – PR24 and beyond: Reflecting customer preferences in future price reviews – a discussion paper South East Water response](#)', January 2021, p. 11.

⁷⁸ Sustainability First, '[Ofwat December 2020 consultations: PR19 lessons learnt report; PR24 launch document; and public value discussion document](#)', February 2021, p. 2.

⁷⁹ Dŵr Cymru Welsh Water CCG, '[P24 and beyond – Reflecting Customer Preferences in Future Price Reviews: A Response from Dŵr Cymru Welsh Water Customer Challenge Group](#)', January 2021, p. 6.

⁸⁰ Wessex Water, '[Ofwat PR24 and beyond: Reflecting customer preferences in future price reviews – a discussion paper: Wessex Water response](#)', December 2020, p. 9.

⁸¹ Stephen Littlechild, '[Submission to the CMA on Ofwat price determinations](#)', May 2020.

⁸² For more information on how negotiated settlements work, see: Frontier Economics, '[The potential for direct negotiations for price setting in the water sector in England and Wales – a report prepared for Wessex Water](#)', July 2015.

Negotiated settlements have been used in a variety of sectors around the world. For example in the United States, interstate gas pipelines and their customers settle about 90% of rate cases through negotiated settlements.⁸³ The approach has been used to regulate the oil and gas pipeline sector in Canada.⁸⁴ The Australian Energy Regulator has trialled a negotiated settlement approach to help develop AusNet Services' regulatory proposal for the 2021-25 period.⁸⁵ And in the UK, WICS has used negotiated settlements as the basis for setting prices for Scottish Water.⁸⁶

A range of arguments have been advanced to support the use of negotiated settlements. This includes that they offer greater flexibility with respect to the types of agreements which might be reached, which helps better reflect local circumstances and may provide more satisfactory outcomes for both the company and their customers.^{87 88} It may also reduce burdens on both the company and their regulator.

The value which negotiated settlements add may depend in part on the context in which they are applied. Adopting this approach across 17 different companies could also prove complicated and resource intensive, since we would need to facilitate 17 different negotiations while also developing 17 different backstop determinations. Customer forums would need to understand customers' priorities to inform their negotiating positions, presenting similar challenges to those we have experienced in previous price reviews. There is also a question regarding how to determine who represents customers' interests in the process, the accountability of these representatives to customers, and determining how or on what grounds Ofwat might reject the outcome of such a process. The regulatory burden may not be diminished by the process, given the likely need for Ofwat to provide views on cost thresholds in advance of the negotiation process and to allow sufficient time to consider the outcomes of the process before final determinations.

As set out above, the Government and other regulators decide on much of the required level of service improvement for PR24, and the assessment of base costs and service is largely a product of a comparative benchmarking approach. Therefore, the scope for negotiated settlement in water sector in England and Wales appears to be modest.

Therefore, we are not proposing to implement negotiated settlements at PR24. Customer views are vitally important and we also want to ensure they are gathered in a targeted and proportionate way. We believe our proposals below may better help do this.

⁸³ Stephen Littlechild, 'The process of negotiating settlements at FERC', Energy Policy, November 2012.

⁸⁴ Doucet, Joseph & Littlechild, Stephen, 'Negotiated settlements and the National Energy Board in Canada', Energy Policy, November 2009.

⁸⁵ More information can be located on [AER's website](#).

⁸⁶ More details of WICS's approach to using negotiated settlements is outlined in Section 5.1 of [Appendix – Reflecting customers' preferences](#).

⁸⁷ Frontier Economics, '[The potential for direct negotiations for price setting in the water sector in England and Wales – a report prepared for Wessex Water](#)', July 2015, p 5.

⁸⁸ Stephen Littlechild, '[Submission to the CMA on Ofwat price determinations](#)', May 2020, p. 5.

However, we are interested in how the benefits of negotiated settlements might be achieved through our price review framework. We consider one way of doing this is our proposed collaborative approach for developing Welsh companies plans. As outlined in Chapter 4, this would ensure that the priorities of the Welsh government and the needs of Welsh customers were reflected in plans, while also ensuring these plans were still subject to our rigorous scrutiny regarding cost efficiency and service level stretch. Another alternative could be the approach outlined by United Utilities, who suggests potentially using a simplified ‘negotiated settlement’ process to agree small, specific aspects of company plans.⁸⁹ We seek views on other approaches we might usefully consider.

6.2 A collaborative approach to research for the price review

Our earlier discussion paper invited views on our idea that a collaborative nationwide research approach could be used to inform common areas of business plans. We suggested that this may provide a more reliable and consistent way of collecting customer views, and enable us to better understand the similarities and differences between customers. This would complement companies’ own customer engagement.

Having considered the responses to our discussion paper, many of which were supportive of this approach, we propose to work with the sector to explore **design and implementation of a collaborative approach to customer research for the price review**. Further details of our considerations are outlined in [PR24 and Beyond: Creating tomorrow, together. Appendix – Reflecting customers’ preferences](#). In summary we think that it would enable us to better reflect customers’ preferences in the price review by:

- Increasing the overall quality and consistency of customer research on customer preferences and valuations;
- Providing us, companies and other stakeholders with greater certainty that we are reliably identifying similarities and real differences between customers and communities across company, regional and national boundaries;
- Where appropriate, provide comparable results across all companies that can help the customer challenge process.

It may also increase the efficiency of company expenditure on customer research, particularly for smaller companies. These cost savings should be passed through to customers through cost sharing within PR24. This will also result in lower cost benchmarks for PR29.

⁸⁹ United Utilities, ‘[United Utilities response to Ofwat – PR24 and beyond: Reflecting customer preferences in future price reviews](#)’, December 2020, p. 3.

It may be appropriate to have different research in England and in Wales. Although many areas will be comparable, there may be some issues relating to the different priorities in the two nations which require a different focus.

6.2.1 Potential scope of a collaborative approach to research

[PR24 and Beyond: Creating tomorrow, together. Appendix – Reflecting customers’ preferences](#) sets out that we consider that the scope of collaborative customer research should include areas of company proposals and our determinations that are common to all companies, where it is important for findings to be comparable across companies. It could explore customer views of overall current and long-term priorities. Where appropriate, it could also explore how customers value improvements, or deteriorations, to service, in order to inform ODI rates. As we set out in Chapter 9, we would use the results of such research as a starting point for setting ODI rates – however, we will cross check these against wider information, where available, and adjust the results if they do not appear appropriate.

It may be possible to use the collaborative customer research to inform setting of appropriate caps for common PCs, based on the extent of improvements desired and customer tolerance of price increases. Later phases of research could explore affordability concerns and business plan acceptability. Respondents to our paper made a distinction between ‘**nationwide**’ research and a ‘**standardised**’ approach. Nationwide research would involve customers of all companies being included in one research project, with customer samples that are robust at company level. A ‘standardised’ approach would mean all companies agreeing a common methodology for a research project that is applied locally by each company.

A standardised approach would provide greater flexibility for companies. On the other hand, the nationwide approach would provide greater transparency of findings and greater efficiency of expenditure, particularly for smaller companies.

We still expect companies to provide evidence of customer views on local issues, such as the proposed long term investments and their phasing, or the best way to meet a particular outcome to deliver public value.⁹⁰ Local engagement may also support bespoke PCs and ODIs. Although we are suggesting these could be more limited at PR24, there may be scope for such outcomes in some instances.

We expect the local and standardised or nationwide research to interact. We expect company insights of customers’ views, gleaned from their ongoing engagement during the price review

⁹⁰ We note that Yorkshire Water’s submission to the Future Ideas Lab comments that institutions like local authorities and metro mayors could have a bigger role in shaping companies’ business plans, particularly within the context of expectations about more partnership working. See Yorkshire Water, ‘[PR24 and beyond: 10 years of investment?](#)’, March 2021, p. 14. In its submission to the Future Ideas Lab, Bristol Water calls for a new model of trust-based regulation in which companies work with local stakeholders to build consensus around a range of plausible business plan scenarios. See Bristol Water, ‘[Regulating for consensus and trust: Modernising economic regulation](#)’, April 2021.

period, to inform research delivered within the collaborative approach. There may also be opportunities for the collaborative research to include elements on company-specific proposals.

But we wish to avoid companies repeating research delivered within the proposed collaborative research, or undertaking parallel and ‘competing’ research, not least to protect customers from the risk of duplicate costs. It may therefore be appropriate to give primacy to the findings of the collaborative research as we form our determinations.

We plan to explore the opportunities to design and implement standardised and nationwide approaches to customer research through discussion with companies, CCW and other stakeholders – we call this the ‘**collaborative approach**’. We will particularly explore what the best practical approach may be in preparation for the PR24 price review and how this could interact with companies’ own research.

6.2.2 Governance of the collaborative research

We are currently working with water companies, CCW and Water UK to establish ongoing delivery and governance arrangements for the design and implementation of the potential collaborative customer research. These discussions will include consideration of the potential phasing and timing of research development and implementation.

We think arrangements could include:

- a **steering group** for each nation, who will provide direction on the collaborative research approach;
- an independent **advisory group** of research and other experts, who will provide advice to the steering group and provide challenge on behalf of customers. We also expect this group to ensure appropriate research methods are applied, standards are met and findings are used appropriately;
- a **delivery group**, who will be responsible for all practical aspects of the proposed collaborative research approach, including, where needed, procurement, all aspects of project and financial management, and contract management.

We need to establish membership for these groups, but we would expect the following bodies to be involved in addition to us: CCW, water company representatives and Water UK, Defra/Welsh government, Environment Agency/Natural Resources Wales, DWI, Citizen’s Advice and other customer experts.

Given the closer involvement of the Welsh stakeholders in the long term plans in Wales (see Chapter 4), we expect that Welsh government and Natural Resources Wales will be part of the Welsh steering group. If there is a wider steering group in Wales, or in England, there may be less need for a separate advisory group – instead, advice could be sought from individual

organisations. We aim to explore whether any of the existing Welsh stakeholder groups could fulfil governance requirements for the collaborative research approach.

6.2.3 Requirements for challenge and assurance

We recognise the progress that has been made by companies in orientating their decision-making and business plans towards the experiences, needs and views of customers. We expect that companies are aiming to further increase the sophistication, focus and efficiency of customer engagement activities. We expect this to include consideration of how best to reflect customers' views in decision-making.

As such, we do not plan to mandate, as we did in PR14 and PR19, that each company should have a customer challenge group that delivered a customer challenge role and provided assurance to us on the quality and use of each company's customer engagement. Instead, we suggest **each company is to put in place challenge and assurance solutions for customer engagement that meet its specific needs and ambitions.**

Many companies, but not all, have indicated to us that they plan to continue the independent group that performed the PR19 customer challenge group role: in many instances this is to ensure ongoing customer challenge of company delivery of existing commitments to customers. Under our proposals, each company has freedom to maintain its CCG, where they find it helpful for focusing on, and working with, customers, as part of their day to day business outside the price review.

To help companies design appropriate approaches to customer engagement, challenge and assurance, and in response to suggestions made in response to our earlier discussion paper, we plan to work with CCW and the rest of the sector to develop and agree minimum standards for:

- **high quality research;**
- **independent customer challenge** to companies, with a focus on company delivery of commitments made to customers
- **independent assurance** of i) the quality of companies' local customer engagement for the price review and ii) use of the results of local engagement and the proposed nationwide research in price review submissions.

We note that CCW is publishing 'Triangulation – a review of its use at PR19 and good practice' which will set out best practice in triangulation of data from customer evidence.

6.3 Next steps

We look forward to continuing our work with the sector to develop thinking on the collaborative approach to customer research, minimum standards for high quality research, customer challenge and assurance, and how to best capture the views of customers, communities and stakeholders in PR24 and future price reviews.

In particular, we look forward to continuing to develop our working relationship with CCW, to make sure that our efforts align and support each other, within our respective remits.

We note that UKWIR has already started work looking at how should customers' and stakeholders' views be used in regulatory decisions and look forward to discussing that work with the sector in due course.

6.4 Questions for stakeholders

Q6.1: What are your views on the merits of our proposals for a collaborative approach to standardised and/or nationwide customer research to inform company business plans and our determinations?

Q6.2: Do you have any suggestions for how we best implement the collaborative approach to customer research for the price review?

Q6.3: Are there aspects of negotiated settlements that could be reflected in our price review framework?

Q6.4: What are your views on our proposals for customer challenge of business plans and assurance of customer engagement?

Q6.5: What are your views on whether we should develop minimum standards or provide guidance in other areas?

Q6.6: How well does our proposed approach to customer engagement take appropriate account of the different regulatory frameworks in England and Wales?

7. Planning together for PR24

The price review does not happen in isolation. It needs to align with the work of other organisations involved in the water sector, including the other regulators, Welsh and UK governments, CCW and other groups with an interest in water. We need to pull together across the sector and work effectively to deliver a price review that serves customers, communities and the environment well. And the companies need to ensure that they are engaging effectively with these organisations to ensure coherence across the sector.

This chapter discusses how we and water companies can work in partnership with other organisations to help deliver PR24. It outlines:

- our thoughts on how to ensure water companies can most effectively engage with the strategic planning frameworks to enable them to **bring their strategic plans together and reflect them in business plans**;
- the **role we expect water companies to take engaging with other regulators**, and how we will seek input from other regulators before and after the submission of companies' plans; and
- that we are considering whether there could be a role for a **'PR24 Challenge Panel'** to inform the price review process.

7.1 PR24 in the context of other strategic planning frameworks

The price review interacts with an increasing number of other strategic planning frameworks, which water companies need to reflect in their business plans. Table 7.1 sets out the **strategic planning frameworks** we consider key for the development of the price review. These frameworks need to work together. Importantly, customers need to fund – where appropriate with co-funders – the activities outlined in these plans. So the plans need to consider the most efficient delivery routes taking account of the needs and preferences of customers, communities and the environment, including affordability, both now and in the future. Many of the stakeholders involved, including local stakeholders such as local authorities, mayors and local environmental groups, are common across the strategic plans and so it is vital for companies to actively manage engagement with these stakeholders as part of this process.

Table 7.1 Strategic planning frameworks

Name	Jurisdiction	Led by	Length (years)	
			Round	Plan
Water resources management plans (WRMP)	England and Wales	Companies	5	25
Regional water resource plans (RWRP)	England	Companies	5	25
River basin management plan (RBMP)	England and Wales	Environment Agency / NRW	6	6-12
Flood risk management plan (FRMP)	England and Wales	Environment Agency / NRW	6	6-12
Drainage and wastewater management plan (DWMP)	England and Wales	Companies	5	25
Strategic regional water resources gated process	England	RAPID	N/A	N/A
Shoreline management plans (SMP)	England and Wales	Local councils	N/A	100
National environment plan (NEP)	Wales	NRW	5	5
Water industry national environment plan (WINEP)	England	Environment Agency	5	5

Figure 7.1 shows at a high level how these frameworks come together in England and Figure 7.2 does the same for Wales. These figures highlight a number of complex interactions between the frameworks. The picture has become more complex since PR19 with the introduction of the DWMP, the strategic water resources gated process and the increasingly regional aspects of the WRMP process in England. As we discuss in Chapter 5, we are considering how to take account of this increased complexity when considering the design of PR24, for example by reducing the number of stages in the assessment process or otherwise streamlining the process.

Figure 7.1 Interaction of strategic planning frameworks in England

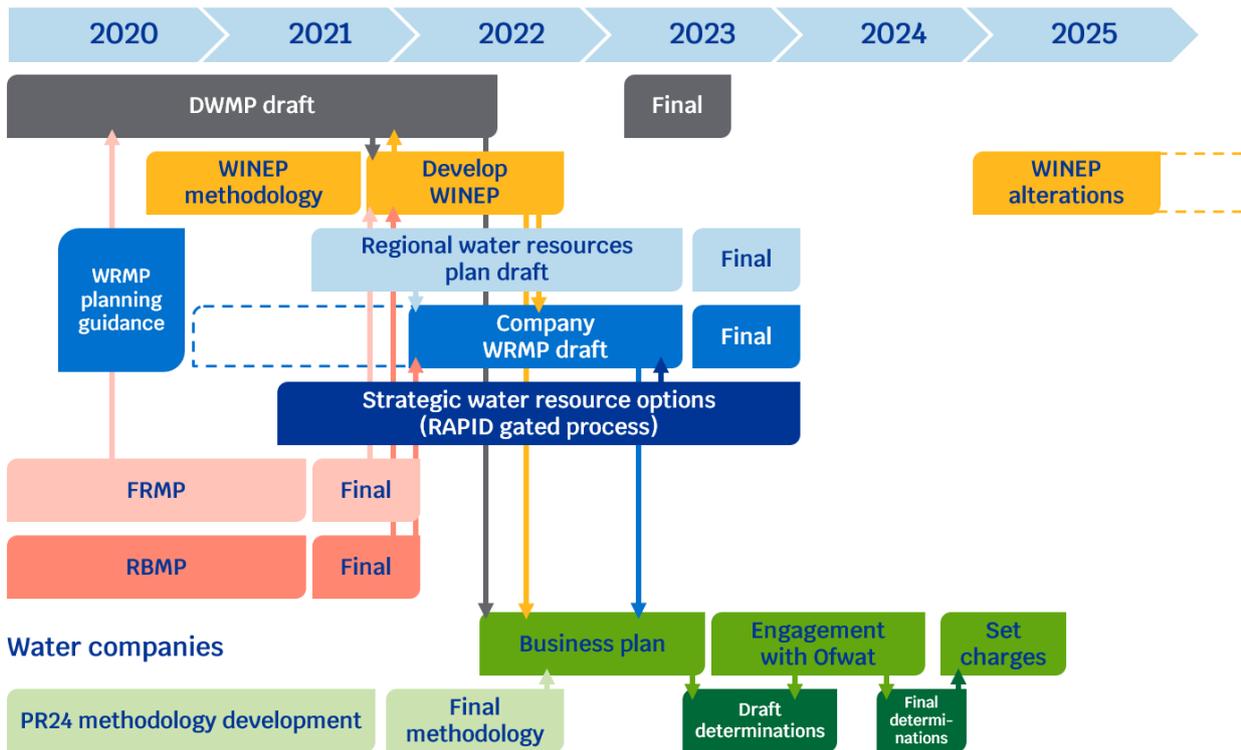
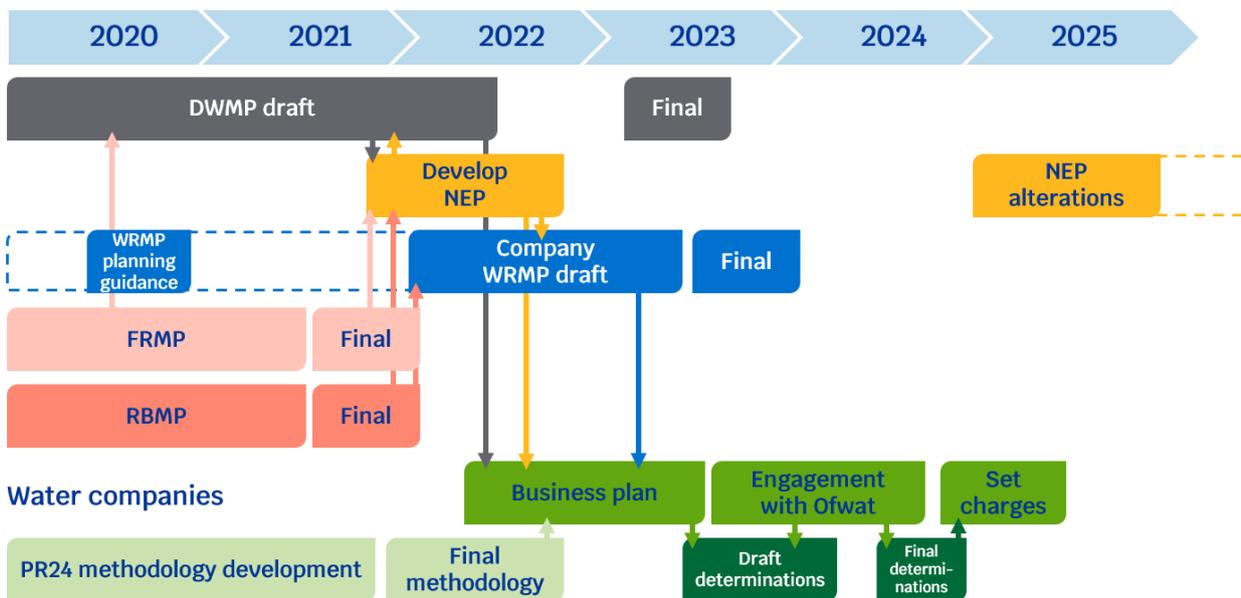


Figure 7.2 Interaction of strategic planning frameworks in Wales



As set out in Chapter 4, we want to understand how **companies' business plans bring together the outputs of all the strategic planning frameworks into a coherent long-term vision**. Their 5-year plans should be set out in that context. Companies have to take ownership of all of their strategic plans to drive the best outcomes in the long term. This

includes actively seeking to make the interactions between the strategic plans as effective as possible, firstly through the development of the strategic plans and secondly as they bring them together to inform their business plans.

We are also considering **how we can best input into the WINEP, NEP, WRMP and DWMP processes ahead of business plan submission**. Our [PR19 lessons learnt](#) identified that this is important, for example in terms of making sure there is an appropriate and continuous level of assessment and feedback at each stage of WRMP.⁹¹ We will also consider how the six year duration of RBMP (and FRMP) and consequential revised plans in 2027 should be accounted for in the design of PR24.

We are already working with other organisations to develop the **price review methodology and these other frameworks** so that they **work effectively together**. For example, we are working collaboratively with the Environment Agency, the UK government, companies and other stakeholders through the WINEP taskforce to develop the Water Industry National Environment Plan (WINEP) methodology for England. We are also engaging with Welsh stakeholders on these issues to facilitate the sharing of ideas across countries. This should make regulation more efficient and effective. As Yorkshire Water notes in its submission to the [Future Ideas Lab](#), effective alignment between regulators to ensure coherence of process and objectives is key.

In addition to these frameworks, **we are also mindful of emerging government policy and legislative change**. This includes the development of Environmental Land Management Schemes (ELMS) and the ongoing collaborative work of the Storm Overflows Taskforce, along with the measures set out in the forthcoming Environment Bill. These include, for example, proposals around developing a Local Nature Recovery Strategy that will increase the importance of collaboration with local authorities. We also expect our strategic priority statements from the UK and Welsh governments to be updated in due course, and will continue to monitor the policy landscape to ensure we take account of all relevant frameworks as PR24 is developed. And we are mindful that all of these frameworks – including the price review – will evolve together over the long term.

We will also continue to work closely with **CCW**, including on the collaborative customer research set out in Chapter 6. We will also co-ordinate with them on wider work including, for example, the affordability review. This will explore issues of customer affordability and support, including social tariff provision. It may influence Government policy and will set important context for the next price review, and for wider Ofwat work.

7.2 Input from wider sector stakeholders into PR24

We are keen to get input from a wide range of stakeholders in the price review. Water companies need to engage with their local communities, customers and environmental

⁹¹ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020, p .71.

stakeholders to inform their business plans. But we also have a role – both in engaging with our fellow regulators and in making sure customer and environmental representatives are heard throughout our process.

7.2.1 Engagement with other regulators on business plans

We need to be confident that companies' plans **fulfil their relevant statutory obligations**. It is primarily the obligation of the companies to demonstrate and provide assurance that their plans will fulfil their statutory obligations. Failure to do so would be a significant failure on the part of the company. Other regulators can help ensure that they do this, both by informing companies' development of their plans and our assessment of the business plans in relation to their statutory obligations. In addition, CCW can provide an important customer perspective.

At PR19 the Environment Agency, Natural Resources Wales, DWI and CCW were invited to provide their views on companies' plans through the customer challenge groups ('CCGs'). As discussed in Chapter 6, our approach to customer engagement is evolving and so a new approach may be needed for other regulators to feed in to the price review process.

We consider that it is the **role of the water companies to seek challenge to their plans from other regulators and stakeholders in advance of submission**. Companies need to effectively manage the development of their business plans to build this in to the process so they can submit their best business plans first time.

Nevertheless, our assessment and challenge of companies' plans will be more effective if we are joined up with other regulators and CCW. **We will therefore engage with the other regulators and CCW on how to best take account of their views on companies' business plans**. We expect to engage actively with the Environment Agency, Natural Resources Wales, DWI and Natural England. An ongoing dialogue will be needed to ensure views are properly reflected, but we anticipate this will be focused around the companies' business plan submissions. If we require early submissions of parts of the business plans, as we did for elements of costs and outcomes at PR19, engagement with other regulators at this stage could also be beneficial.

In PR19, we required CCGs to submit their reports – which included views from other regulators – alongside business plans. But feedback suggests that this hampered the groups' ability to scrutinise plans fully, since they were commenting on out of date drafts.⁹² Instead, we consider it may be helpful for us to seek views from other regulators after plans are received, but early enough to influence our assessments, as a cross check that companies' plans are compliant with their statutory obligations.

⁹² Ofwat, '[PR24 and beyond: Reflecting customer preferences in future price reviews – a discussion paper](#)', December 2020, p. 21.

We will ultimately assess companies' business plans independently of other regulators. Other regulators assess different aspects of companies' performance, holding companies to account on matters according to their functions and duties, and so may make different assessments. As discussed in '[PR24 and beyond: our reflections on lessons learnt from PR19](#)', we recognise the importance of communicating why views differ.

7.2.2 RAPID

In addition to the roles we and companies have in engaging with other regulators through PR24 described above, we will continue to work collaboratively with the Environment Agency and the DWI through RAPID. The goal of RAPID is to help accelerate the development of new water infrastructure and design future regulatory frameworks. It is intended to provide a seamless regulatory interface, working with the industry to promote the development of national water resources infrastructure that is in the best interests of water users and the environment.

7.2.3 PR24 Challenge Panel

We are also considering creating a panel to inform the price review process. This panel, with the working title 'PR24 Challenge Panel', could help ensure that customer and environmental representatives are heard, and to help us understand how well company business plans reflect the interests of customers, communities and the environment. This would enable us to tap into a broader range of expertise and better challenge the quality of companies' business plans. We welcome views on how best to involve such a challenge panel in the price review process.

7.3 Next steps

We will continue to work collaboratively with stakeholders across the sector, for example through RAPID, work with the Environment Agency and others on WRMP and DWMP and the co-development of the WINEP methodology through the WINEP taskforce.

We welcome views from stakeholders on whether we have captured here all of the key interactions between the price review, strategic planning frameworks, and other partner organisations. We also welcome views on what more companies should do to bring the outputs of the strategic planning frameworks together, especially in the long term. We are also interested in different perspectives on how we could work best with other regulators, governments and CCW to ensure that our price review delivers for customers, communities and the environment.

7.4 Questions for stakeholders

Q7.1: How can we ensure that companies bring together the outputs of the strategic planning frameworks in the most coherent and effective way for business plans?

Q7.2: What are your views of our thinking on our and companies' roles in engaging with other regulators between business plan submission and our issuing of the final determinations?

Q7.3: How could we best involve a 'PR24 Challenge Panel' in the price review process to help ensure that our decisions best reflect the interests of customers, communities and the environment?

8. Design and implementation of price controls

This chapter sets out our proposals for:

- our general approach to the design and implementation of price controls;
- how we could improve the way we regulate water resources, bioresources, residential retail and business retail activities; and
- regulating activities that span multiple price control activities, that is, major infrastructure projects and reconciling the PR24 price controls.

For PR24, we are proposing to:

- **retain separate controls to enable targeted, pro-market regulation where appropriate** – the broad structure of the price controls (for example, in terms of the number and duration of price controls) will stay the same as PR19; and
- **make a number of improvements to the implementation of these controls**, for example in terms of reviewing the allocation of costs and undertaking other measures specific to each price control to promote markets.

8.1 Our approach

Figure 8.1 Water and wastewater activities



The water sector encompasses a range of activities – from abstracting, treating and transporting water; providing retail services (such as billing and debt collection); to taking away, treating and disposing of wastewater and sludge. These activities are shown in Figure 8.1. These activities are diverse in a number of ways, for example, in terms of their capital intensity, the scope for using alternative regulatory mechanisms (such as markets) and how they could contribute to our ambitions for the sector.

The diversity of water companies' activities creates both challenges and opportunities for the way we set companies' price controls – that is, the way we determine the upper limit on water companies' revenue.

Our approach to the design and implementation of price controls is to deliver better outcomes for customers, communities and the environment by:

- enabling targeted and proportionate regulation for different activities;
- shining a light on, and enabling better comparison, of companies' costs so that the sector can become more efficient; and
- supporting alternative forms of delivery, such as markets, to drive innovation, resilience and the identification and implementation of alternative approaches.

8.2 Our proposals regarding specific parts of the value chain

8.2.1 Water resources

The provision of water resources is a vital element of the value chain for public water supply, encompassing the identification and abstraction of sources of raw water and its input into the raw water distribution system.

At PR19, in addition to creating a separate price control for water resources, we reinforced the bidding market, requiring companies to be transparent in publishing water resources market information and assessing bids by third parties to help meet or manage future demand for water. We also maintained financial incentives to support the trading of water between companies when in customers' best interests.

Water resources are coming under increasing pressure from population growth and climate change, while also trying to increase supply resilience for customers and reducing abstraction from the water environment. At PR19, we were disappointed that business plans and water resources management plans (WRMPs) were still highly dependent on supply-based solutions designed to serve individual company areas, rather than developing integrated approaches to secure efficient long-term resilience of the region.⁹³

To address the growing sense of urgency, in 2018 we, together with the Environment Agency and DWI, established RAPID to accelerate the development of new strategic water infrastructure and facilitate this through improvements to the regulatory framework. We proactively allowed £470 million of additional development funding to encourage collaboration between companies in delivering strategic water resource solutions for the future, contingent on passing specific investment gateways.⁹⁴

⁹³ More details on our views can be found in our [response document to draft WRMPs](#).

⁹⁴ See the PR19 [strategic regional water resource solutions appendix](#) for further information on how we developed the gated funding process.

We expect to see a greater level of ambition from companies in the way customers' needs for new water resources can be met in an environmentally sustainable way, while still providing good value. This should include actively considering a wide range of options both from within their own proposals and other sources, such as trades with neighbouring companies and third parties.

At PR19 we introduced a separate price control for water resources to improve management focus on the relevant components of the value chain, reduce the potential for cross-subsidisation, and facilitate the development of markets. We continue to consider that the reasons for a separate control remain valid. For PR24 we propose to:

- **Review the structure and boundary definition of the water resources control.** The current approach may still be limiting whether companies view relevant components of the value chain as a separate business with commercial opportunities to improve efficiency. This is because there may be cross-functional assets, and inconsistent allocation of the costs of these to different controls will impair the accuracy of our cost modelling. And this in turn limits our ability to set well-targeted incentives for water resources activities. For example some assets used for the abstraction of raw water, such as borehole pumps, also perform raw water transport or water treatment activities. These activities and costs would then fall under the 'water network plus' control.

We propose to work with industry to: i) ensure costs are being allocated consistently across the current water resource and water network plus controls; and, ii) examine the boundary of the water resources control to identify whether this should be extended to include:

- Raw water distribution assets - this would resolve a sizeable proportion of the overlap of cross-functional assets and costs (for example from pumping costs), with relatively little change to companies' RCV allocation; and
- Water treatment - in effect creating a 'control for sourcing treated water' which could lead to a more sensible long-term allocation, given the dependency of the costs of treating water on the initial water resource assets. This allocation would also resolve the remaining asset cost control overlap from borehole pumps and was successfully modelled separately in the PR19 cost benchmarking exercise as 'water resources plus'. This is shown in Figure 8.2.

Figure 8.2 The activities within the potential 'treated water' control



We set out further detail of our assessment of the structure and boundary of the water resources control in [an appendix](#). Extending the boundary of the water resources control may, depending on the additional activities included, require a licence modification.

- **Promote regional and national solutions to help unlock best value for customers and the environment.** We expect companies to investigate regional supply and demand-side options. We will continue to work with regional water resources groups and, working with the other regulators, will closely monitor their impact over the coming years. Complementing this consultation, RAPID will be publishing a consultation on the regulatory and commercial framework, focusing on arrangements for multi-party, multi-sector schemes, shortly. We will consider the findings of RAPID's ongoing work which explores the risks and benefits of incentivising the co-ordinated planning, development, and operation of strategic water resources assets, and how they could be implemented.
- **Review the prospect for bilateral markets⁹⁵ before PR29, but we do not anticipate it will come into effect during the next price review period.** After consulting stakeholders⁹⁶ we have concluded that interest in bilateral markets is currently limited. In PR24 we intend to prioritise work likely to yield the best outcomes for customers. We are likely to retain the other mechanisms that we have put in place to promote water resource markets as well as retaining water trading incentives. Our expectation is that the industry should take the initiative to recognise where markets can deliver the best outcomes for their customers and then use them accordingly. For example, other forms of bilateral trades are emerging at a catchment level for non-public water supply purposes.
- **Consider RAPID's review of issues around contracting and trading bulk supplies of water.** RAPID will set out how it will work with stakeholders to address issues such as firmness of contracted supply, pricing, contracting issues, and work on water quality. These issues will also be relevant for smaller, less strategic trades covered by the price control incentives.
- **Consider additional interventions if water companies show insufficient ambition to developing water resources.** This could, for example, include a mechanism that requires water companies to fund the development costs of third parties to ensure an appropriately broad range of options are being considered, and not excluded due to a lack of information or feasibility activity. We will consider how we can hold water companies to account for their engagement and intend to undertake a review of how they have engaged with market options.

⁹⁵ Bilateral markets is the term for the proposed market model that would see third parties trade water resources directly with retailers in the business market (usually using an incumbent water companies' network to treat and transport the water).

⁹⁶ See [Bilateral markets – call for information](#).

8.2.2 Bioresources

Bioresources (or sewage sludge) are the semi-solid by-products of wastewater treatment. With the right conditions, a market for bioresources will help the sector to meet its potential to create economic and environmental value by enabling and incentivising:

- technological changes making treatment more cost effective and enabling greater generation of renewable energy;
- economies of scale;
- inter-company optimisation – such as through trading or development of joint capacity; and
- co-digestion of sludge with other organic waste.

Achieving this potential will play an important part in meeting the UK and Welsh governments' ambition of net zero emissions by 2050.

Since 2018, we have required companies to produce information related to i) [market information](#), and ii) [market monitoring](#) and at PR19 we introduced a separate price control for bioresources in the form of an indexed 'modified-average revenue' control⁹⁷.

After identifying potential issues with the operation of the bioresources market, we launched our 'Review of the bioresources market' on 19 October 2020. We are publishing our draft findings and the details of our proposals in [a separate consultation document](#).⁹⁸ In summary, although there seems to be a reasonable degree of competition for sludge transport and disposal, we have found that there are a number of barriers preventing the market from reaching its potential. Some of these barriers are caused by the way we regulate.

We propose to:

- **Establish bidding market arrangements.** At PR19, companies produced Bid Assessment Frameworks for activities related to water to ensure clear, objective and non-discriminatory consideration of third party bids when tendering for significant work. We consider there is merit in companies producing a similar framework which is tailored to the bioresources market.
- **Undertake better targeted cost assessment.** An efficiency challenge tailored to the bioresources control will help to drive efficiency. To achieve this, we need to ensure that companies have allocated their costs appropriately. We have already issued guidance to companies to improve cost allocation in relation to [sludge liquors](#) and will separately

⁹⁷ A proportion of bioresources allowed revenues are fixed and a proportion varies with actual sludge production.

⁹⁸ We are also publishing [Jacobs' bioresources market review report](#). We also acknowledge useful contributions by stakeholders to our review, including i) United Utilities' report, '[A review of options for market participation in bioresources](#)' which was submitted to our [Future Ideas Lab](#), and ii) [Anglian Water's letter](#).

consult on changes to the allocation of overheads. We will also shortly consult on methods to improve the allocation of energy costs and revenues in bioresources.

- **Consider changing the basis of our cost challenge so that it is based on average revenue requirement rather than expenditure.** An average revenue control would come closer to a ‘gate price’⁹⁹ type of approach which is how waste is frequently charged for in the wider waste sector. In addition, an econometric-based approach to benchmarking companies’ average revenue requirements would introduce comparative competition on a wider set of costs than just base costs. This approach would also address any in-house bias (i.e. a preference of companies to develop their own in-house solutions that might attract RCV, rather other more innovative approaches), because in-house investment and long-term contracts would be included within the same assessment.

Under this approach, there could be a risk of stranding assets. We would consider how best to reduce the risk of asset stranding if it would be in customers’ interests. This could be through, for example, setting an appropriate level of cost challenge, using glidepaths and/or regulatory protection where companies have appropriate innovative, pro-market plans. In any case, our approach would take account of the different degree of regulatory protection that we committed to in PR19 for [pre-2020 RCV](#) and [investment after that date](#).

- **Encourage greater sector collaboration.** We expect water companies to work together to address common issues where appropriate. This could be, for example, by providing additional information to support the market, introducing standardised measures of sludge quality and considering regional collaboration.
- **Improve information remedies.** We recently published an [amended direction](#) which requires companies to publish improved information to support the bioresources market and provide us with additional information to monitor the development of the market. Companies are required to provide this information at least annually.
- **Ensure more joined-up, pro-market outcomes.** We will look to ensure that company performance commitments related to bioresources at PR24 are more joined-up with our long term plans for the market and do not have unintended consequences for market development.

Our review also identified that there were barriers that are not to do with how we regulate. We will continue to work with environmental regulators and other stakeholders to ensure environmental regulation or other barriers are addressed as appropriate.

⁹⁹ Also known as a ‘gate fee’. Gate fees are the charges for providing a range of waste treatment, recovery and disposal services. For other organic waste it is commonly expressed on a per tonne basis.

8.2.3 Developer services

Developer services in the water sector are subject to competition. When a developer requires new water and/or wastewater connections to a new development site, they can request the incumbent water company or a new appointee (NAV) to provide the necessary infrastructure and service the site. Alternatively, developers may choose a contractor to provide the necessary pipework and related services, which is known as self-lay provision. However, not all developer services activities in the water sector are contestable and so elements of the work must be provided by the local incumbent water company. In addition, while there is significant market penetration from self-lay providers and NAVs in some company areas, many developers continue to rely on their local incumbent company for the provision of developer services. Consequently, developer service activities of incumbent water companies are still subject to price control regulation.

In PR19 we included developer services costs in our base (or on-going) expenditure allowances and introduced a new customer service incentive – D-MeX – to further encourage incumbent companies to provide developers with a good level of customer service. We also committed to adjust revenues at PR24 to reflect differences between forecast and outturn numbers of new connections.

We have recently published a [consultation on developer services charges and incentives in England](#). In this document, we propose to retain the existing developer services contribution to network reinforcement as well as on-site connection costs but, from April 2025, to remove the balance of charges rule and the ability to offer income offset that reduced developers' contribution to costs to take account of the revenue that the water companies would receive from future customers in the new premises.

We commissioned consultants CEPA to undertake a review of the developer services market and the appropriate approach to the regulation of developer services for PR24 and beyond. CEPA finds that:

- there is evidence that the level of competition in developer services is increasing and there may be ways in which competition can be enhanced further; and
- some stakeholders raised concerns about the way cost allowances were calculated in PR19 and CEPA consider that incremental improvements to the approach could be made.

CEPA presents two main options for the regulation of developer services for PR24:

- **An adaptation of the current regulatory approach**, where all developer services continue to be included within the network-plus price control, but improving the approach to cost assessment and reconciliations, potentially with a view to a further transition towards more separate regulation or deregulation of developer services at future price controls. The focus would be on cost assessment improvements, which

could be enabled through enhanced data collection, and/or improvements to the design of the regulatory framework.

- **A more fundamental change in the approach to regulating developer services at PR24 that would be more reliant on ‘backstop’ regulation** of contestable developer services, akin to Ofgem’s approach to regulating electricity new connections. Under this option, contestable developer services (assumed to be site specific work) would be excluded from the network-plus price controls but would initially be subject to a capped regulated margin. Non-contestable work (i.e., network reinforcement) would be expected to remain within the scope of the separate water and wastewater network plus price controls. This would require a licence modification.

To help inform the decision on which option to take forward for PR24, CEPA recommends that Ofwat should undertake the following steps:

- **Introduce more prescriptive developer services cost allocation guidance.** Existing guidance for cost allocation between developer services and other wholesale activities is primarily principle based. We will consider introducing more prescriptive guidance for PR24 to ensure that incumbents are allocating costs to developer services consistently and accurately. This may inform the practicality of excluding certain contestable developer services from the wholesale network plus price controls and/or help to support the evolution of the treatment of developer services within the cost assessment at PR24. While this may add to the regulatory burden in the short term, it could lead to substantial benefits in the long-term, such as more accurate ‘cost reflective’ charges that provide better market price signals.
- **Enhanced collection and use of developer services data**, which would enable Ofwat to conduct a more comprehensive ‘state of the market’ review. This could encompass collecting data on costs, revenues and information on market penetration of other companies that provide developer services: self-lay providers and new appointment and variations¹⁰⁰. This may provide more confidence that an option that relies more on competition can be justified. The improvements in data availability will also help the refinement to existing uncertainty mechanisms within the price control, e.g., the Developer Services Revenue Adjustment, and/or support the evolution of the cost assessment at PR24.

We are considering CEPA’s recommendations and are interested in views. We are also continuing to consider whether a separate control for contestable (site specific) developer services would be beneficial and would also welcome views on this. We are taking forward

¹⁰⁰ New appointments and variations (NAVs) are limited companies which provide a water and/or sewerage service to customers in an area which was previously provided by the incumbent monopoly provider. A new appointment is made when a limited company is appointed by Ofwat to provide water and/or sewerage services for a specific geographic area. A new appointee has the same duties and responsibilities as the previous statutory water company. A variation is where existing appointees ask Ofwat to vary their appointments to change the areas they provide services to.

CEPA's suggestions on additional data collection to better inform the decision on which approach to take forward for PR24.

8.2.4 Residential retail

At PR19 we set an average revenue control for residential retail. This was based on a single customer band with no automatic indexation of allowed revenue. We consider that our approach at PR19 worked well and remains broadly appropriate. However, this approach could be refined to further increase the benefits to customers, make our cost assessment more robust and our implementation simpler still.

We set out proposals to refine our approach to cost assessment for residential retail in Chapter 10. In addition to this, we are considering:

- **Simplifying the future reconciliation** so that it directly targets allowed revenue, rather than requiring customer numbers to be reforecast. This would incentivise companies to collect the right revenue, whilst reducing complexity and being more consistent with our reconciliation of other controls.

8.2.5 Business retail for Welsh companies

In 2017, only non-household water customers of Welsh water companies consuming at least 50Ml per year remained eligible to switch their supplier, while the business retail market was opened for competition to all non-household water and wastewater customers of English water companies. At PR19 we set a gross margin cap for customers who are able to switch their supplier and for all other customers we used a retail cost to serve and net margin approach.

We will tailor the design of the business retail controls at PR24 to the specific circumstances in Wales, as all of the incumbent water companies in England have now chosen to exit the market and the acquiring retailers' charges are regulated by the Retail Exit Code. We consider that our approach can be made simpler, more consistent and more transparent. We are considering:

- **Simplifying the control and make it more uniform.** For all customers who are not eligible to switch their supplier, we will continue to set determinations based on the retail cost to serve and net margin approach and will express this as a single modification factor like in residential retail.

- **Maintaining our approach for the largest water customers, who are able to switch their supplier.**¹⁰¹ We would maintain the gross margin cap approach from PR19 and will consider aligning this with any future changes made to the Retail Exit Code. Where a change in switching eligibility requirements means some customers within this group are no longer able to switch, we would apply the approach detailed in the above paragraph.
- **Retaining the PR19 cost assessment approach for business retail.** We would use deep dives to assess companies' submitted costs, using appropriate comparators to determine efficiency.
- **Reconciling business retail controls using the same approach as residential retail.**

8.3 Our proposals spanning multiple parts of the value chain

8.3.1 Major projects

Meeting the future needs of customers and the environment relies on the delivery of significant infrastructure projects. It is important that these investments, often characterised by high costs or complexity, are efficiently procured and delivered. We support delivery routes for these investments alongside the wholesale price controls to ensure that major projects are, where appropriate, competitively procured.

Under The Water Industry (Specified Infrastructure Projects) (English Undertakers) Regulations 2013 (SIPR), assets of a size or complexity that threatens an English water company's ability to provide services for its customers, such as the Thames Tideway Tunnel. The specification of a project is under this competitive process that results in the award of a project licence is at the discretion of Ofwat or Defra.

At PR19 we introduced Direct Procurement for Customers (DPC), setting our expectation that companies should consider direct procurement via competitive tender for all discrete large-scale projects. The Havant Thicket reservoir, while potentially suitable for delivery through DPC, was delivered at PR19 through a separate 10-year price control as at this time the DPC process was in its early stage of development and there were urgent asset delivery timescales.

While we are in the early stage of implementing the DPC process, we are considering several ways to better support the delivery including:

¹⁰¹ Our intention is that this approach applies to customers who are able to switch their supplier. Price controls will apply to all customers who are not able to switch their supplier, including in the event that switching eligibility requirements change.

- **Enhance our long-term view of major projects.** As set out in Chapter 4, we are asking companies to increase their focus on the long term. A pipeline of upcoming investments will support the development of markets by providing a transparent, long-term view of opportunities to investors. Major projects are identified through the statutory processes such as WRMP, DWMP and WINEP and companies' own processes. Outside of the DPC process, funding for major projects is typically only agreed during the price review process. In this process companies typically focus on investments required over the five years of the review period in question. This limits visibility and may not allow for sufficient analysis to support efficient procurement. It also limits the time available for the assessment of needs, options and cost efficiency with due consideration of future uncertainties within long-term investment plans. We established RAPID in response to a lack of regional and national frameworks for water resources planning. We intend to keep under review the need to more actively manage a projects pipeline that may include allowing major projects to be brought forward and funding agreed at any time.
- **Improve incentives to incumbents to engage with DPC.** We expect companies to consider using DPC for suitable projects when it could offer better value for customers but have seen relatively few projects brought forward to-date. Given the vital role that companies play in proposing and procuring suitable projects, we must ensure they are sufficiently incentivised to engage with the process. We intend to work with industry to identify appropriate incentives including allowing companies to retain a share of any outperformance from DPC contracts, through delivery, operational or risk-sharing incentives. We will also consider whether conflicts of interest in the tender process could be sufficiently mitigated to allow incumbents to submit competing bids fairly, and whether the benefits of having another bidder outweigh any disadvantages of such arrangements.
- **Reduce transaction costs through standardisation.** As the DPC process matures, we expect the cost of bidding to fall, with bidders becoming increasingly familiar with the process and carrying learnings from one tender into another. However, we believe that more can be done to help familiarise bidders between tenders. We intend to look for opportunities to standardise the procurement process. However, these opportunities in the water sector may be more limited than other sectors given the wide variety of asset types eligible for DPC. We intend to work with industry, in coordination with the RAPID working group on standardisation, to understand where we may be able to harmonise procurement frameworks between companies, such as payment terms and approaches to risk management and apportionment, to help reduce the administrative cost of bidding and procurement.
- **Investigate the further award of project licences.** We intend to explore if it is possible, for some projects, to award a project licence under the SIPR model. This allows the Infrastructure Provider to be directly regulated by Ofwat, which might offer greater benefits than the current DPC model, where the project is delivered by a competitively-appointed provider managed by the procuring water company. Under the SIPR legislation,

the award of project licences is currently restricted to “assets of a size or complexity that threatens the incumbent’s ability to provide services for its customers”. We are also considering whether our current guidance on the eligibility of DPC schemes based on their monetary value can be improved.

- **Enhance our assessment of major projects.** In our [PR19 lessons learnt](#), we highlighted the need to improve our coverage of cost benchmarking models. This is particularly so for major projects due to their materiality and potential impact on services. We may develop our cost benchmarking by making better use of data from company submissions, using out-turn costs from incumbent companies and industry databases, and by drawing on expert consultants. Building on PR19, it is important that our assessment of ‘best value’ projects appropriately values social and environmental benefits. This issue is set out in more detail in Chapter 10.
- **Treatment of shared assets, risk and outcomes.** The ongoing work of RAPID and regional planning bodies may lead to the delivery of more integrated solutions developed at a regional or local level. For example, this may include ‘regionally optimal’ water resource solutions with shared assets or flood alleviation schemes delivered through partnership working. Therefore, delivery routes for multi-party assets, with appropriately allocated risks and accountability for delivering outcomes, will need to be developed to ensure customers only pay for their share. We welcome RAPID’s ongoing work with industry to identify appropriate delivery models for new infrastructure and will closely monitor the outcome.

8.3.2 Future reconciliations

Amendments are made to companies’ allowed revenues through a ‘reconciliation’ process. The way we implement our reconciliations is an important part of how we provide the right incentives for companies and ensure risk is allocated appropriately.

We introduced more reconciliations at PR19. This delivers more benefits to customers but also more complexity. Our aim at PR24 is to refine our approach to maintain the benefits to customers whilst making our approach as clear and simple as possible.

We are considering:

- **Reviewing the balance of annual and end-of-period reconciliations.**
- **Producing a ‘reconciliation rulebook’ for our PR24 reconciliations.** Previous rulebooks have helped to make the implementation of our reconciliations clearer.

- **Ensuring the number of reconciliations is proportionate.** For example, if we do not anticipate the bilateral market for water coming into effect before PR29 then we will discontinue the bilateral entry adjustment reconciliation.
- **Simplifying and standardising reconciliations.** As described elsewhere in this chapter, we have specific proposals for this in relation to reconciliation of the future residential retail and business retail controls. We will keep under review how we apply this principle to other areas.
- **Consolidating reconciliation models.** We will keep under review whether to consolidate our reconciliation models and incorporate them into the financial model.

8.4 Questions for stakeholders

Q8.1: Do you agree with, or have any comments on, our general approach to the design and implementation of controls, i.e. to retain separate controls with the same broad structure as at PR19, but with improvements to our implementation?

Q8.2: Do you agree with, or have any comments on, our proposals for specific parts of the value chain, i.e. for water resources, developer services, residential retail and business retail in Wales?

Please note that specific questions related to a) the structure and boundary definition of the water resources control are set out in [a separate appendix](#); and b) our review of the bioresources market are set out in a separate [consultation document](#).

Q8.3: Do you agree with, or have any comments on, our proposals spanning multiple parts of the value chain, i.e. for major projects and future reconciliations?

9. Outcomes

9.1 Introduction

Our outcomes framework aims to focus companies on delivering the things that really matter to customers and the environment. It specifies: how we will measure progress towards outcomes (these metrics are called performance commitments); the standards they should reach (performance commitment levels); and the incentives associated with out- or under-performing (outcome delivery incentives). We set all of these to align with what customers want and need, taking account of evidence of customers' preferences.

As set out in Chapter 3, we have signalled our **continued commitment to using an outcomes-based approach**. However, our [PR19 lessons learnt](#) indicated that there may be aspects of it that could be **streamlined**.¹⁰² At the same time, there may be merit in extending it to further increase the focus on improving the **environment and on the long term**.

This chapter considers how we can best do that. It looks at what performance commitments we should have, how performance commitment levels should be set, and how the incentive rates could be set. It considers a number of potential changes.

- Should we **reduce the number of performance commitments** by focusing them on incentivising the delivery of outcomes of enduring interest to customers. These may mostly be common across companies, with far fewer bespoke performance commitments than in PR19.
- Be clearer how **our expectations of service levels are consistent with the costs that we allow**. We could, for example, consider what performance commitment levels could be achieved given base costs in advance of the price review and then work with companies to consider any changes to tie in with their long-term ambitions or to match the immediate needs of local communities.
- **Simplify our approach to setting incentive rates**, and remove the formulaic use of marginal cost estimates. As with performance commitment levels, we could publish our initial views on appropriate incentive rates ahead of business plan submission.

9.2 Setting performance commitments

As part of our aim to streamline where appropriate, we are considering whether we should limit the number of performance commitments (PCs). In PR19 there were 675 PCs across the

¹⁰² Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#),' December 2020.

industry and up to 56 per company. Up to 15 PCs were common across the companies, but most were bespoke to each individual company.

The large number of PCs may, in part, reflect that performance commitments fulfilled a number of different functions. The intent of the outcomes regime in PR14 was to provide a description of what water companies would deliver in their regulatory settlement. It was also intended as a tool to explain to customers what to expect from their water companies – which means that customers need to understand it. And the resultant financial and reputational incentives helped to align the interests of companies and customers.

By focusing on outcomes, not outputs, companies have the flexibility to decide how best to provide benefits to customers. But it is difficult to set performance measures that capture all aspects of short and long term outcomes. So we also included some output measures to help us to hold companies to account. For example, in some cases the statutory schemes to meet environmental standards were specified as specific asset improvements, rather than the desired outcome of the investment. In these cases we have required these specific outputs to be delivered. Other examples included interconnection or metering schemes. Interconnections can increase resilience in a range of ways for customers and so are hard to tie to specific outcomes. Metering will help reduce per capita consumption (PCC), but the full benefits will not be delivered in the five year period. In both of these cases we set output measures to protect customers. Similarly asset health is not a pure outcome, but focuses on the ability of assets to continue to perform the company's functions for the benefit of customers, the environment and wider society now and in the future.

Companies have also said the large number of PCs impeded their intended purposes. In particular, it diluted their incentive properties within the five year period. A large number of PCs may also not be effective in communicating with customers. Our [PR19 lessons learnt](#) exercise said that most companies favoured placing a limit on the number of bespoke PCs a company can have and/or making some of the 'most common' bespoke PCs into common PCs.¹⁰³ As discussed in our [PR19 lessons learnt](#) and our forthcoming PR14 review, bespoke PCs are more challenging to benchmark. As set out in Chapter 3 we want to extend our use of benchmarking.

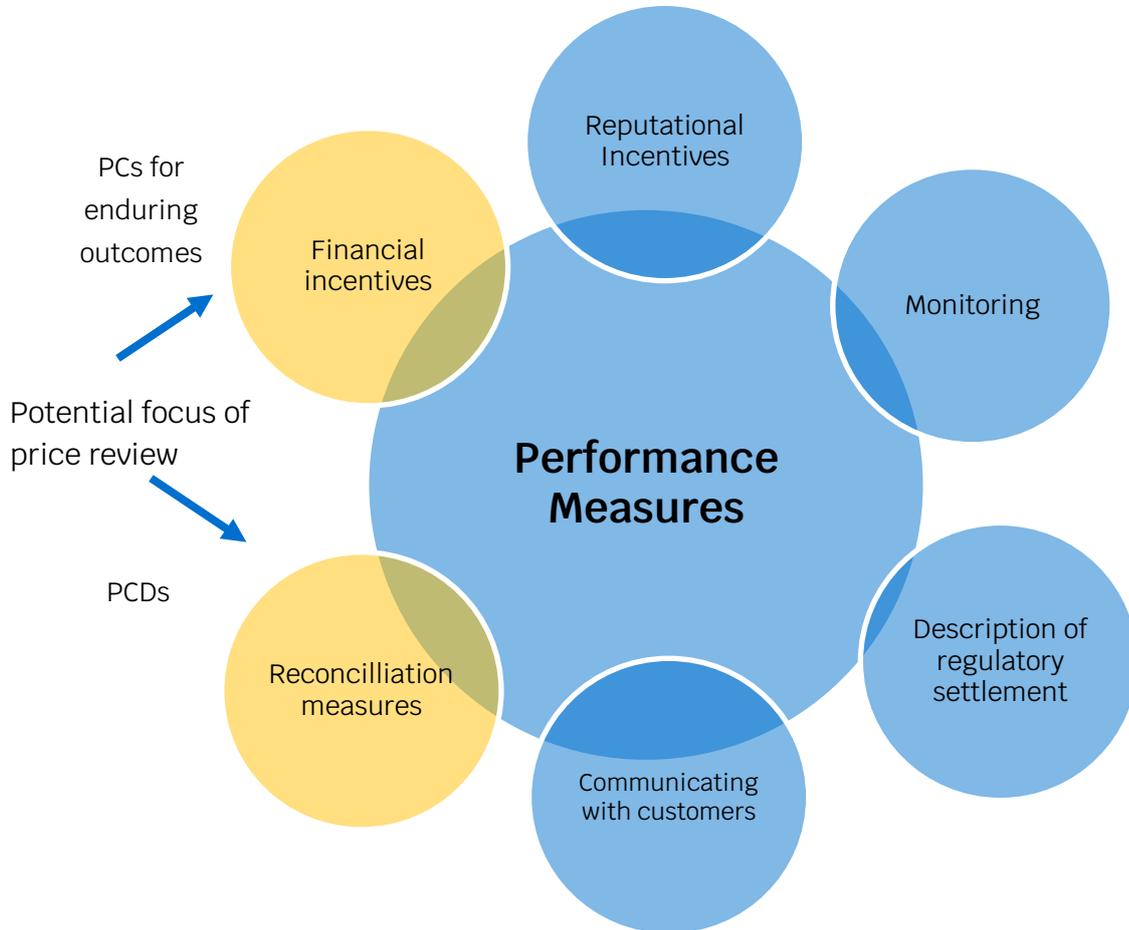
As we explain below, we are considering whether:

- PCs could focus on providing financial incentives for a select number of **outcomes of enduring interest to customers**, most of which will be common across companies.
- To aid clarity, funding or reconciliation mechanisms could be retitled **Price Control Deliverables**.
- Both companies and we could do **more outside the price review**. For example, reputational incentives may be as effective if set outside the price control as if they are defined within it, and doing so could allow greater flexibility and focus.

¹⁰³ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#),' December 2020, p. 56.

We will build on discussions with the sector through the Outcomes Working Group, to consider what PCs would be suitable for PR24 and beyond.

Figure 9.1 Potential functions of performance measures



9.2.1 The price control could focus on financially incentivising long-term outcomes

We are considering whether PCs could be focused on providing financial incentives for a select number of outcomes that will continue to matter to customers.

Focusing on a smaller number of outcomes, with potentially larger incentives, may increase management focus on these areas. If these are issues that are of enduring interest to customers it could also help to increase companies' focus on the long term. This is because companies may have greater confidence that they will be recompensed for investments that meet these outcomes, even if the exact definition of performance commitments may change.

We recognise that there will be important issues that may be shorter-lived priorities, or priorities that are lower value but nonetheless important. We would need to consider whether

these could be driven forward outside the price control, for example through the use of key performance measures, or encouraging dialogue with local communities, or through other means.

- We see the enduring outcomes falling into three categories. **Customers receiving excellent service everyday**: These provide a direct benefit to consumers, such as reliability of water supply, preventing sewer flooding and providing great customer service.
- **Environmental outcomes**: These include outcomes that help protect the environment, such as encouraging water efficiency or enhancements to the environment where these are delivered as part of core water company services. This could include measuring greenhouse gas emissions.
- **Asset health and operational resilience**: These track the company's ability to continue to perform its functions for the benefit of customers, the environment and wider society now and in the future.

We recognise that clear statutory standards already exist for the quality of drinking water and environmental protection. These are enforced by the Drinking Water Inspectorate (DWI), Environment Agency and Natural Resources Wales. But financial incentives through PR24 may still be required to align the interests of companies and customers. We will work with other regulators in identifying and setting PCs for areas for which they have enforcement powers.

We also recognise asset health is not necessarily a direct outcome for customers, but focuses on the ability of assets to continue to perform the company's functions for the benefit of customers, the environment and wider society now and in the future. Customers are paying companies to maintain a level of asset health to reduce risks of service failure and it is important that companies are held to account to deliver this. However, the impact of asset health on service may only become apparent in the longer term. Most asset health metrics are themselves based on measuring when assets fail, which can be some time after asset health has actually deteriorated. So our asset health metrics may themselves only detect changes in asset health after a number of years. Our incentives therefore rely on companies being concerned about their returns in future periods.

As set out in Chapter 4, we have concerns about the extent to which companies are sufficiently focused on the long term and the steps we are considering to address this. We are also already working with the sector to consider how we can develop better operational resilience and asset health metrics. We could revise the asset health PCs that we use or ask companies to report additional metrics to give a fuller picture and aid cross-company comparisons. We consider asset health and operational resilience further in Chapter 10.

Many of the outcomes in these three categories will be common to all, or at least a subset of, companies, rather than unique to a particular company. To increase our ability to

benchmark, and to aid simplicity, we consider that the PCs that measure these outcomes should likewise be common.

We expect there would be **fewer company-specific PCs**. Bespoke performance commitments may still have a place to address the specific views of a particular company's customers or unique circumstances of local communities. A clear example is SES Water, which has a unique statutory duty to soften water which is covered by a bespoke PC that we would expect to continue in some form over multiple price controls. Bespoke PCs could play a role under a simplified 'negotiated settlement' process to agree small, specific aspects of company plans that we discuss in [customer engagement chapter]. But many of the bespoke PCs in PR19 would be covered under the common outcomes discussed above. Others could be reclassified as 'price control deliverables' or could be agreed with customers and stakeholders outside the price control.

9.2.2 Funding mechanisms could be distinguished from PCs

We aim to specify outcomes, rather than outputs, as far as possible. We are working with the Environment Agency, Defra, the water companies and other stakeholders to develop a more outcomes based approach to the Water Industry National Environmental Programme (WINEP) methodology for England. We are also engaging with Welsh stakeholders on these issues to facilitate the sharing of ideas across countries for the Welsh National Environment Programme (NEP).

But we recognise there may still be a need to link funding to specific outputs, including for NEP and WINEP commitments, at PR24. We suggest following Ofgem's approach and distinguishing these from PCs, renaming them Price Control Deliverables (PCDs). We would then use these to review delivery at PR29 and to take action if there is non-delivery. We could also set out the long-term impact we expect from the PCD on costs and PCLs post-delivery, to make sure that customers receive the expected benefits.

Ofgem's Price Control Deliverables (PCDs)

Ofgem has used PCDs in RI10-2 which set defined financial allowances to deliver specific projects and services, for example a project delivering a stated standard (e.g. government policy) or a significant and/or high value activity. They can be either mechanistic or evaluative; mechanistic PCDs are set in cases where work is defined by volumes or numbers of units delivered or where activities are typically repeatable. Evaluative PCDs are set in cases where there is some flexibility in how the output can be delivered to allow for companies to explore innovative delivery approaches. The onus rests on the company to demonstrate how any cost savings achieved are due to efficiency or innovation. The scope of PCD, delivery date and price control allowances for each PCD is defined in the company's licence. In the event of non-delivery (either through under-performance or change in need

since the business plan final determination) Ofgem makes a downward adjustment so that customers only pay for the efficient costs of work that has been delivered.

9.2.3 It may be appropriate to consider some measures outside the price review

Some outcomes may be more appropriately or effectively dealt with outside the price review. This may be particularly appropriate where reputational pressures are strong and where improvements do not require funding beyond that provided by our base cost allowance. This may make it easier to separate from the price review. This could allow us to dedicate greater focus and be more reactive to these issues.

We are considering whether this approach may be effective for affordability and vulnerability. As we have seen with the wide ranging impact of Covid-19, companies need to be responsive to challenges that customers face on a year by year basis.

Affordability and vulnerability measures would need to remain **key performance measures**, whether or not they are set as part of a price control. They need continual and careful monitoring on an annual basis. As set out in our strategy, we are considering the case for a formal licence obligation to provide binding requirements on how companies treat their customers and the most vulnerable in society.¹⁰⁴ This would give us additional powers, beyond reputational levers, to make sure that companies take appropriate action. We will consider the recommendations that the Consumer Council for Water made on 26 May following its independent review of affordability support for vulnerable customers, and how it impacts the handling of these issues in the price review.

Other examples may include specific company initiatives, where other parties may be able to hold the company to account for any concerns. For instance, Anglian Water has partnered with Keep Britain Tidy who deliver [Beachcare and Rivercare](#). These schemes helped community led volunteer groups to effect positive change. Anglian Water's engagement in these schemes was not part of the price control or its incentives, but the company has still continued to support these schemes. This would allow water companies to seize opportunities as they occur, when they work with their communities, better enabling them to deliver core services differently and provide greater value.

Additionally, there may be measures that are useful for us, and for companies, to track to explain performance commitments within the price control. This could include, for example, some secondary asset health measures. In addition, companies and we could consider measures which could help communicate important insights to customers.

¹⁰⁴ Ofwat, '[Time to act, together: Ofwat's strategy](#)', October 2019, p. 26.

9.2.4 Working together to transform performance

We are also considering whether the outcomes framework could evolve to help encourage **collaboration** on key common issues and **drive up performance** across the sector.

At PR19, we set enhanced incentives for companies that improved their performance beyond the best level currently achieved by any company. Companies that received these payments were required to share learning on what worked and what did not, so that the benefits of that learning were more quickly spread to all customers. We will examine the impact that these incentives are having before we consider their potential role in the future.

We also want to consider if there are other ways to encourage greater cooperation between companies and stakeholders and lift performance across the sector. One way could be to make incentive payments contingent on industry performance or stakeholder involvement. This would give greater incentive for collaboration and for the leading companies to share knowledge. For instance, we could make incentive payments contingent on:

- overall industry targets being reached;
- all companies improving to at least a certain base level; or
- evidence that stakeholders also contribute to achieve outcomes alongside companies.

While such approaches may help to focus the sector on greater collaboration, they may have unintended consequences. For instance, if a company does not think other companies are likely to reach the target, a shared target could reduce its own incentives to improve. We welcome views on whether this is an area that we should explore further.

9.3 Setting performance commitment levels

Protecting customers requires us to challenge companies on both outcomes and costs and to ensure that these fit together in our determinations. As we set out in our [PR19 lessons learnt](#) document, as we hone our approach on both of these areas, the interface between them will require more attention.¹⁰⁵ And, to be clear on the interface, we need to be clearer about what PC levels are intended to represent.

There are different approaches that have been used, or suggested, to setting PCs.

- Levels could be set as **minimum standards**, which companies are expected to meet. These ensure customers receive a minimum level of performance.

¹⁰⁵ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020, p. 73.

- Alternatively, levels could be set at **'optimal' levels** for customers (where marginal costs equal marginal benefits).¹⁰⁶ At PR14, in the absence of common PCs, bespoke PC levels were set on a company-specific basis using companies' estimates of where marginal benefit was equal to marginal cost for each company-PC combination.
- At PR19, we recognised the difficulty in precisely estimating such optimums, particularly as we had limited information on marginal costs. Instead, we generally set common PC levels that we considered **stretching but achievable from our base costs**. An efficient company will not necessarily meet every performance commitment, although we would expect its outperformance to at least balance with any underperformance.¹⁰⁷

Using the level of performance an efficient company can achieve from our base costs could be an appropriate **starting point for setting PCLs**. An important goal of a price review is that companies are funded for efficient performance, recognising that the service level that companies can achieve for a given cost should improve continuously over time. PCLs in this case would not be an absolute 'minimum standard' that had to be delivered, nor do we think it's realistic to set all PCs at the exact economic optimum. Rather, by linking outcome levels to that which should be expected from base funding, we would be aiming to ensure that **customers get the level of service they pay for**.

As set out in Chapter 4, at PR24, we could streamline the business planning process by setting out what we consider are efficient levels of performance for common PCs ahead of business plan submission using historical improvements and consideration of other factors such as technological change as a starting point. We would consider whether we can expect similar levels of performance by all companies or if there are PCs where there is evidence to quantify how company specific factors should lead to differing levels of efficient performance from base costs.

Companies could put forward evidence to support varying their PC levels. This could include adjustments where there is a clear case that the level of service that is achievable from base is either too high or too low for a significant number of customers. Importantly, companies could also put forward variations to continue to be able to deliver outcomes in the long-term. We are open to considering a number of ways that companies could be funded. This could be through ODIs, adjustments to the base cost allowance or making enhancement expenditure allowances. We explore this further in Chapter 10.

¹⁰⁶ Assuming there is a diminishing rate of increase in benefits as service improves, but an accelerating increase in costs, then the point at which marginal costs are equal to marginal benefits is an optimal point where any further increase in service would cost more than the benefits it provides.

¹⁰⁷ We set performance commitment levels for statutory measures such as treatment works compliance as full compliance, which is the minimum. However, even in these cases, we set deadbands based on historical industry compliance to allow for some fluctuation in performance, while providing a strong incentive to minimise compliance failures.

Our [PR19 lessons learnt](#) exercise noted one company's suggestion that we could set **multiple targets** with a minimum performance level and then a more aspirational stretching level that goes beyond the floor level.¹⁰⁸ The consequences of failing to meet the minimum performance level would be more severe than failing to reach a stretching level, and would attract additional scrutiny by Ofwat. We understand why the company suggested this, but we are concerned that using such an approach would add a level of complexity to how targets and allowances are determined. It could also lead to companies being satisfied with delivering a 'minimum' standard, rather than aspiring to deliver excellent service. Rather than set a threshold up front on which we should scrutinise failing levels, we carefully consider companies performance each year and will consider the use of enforcement action wherever a company's performance falls significantly short and breaches relevant legal obligations.

9.4 Setting incentives

Outcome delivery incentives (ODIs) are the financial consequences to companies of under or outperformance relative to their PCLs. They act as an incentive for companies to deliver their committed levels of performance, recompensing customers for foregone benefits if they deliver less than is expected. Companies that go beyond and deliver greater benefits to customers than expected, are **paid on delivery**.¹⁰⁹ This approach aligns the interests of companies with those of their customers.

At PR19, we set the level of **ODI rates based on how customers value a change in service**, including impacts on the environment. This helps align the incentives of companies and customers. We also took account of changes in costs. This was on the assumption that companies avoided costs if they provided poorer service and had to spend more to provide better service. Cost sharing means that customers automatically share in any cost differences, on top of any bill impact from ODIs.

As discussed in Chapter 6, the value that customers place on service can be difficult to estimate in some cases.¹¹⁰ We are interested in views as to whether the collaborative approach to research, or other approaches, may lead to better estimates. But there may be limits to what we can realistically obtain from customer research.

Marginal cost data can also be difficult to estimate. In PR19, there was significant unexplained variation in the cost estimates for changes in service that the companies provided. Moreover, if service deteriorates because of mismanagement, there may be no cost

¹⁰⁸ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020, p. 55.

¹⁰⁹ As opposed to providing a greater cost allowance up front that may or may not deliver benefits for customers or the environment.

¹¹⁰ For example, at PR19 the implied average marginal benefit of leakage reduction was [£0.4m/Mld]. This compared to the median requested leakage enhancement unit cost of [£2.0m/Mld]. This implied leakage ODIs which were insufficient to fund outperformance, despite the National Infrastructure Commission estimating that relying on emergency drought resilience measures would cost an estimated £40 billion over the next 30 years versus increasing resilience which would cost only £21 billion.

saving associated with a performance reduction, in which case customers would not see any bill reductions through cost sharing. Given these difficulties, we are considering changing our approach to setting ODI rates and **removing our reliance on estimating marginal costs** to avoid complexity and spurious accuracy.

We could disregard any link between performance and costs of a particular company and just set ODI rates in line with how customers value changes in service.¹¹¹ But if service improved, customers would pay the ODI rate and a share of additional costs, which would be more than the benefit they receive. It may therefore be better to set rates at a lower level, such as 50% of the marginal benefits.¹¹²

Although we intend to use customer valuations as a starting point for incentive rates, it may be prudent to check the result is in line with wider information. For asset health, in particular, customers may struggle to give meaningful valuations of marginal benefits. We will consider further what other options exist. For asset health, for example, we could calculate ODI rates based on the allowance of efficient costs that we make in price controls.

As with PCLs, in order to streamline the business planning process, we could publish our initial views on appropriate incentive rates ahead of business plan submission, as set out in Chapter 4. And as also set out in that chapter, we are also considering if we should provide clearer guidance on successive price control periods.

9.5 Next steps

As outlined in this chapter, we suggest reducing the number of PCs and will continue to discuss with the outcomes working group how to identify and define the appropriate package of common PCs for PR24 and future price reviews. A focus of these discussions will be how we can introduce common environmental PCs that will provide appropriate incentives for water companies to deliver an outcomes focussed environment programme and tackle issues such as addressing harmful combined sewer overflows. We will also consider how the package of PCs can best incentivise asset health and operational resilience. We intend to publish a paper looking at these issues in more detail later this year.

We will also consider how we can streamline the process to set ODI rates taking into account the best information including that from the collaborative approach to research. We will also

¹¹¹ There may nonetheless be no correlation between costs and service across the industry because efficient firms may tend to have lower costs and better service.

¹¹² This also has some economic support as theoretically companies should operate where their marginal cost is equal to their marginal benefit. If cost sharing rates are set at 50%, and the incentive rate is set at 50% of customers' marginal benefits, a companies' marginal cost should equal customers' marginal benefit. Therefore the full amount that customers pay is 100% of their marginal benefit – 50% through the outperformance payment and 50% through cost sharing.

consider alternative approaches where we do not have reliable information on customer valuations. We expect to publish a paper on this in 2022.

We outline some specific questions for respondents below.

9.6 Questions for stakeholders

Q9.1: What kinds of performance commitments should we include in the price review? What outcomes require financial incentives for all companies for the foreseeable future?

Q9.2: How do you think we should monitor outputs that are not clearly linked to the outcomes incentivised in the price control? Would it help to distinguish between PCs that monitor outcomes and PCDs that monitor outputs? What other options could we consider?

Q9.3: Do you consider there are aspects of company performance where it would be better not to set expectations as part of the price control? What approaches should we consider in these cases, so that companies act in the interests of customers?

Q9.4: What should be our aim in setting the levels of performance commitments? Do you agree with the suggestion that performance commitment levels should be set, as a starting point, at what can be achieved by an efficient company with base costs and that deviations from this are proposed in company business plans? If not what alternative proposals should we consider?

Q9.5: What approach should we take to setting ODIs? How should we take account of marginal costs and marginal benefits in setting ODI rates? What are the risks and benefits of the approaches that we set out, or any others that you propose?

10. Cost assessment

Water companies spend around £10 billion per year. Every five years we set an efficient cost allowance for each company so that it can meet its statutory obligations and deliver improvements.

Setting efficient cost allowances helps to protect customers from paying more than they should for their water and wastewater services. It also enables billions of pounds of investment to be funded through customers' bills, and challenges all companies to be efficient.

As we set out in Chapter 3, we want to expand the use of markets, such as through Direct Procurement for Customers, and rely on competition to help to deliver the outcomes that customers want at the most efficient costs. Where competition is not practical or beneficial we set efficient cost allowances based on: historical outturn expenditure, information we have about companies' characteristics and activities, the expenditure proposed in company business plans and relevant benchmarks.

At these early stages of PR24 we are keen to engage with stakeholders to help us improve our approach to cost assessment. We have initiated a discussion forum with companies – a cost assessment working group – where we can discuss together how to address current concerns as well as incorporate emerging issues and long-term ambitions in our future approaches to cost assessment. We made significant improvements to our cost assessment approach in PR19. We are therefore keen to build on this approach for PR24, taking account of the lessons learnt from PR19¹¹³ and the CMA redeterminations for Anglian Water, Bristol Water, Northumbrian Water and Yorkshire Water.¹¹⁴ However, we are also keen to hear views on new approaches, including any changes that might take more than one price review period to implement.

We set out in this chapter some areas that we are exploring and welcome your thoughts on them. We set out initial thinking and pose questions about:

- How we can build on our cost modelling approach at PR19, for example to consider additional cost drivers and more disaggregated cost models;
- How we can use benchmarking more widely, in particular on enhancement costs, and, where feasible, make greater use of external benchmarks;
- How we can take into account of key emerging issues such as net zero, public value and partnership working;
- How we can take better account of social and environmental benefits and the long-term in investment proposals;

¹¹³ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020.

¹¹⁴ Competition & Markets Authority, '[Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations – Final report](#)', March 2021.

- How we can improve our assessment of nature-based solutions, so that they are appropriately incentivised through the cost assessment framework
- How we can strengthen our approach to long term operational resilience, in particular whether we can take account of forward-looking pressure on capital maintenance and improve our approach to resilience enhancement expenditure; and
- How we can better explore the link between costs and outcomes and reflect this in the trajectories for meeting long-term ambitions.

10.1 Increasing productivity and efficiency

It is important that companies are appropriately incentivised and challenged to deliver productivity improvements and greater efficiency going forwards. The water sector is likely to face cost pressures at PR24 as it looks towards meeting a series of ambitious long-term targets. Meeting long-term challenges while maintaining affordable bills for customers will require companies to improve their productivity and appropriately sequence and phase their investment requirements.

We think companies can do more to improve efficiency. Following privatisation water sector productivity growth was 3 to 4% per year. Since 2011, productivity growth in the water sector has appeared weak.¹¹⁵ This compares to relatively strong productivity growth for comparator sectors.

It is important that water companies continue to be appropriately challenged and incentivised to innovate as this should lead to higher productivity and greater efficiency. The increasing availability of data, for example on network performance, provides water companies with a significant opportunity to increase productivity. To help unlock this potential, it is important that water companies better understand the reasons for poor water sector productivity growth over recent years and learn from higher-performing sectors. Innovation can drive efficiency improvements. This was one of the reasons we introduced the £200 million innovation fund.

Our PR19 final determinations required a step change in service improvement and cost efficiency and provided stronger incentives for improvements in service and cost efficiency. Most companies accepted this challenge, demonstrating the scale of improvement possible. Our efficiency challenge was largely maintained by the CMA.

We want to further encourage lagging companies to catch up with leading companies in the sector at a faster pace and to encourage leading companies to accelerate their improvement. We are interested in views on how best to take this work forward.

¹¹⁵ Frontier Economics, '[Productivity improvement in the water and sewerage industry in England since privatisation](#)', September 2017.

10.2 Improving our approach to base cost modelling

Base costs are routine, year-on-year costs, which companies incur in the normal running of their businesses to provide a base level of service to customers and include expenditure on maintaining the long-term capability of assets, as well as expenditure to improve efficiency.

Our main tool to determine efficient base cost allowances has been **econometric modelling**. This approach uses statistical methods to benchmark companies' costs taking into account factors which are largely beyond companies' control. Where possible we use econometric models to identify efficient costs as they allow us to compare costs across companies, helping to overcome information asymmetry where companies know more about their efficient costs than we do. In our PR19 econometric models we benchmarked operating expenditure and capital maintenance expenditure, i.e. base costs, together with some enhancement activities driven by population growth which have similar characteristics and cost drivers.

We recognise that econometric models are not perfect and may not explain all variations in efficient base costs between companies and over time. We therefore complement econometric analysis with **cost adjustment claims**. These provide companies with an opportunity to present evidence of unique operating circumstances or legal requirements that are not explained by the cost drivers in the econometric models and drive higher efficient costs for the company relative to its peers.

Some base costs were not included in our econometric modelling because they are largely outside the control of the company or because they are driven by specific regional requirements. Some examples are business rates and abstraction charges. We assessed these costs, known as **unmodelled base costs**, separately.

We have confidence in our econometric cost assessment models which have been developed through consultation.¹¹⁶ We have had extensive input from the sector and the models are consistent with engineering insight. We are grateful for the companies' contribution to the development of the modelling suite. We are keen to build on our PR19 approach and, where appropriate, will look to make improvements for PR24, taking account of the lessons learnt from PR19.¹¹⁷ We welcome thoughts from the sector both in building on the progress made at PR19 and in suggesting more radical improvements. Areas which we are currently considering are set out below.

Scope of base cost benchmarking. We intend to continue to define separate activities within expenditure to retain flexibility so that we are able to model activities together as appropriate. We will assess whether there are any merits in developing total expenditure (totex) econometric models at PR24 as part of our modelling suite, which include both base

¹¹⁶ Ofwat, '[Cost assessment for PR19: A consultation on econometric cost modelling](#)', March 2018.

¹¹⁷ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020, pp. 63-68.

and enhancement costs, with costs excluded from the econometric models by exception only (for example, costs outside the expected scope or very large bespoke projects).^{118 119} This could help to avoid cost assessment being distorted by any allocation between base and enhancement expenditure. We recognise that totex models may limit the ability to capture important cost drivers, and so we would only consider them as part of our overall toolkit.

Cost drivers in econometric models. The base cost econometric models selected at PR19 contained a wide range of key cost drivers, including scale, density, treatment complexity and economies of scale. The CMA did not significantly change our econometric approach and model selection. But we are open to considering additional or alternative cost drivers at PR24 and welcome suggestions to increase cost driver data availability.

Growth related costs. In PR19 we included growth-related costs (including developer service expenditure) with base costs as they shared similar characteristics and cost drivers. We will look again at our approach to assessing growth costs, including whether it is appropriate to assess growth or developer services expenditure separately (e.g., standalone growth / developer services model). As set out in Chapter 8 we are looking to collect additional data on developer services costs. We will also reassess how growth uncertainty (i.e. the difference between forecast and outturn growth) should be managed.

Disaggregated cost models. Disaggregated cost models for each price control allow the use of specific cost drivers for certain elements of the supply chain that are more difficult to identify in more aggregated models (such as wholesale). This can enable more accurate cost models to be produced which can provide clearer incentives and price signals to market participants. However, disaggregated cost models can be challenging to develop because of data reporting inconsistencies and cost trade-offs. For instance, we were unable to develop robust standalone water resources or growth / developer services cost models at PR19. We were also unable to set a separate bioresources efficiency challenge. As set out in Chapter 8 we are undertaking further work to improve consistency of cost reporting to help develop disaggregated models in PR24.

Residential retail. We will consider improving the consistency of data reporting, exploring alternative approaches to assessing granular retail activities and investigating additional data sources for regional deprivation, as highlighted in our PR19 lessons learnt.¹²⁰ We will also consider how we can improve our retail models, including the use of forward-looking costs in our assessment.

Developing additional external benchmarks. External benchmarks can allow the comparison of water companies' costs to those in another sector. In PR19 we used external benchmarks for retail bad debt and customer services costs. For residential retail, we want to

¹¹⁸ A totex modelling approach was applied by Ofgem at RIIO-GD2 because they considered it better accounted for cost complementarities, trade-offs and potential reporting inconsistencies.

¹¹⁹ Linked to this, we are proposing such an approach for bioresources as could help to facilitate the bioresources market. This is discussed in Chapter 8.

¹²⁰ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020, pp. 71-72.

make wider use of benchmarking as retail activities are generally directly comparable with other sectors. In wholesale costs, activities such as pipe-laying are common across different sectors and may also be suitable for benchmarking.

Where possible, we are keen to develop additional external benchmarks, although we are conscious of the difficulty of ensuring costs are sufficiently comparable and that external benchmarks are only likely to cover a portion of water company costs. We are therefore interested in views on what other relevant external benchmarks could be used to assess other water company costs, for example on business support costs or staff costs.

Cost adjustment claims. Cost adjustment claims will remain a key component of our cost assessment. We will continue to require companies to present compelling evidence that an adjustment to their modelled cost allowances is required. Given concerns raised about the high evidential bar at PR19, we will consider suggestions on how the assessment criteria / gateways could be made clearer at PR24. We are keen to explore how to implement symmetric cost adjustments more widely at PR24, where cost baselines are adjusted both positively and negatively for factors that are not explained by the cost drivers in the econometric models. We welcome thoughts from companies on potential factors that may warrant a symmetric post-modelling adjustment.

In summary. The PR19 base cost models provide a strong foundation for PR24. We will look to develop the PR24 base cost benchmarking models in consultation with the industry through the cost assessment working group. Our main focus will be on building on our approach from PR19. This should provide greater clarity on how we assess base costs and allow companies to focus their attention on how they intend to meet long-term challenges, including the most effective way to sequence any additional investment. We are therefore keen to engage early with companies over prioritised improvements that could be made to the PR19 models and potential symmetrical adjustments that could be applied to the outputs.

As set out in Chapter 4, we are also considering whether it would be possible to publish the base cost models early. If we did this we would expect companies to account for early information on their efficiency in their business plans, and we would expect this development to allow companies to focus more on the long-term challenges. However, we would need to avoid perverse incentives for companies and to ensure fair treatment across companies, such as to allocate costs to certain areas or to inflate cost drivers. Consequently, it is important that data definitions are robust and that any potential cost models and model parameters would be robust to the inclusion of additional years of data. They must also allow the incorporation of company forecast cost information where that increases the robustness of the modelling.

10.3 Improving our approach to enhancement cost assessment

Enhancement expenditure is generally where there is a permanent increase or step change in the current level of service to a new 'base' level and/or the provision to new customers of the current service. Enhancement funding can be for environmental improvements required to meet new statutory obligations, improving service quality and resilience, and providing new solutions for water provision in drought conditions.

Cost benchmarking. For the majority of enhancement costs at PR19 we used benchmarking of company forecast data to compare costs for similar activities to identify the efficient costs for enhancement programmes. We used benchmarking for most of the environmental programmes, most of the costs to improve drought resilience, and metering programmes, which covered 70% of enhancement proposals.

Bespoke assessment. Where we did not have comparative data at PR19, such as in the area of resilience, we assessed detailed company proposals and made efficient allowances based largely on the quality of company evidence.

For PR24, we will be looking to extend our approach to enhancement cost benchmarking. This may include the use of out-turn costs and cost drivers, reflecting the recommendations from the CMA and the [PR19 lessons learnt](#),¹²¹ and information from industry databases and expert cost consultants. We will consult on the collection of additional data on historical costs both at an activity and scheme level within annual performance reports. Particular areas where we intend to collect additional historical data include phosphorus removal, leakage and metering. We are considering where it is possible to extend this to other areas, such as wastewater storage schemes both at sewage treatment works and in the sewerage network. For major projects this may include planning and development costs alongside contractor delivery costs.

Dealing with uncertainty in enhancements. Reviewing company plans every five years provides a balance between certainty for customer bills and allowing companies to get on with delivery, with the flexibility to accommodate changes in requirements. We consider there is significant flexibility and adaptability in the existing regime. For example: the totex and outcomes regime provides flexibility to companies to deliver the same outcome through a different approach during the price control period, cost sharing allows companies to share cost out and under performance with customers, and uncertainty mechanisms provide companies with a greater degree of protection where issues are outside their control. We consider that the move towards a greater focus on long-term outcomes will provide even greater flexibility to companies in how they deliver outcomes for customers, communities and the environment. Going forward, we will continue to review the arrangements for

¹²¹ This could help to address a concern raised in our [PR19 lessons learnt](#) that more data sources could be used to provide assurance of the efficiency of forecast enhancement cost data.

managing uncertainty around enhancement expenditure for PR24, and whether we can better trade off complexity and simplicity while continuing to protect customer interests.

Moving towards net zero. The UK is committed to a legally binding target of net zero emissions by 2050, with tightening carbon budgets supporting the pathway. Water companies have an important role to play in this. Companies will need to plan for meeting this long-term ambition and consider how each five-year period can be a checkpoint along the journey to net zero. They will need to consider how to embed net zero in long-term decision making when delivering their core functions. Water companies have already started considering potential approaches for their operational emissions as part of the Public Interest Commitment 2030 net zero work. Although less mature than operational carbon, the journey of embedded carbon towards 2050 also needs to be considered from now onwards to ensure the 2050 requirement can be met.

To achieve net zero, substantive decarbonisation of water and wastewater services is fundamental. Offsetting, where emissions are offset by alternative measures such as tree planting, does not address the root cause of emissions and so should only be used as a last resort when other alternatives have been exhausted at this point in the transition to net zero. We currently consider that the primary focus at PR24 needs to be on driving carbon emissions down, rather than offsetting them.

Such a fundamental change of approach to delivering water and wastewater services could mean a change in the costs of providing those services. Seeking opportunities to reduce carbon may reveal opportunities for reducing cost and increasing environmental benefits via nature based solutions. We also recognise that transition to net zero may increase costs of service. Potentially there are some areas where higher upfront costs are offset by lower energy and chemical costs, meaning no higher costs over the whole life of the assets for customers to pay. We recognise that investment required by companies, for example to deliver environmental improvement programmes, can deliver net zero benefits.

We are considering how best to reflect the transition to net zero in our cost assessment approach. Potential options we are considering include:

- Asking companies to identify the carbon reduction benefits resulting from base expenditure and existing enhancement programmes as part of their business plan; and
- Using the outcomes framework to compensate companies if they go beyond the carbon reduction that can be delivered through base costs and existing programmes; and/or
- Allowing additional or incremental carbon reduction costs where proposals are well evidenced and demonstrate benefits over and above purely carbon benefits alone, and, where feasible, benchmarking incremental unit costs of carbon reduction to provide an efficient additional cost allowance for carbon reduction.

We welcome views on how our cost assessment approach should take account of net zero.

Generating public value and taking account of social and environmental impacts.

Water companies are well placed to provide significant public value (in particular social and environmental benefits) as they carry out their core function of delivering water and wastewater services for customers. Much of this public value is delivered as part of the delivery of core functions such as environmental improvements to river water quality and public health benefits of high quality drinking water. There is real scope for companies to deliver solutions that are lower or equivalent cost to traditional methods, but that deliver even greater public value. But this should not distract from delivering their core functions. Where there are benefits that can be delivered but that go beyond their statutory functions, companies should be open to delivering additional public value, but to do so should work in partnership with others.

Where companies go beyond the standards in their statutory obligations, they will need to demonstrate customer support. This is consistent with the approach we used in PR14 and PR19 and allows customers to fund improvements which they support.

Consistent with our position on public value, net zero carbon emissions and the use of nature-based solutions, we expect companies to continue to place an appropriate emphasis on social and environmental factors to show that their business plans represent overall 'best value', rather than just least cost. At PR19, consistent with our totex and outcomes approach, we took into account a range of environmental and customer outcomes when assessing proposals. We were also able to take into account wider social and environmental impacts when deep diving proposals to identify the best value whole life solution. Some current strategic planning frameworks, such as water resources management plans (WRMPs), already apply a form of best value at the option appraisal stage when developing the long-term programme.¹²²

We are keen to understand whether it is possible to more robustly and potentially extensively consider wider social and environmental impacts in our cost assessment approach. However, we recognise that valuing social and environmental impacts is challenging, particularly on a comparable basis across the industry. We expect water companies to work together to ensure there is an appropriate degree of comparability in such estimates and their use, building on the results of the collaborative research on customer valuation suggested in Chapter 6. We will explore this issue further through on-going engagement and consider how we can play a role to promote common approaches.

¹²² The Environment Agency, Natural Resources Wales and Ofwat joint guidance for water resources planning provides more detail on best value water resources planning: <https://www.gov.uk/government/publications/water-resources-planning-guideline/water-resources-planning-guideline>.

Facilitating partnership working. We support a partnership approach where water companies work together with other parties to deliver broader outcomes and additional value beyond their statutory functions, with water companies funding their fair share of the costs of any improvements, consistent with their statutory functions. However, water customers can only be expected to fund activities consistent with a water company's statutory functions. Solutions delivered in partnership allow companies to leverage input from third parties. Funding should be allocated such that each partner pays its fair and efficient share of the costs of solutions, taking into account the relative benefits of the solution to water companies and third parties, and the incremental costs compared to a solution the water company would implement to address only its requirements.

Facilitating nature-based solutions. In our strategy, '[Time to act, together](#)', we stated that the environment is at the heart of everything we do and that we will encourage companies to make more use of nature-based solutions. Nature-based solutions are likely to be more prevalent with improved consideration of environmental and social benefits in developing best value business plans. Since PR14, we have used a totex approach to cost assessment, breaking the direct link between capital expenditure and the RCV. This approach is designed to facilitate the right proposals and solutions whether they are capital expenditure (capex) or operating expenditure (opex) solutions. However, due to the uncertainty over opex solution allowances for more than five years, stakeholders have raised concerns that our approach may have discouraged companies from proposing nature-based solutions, which require ongoing management and operating expenditure.

This issue was raised by United Utilities in its Future Ideas Lab submission '[Evolving the WINEP to deliver greater value](#)'. United Utilities recommends we make allowances for totex based on whole-life net present value (NPV) costs, rather than each price control period's expenditure. In-period opex would form part of allowed revenues with the remainder of the NPV added to the RCV, to be recovered from customers over time. RCV run-off assumptions could be varied to provide the ongoing cost of managing opex solutions. This solution could increase complexity, as it would need separate reporting of such opex solutions to strip costs out of future periods to prevent double funding. We would also need to understand how such an addition to the RCV might impact on financial metrics and notional financeability. We welcome views on whether there is an issue, the potential scale of the issue and how best to account for opex-based solutions in our cost assessment approach.

Enhancement investment for the long term. Many of the aspects described above, such as delivering net zero and taking account of public value, are about delivering long-term ambitions and investing in the best whole life solution, rather than simply the lowest cost solution. We support companies investing for the long term and demonstrated such support in PR19, for example through funding well-evidenced plans to mitigate future drought risk resulting from the water resources management planning process including in solutions that deliver benefits beyond the 2020-25 period. However, we are keen to understand whether there is more that we can do in our cost assessment approach to take account of the long-term. We welcome ideas on how we can do this better for PR24.

10.4 Maintaining and improving operational resilience in the long term

Resilience was a key theme at PR19 and we provided £13 billion of funding in this area. We provided funding for companies to maintain base services and for enhancements where they were well evidenced. However, **in general, companies did not provide a clear line of sight between their organisational objectives, resilience planning framework, planned level of service, and required cost.** Considering the significant challenges faced by the sector, as set out in our goals chapter, this is an area we expect to improve for PR24. We are considering how to better set our expectations in this area and hold companies to account.

Maintaining operational resilience and asset health. In PR19 we set our totex allowance to be sufficient for an efficient company to provide resilient services to its customers over the long term. We set the base allowance using historical costs and used forecast cost drivers to account for future changes in the asset base. A company could raise cost adjustment claims if it considered that our models did not reflect its individual circumstances including where it believed its historical costs were not reflective of its future needs. While the CMA confirmed that our approach to funding capital maintenance and maintaining asset health was appropriate, it suggested that we could enhance our analysis at PR24 with a forward-looking element that would assist in triangulating results from the econometric modelling of historic costs.

We are keen to build on our PR19 approach for funding capital maintenance and maintaining asset health at PR24. In particular, we are interested in views on whether there is more we could do to take into account a forward looking element in our approach. When considering forward looking costs, we are keen to understand why forward-looking costs might be different to those incurred in the past. We are also conscious that customers should not pay twice for capital maintenance and asset replacement and that any forward-looking element should not make up for past under-investment or inefficient use of base allowances.

Ensuring companies provide effective stewardship of the asset base is not just an issue that is relevant for the price review process. In parallel we are engaging with the sector and have co-created an asset management maturity assessment. This looks at asset management capabilities and approaches, and the data and insight used to inform investment decisions related to resilience, with the aim of increasing our understanding of and improving of company approaches to asset management.

We are conscious that changes to asset health take place over the long term and so are considering three further changes: strengthening incentives for long term resilience, wider use of resilience metrics (both of which are discussed in more detail in other areas of this document, see below) and improving our approach to resilience enhancement.

Strengthening incentives for long term resilience. We are considering if there are ways in which the incentive framework could reinforce the long-term focus, and strengthen incentives for resilience. For example, as set out in Chapter 4, we are considering whether outperformance payments should be paid after the price review period in which they are set, and whether payments could be contingent on outcomes continuing to be delivered in future periods. So, outperformance payments for, say, reducing pollution incidents would be deferred to the next price review period and then only paid if the reductions were sustained.

Wider use of resilience metrics. Investments in resilience must address a clear need and have the support of customers. Not all resilience hazards are covered by performance commitments within our outcomes framework. As set out in Chapter 9, we are seeking views as to whether we should require companies to report on additional resilience metrics to hold them to account in this area and enable cross-company comparisons. However, we recognise that it is challenging to quantify robustly risks of extreme events, particularly as such events are rare or even may never have happened. In these circumstances, an appropriate resilience metric may be an outcome-based metric or may equally be defined more as method-based or an asset-based output – for example, the proportion of communities having a second independent supply of drinking water or local water storage or other measures to support response and recovery interventions.

Enhancing operational resilience. Operational resilience is fundamentally important to company operations and strategic planning processes, many of which have long-standing and detailed methodologies, e.g. the water resource planning process. Other processes, such as the drainage and wastewater management plans (DWMPs), are in the process of development. We recognise the challenges the sector faces in maintaining resilience in the future, for example in adapting to climate change, responding to new threats such as cyber security and managing water resources in the face of population growth. We are seeking views from the water companies and other stakeholders as to whether strategic planning frameworks such as water resources management plans and drainage and wastewater management plans and others are adequate to capture the required investment on resilience, particularly around base costs.

At PR19, we funded resilience expenditure through a combination of base and enhancement costs. We provided £643 million of funding under the category of ‘resilience enhancement’ to improve service resilience in the face of low probability, high consequence events that were not covered by another investment area. Many of the ‘resilience enhancement’ proposals we saw were not well-evidenced and some described activities that we consider to be covered by our base allowance, for example addressing sewer flooding. We think that this arose due to broad nature of the definition of the resilience enhancement investment category. Consequently, for PR24 we are considering whether we should use investment categories which are more clearly defined and potentially remove the ‘resilience enhancement’ category. This will allow resilience enhancement proposals to be better targeted.

We expect companies to provide robust evidence that is proportionate to the materiality of the issues, their complexity, the availability of tools to assess the impact and duration of risks and the marginal nature of the decisions. In addition, in areas of material expenditure where companies have more discretion to choose their investments, we expect adequate customer protection to be in place.

Companies are responsible for developing and maintaining a robust and effective approach to resilience planning, adopting innovative analytical approaches where appropriate. The asset management maturity assessment is expected to highlight and disseminate best and good practice across the industry. We expect companies to take advantage of this and learn from each other. We would welcome views from stakeholders as to whether there is a need for setting common assumptions and planning scenarios. Such common assumptions, around for example population growth and climate change, may provide a consistent foundation for business planning and better enable cross-sector comparisons.

10.5 Funding service improvements over the longer term

Service improvements should be funded at an efficient cost over the long term. Our approach to making cost allowances must support this goal. This section provides our initial view, considering evolution of our approach from PR19. However, we invite stakeholders to provide views on alternative approaches in addition to our suggestions for building upon the PR19 approach.

Service improvements should not necessarily increase costs. For example service improvements can be achieved from greater management focus or technological change. Better service can also reduce costs as less expenditure might be needed to address problems. At PR19, we set performance commitment levels to reflect stretching but achievable performance from base costs and the expected improvement from enhancement expenditure. Our forecasts of improvements from base costs were based on company forecasts of future improvements and historical improvements achieved through base expenditure. Companies were able to submit cost adjustment claims if they considered that company specific circumstances impacted their costs of delivering these levels of service.

Our approach to funding service improvements

For PR24 we expect companies to continue to improve performance from base expenditure. As set out in [outcomes], for each common performance commitment, we are considering forecasting the performance level that could be delivered by an efficient company from its base funding. We think that this forecast performance level should represent stretching performance and an expectation that companies will continuously improve. In making this forecast, we would review the levels of historical improvements and consider other factors such as future technological change. We could then consider, in the context of its long-term

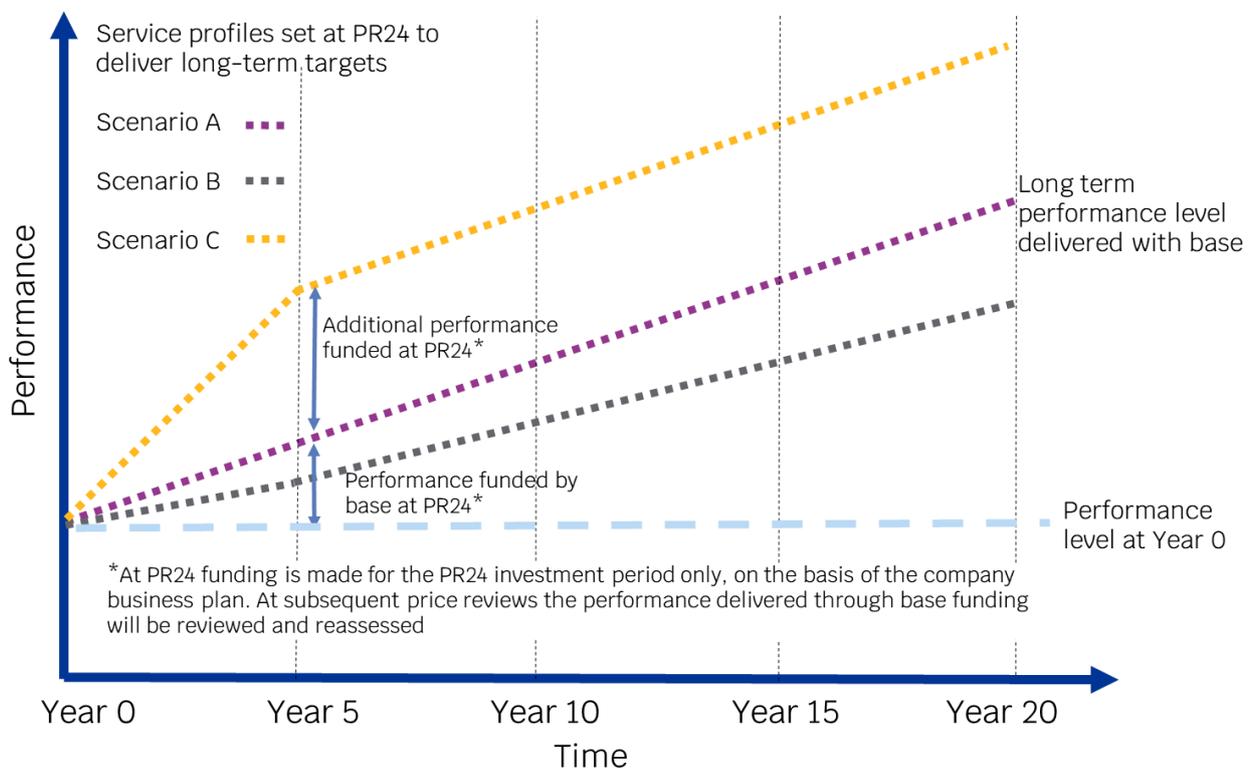
strategy and customer preferences, whether this is the level of performance companies should be required to deliver, and the appropriate level of funding.

We are open to considering a number of ways that companies could be funded. This could be through outcome delivery incentives (ODIs), adjustments to the PR24 base cost allowance or making PR24 enhancement expenditure allowances. We are interested in views and we intend to discuss this issue further in a paper considering long-term issues later this year.¹²³

Figure 10.1 below illustrates three funding scenarios for an individual performance commitment:

- A. Performance levels and long term improvements are delivered through base;
- B. A company's proposed service profile delivering performance lower than that expected to be delivered by an efficient company from its base funding. This is justified by evidence provided by the company and a reduced funding may be necessary (for example through ODI payments or adjustments to cost allowances); and
- C. A company's proposed service profile delivering performance levels more stretching than that expected to be delivered by an efficient company from its base funding. This is justified by evidence provided the company and additional funding may be required (again which could be through ODIs or adjustments to cost allowances).

Figure 10.1 Funding of various performance scenarios



¹²³ This is the paper also referenced in Section 4.4 of this document.

Improving the evidence base

As described in the sections above, we propose to use companies' outturn performance and costs for delivery of their current plans to support our assessment of the levels of performance delivered through base expenditure and the expenditure associated with making further improvements. Where necessary, we propose to capture additional data through the annual reporting process to support this analysis. This may require companies to provide a further detailed breakdown of their historical data.

At PR24, we will draw on the evidence of the impact of historical investment and innovations in approaches and technologies to set efficient costs and ensure performance commitment levels are suitably stretching. We welcome stakeholder views as to the areas where additional data capture would be beneficial. We also recognise a requirement to better account for the impact of investment delivering benefits across multiple performance commitments.¹²⁴ We are interested in views of how best this could be accounted for in PR24.

Adjusting company funding where necessary

It is important that customers fund an allowance commensurate to the level of challenge faced by an individual company. As described above, our base cost models should fund the forecast level of service improvements for efficient companies. At PR19, a number of companies suggested it was more expensive for them to make service improvements in particular areas. We propose to undertake further work to see if it is possible to better understand the underlying drivers of differences in service quality performance across companies.¹²⁵ As set out above, where we make cost adjustments based on company specific circumstances at PR24, we expect to make greater use of symmetrical adjustments across the sector so that customers are not over-paying for service improvements. We additionally intend to account for service levels where customers have historically funded service improvements to ensure that customers do not pay twice for the same improvement in service. We will also work to ensure that historical investments are reflected in the level of stretch set in individual company performance commitments. We welcome proposals from stakeholders regarding appropriate approaches for implementing the adjustments described and areas where further adjustments may be necessary.

10.6 Next steps

Building on the success of the PR19 approach, we intend to continue to work with stakeholders to further develop our cost modelling approach through the cost assessment working group. We also intend to collect additional data through the annual performance

¹²⁴ This is particularly evident for investments in technologies that enhance a company's understanding of its network. For example monitoring equipment on the water supply network could benefit leakage, outage, water quality and supply interruption performance.

¹²⁵ Where possible we will use the improved evidence base to support this investigation of drivers of performance and cost.

report, and where appropriate will further engage with the sector to refine these requirements. We will also undertake further consultancy work, working with and consulting with the sector, where appropriate. We intend to publish a paper on long-term issues later this year where we intend to discuss ways in which companies could be funded for service improvements. We set out our consultation questions below but welcome views on any of the issues discussed above.

10.7 Questions for stakeholders

Cost assessment approach

Q10.1: What should be the priorities for improving our approach to cost modelling and assessment?

Q10.2: In what areas (both historical water sector and external) can we improve the range of benchmarks we use in cost assessment?

Long-term ambitions

Q10.3: How can we take account of longer term ambitions such as delivering net zero and increasing public value in our approach to assessing costs?

Nature based solutions

Q10.4: Do we need to amend our cost assessment approach to take account of nature based solutions?

Service and cost relationship

Q10.5: Where can we enhance our evidence base on the relationship between costs and service?

Q10.6: What mechanisms should we consider for the efficient funding of performance levels, set in a long-term context, that vary from those an efficient company would deliver through its base allowance?

Operational resilience

Q10.7: Is there more that we need to do to reflect future pressure on operational resilience in our approach to cost assessment?

Q10.8: Are the most significant challenges to the operational resilience of the sector adequately captured within current strategic planning frameworks?

Q10.9: How can we strengthen incentives for long-term operational resilience and improve the assessment of resilience enhancement expenditure while continuing to protect customers' interests?

11. Risk and Return

11.1 Introduction

At PR24, **we want to align the interests of companies and investors with those of customers**, so that the sector is attractive to investors, but companies can only earn high returns from great performance.

We are considering retaining our overall approach, under which returns are determined by an allowed base return on capital and a framework of incentive and risk allocation mechanisms. We nonetheless wish to explore whether our framework can be modified to improve incentives and whether it can be made simpler.

This chapter sets out how we could do that. In summary, for PR24 we are suggesting that we could:

- **seek to optimise our risk framework**, reducing complexity where appropriate. We will also look at whether we can improve our understanding of risk;
- **consider updating our approach to estimating the allowed return on capital**. We will, in particular, consider whether to **index the allowed return on equity**, to protect customers and shareholders from forecasting risk, as well as **reviewing the role of balance sheet and index data** in setting the allowed return on debt;
- **explore our approach to financeability**, taking account of how we define the notional capital structure, and considering **ways of incentivising financial resilience** to protect customers from the adverse outcomes of risky financial structures; and
- **consider a further transition towards full CPIH indexation**, to further reduce reliance on the discredited RPI measure.

11.2 The overall balance of risk and return

To spur companies to deliver a high-quality and efficient service and manage changes in the external environment, our framework has a range of incentive and risk allocation mechanisms. These can increase or decrease a company's returns. The level of base return together with the expected return from risk allocation mechanisms needs to align with this risk in order that the sector is attractive to investors without overcompensating them.

The PR19 regime has several different components which impose varying degrees of risk on the company:

- **Volume risk mechanisms:** which protect companies against ex post volumes being different from those forecast at final determinations, including reconciliation mechanisms for the household retail and bioresources controls.
- **Collection risk mechanisms:** bad debt risk remains largely with companies in order to give good collection incentives.
- **Fixed cost allowances:** where the risk of variance in the corresponding cost item is held by companies.
- **Cost allowances subject to reconciliation:** where allowances are updated for outturn data to reduce risk to the company (and transfer it to customers). Reconciliation may be total or partial, varying the level of risk companies are exposed to.
- **Service incentives:** such as Outcome Delivery Incentives (see Chapter 9). Caps and collars can limit outperformance payments and underperformance penalties and hence the exposure faced by customers and companies.
- **Re-opener mechanisms:** which allow the resetting of allowed revenues within period, subject to a materiality threshold (e.g. interim determinations).¹²⁶

The relative prominence of these categories of mechanism has changed over time. For instance, PR19 was marked by significant growth in the number of reconciliation mechanisms,¹²⁷ and a higher share of revenue at risk governed by service incentives relative to PR14. Conversely, there have been no formal company applications to invoke re-opener mechanisms since 2013,¹²⁸ and no successful applications since 2007.¹²⁹

11.2.1 Allocating risks appropriately

We seek to use our risk allocation framework to incentivise efficiency and service quality, while having regard to water's status as a relatively low risk and low return sector. A key consideration in allocating risks is whether or not companies can influence them. If a company shares in the consequences of a risk it can influence, it will have an incentive to manage down the risk's likelihood and impact, which can lead to better outcomes for customers.

Other factors may also be relevant. For example, a recurrent theme in feedback on PR19 has been concern about the complexity of the regulatory framework – and in particular the number of reconciliation mechanisms.¹³⁰ While simplicity is not an end in itself, complexity tends to increase administrative burden and risk of error, which can then lead to detrimental consequences for consumers. We are interested in views on how to manage the trade-off

¹²⁶ Ofwat, '[Interim determinations](#)', webpage retrieved on 19 May 2021.

¹²⁷ For instance, the PR19 reconciliation rulebook contains 20 mechanisms, while its PR14 equivalent contained only 7.

¹²⁸ Ofwat, '[Final determination of Thames Water's IDoK application](#)', November 2013.

¹²⁹ Bristol Water and Dee Valley Water successfully applied for an interim determination in 2007.

¹³⁰ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)', December 2020, pp. 85–86 and pp. 99–107.

between complexity and the benefits of risk allocation mechanisms. For instance, we could remove mechanisms that consistently produce reconciliations that are below a particular turnover threshold.

For PR24 we are interested in identifying areas where modifications to the risk allocation framework may be beneficial for customers. We will seek to use company data from the initial years of the PR19 price review period (2020–25) to inform our thinking on areas of the risk allocation framework where there is a case for change.

11.2.2 Understanding risks

To calibrate an appropriate balance of risk and return for PR24, we seek to have a reasonable sense of the magnitude of risks involved. Risk ranges based on Return on Regulatory Equity (RoRE) can help to quantify the financial impacts of risks. We continue to see value in retaining this measure to provide insight into the risk–reward balance faced by companies.

We found during PR19 that companies' business plans had adopted different approaches to measuring risk impacts and constructing RoRE risk ranges from these impacts.¹³¹ These differences in approach across companies made it difficult to compare the resulting risk ranges or directly incorporate this evidence into a sector-wide assessment. This influenced our decision to adopt common approaches to the presentation of RoRE risk ranges for final determinations that took account of historical performance data across the sector. For PR24 we are interested in exploring options to improve the insight of RoRE, potentially involving risk measurement tools such as Monte Carlo analysis. We are also interested in whether promoting a more consistent approach to the calculation of impacts and construction of RoRE risk ranges would have benefits. We note that our suggestions in Chapter 9 around focusing on fewer performance commitments that would be common to companies could have the benefit of making the common distribution of risk easier to model across companies.

11.3 The allowed return on capital

The allowed return on capital is an important component of allowed revenues which is intended to fund efficient financing costs. Our approach to setting the allowed return aims to provide an allowance that is reasonable for the price review period. We also design our approach to maintain incentives for companies to seek prudent and cost-effective financing over time, the benefits of which can be shared with customers.

We achieve this through the use of benchmarking, which promotes that financing costs paid by customers are those of a reasonably efficient company. Companies' inability to directly

¹³¹ For instance, some companies' ranges assumed correlations between risks, while others did not.

pass through their actual financing costs supports greater financing efficiency and discourages excessive risk-taking.

11.3.1 Notional structure

Most of our previous price controls have focused on using a single notional capital structure to set the base allowed return. This approach benefits from simplicity and provides some protection to customers from bearing the risks of company choices around their capital and financing structure. However, concerns remain that this regulatory approach may not do enough to discourage some companies from adopting risky financing strategies in order to arbitrage gains for investors. Our concern is that the financing structures which result lack adequate levels of long-term financial resilience and are not in customers' interest.

We acknowledge that the CMA's March 2021 redeterminations disallowed the gearing outperformance sharing mechanism which we introduced to address distorted incentives around highly-g geared structures.¹³² We will consider whether further work targeting risky structures is required to address distorted incentives alongside our work on strengthening financial resilience discussed below.

11.3.2 Allowed return on equity

For PR24, we propose to set an allowed return on equity which is commensurate with the risk faced by an efficient company over 2025-30.

In PR19 and previous price controls, we have used the Capital Asset Pricing Model (CAPM) populated with UK parameters to determine the allowed return on equity. In its March 2021 redetermination of the PR19 price controls, the CMA also followed this approach. The CAPM has the benefit of relative simplicity and good availability of input data. But we are interested in views on other approaches which could potentially serve as cross-checks to a CAPM estimate.

We will also consider the approach taken by the Competition and Markets Authority (CMA) in its March 2021 redetermination of four companies' PR19 price limits. The CMA set an allowed wholesale return of 3.12% rather than our 2.92% (CPIH terms). This was mainly due to the increased weight placed on historical averages of equity returns to estimate Total Market Return, and also the CMA's decision to set an allowed return on equity which was above the level implied by using the midpoint of the ranges of their components. We will also consider any developments in the ongoing energy network (RIIO-2) appeals to the CMA which have relevance to the allowed return in the water sector.

¹³² Competition and Markets Authority, '[Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determination - Final report](#)', March 2021, p. 12.

In our reconsideration of our risk framework highlighted above, we are considering exploring the merits of indexing the allowed return on equity, and how this could be implemented – considering issues such as the speed of reconciliation and scope of inputs to be indexed. The PR19 process was characterised by significant volatility in our proxy for the risk-free rate: RPI-linked gilt yields. Our December 2017 ‘early view’ of 0.10% in CPIH terms was supplanted by an estimate of -0.45% for draft determinations, only to fall further to -1.39% for final determinations. This level of unpredictability increases the risk over a 5-year price review period that a fixed allowed return on equity may cause windfall gains or understate the return investors require. Introducing indexation could therefore provide protection for both customers and investors.

11.3.3 Allowed return on debt

For PR24 we intend to set an allowed cost of debt covering the reasonable embedded and new debt costs of the notional company over 2025–30. We are interested in setting a reasonable return which also implies good incentives to issue new debt prudently and efficiently.

We are interested in exploring the role played by balance sheet data and index data in informing our allowance. Our PR19 allowed cost of embedded debt focused on an index-led benchmark, with a cross-check from balance sheet data. Both Ofgem’s RIIO-2 determination and the CMA’s March 2021 water redeterminations placed more weight on using actual costs as a starting point for their allowances. We consider that it may be difficult to capture the key characteristics of water bond issuance in any one index, risking an allowance that is over-generous relative to most companies’ actual costs. This suggests that it may be appropriate to assign relatively more importance to balance sheet data as part of PR24.

Our redesigned instrument-level data collection from the annual performance report from 2021–22 will support more frequent updates on the balance sheet cost of debt, as well as providing a more detailed picture of the financing arrangements of individual companies.¹³³ We anticipate it will also reduce duplication and additional data requests through providing a single source of data to be used for both price review and other purposes.

At PR19, we set a weighted average overall cost of debt using an assumption for the notional share of new debt. We placed weight both on company issuance data and more notional profiles based on the sector’s years-to-maturity. This was also broadly the approach followed by the CMA in its redeterminations.¹³⁴ For PR24, we are interested in exploring how much weight we should place on company submissions and notional profiles when setting our assumption.

¹³³ Ofwat, ‘[Consultation on regulatory reporting for the 2020-21 reporting year](#)’, May 2021, p. 19.

¹³⁴ Competition and Markets Authority, ‘[Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determination – Final report](#)’, March 2021, pp. 962–966.

We note that there may also be potential to simplify this area by not making separate allowances for new and embedded debt. Ofgem's RIIO-2 final determination allowed return on debt set a combined cost of debt using an extending trailing average of their preferred benchmark index. Adopting a similar approach would see a single allowance covering the costs of both embedded and new debt, avoiding having to separately estimate the notional proportion of new debt.

11.3.4 Company-specific adjustments

At previous price reviews some companies have requested company-specific adjustments to the allowed return to reflect their circumstances as smaller companies. We note that the CMA in March 2021 allowed Bristol Water an uplift to its cost of embedded debt and issuance & liquidity costs, but not other components.¹³⁵ As part of PR24, we are interested in views around whether continuing to allow such uplifts is appropriate, under what conditions, and how to streamline the assessment process.

11.3.5 Retail margins

The net margin is intended to provide an efficient company with a normal return that is appropriate to the capital employed and risks as a retailer. In contrast to the wholesale business, which has significant long lived tangible assets, the retail business is relatively asset-light and working capital is a key component of its capital employed. This means traditional return on capital approaches are less suited to assessing appropriate returns.

Our approach to setting a retail net margin for the household retail control was not contentious as part of the PR19 process, and we have not identified issues with our approach, internally. We also made a retail margin adjustment to the appointee allowed return on capital to avoid double counting non-diversifiable risks in both the retail margin and the appointee allowed return. While several disputing companies challenged the principle and level of our retail margin adjustment, the CMA's March 2021 redetermination included an adjustment which was higher than that which we had set at the PR19 final determinations.¹³⁶

For PR24, we propose to retain a net margin approach to providing for household retail finance costs, together with a retail margin adjustment. We will review the appropriate level of net margin, taking into account the characteristics of the household retail control as well as external benchmarks. We are also considering how to set a retail margin adjustment which

¹³⁵ Competition and Markets Authority, '[Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determination – Final report](#)', March 2021, paragraphs. 98-100.

¹³⁶ Competition and Markets Authority, '[Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determination – Final report](#)', March 2021, p. 1029.

will address the double counting issue using updated data. We are interested in views on how best to approach these issues.

11.4 Financeability and financial resilience

Water companies must be able to access finance on reasonable terms if they are to meet their obligations and commitments to customers over the long term. Companies are best placed to make their own choices associated with financing and capital structures, within the framework of price controls, licence conditions and their wider obligations. But we aim to protect customers from the risks arising from the choices companies make about their financing structure. This is why we focus on testing financeability using a notional capital structure for an efficiently-run company, rather than focusing on an actual capital structure.

The financing choices companies make imply different risk positions. This can impact on both the quantum and the cost of financing in the period of the determination and beyond. As monopoly providers of an essential service, it is important that companies are able to demonstrate levels of financial resilience that enable them to deliver their obligations and commitments to customers both now and in the future. Where financial resilience is at risk, companies should demonstrate that they have the ability to respond.

11.4.1 Financeability

We anticipate that an assessment of financeability will remain an important element of the regulatory framework – in both company business plans and our determinations. The assessment is relevant to the notional capital structure and considers whether the allowed revenues, relative to efficient costs, provide sufficient headroom for an efficient company to finance its investment on reasonable terms and to carry out its functions over the control period, thereby protecting the interests of existing and future customers.

Our PR19 approach to financeability has faced challenges:

- In 2018 two credit rating agencies tightened their guidance on financial ratios for English & Welsh water companies, in response to a perceived increase in political risk.¹³⁷
- The CMA's March 2021 final determinations rejected our approach of advancing future cashflows as a tool to resolve notional financeability constraints.¹³⁸

In response to these challenges, for PR24 we propose to explore our approach to determining the notional capital structure that underpins the allowed return on capital and our

¹³⁷ See e.g. Moodys, 'Regulator's proposals undermine the stability and predictability of the regime', 22 May 2018.

¹³⁸ Competition and Markets Authority, '[Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determination – Final report](#)', March 2021, para 10.82.

financeability assessment. One potential change could be increasing the assumed share of index-linked debt from its PR19 level of 33%. As at March 2020, approximately half of the sector's total outstanding debt was index-linked.¹³⁹ In addition, a further reduction to the notional level of gearing that we applied at PR19 would be consistent with proposals set out by some companies to improve financial resilience through 2020-25. It would also take account of the need to ensure sufficient headroom is available where regulatory incentive mechanisms put more revenue at risk in the period of the price control than in historical determinations. Reduced gearing would also be consistent with rating agencies' assessment of increased risk, signalling the desirability of a larger equity buffer to weather shocks.

We are keen to explore the implications of lower notional gearing with sector stakeholders, noting that deleveraging can be associated with additional costs. For example, Ofgem's RIIO-2 final determinations provided a 5% equity issuance allowance to fund its view of the issuance costs associated with the £1.8 billion of new notional equity implied in its decision to assume a reduced notional gearing in the range 55-60%.¹⁴⁰ We will carry out work for further discussion with the sector on this issue.

11.4.2 Financial resilience

While companies are ultimately responsible for their choice of financing and capital structure, risky decisions may have detrimental customer impacts. The regulatory regime contains a number of measures that protect customers in the event of financial failure. But these protections are not perfect and remain untested in the water sector where the reasons for financial distress are internally generated.¹⁴¹ To reduce such risks to consumers, we will continue to attach significant importance to companies' financial resilience, i.e. the extent to which an organisation's financial arrangements enable it to avoid, cope with and recover from disruption.

We are considering whether we should increase protection for customers in this area. This could include: amending the notional approach, adapting our approach to the price determination, or considering the need for additional customer protections, in circumstances where companies make financing choices that reallocate risk reasonably expected to be borne by equity investors in the notional company to other parties.

We expect requirements for companies to provide Board assurance and demonstrate how they will maintain financial resilience will be important at PR24. We are also taking forward a programme of work to determine what more we should do to ensure customers are

¹³⁹ Source: Ofwat analysis of 2019-20 annual performance reports: Table 1E 'Net debt analysis'.

¹⁴⁰ Ofgem, 'RIIO-2 Final Determinations – Finance Annex', December 2020.

¹⁴¹ Wessex Water and Dŵr Cymru were able to continue operations as normal despite the financial failure of parent companies Enron and Hyder, respectively.

adequately protected from the financing decisions companies make. We expect to publish a discussion paper on this issue in autumn 2021.

11.5 Inflation indexation

We see merit in further transitioning to full CPIH-indexation for PR24. For PR19 we embarked on a partial transition, by indexing customer bills to CPIH and indexing 50% of legacy RCV and all new RCV to CPIH. By the end of the 2024–25 financial year, we estimate approximately 60% of the sector’s RCV will be indexed to CPIH. Greater use of CPIH would mean indexing with a more robust measure of inflation that has greater customer legitimacy, and would align with the Johnson review recommendation that regulators ‘should work towards ending the use of the RPI as soon as practicable’.¹⁴² A full transition would also significantly simplify our overall price review approach and bring practice in water regulation in line with energy and telecoms (both of which have fully transitioned from RPI indexation). We are keen to explore with sector stakeholders the considerations and practicalities of effecting such a change, noting the proposal to discontinue the RPI calculation methodology¹⁴³ from 2030.¹⁴⁴ This would effectively convert most RPI-linked liabilities to CPIH indexation.

11.6 Next steps

We intend to carry out further work on our suite of risk allocation mechanisms and on how to increase the insight of our risk metrics. We will also consider alternative approaches to estimating the allowed return proposed by other regulators – setting out our view of the implications for our approach at PR24. We intend to engage with industry and wider stakeholders through a discussion paper on steps to ensure financial resilience through price control or other mechanisms.

11.7 Questions for stakeholders

Q11.1: Are there areas of our risk allocation framework where mechanisms could be added, simplified or removed in a way which would benefit customers?

Q11.2: How should we improve our use of RoRE risk ranges to provide insights into the balance of risk and reward, and improve comparability across companies?

¹⁴² UKSA, ‘UK Consumer Price Statistics: A Review’, January 2015.

¹⁴³ It is proposed that RPI will continue to exist as a series, but inflation will be calculated using the CPIH methodology, meaning that RPI and CPIH inflation will be the same after the change.

¹⁴⁴ HMT, UKSA, ‘[A response to the consultation on the reform to the Retail Prices Index \(RPI\) methodology](#)’, November 2020, p. 3.

Q11.3: Should we index the allowed return on equity, and if so, how ought this to be implemented?

Q11.4: To what extent should we place weight on a) balance sheet data; and b) index data when setting the allowed return on debt?

Q11.5: Should we allow adjustments to the sector allowed return based on company size - and how should this be assessed?

Q11.6: Should we make different assumptions for the PR24 notional structure compared to PR19, and how should such a change be implemented?

Q11.7: Do you have any suggestions for mechanisms which could incentivise financial resilience within the price control process?

Q11.8: To what extent should we further increase the share of the notional company RCV which is indexed to CPIH in our assumptions for the period 2025-30, and how should this be implemented?

12. Next steps for PR24

This chapter sets out our view of the timetable for PR24. Setting out a clear timetable in advance, while retaining flexibility to respond to emerging issues, is key to the successful delivery of PR24. This was one of the key lessons that we learnt from our review of PR19.¹⁴⁵

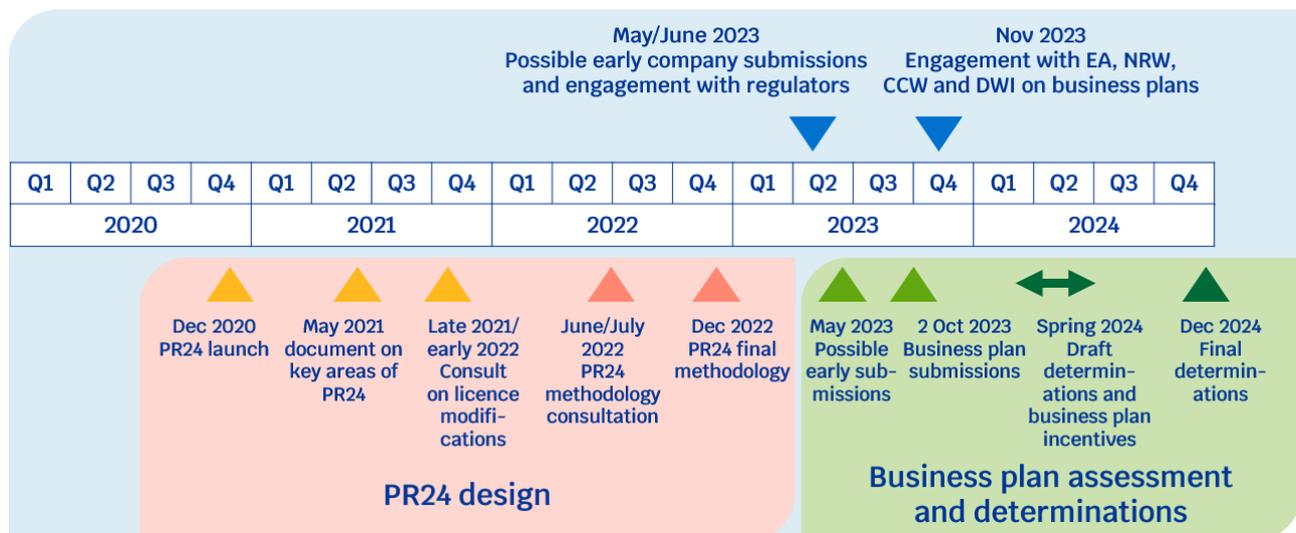
12.1 PR24 high-level timetable

We set out our early view of key dates for PR24 in the draft timetable in figure 12.1 below. We will set out further details once we have made key decisions on the methodology including on our ideas:

- set out in Chapter 4, that we provide initial views on base costs, PCLs, ODIs and financing costs ahead of business plan submission;
- set out in Chapter 5, to combine the initial assessment of business plans (IAP) with the draft determination stage; and
- set out in Chapter 6, to conduct collaborative customer research.

Our timetable is split into the **PR24 design** phase and **the business plan assessment and determinations** phase.

Figure 12.1 Draft PR24 timetable



¹⁴⁵ Ofwat, 'PR24 and beyond: Our reflections on lessons learnt from PR19' December 2020, p. 4.

12.2 PR24 design

We are already working together with companies, other regulators, the UK and Welsh governments and other key stakeholders on the design of PR24. We welcome in particular the wide range of submissions we have already received through the [Future Ideas Lab](#), and encourage interested stakeholders to continue to contribute ideas through this forum.

We have identified a number of issues for consideration throughout this document. As well as seeking feedback on these matters through the questions we are posing, we also plan to continue engaging with stakeholders through a number of channels.

We have set up working groups with the sector to meet regularly and work together to address issues on cost assessment and on outcomes. As discussed in Chapter 6, we are currently working with water companies, CCW and Water UK to establish ongoing delivery and governance arrangements for the design and implementation of the potential collaborative customer research.

We will publish papers on key issues in PR24, to share our views and to seek feedback. For example, we will develop working papers on our potential approach to long-term strategies and to explore our long-term approach to PCLs and ODIs, and will carry out further work on our framework for allocating risk.

There are also a number of areas outside of but related to the price review that we will engage further on. For example, we will publish a discussion document on financial resilience concerns and the development of incentives for companies to ensure that they remain financially resilient. And we will engage further with the industry on net zero and public value.

If **modifications to licence conditions** are required to implement our preferred approach, we would expect to consult on these in late 2021 or early 2022. Because of the need to collect and consider additional data, we expect to consult on options for developer services as we develop the PR24 methodology in 2022. We highlight some other areas where licence modifications may be necessary throughout this consultation and welcome views on this from companies and other stakeholders.

This engagement will feed into our draft PR24 methodology consultation, which we will publish in June/July 2022. After considering the feedback received, we plan to publish our final methodology for the price review in December 2022.

We are keen to engage with all interested stakeholders across the sector as the approach to PR24 is developed. Beyond the regulated water companies, this includes new appointments and variations (NAVs), business retailers, Market Operator Services Ltd. (MOSL), companies in the wider supply chain, as well as governments, other regulators,

customers and their representative groups and environmental organisations. We also welcome contributions from all of these stakeholders to the [Future Ideas Lab](#).

12.3 Business plan assessment and determinations

Following the publication of the final methodology, our focus will shift from developing the price review framework to the content of companies' business plans and ultimately the setting of the determinations.

Feedback from PR19 suggests that early submission of key elements of business plans prior to final submission was a helpful stage of the process.¹⁴⁶ Accordingly, we will consider what elements of business plans might usefully be included in an early submission from companies, for example with respect to enhancement schemes or outcomes with bespoke PCLs. We will also engage with other regulators at these early stages to get their initial views on the business plans' risks and opportunities. As set out in Chapter 4, we are considering providing initial views on ODI rates, PCLs, base costs and WACC ahead of business plan submission.

We are planning for a **business plan submission date of 2 October 2023**. We consider this would achieve a good balance between providing sufficient time for us to review and robustly challenge plans, and receiving feedback from companies on the challenges they have received. We do not consider a later submission date would be viable, due to the time needed to make our assessment.

As discussed in Chapter 5, we are considering combining the business plan incentive stage with the draft determination stage, and publishing the results of this in **spring 2024**. We will consider feedback on this suggestion, including the implications for the timing of draft determinations for companies with high quality business. Final determinations for all companies will be made in **December 2024**.

We welcome views from stakeholders on our draft timetable for PR24.

12.4 Questions for stakeholders

Q12.1: What are your views on the draft timetable for PR24?

¹⁴⁶ Ofwat, '[PR24 and beyond: Our reflections on lessons learnt from PR19](#)' December 2020, p. 108.

13. Questions for stakeholders

This discussion paper has outlined our initial views on PR24 and future price reviews. In this chapter, we summarise our questions for stakeholders. We want to hear views on the ideas set out in this document from across the sector. This includes water companies (both regional and new entrant), business retailers, Market Operator Services Ltd. (MOSL), companies in the wider supply chain, as well as public bodies, other regulators, customers and their representative groups and environmental organisations. We invite written submissions by 5pm on 22 July, and set out how you can respond to this document on page 6 of this document.

We also continue to welcome contributions, from across the sector and beyond, to the [Future Ideas Lab](#) on how we can evolve the price review at PR24 and beyond.

Chapter	Questions for stakeholders
2. Ambitions for PR24	Q2.1: Do you agree that the themes we have suggested for PR24 are appropriate for England and for Wales?
	Q2.2: Do you have comments on the considerations we've identified as relevant to the design of PR24?
	Q2.3: How should we evaluate our progress, and how can we best develop or use appropriate metrics to do so?
3. How we regulate	Q3.1: How can we best regulate the water sector to deliver value for customers, communities and the environment? Do you agree, or have comments on, our suggestion to maintain our 'building block' approach based on outcomes, costs and risk and return?
	Q3.2: To what extent is greater co-ordination required across the sector? In what ways might we promote better co-ordination across companies and with other sectors, and how might this benefit customers?
4. Increasing focus on the long term	Q4.1: What are your views on the need for greater focus in companies' regulatory business plans on how they will deliver for the long term?
	Q4.2: What should long-term strategies seek to cover and what details should we expect companies to set out in business plans? Would common requirements help us and other stakeholders to understand each company's approach?
	Q4.3: How would this build on the work completed in strategic planning frameworks?
	Q4.4: How can we allow such strategies and plans to adapt to new information at future reviews while continuing to hold companies to account to deliver expected benefits into the future?
	Q4.5: Would providing our views on comparable aspects of companies' plans in advance of business plan submission streamline the price review process?
	Q4.6: Should we adopt a collaborative approach to developing Welsh companies' plans at PR24? If so, how should we go about doing this?
	Q4.7: What are your views on how we could provide clarity over the long-term regulatory framework?
	Q4.8: Are there barriers to water companies changing how they deliver their core functions to deliver greater environmental and social value? How can we address any barriers?
	Q4.9: Do you have any further suggestions for increasing the focus on the long term? If so, what are these?

5. Strengthening incentives	Q5.1: Should we undertake an initial assessment of plans at PR24? If so, what areas should we focus on in this assessment?
	Q5.2: Should we consider adopting a more light touch approach at PR24 for companies with a strong track record of delivery during the PR19 price review period? If so, what factors should we consider in our assessment and why?
	Q5.3: Should we streamline the price review by combining different steps in the process? If so, which of the three options outlined in this paper should we consider? And are there other options we can usefully consider?
	Q5.4: Is a different approach needed for the initial business plan assessment for companies in England and in Wales?
	Q5.5: What incentives should we provide for high quality plans at PR24? If we don't make use of early draft determinations, how else might we strengthen incentives to table high quality plans on first submission?
	Q5.6: How might we set cost sharing rates at PR24? Should we consider an approach based on our ability to monitor companies' asset health status?
	Q5.7: Which areas should we be considering targeted challenges for at PR24, and why?
	Q5.8: Should we use innovation specific incentive mechanisms at PR24? If so what would these be, and what would they add in addition to the other mechanisms outlined in this chapter?
	Q5.9: In what ways might we promote the themes of EBR through PR24?
6. Reflecting customers' preferences	Q6.1: What are your views on the merits of our proposals for a collaborative approach to standardised and/or nationwide customer research to inform company business plans and our determinations?
	Q6.2: Do you have any suggestions for how we best implement the collaborative approach to customer research for the price review?
	Q6.3: Are there aspects of negotiated settlements that could be reflected in our price review framework?
	Q6.4: What are your views on our proposals for customer challenge of business plans and assurance of customer engagement?
	Q6.5: What are your views on whether we should develop minimum standards or provide guidance in other areas?
	Q6.6: How well does our proposed approach to customer engagement take appropriate account of the different regulatory frameworks in England and Wales?
7. Planning together for PR24	Q7.1: How can we ensure that companies bring together the outputs of the strategic planning frameworks in the most coherent and effective way for business plans?
	Q7.2: What are your views of our thinking on our and companies' roles in engaging with other regulators between business plan submission and our issuing of the final determinations?
	Q7.3: How could we best involve a 'PR24 Challenge Panel' in the price review process to help ensure that our decisions best reflect the interests of customers, communities and the environment?
8. Design and implementation of price controls	Q8.1: Do you agree with, or have any comments on, our general approach to the design and implementation of controls, i.e. to retain separate controls with the same broad structure as at PR19, but with improvements to our implementation?
	Q8.2: Do you agree with, or have any comments on, our proposals for specific parts of the value chain, i.e. for water resources, developer services, residential retail and business retail in Wales?
	Q8.3: Do you agree with, or have any comments on, our proposals spanning multiple parts of the value chain, i.e. for major projects and future reconciliations?
9. Outcomes	Q9.1: What kinds of performance commitments should we include in the price review? What outcomes require financial incentives for all companies for the foreseeable future?

	<p>Q9.2: How do you think we should monitor outputs that are not clearly linked to the outcomes incentivised in the price control? Would it help to distinguish between PCs that monitor outcomes and PCDs that monitor outputs? What other options could we consider?</p> <p>Q9.3: Do you consider there are aspects of company performance where it would be better not to set expectations as part of the price control? What approaches should we consider in these cases, so that companies act in the interests of customers?</p> <p>Q9.4: What should be our aim in setting the levels of performance commitments? Do you agree with the proposal that performance commitment levels should be set, as a starting point, at what can be achieved by an efficient company with base costs and that deviations from this are proposed in company business plans? If not what alternative proposals should we consider?</p> <p>Q9.5: What approach should we take to setting ODIs? How should we take account of marginal costs and marginal benefits in setting ODI rates? What are the risks and benefits of the approaches that we set out, or any others that you propose?</p>
10. Cost assessment	<p>Q10.1: What should be the priorities for improving our approach to cost modelling and assessment?</p> <p>Q10.2: In what areas (both historical water sector and external) can we improve the range of benchmarks we use in cost assessment?</p> <p>Q10.3: How can we take account of longer term ambitions such as delivering net zero and increasing public value in our approach to assessing costs?</p> <p>Q10.4: Do we need to amend our cost assessment approach to take account of nature based solutions?</p> <p>Q10.5: Where can we enhance our evidence base on the relationship between costs and service?</p> <p>Q10.6: What mechanisms should we consider for the efficient funding of performance levels, set in a long-term context, that vary from those an efficient company would deliver through its base allowance?</p> <p>Q10.7 – Is there more that we need to do to reflect future pressure on operational resilience in our approach to cost assessment?</p> <p>Q10.8: Are the most significant challenges to the operational resilience of the sector adequately captured within current strategic planning frameworks?</p> <p>Q10.9: How can we strengthen incentives for long-term operational resilience and improve the assessment of resilience enhancement expenditure while continuing to protect customers' interests?</p>
11. Risk and return	<p>Q11.1: Are there areas of our risk allocation framework where mechanisms could be added, simplified or removed in a way which would benefit customers?</p> <p>Q11.2: How should we improve our use of RoRE risk ranges to provide insights into the balance of risk and reward, and improve comparability across companies?</p> <p>Q11.3: Should we index the allowed return on equity, and if so, how ought this to be implemented?</p> <p>Q11.4: To what extent should we place weight on a) balance sheet data; and b) index data when setting the allowed return on debt?</p> <p>Q11.5: Should we allow adjustments to the sector allowed return based on company size - and how should this be assessed?</p> <p>Q11.6: Should we make different assumptions for the PR24 notional structure compared to PR19, and how should such a change be implemented?</p> <p>Q11.7: Do you have any suggestions for mechanisms which could incentivise financial resilience within the price control process?</p> <p>Q11.8: To what extent should we further increase the share of the notional company RCV which is indexed to CPIH in our assumptions for the period 2025-30, and how should this be implemented?</p>

12. Next steps for PR24	Q12.1 - What are your views on the draft timetable for PR24?
Appendix - Examining the boundary of the targeted control for water resources	Q14.1 - How can costs and incentives for the existing water resources control be targeted more effectively?
	Q14.2 - Would amending the boundary to include raw water distribution or to extend it further to include water treatment improve the operation of the control? What are the issues involved?

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Ofwat
Centre City Tower
7 Hill Street
Birmingham B5 4UA
Phone: 0121 644 7500

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