Planning our future together

Our business plan 2025-2030

Affinity Water

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Executive Summary

Affinity Water

Introduction

Our purpose is to provide high quality drinking water for our customers and take care of the environment for our communities, now and in the future. Our aim is to provide efficient and affordable services in both the short and long term.

Our long term ambitions, as set out in our Strategic Direction Statement are focused on four key areas: the environment, resilience and our customers and communities.

We are proud to present our business plan for PR24, which sets out the five year plan needed to achieve those long term ambitions, and maintain ongoing compliance with our obligations. We know that our customers' expectations are constantly increasing, while the world around us is more and more uncertain. The industry today is facing unprecedented scrutiny on environmental issues, and, as a water-only company with high environmental ambitions and track record, we are well placed to help rebuild trust in the industry.

Our five year and 25-year plans set out how we will meet these challenges and expectations by employing innovation, efficiency, and developing partnerships to deliver an excellent service for our customers and communities.

Our long term ambitions

Environment

Leave the environment in a sustainable and measurably improved state.

- End unsustainable abstraction from chalk groundwater sources
- Achieve Net Zero for operational emissions by 2030 and all carbon by 2045
- Deliver a net gain in Natural Capital

Customers

Deliver what our customers need, ensuring affordability for all.

- Exceed customers' expectations for drinking water
- Personalise our services to support different needs and wants
- Take care of our vulnerable customers and keep bills affordable

Resilience

Be prepared for change, and resilient to shocks and stresses.

- Ensure a resilient supply of water for our customers
- Ensure our physical assets are resilient for the longterm
- Ensure our people, processes, suppliers and finances remain resilient

Communities

Work with our communities to create value for the local economy and society.

- Build trust and transparency
- Enhance environmental and social health to provide value to our communities
- Reduce our impact in the water environment for all

Challenges we face

We have a diverse range of challenges over the next 25 years, and we are committed to ensuring our business is sustainable for the long term.

The scale and complexity of the world we operate in is changing. Acute risks and hazards such as cyber-attacks and extreme weather events, together with future pressures, such as climate change, population growth, and economic and social change are increasing in intensity and unpredictability. These challenges demand novel and innovative responses, and significant investment, to deliver the improvements our customers want, now and in the long term.

Our long term environmental ambition

We have a high level of environmental ambition, which is challenging given that due to high population growth in our region we are anticipating a 10% increase in demand by 2050. We want to stop placing stresses on the rare and unique chalk stream habitats in our area through our abstraction from the groundwaters that feed them.

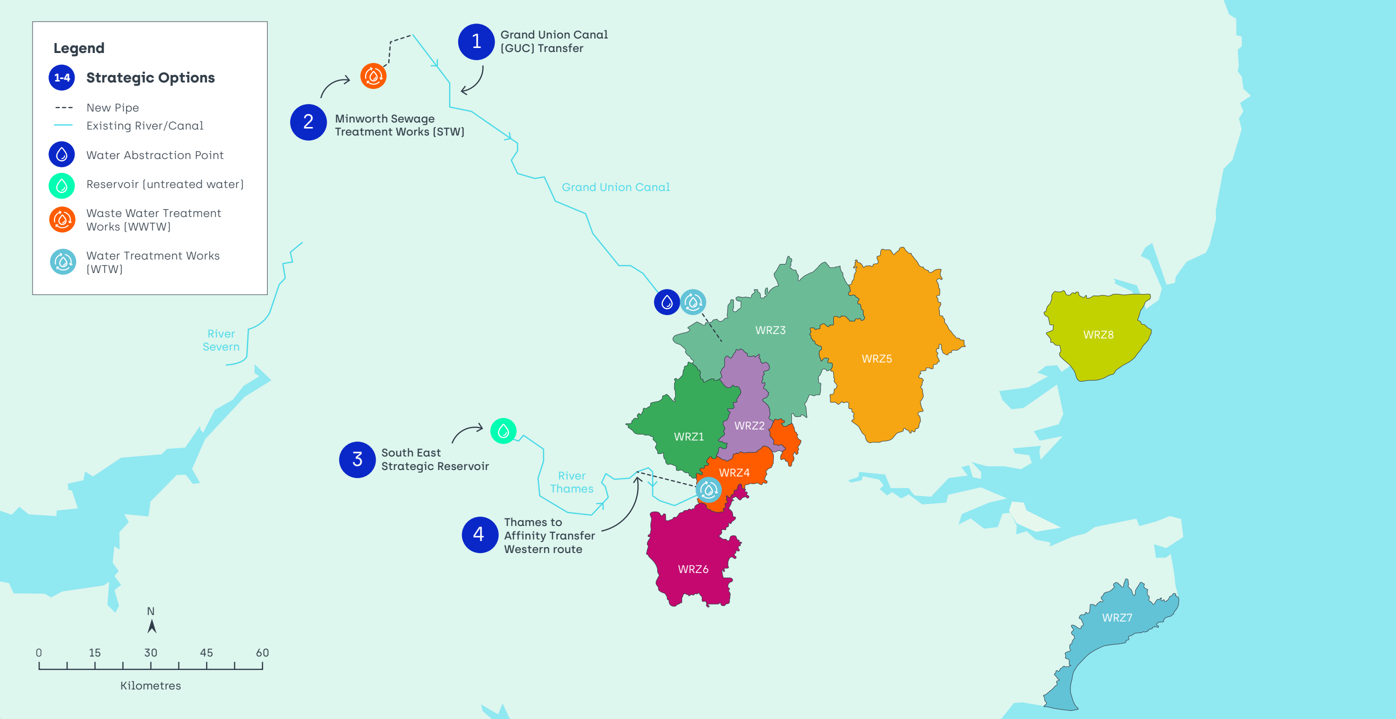
We will need to balance supply and demand over the long term:

- Reducing leakage by 50% from the 2017-18 baseline by 2050
- Reducing daily per person consumption in a dry year to 110 litres by 2050, and business demand by 18 million litres per day by 2050
- Delivering the strategic regional water resources across our region, as shown in the map below, which are scheduled for preparatory work during 2025-30 and delivery during 2030-35 and beyond

Our affordability ambition

We prepare this plan in the midst of a cost-of-living crisis, where customers are facing cost increases from all quarters. We will need to extend the reach of our social tariff and anticipate increasing the number of customers benefitting from this tariff from 90,000 to around 150,000 by 2030.

Our long term plan for bringing water into the areas we serve



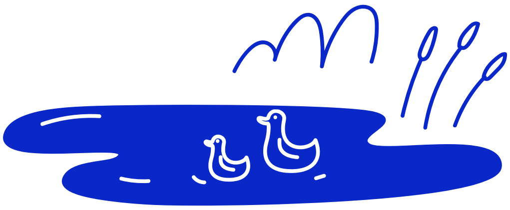
Our customers' voice

We have undertaken the largest programme of customer research and engagement in Affinity Water's history to develop our plan.

We have commissioned our own, innovative new research to deeply understand our customers' views and values, as well as collaborating with regional partners and national groups to understand our customers in wider contexts. We have also brought together existing customer information and knowledge using machine learning and data insight techniques to develop a rich and comprehensive understanding of our customers.

Our Independent Challenge Group (ICG) has challenged us every step of the way, ensuring we are delivering high quality research and taking customer views into account.

All of this insight and learning has been used to shape and adapt our plan to deliver what customers need and expect.



On bills...

Customers recognise that investment is needed, and that bills are reasonable. They support more progressive ways of charging through a wider range of tariffs than at present, as long as the vulnerable are protected.

On water resources...

Customers support our investment plans for the long term, and recognise that they are needed both for today and future generations. They also support our plans to improve biodiversity, reduce our carbon impact, and our ambition to eliminate unsustainable abstraction in the long term.

We have also extensively engaged with our customers and stakeholders on our long-term plans, through our strategy (published in Jan 2022), development of our company and regional level water resource plans, and our long-term delivery strategies.

From this engagement, we have been able to develop and test our phased approach to long-term plans and put forward a plan for 2025 to 2030 that our customers support and reflects their priorities for the immediate and long term.

What we have changed as a result of our customer engagement

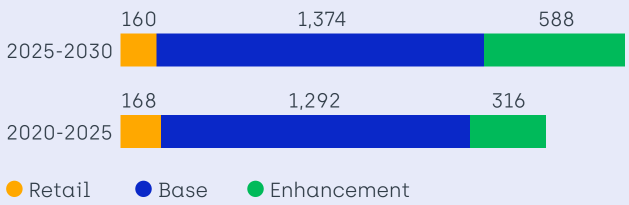
We have engaged with thousands of customers throughout the process of developing our business plan, along with our business as usual engagement that happens every day. We published a draft plan and received 1,808 responses from customers and stakeholders, alongside other activities such as participation in our live online 'Your Water, Your Say' event, and the affordability and acceptability research. We have made changes to our plan as a result of feedback, both from the consultation and throughout the plan development process.

As a direct result of customer feedback, we have ensured that our WRMP prioritises demand-side reductions first, that our work on rivers is focused on the river itself rather than surrounding areas, and that we extend our lead replacement plans to include customer pipes as well as our own pipes. We also heard from customers that our draft plan, while affordable for many, would be challenging for a small but significant proportion of customers. We further challenged ourselves to make sure our investment plan is as efficient as it can be, this results in a lower average bill for customers than in the draft plan.

Our plan - investment

We will invest a total of £2.12bn between 2025 and 2030. This is an 19% increase from 2020 to 2025, reflecting our increased ambition for reducing unsustainable abstraction.

Investment in 2025-30 compared with 2020-25



Environment

Our ambition is to leave the environment in a sustainable and measurably improved state.

We will:

- Deliver an investment programme that reduces the water taken from **chalk aquifers** by 35 million litres per day in the next five years
- Deliver a programme of **river restoration and catchment management** to improve the wider river environment
- **Reduce operational carbon** emissions to zero by 2030, helping to reduce the UK water sector's 2.4m tonnes of carbon per year of emissions
- Deliver £78m of **leakage reduction investment** totalling 22.4 million litres per day or 30% by 2029-30 on our path to a 50% reduction by 2050 (against a baseline from 2020)

Customers

Our ambition is to deliver what our customers need, ensuring affordability for all.

We will:

- Deliver a £76m package of **water quality treatment upgrades to improve water quality further**
- Provide a broad **package of support for customers** struggling to pay
- Water assistance voucher scheme and **debt support scheme**
- Introduce tariff trials to support affordability
- **Introduce payment breaks** & payment plans
- **Free repairs** of customer supply pipes for vulnerable customers
- Industry leading home water efficiency checks to help **reduce water and energy usage**

Resilience

Our ambition is to be prepared for change, and resilient to shocks and stresses.

We will:

- **Reduce total water demand** by 50 million litres a day in 2030 from a 2025 baseline. This equates to a 4.5% reduction in total demand
- Install **400,000 smart meters** (one third of all customers) to help customers control their usage
- Protect key assets from **single point failures**
- **Provide additional flood alleviation** protecting sites from climate change
- Increase **network calming** - an important piece of work that not only reduces leakage but reduces the cost of investing in replacement pipes

Communities

Our ambition is to work with our communities to create value for the local economy and society.

We will:

- **Enhance** our programme of collaborative working with community and local government and charitable organisations **Promote** staff volunteer days to help local communities and charities
- **Improve our visitors' experience** by providing public access sites including catering and water sports by third parties and partners
- **Increase river enhancement opportunities** to support biodiversity and flood management within the Colne Valley

Our plan – performance

We have sought our customers' views and experiences to guide and inform our plan. Development of delivery plans has been led by our operational teams and involved our supply chains which gives us a high level of confidence that they can be achieved. We have looked to our past performance, and across the industry, to ensure that the ambition for our performance is set at a high level.

Our plan shows a significant increase in ambition for most of the common performance commitments by 2030. We aim to deliver a step change in performance consistent with our long-term delivery plans. Our plan will enable us to continue to meet our obligations.

We have included three bespoke commitments. Low pressure is an area where we have seen issues in the past, and so we include this performance commitment in recognition of its importance to our customers. We also include the Abstraction Incentive Mechanism or AIM. Reducing abstraction from our most sensitive catchments is of intrinsic importance to our long-term plans. We have included a Whole Life Carbon performance commitment to provide a holistic measure of reducing embedded carbon.

Efficient costs

Our plan will deliver ambitious performance at an efficient cost. Our plans are developed focusing on customer requirements and costed using out turn costs with an anticipated frontier shift of 0.5% applied. Where investment is driven by statutory requirements we work collaboratively with the Environment Agency to ensure best value over the long term. Our programmes of work are optimised using state of the art optimisation software including Copperleaf which ensures the least regrets solutions are chosen, which deliver the best value increase across the six capitals for our region.

Case Study:

Delivering Ofwat's ambitions over and above performance commitments

Providing open source access to our monitoring network, field data and measurements.

We collect data including river flows, groundwater levels, river and lake levels, rainfall and surface water quality, to help ensure there is a good understanding of the environment within the areas of our operations. Our environmental monitoring network covers more than 700 locations.

We are committed to the principle of sharing our data and information publicly, and have developed a web portal to give easy and open access to any person or organisation who wants to use the data.

Our Environmental Data Web Portal went live in March 2023 and we held a series of short sessions with regulators and stakeholders to demonstrate and publicise the tool. We have received positive feedback from stakeholders as the portal provides them with free access to near real time data of their local rivers and catchments.

We are continuing to add datasets to the portal and are looking at how we can incorporate our ecological survey data, our archive of fixed-point photography (which provides a photographic record of our chalk streams since 1998), and potentially citizen science data sets from stakeholders.

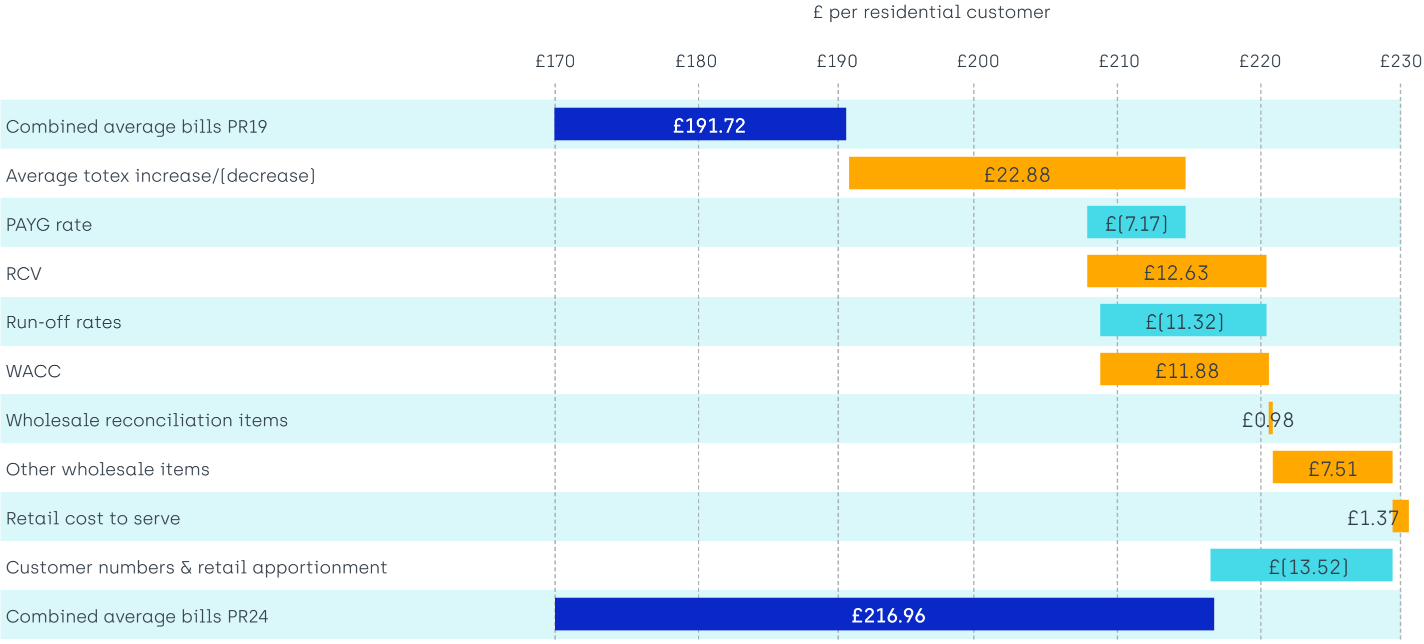
New performance commitments 2025 - 2030

Our Ambition Statements	Key Outcome	Type	Performance Commitment	Reward/ Penalty	Measure	2024/25 Target	2025/26 Target	2029/30 Target	Improvement
Leave the environment in a sustainable and measurably improved state	Environment	Common	Leakage	Both	% Reduction from 2019-20 baseline	20%	20%	31%	11%
			Per capita consumption	Both	% Reduction from 2019-20 baseline	12.5%	12%	16%	4%
			Business demand	Both	% Reduction from 2019-20 baseline	n/a	11%	11%	n/a
			Biodiversity	Both	Biodiversity units per hectare	New for 2025/26	0	2.70	n/a
			Operational GHG emissions	Both	Tonnes of CO_2e	New for 2025/26	55,477	55,859	n/a
			Discharge permit compliance	Penalty Only	% Compliance	New for 2025/26	100%	100%	n/a
			Serious pollution incidents	Penalty Only	Number of Cat. 1 & 2 incidents	New for 2025/26	0	0	n/a
		Bespoke	Whole life carbon	Both	% reduction against baseline	New for 2025/26	n/a	14%	n/a
			Abstraction incentive mechanism	Both	Reduction in Ml of abstraction across selected sources	0	0	0	n/a
Be prepared for change, and resilient to shocks and stresses	Resilience	Common	Mains repairs	Both	Number of repairs per 1,000km of mains	142	140	132	7%
			Unplanned outage	Both	% Of peak week production capacity	2.54	2.46	2.14	16%
Deliver what our customers need, ensuring affordability for all	Customer		C-MeX	Both	Score /100	League Table	n/a	n/a	n/a
			Water supply interruptions	Both	Time per property per year	00:05:00	00:04:40	00:03:40	25%
			Compliance risk index	Penalty Only	Numerical Score (Deadband of 2.0)	0 (Forecast of 1.09)	0 (Forecast of 1.09)	0 (Forecast of 0.9)	17%
			D-MeX	Both	Score /100	League Table	n/a	n/a	n/a
			Customer contacts about water quality	Both	Number of contacts per 1,000 population	0.67	0.67	0.67	0%
			BR-MeX	Both	Score /100	League Table	n/a	n/a	n/a
		Bespoke	Average time properties experience low pressure	Penalty Only	Average time per property that pressure is below 15m per year	02:42:10	01:55:56	01:43:43	36%

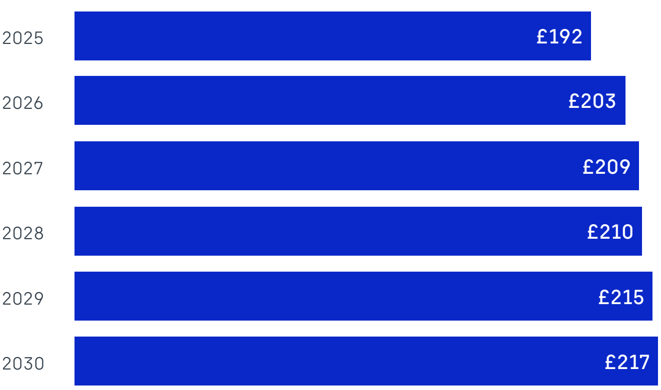
Our plan – customers' bills

We have continually challenged ourselves to make sure our customers' bills are fair and as low as they can be. Our WRMP and WINEP programmes will increase bills, and this is supported by customers. By 2030, the average customer bill will be £216.96, an increase of 13% compared to 2025.

Real Average Customer Bill Movements 2025 compared to 2030
£/Customer in 2022/23 CPIH Year Average Price Base



Average customer bills by 2030



Long-term affordability
Bills have fallen in real terms since the creation of Affinity Water ahead of the PR14 price review. In the next period, bills will increase due to an ambitious programme to protect and improve the environment, and maintain supplies to customers, with an 86% increase in enhancement investment.

However, by 2029-30, bills will still be lower in real terms than in 2015-16 as customers pay for the enhancement over the long term. We will deliver most of the significant improvements in performance from base investment, which will rise by just 7%, limiting the effect on bills, and we have taken all action we can to ensure bills are as low as they can be.

We were an early champion of social tariffs. We have recently gained support to increase the social tariff cross subsidy to £9.50, and plan to increase the number of customers benefitting to up to 150,000 by 2030.

Affordability and deliverability

Affordability

We are always looking at providing additional ways to help our range of customers and meet their individual needs.

In 2023 we are trialling 'WaterSave', a rising block tariff with 1,500 customers in the Stevenage area, to gain new evidence of the effects of such tariffs on affordability and water use behaviour, and we plan four further trials between 2025 and 2030.

We have developed a four-layer affordability strategy, designed to ensure we have taken every action we can to ensure bills are as low and fair as possible, before asking our customers to take action. We also provide tools to help customers reduce consumption, and therefore bills.

Ensure our bills in 2025 to 2030 are the lowest they can be by:

- Challenging the costs we have used to develop our investment programmes to be as efficient as possible
- Planning investment on a just-in-time basis, minimising early investment that would affect 2025 to 2030 bills

Change our tariffs to deliver fairer bills by:

- Extending our social tariff to 150,000 customers and adopting any new national social tariff so no customer receives less support as a result
- Continuing with tariff trials to help make bills fairer

Provide tools for customers to reduce bills and consumption by:

- Increasing our customer supply pipe leakage allowance for those on social tariffs
- Installing 400,000 smart meters by 2030 and providing online ways for customers to understand and manage their use

Help households with the cost of living by:

- Enhancing our 'benefits maximisation' service to make sure all eligible benefits are claimed
- Using our own and external data, proactively identifying customers in or at risk of experiencing financial pressure

Delivery between 2020 and 2025

We have made significant progress on delivering our performance commitments during this five-year period and are on track to deliver the majority of our performance commitments:

1. Industry leading in water quality, as measured by the Compliance Risk Index (CRI) and in retailer satisfaction
2. Largest reduction in leakage in the industry
3. Meeting our challenging interruptions to supply target, improving from 13m:36s in 2019/20 to 3m:43s in 2021/22
4. Improvements in sustainable abstraction (AIM)
5. Rapid progress on D-Mex
6. Significant improvement in understanding our low pressure service, through increased monitoring on the network

We know we still have a lot more to do, particularly in improving our C-Mex score. As a result of the pandemic, we have also seen slower progress on the PCC commitment, along with the rest of the industry.

Delivery between 2025 and 2030

Our PR24 plan is the most ambitious plan we have ever developed. While our base investment is very similar to the current period, investment in our region to enhance services is nearly double. We anticipate this to be the case across all companies, and we recognise the pressure that will be put on supply chains by the industry.

Our enhancement programme will largely be delivered by tier 2 suppliers. We have engaged with supply partners across all levels of our supply chain, and gained assurance that our plans are deliverable. In addition, we have engaged in depth with key suppliers who have provided further assurances on planning and programming, and ways of working together.

An increased proportion of our statutory schemes such as the WINEP will be delivered through nature-based solutions and partnership working. We have extensive experience of this type of working and are confident we can deliver the step change in scale required.

We will also be working with other companies, for example within the WRSE group, to deliver the Strategic Resource Options through the Direct Procurement for Customers route.

Financial resilience

Financing our plans

During the period 2025 – 2030 we will need to refinance £250m of existing debt which matures in 2026. This and any new debt will be raised as green or sustainability linked debt. We already have a Green Finance Framework which sets out the criteria under which we will issue Green finance, including examples of suitable projects, how projects will be assessed, and how outcomes will be measured.

A fair and balanced plan

We have developed a fair and balanced plan for our customers and our region. Our plans are based on our customers' priorities, and we have tested our developing plans at various points during the process to make sure our plans continue to reflect what our customers want. Our bills are based on efficient investment costs, and we provide help to the small proportion of customers who struggle to pay. Customers are protected from overspends and under-delivery though the cost sharing mechanism, performance commitments and price control deliverables.

Our plan includes a return for our investors who have foregone dividends since 2018 to reinvest in the resilience of the business. Our policies on dividends and exec pay are transparent, represent best practice in the industry and are contingent on delivering good service to customers.

Our plan will allow us to deliver on our environmental obligations and ambition, and we will contribute nearly £1bn of additional value across the six capitals during the period 2025 – 2030.

Financial resilience

Our financial strategy is to secure an overall risk and return package which balances the need to deliver services at an acceptable price to customers with the need to remain financially resilient and support the raising of capital to fund the investment programme.

The plan presents a robust and financially resilient firm with a capital structure that enables us to maintain strong credit ratings and withstand downside scenarios, whilst raising capital to fund our investment programme for the benefit of customers and the environment.

The plan includes a planned equity injection of £150m into the regulated company in Year 1 (2025-26). The additional equity will reduce our gearing to 70.7% by 31st March 2026 and support investment over the period 2025-2030.

We have adopted all requirements in the Final methodology, including the early view of WACC at 3.29%. As a result, the overall RoRE range of the plan demonstrates a significant skew in downside risk for the notional company. We have proposed ways to mitigate this across the plan.

The Board have assured the plan, supported by external experts, and are confident that both the notional and actual company are financeable and financially resilient.

Governance and assurance

In developing our plan for 2025-2030 and the longer term plan to 2050, we have sought the highest levels of challenge and assurance throughout the process.

For each main area of the business plan, the Board has taken full ownership of the plan, and has been involved in three phases: engagement and shaping, challenge and critique, and final approval. The Board has scrutinised the risks, mitigations, challenges and stretch, and overall deliverability, and the Board has been involved in all areas and beyond those specified for Board Assurance.

During the PR24 process, the Independent Challenge Group has provided Affinity Water with detailed commentary in respect of their preparations and proposals for business plan submissions. This is part of our continuous work programme that seeks improvements for customers.

Caroline Warner, Chair of the Independent Challenge Group

Our comprehensive assurance framwork is based on:

- A risk-assessed three lines of defence model for reviewing and challenging the business plan
- Robust programme governance, including clear lines of accountability and responsibility, and a 'Red Review' process of all investments
- External challenge from a range of partners, identified on the basis of who is best placed to provide assurance to help improve the plan

We have also had extensive challenge from our Independent Challenge Group on our customer research, from strategy through to implementation.

Statement from the board

"We, the Board of Affinity Water Limited, are pleased to submit our business plan for 2025-30 and beyond; we accept ownership of, and accountability for, the development of this plan.

The Board of Affinity Water Limited has reviewed and approved the assurance programme, the assurance findings and management's response. We have collectively and individually challenged and satisfied ourselves that the assurance undertaken demonstrates that the PR24 business plan is financeable both for the notional and the actual company, maintains long-term financial resilience (over the period 2025-30 and beyond), is deliverable, achieves value for money, is robust and efficient, is stretching but achievable and has a strong customer research base.

The full board assurance statement and signatures can be found in our narrative."

Ian Tyler
Chairman

02.

View from the Board

Affinity Water

2.1 Introduction to our plan

We, the Board of Affinity Water, are proud to present our business plan for 2025 – 2030. We have developed our plan based on customer priorities and our obligations as a water supply company, to deliver on our purpose to provide high quality drinking water for our customers and take care of the environment for our communities, now and in the future.

We have worked extensively and continually with customers and stakeholders to agree our long-term ambitions, which underpin our purpose. Our ambitions are themed around the environment, customers, communities and resilience.

We are confident that our plan aligns with Ofwat's ambitions for PR24. We have developed our plan in line with the detail and the intent of Ofwat's methodology.

We welcome the **greater focus on the long-term** in this business planning cycle. We operate within a long-term industry where decisions and investments are anticipated to last for decades, however we recognise the need to be adaptable and flexible and welcome the opportunity to do so in our long-term planning frameworks. Our five-year plan is deeply rooted in, and connected to, our Long-Term Delivery Strategy (LTDS), and both have been developed by one team in Affinity. We set out more on this in chapter 3 of this document and the Long-Term Delivery Strategy.

We have carried out our biggest ever engagement with customers so that our **plans reflect a clear understanding of our customers and communities**. We have been at the forefront of innovative and collaborative engagement to support our WRMP development through regional planning groups, and have taken an active role in shaping the Acceptability and Affordability research required by Ofwat. We include more on how we have engaged customers, and how that insight has driven and changed our plans, in chapter 4 of this document. We are conscious of the affordability challenge for our customers and have set out our plans to ensure we have done everything we possibly can to address affordability concerns in chapter 5.

We have a high level of environmental ambition which touches all aspects of our plan. Protecting the globally rare chalk streams in our area is one example of how we are able to **deliver greater environmental and social value** to our communities, by working in partnership with local stakeholders, and creating new amenities alongside river channels, to allow greater access to our natural environment. We consider the wider value we can offer in chapter 3.

One of the key principles underlying our affordability strategy is to ensure that we are **driving improvements through efficiency and innovation,** so that costs to customers are as low as they can possibly be. We demonstrate our efficient costs in chapter 7 of this document and our focus on innovation in chapter 3 of this document.

We are satisfied that we will be able to deliver our ambitious plan and have tested the **deliverability** through Board engagement sessions and gaining third party assurances. We include our deliverability plans in chapter 8 and our full Board Assurance statement below.

Customer protection

We have a comprehensive customer protection package in our plan. This ensures our customers are not paying more than they should for services, and that those services are of a high quality.

Performance commitments - we have set ambitious and stretching targets and calibrated the incentives using Ofwat's national valuation research, which will see customer bills adjusted according to underperformance and out-performance, both subject to an overall cap.

Price control deliverables - we have proposed price control deliverables where material investment is not already subject to a performance commitment. These cover the majority of our enhancement programme and will see money returned to customers where enhancement investment is not delivered as anticipated in the plan.

Outperformance sharing - we are subject to the outperformance sharing mechanism which returns outperformance to customers and limits customers exposure to overspends.

Our dividend policy means we will only pay dividends if performance is acceptable and the business remains financeable in the long-term. We are a responsible Board, and recognising the challenges of this period, and have not paid any dividends since 2018. See Appendix AFW37 - Dividend Policy for further detail.

Our executive pay policy ensures pay is set fairly and transparently. It also sets out the basis on which bonus payments can be made, and that the majority of these metrics are based on customer outcomes rather than purely on financial measures. For more detail see Appendix AFW38 - Remuneration policy.

We have ensured the balance between what current customers and future customers pay is fair, by setting PAYG and RCV run off to their natural rates. This means customers will pay for the services we provide at the time they use them, which responds to customer feedback.

2.2 Board assurance statement

2.2.1 Board assurance summary

As part of its business plan for 2025 - 2030 and beyond the full Board of Affinity Water ("the Board") provides this Board Assurance Statement. The assurance statement sets out how the Board has owned and governed the preparation of the plan and exercised its accountability for production of a plan that is of high quality.

In developing our business plan and Long-Term Delivery Strategy the Board has maintained strategic oversight and leadership of all areas of development and sign off. The Board has established an integrated assurance framework for both the business plan (our five-year plan) and the Long-Term Delivery Strategy (our 25-year plan) and has ensured that the framework was properly deployed in preparation of the 25-year and the five-year plan.

Commencing in May 2020, the Board's leadership, governance and assurance has allowed it to satisfy itself that all elements of these plans have been produced to a standard that is high quality, ambitious and deliverable. The Board has reviewed and challenged all elements of these plans and satisfied itself, through its assurance, that these plans:

- Enable the company to deliver its statutory and licence obligations now and in the future
- Are underpinned by comprehensive assurance
- Are built on accurate data and information that is high quality
- Are founded on a robust Long-Term Delivery Strategy
- Fully consider affordability support for customers and provide value for money in the near and long-term
- Contain costs and outcomes that are well-evidenced, efficient, and stretching and also deliverable
- Will deliver operational, financial and corporate resilience now and in the future
- Are financeable on both a notional and actual basis
- Are financeable and maintain long-term financial resilience
- Are founded on strong customer insights and tested through comprehensive engagement at multiple stages

The Board took on its leadership, governance and assurance duties from the outset. In September 2021 the Board approved the governance and assurance process for the plans, including how information was gathered to reliably support the Board's decision making.

The Board has scrutinised management's implementation of governance and assurance and received reports from internal and external assurance providers, detailing the findings from the Board's assurance activities. The Board's assurance has played a key role in ensuring that the Board has had transparent access to the data, information and assumptions upon which the plans have been developed.

By setting the direction for the company, direct challenge of management's proposals, scrutiny of assurance reports and direct access to internal and external expert assurance providers the Board has satisfied itself that all the elements of the plan constitute a high-quality business plan and Long-Term Delivery Strategy.

2.2.2 Board governance

Board leadership

The full Board of Affinity Water comprises:

- A non-executive chairman, who is independent
- Three independent non-executive directors
- Two executive directors
- Three non-executive directors who are affiliated to shareholders, therefore not independent

Figure 2.1 Our Board of directors

The constitution of the Board ensures that there is robust independent challenge of management, and that effective communication is maintained with shareholders. This has resulted in plans that are in the best interests of our customers with the necessary shareholder support to maintain financial resilience in the period 2025 - 2030 and beyond.

The Board has been fully engaged in the development and preparation of the Long-Term Delivery Strategy and business plan, by using its formal Board meetings to lead and provide strategic direction to management. We have challenged management to consider our customers' and stakeholders' needs through our engagement programme. We have also held structured strategy sessions to challenge the proposals for the plans considering the detail of alternative options and the impact for customers and the environment.

Board action

- The Board's leadership of the business plan for 2025 - 2030 commenced in May 2020 with a review of lessons learned from PR19, followed later in 2020 by review and update of the Board's strategic direction and long-term strategy for the company. At this stage, the Board established its requirements for early and effective involvement of the full Board

- The Board has met on 31 occasions between May 2020 and October 2023 to provide direction, instruction and challenge to management on the preparation and assurance of the business plan. The schedule of Board and meetings with the relevant extracts from the minutes are included in Appendix AFW24 - Record of board meetings
- The Board has implemented a programme of dedicated strategy days to focus solely on the development and challenge of the company's business plan for 2025 - 2030 and Long-Term Delivery Strategy. These days have focused on ensuring that the business plan is founded on a robust Long-Term Delivery Strategy, contains stretching and also achievable outcomes, contains efficient costs, remains affordable for customers in the near- and long-term, is financeable, that the company is financially resilient and reflects the outputs and priorities from comprehensive customer engagement
- The Board met to review, challenge and approve elements of the plans as they mature, satisfy itself that the plan is of high quality by receiving feedback from its assurance providers, ultimately approving the business plan on 26 September 2023

Governance Structure

In September 2021, the Board reviewed proposals and implemented its governance structure for the development, challenge and approval of the business plan.

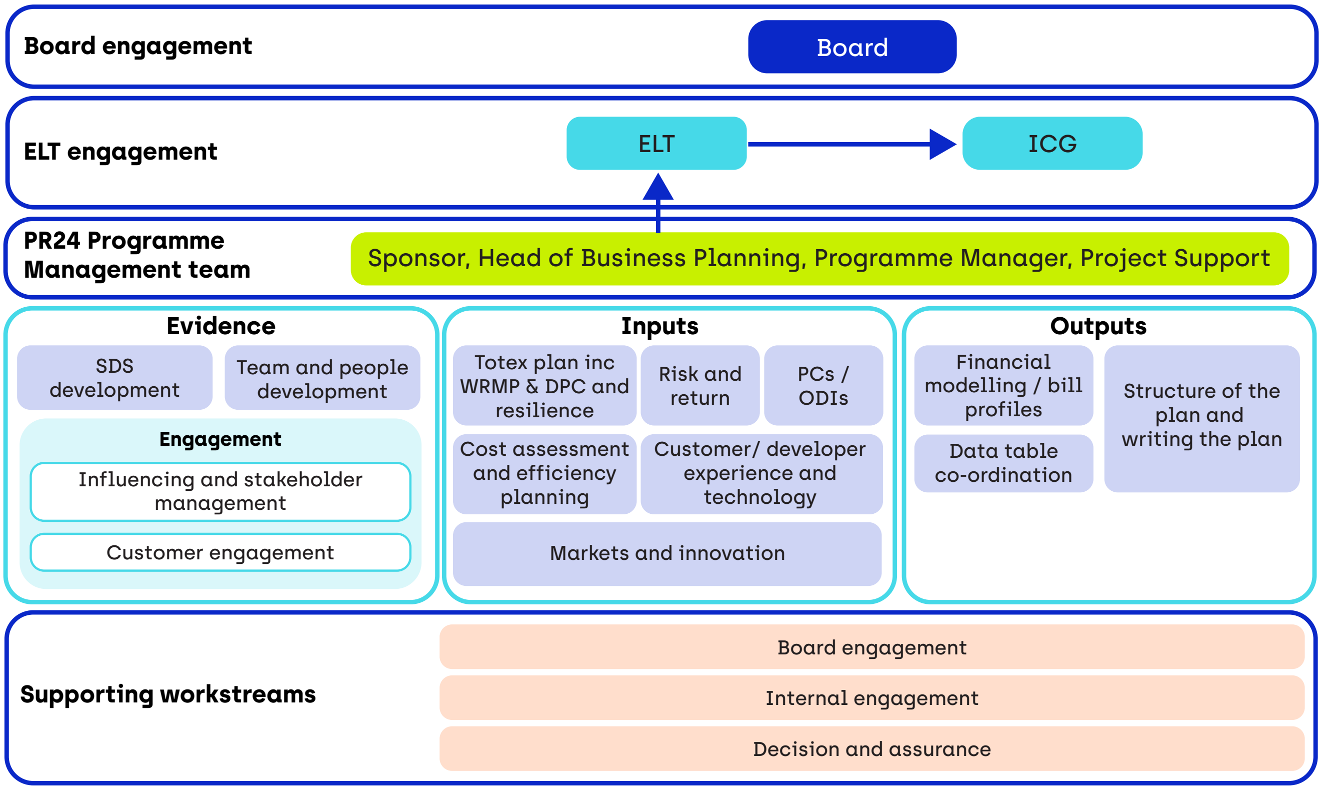


Figure 2.2 Governance structure

Board action

The Board has ensured the governance structure in Figure 2.2 Governance structure above has:

- Been implemented on an operational basis through a 'PR24 programme board'. This group is made up of members of the Executive Leadership Team (ELT), and senior workstream leads. The programme board has met monthly to enact the Board's strategic direction and instructions
- Received monthly updates about the PR24 programme board from members of the Executive Leadership Team

- Ensured that the Board's plan programme and expectations are delivered on time and met the Board's expectation of high quality
- Ensured the Board's assurance framework has been properly implemented
- Ensured that methodological, customer and stakeholder expectations have been consistently and regularly communicated to workstream delivery groups

2.2.3 Assurance framework

The Board has confidence in the information it has prepared during the preparation of these plans. From the outset the Board has aimed to produce a high-quality business plan supported by internal and independent assurance commensurate with the risk associated with information supporting each element of the business plan.

The Board has overseen the development of the assurance framework and assurance programme for the business plan, which has been developed by management and supported by external specialist providers. Our overall assurance framework is set out below in Figure 2.3 Our assurance framework.

Figure 2.3 Our assurance framework

The application of the Board's assurance framework has implemented best practice based on the Chartered Institute of Internal Auditors "three lines" model, as set out in our published 'Assurance Plan for 2020 - 2025'[1]. This provides confidence in the quality, completeness and accuracy of the data and information underpinning the business plan. This has included first line preparation and control of data and narrative, second line internal review and third line review through external assurance partners and our internal audit team. This includes:

- Internal assurance to review and challenge the proposals and content, including consistency checks across the complete submission and any related submissions
- Input from specialist external advisers on specific topics such as cost adjustment claims, deliverability and financeability
- Formal strategic, technical, financial and specialist external assurance to ensure that we met all of the requirements set out in Ofwat's PR24 final methodology
- Critically, the extensive involvement of our Board in the development of the plan

The business plan has also received scrutiny by the Independent Challenge Group (ICG) on material aspects of the plan and what it means for customers and other stakeholders. Details of the engagement

1. https://www.affinitywater.co.uk/docs/corporate/Assurance-Plan-AMP7.pdf

and challenge are set out in AFW36 - Independent Challenge Group report.

2.2.4 Assurance plan

The Board's Assurance Plan for the period 2020 - 2025 is published on Affinity Water's website [2]. It sets out the Company's rigorous and tested approach to assurance. The plan establishes:

- The role of the Board
- The role of the Independent Challenge Group
- The Board's Risk Management Framework
- Our internal systems and processes
- How we comply with our legal and regulatory obligations

The Board has ensured that the plan's approach has been implemented through its PR24 business plan specific board governance and assurance framework requirements.

2.2.5 Providing robust assurance

The Board has ensured the assurance framework and assurance plan have been properly deployed in the development and approval of the plans.

Board action

- The Board has satisfied itself that all three lines of defence have completed their review and challenge of the underlying material assumptions, quality and completeness of the information presented to the Board, prior to approval as part of the plan
  - Management has supplied reports to the Board on the 1st and 2nd line internal assurance activities
  - Independent 3rd line assurers have supplied management with findings and actions required to produce compliant and high-quality plans. This has been reported to the Board, which has then challenged management to complete outstanding actions and report satisfactory closure back to the Board. The Board has satisfied itself that there are no material and unmitigated outstanding assurance actions prior to submission of the business plan and Long-Term Delivery Strategies
- Where challenge has been made by the Board or risks and issues have been identified through the assurance process, the Board has sought reassurance that actions have been taken to address them
- The Board has sought and received assurance about all elements of the plans including the company's historical and expected performance
- The Board has engaged with the PR24 plan development in 31 separate Board meetings and 'dedicated 'strategy days', iterating the development of the plans to challenge and refine the proposals to deliver the Board's strategic direction for the company, customers' expectations and meets Ofwat's final methodology requirements which has allowed the Board to be confident that all elements of its plan add up to a submission that is high quality
- The Board has reviewed and approved the assurance findings and management's response, and has satisfied itself that it has provided:
  - The evidence that the plans deliver its statutory and licence obligations now and in the future
  - Comprehensive assurance
  - Accurate data and information that is high quality
  - A robust Long-Term Delivery Strategy
  - Affordability support for customers and value for money in the near and long-term
  - Costs and outcomes that are well-evidenced, efficient, and stretching and also achievable
  - Financeable plans that are financially resilient in the long-term

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2. https://www.affinitywater.co.uk/docs/corporate/Assurance-Plan-AMP7.pdf

- Plans founded on strong customer insights and tested through comprehensive engagement at multiple stage

2.2.6 Data and information quality

The Board has satisfied itself that the data and information underpinning the development of the plans is of high quality. It has established clear programmes of work for management to undertake focused on providing high quality information for each element of the plan. The Board has held regular reviews with management to monitor progress and maintain its governance and accountability for the plan.

The Board provides assurance that the data and information submissions supplied as part of the business plan documents have been subjected to the Board's robust 'three lines of defence' assurance model.

Board action

As set out in the assurance framework, all data and information underpinning the plans has been subject to risk based assurance, adopting the three lines of defence model as set out in the company's 'Assurance Plan for 2020 - 2025'[3].

- Management has presented all elements of the plans to the Board, exposing all material assumptions ensuring that the Board has had full transparency of risks in the data underpinning the plan
- Management has confirmed that all data and commentary has been subjected to 1st and 2nd lines of defence from experts across the breadth of the company. Risks and issues and their materiality to the resilience of the plans have been presented to the Board as part of the risk and return assessment. In addition, economic regulation and finance specialists have provided technical compliance oversight of the whole business plan
- Assurance letters are provided in Appendices AFW28 - PwC assurance letter and AFW09 - Atkins assurance letter
- Each data assurance provider has reviewed and checked their allocated data lines andhas reported to the Board that all data is consistent with the reporting requirements, and has been prepared through rigorous analysis following clearly defined procedures. It has not identified any reporting risks through its assurance activities

2.2.7 Long-Term Delivery Strategies

The Board has led the development of the Long-Term Delivery Strategy for the company, meeting the near - and long-term expectations of customers and communities to improve our services, improve our resilience and take care of the environment. It has steered and challenged management throughout the strategy's development and through the application of its robust assurance processes the Board provides its assurance that its Long-Term Delivery Strategy:

- Reflects the long-term vision and ambition of the Board and company management
- Is high quality, and represents the best possible strategy to efficiently deliver the company's long-term objectives, reflecting future uncertainties
- Enables the company to meet its statutory and licence obligations, now and in the future
- Is based on adaptive planning principles
- Is aligned to the WRMP and WINEP statutory frameworks
- Has been informed by customer engagement
- Secures long-term affordability and fairness between current and future customers
- That the Board has challenged the development of the 2025 - 2030 business plan and has assured itself that the plan forms the first five years of the Long-Term Delivery Strategy

3. https://www.affinitywater.co.uk/docs/corporate/Assurance-Plan-AMP7.pdf

Board action

The Board has been actively engaged in directing and shaping the strategic direction and later the Long-Term Delivery Strategy since July 2020. The Board provided clear steer to management that there must be a clear link between Affinity Water's purpose and any Strategic Direction Statement (SDS) and Long-Term Delivery Strategy. The Board has ensured that the integrity of the link between purpose, Long-Term Delivery Strategy and the business plan for 2025 - 2030 and other statutory frameworks (such as WRMP and WINEP) has been maintained through its scrutiny and challenge of managements proposals throughout their development.

- Strategy days took place in November 2022 and June 2023 where the Board requested updates on the progress of the development of the long-term delivery strategies. At these meetings the Board scrutinised the costs and phasing of delivering the Board's ambition. It challenged the pace at which management proposed to phase the Board's ambition to improve resilience to single point asset failures and address the challenge of removing all lead communication and supply pipes by 2050 in addition to meeting its statutory, legal and regulatory obligations into the future
- The Board has received internal assurance and evidence from management on 26 September 2023 to demonstrate that the Long-Term Delivery Strategy meets the expectations and requirements of Ofwat's final methodology. KPMG has provided the following assurance: (for more detail see Appendix - AFW26 KPMG assurance letter)
    - Independent review and assurance that Affinity Water has developed its Long-Term Delivery Strategy in accordance with Ofwat's final methodology requirements, that the financial modelling of scenarios has been independently checked and that the data tables have been prepared correctly
    - Independent review and assurance that the analysis and data inputs to the Long-Term Delivery Strategies has been prepared correctly and the data tables have been correctly completed
    - Confirmed that all the tests necessary for the Board to make this assurance statement have been properly conducted by management prior to requesting Board approval

2.2.8 Affordability

Throughout the development of the business plan the Board has maintained a clear focus on affordability of bills in the short and long-term. The Board has challenged management to ensure that only necessary and efficient costs are being passed through to customers, and that customers and the Independent Challenge Group have had chance to challenge the impact on customer bills. The Board provides its assurance that:

- The full implications of the plans for customers have been considered and that the plan achieves value for money
- The Long-Term Delivery Strategy protects customers' ability to pay their water bill over the long-term and delivers fairness between what existing customers will pay and what is paid for by future customers

Board action

- The Board has challenged and approved managements' proposals for customer bill profiles in the near and long-term. It has ensured the use of run-off rates and PAYG has fairly allocated costs between current and future customers
- The Board has received feedback from customers via the Ofwat-mandated affordability and acceptability testing, with 19% of respondents saying bills were affordable. The Board notes that this is lower than is previous price reviews and considers this a response to the prevailing economic conditions. The Board has considered how vulnerable customers who are experiencing affordability issues can be further helped through the comprehensive affordability strategy that is set out in the business plan
- The Board has received assurance from the 1st and 2nd lines of defence that the affordability testing has been conducted in compliance with the methodology and that the results have been accurately interpreted in reporting the level of affordability amongst customers

- Sia Partners have provided independent assurance that the research methodology, implementation and analysis has followed best practice and is robust
- The Independent Challenge Group (ICG) has scrutinised the customer research and findings and has had opportunity to review and challenge the affordability testing. The ICG has confirmed its support for the steps the Board is taking to ensure affordability for customers. For more detail see Appendix AFW36 - Independent Challenge Group report

2.2.9 Costs and outcomes

The Board has challenged management to demonstrate that the outcomes and performance commitments within the business plan are stretching and achievable, incur only robust and efficient costs and are supported by customers. The Board has also challenged management to demonstrate that it has the necessary delivery plans, resources and suppliers in place to deliver the business plan. The Board has subjected these business plan proposals to robust assurance. The Board provides its assurance that:

- The performance commitment levels in the plan are stretching and achievable and reflect performance improvements expected from both base and enhancement expenditure
- The expenditure forecasts included in the company's business plan are robust and efficient
- The needs for enhancement investment are new requirements that customers have not already funded
- The options proposed within the business plan are the best option for customers and a full cost benefit analysis of options has taken place
- PR24 plans and the expenditure proposals within them are deliverable and that the company has put in place measures to ensure that they can be delivered. This includes setting out the steps the Board has taken to satisfy itself that supply chain risk is manageable and delivery plans account for:
    - The ability of the company and its supply chain to expand its capacity and capability at the rate required to deliver the increased investment
    - The impact of similar levels of growth across the sector and any overall sector and supply chain capacity constraints
    - Key supply chain risks and capacity constraints, such as the availability of specialist resource or components
- The plan includes price control deliverables covering the benefits of material enhancement expenditure (not covered by performance commitments)
- The investment proposals are affordable by customers and do not raise bills higher than necessary
- The investment proposals reflect customer views, and where appropriate are supported by customers

Board action

- The Board has challenged management to demonstrate that the performance commitment levels reflect customers' priorities, and they also reflect the benefits expected from the entirety of the plan expenditure
- To maintain affordability the Board has challenged management to provide analysis to demonstrate that all expenditure is included for the purpose of achieving 2025 - 2030 performance commitment levels and that no investment is being requested for improvements included at previous reviews
- The Board has received and scrutinised analysis of the company's cost base relative to the sector and has ensured that management has reflected only efficient costs in the expenditure forecasts for 2025 - 2030
- The Board has challenged management to undertake robust optioneering of the proposals for the strategic improvement programmes such as WRMP and WINEP quality enhancements to ensure that the best and most efficient options over the near - and long-term have been incorporated into the plan
- The Board has required meaningful engagement to occur with the supply chain, exposing the scale and timing of performance commitment levels, asset intervention needs and totex expectations. The Board has received confirmation from the supply chain in June and September 2023 that the plan is

deliverable, and that it has the capability and capacity to supply Affinity Water with the services required to meet the activity levels necessary to deliver target levels for performance commitments
- The Board has challenged management to expose where customers are not protected by outcome delivery incentives for material enhancement investment, and to put in place price control deliverables that will protect against under delivery of improvements
- The Board has subjected the entirety of the plan expenditure to a customer affordability assessment as set out earlier in this statement
- The Board has received assurance from the 1st and 2nd lines of defence that the performance commitment levels have been calculated robustly and reflect customer priorities, project optioneering has been completed for investments, that efficiency modelling has informed the costs within the plan, the company and its supply chain consider the plan to be deliverable and that customers are protected against under delivery by outcome delivery incentives and price control deliverables
- The Board has received independent 3rd line assurance confirming that it has independently scrutinised and challenged the performance commitment levels, ODIs and PCDs, proposed options and costs and considers that the proposals meet the requirements of Ofwat's final methodology

2.2.10 Risk and return

Financeability

The Board is required to assess the financeability of the notional company. In order to do this, the Board has subjected management's financial modelling to assurance, which has ensured that all components of the plan have been included within the modelling and the financeability assessment has been conducted correctly.

The Board provides its assurance that the business plan:

- Is financeable on the basis of the notional capital structure with an opening level of gearing of 55% and an opening proportion of index linked debt of 33%
- Accounts for all components of the plan
- Accounts for Ofwat's early view on the allowed return on capital for PR24; and
- Is consistent with maintaining target credit ratings two notches above the minimum for investment grade

In order to achieve the required credit rating whilst maintaining 55% gearing the notional company requires a significant equity injection of £258m. For the purpose of this Board assurance statement, it is assumed that this equity will be forthcoming in line with the final methodology.

However, equity financeability is not a given and would be entirely dependent on the final balance of risk and return. Given the requirement for a material equity injection in order for the notional company to be financeable, it is critical that the Final Determination yields a balanced risk-adjusted return.

Regarding this balance of risk and return, when applying the conditions specified in the final methodology, the RoRE risk analysis shows significant downside asymmetry and absolute risk levels above those contained in the final methodology. The RoRE risk that the notionally efficient company is exposed to represents an imbalance in risk and return which must be addressed.

This can be addressed at risk source using existing regulatory techniques, examples of which have been outlined in the plan. Ultimately, where risk cannot be or is not mitigated at source,an increase in return would be expected.

Board action

- The Board has requested management to assess if the company is financeable based on the notional capital structure as defined in Ofwat's final methodology incorporating Ofwat's early view on the allowed return on capital

- The Board has received and scrutinised the outcome of the financial modelling, challenging management to explain how it has assessed financeability
- Management has demonstrated to the Board that the business plan will generate cashflows capable of maintaining credit rating metrics of Baa1/ BBB+ for the notional company. The Board has satisfied itself the company will sustain investment grade ratings based on the rating agencies' current view of the sector
- The Board has received 1st and 2nd line assurance from management that the financial modelling accounts for all requirements of Ofwat's final methodology and incorporates all components of the business plan
- The Board has received independent 3rd line assurance from KPMG confirming that the financial modelling of both the notional capital and actual company structures has been completed in line with Ofwat's requirements
- The Board has received independent 3rd line assurance from Centrus (Appendix AFW48 - Centrus report) confirming that the result of the analysis demonstrates the financeability of the notional company and the maintenance of target credit rating two notches above investment grade

Financial resilience

The Board is responsible for ensuring the financial resilience of the company under the actual capital structure. It has rigorously tested the near-and long-term financial resilience on the basis of the actual capital structure of the company, incorporating the base case and downside scenarios. The Board provides its assurance that:

- The actual company is financially resilient over the 2025 - 2030 period and beyond under its business plan
- Under the base case the company would be rated Baa1/BBB+
- The testing of base case and downside scenarios demonstrates financial resilience
- Where it has identified a financial risk, it has robust mitigating actions in place to address the challenges of the downside scenarios included within the business plan; and
- Has subjected the financial resilience analysis to appropriate assurance

Board action

The Board has set the expectation for management that the company should be financially resilient over the period 2025 - 2030 and beyond :

- The Board has received the outcome of the financial modelling and financial stress testing of the base case and 11 downside scenarios
- Of these downside scenarios, 8 are consistent with Ofwat's recommendations for stress testing and the remaining 3 represent bespoke combination scenarios which are generally more severe. The bespoke downside scenarios have been established by internal experts based upon real world experience, business risks and annual testing in the Long Term Viability Statement (LTVS) from the Annual Report
- Stress testing has been carried out on both the actual Appointee and the actual legal entity, Affinity Water Limited. Affinity Water Limited benefits from non-appointed cashflows over and above the actual Appointee
- For both Affinity Water Limited and the actual Appointee, the likely credit rating outcomes have been considered. In addition, for Affinity Water Limited we have considered the ability to meet the financial covenants contained in the Whole Business Securitisation agreements
- The base case assumption in this business plan submission is an equity injection of £150m into the actual company. This equity injection enhances financial resilience, provides greater flexibility to mitigate risks and enables an appropriate dividend yield, subject to actual performance

View from the Board

- As responsible long-term owners, shareholders are supportive of this plan. However, investor support (including equity support) remains subject to an acceptable Final Determination, and approval from their respective Investment Committees
- The Board has scrutinised the resulting financial risks from the financial resilience modelling and challenge management to make robust mitigation proposals for consideration, including the proposals for deferring dividends to provide greater flexibility to mitigate risks from the downside scenarios
- The Board have considered financial resilience beyond the price control period both as part of the Business Plan submission and in its Long Term Viability Statement (LTVS). Through its reviews, the Board has satisfied itself that the company demonstrates long-term financial resilience
- Regarding the balance of risk and return, when applying the conditions specified in the final methodology our RoRE risk analysis shows significant downside asymmetry and absolute risk levels above those contained in the final methodology. Our view of the RoRE risk that the actual company is exposed to represents a material imbalance in risk and return which must be addressed
- Any imbalance in risk and return could lead to a deterioration in financial resilience, as well as creating uncertainty around equity financeability. The imbalance in risk and return can be addressed at risk source using existing regulatory techniques and suggestions have been made throughout the plan for this. Ultimately, where risk cannot be or is not mitigated at source, we would expect return to increase
- The Board has received 1st and 2nd line assurance from management that the financial resilience testing has accounted for the base case and all required downside scenarios
- The Board has received independent 3rd line assurance from KPMG (AFW26 - KPMG assurance letter) confirming that the financial modelling of both the actual company structures has been completed in line with Ofwat's requirements
- The Board has received independent 3rd line assurance from Centrus (Appendix AFW48 - Centrus report) that the actual company is financially resilient
- The Board has satisfied itself that under the downside scenarios the company would maintain the minimum investment grade credit ratings of Baa3/BBB-

2.2.11 Customer engagement

The Board recognises the importance of robust customer engagement in the shaping and acceptability of its business plan for 2025 - 2030 and beyond. The Board has set high expectations of the customer engagement and research undertaken by management. The Board provides its assurance that:

- The business plan and Long-Term Delivery Strategy are founded on high quality customer engagement and research that has adopted best practice in the way the engagement has been conducted and interpreted
- Customers have had opportunity to provide their feedback and acceptance of the business plan submission
- The ICG has provided scrutiny and challenge of how the customer engagement and research has been prepared, delivered and interpreted

Board action

- The Board challenged management to implement high quality customer engagement to explore and understand customers' views on the Long-Term Delivery Strategy, views on the plan and affordability including the views of vulnerable customers
- The Board has received reports on the plans, progress and findings on managements five stage engagement plan. This has enacted the Board's strategy through:
    - Deep dive stakeholder sessions to explore the Long-Term Delivery Strategy

    - Extensive qualitative and quantitative research with household and non-household customers on their preferences, priorities and willingness to pay
    - Integration of business-as-usual engagement with customers and day to day insight gathering
    - Public consultation on a draft plan
    - Affordability and acceptability testing
    - Young adult and vulnerable customer testing
    - Your water, your say engagement where customers can raise questions about the plan with management
- The Board has received updates from management demonstrating how the outputs of the engagement have shaped and influenced the plans
- The internal 1st and 2nd lines of assurance have provided assurance to the Board that the business plan and Long-Term Delivery Strategy reflect the priorities of customers revealed through the customer research
- The Board has received independent assurance from Sia Partners that the research has been robustly designed, executed and analysed using recognised industry leading techniques to produce high-quality research insight
- The Board has received independent validation of the high-quality nature of the customer research, and endorsement of the way it has been used to influence and shape the plan from the Independent Challenge Group. For more detail see Appendix AFW36 - Independent Challenge Group report

2.3 Our Independent Challenge Group

We have refreshed and reinvigorated our Independent Challenge Group as part of the PR24 process. We appointed Caroline Warner as our Chair on 1st April 2020 and have subsequently built the group through a rigorous recruitment process, to ensure the ICG has a strong mix of customer and environmental expertise.

The group consists of a mixture of experts in customer engagement and environmental advocacy along with regulatory representatives. Caroline is also the chair of the National Customer Oversight Group, which ensures we have access to best practice in this area.

Name	Role
Caroline Warner	Chair (Established chair and non-executive director with a long track record in consumer brand business leadership)
Dr Anna Maria Milan	Regulatory member (Policy Manager at CCW)
Jonathan Sellers	Regulatory member (Account Manager at EA)
Dr David Holden	Independent member (Chair, subgroup for Customers & Communities): Experienced customer research and engagement expert)
Anthony Smith	Independent member (Chair ,subgroup for Environment & Resilience): Chief Executive of Transport Focus)
Unette Spencer	Independent member (Vice President of Customer Solutions at Mastercard with specialisms in customer loyalty)
Bob Winnington	Independent member (Chief executive of the Money Advice Liaison Group)
Todd Holden	Independent member (Senior expert in innovative low carbon, energy efficient policy and environmental solutions)

Table 2.1 Independent Challenge Group members

We value the challenge and questioning that has come through our ICG and our plan is more robust as a result. Our Chair, Caroline Warner, has attended three Board meetings to provide the perspective of the ICG to the Board during 2022 and 2023. The ICG has published an independent report setting out their key lines of enquiry and areas of ongoing influencing and challenge for the period of 2025 - 2030.

View from the Board

On the role of the ICG Caroline Warner said:

"The essential purpose of the ICG is to challenge Affinity Water to improve continually the quality of service and value that they offer to customers. Members are experts in a range of consumer and environmental matters and are well-placed to represent citizen interests by asking searching and informed questions across the full range of business activity. It is encouraging to note that inviting challenge from the ICG is now embedded into the company's working practices and that this is having a demonstrable positive influence on a developing improvement culture.

Figure 2.4 Caroline Warner ICG chair

While the ICG has been designed to offer independent challenge ongoing, the group has an important role in the five-yearly Price Review process. In preparation for PR24, we have urged the company to build solid foundations of customer insight that will drive business planning from the outset. Understanding the perspectives of the people they serve has never been more important given the dual pressures arising from increasing costs of living and future investment imperatives."

03.

Our long-term ambition

Affinity Water

Our long-term ambition key points

- We are the largest water only company with a unique combination of environmental challenges, such as maintaining the health of our chalk streams, and an extremely diverse customer base with the highest demand for water in the country
- We are a long-term business with purpose that delivers value far wider than our statutory remit, and we align with Ofwat's Public Value Principles
- We recognise the poor outcome from PR19 and the performance challenge in 2020, we have taken significant action to improve our performance and we have moved upwards in the overall assessment
- In planning the transition to 2025 - 2030 we have considered the challenges we face
- Our Long-Term Delivery Strategy (LTDS) is our response to our specific challenges and our customers long-term ambitions and priorities
- Our PR24 plan is the first five years of our LTDS and sets out the ambition for the five years
- Our plan will ensure we can continue to deliver all our statutory obligations
- We have ambition wider than our regulated activities and deliver value to our communities from supporting and enabling competition where it benefits customers
- Our long-term environmental ambition to leave the environment in a measurably improved state is delivered through partnership working
- We strive to drive innovation throughout all our planning and delivery activities

How our plan meets the Ofwat methodology

Ofwat methodology	Our plan
Ofwat quality criteria	
The LTDS is consistent with all other company strategies and activities, such that plans can be viewed together as one, single, adaptive strategy *'The outputs from strategic planning frameworks will need to inform, and align with, each company's long-term delivery strategy and business plan.'*	✓ Our Strategic Direction consultation and statement, published in 2021 is the precursor for our Long-Term Delivery Strategy. The LTDS has been developed alongside our WINEP, WRMP and DWI plans. Our PR24 strategy was created to deliver the first 5 years of our LTDS and Strategic Direction Statement and includes all statutory and non-statutory planned enhancement activity within the core pathway
The LTDS is supported by evidence from all required inputs, including customer engagement for both strategy and ambition, use of scenario-testing, and other company strategies	✓ We have developed our LTDS based on customer insights. We specifically tested all our non-statutory ambitions at the outset and again following the full strategy and associated bill impacts to ensure customer views are reflected ✓ Statutory requirements from our WINEP and WRMP have been built into the LTDS ambitions and company strategies for these integrated into our LTDS ✓ Our ambitions and statutory requirements have informed the development of our investment strategy, which has then been tested against common reference scenarios, the company scenario and a wider suite of uncertainties
The plan should set out all key enhancement activities in terms of adaptive pathways, with appropriate use of trigger and decision points (aligned with other strategic planning frameworks) *'Companies need to plan over the long-term and we expect them to use adaptive planning to identify what needs to be done in 2025 to 2030 and what decisions should be scheduled in future periods when there will be greater certainty'*	✓ Our core pathway lays out a resilient pathway of all enhancement investments from which we can adapt to dependably achieve all our ambitions under the full suite of adverse scenarios. ✓ We have created specific adaptive pathways for each of the four common reference scenarios in addition to a further pathway for a company scenario relating to catchment care and a WRMP reported pathway
Ofwat ambition criteria	
The LTDS outlines a clear, ambitious vision statement, sets out what the company will deliver in terms of key performance outcomes, key	✓ Our LTDS Ambition chapter lays out the specific vision statement we aim to realise through our LTDS, alongside the Performance

Ofwat methodology	Our plan
output metrics from strategic planning frameworks, and highlights areas of company strengths and areas for improvement.	Commitment levels that we expect to achieve from base and with the LTDS enhancement activity out to 2050 The Ambition chapter also lays out the key outputs (including those from strategic planning framework) our core pathway will deliver in order to achieve our ambitions and Performance Commitment levels. The variations in output associated with each adaptive pathway are laid out within our Strategy and Rationale chapters Our LTDS ambition chapter details our current areas of strength and areas for improvement based on recent performance and trajectory

Chapter Guide

In this chapter we set out our long-term ambitions and how they align to our LTDS and SDS as well as Ofwat's Public Value Principles.

Section	Purpose	Cross reference
About us	Our recent history and how we will transition to 2025 -2030 against the background of our performance in the 2020 -2025 period and our long-term ambitions .We also discuss our alignment to Ofwat's Public Value Principles.	Appendix AFW02 - Past performance Appendix AFW03 - Strategic Direction Statement
Challenges we face	Underline the pressures and environment within which we operate and talk about the challenges that the water industry must overcome.	
Our Long-Term Delivery Strategy	Our LTDS in summary which is focused on the challenges our business faces, and the first five years of which is our business plan submission for PR24.	Appendix AFW03 - Strategic Direction Statement Appendix AFW51 - Affinity water Long-Term Delivery Strategy
Delivering wider value through competition	Overview of the wider value we provide through competition including our Developer Experience offering, our support of the NAV market and the provision of wholesale services to non household customers.	Appendix AFW06 - Developer Experience
Environmental gains through partnership working	The value we deliver to the environment through programmes of investment under the WINEP and WRMP frameworks including our chalk stream river improvement works and habitat enhancement schemes, land management focused programme of Catchment and Nature Based Solutions (C&NBS) and our biodiversity programme.	Appendix AFW14 - Enhancement investment cases
Innovation	Summarise our innovation priorities and commitment to continue our work in this area in the coming period.	Appendix AFW41 - Case studies

3.1 About us

We are the largest water only company in the UK supplying over 948 million litres to over 3.8 million customers, every day.

We own and manage the water assets and network across three regions in South East England. Our 91 water treatment works ensures the water we provide through our 16,900km network of pipes reaches millions of homes and business, at the highest quality. We supply much of Greater London and significant strategic infrastructure.

Our region is supplied by 8 different resource zones each of which is named after a local river.

We employ over 1,400 people, the majority of which live in the communities we supply, all working hard to deliver our vital public service and take care of the environment now and for the future.

Our supply area is unique. It contains 10% of all of the worlds rare chalk streams that are under threat from climate change, water demand, pollution and centuries of adverse river modifications. We currently fulfil the highest demand per person for water in England and Wales at 157l /p/d compared to the average of 145 l/p/d. Population growth, increased demand for water, climate change and the need to leave more water in the environment means we work increasingly closely with our customers to help them use water more efficiently. We also have a world UNESCO site in Folkestone.

We have a diverse customer base with equally diverse needs. We supply dense urban communities and rural ones too. Ours is one of the most densely populated and economically active regions in the UK, but in an area considered to be 'water stressed'.

We are a business with purpose, delivering an essential public service while in private ownership. The value we provide to our region goes well beyond the provision of water supply services. We welcomed the introduction of Ofwat's Public Value Principles in 2022[4] which we have adopted, and we have built our business plan around furthering the ambition to create wider value. In particular we see the use of markets, innovation and partnership working as ways we can enhance the value we can add. We set out more on the additional value we add in Table 3.1 Our alignment with Ofwat's principles on public value.

Ofwat principle	Affinity Water's response
Principle 1 Companies should seek to create further social environmental value in the course of delivering their core services beyond the minimum required to meet statutory obligations. Social and environmental value may be created both in direct service and through the supply chain	We are clear that it is our priority to provide our customers with an excellent service, however we are continually looking for ways to add environmental and social value while doing this, using the partnerships we have in place and our supply chain. For example we are intent on ensuring that the work we do with our developer customers aligns with sustainable water practises illustrated by the work we have done in the NAV space to support water neutral housing developments details of which can be found in Appendix AFW41 - Case studies pg 1.
Principle 2 Social and environmental benefits should be measurable, lasting and important to customers and communities. Mechanisms used to guide activity and drive decision making should support this, for example setting and using company purpose, wide external engagement and explicit consideration of non-financial benefits	As part of our investment programmes under WINEP we have ensured that we focus on creating social and environmental value for example through providing public access at some of our company sites, which present opportunities for our customers to enjoy open space and wildlife in their communities, providing health and well being benefits. We have also provided wider recreational, health and well being benefits to our customers and communities by improving access to chalk streams through the creating or improvement of riverside footpaths.
Principle 3 Companies should be open with information and insights on operational performance and impacts (both good and bad). This will support stakeholder engagement, facilitate collaboration and help identify opportunities for delivering additional social and environmental value.	We are committed to meeting Ofwat's challenge to water companies on open data. We have developed an Environmental Data Web Portal to give easy and open access to any person or organisation who wants to use the data network, field data and measurements [1]. In addition we have provided public access to our customer research on our dedicated engagement site. More detail can be found in 4.3 Synthesis and triangulation.
Principle 4 Delivery of social and environmental value outcomes should not come at a greater cost to customers without customer support.	Our investment programmes are subject to cost benefit analysis based on our customers valuations. Our proposed environmental works have been assessed through our WINEP options development and assessment process in alignment with the EA. This ensures our plan provides our customers with best value. Feedback from our customer engagement, particularly the consultation on our plan, indicated that protecting the environment was most important to our customers (for more detail see the consultation and Your Water Your Say sections of chapter 4). We have engaged with our customers and stakeholders through workshops, quantitative and qualitative research and ongoing insight gathering. This customer insight has also driven our innovation focus. Our innovation priorities are outlined in 3.6 Innovation
Principle 5 Companies should consider where and how they can collaborate with others to optimise solutions and maximise benefits, seeking to align stakeholder interests where possible, and leveraging a fair share of third-party contributions where needed. Companies' public value activities should not displace other organisations who	Protecting and enhancing the resilience of our chalk streams is one of our core environmental ambitions. We recognise that working with other organisations, interest groups and catchment partners who are well placed to assist us, is key to the successful delivery of our environmental ambition, ensuring that each organisation is maximising their strengths. In 3.4 Delivering wider value through competition we outline our plans for Revitalising Chalk Rivers (RCR) , Resilient Chalk Catchments (RCC) and our biodiversity programme, through partnership

4. https://www.ofwat.gov.uk/wp-content/uploads/2022/03/Ofwats-Final-Public-Value-Principles.pd

Ofwat principle	Affinity Water's response
are better placed to act.	working.
Principle 6 Companies should take account of their capability, performance and circumstances in considering the scope for delivering greater social and environmental value.	All of our initiatives are carefully selected to ensure that they align with our core competency as an organisation, where this is not the case we have leveraged our supply chain and partnerships to ensure deliverability of our plans. This is the case for our investment under WINEP, but has also driven our choices in our Ofwat innovation competition partnerships and priorities.

Table 3.1 Our alignment with Ofwat's principles on public value

1. See executive summary page 6 for a case study on this initiative

3.1.1 Background to the current period

The start of this decade brought unprecedented challenges which have had far-reaching effects across society as a whole. Whilst our business has been financially and operationally resilient to such shocks, we have not been completely immune to these challenges, and have seen an impact on some of our ambitious performance goals as a result.

Nevertheless, we take pride in affirming that we have consistently provided our customers with a reliable supply of high-quality water, despite the global pandemic, uncertainties arising from Brexit, increased occurrences of extreme weather events, an energy crisis, a cost of living crisis, and record-high inflation. Simultaneously, we have made improvements to our network to enhance our resilience and we have fulfilled all of our commitments outlined in the Water Industry National Environment Programme, taking active steps to preserve our environment for future generations. Our efforts include substantial sustainability improvements related to chalk ground water and restoration projects, aimed at enhancing over 120km of our region's globally rare chalk streams.

At the start of the 2020, we faced a significant performance challenge. By committing to 28 ambitious goals, we needed to quickly adapt and learn in order to achieve these targets. This necessitated a fundamental shift in our approach, spearheading a major transformation programme to enhance productivity and service levels. We also initiated an extensive operational efficiency programme to establish a lean and effective operating structure capable of meeting the demanding targets of this period. Additionally, we clarified responsibilities, strengthened our senior leadership team by bringing in new expertise, and accelerated the pace of change within our organisation. As part of this transformation, we improved the quality of our management information, and implemented systems that provided detailed and transparent performance data at all levels of the business. We also bolstered the integrity of our data management, audit, and compliance systems. We fostered a more inclusive culture that encouraged our teams to share their expertise, drive innovation, and voice their concerns, whilst we also established clearer lines of communication from the ground to the Board and back.

Recognising the importance of ambition, innovation, and collaboration across sectors, we embraced the latest digital technologies and AI machine learning to gain deeper insights into our business and network. This allowed us to proactively identify and address issues before they escalated, and to respond swiftly in the event of a supply interruption. We have also opened our data sets to customers, for example by providing open source access to our monitoring network, field data and measurements[5].

Whilst external environmental factors, such as Covid-19, have affected certain performance commitments like PCC, our transformation programme has laid a solid foundation for achieving high performance this period, and beyond. We will continue to evolve our approach, adopt innovative technologies and processes, and fulfil our performance commitments to ensure the provision of high-quality water and care for our environment, both now and in the future.

5. Page 6 chapter 1 executive summary - case study

3.1.2 Our achievements in the current period

To deliver our 2020 - 2025 plan, we recognised the need to significantly invest in capacity and capability, as well as promote a shift in our business culture, so that the change and ambition needed to achieve the required performance would be embraced. Some of the improvements we have made include:

- Investment in our **situational awareness tool and our digital twin projects**, we are now able to anticipate the effects of potential incidents or planned works on the network in 'real time'. This assists us in determining solutions to unforeseen problems in a timely manner
- Time and investment in **network calming and pressure management** activities. We have also looked to optimise delivery of water supply in our network, where possible. By reducing surges in the network and maintaining optimal pressures, we can reduce leakage and mains bursts, ultimately minimising interruptions to our customers. We can also reduce energy consumption and the need for costly repairs through optimising the network
- We conducted **root cause analysis on our key metrics**, finding that we have seen significant improvements with respect to supply interruptions, with a 27% reduction in interruptions in three years
- We have invested in tools to improve our **forecasting**, enabling us to postpone or reschedule planned works and to reconfigure our network when it is vulnerable. We have spent considerable time in developing a supply-demand tool to predict when and where water will be most in demand. We are working in conjunction with the Met Office to use SECLI-FIRM, their long-range weather pattern indicator to inform longer term weather patterns
- In 2021, we launched our award-winning **'Save our Streams' campaign** which provides knowledge and incentives to our customers to save water and reduce waste. See Appendix AFW41 - Case Studies pg. 1 for detail. Behavioural change is integral to reductions in water use. We have engaged the adults of tomorrow through innovative play. Through our environmental innovation project, a Mine Craft based platform was developed to raise awareness of the need to save water and provide knowledge of water efficiency in general. This foundation has set up children's understanding for future but has also brought messaging home into current family settings. To date our demand management activities have brought savings of over 47Ml/d in the 2020 - 2025 period
- We have an extensive programme of **energy efficiency activities** ranging from replacement of pumps, motors and control units through to system optimisation. We have delivered a step change in our energy monitoring with two new dashboards, enabling quick and easy visibility of energy performance at company, site and pump level so opportunities for improvement can quickly be identified and actioned. Our energy savings process has delivered savings of over £500k p.a. since 2022 with plans in place to deliver similar savings in 2023 - 2025. We have also invested in our first solar plants, which have been generating electricity from March 2022
- In partnership with regulators and a wide range of environmental stakeholders we look to model and develop the best local **solutions to environmental challenges**. We are working to reduce unsustainable abstractions by 27.33 ML/d over this period, beyond the 47 ML/d reduction in the previous period. We have a comprehensive river restoration programme, targeting 38 improvement schemes and WINEP improvement projects, which we are committed to completing by 2024 - 25. Outside of the regulatory sphere we support a number of local community and environmental groups which encompass a variety of local projects such as river cleans which provide a multitude of benefits. In 2023 we sponsored Groundswell, an event where stakeholders could learn about the theory and practical applications of regenerative farming systems. The event provides valuable support, education and shared learning opportunities with the farming community to understand the vital link between soil health management and the resilience and protection of water quality in our catchments

More detail on our performance in the 2020 -2025 period can be found in Appendix AFW02 - Past performance.

3.1.3 Planning the transition to 2025 - 2030

The start of this decade marked a new chapter in the history of Affinity Water. Following the challenging

2019 price review, we began a journey to redefine who we are and what we stand for. Early on in this period, we developed our Strategic Direction Statement (SDS), Appendix AFW03 - Strategic Direction Statement, setting out our ambition to 2050, informed by our research with customers and stakeholders. Our SDS includes four ambition statements, (see Figure 3.1 Our ambition statements), which were shaped by customers and stakeholders and provided a guiding path for the development of our business plan 2025 – 2030.

Our long term ambitions

Environment

Leave the environment in a sustainable and measurably improved state.

- End unsustainable abstraction from chalk groundwater sources
- Achieve Net Zero for operational emissions by 2030 and all carbon by 2045
- Deliver a net gain in Natural Capital

Customers

Deliver what our customers need, ensuring affordability for all.

- Exceed customers' expectations for drinking water
- Personalise our services to support different needs and wants
- Take care of our vulnerable customers and keep bills affordable

Resilience

Be prepared for change, and resilient to shocks and stresses.

- Ensure a resilient supply of water for our customers
- Ensure our physical assets are resilient for the longterm
- Ensure our people, processes, suppliers and finances remain resilient

Communities

Work with our communities to create value for the local economy and society.

- Build trust and transparency
- Enhance environmental and social health to provide value to our communities
- Reduce our impact in the water environment for all

Figure 3.1 Our ambition statements

We started the business planning process much earlier than in previous periods, engaging with thousands of customers and stakeholders throughout, to develop and refine our draft business plan. We published our draft business plan in April 2023, setting out the core aspects of our PR24 plan to consult with customers and stakeholders. We are confident that our plan is robust, credible and aligned with the delivery expectations of our customers and stakeholders.

Our business plan 2025 – 2030 is our most ambitious business plan to date. It sets out an investment programme substantially more than the investment of the current period, and is focused on our customer needs, caring for the environment, improving network and water resource resilience, and working with our communities to create value for the local economy and society. Whilst we understand that the increased investment requirements will put pressure on customer bills, we are working hard to make sure we have a wide range of support available for customers to help keep bills affordable.

3.2 Challenges we face

World pressures

Our world is changing at an ever increasing pace, with significant risks being realised in recent years. We regularly carry out horizon scanning to ensure that we are prepared for potential short and long-term scenarios.

Our long-term ambition

While developing our LTDS we assessed the issues we face at a global level. The majority of these issues have a degree of uncertainty and have been accounted for through scenario testing of plausible extremes, either through common reference scenarios or wider scenario testing or sensitivity analysis to ensure our pathways are resilient to all plausible futures we can consider. The risks we face and how our LTDS will help to mitigate them are summarised in Figure 3.2 Challenges and issues we face and how these have been accounted for in our ambitions.

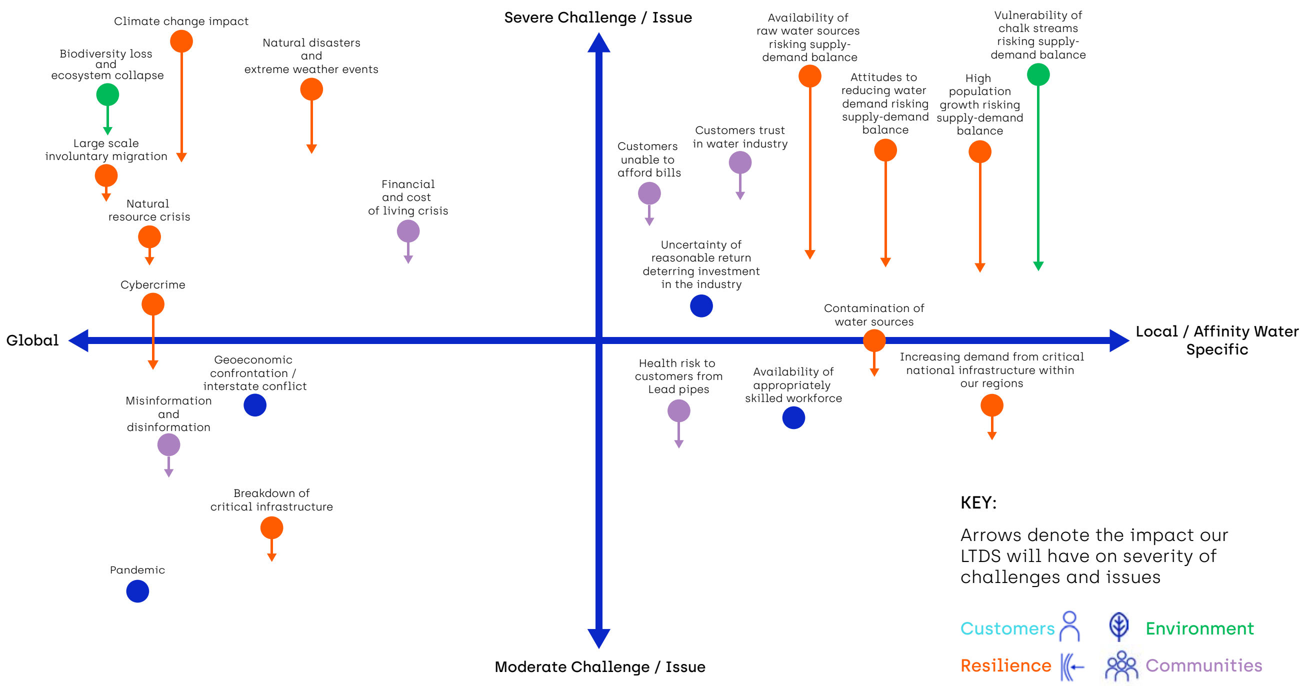


Figure 3.2 Challenges and issues we face and how these have been accounted for in our ambitions

Our long-term plans need to take account of these risks being realised.

Emerging industry challenges

We foresee that the biggest challenge presented to the water industry is the scale of the investment required over the short and long-term, for the maintenance and enhancement of our services according to our customer and stakeholder priorities. Clearly, the emphasis on Combined Sewer Overflows (CSOs) has increased over recent years, and is currently at the forefront of press coverage. However, we expect to face new pressures as customer expectations continue to evolve, such as the presence of lead pipes within plumbing systems and pristine river water amenities.

Trust in the industry has been eroded through issues such as the excessive use of CSOs but also from customer perceptions of shareholder dividends and executive pay and bonuses. Questions about the structure of the water industry are not new, and we need to take more collective responsibility to increase transparency and demonstrate to customers that they are getting the best possible deal.

The effect of the necessary investment will be felt in all aspects of the industry. The workforce needed to install the large number of smart meters needed, or to build the strategic resource options required, will need to be identified and upskilled . Though the move to electric vehicles is undoubtedly positive, this shift relies on a supply of metals for batteries from unstable parts of the world such as China and Ukraine. The cost of power and chemicals, our largest costs bar our workforce, is also predicted to be high for some time to come.

Ultimately, we consider that it will become increasingly difficult to raise capital for investment against the current backdrop of increasing risk and unprecedented investment. This will affect all in the industry, not just wastewater companies and those with historical performance issues. In recent years, across the industry, dividends have been reinvested to help meet increased demands to keep bills for customers low.

If investors are to remain within the industry and continue to invest they will need reassurance that a fair and balanced package of risk and return is available.

3.3 Our Long-Term Delivery Strategy

Our LTDS has been fundamental in shaping our PR24 business plan (2025 - 2030), ensuring our proposed investments represent least regret options in achieving our long-term ambitions and statutory obligations. (AFW51 - Affinity Water Long-Term Delivery Strategy).

Our LTDS outlines our 25-year plan to fulfil our purpose and vision to enhance the service we provide, meeting present and future customer needs. To achieve this, we've established customer-driven goals summarised in our Strategic Direction Statement, reflecting the views of our customers and stakeholders. Figure 3.1 Our ambition statements summarises these.

These ambitious goals require adaptive planning to be dependably achieved in the face of the uncertainty from future technology development, climate change impacts, pollution levels and demand for water and the level of need to leave more water in the environment. Our LTDS accounts for these whilst maximising community benefits and minimising regrettable spending. We've aligned our plans with Ofwat's common reference scenarios and factored in specific local concerns in order to create adaptive pathways.

We've assessed the impact of our LTDS on customer bills, considering each ambition's effect, overall bill acceptability, and generational distribution of impact. We aim to reduce costs on customers by using markets for major infrastructure investments. Our significant regional water projects will be funded via Direct Procurement for Customers (DPC), encouraging innovation and cost reduction. Over 25 years, this approach will channel over £1bn of investment.

Our LTDS comprises of seven integrated investment strategies, outlined in Figure 3.3 LTDS core and alternative pathways with key investments for our core pathway.

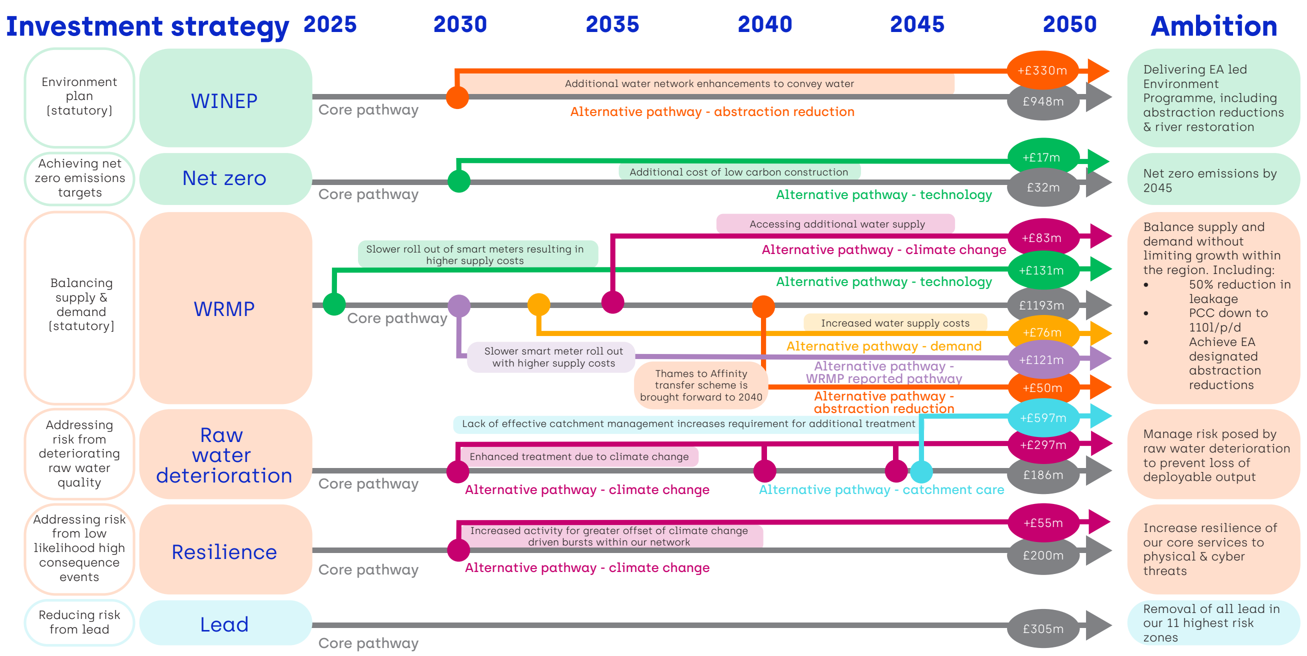


Figure 3.3 LTDS core and alternative pathways

The development of these pathways has materially changed our PR24 business plan, providing insight into the best first steps to achieve our ambitions and into the bill impacts future customers are likely to face. This has enabled us to propose investments in the 2025 - 2030 period that lay the ground work for future investments, such as our lead replacement investment. It also enabled us to phase investments to balance bill impacts across generations of bill payers, such as the rephasing of our abstraction license modification at Uttlesford Bridge, delaying investment to beyond 2030.

3.4 Delivering wider value through competition

3.4.1 Developer Experience

Our customers

Moving through 2025 - 2030, we will see the evolution of two separate markets, each with distinctive characteristics, requirements, and customer needs. These two areas cover connections to the existing market and larger developer customers. We understand we will play a different but vital role in each of these markets and will continue to fully encourage advancement and diversification to ensure the customer remains at the heart of our industry. We will build upon the success of the departmental restructure and rebrand to further establish dedicated expertise in each workstream.

Connections to the existing market

Connections to the existing market are driven primarily by the development of personalised customer relationships and great value for money. We will remain a key reputable and stable provider for customers and continue to impart knowledgeable and professional advice alongside proficient and skilled delivery services. We will offer clear communication, quick, simple and easy processes partnered with continuously improving usable technology to provide a seamless journey tailored to those who have limited understanding of new connection operations. This will aim to build upon the effective changes completed throughout 2020 - 2025 including our free online new connections calculator and revised language and information provided on our website, development portal and associated literature.

Developer customers

Developer customers, focus on delivery timescales, using the easiest site management journey requiring the provision of efficient and helpful operational on-site presence. We anticipate the continued reduction in our operational market share, in line with actuals seen through 2020 - 2025, could see the increase in self-lay providers being awarded up to c.75 % of new mains work. As a result, we will encourage the development of a new way of working and help to facilitate collaborative delivery across the utilities landscape together with allied industries. We have seen significant and positive increase in New Appointment and Variation (NAV) volumes within our area. Since 2021, the number of properties connected by NAVs has increased by 40%, representing approximately 9% of the total connected properties. Based on our projections, we anticipate this percentage to further rise and reach 13% by the conclusion of 2030. We understand as the NAV market continues to mature there will be an increase in partnerships formed with self-lay providers and accept this may result in them being the main customer type we will serve by the end of the 2025 - 2030 period.

Growth

Growth forecasting has been greatly impacted by recent financial volatility. We saw a decline in growth during 2020 - 2025 in part, due to the global Covid-19 pandemic, increases in Bank of England interest rates, the cost-of-living crisis, higher mortgage rates and lack of affordable homes. These combined factors create a challenging economic environment marked by uncertainty and complexity, impacting growth projections and requiring an adaptive strategy for 2025 - 2030.

With possible changes to the political landscape, resulting from the general election before the end of 2020 - 2025, we remain adaptable to possible growth rate fluctuations. We continue to develop our growth data set and align with forecasts, which suggest the avoidance of a recession and growth recovery to start at the beginning of 2025 - 2030. We expect slow but steady growth in connection rates moving through years one and two of 2025 - 2030 with increased acceleration through the latter half of the period. To help combat growth and market share shift driven vulnerability, we will diversify our service portfolio offering.

We are committed to building upon and expanding our efforts, of 2020 - 2025, to further enhance our support in the self-lay design work area. Our focus is on delivering solutions that are environmentally sound, economically viable, and aligned with long-term network planning. Through careful consideration of network requirements and technological advancements, we will ensure that our deliverables are not only effective in the short term but also sustainable in the face of evolving challenges. We are also developing logistics to provide a design service to the self-lay and NAV companies as an alternative opportunity to support the wider market.

Network designs will prevent the construction of over-engineered solutions and reduce associated maintenance liabilities for pipework and fittings in the future to continue excellent water quality performance. We will upskill our internal design team to become a collaborative resource to provide efficient network deliverables for the wider business. Historically delivered by our construction delivery partners but now showcases the evolution and adaptability of our team. We will also assist in the diversion of current operational assets to facilitate achievement of other business commitments.

For further details on our plans in this area see Appendix AFW06 - Developer Experience.

Resilience and our environment

Our customers continue to champion the development and increase in environmental incentive offerings, as seen through our Developer Services engagement and beyond. To aid in the effective delivery of the Smart Metering programme (for more detail see Appendix AFW14a - Enhancement investment cases and Appendix AFW14b - Enhancement investment cases) we will promote uptake by standardising smart meters across our charging and operational offering. This will contribute to the successful reduction in per capita consumption (PCC), network leakage and protect our local environment by taking care of our water. We will, where possible, work in partnership with suppliers and manufacturers to deliver suitable and forward-looking developments. The understanding and use of smart meter data will lead to a decrease in network reinforcement requirements and, ultimately, deliver a reduction factor in customer infrastructure charges; as will the anticipated increase in water neutral development sites.

With the success of our NAV neutrality innovation trial and learnings, we will continue to work closely with DEFRA to form new policies requiring all new developments to be, as standard, water neutral, particularly for water-stressed areas of the country. We will support stakeholders in achieving water neutrality for all new growth while adhering to the framework of environmental incentives, subject to confirmation by Ofwat. By fostering a collective effort, we will strive to ensure that our operations and regional growth initiatives align with sustainable water practices. Through proactive engagement and adherence to regulatory guidelines, we aim to lead in delivering water neutrality and safeguarding water resources for future generations. This will help facilitate regional water savings as outlined in our Water Resource Management Plan. See Appendix AFW41 - Case studies pg. 1 underlining some of our work in this area.

Compliance

With the removal of Developer Services site-specific works from the Network Plus price control, we anticipate the introduction of challenging operational parameters through 2025 - 2030. We will continue to abide by any changes to the charging or operational rules when set. We will have an active role in industry conversation and help guide the thinking in line with our customers' preferences.

We will develop external partnerships to support disruptors to the new connections market improving overall service levels to benefit our customers. We will continue to operate with a comprehensive understanding of, and in line with, Competition Law across the service delivery landscape by ensuring full staff training competency. We will advance and align the training requirements of our delivery partners to match those of self-lay providers and the Network Construction Operations (NCO) registration scheme.

We will continue to deliver transparent and simple charging arrangements, which align to the general charging principles. We will ensure our services are priced competitively to facilitate market diversification and improvement as an effective player. Our charges will remain fair across the two market segments; they will neither abuse inherent incumbent dominance, for new connections to existing mains, nor be predatory leading to exclusion of competition for works requiring requisition mains. Careful consideration and audit will be undertaken to prevent cross-subsidisation from the wider business and safeguard fair funding for environmental incentives with the removal of income offset.

3.4.2 Insets and New Appointments and Variations

To fully reflect and represent the variety of customers we serve through 2020 - 2025, we have changed our operational name from 'Developer Services' to 'Development Experience'. This aims to promote and complement our other activities in encouraging market inclusivity, equality and customer service. The change in our customer-facing brand will have a big impact in fostering strong and open relationships between us and our one-off customers, self-lay providers and NAVs.

In addition to the change of the Development Experience name, we saw a significant increase in the receipt of self-lay and NAV applications, from a collective 24% to 38%, over the first three years of 2020 - 2025. As a result, we restructured our department to account for the rising proportion of work requests and expansion of the open market. This transformation included the generation of a separate and devoted self-lay and NAV team, led by a dedicated, expert self-lay and NAV manager equipped with a wealth of experience in supporting these customers.

3.4.3 Wholesale services to non-household customers

Our wholesale service desk

The service experience of our retailers is important to us. Our aim is to make every interaction with us simple, whether it be directly through a request, or indirectly through our data. Our dedicated Wholesale Operational Service Desk (WOSD) and Settlement Team ensure we are able to deliver an excellent, responsive and pragmatic level of service, demonstrated by our consistent and market leading R-Mex performance over the last two years (4 surveys), ranking us in 1st place. We provide regular reporting and support, with an account management offering which responds to the needs of the retailer, regardless of their size or type. We will continue to build upon this, and respond to the ever-changing needs of our customers and the wider non-household (NHH) market, including our future smart metering and demand reduction programmes.

NHH demand

To reduce overall business demand, we launched a programme to work with retailers in implementing non-household interventions to increase demand reduction savings in key locations. This project has also resulted in new partnerships, for example, with the Whitbread group (Appendix AFW41 - Case studies pg . 2) where we are now collaboratively targeting their hotel chain, Premier Inn, to drive additional non-household demand savings. This is achieved by making their hotel rooms more water efficient with the installation of water saving shower heads and taps and customer behaviour messages.

Meter read service

We continue to offer a meter reading service to all our Retailers, with 20 currently using our service, resulting in over 88% coverage of supply points in our area. We also provide an ad-hoc service to support Retailers who do not have a contract with us, so they can address any unread meter issues. We know that our Retailers derive value from both these services, and we plan to continue offering them. We will continue to review and evolve our service offering in response to non-household customer and retailer requirements as we transition to smart metering.

3.5 Environmental gains through partnership working

3.5.1 Enhancing catchment resilience

Creating resilient chalk stream catchments is an integral part of our proposed investment, under the Water Industry National Environment Programme (WINEP) and our revised draft Water Resources Management

Plan. Through our WINEP, we plan to work with our customers and communities to restore the environment to a more sustainable state. We aim to improve the environmental resilience of our catchments to help ensure they continue to provide the natural assets and services which will support current and future generations. We recognise that working in partnership with other organisations, interest groups and catchment partners is key to achieving our environmental ambition. Our WINEP will build on our existing stakeholder and partnership relationships and seek to further develop our partnership approach.

We are facing increasing pressures on our water resources and on the catchments that serve our communities. Our plan considers climate change, population growth, ageing infrastructure and the need to protect the environment and identifies the investment required to address these challenges.

Through our 2025 - 2030 WINEP we will identify actions and deliver schemes that build the environmental resilience of our catchments and deliver a gain in natural capital. To achieve this we will use innovative approaches, building on the knowledge gained of our catchments through our 2015 - 2020 and 2020 - 2025 programmes and use pilot projects to shape longer term initiatives.

We have seven[6] company sites with open public access which present opportunities for our customers to enjoy open space and wildlife in their communities, providing health and well being benefits. We have also provided wider recreational, health and well being benefits to our customers and communities by improving access to chalk streams through the creation or improvement of riverside footpaths. We will continue to work with landowners and catchment partners to further improve access throughout the delivery of our 2025 - 2030 WINEP.

3.5.2 Delivery through partnership working

Revitalising Chalk Rivers (RCR)

Chalk streams are rare ecosystems that are important to protect. Many of the chalk streams in our area are considered to be impacted by groundwater abstraction for public water supply. Consequently, reduced flows and velocities have led to natural river processes not taking place, which has impacted on the ecology of the river. Alongside abstraction impacts (which are being addressed through our sustainability reductions programme), we must ensure that our chalk streams are more resilient to different environmental conditions, such as drought and flooding. These rivers are currently failing to meet Good Ecological Status (GES), as assessed under the Water Framework Directive (WFD); as such, action must be taken to address this, unless assessed to be disproportionately costly.

Our programme of chalk stream river improvement works and habitat enhancement schemes commenced in 2015 - 2020, and has continued through 2020 - 2025. Our PR24 WINEP proposes an expansion of river improvement works within the chalk rivers located within our supply area and their associated riparian zone. This will build on the existing programme that we have developed in partnership with the EA, referred to as Revitalising Chalk Rivers (RCR), and are we are working with other catchment partners on this to deliver greater value.

Undertaking river channel modifications, such as installation of deflectors or channel re-profiling to create a low flow profiled channel, can help increase in-channel velocities, a key element in the ecological requirements of a river. These channel enhancements and modification works will be delivered alongside our sustainability reductions programme, further abstraction impact assessments, river support and wider Catchment and Nature Based Solutions (C&NBS) schemes. Through these, we can maximise the benefits and support achievement of the WINEP wider environmental outcomes, 25 Year Environment Plan and Environmental Destination requirements. In order to achieve GES, these rivers need to be a properly functioning ecosystem.

Benefits of river improvement works include:

- Chalk streams are more resilient to different environmental conditions, such as drought and flooding

6. Denge, Alkham Valley, Stockers Lake, Springwell Lake, Wraysbury Lakes, Brightwells Farmland, River Colne at Bushey

Our long-term ambition

- Rivers are restored to a more natural state by removing barriers to fish, re-meandering, reconnecting them to groundwater and re-establishing chalk stream characteristics
- Water quality and groundwater recharge is improved as a result of healthier chalk streams, therefore facilitating greater catchment resilience to climate change
- The local environment is improved whilst high quality drinking water supply is also maintained, helping us to meet our environmental objectives and targets

River improvement works have been assessed through our WINEP options development and assessment process, with the best value option prioritised and profiled over 2025 - 2030 and 2030 - 2035. The process of prioritisation takes place with the EA and aligns with our sustainability reductions (SR) programme. For more detail see Appendix AFW14a - Enhancement investment cases and Appendix AFW14b - Enhancement investment cases.

See Appendix AFW41 - Case studies pg. 2 for an example of work we have done to improve our Chalk Streams.

Resilient Chalk Catchments (RCC)

Delivered in combination with the RCR programme, Resilient Chalk Catchments (RCC) is land management focused programme of C&NBS. The programme will also be delivered in partnership with landowners, farmers, businesses, environmental NGOs, regulators, catchment partnerships and river groups. As such, the programme will target C&NBS spatially and temporally at the operational catchment scale (e.g. Upper Lee, Colne) to achieve the following outcomes.For more detail see Appendix AFW14a - Enhancement investment cases and Appendix AFW14b - Enhancement investment cases.

- Enhanced infiltration / aquifer recharge
- No deterioration of groundwater quality (nitrates)
- Habitat enhancement for priority species
- Chalk stream protection and resilience from land management pressures (sediment, pesticides, nutrients etc.)
- Improved catchment resilience to drought and flood pressures for land managers, drinking water supply and chalk streams
- The connection of wildlife corridors and creation of habitats in partnership with local stakeholders
- Wider biodiversity benefits (e.g. to priority habitats and species)

The programme will build on our experience and lessons learned from our 2015 - 2020 and 2020 - 2025 catchment management schemes, which were focused on no deterioration water quality schemes. We recognise that C&NBS, such as cover crops, can offer wider benefits beyond water quality, and can address or mitigate against many of the issues identified through our WINEP Stage 2 risks and issues identification process. See Appendix AFW41 - Case studies pg. 3 for detail our Chiltern Chalk Streams Project Partnership.

Biodiversity programme

Under our Biodiversity Programme, we have been working with a wide range of delivery partners that we have developed relationships with through 2015 - 2020 and 2020 - 2025. We are working with these partners on a number of company sites, as well as on third-party land, to co-design and co-deliver the management plans associated with Sites of Special Scientific Interest (SSSI) sites and other sites of biodiversity importance. Our current partners include:

- Groundwork
- Herts and Middlesex Wildlife Trust
- White Cliffs Countryside Partnership
- Natural England (through CSF and our tenant farmers)
- RSPB
- Watford Borough Council

- Watford Green Gym
- Essex Wildlife Trust

We will continue this approach through 2025 - 2030, so that we can maximise the joint benefits of partnership working, shared funding, and links to bigger initiatives. We are trialling a scheme in 2020 - 2025 with a private landowner at a lake site; in this trial, we are exploring how multiple funding streams can be used to achieve greater environmental benefit when approaching a project with the aim of multiple outcomes, including water quality, biodiversity, carbon capture, water resources and WFD. Findings from the trial will inform our 2025 - 2030 works where we are implementing projects on third-party land. These projects may have multiple benefits and will contribute towards biodiversity performance commitments and various statutory obligations, as well as help us to achieve our vision of becoming environmental stewards.

We have worked with the RSPB at Dungeness Bird Reserve and contributed to the management plan of the whole reserve, which includes our own land, to ensure that benefits will be maximised.

We are engaging with our tenant farmers and neighbouring landowners on landscape management initiatives, so that we can join these up where possible and consequently achieve greater environmental benefit through connecting with the wider landscape.

3.6 Innovation

We are committed to continuing to play a key role as an innovator within the water industry. The scale of the challenges we face as an industry is greater than ever before, with the need for faster progress on outcomes. We also have acute challenges in affordability and deliverability of investment programmes in an uncertain economic climate. Considering this, we are undertaking more innovation activity than ever, with a dedicated innovation team coordinating initiatives within the business and our ecosystem of partners.

Our focus is informed by our long-term plans, such as the WRMP, our 25-year asset investment plans and our LTDS, enabling us to target efforts where they can deliver the greatest benefit. This is summarised in our 10 innovation priorities:

1. **Ensuring resilient supplies** - Finding more effective and affordable methods to ensure customers have a constant supply of quality water now and in the future
2. **Reducing leakage** - Finding more effective and affordable methods to prevent and reduce leakage in our water network (includes pressure management)
3. **Reducing demand** - Identifying new ways of reducing customer water consumption
4. **Mains burst prevention** - Finding more effective and affordable methods which minimise the number of burst mains
5. **Effective SMART metering** - Identifying approaches and technologies to make our SMART metering programme as effective and affordable as possible
6. **Quality drinking water** - Finding more effective and affordable methods of consistently delivering high quality drinking water
7. **Reducing the risk posed by lead** - Finding more effective and affordable methods for managing the risk posed by lead in our network
8. **Customer experience** - Constantly striving for new ways to meet customers every changing expectations of us
9. **Carbon reduction** - Identifying new approaches and technologies to reduce embedded and operational carbon emissions associated with our activities
10. **Increasing natural capital** - Identifying new approaches and technologies to improve natural capital in delivering our services

A number of case studies, which illustrate on our innovation priorities in action, and are found throughout the plan are listed below, for detail see Appendix AFW41 - Case studies:

Our long-term ambition

- Seagrass seeds of recovery (pg.3)
- CaSTCo (pg.5)
- My green lab (pg.4)
- WaterSave tariff trial (pg.5)
- Water neutrality at NAV sites in action - Bidwell (pg 1)
- Voice of the customer programme (pg.6)
- Green bond (pg.8)
- Asset condition laboratory (pg.6)
- Flow Regulators (pg.4)

04.

What customers want

What customers want key points

- We have learnt from our lack of planned and organised approach to customer engagement at PR19 and set out a co-created customer engagement strategy for PR24 in 2021
- We understand who our customers and stakeholders are, including through drawing on insights from our day to day interactions
- We have followed best practice in customer engagement and insight synthesis meeting all principles for high quality research, and aligned to Ofwat methodology for Your Water, Your Say, and the Acceptability and Affordability testing
- We have worked collaboratively throughout with other companies, Ofwat and CCW, and contributed fully to the development of the Your Water, Your Say sessions, the Acceptability and Affordability testing and the ODI valuation research
- There is a clear line of sight from our customers views to our plans, including where plans have changed as a result of customer views
- We have regularly engaged with our Independent Challenge Group, which was refreshed in 2022, throughout the process and our customer engagement and plan have benefited from their challenge and input

How our plan meets the Ofwat methodology

Ofwat methodology	Our plan
Ofwat quality criteria	
The company's plan provides sufficient and convincing evidence that its customer engagement activities meet our standards for research, challenge and assurance. *'Companies should be able to demonstrate they have met the standards we have set for high-quality research, customer challenge and assurance of customer engagement'*	✓ We have worked closely with Ofwat and other water companies to ensure that we follow the Ofwat guidelines for all customer engagement. In some cases, we have worked with other companies to combine research. We have ensured our engagement meets the principles for high quality research and worked with MRS registered agencies to ensure the quality and robustness of the insight gathered. We have had a specialised assurance partner (Sia Partners) who have tested both our approach and triangulation against best practice. We have also demonstrated the changes that we have made to our plans as a result of our engagement with customers and stakeholders
Ofwat ambition criteria	
Ofwat expects companies to demonstrate that they have engaged meaningfully with their customers to understand: • Their priorities for improved outcomes for those customers, communities and the environment for 2025 - 2030 and beyond; and • Their views of how and when statutory requirements are best delivered, i.e. the outputs specified in WRMPs and the WINEP or NEP	✓ We have specifically engaged 13,543 customers directly about our plans while using the insight from a further 109,883 customers regarding all aspects of our service to inform our conversations. We have engaged on our LTDS to ensure that the priorities in our plan align with those of our stakeholders and customers. Our what customers and stakeholders want document includes views that we have sought for the business plan and LTDS, as well as the engagement we have undertaken via our WINEP and WRMP programmes

Chapter Guide

Section	Purpose	Cross reference
Our approach - developing a strategy for engagement	We set out the principles on which we engage with customers and summary analysis of who our customers and stakeholders are.	
High quality research	Summary of how we have ensured our customer research is high quality, aligned to Ofwat's principles for high quality research, and how we have organised the type of research needed to inform PR24.	

Section	Purpose	Cross reference
Synthesis and triangulation	Our insight scoring methodology and assurance of our approach.	
Sharing insight - the line of sight to the business plan	Summary of the evidence base we have produced to synthesis and present the insights we have gained from customers and stakeholders.	Appendix AFW04 - What customers and stakeholders want Appendix AFW05 - What customers and stakeholders want-methodology Appendix AFW36 - Independent Challenge Group report
What we have heard from our customers and stakeholders	Summary of the insight we have gained from customers and stakeholders, organised around our four long term ambition themes of environment, customer, community and resilience.	Appendix AFW04 - What customers and stakeholders want
How insight has driven and changed our plans	How the insight we have gained has driven our plans and how our plans have changed as a result of the multiple iterative engagements with customers.	Appendix AFW04 - What customers and stakeholders want Appendix AFW05 - What customers and stakeholders want methodology Appendix AFW14 - Enhancement investment cases AFW39 - Customer version of the plan
Consultation	Summary of the consultation on our business plan (in addition to the formal consultations required for WRMP) and high level responses.	Full consultation report can be found here:Hearing from our customers
Your Water, Your Say	High level results from the Your Water, Your Say session in June 2023	A full report of the event can be found here:Hearing from our customers Full details - Appendix AFW05 - What customer and stakeholders want methodology
Working together	Outline of the collaborative work and approach we have followed in engaging with customers to help develop our business plan	Hearing from our customers
Independent Challenge Group	Summary of the ICG report and key findings	Appendix AFW36 - Independent Challenge Group report

4.1 Our approach - developing a strategy for engagement

At PR19, concerns were raised regarding the evidence of customer engagement submitted in the initial assessment of our plans. This included lack of primary willingness to pay research; lack of evidence of insight gained from analysis of customer data; limited evidence of engagement with future customers or those that have experienced resilience issues; and, lack of evidence of the acceptability and affordability of the submitted version of the business plan.

Although we improved our evidence base with the revised business plan, we are keen to learn from previous performance and have continued to develop our approach, methods and team.

We have developed a customer research and engagement strategy to provide a clear step-by-step guide on how the line of sight between research, insight, and decisions should be evidenced. We started by mapping out some key principles for our engagement to ensure that each piece of insight was meaningful.

These engagement principles were:

- All research would start with the customer and what matters to them and their world, framing all research as local, caring, relevant and inclusive
- The design and programming of customer engagement/research would be targeted to support business decision making

What customers want

- Research would be meaningful and generate robust conclusions
- We would use the insight from everyday interactions
- The programme of customer engagement for PR24 would be proportionate and efficient, and complement the wider engagement being conducted regionally and nationally
- We would create a repository to store all insight (on an ongoing basis) and create a mechanism to assess the robustness of each piece, informing on the validity and usefulness
- We would share and collaborate
- We would also include stakeholder views in any triangulation

Meet our customers

In order to understand what our customers and communities think, we need to know who they are. As well as regularly refreshing our overall demographics (using data from the ONS NOMIS website), we have looked at our customer segments. We have developed eight customer segments (personas), which we also use to analyse data from research and insight activities. This allows us to explore what our customers think more broadly and establish how we can best serve them in the future. Ethnicity is another demographic that is highly concentrated. Outside the M25, the proportion of the population from an ethnic minority falls sharply. 56.4% of the population identified as White British in Central, compared to 92.1% in Brett and 88.8% in Dour.

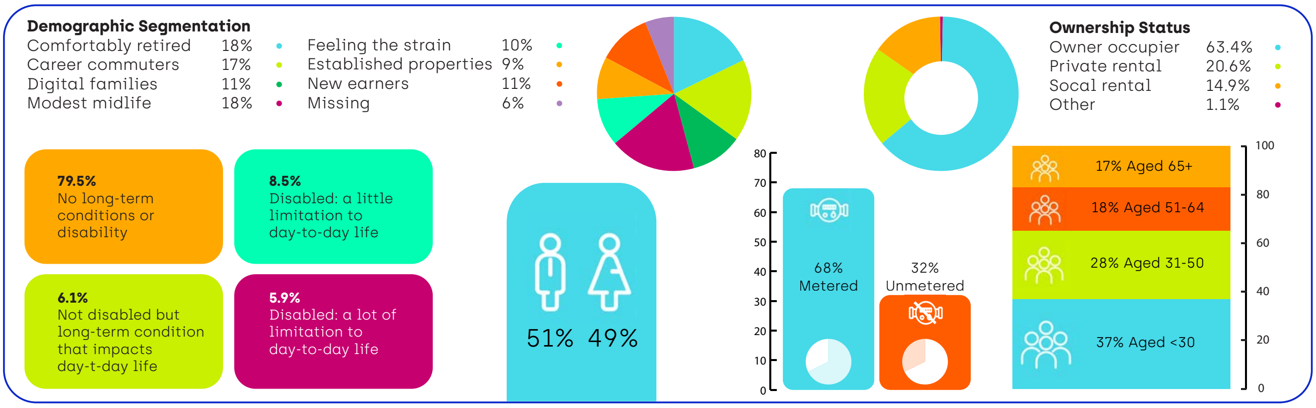


Figure 4.1 Meet our customers

Meet our stakeholders

As well as a broad range of customers across our communities, we also have a wide breadth of stakeholders. We regularly engage with our statutory stakeholders, including Ofwat, the Environment Agency, Natural England, the Drinking Water Inspectorate, Historic England, CCW and 44 local authorities across the area we serve. We also have close links with a number of NGOs, such as river groups, environmental organisations and the Canal and Rivers Trust, along with individual farmers, debt charities and community groups.

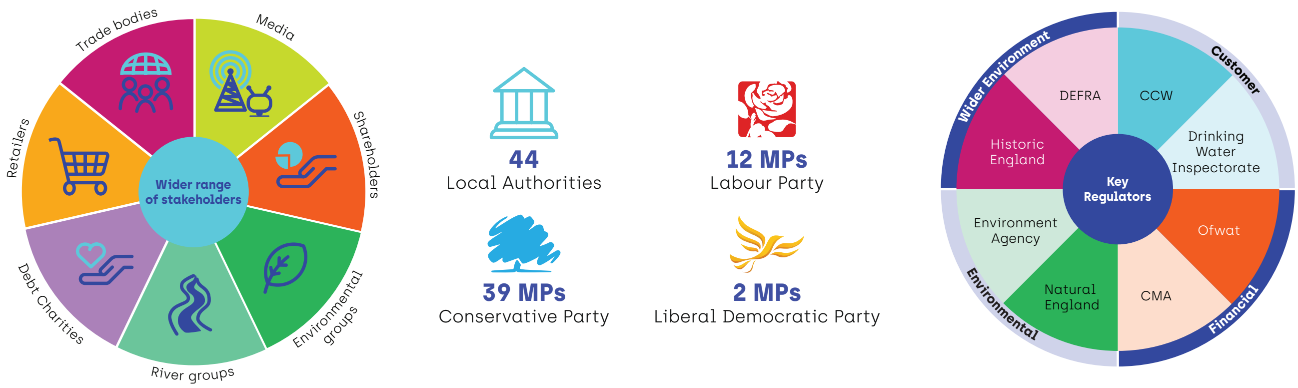


Figure 4.2 Meet our stakeholders

Building relationships with our retailers and groups who represent customer needs, both at a national and local level, has been key in us supporting our customers, and we work with a wide variety of organisations that are involved in water efficiency and water use. Involving all of these groups in the development of our plans has been important in ensuring that we not only develop our plans for our customers, but also for the wider community we serve.

4.2 High quality research

We have ensured that customer research and insight is delivered through a dedicated department within our business. This has enabled us to build a centre of excellence which not only collects and commissions insight, but also analyses and synthesises that insight and clearly communicates findings across the business. Fundamentally, we have aligned our approach with the high-quality research principles set out by Ofwat.

Useful and contextulised
We have designed our engagement and research to ensure we are giving customers context – whether that is explaining current performance, providing useful info graphics and sharing a variety of materials to help customers cognitively engage.

Neutrally designed
We have worked with leading market research experts as well as having an expert in-house team to design research and engagement – testing our approach and materials with our ICG.

Fit for purpose
We have used varied techniques and approaches – ensuring they are fit for the question in hand. From gathering day-to-day insight, wider literature review, online community, qualitative, quantitative and consultation.

Inclusive
We have developed a sampling strategy to represent the customers we serve, both from a demographic and geographic perspective. We also have included business customers in most of our research. We have convened specific groups to explore views of youth, vulnerable and retailers.

Continual
We have gathered a wide range of insight to utilise in our triangulation – this includes using analysis from our 'Voice of the Customer' tool which continually monitors customer insight and sentiment.

Independently assured
We have used Sia Partners to independently assure our engagement.

Ethical
All our research has been designed to ensure the best ethical practices including ensuring anonymity, voluntary participation and informed consent.

Shared in full
We have led collaborative research across several companies, worked across the South East companies to regularly share insight findings and approaches. We have a dedicated site where we share all our engagement findings.

Figure 4.3 Producing high-quality research

We have engaged over 13,000 customers directly about our business plan through a wide variety of engagement (with further insight from c109,000 customers helping to inform and triangulate our findings) – from wider priorities and valuations work, deep dives on enhancement investment cases, targeted engagement with harder to reach groups to wide reaching consultation. We have shared our approach, materials and progress across the business and with our Independent Challenge Group (ICG).

Laying the foundations
- SDS engagement
- Water resources regional research (WRSE)
- Online community
- Priorities and willingness to pay
- National ODI rates research

Deep dives
- Regional water resources - best value
- SROs - added value
- SROs - changing water source
- Water quality
- Wider environmental benefit
- Resilience
- Lead
- Stakeholder deep dives

Sharing our thinking
- Water resources regional emerging plan consultation
- Your water/your say
- Youth panel/ vulnerability panel

Test, iterate, refine
- Customer testing of WRSE regional water resources plan
- WRSE/WRE regional plan consultations
- WRMP consultation
- National PR24 acceptability/ affordability testing
- PR24 consultation

Figure 4.4 Four categories of targeted customer research to inform PR24 (in addition to ongoing insight gathered)

4.3 Synthesis and triangulation

We have not just used multiple sources of our own insight and research to inform our plans, we have drawn on regionally and nationally commissioned research conducted on behalf of the water companies and the industry, in addition to third-party work of relevance to a specific area, such as cost of living. By using a range of data sources, we aim to minimise confirmation bias and maximise the validity of the decision-making.

We have used an approach of synthesis and triangulation aligning with CCW guidance published 24 May 2021[7]. Our approach brought together research conclusions in one place, interpreting them in an independent way, and assessing and weighting to form overarching conclusions which could then be sense checked with our customers and ICG. We have assured our triangulation approach through a third party, Sia Partners.

We recognise that triangulation should be informed by a transparent and consistent weighting framework. We have worked closely with industry experts in this area and developed the below framework.

	Insight source scoring			Feedback scoring
Score	Methodologically sound	Rigorously gathered	Credibly interpreted	Contributory score
1	Limited or no methodology, unplanned with no aims or objective	Limited discussion of data collection technique, who collected data or the procedure for recording differing opinions	Lack of credible interpretation with potential bias. Limited or no discussion of feedback points in the conclusion	Vague, high-level feedback with only a tangential relevance to the topic in question
2	Some aims of engagement, but limited discussion of sampling, knowledge levels and backgrounds	Some discussion of data collection and the methods. Limited depth of feedback and range of options	Some link and discussion of the engagement details in the event report, including some differeing views	Feedback not necessarily fully aligned to the topic and only provides a limited insight and thus moderately useful
3	Clear aims, sound sampling methodology and considerations to barriers to inclusion	Thorough discussion of data collection procedures, noted at range of perspectives and extensive detail on feedback	Engagement work interpreted accurately and fairly with detailed outline of all perspectives and issues discussed	Specific, clear and relevant information with clear link to the topic discussed - high value added

Figure 4.5 Scoring methodology for insight

Each piece of insight was logged on our SharePoint database, updated on an ongoing basis, and scored by the Insight team based on the method set out in Figure 4.5 Scoring methodology for insight. We share this database across the business to allow all those interested (including our ICG) to see individual insight reports. We have provided public access to our research on our dedicated engagement site [8] as part of our commitment to support Ofwat's Open Data initiative.

4.4 Sharing insight – the line of sight to the business plan

To help inform the development of the business plan, we have combined evidence on what our customers and stakeholders want. There are four key documents that have been produced to help inform the planning process. These are summarised in Figure 4.6 Document production to support the business planning.

7. https://www.ccw.org.uk/publication/triangulation-a-review-of-its-use-at-pr19-and-good-practice/

8. https://affinitywater.uk.engagementhq.com/hearing-from-our-customers

Figure 4.6 Document production to support the business planning

What customers and stakeholders want (Appendix AFW04) is a synthesis of all the insight currently gathered - sectioned by investment area it gives the planning teams an independently triangulated summary of the key 'wants' from our customers and stakeholders (this is updated on a quarterly basis). The what customer and stakeholders want methodology (Appendix AFW05) has two sections the first synthesis section has been produced to demonstrate the triangulation and synthesis process. The second 'line of sight' section documents the trade-off and rationale for proposals developed by our planning teams, where they have taken the insight from What customers and stakeholders want, along with other data, and looked at how they trade-off these insights with deliverability and affordability. Both these documents have allowed both the ICG and assurance teams to access a greater level of detail.

Sia Partners and the ICG (Appendix AFW36 - Independent Challenge Group report) have produced assurance reports to assess both the quality and reflection of insight within the plans.

4.5 What we have heard from our customers and stakeholders

We have spoken to 13,543 customers (including 770 non-household customers) to gather insight directly on our plans and an additional 109,883 customers have helped inform our plans through a programme of wider engagement. Full insights from customers and stakeholders can be found in Appendix AFW04 - What customers and stakeholders want. Figure 4.7 High level summary of what customers and stakeholders want shows a high-level summary of our engagement feedback.

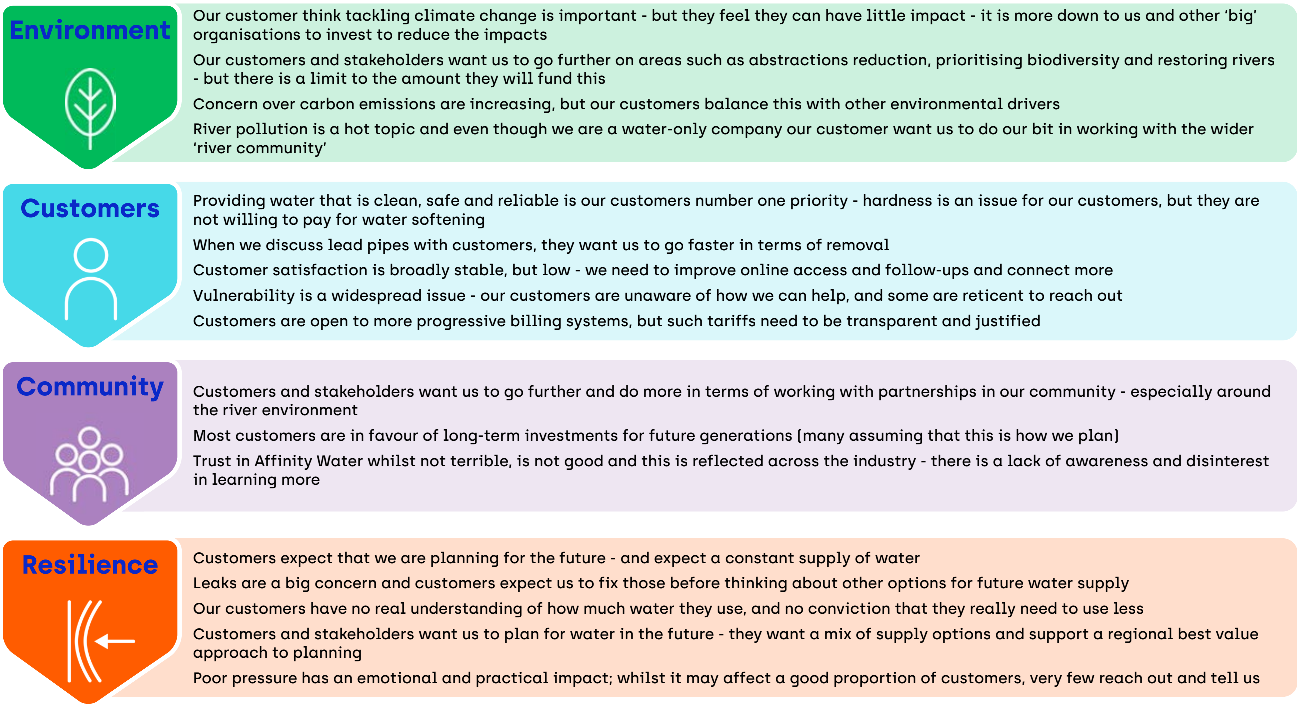


Figure 4.7 High level summary of what customers and stakeholders want

Although it has been important to synthesise all our insight to ensure we get a robust view of what our customers and stakeholders want it is useful to highlight some of the key research reports. One of the key areas of research was the engagement we conducted with customers (and non-household customers) on their overall priorities for investment. The full report[9] provides more detail but at a high level we see water that looks and tastes good is the top priority for both our household and non-household customers. In this quantitative research we saw quite correlated views between our household and non-household customers with the main difference being non-household customers prioritised customer service and low pressure higher than household ones. Other key areas have been the development of and testing (through consultation) our Water Resources Management Plan (WRMP), our detailed work on extending the social tariff and the testing of both affordability and acceptability of our business plan (full details of the Affordability and acceptability testing can be found in chapter 5) .

4.6 How insight has driven and changed our plans

The insight and testing of our business plan with customers has been integral to its development. The voice of the customer has been used throughout to shape and challenge the plan across its development, and at each stage.

Customer insight has shaped and informed the overall strategy, informing each business case and the solution options. The triangulated customer valuations (Appendix AFW04 - What customers and stakeholders want) have populated the Service Measures Framework used to prioritise investments.

The consultation and testing phases of engagement allowed us to 'check-back' with customers and stakeholders to ensure we had the right mix and balance, and test overall acceptability and affordability, of the business plan.

There are, however, other constraints on the business plan, including regulation (which sets requirements) and overall deliverability of the elements of the plan and financeability. These areas are discussed at a further in the line of sight section of (Appendix AFW05 - What customers and stakeholders want methodology)
.

9. https://affinitywater.uk.engagementhq.com/hearing-from-our-customers

Figure 4.8 Balancing the plan

Full details of how insight from customers and stakeholders has influenced the business cases underpinning the business plan can be found in the line of sight section of Appendix AFW05 - What customers and stakeholders want methodology .Some of the key areas that have developed based on customer and stakeholder insight are set out below in Figure 4.9 How the plan changed with further detail provided in chapter 6 costs and chapter 7 outcomes and in Appendix AFW14a - Enhancement investment cases and AFW14b - Enhancement investment cases. We have produced an updated customer version of our plan (Appendix AFW39 - Customer version of the plan) alongside our business plan submission.

	Early plans	Customers and Stakeholders said	Revised plan
Leakage	50% reduction by 2050	Do more	Target unaltered as constrained by deliverability but including innovative network calming to maximise efficiency
Biodiversity	Meet regulatory requirements	Do more – but balance with cost and focus where you can have most impact	Programme working with number of 3rd parties across our sites
Unstainable abstraction	Meet regulatory requirements	Do more – go faster	Programme beyond statutory minimum – focused on key catchments – working with river groups
Per capita consumption	Deliver 110 l/h/d (average year) reduction by 2050	Do more – what out business customers?	Deliver 110 l/h/d (dry year) reduction by 2050 across all customers
Net zero	Go faster than statutory minimum	Balance delivery with cost	Phased program that optimizes benefit with current available technologies
Lead pipes	Meet regulatory requirements – reactive strategy to failures	This is a priority for us	Proactive strategy on 11 zones replacing communication pipes
Water supply	Early programme of possible options for supply and demand management	Get your house in order before looking at new sources – focus on best value options	Large demand management programme, Connect 2050 programme , Grand Union Canal strategic option then Thames to Affinity Transfer

Figure 4.9 How the plan changed

4.7 Consultation

As part of the overall 'test, iterate, define' stage of developing our business plan we have conducted several formal consultations. These have included the statutory 14-week consultation on the Water Resources Management Plan, the consultation on our Drought Management Plan and the regional consultations on the water resources plans for both Water Resources South East (WRSE)[10] and Water

10. Water Resources South East (engagementhq.com)

Resources East (WRE) [11].

However, alongside these we felt it was really important to give our customers and stakeholders an early view of our business plan and the associated bill impact and use the opportunity to get early feedback. This was a crucial exercise to judge whether we were on track to deliver what our customers and stakeholders wanted - especially given the current economic climate.

On 26 April 2023 we ran a 6-week consultation, we produced a customer facing consultation document, engagement hub to gather feedback and a series of short videos explaining a bit about our plan and asking for our customers views. We promoted the consultation through a range of media including social media, internal channels, direct emails, newspaper adverts and electronic billboards at Tesco supermarkets across our region. The ICG helped to shape the consultation document giving us feedback on both content and presentation and inputted into the communications campaign.

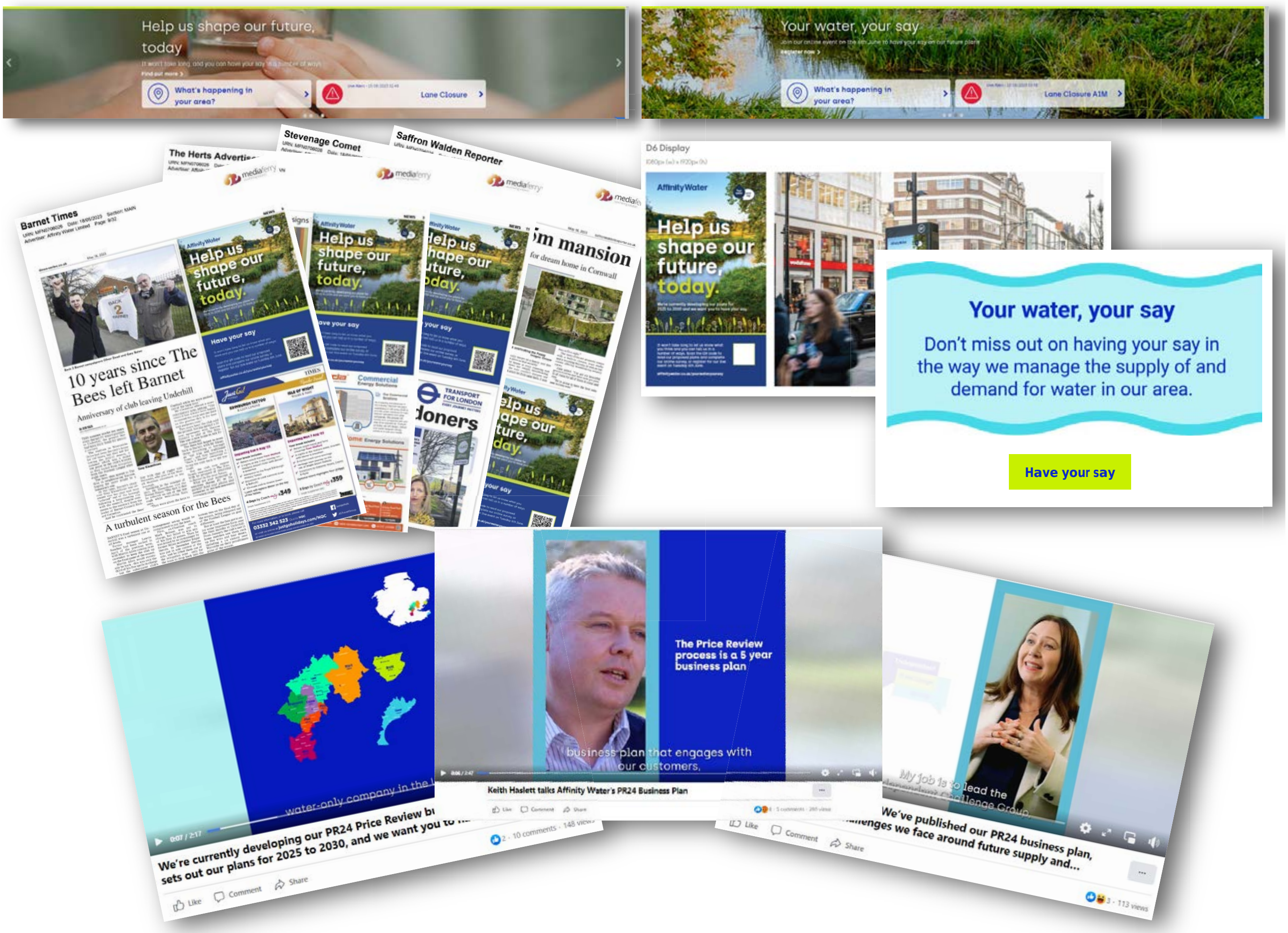


Figure 4.10 Engagement collage

We received 1873 responses to the consultation. Full results can be found in the main report [12] but at a high level 59% of customers thought we were focusing on the right areas for improvement, 52% thought we had the right targets in place, 39% thought the bill increases were reasonable given the improvements suggested and 41% felt they could comfortably afford the increases.

Of the four key areas of focus, respondents were asked to rank what was 'most important' and what 'urgently needed most improvement'. Environment was consistently ranked as far more important than any of the other three (resilience, customer, and community). Those who said it was the most important were significantly more likely than those who said 'customer' to be very satisfied with the plan. 'Community'

11. The Draft Regional Plan - Water Resources East (wre.org.uk).

12. https://affinitywater.uk.engagementhq.com/hearing-from-our-customers

was ranked lowest in both questions.

When asked what was 'the most important part of the plan' - reducing leaks was very frequently mentioned. Protecting the environment/chalk streams, resilience of water supplies and building infrastructure were also areas of focus in some of the responses we received.

We also received many comments where respondents highlighted issues over the proposed bill impacts - often responding with more of a 'citizen view' highlighting affordability issues for those more financially vulnerable.

In addition to the more formal consultation we were conscious that such exercises often exclude future customers and those in vulnerable circumstances so we also commissioned a number of focus groups with future customers and those financially vulnerable and a number of one-to-one interviews with customers on our priority services register. The full report[13] provides more detail but at a high-level our proposals on safeguarding supply, environment and vulnerable customers were found acceptable and the proposed bill increase was felt to be broadly justifiable by most participants. Whilst justifiable, it remained nevertheless unpalatable to many, given the broader context and pressures being faced – in particular those 'just about managing'. There were calls for the increase to be smoothed over the five years, with no 'big jumps,' to make the increases easier to manage. There were also key concerns about whether the increase would feed into shareholder dividends and big profits for the company, which was not seen as acceptable.

The results of the consultation and the early qualitative phases of affordability and acceptability testing gave us clear messages that we had the right emphasis and balance within our plans but affordability was a key concern.

4.8 Your Water Your Say

We held our 'Your water, your say' session on 6 June 2023. It was attended by 67 customers and stakeholders. The session focused on the key areas of customer service priorities; long-term outcomes, environmental outcomes and affordability.

We had a wide-ranging discussion with our customer and stakeholders[14] with the key themes set out below in Figure 4.11 Summary of themes from questions raised in June Your water, your say event.

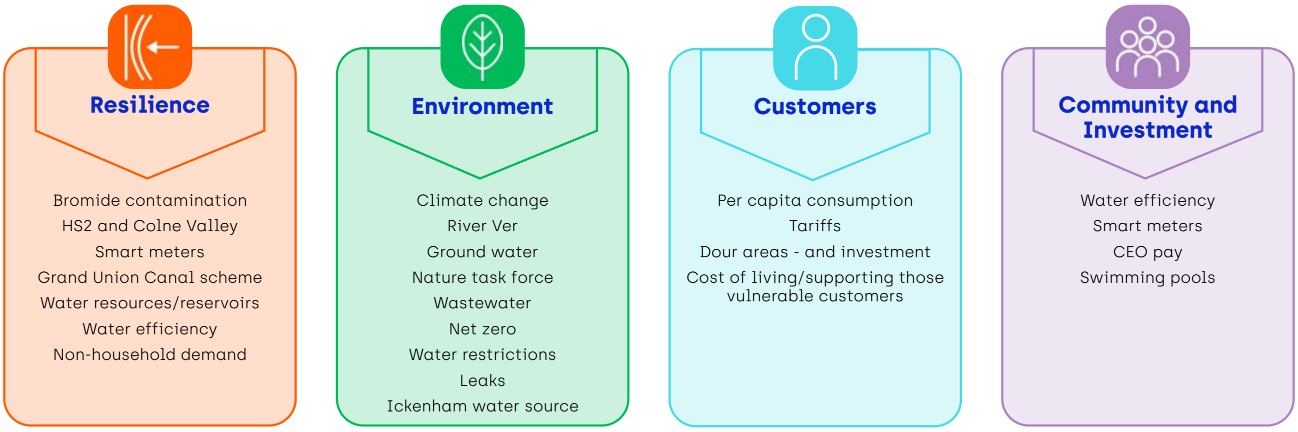


Figure 4.11 Summary of themes from questions raised in June Your water, your say event

A key theme from stakeholder and customer feedback was the protection of chalk streams in our region. We had very positive engagement about our first large scale water supply option, the Grand Union Canal scheme, and a real interest regarding our plans for reducing water use through engagement, tariffs, smart metering, leakage reduction and working with our non-household customers. The themes and questions

13. https://affinitywater.uk.engagementhq.com/hearing-from-our-customers

14. A full report of the event can be found in :https://affinitywater.uk.engagementhq.com/hearing-from-our-customers

we were asked aligned closely with the 1,873 responses received to the consultation on the business plan. Full details of what we heard and our response can be found in Appendix AFW05 - What customers and stakeholders want methodology.

4.9 Working together

PR24 has seen a fundamental shift in terms of collaboration and the development of the approach to customer insight and engagement. We have been heavily involved in the collaborative work delivered by Ofwat and CCW on ODI rates research and affordability and acceptability testing. We have attended and participated in workshops, and delivered a lessons learnt from PR19 session (jointly with Thames Water) and a presentation on our approach to triangulation.

We have led the development of collaborative research projects across the water resources teams, including key work on water resources options and acceptability of the WRSE regional plan, and two joint research projects across several companies on changing of water sources and added value for water resource schemes.

We also set up a collaborative working group with all the insight leads across the south east which meets monthly to share insight, experiences and, where appropriate, identify further collaborative work. We believe this has further helped to ensure a robust and efficiently delivered programme of insight, enabling us to build the best plan for our customers.

We have published all our synthesis and research summaries [15] to ensure transparency and enable sharing and learning across the industry.

4.10 Independent Challenge Group

We clearly see the value of independent challenge to the service we provide to our customers on a daily basis, and how we ensure their needs are met in our longer term plans. Independent challenge holds a mirror up to our operations and activities and provides a valuable critical voice and external perspective. We rebuilt our Independent Challenge Group (ICG) in 2022, refreshing membership and helping them redefine their challenges to have a more ongoing focus (through their key lines of enquiry) - we have been keen to not to have them focus solely on the business plan but ongoing strategic issues for customers that we need to tackle over the long-term.

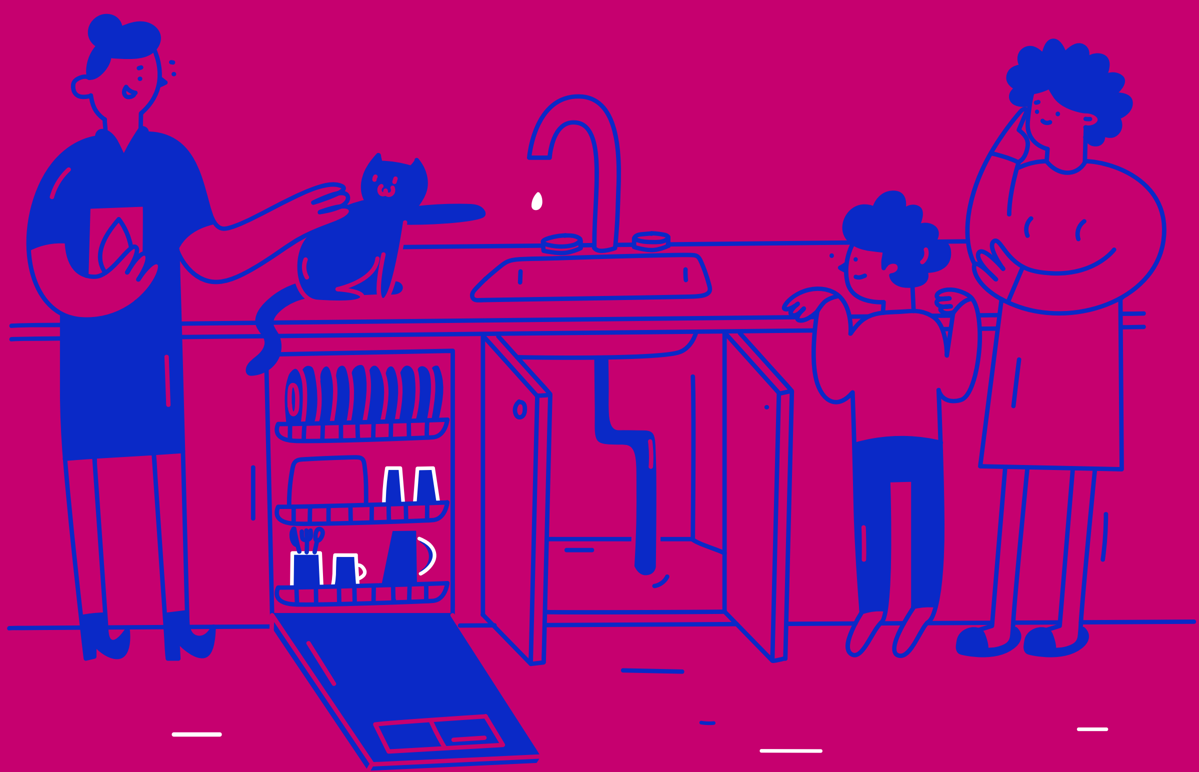
The ICG has met every two months as a main group in addition to two sub-groups - one focused on environment and resilience the other on customers and communities, as well as the chair attending the regional challenge group for Water Resources South East (WRSE) and also being the chair of the national Challenge Co-Ordination Group (COG). The group has been heavily involved in the development of materials shared with customers through research, consultation and affordability and acceptability testing and has also observed engagement 'first-hand' joining focus groups and events. They have also been the approving body for the PR19 Environmental Innovation Project (EIP) activities. Full details of the ICGs involvement in developing our engagement and plans as well as their independent report can be found in Appendix AFW36 - Independent Challenge Group report and their minutes and challenge log are published on our website[16] .

15. https://affinitywater.uk.engagementhq.com/hearing-from-our-customers

16. Independent Challenge Group - (ICG) - Affinity Water

05.

Customer affordability and acceptability



Affinity Water

Customer affordability and acceptability key points

- We have engaged with our customers to understand that their priorities for affordability are for fair bills and for us to provide help for customers struggling to pay
- We have an existing comprehensive package of measures to help all types of customers with vulnerabilities, including financial
- We introduced a targeted £50 one-off bill credit in April 2023 for 30,000 customers and will repeat this in April 2024
- We have a multilayer affordability strategy, taking action ourselves to ensure bills are as low as they can be, before asking our customers to take action
- We are trialling an innovative rising block tariff from October 2023 with 1,500 customers with four further tariff trials planned for 2025 - 2030
- We have followed Ofwat's methodology for the affordability and acceptability testing of our plan and worked collaboratively with other water companies to deliver the research
- We recognise the low affordability results and consider this a reaction to the cost of living crisis rather than to our bill levels and plan further detailed engagement with customers to dig into this and explore further how we can provide additional help for customers experiencing affordability issues

How our plan meets the Ofwat methodology

Ofwat methodology	Our plan
Ofwat quality criteria	
Plan and Long-Term Delivery Strategy explain how you have taken account of views on affordability for all customers, and those who struggle to pay their bills, including how its strategy considers affordability in the long term ***'We also expect each company to explain how it will deliver fairness for both future and existing customers in relation to what they each pay for. 'We expect companies to demonstrate that they put the interests of current and future customers at the heart of the way that they run their businesses, which includes their plans for PR24 and beyond.'***	✓ We have engaged with customers on affordability and fairness for bills, for all customers ✓ In developing our Long-Term Delivery Strategy we engaged with customers on the bill implications ✓ We challenged ourselves and our quality regulators to ensure future obligations are necessary, phased in the most appropriate time period, and delivered in the most efficient way
Plan demonstrates it has used our standardised methodology for testing the affordability and acceptability of its proposals ***'We expect companies to demonstrate that they have adopted the approach to acceptability and affordability research for PR24, which introduces standardisation.'***	✓ We have engaged with Ofwat and other water companies in the development of the standardised methodology for affordability and acceptability testing ✓ We have followed the Ofwat methodology for our Acceptability and Affordability research
Plan includes proposals for supporting customers struggling to pay their water bills through social tariffs and other methods of support under our specified scenarios. ***'We expect companies to provide support for those who struggle, or are at risk of struggling, to pay their water bills. We also expect companies to consult and take effective action to identify and support customers in vulnerable circumstances, including those who are only vulnerable for a short time.'***	✓ We set out our four-layer affordability strategy to ensure our bills are as low as they can be, that we explore using new and different tariffs to deliver fairer bills, to give customers the tools they need to manage demand and therefore bills, and finally to maximise household income to offset (partially or in full) the water bill ✓ We include our plans for social tariff expansion to up to 150,000 customers by 2030, possible through an increase in the customer-supported cross subsidy to £9.50 ✓ We are committed to the principle that no customer receiving help through our social tariff now will be worse off if and when the national social tariff is agreed and introduced ✓ We will continue to work with CCW on plans for a national social tariff
Ofwat ambition criteria	
Plan must include ambitious proposals to enhance affordability, and demonstrate any proposals are based on customer research, and have considered affordability. ***' Companies' ambition must take***	✓ We have engaged with customers on the idea of using different and more progressive tariffs as a way to help customers with

Ofwat methodology	Our plan
account of affordability concerns. Our assessments of stretch and efficiency will support overall affordability by ensuring all customers receive value for money. But we also want companies to explore how they can demonstrate ambition to further enhance affordability overall; for future customers; and residential customers struggling to pay'	affordability concerns. They support these ideas and welcome plans for tariff trials ✓ We are launching a rising block tariff trial in October 2023 to 1,500 customers in the Stevenage area. The first portion of water is free, and the cost increases with each usage increment. The aim is to test whether this helps to make bills fairer and more affordable, particularly for customers struggling to pay ✓ We plan four more tariff trials between 2025 - 2030, three aimed at household customers (a seasonal tariff, a green tariff and a demand reduction competition) and one at non-household customers(a demand reduction auction)

Chapter Guide

Section	Purpose	Cross reference
Affordability definition	Reaffirmation of the Water UK Public Interest Commitment (PIC). pledge we signed up to to in 2019. Projection that expansion of our Low-Income Fixed Tariff (LIFT) to 149,000 by 2029 - 30, means only 1.2% of customers will remain in water poverty and the 2.5% threshold, without our interventions this would equate to 4.7% of customers.	
Affordability for households	Summarise the current help that we offer to customers including measures that will support customers in vulnerable circumstances as well as those experiencing financial vulnerability. We also include details of some of the changes we have made since April 2023 to account for the deepening cost of living crisis.	
Affordability measures	Explanation of our 4 layer affordability strategy for 2025 - 2030. Which includes measures in the following categories: Layer 1 - ensuring our bills are the lowest they can be as a start point, Layer 2 - changing our tariffs so our customer charges are fair and help those most in need, Layer 3 - providing tools for customers to reduce consumption, and hence bills, Layer 4 - maximising household disposable income to help offset the water bill.	Appendix AFW04 - What customers and stakeholders want Appendix AFW41 - Case studies
Affordability and acceptability testing	Confirmation that we have followed the Ofwat methodology and the results gained from the quantitative phase are that 72% of our customers found our revised plan acceptable, and 19% of our customers found it affordable.	Appendix AFW04 - What customers and stakeholders want Appendix AFW45 - Affordability and Acceptability testing

5.1 Affordability definition

In 2019, all water companies signed up to the Water UK Public Interest Commitment (PIC). One of the five pledges was:

"Make bills affordable as a minimum for all households with water and sewerage bills no more than 5% of their disposable income by 2030 and develop a strategy to end water poverty. This requires a package approach tailored to local needs, including measures such as helping customers to be more water efficient, providing social tariffs and additional forms of financial assistance, and working with other organisations to support customers in vulnerable circumstances"[17].

In March 2021, Water UK released a report prepared by CEPA, Quantitative Analysis of Water Poverty in England and Wales. This report estimated the number of customers in water poverty in 2019 - 20 in each company area [18].

Our planned expansion of our Low-Income Fixed Tariff (LIFT) from 52,000 in 2019 - 20 to 149,000 by 2029 - 30 allows us to project that by the end of 2030, only around 20,000, or 1.2% of customers will remain in

17. https://www.water.org.uk/sites/default/files/wp/2019/04/Public-Interest-Commitment-2.pdf published 25 April 2019

18. https://www.water.org.uk/wp-content/uploads/2021/04/Quantitative-analysis-of-water-poverty-in-England-and-Wales.pdf

water poverty at the 2.5% threshold. Without our interventions the number would be around 75,000, or about 4.7% of customers. We consider that our interventions have made and will continue to make a meaningful contribution to bill affordability and towards eradication of water poverty [19].

5.2 Affordability for households

What our customers want

Our work has helped us to understand what our customers priorities are; customers want fair bills that pay for the necessary investment, and help for those customers who may struggle to pay.

Previously, customers have told us that they prefer to pay for things when they use them, and that they don’t want to rack up bills for their children and grandchildren to pay for, or 'kick the can down the road' when thinking of essential investment. During the cost of living crisis, we have seen attitudes shift somewhat in this area, and customers are now much more open to the idea of spreading things out and paying for things over a longer period of time.

The cost of living crisis has also sharpened attitudes towards how we spend customers’ money. More than ever, customers want to be reassured that we are spending money wisely, and want to see more evidence of investment results. However, customers also still want water supplies to be maintained, and the environment to be protected. They do not want to see a reduction in investment, but they do want to be reassured, and proof provided, that the investment is necessary and efficient.

Customers are also increasingly concerned that support is targeted to the most vulnerable, and that there is adequate protection for those struggling to pay. There is an increase in the willingness to pay for financial measures to support those who need it.Although recent research shows that customers view our potential bill increases as modest when compared to, for example, energy bills, any increase must be reasonable. Customers are looking to companies to ensure the cost of the service is spread fairly over the customer base, for example through use of metering and rising block tariffs, to ensure those who use excessive amounts, also pay more.

Current help for customers

We are committed to providing targeted support for those who are struggling to pay their water bills. We have a large number of schemes and projects, and work with trusted partners, to enable us to offer a wide range of support, whether on a temporary or longer term basis. The CCW affordability review recommendations published in May 2021 placed us as joint third best company with regard to the proportion of customers in water poverty being helped[20].

Figure 5.1 Current help for customers below summarises the measures we currently have in place to help our household customers.

19. PR24 - Part 10 Commentary - Supplementary tables: Line SUP15.48 - 49

20. https://www.ccw.org.uk/our-work/affordability-and-vulnerability/affordability-review/affordability-review-recommendations

Supporting our customers in vulnerable circumstances

Multiple channels to register for PSR including ability for third parties to register.
Language Line, British Sign Language interpreter service
VIP lines for PSR customers
Collaborative working with distribution network operators on campaigns to raise awareness of PSR and financial support
Pilot on behalf of CCW to promote financial support to customers who have signed up to PSR

Supporting our customers in financial vulnerability

Working with wastewater providers to ensure customers can be placed onto wastewater tariff without additional application
Water assistance voucher scheme – working with charity partners
Signposting additional support including income maximisation
Debt support schemes including economic abuse crisis fund
Breathing space – debt respite scheme.
Payment breaks, payment plans
Water direct – option to pay water and sewerage charges through benefits
Social tariffs including Low-Income fixed tariff, Watersure and applying wastewater social tariffs

Support in the community

Community grant to support local projects (Liberty Tea Rooms – CAP Debt Advice Centre)
Community events – including attendance at 'wellbeing hub' to provide face to face advice
Supporting local authority with distribution of 'Household Support Funds'
Partnership with local DWP office to run 'surgery' for clients to discuss water bills
Partnership with National Debtline including co-branded website page
Working with local charity to distribute flyers promoting PSR and financial support

Making it easy

18 months contact cycle for data quality and to check receiving the correct service
Home Water Efficiency visits - information and advice on water efficiency including providing and installing free devices
Provision of alternative water during supply interruptions
Data sharing agreements with housing associations for easy identification of households in vulnerable circumstances
Single application form for support schemes
'Priority Customers' training for frontline colleagues
DWP – data sharing agreement to proactively identify households eligible for reduced bill tariffs
'Personas' published on our website to highlight how we have helped customers
BSI Standard 18477 – inclusive services for customers in vulnerable circumstances
Proactive email promoting financial support sent to 650K households

Figure 5.1 Current help for customers

Additional help introduced from April 2023

Over the course of 2022, the cost of living crisis emerged and quickly deepened as the impacts of both the pandemic and the war in Ukraine started to be felt. We took action to directly help those customers likely to be the worst affected and put the following measures in place, effective from April 2023:

- Provided a £50 one-off bill credit to 30,000 customers, targeted at those requiring extra support, such as those who are disproportionately affected by the cost-of-living crisis. We are also working with trusted partners who identify eligible households, for example those who qualify for a fuel poverty voucher due to their circumstances. This will offset about 25% of the water bill and, for an average water and waste bill, this will reduce their monthly payment by approx. £6 per month
- Price-freeze for the standing charge, benefiting those with lower usage and allowing customers more control over their bills through managing consumption
- Uptake of social tariff - Increased our level of discount for the water element of the bill to 60% for households in the most need, typically single adult families or households. We aim to proactively identify a further 3,000 households who would benefit from this tariff during 2023 - 24 and, by March 2025, we anticipate that around 113,000 customers will benefit from either 40% or 60% bill discounts

5.3 Affordability measures

Our affordability strategy and plans for 2025 - 2030

Our strategy is simply to consider every aspect affecting what goes in to customer bills, and challenge ourselves to ensure bills are the lowest they can be during 2025 - 2030. Building on that base, we will then put in place a suite of measures, to complement those we already have, to help customers who struggle to pay their water bills. We will develop new and innovative ways of identifying and engaging with the most stretched households and customers to make sure we are targeting assistance at those most in need.

Our plan for April 2025 onwards, is based around four layers to further insulate customers from affordability issues. The first two are actions we will take, and the further two are actions we can facilitate for customers, so they can take independent action to help with affordability. We think it is important that we take all the measures we possibly can before asking customers to make any changes.

Layer 1 – ensuring our bills are the lowest they can be as a start point.

Layer 2 – changing our tariffs so our customer charges are fair and help those most in need.

Layer 3– providing tools for customers to reduce consumption, and hence bills.

Layer 4 – maximising household disposable income to help offset the water bill.

We set out what this means in more detail for each layer below.

1. Ensuring bills in 2025 - 2030 are the lowest they can be

We will challenge ourselves to make sure our costs are efficient, and that we have looked at all options in line with our Long Term Delivery Strategy, to ensure the phasing of our work delivers an efficient bill profile for 2025 - 2030. We will work with the wastewater companies in our area to always consider the combined bill impact for customers. In developing our plans, we have:

- Challenged the costs we have used to develop our investment programme, to ensure they are the most efficient they can be. We use the Copperleaf system to optimise our investment programme and have strong governance and challenge to ensure we are putting forward the most efficient and effective investments. We use local suppliers where they are the most efficient, which increases the value we put back into our local communities. We have set ourselves an efficiency challenge of 0.5% over and above Ofwat's anticipated challenge
- Deployed capital expenditure solutions where relative benefits are equal to operational expenditure solutions, to spread the cost over the longer term
- Set the Pay As You Go and Regulatory Capital Value run off levers to their natural rates aligned with Ofwat's guidance to ensure customers pay for long lived assets when they use them
- Reviewed our investment programme and proposed all potential options for Direct Procurement for Customers to maximise value for customers - three SRO schemes have been considered suitable for the DPC route
- Influenced the development of the Strategic Resource Options to ensure they are planned for a just in time deployment, minimising the proportion of early investment that could affect 2025 - 2030 bills
- Reviewed the proportion of household and non-household revenue we anticipate, to ensure a fair split following the sustained changes in demand as a result of Covid-19
- Returned the income offset we would have provided to developer customers to domestic customers

2. Changing our tariffs to deliver fairer bills

We will use tariffs to make sure that customers pay for the water they use, and that charges fairly reflect consumption, while giving customers tools to help them save money.

- We will implement any new national single social tariff that is developed between now and 2030 - with the commitment that we will not reduce the support given to any customer as a result of moving to different eligibility criteria or level of support. This may mean we continue to operate our existing social tariff alongside a new 'baseline' national social tariff. We set out more on our social tariff strategy below
- We are currently trialling an innovative 'rising block tariff','WaterSave', which allows customers to better control their bills, and incentivises very high users to reduce consumption. See Appendix AFW41 - Case studies pg. 5 for detail on our WaterSave tariff trial
- We will proactively identify customers who might benefit from the surface water drainage discount, and provide two water butts free of charge to each household to help reduce consumption

- We will trial a new green tariff, to enable those who wish to pay more to support environmentally and socially beneficial projects, empowering customers to choose where the proceeds are distributed. See Figure 5.2 Our future tariff plans for further detail on our plans in this area
- We will develop new flexible ways for customers to pay. For example, we plan to introduce a new app (partnering with Capita, and through the Innovation Fund) to allow customers to 'pay as you go', delivering immediate cost savings to customers who change their behaviour
- We will apply the social tariff reduction to wastewater bills, in addition to water bills

Social tariffs

We have a long history of using social tariffs to help customers struggling to pay their bills and we are committed to continuing to offer this support. We were an early adopter of social tariffs and currently have one of the highest proportions of take up in our customer base. In more recent years, the number of customers on social tariffs has settled at around 90,000.

We have also been an active participant in discussions over a proposed national social tariff. At present, a national social tariff has not been developed, and we commit to adopting any such tariff as and when it is developed. It is likely that the national tariff would be a 'baseline' tariff, which would be additive to the current company specific arrangements.**We commit to the principle that no customer will be worse off** when any national tariff is adopted.

We have strong support from our customers for the principle of a cross subsidy to those who are in need. In 2023 - 24, the level of cross subsidy is around £5 per customer, and recent willingness to pay research has confirmed customers support an increase to around £9.50. We are conscious of the Defra guidance that indicates a cap of 1.5% of bills on any cross subsidy, which at around £2.50 is already being exceeded, and our plans will increase that further. We note proposals to remove that cap, and to conduct national research to gain support for the national cross-subsidised social tariff. Should these proposals not be adopted, we believe that having committed to ensuring no customer is worse off, and given we are experiencing a continuing cost of living crisis, that we should continue with our plans with the support of our customers.

In considering our strategy for social tariffs, we have taken the decision to reverse our policy on removing access to the social tariffs for customers who do not keep up with payments. We set out this policy in the past to incentivise customers to continue paying. We consider that, in the current climate, removing help from customers who cannot pay is not helpful, and this is likely to lead to a growth in customers on the social tariff of around 10,000 - 15,000 per year. This will contribute to increasing the number of customers on social tariffs by 2030 to around 149,000, which can be accommodated within the £9.50 cross subsidy.

With any remaining cross subsidy, we will consult with customers on how we should use it, and we will prioritise support based on customers views.

We are also committed to exploring fairer and more fit for purpose ways of charging customers. We are trialling an innovative 'rising block tariff', which we will roll out to a wider customer base if the trial shows positive results; see Appendix AFW41 - Case studies pg. 5.

Green tariff
Customers would pay a voluntary additional amount which would be used for social and environmental schemes not already included in price limits.

Demand reduction auction
Business customers would bid a price to be paid to reduce demand at certain times where demand is high.

Demand reduction competition
Customers would compete to reduce demand and receive either reward payments, or entry into a prize draw for a substantial prize.

Seasonal tariff
Using smart meters would enable us to charge a higher price during unusually hot weather and test if demand is reduced.

Figure 5.2 Our future tariff plans

3. Provide tools for customers to reduce consumption, and hence bills

Most customers pay on a meter, and metering, and the use of tariffs and other measures can help customers use less water. We will:

- Ensure that there is a discretionary tariff for customers who do not qualify for the Watersure tariff, but use additional water for medical reasons
- Install 400,000 smart meters, in 2025 - 2030, as part of a 15 year programme to move to full smart metering. This will allow customers to financially budget for consumption and mitigate bill rises, as well as support through digital applications and real-time information for customers
- Meter all properties where possible through a compulsory metering programme
- Provide personalised water efficiency consultations and home energy advice to households who identify as struggling with their water bills. We will work with energy partners to provide energy efficiency and fuel poverty advice
- We will increase our customer-side leakage allowance and subsidise any repair costs up to 100% of costs for customers on social tariffs
- Work with Government to ensure all social housing new builds follow the highest standards of water efficiency. We have also launched a pilot on ensuring water neutrality at NAV sites
- Work with Government to bring forward mandatory water efficiency labelling of white goods
- Enhance our communications to customers around water efficiency, and highlight the other costs they can save, for example energy costs in heating water. We will ensure these are available in easy read format, as well as commonly spoken languages in our region, and work with assistive software
- Create a targeted campaign for landlords, where water costs are included as part of the rent, which currently removes the incentive for customers to save water
  Implement learning outcomes from our innovation project on NAV neutrality, to keep water use and bills low in newly-built homes. For more details see Appendix AFW41 - Case studies pg. 1

4. Helping households with the cost of living

The previous layers have focused on what we, and customers, can do to reduce water bills. This layer extends that support by considering how household incomes can be supplemented, to help towards, or even completely offset, the water bill. We will:

- Enhance our 'benefits maximisation' offering and move this in house and/or fund a resource at Citizens Advice to carry out this service
- Using our own and external data we will proactively identify households in, or at risk of, experiencing financial pressures and actively reach out through targeted campaigns and one on one communication to deliver preventative support. We will also use data to determine geographical dynamics where there may be multiple indicators of vulnerability; we commit to working with communities and partners in those areas to engage with hard-to-reach households and communities

- Trialling a green tariff where customers who want to can provide an additional payment that would be distributed to charities supporting social and environmental causes including where customers are struggling to pay. See Figure 5.2 Our future tariff plans for further detail on our future plans in this area
- Create a hardship fund to help customers in the most serious circumstances with help for all their essential bills, not just water
- We will ensure that our frontline workforce is trained to identify households in vulnerable circumstances and are able to provide advice about affordability support, priority services register and referrals to other services

All of these measures are supported by improving how, when and to what effect we engage with customers. We will use data to proactively identify and target customers who would benefit from the various tariffs and services we offer. We will develop new and innovative ways to engage with the most disengaged customers to ensure no-one is disadvantaged through a lack of awareness. We will work with partners to develop new channels to communicate and engage with our customers.

5.4 Affordability and acceptability testing

Following the Ofwat guidance[21] we have conducted both qualitative and quantitative research to understand the customers views on both affordability and acceptability of the business plan. We have followed the guidance fully with one exception [22] in terms of methodology and worked closely with our ICG, Thames Water (who we jointly procured the research with) and the market research agency Accent who conducted the research on our behalf to ensure the sampling methodology, approach and stimulus materials used met the guidelines provided. Sia Partners, our assurers for the customer engagement workstream, have also conducted a deep dive on this area.

Qualitative survey

The qualitative testing took part in May 2023. Full results can be found in Appendix AFW04 - What customers and stakeholders want; but as a headline **44%** found our plan affordable and **73%** of our customers found the plans acceptable.

Quantitative survey - methodology

The quantitative survey was conducted in August 2023 and followed on from the qualitative engagement. The Affinity Water area was treated as two locations, both of which are supplied water services only by Affinity Water - the first location is the area supplied waste services by Thames Water (Affinity Thames), and the second by Anglian Water (Affinity Anglian). These are the only supply areas that met the criteria for selection under Ofwat/CCW's guidance (namely that they make up over 10% of Affinity Water's customer base).

We tested a combined water and waste water bill for the affordability testing and showed plans for the water element to inform answers regarding acceptability.

The target number of interviews was set to 750. This was split 500 Affinity Thames, 250 Affinity Anglian (recognising both the dominant nature of Affinity Thames in terms of customer percentage, but also the need to obtain a reliable sample size for Affinity Anglian). Primarily, the recruitment used a push-to-web approach with online survey links and QR codes provided in the letter and email invitations. Participants were also offered the opportunity to make accessibility requests (including requesting a paper version of the questionnaire to fill in and post back - 49 such requests were received and honoured (31 in the Affinity Thames area, 18 in the Affinity Anglian area).

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21. Guidance_for-water_companies_testing_customers_views_of_the_acceptability_and_affordability_of_PR24_business_plans.pdf (ofwat.gov.uk)

22. In survey materials from that produced by Ofwat/ CCW this was on the bill chart graph, where following cognitive feedback it was decided that it would benefit comprehension if a total (of bill impact plus inflation) were added above each bar on the graph showing the impact of the plan on bills. This was added with the approval of Affinity Water's Independent Challenge Group

Customer affordability and acceptability

In the Affinity Anglian area, we exceeded the full target of 250 interviews and hence did not require, nor therefore send, any reminders. The Affinity Thames area mailing did not achieve quite the same response rate and fell slightly short. It was assessed that to reach the target of 500 interviews, a small reminder would be required. A target of 150 non-household interviews was set, 100 in Affinity Thames area, 50 in the Affinity Anglian area. NHH bill-payers were recruited from a mix of sample sources, and interviewed. Full details regarding sample sizes, recruitment and weighting along with data cleaning to remove speeders etc can be found in the detailed report (Appendix AFW45 - Affordability and acceptability research results (Accent)).

Results

The current economic circumstances for many participants were not favourable. Half of household participants said they were struggling financially currently, and prospects for improvement are scant. Businesses were somewhat less troubled, with under half struggling financially but had more positive longer-term prospects.

Affordability of the proposed business plan was low at **19%** overall, just **17%** of households and **29%** of non-households said the increases would be fairly or very easy to afford. Acceptability of the proposed plan was high at **72%** overall, **72%** of households and **75%** of non-households said it was either acceptable or completely acceptable. Only **10%** of households and **19%** of non-households said it was unacceptable or completely unacceptable.

Leaks and Water Resource Management were the top priorities identified for both households and businesses.

06.
Costs

Costs key points

- Our investment plan has been developed based on customer priorities and tested with customers during its development, including a consultation with customers in April 2023
- Our five-year investment plan has been fully developed in the long term context and represents the first step in our 25-year ambition
- Our forecast investment for 2020 - 2025 is in line with our 2019 Final Determination, delivering for customers in a challenging, high inflation environment affected by global uncertainty
- Our proposed base totex investment for 2025 - 2030 delivers an ambitious improvement in performance for customers at an efficient cost
- Our enhancement plan, set in the context of our Long-Term Delivery Strategy is the largest in our history and delivers significant investment in water resources to meet long term demand
- Our key costs are benchmarked to the sector and market prices to ensure efficiency and our thorough challenge processes have reduced projected costs by £1bn
- Our wholesale cost adjustment claim for regional wages, totalling £42.2m, and our retail cost adjustment claims for regional wages and transience, totalling £3.8m, reflect our unique operating context and are based on sound evidence
- Our plan includes two Real Price Effect adjustments for the effect of inflation on retail costs, and the effect of energy prices on both our wholesale and retail costs, which are based on established macro-economic forecasts

How our plan meets the Ofwat methodology

Ofwat methodology	*Our plan*
Ofwat quality criteria	
The business plan sets out the benefits of the company's proposals, specifically: the performance levels delivered through base for all performance commitments; impacts of enhancement expenditure on performance commitments for 2025-2030 and the longer term (i.e. to at least 2050); and the additional benefits of its proposals. Wherever appropriate it reflects these benefits in performance commitments and price control deliverables. ***Base: 'Companies should demonstrate ambition to deliver improving performance levels and affordable bills. We specifically expect companies to challenge themselves to:*** • ***propose stretching levels of performance from their base expenditure allowance; and*** • ***ensure they maximise the benefits delivered by their statutory investment programmes across all areas of performance'.*** *Enhancement: 'We will use four criteria groupings to assess enhancement at PR24:* • *need for enhancement investment;* • *best option for customers;* • *cost efficiency; and* • *customer protection'.*	✓ Our business plan includes a portfolio of investments that have been developed using a best value approach, delivering the maximum performance improvement and greatest value to our customers ✓ Our LTDS also lays out ambitious performance levels from base out to 2050 and the additional improvement our LTDS enhancements will deliver ✓ Around 90% of our enhancement expenditure is covered by Price Control Deliverables to protect customers from delays or non-delivery, with the remainder sufficiently covered by Outcome Delivery Incentives to provide protections or immaterial with significant regulatory oversight ✓ Each performance commitment is supported by costed five-year delivery plan. This has enabled us to put forward stretching but achievable performance levels from our efficient base expenditure for AMP8 and additional performance improvement from enhancement in key areas such as leakage, supply interruptions and PCC ✓ All performance commitment improvement delivered from enhancement schemes has therefore been overlaid as addition stretch to performance commitments above the stretching but achievable performance level from base
Plan is s consistent with the achievement of government targets and statutory obligations.'**Planning investment over the long-term is critical in ensuring that statutory requirements, government targets and customer needs are achieved in a sustainable and cost-effective way.'**	✓ We have produced a WISER report (Appendix AFW34 - WISER report) detailing how we are meeting our regulatory expectations through our WINEP and WRMP in addition to undertaking a third party assurance audit with Atkins of this report and supporting information ✓ As detailed in Chapter 4 of the revised draft WRMP, our plan meets all of the Environmental Improvement Plan targets for demand management

Ofwat methodology	*Our plan*
Plan includes investment options which are consistent with the company's finalised water resources management plan, final water industry national environmental programme/ national environment programme submission and, if applicable, drainage and wastewater management plan, having adequately addressed any feedback previously provided on these. *'We also expect evidence on the need for variations from final plans, if relevant;Companies already have several long-term strategic planning frameworks. These frameworks include WRMPs, regional water resource plans and DWMPs. These frameworks are complemented by the water industry national environment programme (WINEP) in England and the national environment programme (NEP) in Wales. The outputs from strategic planning frameworks will need to inform, and align with, each company's long-term delivery strategy and business plan'*	✓ All WRMP and WINEP investments for the 2025-30 period are fully included within the PR24 business plan and assigned to enhancement or base cost appropriately ✓ Our PR24 WINEP submission reflects the confirmed final PR24 WINEP release issued by the Environment Agency (EA) on 1 September 2023. Since the submission of our draft WINEP on 30 November 2022, we have worked closely with the relevant EA Driver Leads to address feedback related to our proposed schemes and investigations. We have also addressed the feedback provided by Ofwat in the AFW WINEP review feedback letter received on 25 May 2023, arising from the pre submission engagement meeting and discussion. We have addressed the feedback within our PR24 business plan and supporting business cases ✓ We have provided responses to all Ofwat feedback on the draft WRMP in our Statement of Response, and reflected required changes in our revised draft WRMP
Plan proposes investments to be delivered via direct procurement for customers (DPC), in line with our 'DPC by default' approach.'**For PR24, DPC will apply by default for all discrete projects over £200m of whole life totex.**'	✓ Our strategic resource schemes will be delivered via DPC. We have assessed all other projects in our investment programme, in accordance with Ofwat guidance, using a consistent methodology we developed to test suitability for DPC. This included exploring options to 'bundle' projects of similar asset types to meet the programme scalability criteria. We have concluded that there are no further investments suitable for DPC
Company has input into Ofwat models consultation (Spring 2023), and assessed the impact of new PR24 models and data on company's costs and efficiency challenges	✓ We have worked with Ofwat, and input into work on the econometric base cost models for PR24 including participating in industry meetings and workshops. In May 23 we submitted our response to the consultation ✓ We have assessed the effect of changes to the models and data in order to understand our relative efficiency and to provide an input into the internal challenge processes we have used in developing our plan
Cost adjustment claims are well evidenced, considers the cast for sector-wide adjustments, and submitted early (Summer 2023). Limited to base costs (does not include enhancement expenditure)	✓ We are submitting two well evidenced cost adjustments claims, for transience and regional wages. These were submitted in June 2023 and are included in our submission. Furthermore we have considered whether the symmetrical cost adjustment claims and have concluded these do not impact us materially
Ofwat ambition criteria	
Base expenditure costs include stretching performance targets, and any enhancement expenditure is well justified, considers affordability, and are based on customer/environmental need. *'Companies propose to deliver best value solutions, by considering wider environmental and social benefits, costs, risks, opportunities for third party funding and the affordability of customers' bills.* *Enhancement expenditure is well justified, based on adaptive plans, meets customer and environmental needs and makes progress towards delivering relevant government targets;* *Expenditure proposals are efficient and consistent with our stretching efficiency benchmarks, with any cost adjustments based on compelling evidence* *Companies propose to deliver stretching performance from base expenditure allowances'*	✓ We have set stretching performance commitments which by 2030 will mean we are at least average across the board and upper quartile in some areas. The majority of that improvement in performance will come from base investment ✓ We have set out our business cases for enhancement investment which include the evidence on which the need is based, the options we have considered, how it aligns to our customers' priorities and the benefit that the investment will deliver

Chapter guide

Section	Purpose	Cross reference
2020 - 2025 investment delivery	We set out the investment made so far in the current period for both wholesale and retail, including progress on our Enhancement Spend Action Plan and Defra Accelerated Infrastructure Projects.	Appendix AFW07 - Update on our resilience action plan Appendix AFW10 - Accelerated Infrastructure Projects (AIP) Appendix AFW41 - Case studies Enhancement Spend Action plan
2025 - 2030 investment plan in summary	We set out the investment required to 2030 for both wholesale and retail, including the highlights of what the investment will deliver.	chapter 6 Outcomes sets out in more detail our performance commitments Appendix AFW41 - Case studies
Our investment approach	The process we have followed to identify investment needs, develop business cases using accurate cost forecasting, optimise our portfolio and the governance and challenge we place over our programme development.	Appendix AFW08 - Our investment development process
Operating expenditure: Key investments	Breakdown of the key operating investments for both wholesale and retail	Appendix AFW13 - Base investments Appendix AFW11 - Water UK Delivered Energy Cost Forecasts report and set of forecasts by Cornwall Insight Appendix AFW41 - Case studies
Enhancement Investment	Breakdown of the enhancement investment including optioneering and customer protection through Price Control Deliverables	Appendix AFW14 - Enhancement investment cases Appendix AFW19 - Price Control Deliverables Appendix AFW34 - WISER report
Efficiency	Analysis of current efficiency, proposed adjustments due to Real Price Effects and frontier shift of 0.5% for wholesale and 0.45% for retail	Appendix AFW16 - Treatment of energy costs in base models AFW25 - Real price effects retail (KPMG) Appendix AFW46 - First Economics - PR24: Input price inflation
Cost adjustment claims	We set out two proposed cost adjustment claims for regional wages and transience	Appendix AFW42 - Cost adjustment claim - regional wages Appendix AFW43 - Cost adjustment claim - transience

6.1 2020 - 2025 investment delivery

Table 6.1 2020 - 2025 spend versus FD19 shows our current forecast outturn position for the years 2020 - 2025, as reported in our Annual Performance Reports (APR) and reflected in the data tables submitted as part of our 2025 - 2030 plan, compared to our allowance at FD19.

	Final Determination 2019 (£m)	2020 - 2025 total (£m)
Base	1,279	1,377
Enhancement	410	311
Enhancement (excluding SRO investment)	326.7 [1]	227.7
Retail	142	145
Total	1,832	1,833

Table 6.1 2020 - 2025 spend versus FD19

1. SRO allowance for PR19 - £83.3m

We discuss the drivers behind the variances, and our forecast outturn in our totex in the following sections of this chapter.

6.1.1 Wholesale: base total expenditure

Table 6.1 2020 - 2025 spend versus FD19 shows our forecast outturn on base total expenditure for the period 2020 - 2025.

	Final Determination 2019			Forecast outturn			Variance		
	Opex (£m)	Capex (£m)	**Total (£m)**	Opex (£m)	Capex (£m)	**Total (£m)**	Opex (£m)	Capex (£m)	**Total (£m)**
Water resources	66	39	**109**	108	25	**143**	(43)	12	**(30)**
Water network plus	724	452	**1,176**	897	346	**1,243**	(173)	106	**(67)**
Total	**790**	**489**	**1,279**	**1,005**	**371**	**1,377**	**(215)**	**118**	**(97)**

Table 6.2 Affinity Water : base outturn (2022 - 23 price base)

We forecast to overspend our base totex allowance by £97m, or 7.6%, driven principally by the effect of the high inflation environment we have experienced during the period, in particular the significant increase in energy prices during 2022 - 23. We have also experienced increased costs in meeting our commitments driven by weather events caused by climate change. We have further observed a change in how our customers use water as a result of the shift to home and hybrid working during and since the Covid-19 pandemic, with no sign of reverting to pre-pandemic behaviour. A collaborative study carried out by Artesia Consulting 2021[23], as part of our WRMP indicates that an estimated 50Ml/d shifted from Central London to the surrounding areas, including our central region (Beds, Herts, Bucks, Surrey and Essex), as a result of lifestyle changes driven by Covid-19. This has affected the running costs to our business as we need to treat and distribute more water to customers, increasing both production and distribution costs.

The cost of energy, in real terms, is approximately £80m above our forecast at Final Determination in 2019. As a key input cost and driver of inflation across the economy, the increase in energy prices resulting in part from the conflict in Ukraine has affected costs across our business and supply chains. Our customers have been protected from the full impact of the cost of energy on their water bills, although some of the increased costs have been reflected in inflationary increases to tariffs during the period.

While our energy strategy has mitigated some of the shock from energy prices, such as the development of solar generation and enhanced purchasing, rising energy costs have still had an effect on our business. In addition, we have reorganised our business to deliver a reduction in operating costs, and intensified our risk and value optioneering to drive further efficiencies in our capital programme. We have promoted the delivery of capital works through in-house direct delivery and worked extensively to design value in and costs out of key schemes, for example through rerouting of main schemes to use existing assets more effectively, avoid the need to construct additional booster stations and ensure we work in the most efficient and non-disruptive fashion.

6.1.2 Wholesale: enhancement total expenditure

Table 6.2 Affinity Water : base outturn (2022 - 23 price base) shows our forecast outturn on enhancement totex for the period 2020 - 2025, including expenditure on Strategic Regional Options (SROs).

	Final Determination 2019			Forecast outturn			Variance		
	Opex (£m)	Capex (£m)	Total (£m)	Opex (£m)	Capex (£m)	Total (£m)	Opex (£m)	Capex (£m)	Total (£m)
Water resources	49	174	**224**	1	40	**41**	48	134	**182**
Water network plus	31	155	**187**	41	228	**269**	(10)	(73)	**(83)**
Total	**81**	**329**	**410**	**43**	**268**	**311**	**38**	**61**	**100**

Table 6.3 Affinity Water : enhancement outturn (2022 - 23 price base)

23. The impact of COVID-19 on water consumption during February to October 2020 – Final report (https://artesia.shinyapps.io/Artesia-Reports/)

Costs

Final Determination 2019						
	2020 - 21 (£m)	2020 - 22 (£m)	2022 - 23 (£m)	2023 - 24 (£m)	2024 - 25 (£m)	Total (£m)
Water resources	28	40	48	71	36	224
Water network plus	31	44	41	39	31	187
Total	**59**	**84**	**89**	**111**	**67**	**410**

Table 6.4 Enhancement spend by year : FD 2019 (2022 - 23 price base)

Forecast outturn 2020 - 2025						
	2020 - 21 (£m)	2020 - 22 (£m)	2022 - 23 (£m)	2023 - 24 (£m)	2024 - 25 (£m)	Total (£m)
Water resources	4	6	5	12	14	41
Water network plus	24	46	55	78	66	269
Total	**28**	**53**	**59**	**91**	**80**	**311**

Table 6.5 Enhancement spend by year : forecast outturn 2020 - 2025 (2022 - 23 price base)

We made a slower than anticipated start to our enhancement programme at the start of 2020 as a direct consequence of the Covid-19 pandemic. Our Enhancement Spend Action Plan, published in March 2023 [24], details the consequences of the Covid-19 pandemic on how our customers use water, and the effect of lockdowns on our people and supply chains.

As part of our Enhancement Spend Action Plan, we have agreed a series of annual milestones to complete the outcomes and expenditure associated with the delivery of our enhancement programme. We are pleased to report that we have successfully completed the milestones associated with 2022 - 23 and we are confident that we will deliver the remaining milestones during the final two years of the 2020 - 2025 period. Our underspend of our enhancement allowance is driven by our SRO programme. We will spend £70m less than allowed on SROs. We have met all required milestone dates on time and to the required quality, spending less than our allowance in doing so. Our SRO spend for the 2020 - 2025 period is also less than allowed as a result of ceasing our involvement in the Anglian to Affinity transfer and South Lincolnshire Reservoir schemes. The underspend of our 2020 - 2025 SRO allowance will be fully returned to customers by 2025.

We are pleased that our proposals under the Defra Accelerated Infrastructure Projects (AIP) have been successful and will allow us to commence the early delivery of commitments in the 2025 - 2030 period. (For more detail see Appendix AFW10 - Accelerated Infrastructure Projects) We have established specific teams to start our smart metering programme and to deliver our raw water deterioration schemes. In addition, we propose to begin several statutory investments early through transition funding of £8.1m to be spent across 2023 - 24 and 2024 - 25 of the current investment period. This includes £3.5m investment to establish and procure an efficient and resilient delivery model for our large schemes, with a further eight schemes starting early to ensure our customers receive benefits on time. We discuss our plans to deliver our investment programme in full in chapter 8 of this document.

Our portfolio includes £22m of resilience investments focused on addressing flooding, climate change and third party driven risks. Our updated Integrated Resilience Framework has helped us ensure that these investments provided the optimal increases to resilience of services for every pound, through a systems-based approach to quantifying and managing risks. More detail is provided within Appendix AFW07 - Update on our resilience action plan.

24. https://www.affinitywater.co.uk/docs/corporate/2023/AFW-AMP7-enhancement-spend-action-plan-March-2023.pdf

6.1.3 Household Retail

Table 6.6 Household retail forecast outturn (2022 - 23 price base) shows our forecast outturn on household retail for the period 2020 - 2025, compared with our PR19 Final Determination.

	Final Determination 2019 (£m)	2020 - 2025 total (£m)
Retail	142	145
Total	142	145

Table 6.6 Household retail forecast outturn (2022 - 23 price base)

We forecast to marginally overspend our retail cost allowance by £3m during 2020 - 2025. During the period, we have invested in our people and systems to deliver a better, more efficient service to our customers. Our Business Excellence programme delivered savings of £5m across 2020 - 2025 and allowed us to support our customers in a challenging environment.

The savings and efficiencies that we have made help to mitigate the effect of the pandemic and cost of living crisis, however we expect that our cost of collection and bad debt provision will double as a result over the current period. We continue to support our customers with their bills through our industry leading social tariff, our targeted one off bill credit to qualifying customers and a range of other support, which we outline further in 5.3 Affordability measures. We have also started to make use of Artificial Intelligence to better understand what our customers want and how they want us to provide services to them. We are already seeing benefits of taking an innovative and industry leading approach to integrating advanced technology to ensure our customers voice is heard.

See Appendix AFW41 - Case studies pg. 6 for more detail on our voice of the customer programme.

6.2 2025 - 2030 investment plan in summary

Our plan for 2025 - 2030 delivers:

- Safe, clean drinking water to our customers every day
- Significant improvements in performance in areas that matter most to customers
- The largest ever reduction in unsustainable abstraction to protect our precious chalk stream habitats
- The first phase of our smart metering programme to help customers manage their demand
- A transformation in our customer service

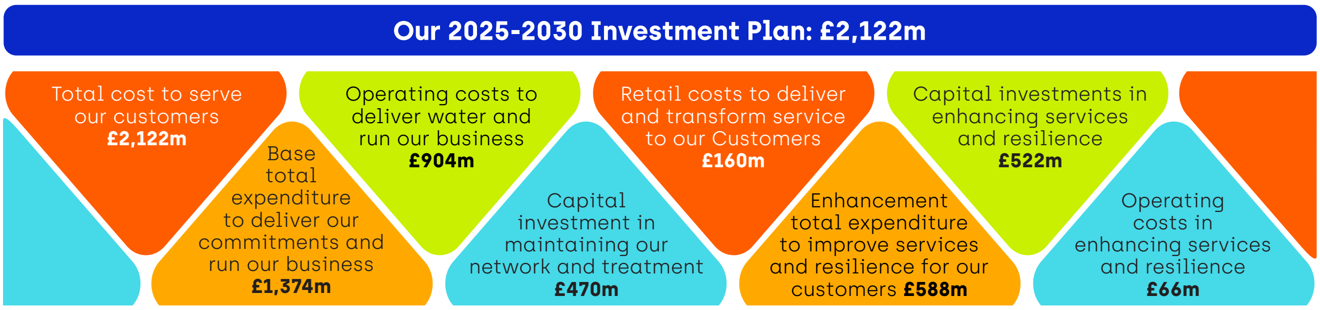


Figure 6.1 Our 2025 - 2030 investment plan

6.2.1 Our plan at a glance

The total plan of £2,122m is £230m larger than our PR19 FD and expected expenditure. The most significant change between the two periods is the growth in enhancement investment, which is driven by:

- A larger scope of work needed to achieve statutory outcomes such as WINEP
- Significant strategic water resources investment needed to meet expected demand for water whilst protecting the groundwater environment

Costs

Our enhancement investment plan has been developed in the context of our 25-year LTDS. In Appendix AFW14a - Enhancement investment cases and Appendix AFW14b - Enhancement investment cases we set out our plan and requirements to serve a growing population in a water stressed region. Our investments in this period are low regrets and based on long term adaptive planning. We have set a stretching package of Price Control Deliverables (PCDs) to protect customers from under investment. We propose three schemes that will be delivered under the Direct Procurement for Customers (DPC) system.

Our customers will benefit from the ambitious performance improvements we will deliver from our proposed investment. Overall, our common performance commitments are significantly more demanding than the prior period and aimed at improving further those aspects of our service that customers value most.

We are conscious that higher expenditure leads to higher customer bills, so we have made significant efforts to ensure that our planned expenditure is efficient. We have internally and externally benchmarked our costs both top-down and bottom-up to ensure that our projected costs are as efficient as they can be. Through our structured challenge processes we have established the need for our planned investment, adjusted our scope of work, tested alternative solutions and reduced costs to find significant savings of over £1bn compared with initial estimates.

As well as our efficiency challenge, which means bills will be no higher than they need to be, we also propose a package of support so that bills can be affordable for all our customers. We have worked hard to achieve the right balance between our ambitions for service delivery, challenge to our costs and ensuring that customers will be able to afford water bills through the interventions discussed in 5.3 Affordability measures.

6.2.2 Base total expenditure

Our base totex proposal for 2025 - 2050 includes the costs to run our business day to day and maintain our assets, as well as to deliver our ambitious and stretching package of performance commitments. Historically, botex has represented approximately 80% of our investment. In the 2025 - 2030 period we expect this to be lower and form around 65% of our plan, reflecting the level of investment required to secure water supplies for the future and enhance our service.

Our base investment plan for 2025 - 2030 is approximately 7% larger than our PR19 FD, reflecting the higher costs of delivery linked to the cost of power, along with the additional efficient costs of delivering our performance commitments.

Further detail on our operating costs can be found in Appendix AFW13 - Base costs.

	Final Determination 2019		Grand total FD 2019	2025 - 2030		Grand total 2025 - 2030
	Water resources £m	Water network plus £m		Water resource £m	Water network plus £m	
Operating expenditure	66	724	790	113	791	904
Capital maintenance	38	452	490	33	437	470
Total	**103**	**1,176**	1279	**146**	**1,228**	**1,374**

Table 6.7 Our base plan at a glance (2022 - 23 price base)

Operating expenditure: delivering high quality water and performance

We propose base operating investment, before expensed renewals of £904m, for 2025 - 2030, increased from £790m (Final Determination 2020 - 2025, 2022 - 23 prices). Our operating investments cover the costs of abstracting, treating and supplying water to our customers, as well as a series of interventions to deliver our performance commitments and the costs to support the running of our business. We also include an allowance of £2.8m in respect of the costs of issuing new equity to support our investment plan.

Highlights: Operating expenditure

People and Partners:
our business is a community of over 1,350 individuals. They are passionate about delivering high quality water everyday. They are our largest single cost of 30% of Opex. Through the Covid-19 pandemic, we invested £1m to accommodate hybrid working. This has allowed us to access a wider talent pool. Cost to hire has reduced by 55%, and we continually benchmark benefits our people receive. We have commenced engagement with our supply chain to start 2025 on the front foot.

Energy:
we have forecast energy princes using Cornwall Insight, as well as comparing to historic costs to help us provide the most robust cost estimate. Whilst costs will stay high, we are reducing consumption, deploying self-generation capacity, and purchasing intelligently. This will create savings of 100,000MWh and £20m in costs during 2025 - 2030.

Abstraction, Treatment and Supply:
significant elements include: EA licences (£30m), Chemicals (£28m) and bulk supplies (£46m). These costs have also been affected by macro-economic factors, which we have limited the impact through intelligent procurement, reducing abstraction, and limiting bulk imports through smart operations.

Rates, Insurance and General:
our plan includes £132m. Of this, we include a forecast of £68m in respect of business rates. We work with industry experts, and the Valuation Office Agency, to secure the best possible determination of our rates liability and are pleased to continue to share the benefits of this work with our customers. During the 2020 - 2025 period, we secured savings of £9m.

Maintaining our Network:
our partners are an important part of our business. We work with them to secure the best costs by good procurement and working collaboratively. We benchmark costs and regularly review performance. We aim to reduce M&R jobs through smarter network management such as network calming.

Figure 6.2 Highlights : Operating expenditure

6.2.3 Base capital expenditure: maintaining our assets to deliver performance

We propose base capital expenditure of £470m (including infrastructure renewal expenditure) for the period 2025 - 2030, reduced from £490m (PR19 FD, 2022 - 23 prices). Our plan covers the costs of maintaining our treatment and network assets, as well as delivering aspects of our ambitious package of performance commitments, continuing the trajectory of significant improvement we have delivered over the current period.

Highlights: Capital Expenditure

Investing in our Network: our **distribution mains** programme will deliver £34.48m of investment at a renewal rate of 0.14% for the 5 year period. We combine this with a network calming and leakage programme that will improve the performance of our mains (see Section 7.2.4). We will invest a further £14.75m to renew our trunk mains. **Leakage** is important to us and our customers. We are committed to achieving the 50% reduction from 2019 - 2020 levels by 2050. We will have already achieved 20% by 2025 and our base leakage investment will total £78.65m, delivering a further 12.32% reduction. Our network calming and smart metering programmes will deliver a further 3.68%. There are lots of different assets on our network, including: valves, sensors and stop taps. These need maintaining and renewing **(M&R)** to ensure we can operate our network intelligently. We plan to invest £114.78m into these activities. **Flushing** our pipes to manage the build-up of iron and manganese is needed to maintain acceptable water quality at the customer tap. We will invest £5.25m in this over the period.

Investing in our Treatment Works: our treatment (sometimes referred to as non-infrastructure) assets take raw water and turn it into a safe, drinking water product for our customers. There are a range of programmes we need to deliver to maintain the performance of our treatment assets:

Pump and motor replacements
Control centre upgrade
Control system improvements
Variable speed pump installs
Generator plant installs
GAC treatment processes
Membrane replacements
Flowmeter install/replacements
Switchgear and transformers
Filter and ion resin recharges
UV upgrades
Chemical storage and bunding
Downhole inspections
Water quality instrumentation
Ozone generator plant installs
Reactive/proactive programme

The above programmes of work have been costed at £76.60m and will be a key contributor to several performance commitments.

Figure 6.3 Highlights : Capital expenditure

6.2.4 Capital maintenance: infrastructure key investments

Trunk & distribution mains

Mains renewals are a critical investment for all water companies, contributing to sustainable asset health and avoiding increases in mains bursts that cause issues to our customers, such as supply interruptions, traffic disruption or flooding to properties. Over the previous two investment periods we had the third highest rate of mains renewal of any water company in England & Wales, having renewed 5.5% of our network. Whilst we have specific challenges, such as cast-iron mains in clay soils, the underlying asset health of our water mains is good, and we continue to track this closely with hundreds of condition samples each year. The need for mains renewal in the 2025 - 2030 period is therefore slightly below that of the wider industry. We plan to invest £49m in trunk and distribution mains renewal over the period, a renewal rate of 0.14% per year.

While we propose a lower renewal rate for 2025 - 2030 than in previous periods, we have considered our investment strategy over the long term and adopted the most efficient approach to phasing mains renewals to deliver maximum benefits to customers. We will deliver a 0.4% annual renewal rate over a 25-year time horizon. Our forward-looking Water Network Asset Strategy sets out our mains renewal rate out to 2050, optimised to deliver our performance targets at the most efficient cost possible. This strategy includes a renewal rate of 0.6% per annum in the 2030 - 2035 period, similar to that delivered from 2010 - 2020. See Appendix AFW41 - Case studies pg.6 for details on our asset condition laboratory.

Leakage

We are committed to deliver 50% leakage reduction by 2050 from 2019 - 20 levels, in line with the National Infrastructure Commission (NIC) recommendations. Our customers tell us that they expect us to address leakage before making demands from them to change behaviour. By 2025, we will have delivered a 20% (3-year rolling average) leakage reduction from 2019 - 20. We have invested extensively in delivering this performance, having made a challenging start to the current period. We have chosen to deliver our leakage in-house and have over 100 people working full time on this performance commitment, delivering benefits to customers and creating employment and wider economic value in our regions.

Our ambition is to reduce leakage by a further 11% during 2025 - 2030. This will mean that we have delivered two thirds of the required 50% reduction by 2030, in line with our WRMP.

We plan to invest £94m of base totex between 2025-2030 in delivering 77% of the 11% leakage reduction. £78m is apportioned to leakage, while £14.6m is apportioned to network calming. The remaining 23% will be funded through the network calming and smart metering enhancement programmes.

In line with industry best practice, Affinity Water has adopted the PALM (PREVENT - AWARE - LOCATE- MEND) Leakage Management Framework. Table 6.8 PR24 leakage base costs below shows our forecast costs by activity.

2025 - 2030 costs	Capital expenditure (£000s)	Operating expenditure (£000s)	Total (£000s)
Prevention(ALC)	23,565	-	23,565
Awareness (ALC)	16,956	2574	19,530
Locate(ALC)	28,592	16,309	44,901
Mend (ALC)	150	5,830	5980
Total	69,272	**24,713**	93,976

Table 6.8 PR24 leakage base costs

The Smart Metering and Network Calming programmes in our Enhancement portfolio will deliver 23% of the 11% leakage reduction (2.6% of the total reduction). The ALC, Network Calming in base and CSL programmes will deliver 77% of the 11% leakage reduction (8.4% of the total reduction). See Table 6.9 PR24 leakage reduction totals by programme.

Business area	Scheme	% of 11% leakage reduction	Total reduction % delivered
Base	ALC	32	3.52

Business area	Scheme	% of 11% leakage reduction	Total reduction % delivered
Base	Network calming	24	2.64
Base	CSL	21	2.31
Enhancement	Smart metering	8	0.88
Enhancement	Network calming	15	1.65

Table 6.9 PR24 leakage reduction totals by programme

Maintenance and repair (including renewals)

The Maintenance & Repair (M&R) programme of work will deliver £114.8m of investment to achieve benefits across the reactive and proactive replacement and installation of stop taps, communication pipes, supply pipes and other fittings.

Benefits realised through the delivery of the M&R programme are central to maintaining our below ground assets and enabling the resilience of our network. We work closely with our key contractors to secure best value for our customers.

We forecast that we will complete over 150,000 individual pieces of work during the 2025 - 2030 period, based on a weighted average of the work volumes we are experiencing. The majority of this work is reactive in nature, driven by the detection of a leak or generated by customer contact.

We will continue our Network MOT process during 2025 - 2030, where we proactively survey the network across each of our District Metering Areas (DMA). We plan to survey each DMA twice ensuring operability, resilience and high-quality data. While the first pass is designed to survey the majority of issues such as locations, defective items and assets, the second pass ensures that any remaining potential issues are caught and managed, by way of quality control.

6.2.5 Capital maintenance: non-infrastructure key investments

Proactive & reactive programmes

Our Non-Infrastructure (NI) investment consists of almost 78,000 assets, divided into 340 separate asset classes spread across 500 locations. These assets cover abstraction, treatment and pumping. The total Gross Modern Equivalent Asset Value (GMEAV) is modelled at £2.2bn. We will invest £76m in the delivery of optimised asset interventions to achieve a reliable and resilient service for our customers.

The capital maintenance activities for these assets contribute to the delivery of multiple performance commitments including interruptions to supply, unplanned outage, CRI, and low pressure. With such a diverse set of assets, with different criticalities and age and condition profiles, prioritising candidates for the optimum economic intervention point is essential to ensure we spend customers money wisely, whilst we maintain a resilient service.

Storage

We have 188 service reservoirs currently in-service, which can hold 1,649Ml of potable and 565Ml of raw water. These assets comprise of contact tanks, raw water storage structures, service reservoirs, treated water tanks and water towers, mostly constructed from reinforced concrete with an average age of 67 years. Over the 2025 - 30 period, we will invest £31.3m in the renewal of these assets, protecting customers from risks to water quality and interruptions from supply. We will continue to inspect our storage assets on a risk-based frequency between seven to nine years, based on criticality and condition data.

6.3 Our investment planning approach

Ensuring sustainable asset health through modelled replacement needs

To ensure we are making the best value investment decisions that reflect what our customers have told us, we have adopted a state of the art approach to investment planning for PR24, adopting latest best practice approaches in business case development and portfolio optimisation. For example, our Service Measure Framework now quantifies over 85 differing categories of value we can bring to customers across the six capitals, compared to the 30 used at PR19, enabling us to determine the best value solutions more accurately to meet our customers' needs. The increased sophistication is the result of our two-year asset management transformation programme, focused in increasing our maturity as assessed through Ofwat's Asset Management Maturity Assessment (AMMA).

We have also increased the level of challenge and scrutiny of our investments, to ensure the options we select are ambitious and deliverable. Every investment case has undergone three phases of scrutiny before being put forward as an investment option in our plan and our Board and Independent Challenge Group have scrutinised our approach and the proposed investments to ensure these reflect the best interests of our customers over the long term.

Each investment across both base and enhancement has been developed using a Green Book based methodology, with our optioneering identifying and assessing a range of feasible investment options to address each need. We then used our Copperleaf investment optimisation tool to inform our decisions on which combination of options deliver the best value and enable us to meet our ambitions and the expectations of us over the short and longer term. To provide confidence that our base investments are delivering the greatest performance improvements to our customers, we undertook 27 separate optimisation runs at set cost increments, to sensitivity test how shifts in focus between short- and long-term performance or increased bias to certain performance commitments changes the plan. Our plan was optimised based on a 25+ year view of benefits which, combined with our Long-Term Delivery Strategy, provides us with confidence our plan forms the foundations of strong performance and resilient service into 2030 - 2035 and beyond.

Confidence in a best value plan relies on accurate costing of all investment options, never more so following the recent volatility in prices, particularly those relating to construction. Recognising this whilst still being committed to being ambitious in what we can deliver, we have gone further than ever before in ensuring we cost all our investments accurately. For example, we have updated over 500 cost curves to forecast costs with greater granularity and accuracy, using our own efficient out turn costs, cross referencing these with external benchmarks and working with a suite of suppliers and consultancies to assure these.

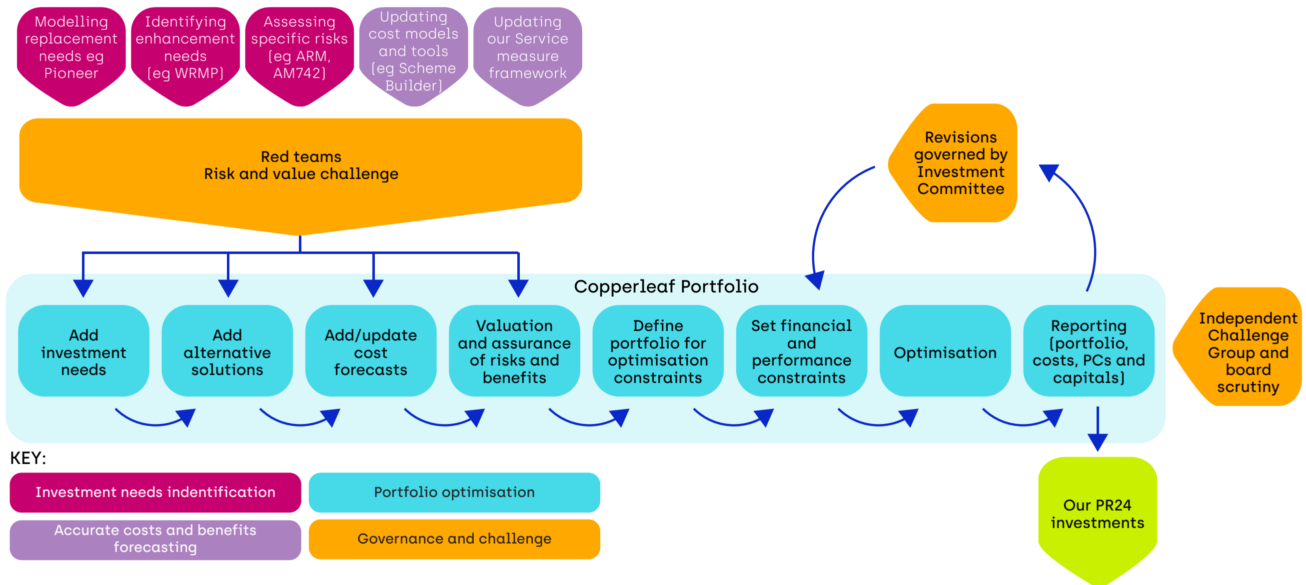


Figure 6.4 Our investment planning approach

6.3.1 Investment needs identification

To ensure our plan efficiently delivers asset health over the long term we have drastically improved our understanding and measurement of the health of our assets, and now plan asset renewal over the long term through our 25-year asset strategies. These strategies inform our asset renewal for the 2025 - 2030 period, optimising for the best value to deliver performance over the longer term. These strategies also account for the significant changes of our 25-year enhancement portfolio and the uncertainties considered within our LTDS. For example, our Water Network Asset Strategy has informed our mains renewal rate for 2025 - 2030, accounting for the renewal rates required in future periods and for the forecast impacts of enhancement activity as well as the threat of climate change. The strategy ensures we can meet our long term performance ambitions, as laid out in our Long-Term Delivery Strategy, at the lowest cost and highest value.

These asset strategies rely on a foundation of good understanding of asset health. Our Pioneer deterioration modelling remains at the core of our understanding, however working with wider industry [25] we have also adopted alternative approaches with which to cross-check the findings of our modelling and provide us with further insights on the condition of our assets. For example, we have adopted a 'Base Asset Health' approach to measuring the effective remaining life of assets and have used this to inform the total extent and targeting of Non-Infra asset renewal alongside our modelling results. For more detail on Base Asset Health see Appendix AFW13 - Base investments.

For PR24 our Pioneer deterioration modelling tool has been updated with 50,000 new data points relating to the condition of our assets, the links between asset condition performance, valuations of service (aligned to our Service Measure Framework), observed rates of deterioration and the latest costs of asset renewal. We have undertaken 15 modelling runs across our network and treatment assets to understand optimal asset renewal investment pathways to achieve our performance ambitions over a 25-year period. More detail of our approach to sustainable asset health and how this has informed our base asset renewal investments can be found in Appendix AFW08 - Our investment development process.

Addressing specific risks

In addition to modelled asset renewal rates, we have identified specific risks and investment needs recorded through our Risk Management Process. This includes specific asset risks recorded by our field teams on Asset Risk Manager in addition to those recorded on our risk registers used across all our business functions. Our Risk Management Process ensures all risks are assessed and quantified using a consistent approach informed by our Service Measure Framework. Where more complex operational risks to resilience exist, our Resilience Assessment Tool is also used to quantify significant risks to resilience of service and the impact of intervention options.

Identifying enhancement needs

Our enhancement plan has been built in line with statutory requirements such as those relating to our Water Resource Management Plan and Water Industry National Environment Programme, in addition to specific investment needs beyond base activity, achieving other customer supported ambitions as part of our LTDS.

6.3.2 Accurate costs & benefits forecasting

Accurate costs forecasting

Accurate forecasting of efficient costs of investments requires a suite of approaches in order to tailor costing appropriately to a given investment. For example, our costs for mains renewal investment options are informed by extensive empirical data, in contrast with more bespoke or novel schemes where we do

25. Through bilateral engagement with companies and consultancies alongside our engagement with Ofwat's Operational Resilience Working Group which seeks to define the asset health metrics of the future

not have this information, such as smart metering, has been costed based upon a combination of research, external benchmarks, and costs of comparable activities we undertake today.

The costs for most investment options have been determined using our Unit Cost Library and cost models, updated for PR24 to reflect the current construction environment as closely as possible. The Unit Cost Library was updated with our own data from project outturn costs since 2020, as well as with industry data and benchmarks provided by Mott MacDonald.

Our Unit Cost Library and cost models allow us to develop efficient costs for the business plan, and to challenge project costs in delivery. The databases contain all elements of cost, including indirect costs such as labour, materials, equipment, and overheads. Business owners of schemes can access these tools on-demand, during the business planning and in-period delivery processes to continually review project efficiency.

Where less empirical data exists within our cost models, we have undertaken more detailed scoping enabling us to use independent consultants and our supply chain to develop detailed bottom-up costs. We have then used top-down industry benchmarks and estimates from the data within our Unit Cost Library to cross reference these to ensure they represent accurate and efficient costs.

More detail on how we have costed schemes to ensure they accurately reflect efficient costs can be found within Appendix AFW08 - Our investment development process.

Benefits

Our Service Measure Framework provides us with a common set of benefits measures and valuations that we systematically use to develop and prioritise our investment options and business planning scenarios. This common set of valuations are used for our business case economic assessments, to develop our long-term delivery investment pathways and in our investment, planning tools such as Pioneer and Copperleaf.

We have significantly improved both the breadth and quality of our Service Measure Framework for PR24. It now has 85 wide-ranging benefits that include: our regulatory performance commitments, EA's environmental benefits that are used for WINEP investments, measures of strategic outcomes aligned to our ambitions and a suite of wider public value measures.

Our benefit valuations are consistently aligned to Ofwat's ODI valuations and the EA's environmental valuations, and we have used these values throughout our economic assessments. For measures that are not covered by these valuations, we have followed best practice approaches to identify well evidenced valuations with every data source recorded and traceable. For example, to identify the benefit valuation for lead replacement we have undertaken independent industry research, examining the latest and most robust research data. For other measures we have undertaken direct customer research, providing us with benefit valuations that we have used alongside other data sources to triangulate for more robust benefit valuations. These have also been used to sense check our regulatory valuations and to provide further validation of our investment decisions.

More detail on the approach for developing our Service Measure Framework and how this has been used in investment planning can be found in Appendix AFW08 - Our investment development process.

6.3.3 Portfolio optimisation

To support the optimisation of the portfolio of investments as a whole, we use Copperleaf, which helps us make informed choices across the portfolio. Use of this system allows us to ensure we have the best programme, costed using the best cost base, and we deliver the best outcome for customers.

Using Copperleaf also allows us to easily respond within the period to changing circumstances, reprioritise and invest appropriately.

The range of costs and benefits across the six capitals (including those directly relating to performance commitments) were uploaded to the tool across 67 different investment areas. We then ran 25 investment scenarios based on different objectives; affordability, target PCLs, accelerated leakage targets, private cost among others. Running multiple scenarios across the portfolio, helps us to identify the most efficient combination of schemes to meet the targets we set for the 2025 - 2030 period.

6.3.4 Governance and challenge

Whilst we are confident in our tools and approach for investment planning, we recognise the value strong governance, challenge and scrutiny brings to our plan in ensuring ambition and deliverability. Our internal Red Teams have provided initial challenge for each investment case, with Board and ICG scrutiny of our overall approach and the resultant investments.

Red teams

Our Red team sessions brought together experts from across the key functions of the business with the objective of challenging investment cases to ensure they reflect a suitable level of ambition in cost efficiency and value delivered, and that they meet relevant Ofwat criteria.

We undertook three cycles of Red Team challenge sessions, with each investment case presented within each cycle. Over 370 actions were raised and completed as a result of these sessions, with the number reducing in each cycle as business cases became more mature, reflecting increasing ambition and built on with firmer evidence bases.

Board scrutiny

As an integral feature of our PR24 business plan, the Board has been closely following the development of our investment plan, alongside the longer-term view of our LTDS. The Board have challenged the executive team to increase the maturity in asset management and have specifically advocated the use of investment planning tools such as Copperleaf to better inform our decision making. Across two years of developing the PR24 business plan the Board have scrutinised both the investment planning approach and the proposed investments. In addition to this direct engagement, Board assurance of our investment planning approach has been undertaken by an external assurance provider.

Our ICG engagement

Our Independent Challenge Group has also scrutinised our investment planning approach to ensure this reflects the best interests of customers. This included deep dives into how Service Measure Framework benefit valuations were developed, how these were applied in investment planning and how our overall plan was selected.

6.4 Operating expenditure: key investments

6.4.1 People

People costs represent approximately 30% of our base totex for 2025 - 2030. Affinity Water is a community of 1,460 people committed to delivering high quality water to our customers every day, and we know that our people take huge pride in working on a vital public service. Our people help us deliver all of our performance commitments, and regularly go the extra mile for our customers.

During 2020 - 2025, we have embraced the opportunity to develop a hybrid workforce driven by the Covid-19 pandemic in 2020. We have invested £1m in remote working technology and office redesign to support our people in continuing to deliver for our customers 24 hours a day. We are investing a further £1m in redeveloping our main sites to bring our teams closer together, allowing more effective incident management and better customer service.

We review our operating model and people plan on a regular rotation, with scrutiny at Executive and Board level quarterly. We carefully manage vacancies and prioritise internal development of our people to secure talent and allow efficient recruitment and hiring processes. We know that when we develop our colleagues, and recruit new colleagues in future, we will need to ensure they have the right skills and experience to support the move towards the use of advanced technology, such as AI and machine learning and ways of future working. Investment in digital technology will not only provide better customer choice, it will also drive down call volumes to our contact centre and support differing service needs. We are also training our contact agents in wider specialist skills to support customers where needed. We are committed to being an employer of choice in our regions and are proud to support apprentices and graduates annually.

This approach to business planning allows us to remain agile and efficient and ensures that our organisation has the right skills and resources to deliver for our customers.

During the 2020 - 2025 period, we have been able to rapidly move resources onto the delivery of leakage improvements, and to maintain the right levels of resource into the coming period to ensure we meet our ambitious leakage performance commitment for 2030. We have also been able to align our delivery teams to provide a true 'source to tap' view of our operations, delivering improved performance on our commitments and cost efficiencies.

During the 2025 - 2030 period, we will invest over £5m in further training and developing our operational teams to support the delivery of our performance commitments. We will continue our successful graduate scheme and will develop talent through our apprenticeship scheme to deliver educational and employment opportunities across our region.

6.4.2 Energy

The cost of electricity to treat and distribute water across our network to customers represents 14% of botex investment for the period 2025 - 2030, and 22% of our opex for this period and is a critical element of our cost base Table 6.10 The evolution of our electricity costs shows how our costs have evolved since 2020, broken into wholesale and grid costs.

Financial year ending	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Total energy £m	23.5	26.7	35.6	40.4	50.8	54.8	43.0	40.9	37.8	37.3	36.1
Grid £m	15.7	15.1	16.2	16.7	18.2	19.2	16.4	17.0	15.7	15.6	14.6
Grid %	67%	57%	46%	41%	36%	35%	38%	42%	42%	42%	40%
Wholesale £m	7.8	11.6	19.4	23.7	32.6	26.6	22.5	23.9	22.1	21.7	21.5
Wholesale %	33%	43%	54%	59%	64%	62%	55%	58%	58%	58%	60%

Table 6.10 The evolution of our electricity costs

For the 2025 - 2030 period, we forecast the wholesale price of energy to settle from the highs experienced in 2022 - 23, but to remain over 40% above the long-term average. Our forecast is based on prices taken directly from the market and benchmarked by Cornwall Insight, a leading energy market consultancy (See **Appendix AFW11 - Water UK report and set of forecasts by Cornwall Insight**). We base our forecast on forward looking market data and are concerned that a potentially backward-looking approach to the setting of energy prices for the 2025 - 2030 is inappropriate, given the volatility in energy prices as illustrated in Table 6.11 Energy price volatility.

Period (Financial year ending)	£/MW/h (Wholesale)
2011 - 2015 (average)	51.81
2016 - 2020 (average)	40.72
2021	52.54
2022	77.09
2023 (estimate)	95.00

Period (Financial year ending)	£/MW/h (Wholesale)
2024 (estimate)	122.08
2025 - 26 (forecast)	138.48
2026 - 27 (forecast)	127.92
2027 - 28 (forecast)	118.60
2028 - 29 (forecast)	114.83
2029 - 30 (forecast)	114.84

Table 6.11 Energy price volatility

To reduce the impact from the wholesale price of energy on our cost base, we developed an ambitious energy strategy across three pillars:

1. Reduce consumption through efficiency
2. Develop self generation capacity
3. Manage residual risk via intelligent purchasing

Through the measures above we will see a 10% reduction in energy costs in the period 2025 - 2030 which equates to a £20m - £23m saving. This strategy will continue in 2025 - 2030, and we target a further reduction in our energy consumption of 10% in both the 2025 - 2030 and 2030 - 2035 periods. This strategy is an important part of delivering both best value for our customers and our commitment to achieving Net Zero by 2030, saving 3.5 tonnes of carbon in 2025 - 2030. For detail on our energy efficiency investments see Appendix AFW41 - Case studies pg.7.

Notwithstanding the action we have been able to take, we consider Ofwat should develop an uncertainty mechanism. Similar to the wages adjustment in PR19, this could work by Ofwat determining a notified index of electricity prices, perhaps based on BEIS published industrial electricity price series. Differences between the notified prices and the actuals observed through the 2025-30 period could be adjusted for in the cost reconciliation model, in the same way as differences in wage inflation are reconciled today.

6.4.3 Business rates

Cumulo business rates are an important element of our cost base. Our rates liability is set by the UK government Valuation Office Agency (VOA) for a five year period, with the next review due in 2028 - 29. In the 12 months before the review process, we worked with industry leading experts and the VOA to ensure that our liability is calculated correctly and that the VOA has fairly reflected the position of our business.

We forecast our rates liability for the 2025 - 2030 period to be £68m. This forecast is based on our valuation received in 2023 covering the periods to 2028, and a further forecast for the remaining two years of the 2025 - 2030 period. We expect our rates liability to remain constant based on our forecast of the results of our business in the coming period. We are pleased to continue to share the benefits of the work we undertake on business rates with our customers.

6.4.4 Retail

We provide retail services to 1.48 million households across our communities in the southeast of England. About 65% of our customers are on a metered supply and with our ambitious smart metering programme, this will increase to almost 75% by 2030. We will use the data generated by our smart meters to support our customers changing their usage, as part of the next step to our behavioural change programme, which has already delivered savings of 23.8ML/d during the 2020-2025 period.

We will continue our award winning Save our Streams campaign, (see Appendix AFW41 - Case studies pg. 1 for more detail) which has resulted in over 250,000 customers signing up to our campaign to reduce water use to help protect the natural environment.

Our plan for 2025 - 2030 is founded on service driven by the principles of simplicity and sustainability.

Costs

We will continue to develop our people and systems to make the customer experience effortless, whichever channel is used to contact us. We will ensure that our communication with all our customers reflects the importance that we place on being stewards of the natural environment, and that our whole plan delivers on this, for detail on our voice of the customer programme see Appendix AFW41 - Case studies pg. 6.

We will continue to innovate in order to deliver improvements in our cost to serve. During the 2020 - 2025 period, our customer team led a Business Excellence programme. This saw 180 people across the business trained in Lean Six Sigma, including 60 of our customer facing employees. This resulted in multiple initiatives to improve service for our customers and delivered £5m in savings.

We will continue to review our business model in retail to ensure that we are both effective and efficient in delivering our service to our customers. During the 2020 - 2025 period, we have trialled options to sit some of our service activities outside of our region, to benefit from lower cost to serve, while maintaining service to customers.

As our retail customer base grows, we will realise efficiencies from this growth so that all our customers benefit. We forecast growth of nearly 60,000 properties in our region by 2030, and our service will adapt to ensure they receive an excellent, reliable service. We undertake continuous engagement with our customers through a variety of forums and develop an evolving understanding of their requirements of our service, whether they interact with us directly or not.

The retail price control has never been subject to price indexation. The macroeconomic environment we have experienced in the last few years, and in particular our exposure to the price of labour, has affected the delivery of our retail services. As a result, our proposed retail plan includes a real price effect adjustment of about +0.4% per year to account for inflation, based applying appropriate inflation indices to our retail cost base. For more detail see AFW25 - Real price effects retail (KPMG).

Our costs are impacted by the high levels of customer transience in our central region, where we experience 25% higher levels of transience than the national average. This impacts our ability to bill and collect from our customers. We propose a cost adjustment claim of £3.8m in respect of customer transience which we discuss in Appendix AFW43 - Cost adjustment claim - Transience (Economic Insight) and 6.7 Cost adjustment claims.

Overall, we propose retail expenditure of £160m, up from £142m in 2020 - 2025 (in 2017 - 18 prices) and reflecting the higher costs we forecast, in particular on employment and cash collections. If the PR19 FD retail allowance had been indexed, this would have increased to £168m in 2022 - 23 prices.

We recognise that our position in the comparative C-MeX table is low. We have taken a data driven approach to improving our services, focusing on the most important customer journeys, and will continue this approach in the period to 2030 as we transform our retail service provision. We will invest in a new website platform and mobile app to allow our customers to self serve and find all the information that they need.

We have developed a comprehensive and transformational retail strategy that documents these customer journeys, along with the steps we will take to improve them. Activities will range from ensuring we have a visible presence in the community to adopting an effortless digital experience, based on best practice from our sector and beyond.

6.4.5 Our Retail strategy at a glance

Our Retail strategy at a glance

Experience:
our award-winning water efficiency campaign, Save Our Streams (SOS), has reached over 0.25 million customers who would not otherwise have had contact with us. At present this campaign has run for three years and delivered 23.8ML/d savings in terms of customer consumption. We will continue with the campaign during 2025 – 2030, and alongside installing 400,000 smart meters to help customers understand and manage their water use, this will help us deliver our challenging 26% reduction in PCC compared with 2019-20. We know we have work to do to improve our C-MeX position, and part of that is improving our visibility to customers.

Service:
we aim to provide excellent customer service to all our customers, every day. We will invest £65m to improve the service our customers receive by re-platforming and modernising our website and implementing a new Customer Relationship Management system which will enhance our 'one view' of our customers. This will deliver an improved digital offering for account and bill management. We will enhance our water efficiency advice and offer home water efficiency checks as standard to any customer applying for our social tariff. We will also offer free customer supply pipe repairs, which will contribute to reducing leakage, and also help customers avoid unexpected repair bills.

Enablers:
a large part of our retail function is our people. We need high quality and well-trained colleagues to make sure the service we provide customers is the best it can be. We will continue to work to attract the best people to our area, and ensure they have the tools they need to deliver what our customers want. Providing a great service is completely reliant on holding accurate data and being able to analyse and use it to our customers' advantage. We will invest in a new Customer Relationship Management system to enable us to better target our communications and more easily identify customers who would benefit from the wide range of help we offer, such as social tariffs, payment holidays and signing up to our Priority Services Register.

Figure 6.5 Our Retail strategy at a glance

Responding to Ofwat's Paying Fair report

We welcome the introduction of Ofwat's seven 'Paying Fair' principles, and we are committed to exploring every opportunity to embed these within our strategies, plans and policies. We were pleased to see a number of our practices were highlighted as good, particularly our partnership with National Debtline to help customers access holistic debt advice, our plans to offer customers flexible payments over three month periods, and our agreement to share data with the Department for Work and Pensions. This last initiative allows data sharing under the Digital Economy Act, and will allow us to proactively identify customers on certain benefits who may be eligible for social tariffs. We have already identified around 20,000 customers who could benefit from social tariffs who may not otherwise have been aware of the help available to them.

In response to the report and the examples identified, we have reviewed the services we offer and in addition to our retail strategy for 2025 - 2030 as set out above, we are pursuing a number of initiatives and improvements ahead of the start of the next price review period. In summary these are:

- Data sharing - we have data sharing arrangements in place with energy companies and the DWP, and by the end of 2023 we will have arrangements in place with a credit reference agency (Transunion) that will enable us to access data with specific affordability indicators highlighted, further increasing our ability to proactively seek out and support customers who need it
- Working with local authorities - we have piloted working with local authorities to identify sheltered housing locations, that we then visit and take applications for social tariffs directly and in person. We will extend this and aim to be working with at least five local authorities by the end of March 2024, and expand the scope wider to cover both other types of residential locations, and to provide access to our wider support options for customers
- Customers on our PSR - where customers fall into debt and are also on our PSR, we will no longer refer them to a standard Debt Collection Agency (DCA). We will review each case individually and either continue to work with the customer in house to try and resolve the debt using our existing schemes such as social tariffs, payment holidays and flexible payments, or we will pass to a specialist DCA to ensure the customer is treated with care
- Bereavement support - to help customers receive the help they are eligible for, we will document our bereavement process and we will set up a partnership with a bereavement service by the end of 2023

Costs

- Customer testimonials - we will be more proactive in contacting customers in debt and will make better use of our existing customer personas, develop customer testimonials, and publicise them to help encourage customers to seek help from us
- Warm referrals - we have started the process of moving to online referrals. We will be able to offer this to customers for referrals to Stepchange by the end of October 2023, and will roll out to our other independent debt advice providers over the coming months

We will implement these changes and will continue to explore further improvements we can make in our package of services, by looking at best practice both within the industry and beyond.

6.5 Enhancement investment

Enhancement area	2025 - 2030	Driver	2025 - 2030		
	Totex £m		Capex £m	Opex £m	Totex £m
WINEP	165.97	Biodiversity and conservation; (WINEP/NEP)	5.94	1.33	7.26
		Drinking water protected areas; (WINEP/NEP)	0.00	3.44	3.44
		Eels/fish entrainment screens; (WINEP/NEP)	0.31	0.49	0.80
		Invasive non-native species; (WINEP/NEP)	1.98	0.44	2.42
		Investigations; (WINEP/NEP) - Complex modelling and surveying	10.00	0.00	10.00
		Water Framework Directive; (WINEP/NEP)	124.97	17.08	142.05
Net Zero	4.30	Greenhouse gas reduction (net zero)	3.48	0.82	4.30
Lead	4.00	External lead supply pipes replaced or relined	0.88	0.00	0.88
		Internal lead supply pipes replaced or relined	0.88	0.00	0.88
		Lead communication pipes replaced or relined	2.24	0.00	2.24
		Other lead reduction related activity	0.00	0.00	0.00
WRMP	279.95	Interconnectors delivering benefits in 2025 - 2030	0.00	0.00	0.00
		New meters introduced by companies for existing customers	30.52	7.43	37.95
		New meters requested by existing customers (optants)	0.11	0.03	0.14
		Replacement of existing AMR meters with AMI meters for residential customers	10.96	2.67	13.63
		Replacement of existing basic meters with AMI meters for business customers	8.43	2.05	10.49
		Replacement of existing basic meters with AMI meters for residential customers	66.80	16.26	83.07
		New meters for existing customers - business	0.11	0.03	0.14
		Replacement of existing AMR meters with AMI meters for business customers	0.33	0.08	0.41
		Smart meter infrastructure	5.50	1.34	6.84
		Strategic regional resource solutions	45.64	0.00	45.64
		Supply demand balance improvements delivering benefits starting from 2031	72.94	1.91	74.85
		Supply-side improvements delivering benefits in 2025-30	3.14	3.66	6.80

Enhancement area	2025 - 2030	Driver	2025 - 2030		
	Totex £m		Capex £m	Opex £m	Totex £m
Raw Water Deterioration	93.82	Addressing raw water quality deterioration (grey solutions)	89.65	4.16	93.82
Resilient Assets & Services	28.71	Resilience	28.65	0.05	28.71
SEMD	11.41	Security - Cyber	6.12	0.00	6.12
		Security - SEMD	2.71	2.58	5.29
Total			**522.30**	**65.86**	**588.16**

Table 6.12 Enhancement costs

Our enhancement investment for the 2025 - 2030 period is nearly 50% larger than the enhancement programme being delivered in the current period. Over 70% of this portfolio of investments are directly linked to our WINEP and WRMP statutory programmes, with a further 15% addressing raw water deterioration under obligations from the DWI. Given the limited discretion in the need for these investments, we have challenged ourselves to keep costs low through a three-phased approach outlined below.

6.5.1 Challenging investment need

All proposed enhancement investments within our plan are either driven by statutory requirements or with the explicit support of customers. For example, we have undertaken extensive engagement with our customers on their support for lead replacement and resilience schemes, laying out potential investment options and associated bill impacts to determine whether to invest and phase our investments accordingly over the 2025 - 2030 period and beyond. Each enhancement investment case and associated customer support is set out in detail in Appendix AFW14a - Enhancement investment cases and Appendix AFW14b - Enhancement investment cases .

Our Long-Term Delivery Strategy has given us a clearer understanding of the investment needs and associated uncertainties we will face over the next 25 years. We forecast that between £3.8bn - £4.4bn of enhancement expenditure will be required to meet our statutory obligations and achieve our ambitions and we have phased this expenditure to optimise for best value whilst considering bill profiles.

This has enabled us to apply greater challenge to each investment within the 2025 - 2030 period, to understand whether it was necessary to undertake now and whether we may come to regret it in the light of uncertainties we face. Most of this challenge focused on the more discretionary areas of spend, for example this drove us to rephase our Lead strategy to reduce 2025 - 2030 costs by £50m, and similarly within our resilience schemes to rephase investment of £46m in Single Points of Failure schemes. We also reviewed our draft statutory programmes and engaged directly with quality regulators where we believed investments may not be low regret over the longer term. For example, following discussions with the Environment Agency about our draft WINEP investments, we agreed to postpone a license adjustment to Uttlesford Bridge reducing costs in 2025 - 2030 by approximately £40m.

Following discussions with the Environment Agency about our draft WINEP investments, we agreed to update the Uttlesford Bridge licence in two phases. The first phase will update the river support condition (effective from 2025) to reflect the historic operation of the scheme and include a new higher trigger level, thus providing greater protection for flows in the River Cam. The second phase of licence change will be effective from 2035 (originally within the 2025 - 2030 period within our draft WINEP) and will require a cessation in abstraction should the river support not be able to maintain the prescribed river flows. This rephasing of licence change has allowed us to reduce 2025 - 2030 investment requirements by c£40m and will enable us to combine the necessary infrastructure works in 2030 - 2035 with our wider WRMP strategy. We will continue to monitor groundwater levels, river flows and ecology in the River Cam to assess the effectiveness of the first phase of licence change and ensure we continue to use the latest best evidence to inform future investment needs.

6.5.2 Accurate cost forecasting of efficient costs

As laid out within 6.3 Our investment planning approach, we have undertaken a range of approaches to ensure we put forward an ambitious, but accurate view of efficient costs. Below we detail the combination of approaches taken across each investment area. More detail on the specific costs of each enhancement investment are provided within the business cases shown in Appendix AFW14a - Enhancement investment cases and Appendix AFW14b - Enhancement investment cases.

SDS ambition areas	Enhancement area	Cost models & historic costs	Quotations & framework costs	Market research	3rd Party analysis	How we have ensured efficient costs
Environment	WINEP	×	×			• Water Framework Directive – Costs developed using our cost models, informed by costs of equivalent schemes we have delivered and comparative industry data • Biodiversity - Costs calculated using a combination of our unit cost model which uses unit costs for biodiversity activities to build up projects, and a top-down comparison to costs from previous work and schemes • Drinking Water Protected Areas – through development of a bespoke cost estimating system for theses WINEP activities. Costs have been collated from historic schemes to develop a set of unit costs for different activities. A bespoke unit cost spreadsheet and scheme builder have been utilised with quotes and historic costs from measures delivered in 2020 - 2025 and wider schemes we have participated in to develop the costs for the feasible options
	Net Zero	×	×	×		• With more limited historic cost data for EV fleets, we have used actual cost data for our 2020 - 2025 EV fleet trials and market research. For charging infrastructure, we have undertaken detailed site surveys and supplier quotations. Our Unit Cost Library has been used to quantify costs of internal resources required
Customer	Lead	×		×		• Forecasting for lead pipe renewal activities is based on actual delivery data since 2015, with desktop studies used to develop costs for non-equivalent activities
Resilience	WRMP	×	×	×	×	• Strategic Regional Options – Costs have developed using a combination of detailed bottom up costing with use of our Unit Cost Library and supplier quotes, alongside use of our Long-run Marginal Cost model that provides outturn cost curves based on historic costs of whole project, providing a top-down comparison • Interconnectors (Connect 2050) – Costs for each scheme have been developed using our Unit Cost Library, based upon required pipeline length and diameter or upon capacity expectations for booster pumping stations and water treatment upgrades • Smart Metering – Costs have been built bottom up from a combination of Affinity Water actual costs and wider industry costs identified through a study undertaken by Stantec. These costs were then peer reviewed by PA Consulting to ensure accuracy
	Raw Water Deterioration	×	×			• The costs have been compiled using a range of sources including site asset information, cost model data from our cost models, previous projects of a similar nature, and recent quotations
	Resilient Assets & Services	×	×			• Climate Change driven Network Calming – Costs have been built bottom up using our Unit Cost Library with independent verification from Mott MacDonald

SDS ambition areas	Enhancement area	Cost models & historic costs	Quotations & framework costs	Market research	3rd Party analysis	How we have ensured efficient costs
						• Single Points of Failure – Costs have been built bottom up using our Unit Cost Library with top-down comparison to our current framework rates • Flooding Risk Management – Costs have been built bottom up using our Unit Cost Library and supplier quotations
	SEMD	×	×	×		• Emergency Planning – Costs have been developed using a combination of current cost of services, existing contract costs and desktop research of wider market rates • Physical and Personnel Security - Costs have been built bottom up using actual costs we have delivered, and findings of trials undertaken since 2015 • Cyber Security - Costs have identified using quotations and actual costs from the current period combined with framework costs for skilled resources

Table 6.13 How we have ensured efficient costs for each enhancement area

6.5.3 Selecting the best options

Across all investments we have adopted best practice using the Green Book based approach to optioneering, identifying a broad range of options and refining this down to a short-list of feasible options for which we have undertaken detailed economic assessments. In doing so, we have maximised the value our enhancements can deliver, with £1.49 bn of benefits being delivered over the 30-year period (a benefit cost ratio of over 3:1) to our customers and communities, and significant improvements in our performance commitments.

We have used our Copperleaf investment planning optimisation tool to support our investment decisions and ensure that we have selected the optimal investments, balancing ambitious short-term performance improvements with long-term asset health and affordability. The tool takes inputs from base and enhancement business cases (including investments defined by the WINEP and our WRMP) and deterioration modelling outputs from our PIONEER tool. To provide confidence that our investments are delivering the greatest performance improvements to our customers, we undertook 25 separate optimisation runs at set cost increments, to sensitivity test how shifts in focus between short- and long-term performance or increased bias to certain performance commitments changes the optimal investments in the portfolio. Our portfolio was optimised based on a 25+ year view of benefits which, combined with our Long-Term Delivery Strategy, provides us with confidence that our plan forms the foundations of strong performance and resilient service into 2030 and beyond.

As part of our focus on delivering best value, we have been ambitious in what our enhancement activity can deliver in performance improvement, as measured by our performance commitments.

Costs

6-Capital		2025 - 2030 Benefit delivered	30 year Benefit delivered
Natural	The materials and services we rely on from the environment	£18m	£201m
Financial	Financial health and efficiency	£8m	£51m
Social	Relationships and customers' trust	£142m	£598m
Intellectual	Knowledge and processes	£20m	£63m
Manufactured	Pipes, treatment works, offices and IT	£49m	£489m
Human	Workforce capabilities and wellbeing	£10m	£28m

Figure 6.6 Selecting the best options

PC	Unit	PCL	2025	2026	2027	2028	2029
Operational greenhouse gas emissions (water)	Tonnes CO2e per [unit and date range TBC]	PCL from base	56652.65	55544.30	55857.31	58669.88	58343.55
		Enhancement improvement	1174.78	1467.83	1775.09	2183.37	2484.24
Leakage	% reduction in Ml/d for a three year average from 2019 - 20	PCL from base	21.2%	22.9%	25.0%	26.9%	28.4%
		Enhancement improvement	0.1%	1.0%	1.8%	2.4%	2.6%
Per Capita Consumption (PCC)	% reduction in litres/person/day for a three year average from 2019 - 20	PCL from base	0.0%	0.0%	0.0%	0.0%	0.0%
		Enhancement improvement	11.7%	13.9%	14.8%	15.5%	16.2%
Business Demand	% reduction in Ml/d for a three year average from 2019 - 20	PCL from base	9.2%	9.2%	9.2%	9.2%	9.2%
		Enhancement improvement	2.1%	1.8%	1.8%	1.8%	1.8%
Mains Repairs	Number per 1,000 kilometers of mains	PCL from base	140.2	138.3	136.4	134.5	132.6
		Enhancement improvement	0.2	0.3	0.4	0.5	0.6
Water Supply interruptions	Hours:minutes:seconds (HH:MM:SS) per property per year	PCL from base	00:04:44	00:04:31	00:04:22	00:04:13	00:04:11
		Enhancement improvement	00:00:04	00:00:06	00:00:12	00:00:18	00:00:31

Table 6.14 Performance improvements : base vs enhancement

Detail of the economic assessments undertaken and benefits each investment delivers are included within Appendix AFW14a - Enhancement investment cases and Appendix AFW14b - Enhancement investment cases.

6.5.4 Use of Direct Procurement for Customers

Direct Procurement for Customers (DPC) has the potential to reduce the total cost to customers for the largest enhancement investments. Following DPC assessments, which are detailed within 8.4 Direct Procurement for Customers, three enhancement investments have been identified for DPC, totalling £138m of expenditure within the 2025 - 2030 period.

6.5.5 Phasing of enhancement expenditure

Phasing of enhancement expenditure within the 2025 - 2030 period has been considered at an investment-by-investment level and then revisited through an overall top-down approach.

For each investment, the phasing of expenditure has been determined based upon deliverability assessments combined with our ambition to deliver the maximum benefit within the period. Our top-down approach included an assessment of the overall deliverability of the plan, accounting for supply chain and internal resource capacity and the required outages at our sites.

The resultant aggregated profile of enhancement costs has a marginal skew towards the early part of the period, with 68% of expenditure incurred in the first three years. We are confident in our ability to deliver this profile, with more detail provided within chapter 8. Price Control Deliverables will incentivise delivery in line with this profile and protect customers from non-delivery.

6.5.6 Customer protections through Price Control Deliverables

We support the introduction of Price Control Deliverables (PCDs) for PR24, recognising the protection this brings to customers and the need to improve customers trust across the industry. Following Ofwat guidance, we have assessed all enhancement expenditure for whether to apply a PCD, as a result PCDs cover 77.8% of our enhancement expenditure. The remainder is either sufficiently covered by ODIs to provide customer protection, or has a high level of existing regulatory oversight (for example the RAPID framework) and are schemes below £17m in value.

For the development of our PCDs, we have aggregated all schemes that deliver similar outcomes, setting the PCD deliverables at a common outcome metric. For example, all our supply side improvements and interconnectors are covered with a single PCD, based upon the number of Ml/d they make available for use for our customers. Once aggregated, we then assessed materiality, to ensure all aggregated groups of schemes above £17m totex are covered by a PCD.

To incentivise timely delivery of the benefits these schemes provide customers, we propose a 3.5% time incentive across all schemes, except where this duplicates the effect of ODIs, where we reduce this incentive accordingly. Further detail of our approach to PCDs and the design of each PCD is provided within Appendix AFW19 - Price Control Deliverables.

Enhancement area	2025 - 2030 £m	Driver	2025 -2030			Customer protections
			Capex £m	Opex £m	Totex £m	
WINEP	165.97	Biodiversity and conservation; (WINEP/NEP)	5.94	1.33	7.26	ODI
		Drinking water protected areas; (WINEP/NEP)	0.00	3.44	3.44	Low Materiality
		Eels/fish entrainment screens; (WINEP/NEP)	0.31	0.49	0.80	Low Materiality
		Invasive non-native species; (WINEP/NEP)	1.98	0.44	2.42	Low Materiality
		Investigations; (WINEP/NEP) - Complex modelling and surveying	10.00	0.00	10.00	Low Materiality
		Water framework directive; (WINEP/NEP)	124.97	17.08	142.05	PCD
Net Zero	4.30	Greenhouse gas reduction (net zero)	3.48	0.82	4.30	ODI
Lead	4.00	External lead supply pipes replaced or relined	0.88	0.00	0.88	Low Materiality
		Internal lead supply pipes replaced or relined	0.88	0.00	0.88	Low Materiality
		Lead communication pipes replaced or relined	2.24	0.00	2.24	Low Materiality
		Other lead reduction related activity	0.00	0.00	0.00	Low Materiality
WRMP	279.95	Interconnectors delivering benefits in 2025-2030	0.00	0.00	0.00	PCD

Costs

Enhancement area	2025 - 2030 £m	Driver	2025 -2030			Customer protections
			Capex £m	Opex £m	Totex £m	
		New meters introduced by companies for existing customers	30.52	7.43	37.95	PCD
		New meters requested by existing customers (optants)	0.11	0.03	0.14	PCD
		Replacement of existing AMR meters with AMI meters for residential customers	10.96	2.67	13.63	PCD
		Replacement of existing basic meters with AMI meters for business customers	8.43	2.05	10.49	PCD
		Replacement of existing basic meters with AMI meters for residential customers	66.80	16.26	83.07	PCD
		New meters for existing customers - business	0.11	0.03	0.14	PCD
		Replacement of existing AMR meters with AMI meters for business customers	0.33	0.08	0.41	PCD
		Smart meter infrastructure	5.50	1.34	6.84	PCD
		Strategic regional resource solutions	45.64	0.00	45.64	RAPID
		Supply demand balance improvements delivering benefits starting from 2031	72.94	1.91	74.85	PCD
		Supply-side improvements delivering benefits in 2025-30	3.14	3.66	6.80	Low Materiality
Raw Water Deterioration	93.82	Addressing raw water quality deterioration (grey solutions)	89.65	4.16	93.82	PCD
Resilient Assets & Services	28.71	Resilience	28.65	0.05	28.71	PCD / ODI / Low Materiality
SEMD	11.41	Security - Cyber	6.12	0.00	6.12	Low Materiality
		Security - SEMD	2.71	2.58	5.29	Low Materiality
Total			**522.30**	**65.86**	**588.16**	

Table 6.15 Price Control Deliverables

6.6 Efficiency

6.6.1 Economic landscape

We are planning our business in an environment of cost inflation and macroeconomic uncertainty. The war in Ukraine has spurred an increase in energy prices in the UK with growth in energy prices reaching approximately 35% in 2022. Although energy prices are expected to fall from their peaks in 2023, they are likely to remain significantly higher than historically. This places considerable pressure on businesses which are already under strain due to post-pandemic effects.

The Covid-19 pandemic closed down significant parts of the world economy. Although, supply chain pressures have eased in 2022, they remain historically elevated and the impact on the economy persists.

The path of inflation is uncertain, evidenced by CPI inflation overshooting OBR forecasts even though OBR have successively revised their projections upwards. For example, CPI inflation was 4.0% in 2021 - 22, more than double the 1.7% that OBR expected in its March 2021 forecast. The OBR's January 2023

Forecast Evaluation Report explains that around one-third of the difference was due to rising energy costs, the rest by a tighter than expected domestic labour market, persistent supply and logistic bottlenecks and an unexpectedly strong recovery in demand in advanced economies.

The inflation outlook remains uncertain due to the unpredictability of further supply shocks and price pressures. The rapidly changing inflation environment defines the PR24 economic landscape alongside volatile and uncertain macroeconomic conditions.

Like most companies, water companies are exposed to external economic shocks. Water utilities, due to the nature of the regulatory framework, are particularly vulnerable to mismatch between the headline consumer inflation rate and rising input prices. Likewise, water companies do not have the same flexibility as unregulated businesses, to raise their prices for example. However, a regulated business does provide certain other protections, such as better visibility of revenues and cost sharing arrangements.

Energy costs account for around 11% of total base expenditure for water companies, so rising energy prices have presented a significant challenge. In addition, supply bottlenecks for chemicals and building materials have resulted in further cost pressures for water companies, widening divergences between water input costs and consumer inflation. In January 2023, ratings agency Moody's lowered its credit outlook for the water sector from stable to negative "reflecting increasing cost pressures in the current macroeconomic environment" [26].

6.6.2 Comparison of expenditure during 2020 - 2023

The PR19 determination challenged companies to close cost performance gaps to the leaders and improve each year thereafter through frontier shift targets. Therefore, measuring cost performance against determination is a good indicator of progress towards efficient outcomes. Over the first three years of this price review period, we have managed our wholesale water base costs to be below the PR19 FD allowance, meeting the efficiency challenge set in 2019.

In the remaining two years of the period, we project base costs to exceed the determination. When considering the three outturn years, this means that over the whole five years we project wholesale botex £1,339m versus £1,288 in the determination (in 2022 - 23 prices). Whilst this is about 4% over the PR19 allowance, this outcome has to be interpreted in the context of the inflationary cost environment and in comparison with other companies.

As seen in the graph below, our performance versus determination compares well with others in the industry. All companies have needed to manage significant cost challenges due to the pandemic, adverse weather, energy market and supply chain inflation. In this challenging environment, not only have we improved our comparative efficiency position since PR19, but as our reported costs feed into cost assessment models and inform efficiency benchmarks, water customers across England and Wales stand to benefit from our performance.

26. Regulated Water Utilities – United Kingdom: 2023 Outlook - Turns negative amid macroeconomic pressures, Moody's, January 2023

Costs

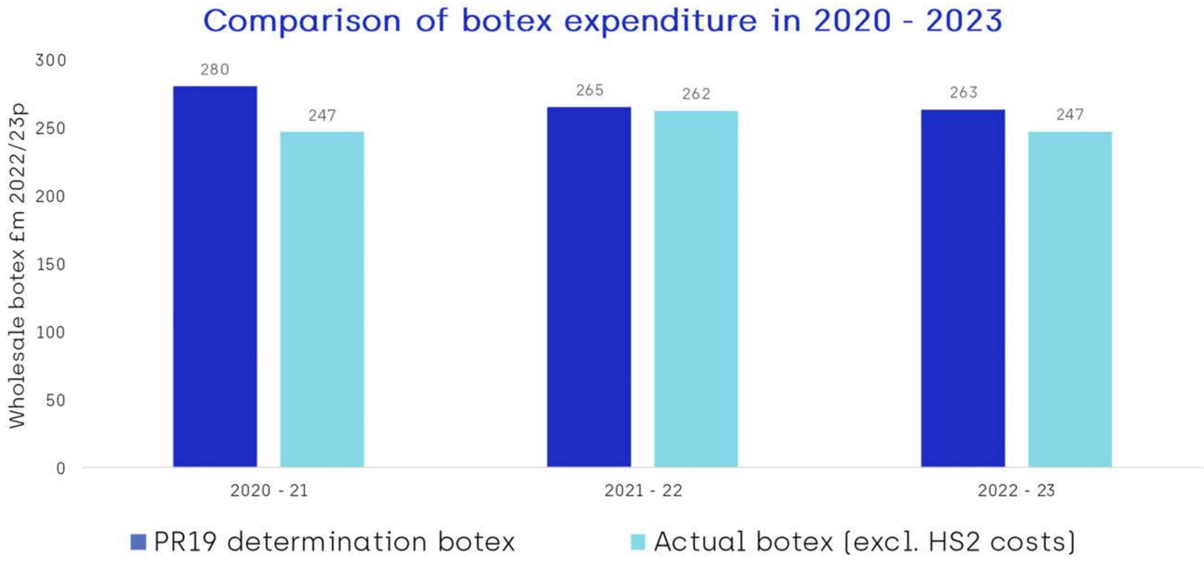


Figure 6.7 Comparison of botex expenditure in 2020 - 2023

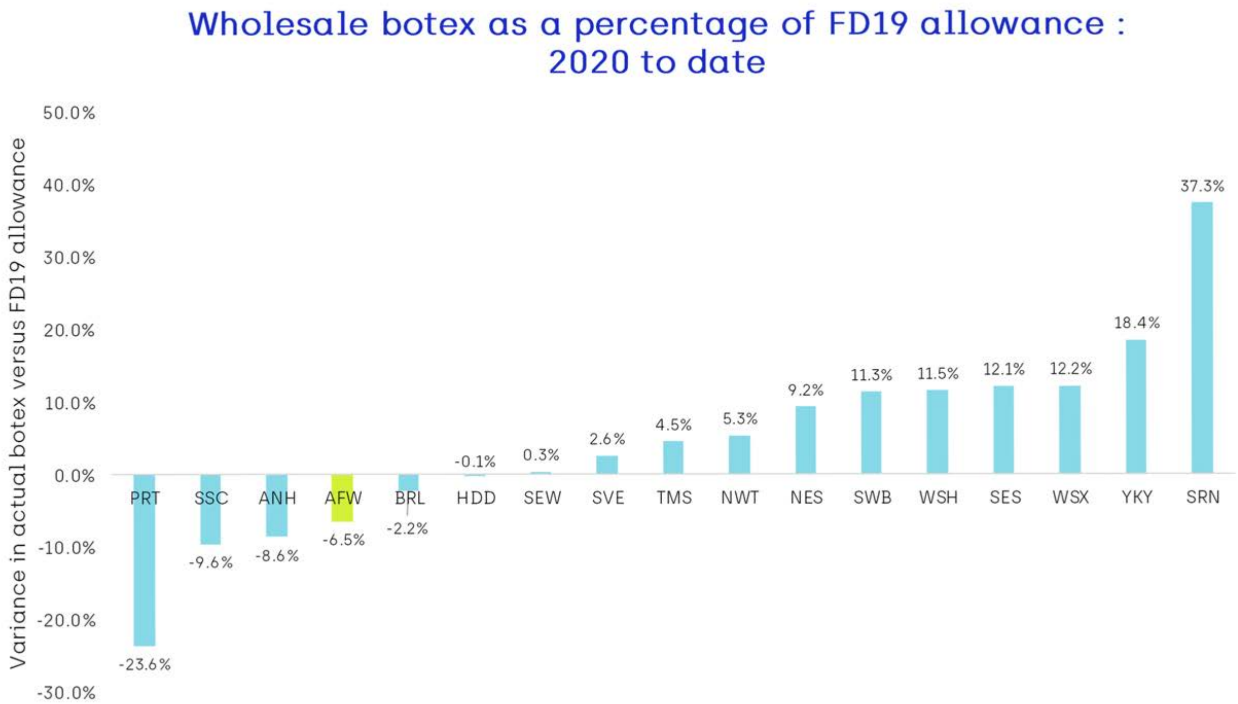


Figure 6.8 Wholesale botex as a percentage of FD19 allowance : 2020 to date

In retail, cost inflation has turned out significantly differently to the 2% per year expected at PR19, increasing the implied cost efficiency challenge needed to manage costs within the nominal price control allowances. In common with most other companies, we have not been able to absorb the inflationary impact on our costs entirely. However, our level of overspend against price setting assumptions is amongst the lowest in the industry. We interpret this as evidence that we have made significant comparative efficiency progress this period, having managed our retail costs versus determination better than others.

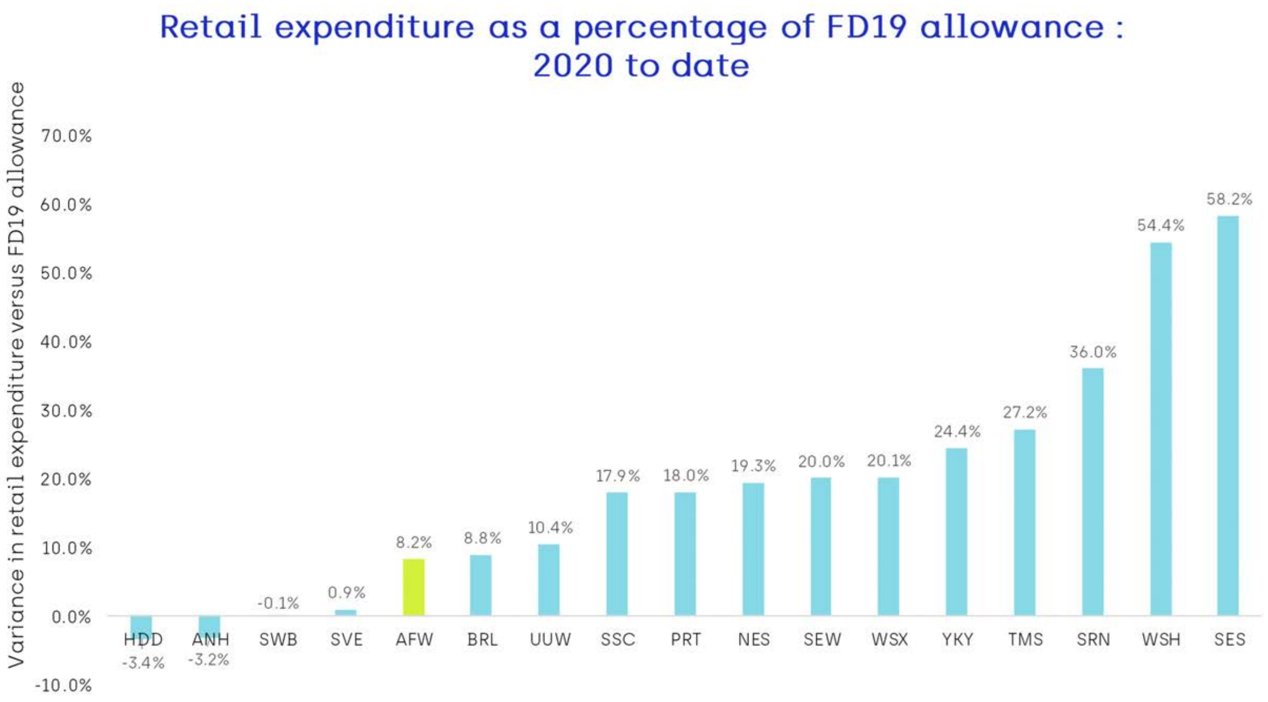


Figure 6.9 Retail expenditure as a percentage of FD19 allowance : 2020 to date

6.6.3 Top-down benchmarking

Wholesale water

We have conducted top-down benchmarking of our base wholesale costs and total retail costs against efficient cost benchmarks estimated by Ofwat's PR24 econometric models. This allows us to improve our understanding of our current efficiency position, as well as allowing us to test our projected costs against those predicted by the models.

In wholesale water, over the five-year period 2018 - 19 to 2022 - 23, our actual base costs lead to an efficiency score 1.00, meaning our five-year expenditure is aligned with predicted costs for a company with our scale, treatment complexity, topography and population density. Our triangulated efficiency score is equal to the upper quartile benchmark 1.00. showing our base cost efficiency to be amongst the leaders in the industry. As we have moved up the efficiency rankings compared to PR19, we have closed the gap to the PR19 cost leaders and established ourselves amongst the cost leaders in the industry for PR24.

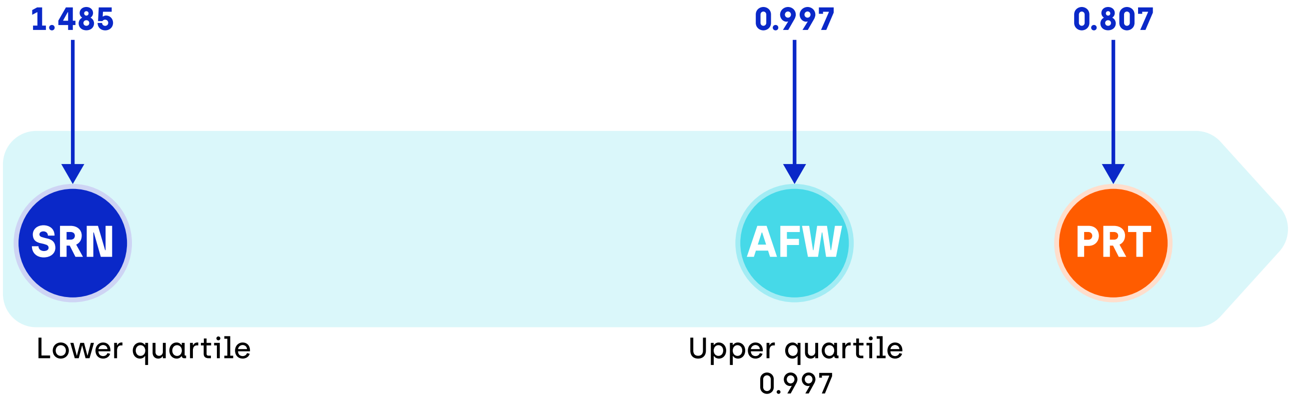


Figure 6.10 Efficiency score wholesale water

Residential retail

Similarly, in residential retail our actual costs over the last five years result in a top down econometric efficiency score 1.037. We have increased our focus in this area, to challenge ourselves to give the best service for the most efficient cost, and we are now outperforming the costs expected for a company of our scale and with our customers' characteristics. We note however that we have not needed to invest significantly in upgrading our customer relationship management systems in the past five years. We know we will need to invest significantly in this area in the period 2025 - 2030 which will create a further efficiency challenge for us.

We are positioned just below the upper quartile, 0.943, part of the gap is accounted for by our cost adjustment claim for transience. See Appendix AFW43 - Cost adjustment claim - Transience (Economic Insight) for more detail.

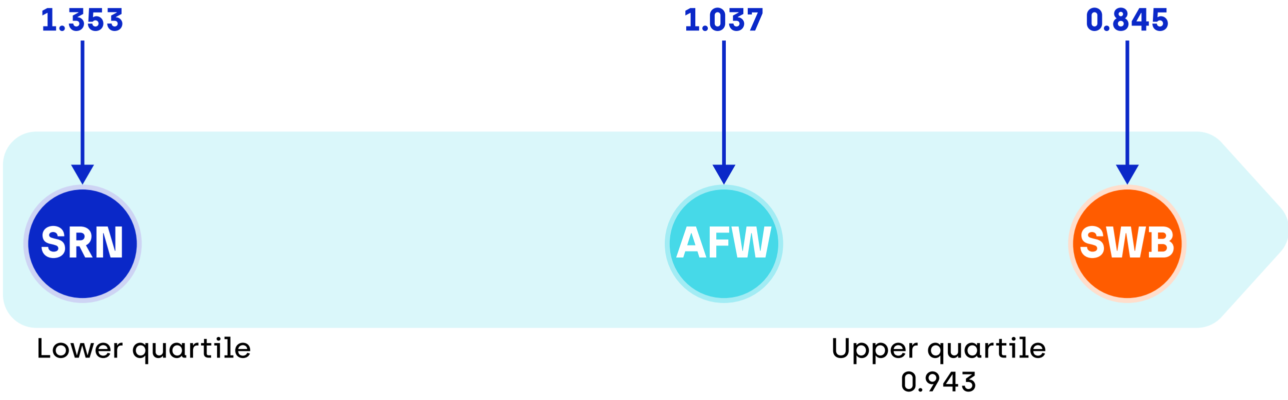


Figure 6.11 Efficiency score residential retail

6.6.4 Real Price Effects

There are two key aspects to real price effects for PR24. First, it is necessary to make the best estimates of the likely rates of increase and decrease in key input costs, labour, electricity, chemicals, materials and equipment costs. Second, these rates can only be applied to PR24 modelled allowances if those fully take account of input price inflation experienced in the last few years. It is not clear that unadjusted, backwards-looking cost assessment models can capture recent cost inflation and establish the correct starting position to apply RPE.

Changes in input costs

For the principle inputs to our wholesale business we have considered how input prices are likely to change over the period 2025 - 2030. To form our projections, we have used published forecasts, private forecasts from expert analysts and by studying past trends in relevant price series. In doing so, we have reviewed and considered the conclusions and framework for assessing RPEs developed by Europe Economics in their report Real Price Effects and Frontier Shift – Final Assessment (2019) [27] and Appendix AFW46 - First Economics - PR24 : Input price inflation.

Our approach is fully described in our commentary to Table SUP11 (Appendix AFW59 - PR24 - Part 10 Commentary - Supplementary tables), and we estimate the following real price effects in Table 6.16 Real price effects .

	Real Price Effect % p.a
Electricity	-3.7%
Chemicals	1%

27. https://www.ofwat.gov.uk/publication/europe-economics-real-price-effects-and-frontier-shift-final-assessment-and-response-to-company-representations/

	Real Price Effect % p.a
Materials plant and equipment	0.3%
Wages	1.2%
Other	0.0%
Total RPE, weighted by input share	0.0%

Table 6.16 Real price effects

Correct starting position

We worked with a consortium of water companies to appoint KPMG to study whether backwards-looking base cost models were likely to capture electricity price inflation, and further, to recommend what type of modelling adjustments would be necessary to ensure base costs assessment properly account for the recent step up in energy costs. For KPMG's report 'Treatment of energy costs in base models' see Appendix AFW16.

The report concluded that trends in historical data may 'no longer be sufficient to determine future energy costs and PR24 cost assessment models should be designed to reflect the step change on energy market.' It also concluded that including an electricity price index in models as a cost driver had the potential to correct this modelling issue. Its econometric evidence showed that the electricity price index explanatory variable was statistically significant at 90% level or above, across treated water distribution and wholesale water models.

Not including electricity prices in cost assessment under-estimates wholesale water costs by over 10% in 2021 - 22, by 5.0% in 2020 - 21 and by 1.4% measured over the most recent five years.

Wholesale water base costs	Wholesale water base costs
Effect on modelled costs in last 5 years	+1.4%
Effect on modelled costs 2020 - 21	+5.0%
Effect on modelled costs 2021 - 22	+10.4%

Table 6.17 Electricity price inflation

We support the conclusions of the report, that backwards looking base cost estimates require adjustment for recent energy price inflation, and that estimated RPEs should be applied from a corrected base cost starting point.

Risk and uncertainty

We recognise that forecasting future input prices is inherently uncertain and extrapolating projections from past observations necessarily assumes that input price inflation in the five-year period ahead will be similar to what has been observed in previous five-year periods. However, not making allowance in price limits for RPEs is to make a different assumption, namely that the future will evolve differently to what has been observed in the past and this latter assumption requires as strong a justification.

For this price review period, we have and continue to experience a prolonged period of significant real input price inflation, however it is not certain that this will continue. Input prices might continue on their current path of moving ahead of CPIH inflation or there may be a slow down or period of correction. As noted earlier, against the backdrop of macro-economic uncertainty, future divergences of input prices could be in either upwards or downwards direction and even the best predictions made now are subject to a wide range of uncertainty. For this reason, we advocate that PR24 price controls make greater use of in-period indexation, or ex-post true-up mechanisms to guard against windfall gains or losses that inaccurate input price assumptions can produce. A possible index was outlined by First Economics in PR24 RPEs (Appendix AFW46 - First Economics - PR24 : Input price inflation) and represents a low cost and no regrets approach to managing the uncertainties surrounding real price effects prediction.

	Weight	Suggested proxy index
Labour	38%	ONS: Average weekly earnings index, electricity, gas and water supply (K57Y)
Electricity	10%	BEIS: industrial electricity prices, including CCL
Chemicals	2%	ONS: chemical and chemical products PPI (G6VG)
Materials	20%	BEIS: construction materials price index, all work ONS: machinery and equipment PPI (G5SV)
Other	30%	CPIH

Table 6.18 Risk and uncertainty

Retail price control and inflation

Unlike wholesale, residential retail price controls are not automatically indexed to inflation so the price review methodology anticipates that it may be appropriate to include input price inflation in allowed revenue. To help us evaluate input price inflation we sought external, expert advice. Our advisers analysed our retail costs and determined the factor inputs most relevant to retail costs i) labour ii)bad debt iii) information technology iv) postage and v) other. They estimated the wedge between consumer inflation and input price inflation for each of these inputs to estimate input price effects, having studied these effect over different time periods, both with and without exclusions in atypical years. Using the conclusions for our plan, we project real retail input price inflation +0.4% per year in the 2025-30 period. Our advisers' report is appended in AFW25 - Real price effects retail (KPMG).

6.6.5 Frontier shift

We have built frontier shift efficiency into our cost projections to anticipate future productivity gains and pass the benefits of forecast improvements to our customers, upfront. To give this effect, for wholesale water base and enhancement investment we have applied frontier shift adjustments of 0.5% each year between 2023 - 24 and 2029 - 30. In retail, we applied 0.45%. Our inclusion of frontier shift means that customer bills in 2029 - 30 will be more than £3 lower than otherwise.

Our frontier shift assumptions are based on a report, commissioned by a consortium of water companies. The report, by Frontier Economics, Productivity and Frontier Shift at PR24 (April 2023) [28] studies total factor productivity (TfP) gains achieved in comparable sectors to water companies over different time periods. To translate 'raw' TfP estimates from comparators in UK KLEMS data into frontier shift estimates applicable to the water sector, upward and downward adjustments were made for:

- Catch-up efficiency
- Scale effects
- Embodied technical change

The report concluded with recommendations of the 'PR24 plausible ranges' in which frontier shift efficiency at PR24 is most likely to lie. We have used the mid-points of the ranges for our plan.

	PR24 plausible range (Low)	PR24 plausible range (High)	Our selection
Wholesale water (base)	0.30%	0.70%	0.50%
Wholesale water (enhancement)	0.30%	0.70%	0.50%
Retail	0.30%	0.60%	0.45%

Table 6.19 Frontier shift efficiency ranges

28. https://www.economic-insight.com/wp-content/uploads/2023/05/Frontier-shift-at-PR24-05-04-23-STC.pd

6.7 Cost adjustment claims

We propose two cost adjustment claims:

- Wholesale Network Plus - Regional wages (Appendix AFW42 - Cost adjustment claim – Regional wages)
- Retail - Transience (Appendix AFW43 - Cost adjustment claim – Transience – Economic Insight)

Our full evidence, including alignment of our claims with Ofwat's principles is set out in tables CW18, RET4 and accompanying commentary (Appendices AFW54 PR24 - Part 3 Commentary - Costs (wholesale) water, AFW56 - PR24 - Part 7 Commentary – Retail and AFW82 - Affinity Water PR24 data tables).

Regional wages

We propose a net Cost Adjustment Claim (CAC) £42.2m for base expenditure in the wholesale water network plus control, for regional wages. Our claim relates to this control because this business segment is the most labour intensive and, for the most part, labour needs to be located near to the water supply system assets, not outside the region.

1. **Unique circumstances** - We used reliable data sources to show that regional wages are 14% higher than average in our area of operation, above upper quartile and 3rd highest across the industry. Those with higher costs are similarly in the south east of England
2. **Need for adjustment** - There is a clear economic rationale that companies located in high wage areas will face higher costs and we show the correlation between regional wages and average costs. Econometric estimators of regional wages are statistically significant, improve adjusted R-squared, lead to more plausible efficiency ranges and bring additional information to cost models not already captured by density variables. The strength of the results shows that regional wages should not be ignored in cost assessment work. Failing to adjust for regional wages either in cost models or CACs risks over-assessment of costs for companies in lower wage areas and under-assessment for those in higher cost areas
3. **Management control** - In forming our claim, we have considered how far labour costs can be reduced or avoided through management action. We show how we have acted to mitigate labour costs and we have adjusted our claim value to reflect the degree of controllability
4. **Materiality** - Our net claim relates to labour, a significant input and driver of costs. Our CAC amounts to around 4% of five-year base costs, satisfying the materiality threshold
5. **Adjustment to allowances** (including implicit allowance) - We have estimated implicit allowance and our claim remains material after its deduction
6. **Cost efficiency** - We tested our claim against labour cost indices used in electricity distribution and found it consistent and we applied the catch-up efficiency implied by Ofwat's PR24 models to ensure cost efficiency of our claim

Transience

We propose a net Cost Adjustment Claim (CAC) £3.8m for the retail price control for transience:

- **Unique circumstances** - ONS data shows that our area has the second highest transience (15%) across the industry, higher than the industry average
- **Need for adjustment** - There is a clear economic rationale that companies located in high transience areas will face higher costs because the more frequently customers relocate, the more difficult and expensive it is to collect revenue and debts. Moreover, the greater the transience, the greater are costs associated with processing changes of occupier, updating records, managing contacts, ad-hoc meter reads and sending final and opening bills. The economic rationale is supported by econometric estimation of transience variables which are statistically significant, have positive sign and do not alter the strength or sign of the other coefficients in the models
- **Management Control** - The extent to which the population moves within or out of our area is outside management control. However, we show how we have reduced or avoided transience costs through

management action to increase direct debit uptake, online billing and improvements to debt collection on closed accounts

Symmetrical cost adjustment claims

We considered the symmetrical cost adjustment claims proposed by other water companies and published on Ofwat's website in June 2023. We found that in most cases, the claims advanced by other companies, if accepted, would result in increases or no material change to our assessed costs. In three cases, other company claims would act to reduce our assessed costs:

- For the topography and average pumping head claims proposed by South Staffordshire and Anglian respectively, we concluded that Ofwat's models were already likely to include this factor in base costs as half of PR24 econometric models already include the distribution average pumping head explanatory variable
- For frontier leakage performance, the proposer is the subject of ongoing regulatory investigation into leakage performance reporting and it is difficult to accept this case until reporting investigations are complete and the outcome published

We provide further information and our assessment of other company cost adjustment claims in our commentary to table CW18 (Appendix AFW54 - PR24 - Part 3 Commentary - Costs (wholesale) water).

07.

Outcomes

Affinity Water

7.1 Summary of our outcomes

Outcomes key points

- Our plan delivers **ambitious and stretching outcomes** in line with our customers' expectations
- We have **actively engaged with our customers** in the development of our plan, changing our strategies to align our package of outcomes to their preferences
- We have focused on improving performance in a sustainable manner, making holistic performance decisions which are considerate of both the upsides and downsides of our activities and **ensuring great value for our customers**
- We have created detailed and costed activity-based plans up to 2030, with quantified PC benefits where possible, ensuring **deliverability** of operational and tactical level plans
- We have considered how we are currently performing and set ourselves challenging targets that go **above and beyond** what we have achieved in the past, both on individual measures and across the broader scope of outcomes
- We have engaged with customers to understand their priorities for performance. Highlights of our outcomes plan include:
  - Going further on leakage than ever before committing to a **50% reduction by 2050** from our 2019 - 20 baseline
  - Driving fundamental changes into our business to deliver **excellent customer service and experience**
  - A step change in our **environmental performance**, driving down operational greenhouse gas emissions in 2025 - 2030 and delivering our Net Zero commitments by 2030 as well as increasing biodiversity and improving river health
  - Ensuring that our **2025 - 2030 business plan aligns with our 25-year LTDS**
  - Sustaining and building on our excellent **water quality** performance from 2020 - 2025, maintaining our industry leading performance in this area
  - Tackling our historically poor performance with **low pressure** head on, making substantial reductions in the average time customers experience low pressure

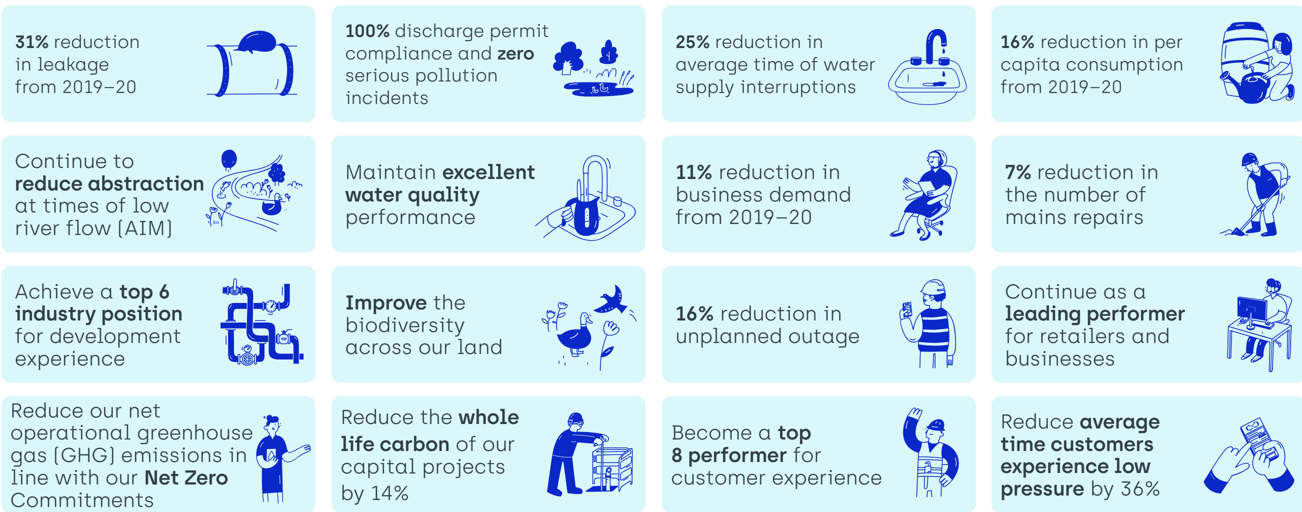


Figure 7.1 Our performance ambitions at a glance

How our plan meets the Ofwat methodology

Ofwat methodology	Our plan
Ofwat quality criteria	
'For ODI rates for common PCs the company uses: The marginal benefits identified through the collaborative customer research, or provides compelling evidence for any alternatives; and *Our view of indicative benefit sharing factors, or alternatives supported by sufficient and convincing evidence consistent with the considerations we have set out in our final methodology.'*	✓ We have adopted Ofwat's incentive rates for the Common PCs
If the company's business plan includes bespoke performance commitments, the company sufficiently demonstrates how it has responded to any feedback we have provided on its bespoke performance commitment submission. The company should also provide complete, consistent and well-evidenced incentive rates for bespoke performance commitments, demonstrating how its proposals are consistent with our final methodology and any relevant guidance.	Bespoke PCs have been proposed in line with the guidance: ✓ Fulfilled the prescribed two criteria for Bespoke PCs ✓ Feedback has been addressed from early definition submission evidence consistent with the considerations we have set out in our submission ✓ Incentive rates have been evidenced with customer research in line with the Draft Methodology guidance ✓ Following 'PR24: Assessment of bespoke performance commitment proposals', we have used a top down approach for whole life carbon
As described in the Draft Methodology, Bespoke Commitments may be appropriate where: *'1. there are local circumstances that do not apply to most other companies and there is compelling evidence that a Performance Commitment is required to provide incentives to drive benefits for customers, communities and the environment; and* *2. a company provides poor service on a common issue where other companies' performance is generally adequate and the risk of deterioration is low'*	✓ Guidance for creating Bespoke Performance Commitments has been very clear and has focused our plans to ensure compliance with the methodology. We understand the need to drive to a smaller number of Bespoke PCs and have reflected this in our approach to their development
Ofwat ambition criteria	
Enhanced ODIs: Available (at 2x the size of standard rates) for selected CPCs where companies deliver outstanding performance through innovation. (Indicative ODI rates shared by Ofwat early 2023) Ofwat's Stretch and Efficiency Definitions (Outcomes)	✓ We are setting ourselves challenging targets to ensure we are delivering stretching performance from base investment. We are targeting to become one of the industry's leading performers for outcomes by 2030 consolidating the improvement journey we have already been on as a business. Additionally, we are forecasting to make progress on each of the individual performance commitments, and maintaining our glide path to our long-term ambitions ✓ Our enhancement investment plans are clearly linked through to our performance plans demonstrating line of sight between our activities and our performance

Chapter guide

In this chapter, we will explain our approach to performance commitments, how we have set ourselves ambitious targets and how we have developed our bespoke commitments. We will also lay out our approach to individual performance commitments and incentives. The table below summarises the key purpose of each of the remaining sections and also provides references to other sections and documents where applicable.

Section	Purpose	Cross reference
Overview of our performance commitments	Presenting our high level performance plans for 2025 - 2030	
Delivering a high quality and ambitious plan	How we have developed our plan to achieve the quality and ambition standard required	Appendix AFW17 - Outcomes Appendix AFW04 - What customers and stakeholders want

Outcomes

Section	Purpose	Cross reference
Customers shaping our plans	How we have used customer feedback to improve our performance plan	Chapter 4 What customers want Chapter 5 Customer affordability and acceptability
Developing bespoke commitments	How we have created and developed our bespoke PCs	Appendix AFW18 - Bespoke performance commitments
Incentive rates	Our approach to setting and balancing incentive rates and performance caps and collars	Chapter 9 Risk and return Appendix AFW17 - Outcomes
Determining marginal costs and benefits	How we have developed marginal cost estimations using our activity based approach to performance	Appendix AFW17 - Outcomes
Developing P90 and P10 positions	How we have developed our expected performance limits for our plan	Chapter 9 Risk and return Appendix AFW17 - Outcomes Appendix AFW18 - Bespoke performance commitments
The interaction of our performance commitments	Recognising the interaction that our activities have across multiple performance commitments	
How our overall outcomes package is in the interest of our customers	How we have ensured that our performance commitments are in the interest of our customers	Chapter 4 What customers want Chapter 5 Affordability and acceptability
Our performance commitments	A step through all our performance commitments including definitions, our past performance, our upcoming plans and our ambitions.	Chapter 6 Costs Appendix AFW17 - Outcomes Appendix AFW18 - Bespoke performance commitments Appendix AFW32 - Deliverability of our plans AFW41 - Case studies

7.1.1 Overview of our performance commitments

New performance commitments 2025 - 2030

Our Ambition Statements	Key Outcome	Type	Performance Commitment	Reward/ Penalty	Measure	2024/25 Target	2025/26 Target	2029/30 Target	Improvement
Leave the environment in a sustainable and measurably improved state	Environment	Common	Leakage	Both	% Reduction from 2019-20 baseline	20%	20%	31%	11%
			Per capita consumption	Both	% Reduction from 2019-20 baseline	12.5%	12%	16%	4%
			Business demand	Both	% Reduction from 2019-20 baseline	n/a	11%	11%	n/a
			Biodiversity	Both	Biodiversity units per hectare	New for 2025/26	0	2.70	n/a
			Operational GHG emissions	Both	Tonnes of CO2e	New for 2025/26	55,477	55,859	n/a
			Discharge permit compliance	Penalty Only	% Compliance	New for 2025/26	100%	100%	n/a
			Serious pollution incidents	Penalty Only	Number of Cat. 1 & 2 incidents	New for 2025/26	0	0	n/a
		Bespoke	Whole life carbon	Both	% reduction against baseline	New for 2025/26	n/a	14%	n/a
			Abstraction incentive mechanism	Both	Reduction in Ml of abstraction across selected sources	0	0	0	n/a
Be prepared for change, and resilient to shocks and stresses	Resilience	Common	Mains repairs	Both	Number of repairs per 1,000km of mains	142	140	132	7%
			Unplanned outage	Both	% Of peak week production capacity	2.54	2.46	2.14	16%
Deliver what our customers need, ensuring affordability for all	Customer		C-MeX	Both	Score /100	League Table	n/a	n/a	n/a
			Water supply interruptions	Both	Time per property per year	00:05:00	00:04:40	00:03:40	25%
			Compliance risk index	Penalty Only	Numerical Score (Deadband of 2.0)	0 (Forecast of 1.09)	0 (Forecast of 1.09)	0 (Forecast of 0.9)	17%
			D-MeX	Both	Score /100	League Table	n/a	n/a	n/a
			Customer contacts about water quality	Both	Number of contacts per 1,000 population	0.67	0.67	0.67	0%
			BR-MeX	Both	Score /100	League Table	n/a	n/a	n/a
		Bespoke	Average time properties experience low pressure	Penalty Only	Average time per property that pressure is below 15m per year	02:42:10	01:55:56	01:43:43	36%

Figure 7.2 Overview of our performance commitments for 2025 - 2030

Our SDS sets out our long-term ambitions to 2050, the challenges we face, and the huge opportunities for society, our company and the wider water sector to create value. Our four ambition statements set out our strategic response to our stakeholders and customers feedback. We have used our SDS as the framework for our outcomes, that are informed by the interests of our customers and linked to our performance and overall vision.

We have considered our performance commitments (PCs) in the context of the long-term, with our plan representing a five-year segment of our 25-year performance trajectory, which has been optimised through our LTDS.

We have aligned the rollover performance commitments from 2020 - 2025 to these statements, and they have been critical to our adoption of the new common performance commitments.

7.1.2 Delivering a high quality and ambitious plan

Our high quality plan

Delivering a high quality and ambitious plan for our customers is essential. To do this, we have considered Ofwat's criteria for delivering a high-quality plan, as set out in the final methodology, and have delivered on these through our business plan.

We have used various governance structures to ensure our plan meets the criteria set by Ofwat. This has included engagement, discussion and challenge through our Independent Challenge Group. Our Board has overall oversight and ownership of our plan, and have challenged our ambition in order to ensure that we are delivering stretching performance across our outcomes package. We have also gained external assurance of our outcomes on a Performance Commitment (PC) by Performance Commitment basis, using subject matter experts to challenge our thinking and delivery plans to ensure a high quality, ambitious and deliverable plan.

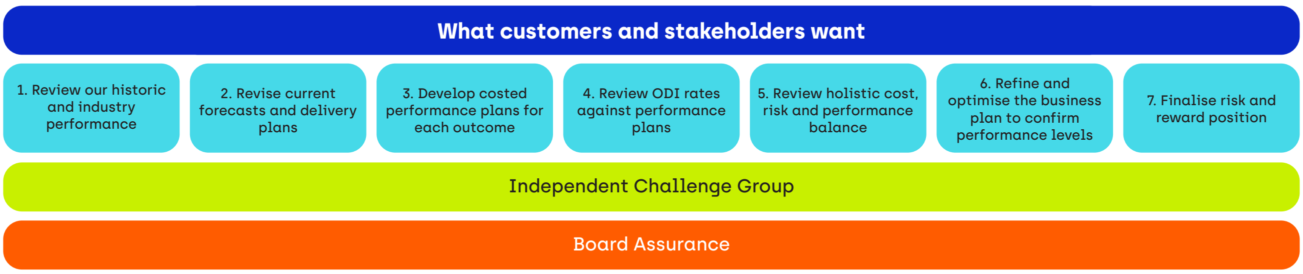


Figure 7.3 Developing our performance commitments

We have aligned our Costs and Outcomes workstreams to ensure that our plan is joined up, giving line of sight between spend and performance where possible. We have used our customer research and governance structures to support this process throughout. This approach means we have reflected what our customers want through our plan, using their views to change and adapt our plans and ambition.

We have reviewed our base and enhancement costs to align with performance improvements; the breakdown of each is shown in the individual PC sections later in this chapter.

Our industry position

We recognise that we are on a journey of performance improvement. In Ofwat's service and delivery report 2019 - 20[29],we were ranked as 'lagging behind' in the overall league table. This is significantly below the standards that we set for ourselves, and we have reflected on what we need to change to deliver improved performance. We were pleased that these efforts were reflected in an improved position in the 2020 - 21[30]

29. https://www.ofwat.gov.uk/wp-content/uploads/2020/12/Service-delivery-2020-final-1-Dec.pdf

30. https://www.ofwat.gov.uk/wp-content/uploads/2021/11/Service-Delivery-Report-2020-2021.pdf

report, moving up into the 'Average' bracket and consolidating this position in 2021 - 22[31] .In the first two years of the 2020 - 2025 period, we have moved from 13th to 7th in the industry in terms of ODI incentives as a % of RoRE. We see this as part of our journey of continuous improvement and believe that we have set a plan, which will achieve our ambition to be amongst the leading companies in 2025 - 2030. It is important to us that we deliver the performance that our customers expect and will push ourselves to meet all our performance targets for 2025 - 2030.

Industry Position Overall Service Delivery

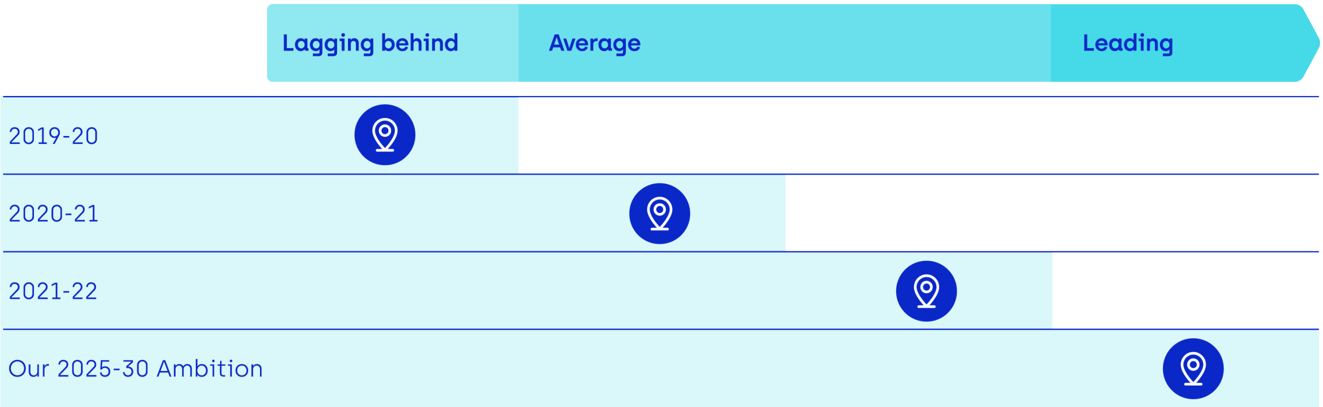


Figure 7.4 Industry position : overall service delivery

Demonstrating ambition

We understand that we must challenge ourselves to deliver an ambitious business plan - our customers expect nothing less. As a business we are proud of how we have transformed our water supply interruptions and compliance risk index performance in recent years and are ambitious in delivering similar transformations across other performance areas, such as C-MeX. Ambition is at the heart of our plan, with stretching performance commitments a key component. We know that our operational teams have the best understanding on how to deliver our ambitious Performance Commitments, so they have led the development of our overall outcomes package and shaped the activity plans that we have used to build our forecast and delivery plans for the PCs in 2025 - 2030.

In setting performance commitment levels (PCLs), we have also considered the requirements set out in the final methodology, as below:

1. PCLs set at PR19
2. Historical outturn performance at an individual company and sector level
3. Historical expenditure included in the base expenditure models at PR24
4. Company forecasts of performance levels that can be delivered from base expenditure
5. Performance levels of efficient companies
6. The opportunity for transformational performance improvements

Appendix AFW17 - Outcomes describes how we have used these challenges as part of setting our 2025 - 2030 PCLs.

Through our what customers and stakeholders want (Appendix - AFW04) research, we understand that our customers have preferences for performance improvements, and have reflected this in our ambition for the relevant performance commitments:

- Providing water that looks, tastes and smells good: compliance risk index common performance commitment and customer contacts about water quality common performance commitment

31. https://www.ofwat.gov.uk/wp-content/uploads/2022/12/WCPR_2021-22.pdf

- Prevent interruptions to water supply: water supply interruptions common performance commitment and average time properties experience low pressure bespoke performance commitment
- Reduce the amount of water that is lost through leakage: leakage common performance commitment

In determining an ambitious set of performance commitments, we have:

1. Reviewed **how we and the industry have been performing** in 2020 - 2025 and our key areas of improvement, understanding our industry position and how the delivery of PCs activity interact both positively and negatively with other PCs
2. Challenged our teams to develop **detailed delivery plans** and business cases, ensuring that **statutory drivers and programmes** have been considered (e.g. WINEP), each with tangible and quantifiable performance commitment benefit and total expenditure cost estimates so that a high degree of ambition is considered throughout
3. Considered how we have delivered **transformational performance improvement** in the past, and how we could apply this across other PCs
4. Reviewed performance **gains across the industry**

We believe that this approach has resulted in an ambitious and deliverable set of outcomes, for which we will need to deliver stretch performance both on an individual PC basis and holistically across our business. We have assessed our plan against the criteria set out in the final methodology to ensure we have met the standard required. See Figure 7.2 Overview of our performance commitments for 2025 - 2030 for more detail.

7.1.3 Customers shaping our plans

As explained in chapter 4 we have developed an engagement strategy with our customers (household and non-household) as well as our stakeholders to build a clear line of sight between research, insight and business decisions. We've made sure our interactions with customers and stakeholders meet Ofwat's high-quality standards for engagement. Additionally, we've partnered with Ofwat, CCW, and other water companies to play a central role in advancing how the industry uses valuable insights. The information we've gathered is summarised in what customers and stakeholders want (Appendix AFW04). This insight has played a significant role in shaping both our business plan and long-term strategies, and you can find more information in the 'Line of Sight' section of the what customers and stakeholders want methodology (Appendix AFW05). We have also provided a concise summary of what our customers have shared for each performance commitment. What we have heard from our customers and stakeholders has not only shaped our approach, but in some cases changed our direction of travel or pace of travel. See Figure 4.9 How the plan changedfor examples of how insight has influenced our plans.

7.1.4 Developing bespoke commitments

We have submitted three bespoke performance commitments in our business plan. We have chosen these PCs as they will drive significant customer and environmental benefits across low pressure, chalk stream abstraction and delivering on Net Zero. Guidance for creating bespoke performance commitments has been clear, and has focused our plans to ensure compliance with the methodology. We understand the need to drive to a smaller number of bespoke PCs, and have reflected this in our approach to their development.

Our process for determining bespoke performance commitments

We followed a structured approach to determine our bespoke PCs, using guidance from Ofwat to promote or reject our long list of PCs, as below:

1. Developed a long list of bespoke PCs, which included a review of existing industry PCs
2. Internally reviewed whether the proposed PCs would meet Ofwat criteria
3. Reviewed customer views of their preferences to understand whether these could align to potential bespoke PCs

4. Undertook a detailed forecast and performance improvement plan process for selected bespoke PCs, mirroring our approach for the common PCs
5. Received external third party assurance of definitions and rationale
6. Undertook customer engagement to determine valuations and incentive rates
7. Used feedback from Ofwat to refine definitions
8. Incorporated the final selection into our business plan

Our ICG engagement

We have engaged with our Independent Challenge Group to discuss our proposed bespoke performance commitments as part of our overall Outcomes package. We discussed with the ICG to clarify why we chose specific customised performance commitments (Bespoke PCs) and how we considered feedback from customers and stakeholders in our planning process. We welcome their input in challenging the customer benefits of our Bespoke PCs.

Our bespoke commitments

We considered a number of bespoke PCs as part of the development process and reviewed each against Ofwat's criteria and customer preferences .

Following this assessment process, we have submitted three bespoke performance commitments. The performance commitment definitions and our response to Ofwat feedback can be found in Appendix AFW18 - Bespoke performance commitments.

Low pressure

We understand that we are a performance outlier for low pressure, and we are committed to delivering improvements for our customers. We recognise that this meets the first criteria above, and therefore consider that a bespoke PC is appropriate.

Abstraction incentive mechanism

As part of our strategic ambitions, we are committed to protecting the environment, including the chalk streams in our area. To assist in this ambition, the abstraction incentive mechanism (AIM) has been used as a bespoke PC for 2020 - 2025. Our plan to deliver on chalk streams is already largely described in our WRMP, and is essential to balance the supply/demand challenge in a sustainable way. AIM takes us above and beyond the WRMP, and will further incentivise our ambition to limit abstraction from chalk stream boreholes at times of low river flow, therefore delivering benefits to the local environment.

Whole life carbon

We recognise the importance of achieving Net Zero and the carbon impact of construction activities. We have proposed a bespoke performance commitment for whole life carbon, which will incentivise the reduction in embedded and operational GHG emissions over the lifespan of an asset. This will deliver environmental benefits in line with our customers priorities.

7.1.5 Incentive rates

Setting incentive rates

Where appropriate, we have used PC incentive rates published by Ofwat, with a 70% benefit sharing factor. For bespoke PCs, we have conducted our own research to develop customer valuations; the methodology for the incentive rate can be found in Appendix AFW18 - Bespoke performance commitments.

Balancing incentives

We have followed the principles set out in the final methodology by using symmetrical incentive rates for rewards and penalties. We believe that this gives the right balance of risk and rewards, and offers appropriate incentives to drive performance.

We have considered how customers are protected from outperformance and underperformance, as follows:

- We have followed the final Methodology framework of a +/- 3% RoRE range of total ODI penalties (excluding measure of experience PCs) before any customer sharing of underperformance or outperformance payments
- Outside of the +/- 3% RoRE range of total ODI penalties, payment sharing will be 50% until +/- 5% RoRE range of total ODI penalties is met
- Outside of the +/- 5% RoRE range of total ODI penalties, payment sharing will be 90%

Additionally, we have used targeted caps and collars, in line with the final methodology guidance for specific PCs as to protect against significant underperformance or overperformance on an individual PC.

Skew of risk and reward

We have completed a review of the RoRE position based on outcome delivery incentives to give a view of the risk and reward position of this plan. This view indicates a significant skew towards penalty in the outcomes package and well outside the 3% RoRE limit indicated in the final methodology.

We have outlined the reasons we have identified for the disparity in risk and reward:

- **Penalty only performance commitments** for CRI, serious pollution incidents, discharge permit compliance and average time properties experience low pressure
- The **natural skew of some performance commitments**, such as water supply interruptions, where the best possible performance 00:00 is 03:30 from our proposed PCL (2029 - 30) giving potential reward of £3.36m, whereas using the 0.6% RoRE at risk with the standard underperformance rate gives a collar of 11:32 at a penalty of £7.21m
- As most ODI rates have been built top down, with 0.4%-0.6% of RoRE at risk, meaning the **cumulative effect** of twelve common PCs and three bespoke PCs takes the total risk exposure beyond 3%

We recognise that symmetrical ODI rates have been a cornerstone of the final methodology and the rationale behind collars only on selected performance commitments and, therefore, we have submitted a plan which complies with the methodology. However, there could be alternative options to bring more balance to the outcomes package that offer an equal risk. We have suggested a number of options for consideration.

Per Capita Consumption (PCC)

PCC presents a significant challenge with very high negative skew, with an estimated 1.9% RoRE penalty at P10. This is by far the largest exposure of any PC and around 33% of our total outcome delivery incentive penalty exposure at P10. We have laid out some options which might support the balancing of risk and reward.

Inserting a performance collar and cap

We have developed our PCC targets based on the final methodology, using Ofwat's marginal benefit valuation and sharing rate. We have not included a deadband, cap or collar as per guidance.

Unlike all other performance commitments, across the industry, every company is behind their target to deliver PCC indicating performance issues are not company specific.

We have set ourselves challenging and ambitious targets for 2025-2030 in line with our WRMP, meeting Ofwat's requirement to match with our business plan. These ambitious targets, however, with no performance collar will mean ODI risk will be very high, particularly with external factors, such as extreme weather events, having a large effect on performance.

Ofwat's top down incentive rate setting has used:

Outcomes

- 0.4% RoRE at risk for PCC (£2.99m p.a.)
- Combined 1.3% RoRE at risk for aggregated water demand (£9.73m p.a.)

Our estimated P10 positions for each of the year of 2025-2030 culminate in a 9% reduction by 2029-30 and would equate to an annual penalty of £16.2m – well over the 0.4% RoRE from the marginal benefit valuation for PCC or even the aggregated water demand RoRE at risk. Whilst we will be working hard to deliver our PCC target, the risk of non-delivery would be skewed heavily towards penalty.

We also note that PCC is amongst the lowest ranked PCs from Ofwat's collaborative customer research[32], which suggests that the very high penalty potential does not correlate with customers valuations.

Our suggestion would be a targeted collar for PCC to match the 0.4% RoRE at risk or 0.5% RoRE to keep in line with the final methodology caps and collars for most other PCs. Alternatively applying a collar on the aggregated water demand (Leakage, PCC and Business Demand) at 1.3%. Corresponding performance caps would then be appropriate to ensure customers are protected.

Additional customer protection will be in place with our proposed PCL for smart metering, meaning we can be held to account financially for non-delivery of our commitments.

Assessment of PCC performance in dry years against the dry year forecast

We have submitted a compliant business plan, matching our WRMP and using the normal year figures for the relevant data tables.

However, due to the impact of climate change, we are seeing an increasing trend of dry years since 2018. We plan for a dry year to be a 1 in 10 year event, however we have experienced three dry years in the last five. Dry years lead to higher customer consumption and therefore significant challenge to achieve our normal year PCC target and likely penalties.

We would recommend that when a dry year is assessed to have occurred, then incentives for that year are assessed against the dry year WRMP target. Additionally, using a sliding scale of the relative position of a year between normal and dry to adjust the target accordingly. Whilst this would create a slightly more complex calculation, it would create a measure that is more reflective of the changing climate conditions and would mean a fairer assessment of performance against appropriate targets. Incentives to achieve and outperform targets would remain so the risk of companies deciding to reduce performance due to lower penalties is very low.

If agreeable, we propose to undertake a study to review dry year forecasts and include a higher weighting on more recent years and develop the mechanics of how incentivising this measure would work.

Other performance commitments

- In previous feedback, we have suggested the reintroduction of a meaningful deadband for **CRI**
- Creating symmetrical cap and collar positions for the **asset health** metrics, moving the collars to match the 0.25% RoRE of the caps
- The introduction of collars on **CRI and customer contacts about water quality**. We have finished in the upper quartile for water quality measures for the first three years of 2020 - 2025 demonstrating consistently strong performance. This, therefore, may give the option of reducing penalty risk exposure whilst the risk to customers of under-performance is low based on our excellent track record. Additionally, the DWI are an effective regulator and have powers to impose enforcement action above and beyond the financial penalty, giving additional incentive to perform
- We note that others have suggested (through final methodology feedback) the introduction of a penalty deadband on **mains repairs** to protect against some of the impacts of extreme weather events. Due to the volatility associated with mains repairs and the correlation with extreme weather, a collar on this measure

32. (https://www.ofwat.gov.uk/wp-content/uploads/2023/08/PR24-Using-collaborative-customer-research-to-set-outcome-delivery-incentive-rates-.pdf)

- With the new performance commitments for **operational GHG emissions** and **biodiversity**, the narrowing of caps and collars on each to 0.25% as maturity increases
- As the only company to be successful in having two **bespoke performance commitments** potentially suitable for further development following Ofwat feedback, and with our third proposed bespoke PC for whole life carbon, we are uniquely exposed to penalties on each. Tighter collars on the bespoke PCs would help resolve this situation

Caps and collars

We have developed caps and collars in line with the guidance from the final methodology.

- Caps limit the maximum reward available from performance
- Collars limit the maximum penalty from performance

Once a cap or collar is reached, no further reward or penalty will be applied, limiting the customer exposure to overperformance or underperformance. Caps and collars are applied to annual performance.

Using the % RoRE range given for the relevant performance commitments alongside the incentive rates published by Ofwat, we have calculated the range of PC performance around the PCLs we are proposing. For our bespoke PCs, we have used valuations from customer research, details of which can be found in the relevant PC later in this chapter.

Key outcome	Type	Performance commitment	Cap/collar	Limits used	Incentive rate £m
Environment	Common	Leakage	n/a	n/a	0.365 per Ml/d
		PCC	n/a	n/a	1.412 per l/h/d
		Business demand	Both	+0.5% to -0.5% RoRE	0.365 per Ml/d
		Biodiversity	Both	+0.5% to -0.5% RoRE	To be confirmed
		Operational GHG emissions	Both	+0.5% to -0.5% RoRE	To be confirmed
		Discharge permit compliance	n/a	n/a	0.168 per %
		Serious pollution incidents	n/a	n/a	1.363 per incident
	Bespoke	Whole life carbon	Both	+0.3% to -0.3% RoRE	£0.28m per %
		Abstraction incentive mechanism	Both	+0.275% to -0.275% RoRE	0.00136 per Ml
Resilience	Common	Mains repairs	Both	+0.25% to -0.5% RoRE	0.148 per repair per 1,000km
		Unplanned outage	Both	+0.25% to -0.5% RoRE	1.629 per %
Customer		C-MeX	n/a	n/a	n/a
		Water supply interruptions	Collar Only	0.5% RoRE	0.916 per minute
		CRI	n/a	n/a	0.982 per unit
		D-MeX	n/a	n/a	n/a
		Customer contacts about water quality	n/a	n/a	9.874 per contact per 1,000 customers
		BR-MeX	n/a	n/a	n/a
	Bespoke	Average time properties experience low pressure	Collar Only	-0.125% RoRE	0.0165 per minute

Table 7.1 Caps and collars

For incentive rates see AFW82 - Affinity Water PR24 data tables (OUT7) and AFW52 PR24 - Part 1 Commentary – Outcomes .

7.1.6 Determining marginal costs and benefits

We have used a bottom-up approach to build our understanding of marginal costs and benefits. For each PC, we have developed detailed and quantifiable plans for delivery, supported by business cases which have undergone thorough review and audit. These plans have been created using named schemes so that both the likely cost and benefit have been judged at an appropriate level, enabling assurance of deliverability and understanding of how benefits will be realised. This process means that we have confidence in our approach, and that our marginal costs and benefits will be accurate. These plans are summarised for each PC later in this chapter, with further detail in Appendix AFW17 - Outcomes.

These plans have helped us to understand our best value options for each PC, and to holistically compare them to other options so that the the optimal mix of schemes can deliver the best value for customers.

We have analysed the overall package of performance commitments, and associated outcome delivery incentives, to determine the overall risk and reward potential. The findings of this analysis is in **chapter 9**.

7.1.7 Developing P90 and P10 positions

For all relevant performance commitments, we have used a process to develop our expected performance range. We have used these ranges to inform our plans, and challenge the level of ambition. We have determined P90 and P10 positions, as follows:

- P90 represents the 1-in-10 year good performance
- P10 represents the 1-in-10 year poor performance

We have looked to maintain a common methodology to creating these positions; however, due to the availability of data, we have had to adapt our approach for some PCs. We have looked to use multiple sources of data to give the fullest picture performance, with our primary source being the published industry annual performance review (APR) data.

Performance commitments	Our methodology	Rationale for using methodology
Mains repairs Unplanned outage CRI Water supply interruptions Customer contacts about water quality Leakage Per capita consumption AIM	• Using APR data, collate all company's submissions into year on year performance • Determine 10th and 90th percentile positions, as well as mean average position • Review shape of the trend that this analysis has delivered, and determine best fit line for each • Extend best fit lines over the period from latest APR data until 2030 • Overlay our own performance over this time period, and our forecasts for the remainder of this period and for the whole of the next one • Review the outputs and use expert judgement to adapt to fit realistic performance levels	Minimum of four years of historic industry data
Operational GHG emissions Discharge permit compliance Serious pollution incidents Average time properties experience low pressure	• Using APR data, collate all company's submissions into year-on-year performance • Where relevant, included quarterly data to expand number of data points available • Created trendlines of performance based on 10th and 90th percentiles • Use expert judgement to adapt to fit realistic performance levels	Fewer than four years historic industry data

Performance commitments	Our methodology	Rationale for using methodology
Biodiversity Business demand Whole life carbon	• Reviewed existing data sets to find similar or surrogate measures where possible • Created detailed delivery plans and expected levels of performance • Used top down approach based on expert judgement	No historic industry data

Table 7.2 Our methodology for developing P90, P50 and P10 positions

7.1.8 The interaction of our performance commitments

We recognise that our performance commitments interact with each other. Activities which deliver great performance with one PC may also deliver benefit for another PC; for example, an improvement for mains repairs will likely see an improvement in interruptions to supply. However, the converse is also true; for example, activities to improve low pressure will require changes that will risk a negative impact on leakage and mains repairs. We have used this approach to analyse our planned activities for 2025 - 2030, and to look for areas which will deliver mutual benefit across multiple PCs. This allowed us to maintain a holistic view of performance, ensuring the best value solutions across our plan. We also recognise areas where conflicts may arise, and have worked to isolate schemes so that we can minimise disbenefits across other PCs.

This holistic approach is critical to delivering the best possible value and to optimise performance for our customers. Therefore, for any changes to a single PC, the impact on other PCs has to be considered in the round. Through this, we can avoid a sub-optimal package of outcomes and ensure an overall positive outcome for customers.

7.1.9 How our overall outcomes package is in the interest of our customers

We have considered our overall package of performance commitments to make sure it is in the interest of our customers. We have balanced our overall performance package to deliver ambitious outcomes for our customers. We have used customer research to inform the development of our bespoke performance commitments and associated incentive rates, ensuring we are delivering on our customers' priorities and challenging ourselves to do more to meet and exceed their expectations. Setting ourselves stretching performance targets is important, but it is equally important that we are capable of delivering on these commitments for our customers, for this reason we have added significant emphasis on the deliverability of our plans, setting out targeted and actionable delivery plans with clear routes of investment, and working with our supply chains early in process to confirm their capacity and capability to deliver for our customers.

Our Independent Challenge Group have pushed us on a number of our PCs. We have included a summary of their challenges and our response below:

- **Contextualising leakage reduction over the long term and why our target is ambitious**. We have included our road map for leakage to 2050 in Appendix AFW17 - Outcomes and explain how we have set targets in line with the final methodology. Our leakage section in our business plan also explains how we have delivered in the past and how we have developed our future delivery plans
- **Contextualising our per capita consumption (PCC) target.** We have set our PCC target in line with the final methodology, aligning with our WRMP. Our target also aligns to our long term ambition to drive PCC to 110 l/h/d
- **Explanation as to how mains repairs performance will improve and learning from benign weather years**. We have seen a high variability in the number of mains repairs based on the weather, with extreme weather events correlating with a high number of mains repairs. We understand the more benign years will give us opportunities to improve our performance. Our planned interventions, such as our network

calming programme, will deliver benefits in all conditions and we will continue to review methods to reduce the weather related impact in the long term, including mains renewals

- **Greater transparency on our energy usage to support the operational GHG emissions PC**. We see our energy usage as an opportunity for Open Data. We have good data visibility and accuracy for energy and we have a number of dashboards we use for ongoing management. We will look at opportunities to share this externally in the future

7.1.10 Reporting and assurance

As laid out in our Strategic Direction Statement, we are committed to building trust and transparency. We will continue to be open with our data and publish audited performance records every six months, including as part of the annual performance reporting (APR) process. We will maintain our interaction with our Independent Challenge Group to give independent oversight and challenge to our performance.

We are committed to sharing our successes and what we have learnt with other water companies, as well as learning from others, so that we drive collective continuous improvement as an industry. Additionally, we will work to create more transparency of our activities and performance to deliver on the open data challenge Ofwat has set the industry.

7.2 Our performance commitments

Details of each of our performance commitments are given in the following section. This includes: how we have listened to our customers; how it fits into our long-term plans; reflecting on how we have performed in the past; how incentive rates have been determined; and, the delivery options that we are going to pursue to achieve ambitious performance in 2025 - 2030. More detail and supporting data can be found in Appendix AFW17 - Outcomes. Where we have quoted incentive rates and performance commitment levels, further detail can be found in AFW82 - Affinity Water PR24 data tables (Outcomes tables) and AFW52 - PR24 - Part 1 Commentary - Outcomes.

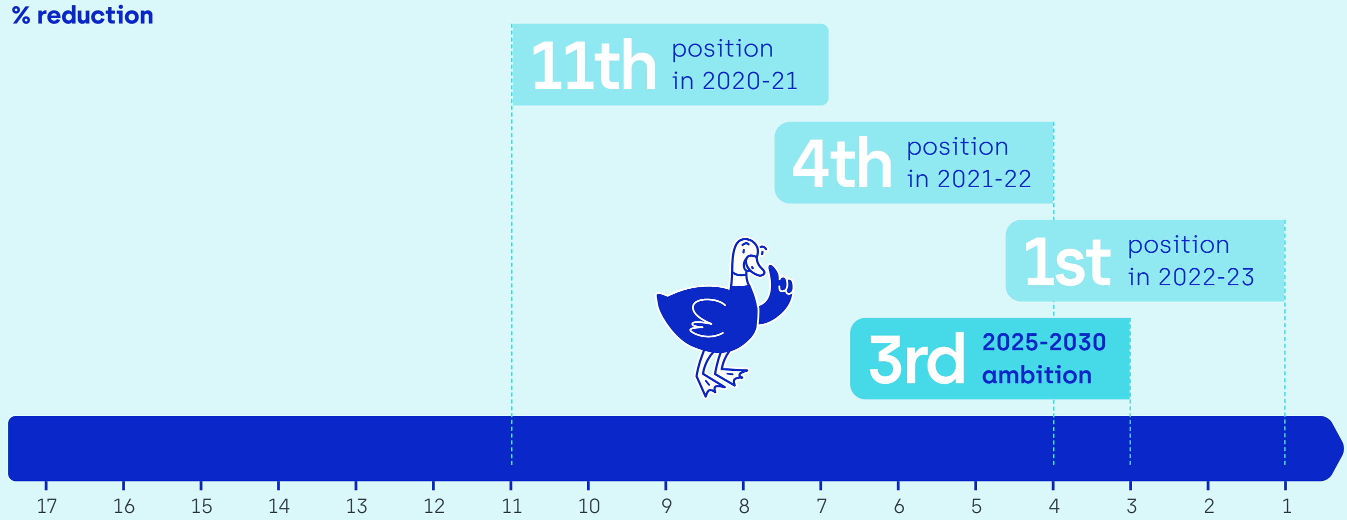
Performance Commitment:

Leakage

Environment

Industry position

% reduction



Our long-term plans

Alongside the rest of the industry, we are committed to reducing our leakage by 50% by 2050.

Our 2020-2025 commitments are in line with this longer term commitment and ensure the glide path we are on will deliver to this target in a controlled and sustainable manner.

Incentives to deliver

Leakage performance is incentivised through rewards and penalties. If we underperform we will give back £0.36m per Ml/d to customers and if we outperform we will receive the same rate as reward. There are no caps or collars on the leakage target.

What our customers are telling us

Our customers are concerned about leaks and it's a topic that they regularly raise. They want us to fix them quickly and they expect us to be dealing with leaks before looking for additional supplies

Source: AFW04

Delivering excellence

We have delivered industry leading leakage reductions from the baseline figure in 2020, building on our industry leading reductions in 2015 - 2020 . Our delivery has been achieved through a business focus on changing our peformance and investing in new and innovative technology to support our teams.

Our Leakage team are winners of the Institute of Asset Management Excellence Award for Team Achievement 2022

PC details - leakage

Data table references:	OUT1.9 / OUT2.9 / OUT3.9 / OUT4.32-4.35.
Performance commitment description:	Leakage is a common performance commitment, and we have adopted the standard definition. This is a continuation of the PR19 PC. Reducing leakage is a critical goal for us and our customers. Reducing leakage improves system resilience and benefits the supply/demand balance, reducing the need for abstraction.
Unit for performance commitment:	Percentage reduction of three-year average of leakage from 2019 - 20 baseline. The volumetric levels resulting from the application of the percentage reduction in megalitres per day (Ml/d).

Our performance in leakage reduction

We are committed to achieving at least a 50% reduction in leakage by 2050 from the 2020 baseline and our plan maintains our glide path to this goal. The graph below shows our performance in leakage reduction from the start of the 2020 - 2025 period and the glide path to achieving our targets by the end of 2029 - 30. We are forecast to meet our 20% reduction target in the 2020 - 2025 period.

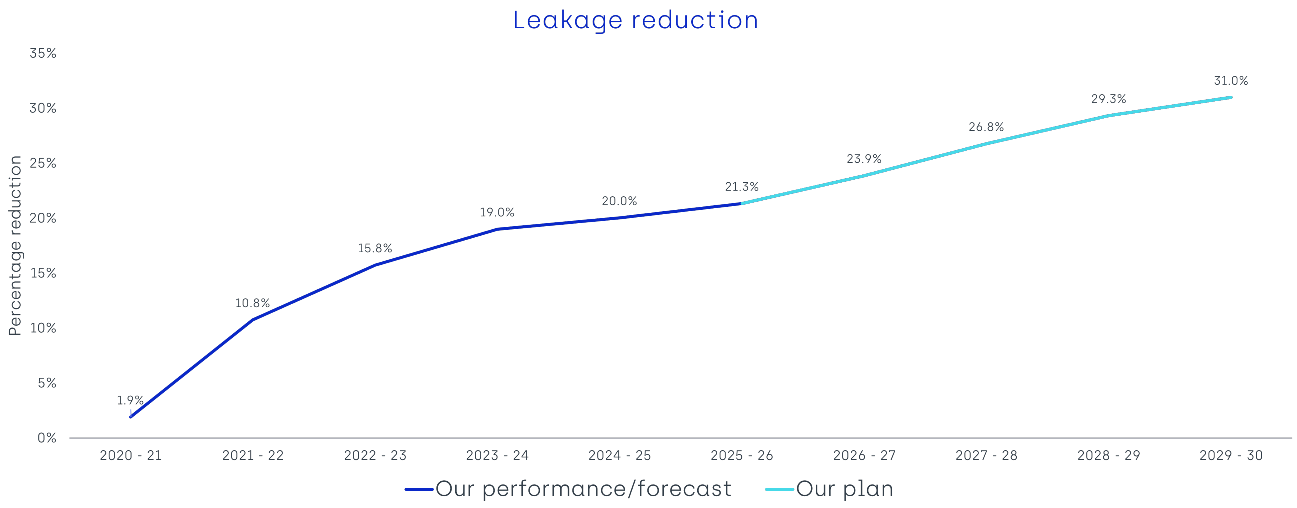


Figure 7.5 Leakage reduction performance

Details of the activities to build up performance benefit can be found in Appendix AFW17 - Outcomes. Our performance improvement is split between base and enhancement investment:

- 23% from Enhancement (5.2Ml/d)
- 77% from Base (17.2Ml/d)

Reflecting on past performance

In 2020 - 2025, we committed to reduce leakage by 20%, as set out in our WRMP. This commitment followed a 14% reduction in 2015 - 2020. We understood that a step change in our approach was needed to meet this target, and recognised that this would be a challenge from the outset. We identified that, in order to achieve a 20% leakage reduction, we would need to reduce the glide path by the end of 2025, and we predicted that the initial two years would be particularly difficult.

At the outset of 2021 - 22, our action plan, as shared with Ofwat, was based on a mix of leakage control activities. These included ramping up resources to identify leaks and improve our agility in responding to them, so that we could reduce their run time, therefore reducing the amount of water lost. Despite efforts and plans, we did not achieve our target for first two years of the period, with a 1.9% and 10.8% reduction against the required 2.7% and 11.1% reduction target.

In 2022 - 23, we redoubled our efforts, developing innovative plans which has led to outperformance of our leakage target with a reduction of 15.8%. With these plans delivered, we now anticipate that we will meet our target for the remaining two years of the 2020 - 2025 period and, where possible, exceed our target levels before the start of the 2025 - 2030 period.

Year	2020 - 21	2021 - 22	2022 - 23	2023 - 24	2024 - 25
PCL met/forecast	No	No	Yes	Yes	Yes

Table 7.3 Leakage : our expected performance 2020 - 2025

Selection of our plans to deliver

- Use of active leakage control, improving our efficiency through the use of smart technology *(included in base investment for leakage)*
- Free repair of customer side leaks *(included in base investment for leakage)*
- Investing in smart meters to improve the speed of detecting customer side leaks *(included in enhancement investment for smart metering)*
- Investing in a wider programme of calm networks interventions *(base and enhancement investment for network calming)*

Leakage is a critical performance commitment; however, it also interacts heavily with other PCs. In particular, we expect that reducing leakage will deliver mutual benefits across mains repairs, supply interruptions and C-MeX. However, we recognise that our low pressure bespoke PC may be adversely impacted by leakage reducing activity. As part of our holistic approach to performance, we will carefully scope leakage works so that we can avoid negatively impacting the low pressure metric.

Our ambition

As per the guidance from the final methodology, our leakage targets must meet the numbers included in our Water Resources Management Plan. We understand the importance of leakage reduction to our customers and the environment, so we are committed to our long term target of achieving a 50% leakage reduction by 2050. We have set the PCL for our business plan as to continue this trajectory, working towards this target and building upon our progress from 2020 - 2025. We have front-loaded our leakage programme so that we can achieve over 60% of our long term reduction target in the first ten years of our 30-year plan. This demonstrates our ambition to improve our leakage position, and deliver a stretching profile that will give maximum benefit to customers.

2024 - 2030 performance commitment levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment level	20.0%	21.3%	23.9%	26.8%	29.3%	31.0%
% Improvement from 2024 - 25						11%
Incentive rate	£0.365m per Ml/d					

Table 7.4 Leakage PCL : baseline figure (2019 - 20) : 187.7Ml/d

Performance Commitment:

Per capita consumption (PCC)

Environment

Industry position

Our long-term plans

We will use PCC as a long-term measure to reduce the volume of water used by our customers and therefore the volume abstracted from our sources. To ensure this focus, we have set ourselves goals up to 2050 and will deliver plans that can sustain short term gains over long periods.

By 2050, we will have made even more savings in water consumption, alongside additional leakage reductions, to help us reduce our impact on the environment by reducing the amount we abstract to sustainable levels.

Our Strategic Direction Statement (December 2021)

Incentives to deliver

Per capita consumption performance is incentivised through rewards and penalties. If we underperform we will give back £1.41m per l/h/d to customers and if we outperform we will receive the same rate as reward. There are no caps or collars on the PCC target.

What our customers are telling us

Our customers are generally unaware of the volume of water they use - and many believe they are water efficient. There are also segments of customers who still don't believe we need to reduce water use. Customers are however positive about using metering to pay for what they recieve

Source: AFW04

Delivering excellence

We implemented our innovative Save Our Streams campaign in 2020-25 to make customers think differently about how they use water and how it might impact local chalk streams. The campaign achieved a large number of sign-ups from across our customer base and won Water Efficiency Project of the year at the Water Industry Awards 2022. We are planning on rolling out a new phase of Save Our Streams to accompany our ambitious smart metering programme in 2025 - 2030

PC details - PCC

Data table references:	OUT1.10 / OUT2.10 / OUT3.10 / OUT4.44-4.52.
Performance commitment description:	PCC is a common performance commitment, and we have adopted the standard definition. This is a continuation of the PR19 PC. Helping our customers to use less water is essential for our long-term plans. By reducing customer demand, we can better balance the supply/demand of water resources and reduce our water abstraction.
Unit for performance commitment:	Percentage reduction of three-year average PCC from 2019 - 20 baseline, the volumetric levels resulting from the application of the percentage reduction in litres/person/day (l/p/d).

PCC reduction performance

In the graph below, we illustrate our trajectory towards our ambition of reducing PCC by 16% by the end of 2030.

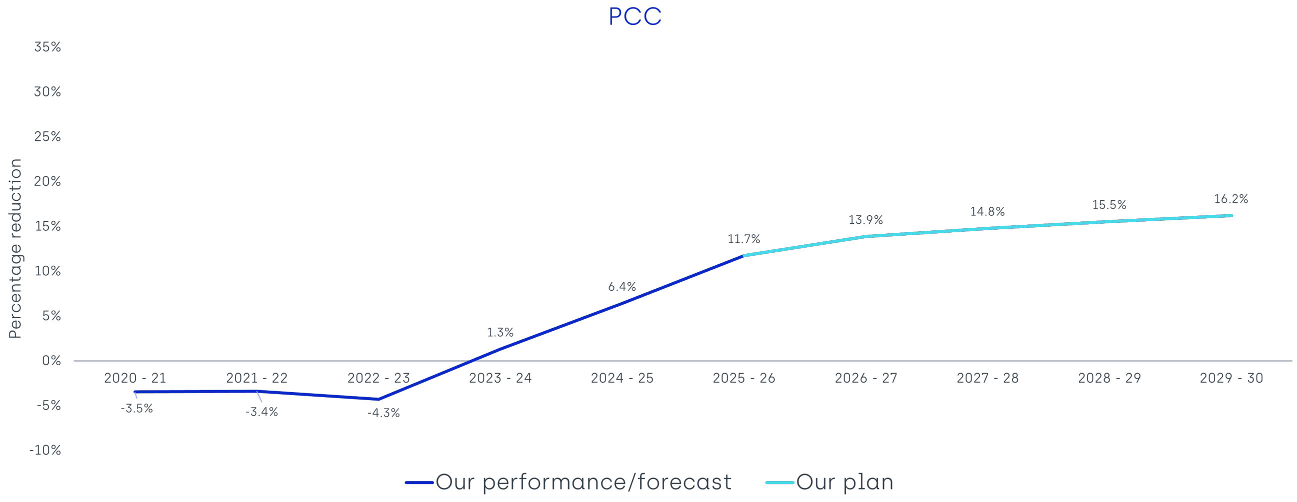


Figure 7.6 PCC reduction performance

Details of the activities to build up performance benefit can be found in Appendix AFW17 - Outcomes. All performance improvement is delivered through enhancement investment.

Reflecting on our past performance

As PCC is a measure of customers' consumption in the home, performance against this metric was severely affected by the Covid-19 pandemic across the industry. Lockdown occurred during the hottest weather in 2020 and 2021. Combined with the majority of people furloughed, working from home and school closures, this saw demand increase significantly. Into 2021 and beyond, the pandemic has changed the ways of working for a significant proportion of our customer base, with this looking set to continue into the future. While some of the effects of Covid-19 have reduced within our area, significant numbers of our customers continue to work from home and live in a 'new normal'. PCC has remained high throughout, and working arrangements have not (and are unlikely to) return to pre-pandemic levels. On a comparable basis, Covid-19 effects still account for a 2.5l/h/d increase in our PCC in 2022 - 23.

Despite failing our performance commitments for the first three years, we have made progress in improving performance. We have invested significant resources into education and campaigns for encouraging reductions in water usage. We are working to achieve the overall commitment however due to the subsequent Covid-19 increases this will be challenging.

Outcomes

Year	2020 - 21		2022 - 23	2023 - 24	2024 - 25
PCL Met/Forecast	No	No	No	No	No

Table 7.5 PCC : our expected performance 2020 - 2025

Selection of our plans to deliver:

We recognise that we are set to miss our PCL target for every year in 2020 - 2025 and therefore we cannot continue on with a business as usual mentality for PCC. We have set ourselves new and ambitious plans building on some of our success to date alongside radical changes, such as our smart metering programme supported by customer behaviour change.

- We will be making our largest investment in smart metering with 400,000 due to be installed by 2030. This will enable customers to have up to date information about their usage and demonstrate the benefits of reducing water usage. Our smart metering programme *(included in enhancement investment for smart metering)* will be supported by:
  - Increasing the number of home water efficiency checks *(included in enhancement investment)*
  - A continuation of our save our streams campaign to continue to draw links between people's water usage and the environment *(included in enhancement investment)*
- Investing in new and innovative technology to limit maximum flow rate into high usage areas *(included in enhancement investment)*
- Focusing on supporting the repair of internal leaks quickly *(included in enhancement investment)*

There are clear synergies between business demand and per capita consumption performance commitments. To manage these effectively, we are using the same team to lead each strategic development, the planning and the delivery of both. This will ensure that successes and lessons learned are applied across both PCs, hence benefiting our customers.

Our ambition

As per the guidance from the final methodology, our PCC targets must meet the numbers included in our Water Resources Management Plan. Through the Covid-19 pandemic, we experienced a significant change in customer behaviour, which has changed our PCC performance. Given this challenge, our plans are ambitious; we look to get ourselves back on course to reducing PCC and delivering the associated environmental benefits.

2024 - 2030 performance commitment levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment level	12.5%	11.7%	13.9%	14.8%	15.5%	16.2%
% Improvement from 2024 - 25						3.7% [1]
Incentive rate	£1.412M per l/h/d					

Table 7.6 PCC PCL : baseline figure (2019-20) : 154.0Ml/d

1. Our forecast 2024 - 25 position is to achieve a 6.4% reduction against our 2017 - 20 baseline, therefore our expected improvement between 2024 - 25 and 2029 - 30 will be 9.8%

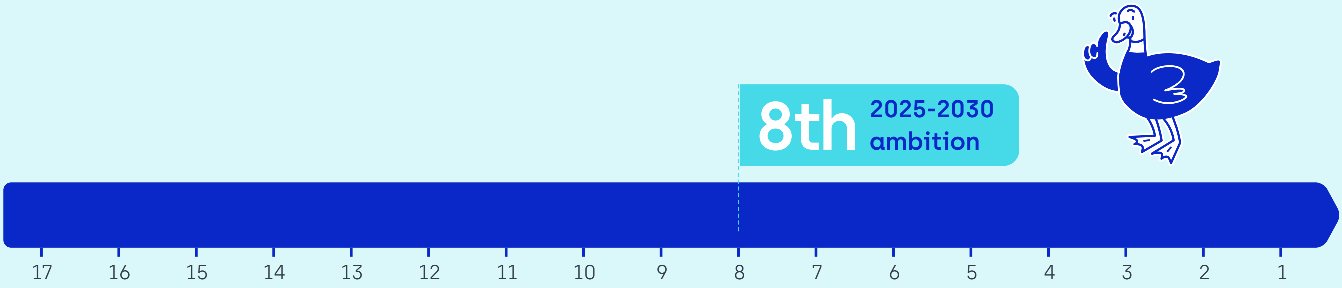
Performance Commitment:

Business demand

Environment

Industry position

% reduction



Our long-term plans

- We will work with retailers who serve our local non households such as businesses and schools to incentivise greater resource efficiency and reuse
- Introduce services to help major high use businesses to reduce their usage which makes up the majority of non-household use

Our Strategic Direction Statement [December 2021]

Incentives to deliver

Business demand performance is incentivised through rewards and penalties. If we underperform we will give back £0.36m per Ml/d to customers and if we outperform we will receive the same rate as reward. There is both a cap and a collar for Business demand which are set at +/- 10.3% of the target.

What our customers are telling us

Our business customers want clear and accurate bills and easy to access usage data. Seasonal businesses want flexibility. The cost of leakage is also a top priority for this group of customers. Source: Report 193 Evidence Review of Retail Business Water Market [Blue Marble]

Source: AFW04

Delivering excellence

We have been partnering with holiday parks in our East Region to reduce their water usage. We have installed water saving devices at the holiday parks, including water efficient shower heads, tap aerators, airgap valves on toilets, urinal monitoring systems to reduce water wastage and flow restriction valves

PC details - business demand

Data table references:	OUT1.11 / OUT2.11 / OUT3.11 / OUT4.71-4.74.
Performance commitment description:	Business demand is a common performance commitment and we have adopted the standard definition. This is a new PC for PR24. This PC promotes water efficiency for our customers and helps to improve water resources supply/demand, therefore reducing the volume of water abstracted.
Unit for performance commitment:	Percentage reduction of three-year average from 2019 - 20 baseline. The volumetric levels resulting from the application of the percentage reduction are in megalitres per day (Ml/d).

Business demand reduction performance

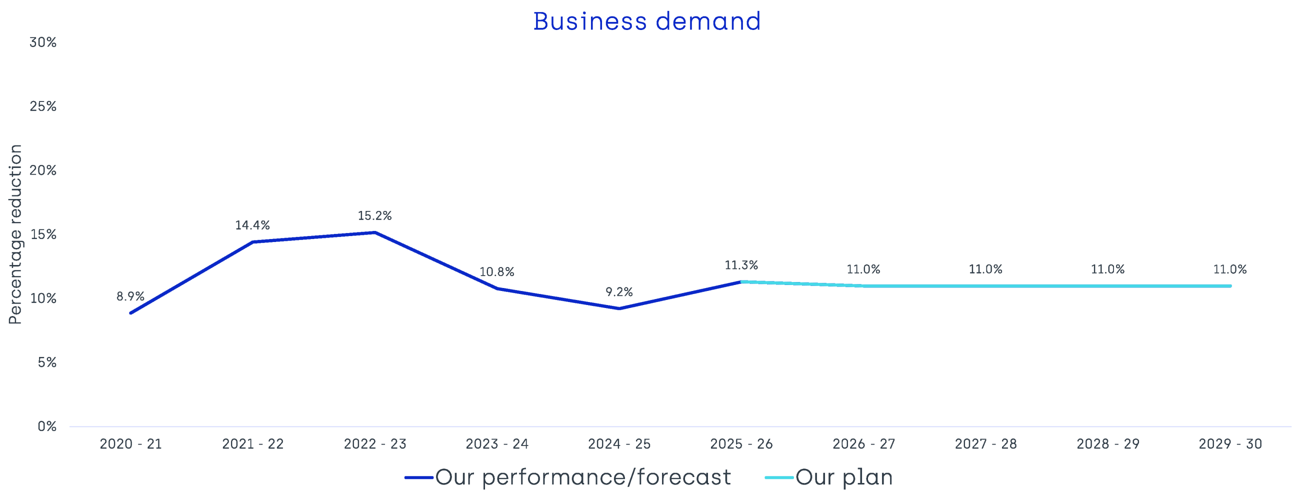


Figure 7.7 Business demand performance

Details of the activities to build up performance benefit can be found in Appendix AFW17 - Outcomes. Our performance improvement is delivered through enhancement investment.

Reflecting on our past performance

Since the start of the 2020 - 2025 period, we have undertaken several schemes to take joint responsibility alongside our customers in reducing non-household wastage. As part of our Water Smart Holiday Parks project in the Clacton region, we installed water efficiency devices at holiday park sites in summer 2021. Overall, the five sites reduced their water consumption by 42% during peak demand in summer 2021, compared with previous years. The site also received far fewer complaints from holiday makers about low water pressure. A new partnership with Whitbread group is currently underway across our area, targeting hotel chains, such as Premier Inn to expand the project, see Appendix AFW41 - Case studies pg. 2 for more detail.

In our Stort region, we also completed a New Developments project using a NAVs delivery model to support competitive markets. Over a six-month period, we developed a framework to make it easier for NAVs to work with their water company at a new development site. The partnership encompassed legal, regulatory and operational aspects of working. By using our innovative delivery model, the new framework has stimulated environmental innovation and we have significantly improved our relationship with our NAV providers, given that we now have a better understanding of these businesses and their site-specific challenges. Furthermore our NAV project was one of nine Breakthrough Challenge winners. for further detail see Appendix AFW41 - Case studies pg.1.

Selection of our plans to deliver:

- Investing in the installation of smart meters across non-household customers *(included in enhancement investment for smart metering)*
- Begin a dedicated non-household water efficiency programme to target, and work with, high using businesses so that we can help reduce water usage, such as: food processing plants, factories, hotels and holiday parks *(included in base investment)*
- Undertake water efficiency activity within schools so that we encourage reduced water wastage and educate pupils on water efficiency *(included in base investment)*
- Trial non-household tariffs to reduce demand *(included in base investment)*
- Working with our largest water users to reduce water demand, particularly through peak water demand periods *(included in base investment)*
- Stakeholder engagement, including with our retailers, to develop strategies for encouraging lower water usage *(included in base investment)*

Our ambition

The government has set a statutory target of a 9% reduction in non-household consumption by 2037 from the 2019 - 20 baseline. Our plan delivers beyond that requirement delivering a 11% reduction by 2029 - 30.

As per guidance from the final methodology, our business demand targets must meet the numbers included in our Water Resources Management Plan. Similar to PCC, we have seen a change in behaviour from non-household customers, through Covid-19, which has lead to a reduction in usage. However, with more businesses returning to normal, we expect water consumption to increase. Managing business demand has not previously been a target across the industry, so we have limited evidence to show how much influence we can have over their use. Given these challenges, our plans are ambitious so that we drive sustained reduction from pre-pandemic levels.

2024 - 2030 performance commitment levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment level	n/a	11.1%	10.9%	11.0%	11.0%	11.0%
% Improvement from 2024 - 25						n/a
Incentive rate	£0.365m per Ml/d					

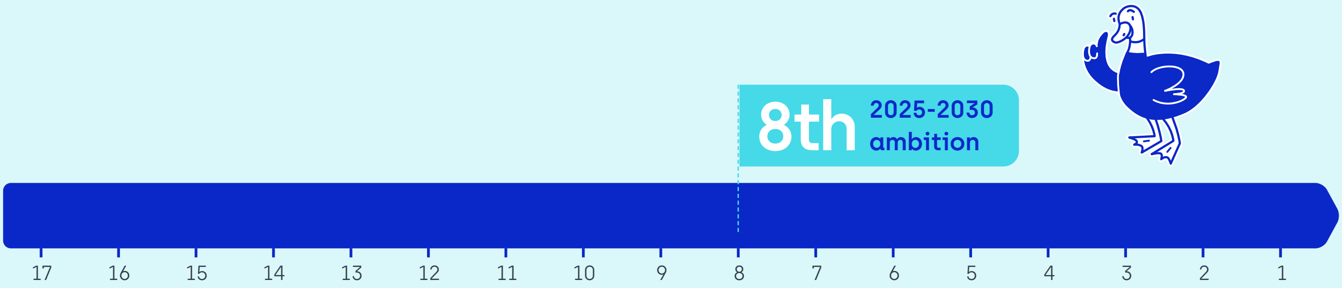
Table 7.7 Business demand PCL : baseline figure (2019 - 20) : 174.8 Ml/d

Performance Commitment:

Biodiversity

Environment

Industry position



Our long-term plans

We see biodiversity by its very nature as long-term aspiration with the benefits of work we complete now stretching into the future. We will set ourselves a 30 year horizon for the benefits of the changes we make to take full effect and continue to think long-term about the best biodiverse solutions for our land.

We are committed to restoring biodiversity while sequestering carbon. Wildflower meadows on chalk downland are home to an incredibly rich and diverse range of plant and insect life, including many species that don't grow anywhere else. The UK has lost more than 80% of our chalk grassland since the Second World War. This is mainly because of changes in land use from traditional low-level animal grazing to intensive farming methods.

Our Strategic Direction Statement (December 2021)

Incentives to deliver

Biodiversity performance is incentivised through rewards and penalties, Ofwat have yet to publish the rates. There will be a cap and collar on the biodiversity target, which will be confirmed following the publication of the incentive rate.

What our customers are telling us

Increasing biodiversity is supported by customers, but they are split on how far to go – and a significant majority do not want to go beyond current levels of investment. We do see support from customers in increasing biodiversity and improving the environment when building large infrastructure schemes

Source: AFW04

Delivering excellence

We have delivered significant biodiversity benefits at our Hilfield Park Reservoir site. Our work has included the excavation of scrapes, lagoons, ditches and ponds, with the overarching aim to boost biodiversity on site through the generation of complex habitats. We envisage this site will become the best in Hertfordshire for dragonflies and damselflies, their abundance would be reflective of wider wetland heath

PC details - Biodiversity

Data table references:	OUT1.6 / OUT2.6 / OUT3.6 / OUT4.12-4.23.
Performance commitment description:	Biodiversity is a common performance commitment, and we have adopted the standard definition. This is a new PC for PR24. This performance commitment is designed to incentivise the conservation and enhancement of biodiversity in the exercise of our functions.
Unit for performance commitment:	Biodiversity units per 100km^2 of appointed business company land.

Biodiversity performance

Biodiversity is a new PC, and a metric that we have not recorded prior to this price review process. As a result, we do not have a baseline figure for our performance. We have made assumptions based on the volume and type of land we hold, and are actively working to gain a baseline for this metric. With no baseline, we have demonstrated our performance in absolute terms of the increase in biodiversity unit per 100km^2 of company supply land. We will only start reporting benefit from 2027 - 28 onwards to allow four years between surveys which we commenced in 2023 - 24.

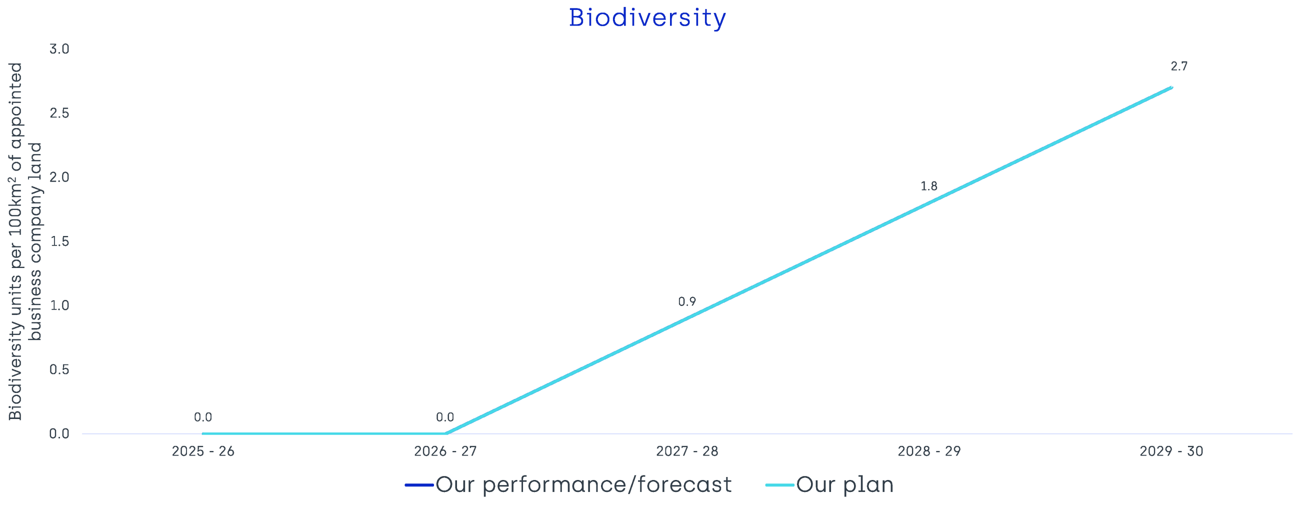


Figure 7.8 Biodiversity performance

Details of the activities to build up performance benefit can be found in Appendix AFW17 - Outcomes. Our performance improvement is delivered through enhancement investment.

Reflections on our past performance

Biodiversity is a new PC from 2025 onwards. However, to support the new measure, we are currently undertaking a biodiversity baseline exercise for all our landholdings using satellite imagery and surveys. We have been managing many of our sites for the benefit of biodiversity and have delivered biodiversity enhancement projects throughout 2020 - 2025 through the Water Industry National Environment Programme.

Examples of our enhancement projects include:

- Habitat management at Stockers Lake Nature Reserve in Rickmansworth. Stockers Lake is an important site for migratory birds, and home to the of the largest heronry in Hertfordshire. We undertake regular maintenance of the islands within the lake to provide suitable habitat for the herons, including installing nest platforms. We have also installed tern rafts and additional hedgerows to provide further habitat for water and ground nesting birds. We have worked with Hertfordshire and Middlesex Wildlife Trust to manage this site, along with Hilfield Park Reservoir and Springwell reedbed
- We have also been working with community groups across our supply area to tackle invasive species in our operational catchments beyond our landholdings. We have supported over 40 groups through

the scheme since the start of the period. We have worked with these groups to tackle invasive non-native species, such as by hand-pulling Himalayan balsam, spraying Japanese knotweed and giant hogweed, and trapping American mink

Selection of our plans to deliver

Whilst 2025 - 2030 will be the first period that we will have biodiversity as a performance commitment, we have long held our ambitions to improve the biodiversity of our sites and associated land. We will build on our existing plans through our 2025 - 2030 delivery. These plans are all *included in enhancement investment for biodiversity*:

- Renewing management plans and implementing management of SSSIs on our company sites. Investigating the possibility of species reintroduction and implementing pollinator, habitat and tree management plans
- Investing in invasive species control on the Cam and Mimran Rivers
- Working with Essex Wildlife Trust and Whitecliff Countryside Partnership to manage biodiversity strategies in our East and South East regions respectively
- Water vole habitat monitoring on drought permit rivers to assess water vole populations and the impacts on them from abstraction during drought

Our ambition

We have great ambitions to improve the biodiversity of our land and increase the wider environmental benefit that we offer. Our programme of works will be our most ambitious ever for biodiversity, and we will implement more interventions in this five year period than we have in any previous five year period. We will change how we view the value of our land as a business, ingraining biodiversity in all of our capital work and using high potential land specifically to generate an increase in our biodiversity. Our ambition extends to reintroducing species, such as beavers, by working alongside others in the county of Hertfordshire.

2024 - 2030 Performance Commitment Levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment level	n/a	n/a	n/a	0.90	1.80	2.70
% Improvement from 2024 - 25						n/a
Incentive rate	To be confirmed					

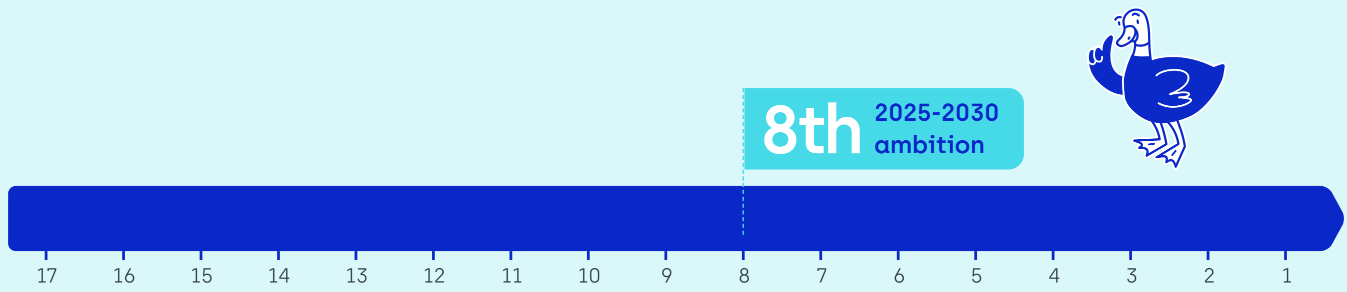
Table 7.8 PCLs biodiversity

Performance Commitment:

Operational greenhouse gas emissions - water

Environment

Industry position



Our long-term plans

We are committed to a long-term reduction in our operational greenhouse gas emissions meeting our environmental responsibilities as part of the Water Industry and the UK. We are also committed to driving down our embedded carbon emissions in the long-term ensuring sustainability is critical to our decision making.

The commitments we are setting ourselves in AMP7 are part of our journey to delivering this long-term ambition and set us on the necessary glide path to achieving our goal in a sustainable and cost effective manner.

[We will] Achieve Net Zero Carbon by 2045 [and 2030 for our operational emissions]

Our Strategic Direction Statement (December 2021)

Incentives to deliver

Operational greenhouse gas emissions - water performance is incentivised through rewards and penalties, Ofwat have yet to publish the rates. There will be a cap and collar on the Operational GHG emissions target, which will be confirmed following the publication of the incentive rate.

What our customers are telling us

The link between water and net zero is not clear or direct in our customers' minds. Concern over carbon emissions is however increasing, although customers do balance it with other environmental drivers and there is a price limit for some. Carbon reduction is ranked higher by non-household customers than household customers, probably due to needing to meet net zero targets in their own operations

Source: AFW04

Delivering excellence

We have developed new tools for monitoring and reducing our scope 2 emissions. These include the Energy and Carbon Performance Monitor where we monitor the energy consumed per unit flow for our sites, POET (Pump Optimisation and Efficiency Tool) where we use live telemetry data to plot pump efficiency and system curves and a mobile app for our on site teams to calculate live pump efficiencies and understand the payback period of a replacement before sending the data back to our engineering teams to review. This range of options means we have excellent insight into our scope 2 emissions and can react quickly to improve performance through operational or capital solutions

PC details - operational greenhouse gas emissions (water)

Data table references:	OUT1.7 / OUT2.7 / OUT3.7 / OUT4.24-4.29.
Performance commitments description:	Operational greenhouse gas emissions is a common performance commitment, and we have adopted the standard definition. This is a new PC for PR24. This performance commitment incentivises the reduction of greenhouse gas emissions arising from our operational activities.
Unit for performance commitment:	Tonnes of CO_2e per Ml .

Operational greenhouse gas emissions performance

The commitments we are setting in 2020 - 2025 are part of our journey to delivering our long-term ambition, setting us on the necessary glide path to achieving our goal in a sustainable and cost-effective manner.

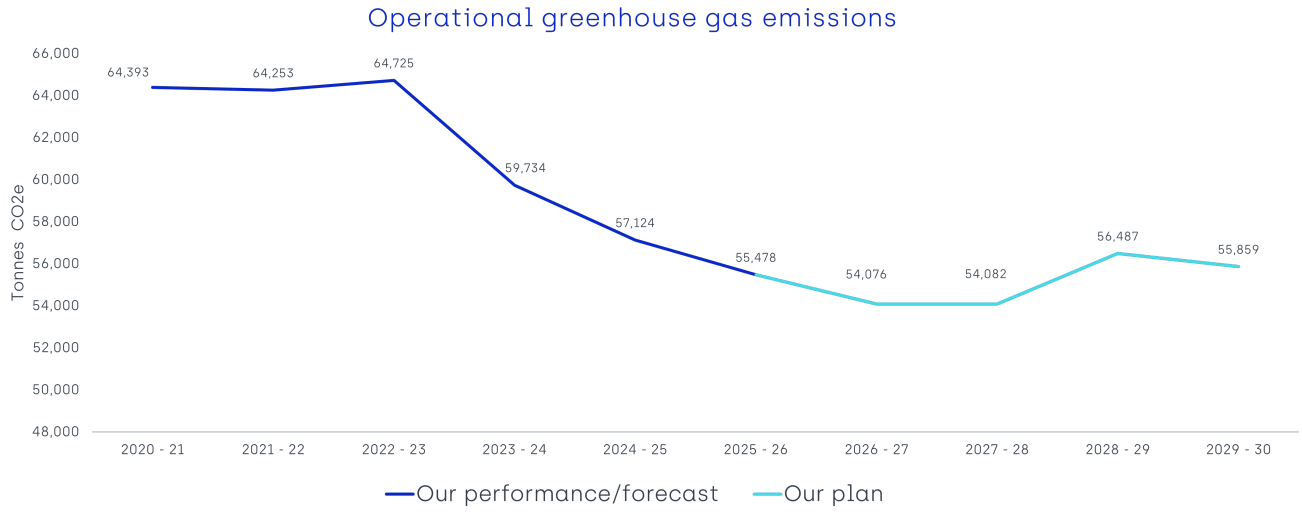


Figure 7.9 Operational greenhouse gas emissions performance

Details of the activities to build up performance benefit can be found in Appendix AFW17 - Outcomes. Our performance improvement is split between base and enhancement investment:

- 64% from base (15,813 Tonnes)
- 36% from enhancement (9,085 Tonnes)

Reflecting on our past performance

In recent years, understanding and reporting greenhouse gas (GHG) emissions has improved, although significant challenges remain in reporting some areas of emissions. With improving methods and increasing breadth of reporting, drawing direct comparisons to past performance is challenging. During 2020 - 2025, we consistently assessed our performance against our WaterUK target, which is to become Net Zero by 2030 for our operational emissions. Since the beginning of 2020, we have recorded a 67% reduction in operational GHG emissions, driven largely by our commitment to purchase electricity from renewable sources.

In 2021, we commissioned our first pilot solar sites, with plans to deliver further sites over the course of this period. Our solar installations at Chertsey and Walton performed well during 2022 - 23, generating 1,051,721 kWh and 589,004 kWh of energy respectively. The electricity generated from solar equated to 0.72% of our total electricity usage during 2022 - 23, reducing our potential carbon emissions by 317 tCO_2e. Our move to renewable energy sources has been complimented by our energy efficiency and optimisation programme. A total of 1,964,000 kWh were saved as a result of projects delivered in 2022 - 23, equating to around 380 tCO_2e.

Selection of our plans to deliver:

We actively manage our power usage using the Energy Hierarchy, by first looking to reduce our consumption through optimisation and efficiency before looking to renewables:

- Our energy efficiency ambitions build on our current savings programme (over 80 projects) and includes the replacement of pumps and motors, making control and system change, and the reduction of pressure losses. We have developed new and innovative data insight for our energy use including daily site and company level energy usage and 15 minute pump level efficiency data. These tools enable us to quickly identify underperforming systems and make proactive steps to improve efficiency or to initiate asset replacement projects. We will also focus on energy use of our treatment processes and look to exploit low cost optimisation opportunities to reduce energy consumption *(included in base investment)*
- Making our largest investment in the electrification of our fleet of cars, vans and plant *(included in base investment)*
- Using low carbon fuels for our standby power generators and looking to innovate through investing in new technology to give reliable power with minimal carbon impact *(included in base investment)*
- Working with our supply chain to develop low carbon solutions *(included in base investment)*
- Investing in nature based solutions to inset our carbon footprint *(included in enhancement investment - biodiversity)*

Our ambition

We have a long-term commitment to reduce our carbon footprint, we have developed ambitious plans to deliver a step change in our performance. Our strategy for achieving net zero is to prioritise emissions reduction through efficiencies and optimisation. This is supported by investment in low carbon fuel alternatives, such as on site solar generation, and a transition to electric vehicles and use of biodiesels. We will take significant steps in the reduction of Scope 1 emissions by progressing our move to a fleet of electric vehicles.

Our energy efficiency work will deliver rapid capital investment so that we see benefits delivered early in the 2025 - 2030 period, with our largest single year of investment in energy planned for 2025 - 26, with further optimisation activities to follow. We plan to manage residual emissions by Carbon insetting and by maximising the potential of the investment we already make in environmental improvement and catchment management projects.

2024 - 2030 performance commitment levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment level	n/a	55,477	54,076	54,082	56,486	55,859
% Improvement from 2024 - 25						n/a
Incentive rate	To be confirmed					

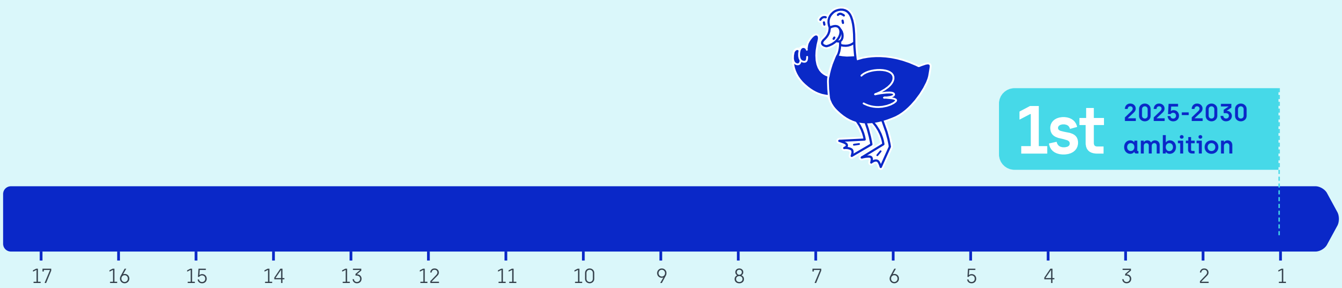
Table 7.9 PCLs operational greenhouse gas emissions

Performance Commitment:

Discharge permit compliance

Environment

Industry position



Our long-term plans

We will see discharge permit compliance as an essential activity for ourselves in both the short and long-term. We will continue to focus on compliance and ensure we understand the future needs of our assets through investment projects and ongoing operations and maintenance.

Incentives to deliver

Discharge permit compliance performance is incentivised through penalty only. If we underperform we will give back £0.17m per % non compliance to customers. There is no collar on this target.

What our customers are telling us

Industry research shows there is relatively little trust in water companies and negative media has had further impact on people's views. Our customers expect us to be a leader on the environment and want us to do more to protect and restore. They want us to go beyond statutory minimums (though how far is often limited by personal circumstance)

Source: AFW04

Delivering excellence

We have taken steps to reduce our water discharges from our sites. In 2021 we formally requested the revocation of permits at 26% of the sites which previously held discharge permits

PC details - discharge permit compliance

Data table references:	OUT1.14 / OUT2.14 / OUT3.14 / OUT4.86-4.89.
Performance commitment description:	Discharge permit compliance is a common performance commitment, and we have adopted the standard definition. This is a new performance commitment for water only companies, and is derived from a similar metric used in PR19 for Water and Sewage Companies. This PC further incentivises the need to fully meet requirements set within discharge permits. Meeting our commitments for discharge permits continues our ambition to protect and enhance the local environment.
Unit for performance commitment:	Percentage compliance.

Discharge permit compliance performance

We are planning to maintain 100% compliance with our discharge permits in 2025 - 2030, demonstrating our ambition to achieve a perfect score for this PC.

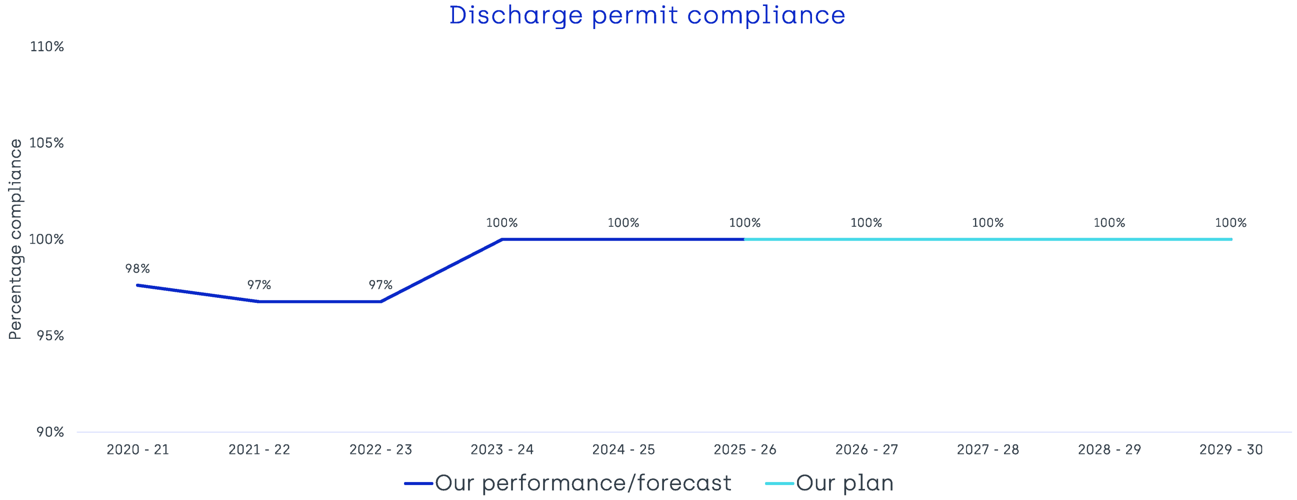


Figure 7.10 Discharge permit performance

Details of the activities to build up performance benefit can be found in Appendix AFW17 - Outcomes. Our performance is delivered through base investment.

Reflecting on our past performance

The 2025 - 2030 period will be the first time that discharge compliance is reported to the regulator; however, the Environment Agency has tracked this metric in the past and reports back to companies annually on performance against their own sampling regime.

Selection of our plans to deliver:

- Our primary focus will be on continually improving our teams' competency so that they understand the importance of compliance with our permits. We will embed into our competent operator programme to ensure this is formally trained out to all relevant team members
- The PC for discharge permit compliance will not change our zero tolerance approach to this activity
- Maintain focus on our legal and moral responsibilities for discharge permit compliance and continue our excellent record
- Fully investigate any near misses, and ensure that lessons are learnt and embedded into our future operations
- Ensure that we understand the terms of our permits and that we follow them

Outcomes

All expenditure will come from base costs.

Unpermitted discharges to the environment cause reputational harm to the entire water sector, and when one company gets it wrong it impacts all. We take this duty seriously and will continue to focus on reducing the risk of any occurrences.We also understand that it is important to our consumers that we comply with our discharge consents and report these transparently. We are committed to being open and transparent with our data, including our reporting of discharge permit compliance.

Our ambition

We have set ourselves the highest standards for our environmental performance by committing to achieving 100% compliance for our discharge permits. We are setting up processes to report this metric internally, so that we can understand our performance against our own sampling and identify where improvements can be made.

2024 - 2030 performance commitment levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment level	n/a	100%	100%	100%	100%	100%
% Improvement from 2024 - 25						n/a
Incentive rate	£0.168m per %					

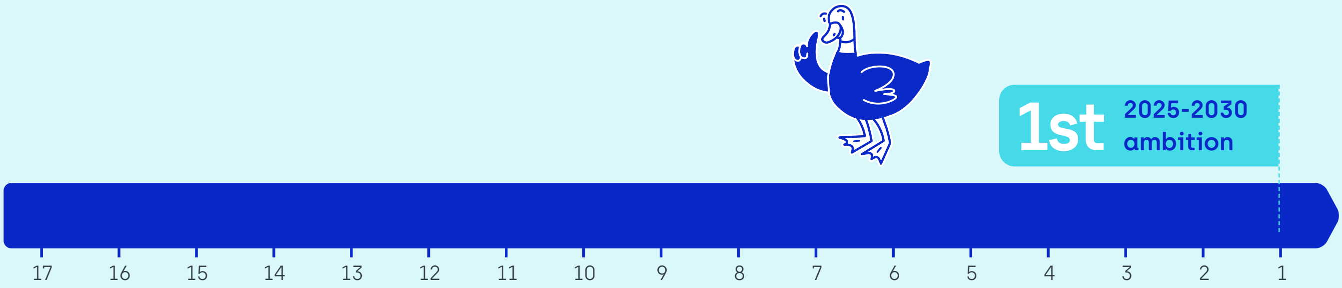
Table 7.10 PCLs discharge permit compliance

Performance Commitment:

Serious pollution incidents

Environment

Industry position



Our long-term plans

Serious pollution incidents are unacceptable to our business and we plan to avoid any occurrences in the future. Long term we will focus on reducing all pollution events and continue to reduce the risk of serious events occurring and mitigating any impact if they were to occur.

Incentives to deliver

Serious pollution incidents performance is incentivised through penalty only. If we underperform we will give back £1.36m per incident to customers. There is no collar on this target.

What our customers are telling us

Our customers want to see us working with other companies to keep waterways clear, managing flood risk and pollution, as well as working with government on regulations

Source: AFW04

Delivering excellence

We have learnt lessons from our PC performance in 2020 - 2025 and found a programme board approach has driven improvements in our control and delivery of improvement. We are using our success with this approach to create a new programme board for pollution incidents led by our Senior Leadership Team driving our performance

PC details - serious pollution incidents

Data table references:	OUT1.13 / OUT2.13 / OUT3.13 / OUT4.83-4.85.
Performance commitment description:	Serious pollution incidents is a common performance commitment, and we have adopted the standard definition. This is a new PC for PR24. This PC further incentivises us to continue to avoid serious pollution incidents.
Unit for performance commitment:	Number of serious pollution incidents (Category 1 and 2).

Serious pollution incidents performance

We are committed to ensuring that there are no serious pollution incidents in 2025 - 2030. We have a zero tolerance approach to this activity.

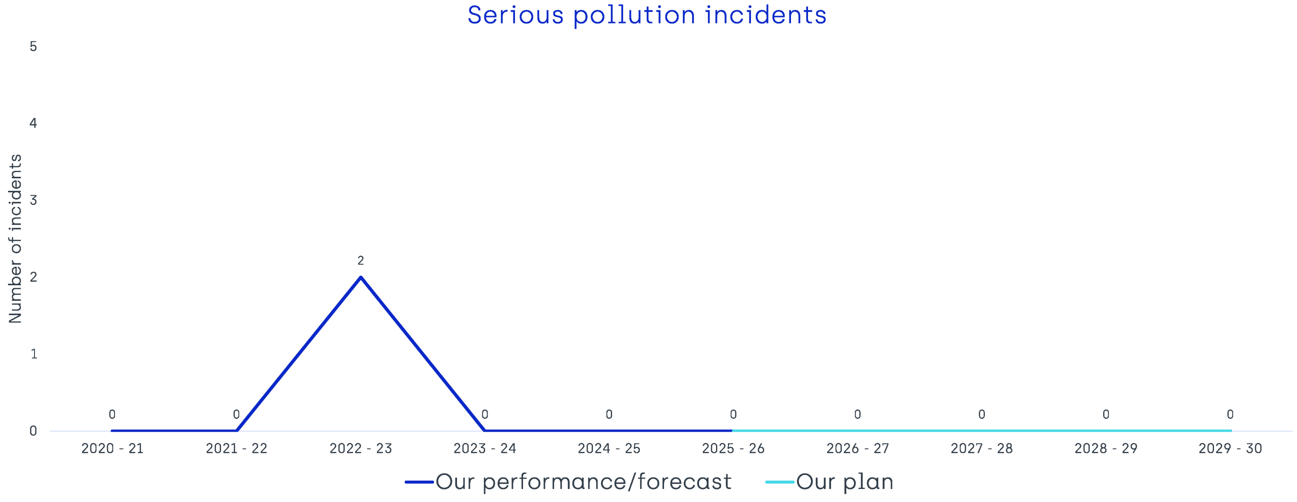


Figure 7.11 Serious pollution performance

Details of the activities to build up performance benefit can be found in Appendix AFW17 - Outcomes. Our performance is delivered through base investment.

Reflecting on our past performance

We have been self-reporting pollution incidents to the Environment Agency for a number of years, and we are proud of our record of openness and transparency in this area.

We know that pollution and wider environmental concerns are of the utmost importance to our customers. The introduction of this performance commitment will hold us to account, so that we improve the quality of the environment by reducing the number of serious pollution incidents that occur.

In 2022 - 23, we reported our first two serious incidents since 2016 - 17. Both of these Category 2 incidents were the result of burst water mains which led to polluted water getting into the watercourse. The first incident in Borehamwood, demonstrated that we must improve our response time to isolate bursts, so that we can lessen the impact and reduce the severity of an incident. Following the second incident in Pinner, which was a particularly complex repair, we updated the PEAR (People, Environment, Asset, Reputation) risk assessment and enhanced our procedures to clarify the priority order during emergency response incidents. In particular, the second incident highlighted the challenges of serious pollution events, where we must quickly and efficiently determine where is the greatest risk of harm. In both cases, the incidents were self-registered with the Environment Agency.

Following these incidents, we have introduced new measures for reviewing environmental impacts when we respond to network issues. In addition, we have updated our procedure on notifying the EA of events and updated our Environmental handbook.

Selection of our plans to deliver

Our recent serious pollution incidents have been caused by burst mains near water courses. Whilst we focus on reducing mains bursts, we will have an inevitable level of risk at all times due to the nature of our business. Therefore, we will focus on reducing the severity of incidents when they do occur, upskilling our teams to recognise risks on site and mobilising mitigation measures to reduce the environmental impact.

- Our primary focus will be on continually improving our teams' competency so that they understand the importance of pollution incidents and how to manage any potential events. We will embed into our Competent Operator programme to ensure this is formally trained out to all relevant team members
- Develop measures to reduce the pollution severity of burst mains, including a review of our stores holding and our approach to identifying environmental impact of an incident
- Maintain focus on our legal and moral responsibilities for serious pollution incidents, and continue our excellent record
- Continue to deliver capital and operational work in line with industry standard
- Fully investigate any near misses, and ensure that lessons are learnt and embedded into our future operation

All expenditure will come from base costs.

As with discharge compliance, serious pollution incidents cause reputational harm to the entire water sector, and any incidents can affect the industry as a whole. We take this duty seriously and will continue to focus on reducing the risk of any occurrences and limiting the severity of any events. We understand that it is important to our consumers that we avoid pollution incidents and report these transparently. We are committed to being open and transparent with our data, including our reporting of serious pollution incidents. We are recognised by the Environment Agency for our high level of self-reporting of events, we will continue to be open and proactively report any incidents.

Our ambition

We will have zero tolerance of serious pollution incidents, and have therefore set our target level at zero incidents for the 2025 - 2030 period. To achieve this, we will focus more on emergency response training so that we ensure that the PEAR risk assessment is thoroughly understood by emergency controllers (Silver). As a result, the hierarchy of harm will be properly understood and events will be addressed appropriately, meaning the risk of environmental impact is minimised or eliminated. Further training and competence assessments will also ensure that our site teams have a greater awareness of the associated environmental impacts relating to the decisions that are made on-site during a response.

2024 - 2030 performance commitment levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment level	n/a	0	0	0	0	0
% Improvement from 2024 - 25						n/a
Incentive rate	£1.36m per incident					

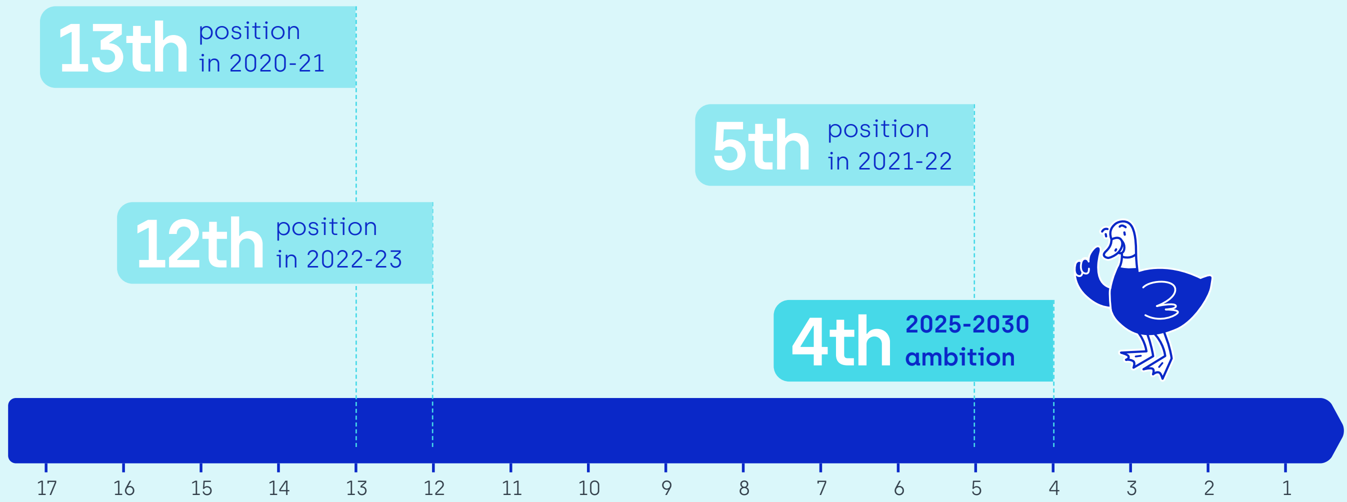
Table 7.11 PCLs serious pollution incidents

Performance Commitment:

Mains repairs

Resilience

Industry position



Our long-term plans

We have an asset base that is aging and will need investment in the future so that we can continue to provide great service to our customers. We will be investing in pumps, mains upgrades, new mains and investment in service reservoirs.

Our Strategic Direction Statement (December 2021)

Incentives to deliver

Mains repairs performance is incentivised through rewards and penalties. If we underperform we will give back £0.15m per repair per 1,000km to customers and if we outperform we will receive the same rate as reward. There is both a cap and a collar for mains repairs which are set at the target -12.6 (cap) and +25.3 (collar) repairs per 1,000km.

What our customers are telling us

Providing a safe, secure supply of water is a top priority across all our customer segments and particularly noted by non-household customers. Bursts are one of the areas our customers do identify when they think about resilience in the long term

Source: AFW04

Delivering excellence

We are starting trials with smart actuation of valve operations to avoid causing pressure issues. The new tool will inform operatives how to safely open and close valves, including how fast to operate the valve, how many turns are required and capturing asset information. This tool will help reduce transients when completing valve operations and therefore reducing the risk of mains bursts

PC details - mains repairs

Data table references:	OUT1.18 / OUT2.18 / OUT3.18 / OUT4.90-4.96.
Performance commitment description:	Mains repairs is a common performance commitment, and we have adopted the standard definition. This is a continuation of the PR19 PC. This performance commitment incentivises the reduction in mains bursts.
Unit for performance commitment:	Mains repairs per 1,000km of mains.

Mains repairs performance

We will continue our improving performance for mains repairs. We understand the link between extreme weather and our performance against this PC, and we will continue to invest in limiting the impact as much as possible. We have made realistic assumptions, based on weather patterns, in our PCL plans. We recognise that we need to renew our network, and we have a strong track record of doing so historically. However, due the scale of our network, we also recognise that mains replacement has a limited effect on in period reporting for mains repairs. We have optimised our mains replacement plans over a 25-year period, and have included the optimally modelled replacement lengths in our plan.

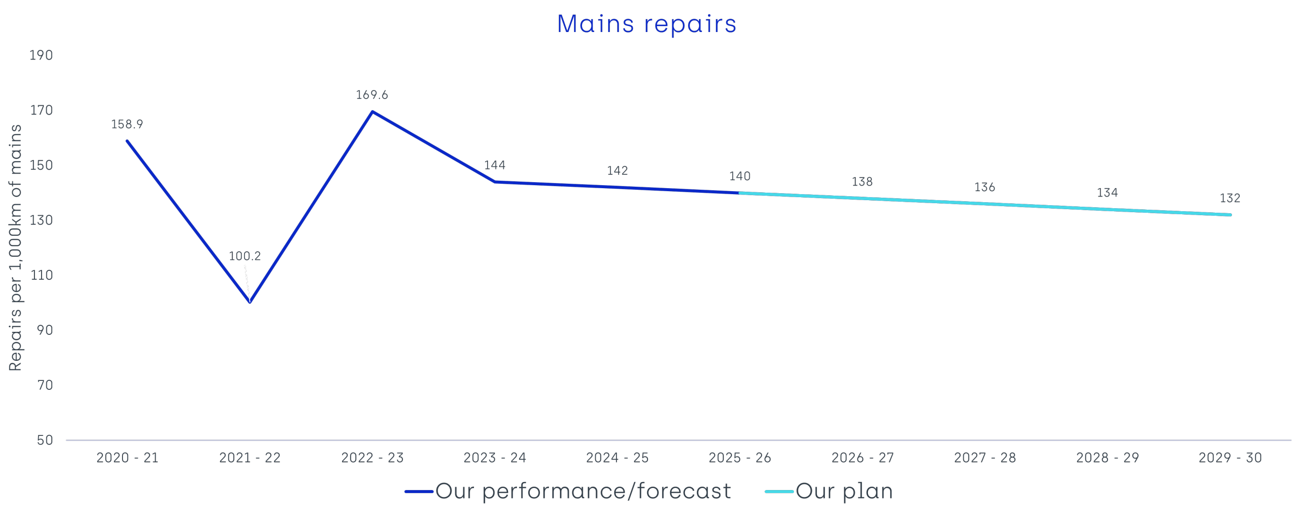


Figure 7.12 Mains repairs performance.

Details of the activities to build up performance benefit can be found in Appendix AFW17 - Outcomes. Our performance improvement is split between base and enhancement investment:

- 63% from enhancement (6.3 repairs per 1,000km of mains)
- 37% from base (3.7 repairs per 1,000km of mains)

Reflecting on our past performance

Mains repairs have been reported for a considerable number of years. Normalising for weather, we have reduced the number of mains repairs over time by renewing mains that have proved most prone to bursting, reducing high night-time pressures and reducing the volatility and occurrences of surges within the network. We have continued this focus throughout the 2020 - 25 period.

We must look at the reduction of mains repairs required in conjunction with the significant reduction we need to achieve in the volume of water lost through leaks. Stepping up leakage detection has consequential effects on this metric.

Our 2020 - 21 performance failure was the result of two prolonged periods of sub-zero temperatures in the months of January and February, which caused a significant increase in the number of mains repairs. Repair volumes in the month of February were approaching those seen during the ‘Beast From the East’ in 2018.

In 2021 - 22, we delivered our best ever performance in this metric, aided by benign weather conditions in both summer and winter. While significant work has been conducted in relation to network calming and reducing network volatility, weather effects still play a factor in overall performance. Our performance for 2022 - 23 was significantly affected by weather conditions, given the prolonged hot summer and extreme winter freeze-thaw.

Year	2020 - 21	2021 - 22	2022 - 23	2023 - 24	2024 - 25
PCL Met/Forecast	No	Yes	No	Yes	Yes

Table 7.12 Mains repairs: reflecting on past performance

Selection of our plans to deliver:

- Investing in our network calming programme to improve control of our pumps and valves *(included in enhancement and base investment for network calming)*
- Understanding the root cause of every burst main, and implementing actions to avoid recurrence *(included in base investment)*
- Investing in technology and software to deliver a calmer network and asset optimisation *(included in base investment)*
- Working with our teams to improve technical and operational competency *(included in base investment)*
- Increasing the proactive maintenance of our below ground assets *(included in base investment)*
- Minimising the effect on weather events on mains bursts through investment in smart control and monitoring *(included in base investment)*

Our ambition

Though we face challenges with reducing mains repairs, we have set ourselves an ambitious target to continually improve our performance. Given the external factors, such as the weather, that contribute to year-on-year variance for this measure, we have challenged ourselves to overcome these factors and drive down the number of mains repairs. We are investing in new technology along with our largest-ever programme of network calming activities so that we can improve our performance and ensure that we achieve consistent results.

2024 - 2030 performance commitment levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment levels	142	140	138	136	134	132
% Improvement from 2024 - 25						7%
Incentive rate	£0.148m per mains repair per 1000km					

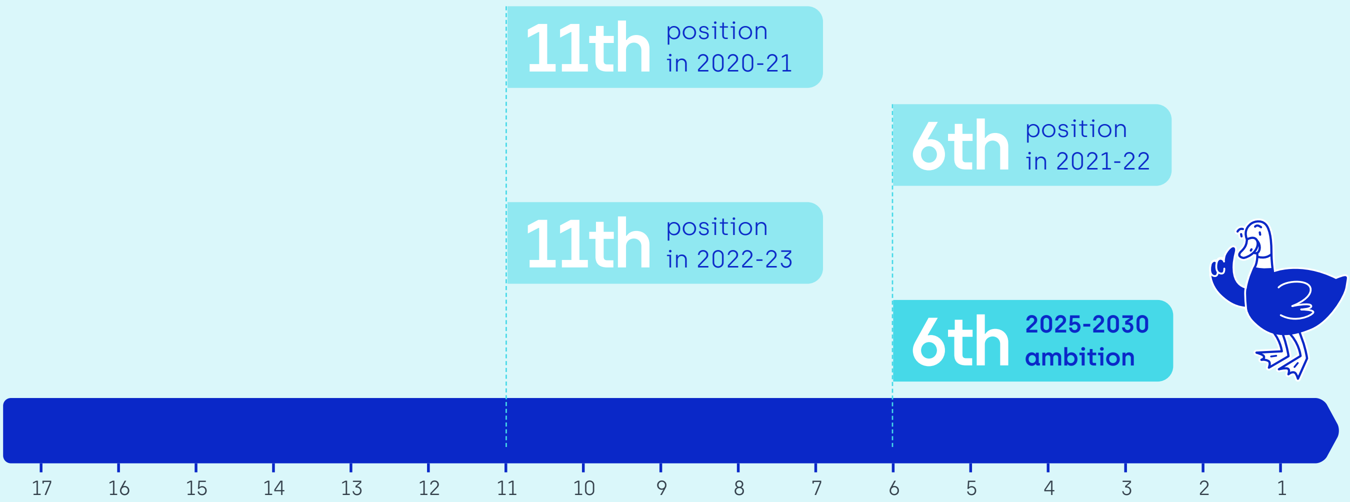
Table 7.13 PCLs Mains Repairs

Performance Commitment:

Unplanned outage

Resilience

Industry position



Our long-term plans

We will invest with our stakeholders to create a more resilient community able to cope with and respond to an increasingly uncertain future. Ensuring a resilient supply of water for our customers.

Incentives to deliver

Unplanned outage performance is incentivised through rewards and penalties. If we underperform we will give back £1.63m per % to customers and if we outperform we will receive the same rate as reward. There is both a cap and a collar for unplanned outage which are set at the target -1.15% (cap) and +2.3% (collar).

What our customers are telling us

Providing a safe, secure supply of water is a top priority across all our customer segments and particularly noted by non-household customers. Our customers expect us to plan and maintain our equipment to ensure we minimise any disruptions

Source: AFW04

Delivering excellence

We are driving improvements in our proactive planned preventative maintenance to improve overall site reliability. We have completed a full review of maintenance activities and frequencies to ensure we are prioritising activities and maximising the value from our interventions and improving reliability of our assets. Alongside this we are developing a culture of compliance ensuring we have accountability for maintenance delivery at every level

PC details - unplanned outage

Data table references:	OUT1.19 / OUT2.19 / OUT3.19 / OUT4.97-4.99.
Performance commitment description:	Unplanned outage is a common performance commitment, and we have adopted the standard definition. This is a continuation of the PR19 PC, however the removal of exclusions from the PR19 definition has a material impact and has created a discontinuity of reporting between periods. This measure is a means of assessing asset health for water abstraction and water treatment activities. It is defined as the annualised unavailable flow, based on the peak week production capacity (or PWPC), for each company. This performance commitment incentivises improvement in the reliability of our above ground assets.
Unit for performance commitment:	Percentage of peak week production capacity.

Unplanned outage performance

We recognise the long-term nature of asset health improvements, and have used our 25-year long-term plan to inform our five-year plan from 2025 - 2030. Due to the scale of our asset base, we will focus our performance improvement to deliver the optimal long-term customer outcomes. This approach has underpinned our unplanned outage plans for 2025 -2030.

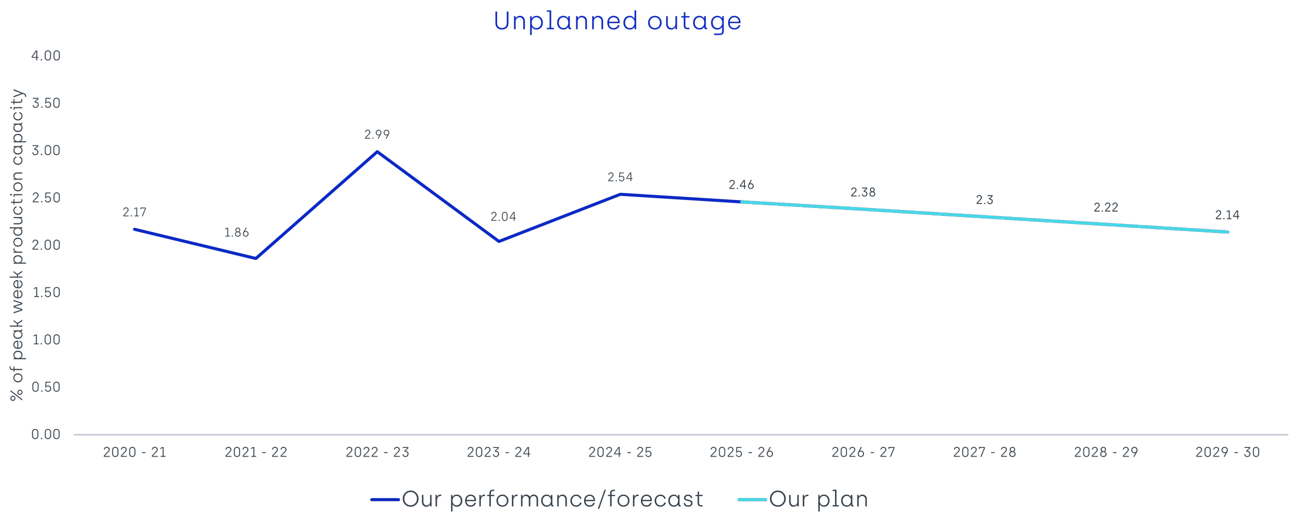


Figure 7.13 Unplanned outage performance

Details of the activities to build up performance benefit can be found in Appendix AFW17 - Outcomes. Our performance improvement is delivered through base investment.

Reflecting on our past performance

We have achieved our unplanned outage target for the first three years of the period, and are forecast to achieve it for the remaining two years.

Outage measures are a measurement of asset health, and we have spent considerable effort in improving the reporting and capture of this data. While we use unplanned outage information to inform our capital investment and maintenance, it is equally useful to us to better understand how our sites are maintained and operated on a day-to-day basis. Improving the consistency of outage reporting allows us to more accurately model supply and demand scenarios, keeping disruption to our customers to a minimum. The introduction of this metric in 2020 - 2025 raised the profile of this measure and, through improved understanding of its end-to-end requirements, we have seen greater understanding of the cause and effect of everyday actions and decisions.

Industry wide, our unplanned outage performance was better than average in 2022 - 23; this improved our position from 12th in 2019 - 20 to 6th in 2021 - 22. With continued improvements planned, we will better understand the cause and effect of outages, and the ability to plan to mitigate against their impacts in the future. As such, we believe that our performance will increase against other companies in the industry.

Selection of our plans to deliver

- Focussing on restoring assets to available status within 24 hours of failure (where there is not a longer term issue)
- Continuing our planned, preventative maintenance programmes so that we optimise time working on assets, maintaining serviceability and increasing resilience
- Investing in our assets to facilitate remote condition assessment and reset
- Investing in critical spares to allow fast resolution
- Putting a mature testing schedule in place to deliver improvement in peak week production capacity
- Investing in our people so that we have a multiskilled workforce able to respond to failure. This will include the development of apprenticeships, so that skills from an experienced workforce are shared with the next generation

All performance will be delivered through our base investment plans.

Our ambition

We are aiming to reduce unplanned outage at all of our sites, and have set ourselves challenging targets to achieve this. With the changes to the PC definition, we will experience upward pressure on this metric, particularly from the management of raw water quality. We will continue to stretch ourselves so that we improve performance from our baseline levels and progress towards upper quartile performance in the 2025 - 2030 period.

2024 - 2030 performance commitment levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment level	2.54	2.46	2.38	2.30	2.22	2.14
% Improvement from 2024 - 25						16%
Incentive rate	£1.629m per %					

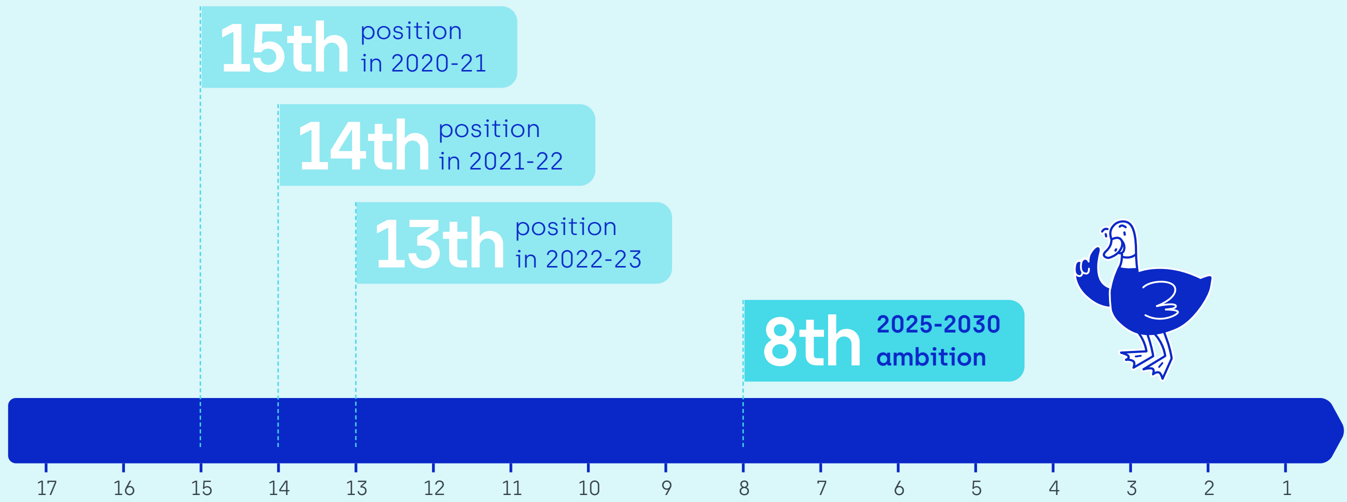
Table 7.14 PCLs unplanned outage

Performance Commitment:

C-MeX

Customer

Industry position



Our long-term plans

We understand that we need to meet and exceed customers' expectations in the long-term. We will focus on getting the basics right every time, resolving customer issues proactively and continually improving the service we offer. With our smart metering package, we will look to give customers more insight into their water usage and support our push to reduce usage.

Incentives to deliver

C-MeX is incentivised on an industry comparative basis. This mechanism is currently under consultation.

What our customers are telling us

Customer satisfaction is stable but low and this seems to be due to a lack of connection with the company. Customers tell us that they don't want to talk to us at all, if possible. For many that means being able to handle things through an app. But if something does happen, they want us to do the reaching out, notifying them about alerts in their areas, monitoring water use patterns for internal leaks and actively staying connected regarding any works underway

Source: AFW04

Delivering excellence

Our Award-Winning Approach

Winners at Engage 2021 Awards:
Best Operational Excellence Transformation

Finalists at Engage 2022 Awards:
Best Customer Service Team

PC details - C-MeX

Data table references:	n/a.
Performance commitment description:	C-MeX is a common performance commitment, and we have adopted the standard definition. This is a continuation of the PR19 PC. C-MeX incentivises us to improve the experience for our residential customers. With this, we should increase our residential customer satisfaction, by improving both our customer's overall experience and our handling of customer contacts. The definition is currently under review.
Unit for performance commitment:	Score out of 100.

Reflecting on our past performance

We aspire to become one of the leading water companies in the service provided to our customers. We know that we have a long way to go to achieve this, and we are progressing a number of initiatives which aim to close the gap, provide us the platform for stronger delivery and deepen our connections with our customer base.

Through research, focus groups, network events and engaging with customers, we know that our customers want to be kept informed, and for us to deliver against our commitments and resolve any challenges they experience. Alongside this, they would like us to understand their household and how we can provide help and support when needed.

We have enhanced our training in a number of areas and added specialist teams who can support specific technical cases. In addition, our review of our 7-core customer journeys, the processes which apply to these and the way our systems operate to support stronger outcomes are all being enhanced. These are the areas which require focus in order we can address the performance seen. In 2021 - 22, our overall score moved us from 15th to 14th position, and we remain in 14th place for 2022 - 23. This is clearly a focus area for us as a business during 2025 - 2030.

Selection of our plans to deliver

We recognise that our C-MeX performance has been consistently below our desired standard, and we are committed to fundamentally rethinking the way we deliver services and the depth of our interactions held with our customers. Our attempts to incrementally improve processes are yet to achieve the results that we hoped for and emphasise that we must completely change our thinking and actions in order for us to give the best possible customer service.

We are in the process of a wholesale transformation programme for our customer teams, including fundamental changes to our business model as below:

- Changing our senior leadership team responsible for Customer Experience with the appointment of a new Director of Customer Experience
- Reorganising our Production and Network operational teams into a single Customer Delivery Directorate, with full source-to-tap accountability in a single function
- Introduction of a new Director of Technology and Transformation to drive digitisation and innovation into our customer service

We are conscious that our processes do not deliver against expectation and make it both difficult for customers and colleagues to navigate. We are completing a root and branch review of our key customer journeys including process, workflow build and the elements which hold key interactions all being refreshed. Using different technology, models and approaches seen from best in class from other sectors to do things differently going forward. Our aim is delivery of seamless experience at every interaction.

We are told by our customers that the speed of resolution is critical and that this an area that we need to improve in. We will commit to reducing the resolution time for customers, particularly in areas such as leakage, so that we meet and, where possible, exceed customer expectations. We are investing in the training and competency of not just our internal colleagues, but also our supplier partnerships so we can deliver a consistent service for all customers. Our investment in new workforce planning tools will maximise the productivity of our community-based teams. With the changes that we are making, we will set ourselves stretching resolution targets, including an internal commitment to complete visible leak repairs within five days.

We also recognise that our customers value accurate and timely communication, so that they are kept informed of progress. We will set customers' expectations for resolution and keep them informed of progress throughout. We want our customers to know that when we make a promise, we will keep it. In addition, we have built a suite of customer personas, which help us adapt our communication material to the specific customer and match their needs and preferences where possible.

We know that improvements to our systems are needed so that it is easier for customers to interact with us. We will be investing to develop a new mobile application and enhancing our online website to provide the customer with choice for which channel they use (telephone, web or mobile). Delivery of these enhancements will work collaboratively alongside delivery of our smart metering programme so customers can view and see water usage, bill value and multiple other services or updates when they need.

Whilst C-MeX gives an indication of customer service and experience, we have set ourselves further internal targets to drive performance, as below:

- 80% of customer interactions being self service
- 85% of customers interactions being resolved first time
- 90% of calls received to be answered in 60 seconds
- 80% of written complaints will be responded to within 3 working days

We have had success in building our brand and improving the customer experience element of our C-MeX score. We will continue to build our brand, including our award winning Save Our Streams campaign (see Appendix AFW41 - Case studies pg.1), with our customers, improving our standing in the community and our customers awareness of us.

Our ambition

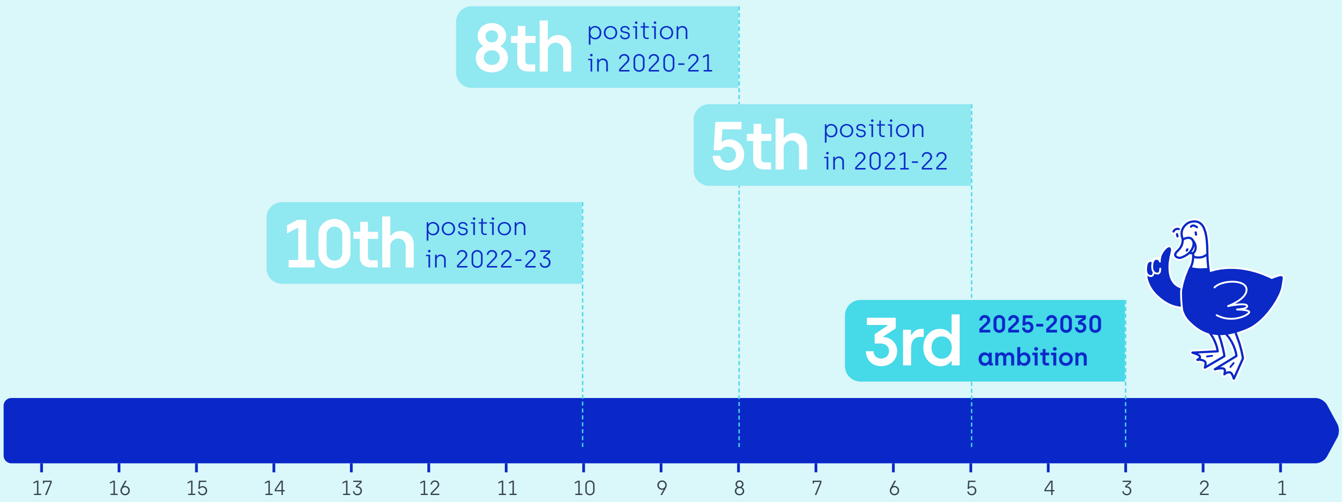
We need strong focus from across the business and support of all our supplier partners to ensure we drive improvement in this area. To help understand on a day-to-day basis customer sentiment (along with customer commentary) our leading-edge real-time customer satisfaction monitoring and analysis system, Qualtrics, allows us to pinpoint areas of concern for customers so that we can resolve and respond to issues quickly, and therefore improve our overall satisfaction scores. More detail can be found in Appendix AFW41 - Case studies pg. 6.

Performance Commitment:

Water supply interruptions

Customer

Industry position



Our long-term plans

We will continue to reduce disruptions to the water supply for our customers. We have seen the impact of single events, such as extreme weather, on our performance. In the long-term, we expect these occurrences to become more frequent and will focus on how to mitigate their effect on customers' supplies.

Incentives to deliver

Water supply interruptions performance is incentivised through rewards and penalties. If we underperform we will give back £0.92m per minute to customers and if we outperform we will receive the same rate as reward. There is a collar for water supply interruptions which is set at the target + 4 minutes and 54 seconds.

What our customers are telling us

Providing a safe, secure supply of water is a top priority across all our customer segments and particularly noted by non-household customers. If interruptions do occur our customers expect supplies to be returned quickly and effectively with clear, active communication to keep them informed

Source: AFW04

Delivering excellence

Delivering improvements in 2020-2025
We have transformed our end-to-end customer and colleague experiences making sure we get full benefits from mobility and automation in the field. Our self-developed platform Situational Awareness has already delivered significant response time reduction for supply interruptions.

It brings together our network data into one screen for our control room and field teams alike. And we will continue to embrace new technologies as they become available

PC details - water supply interruptions

Data table references:	OUT1.1 / OUT2.1 / OUT3.1 / OUT4.1-4.6.
Performance commitment description:	Water supply interruptions is a common performance commitment, and we have adopted the standard definition. This is a continuation of the PR19 PC. Water supply interruptions are referred to in terms of the average number of minutes lost per customer for the whole customer base (for interruptions that lasted three hours or more).
Unit for performance commitment:	Hours:Minutes:Seconds per property per year.

Water supply interruptions performance

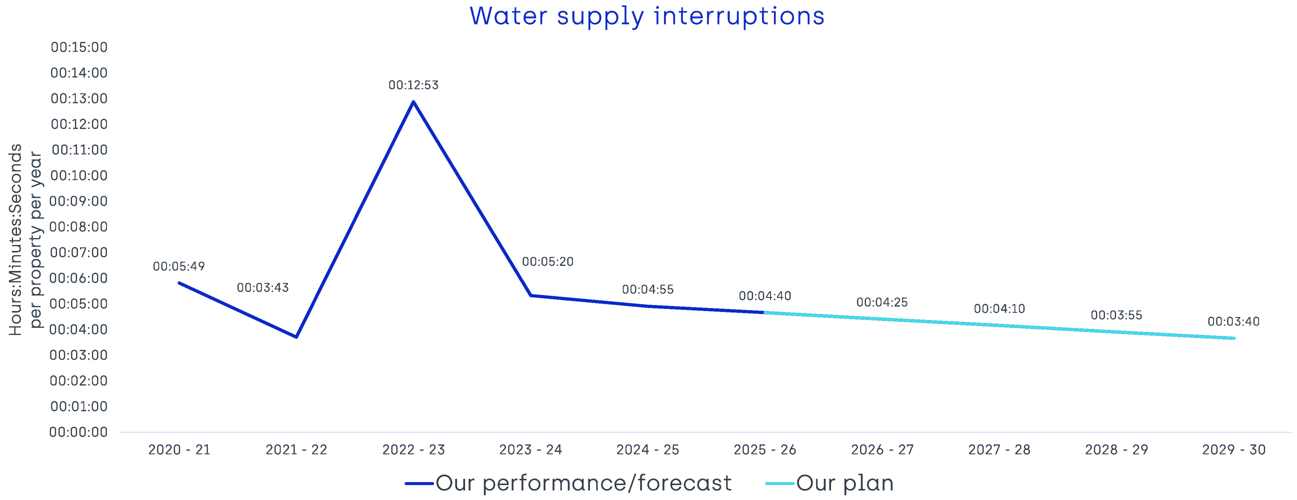


Figure 7.14 Water supply interruptions performance

Details of the activities to build up performance benefit can be found in Appendix AFW17 - Outcomes. Our performance improvement is split between base and enhancement investment:

- 41% from enhancement (31 seconds)
- 59% from base (44 seconds)

Reflecting on our past performance

We have improved on interruptions to supply significantly, in line with the action plans set out in our PR19 business plan. Since 2017 - 18, where over 32 minutes were reported, our average interruptions have steadily reduced year on year. In 2021 - 22, we achieved our best ever performance of 3 minutes and 43 seconds, placing us 5th in the industry.

We know that external factors, such as weather and third party interactions, have a significant effect on this metric, with the ability of one large incident to 'exceed the target'. This was evident in the two week 'freeze-thaw' event in December 2022, which added over eight minutes to our performance for the 2022 - 23 year. This was over twice the interruption time seen for the rest of the year.

Had this event not occurred, we would have maintained our performance trend in line with the prior years' performance. We are, however, committed to achieving and maintaining upper quartile performance as we progress through this period and into the next.

We have also extensively reviewed our response to the 'freeze-thaw' event so that we understand its effects, and to ensure that we enacted all emergency plans and contingency activities as effectively as possible.

Selection of our plans to deliver

- Investing in the delivery of our calm network programme to reduce mains burst and the associate supply interruptions *(included in base and enhancement investment for network calming)*
- Increasing our options for fast restoration of supplies following outage *(included in base investment)*
- Adapting our working hours to meet the challenge of driving down interruptions outside of core working hours *(included in base investment)*
- Working with our supply chain to develop innovative ways of minimising supply interruptions *(included in base investment)*
- Using detailed analysis to understand and resolve root causes of issues *(included in base investment)*
- Delivering our control vision, enabling oversight of our operations and fast response when problems do occur *(included in base investment)*

Water Supply Interruptions is a critical PC due to its interaction with other PCs. We see direct line of sight between interruptions to supply and C-MeX with clear correlation between customer service and maintaining a stable supply.

Our ambition

We have delivered significant improvements in our baseline water supply interruptions performance; however, we are looking to take our performance further. Our plans will consolidate our to-date gains and stretch us further so that we become a leader in the industry for this metric.

2024 - 2030 performance commitment levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment level	00:04:55	00:04:40	00:04:25	00:04:10	00:03:55	00:03:40
% Improvement from 2024 - 25						25%
Incentive rate	£0.916m per minute					

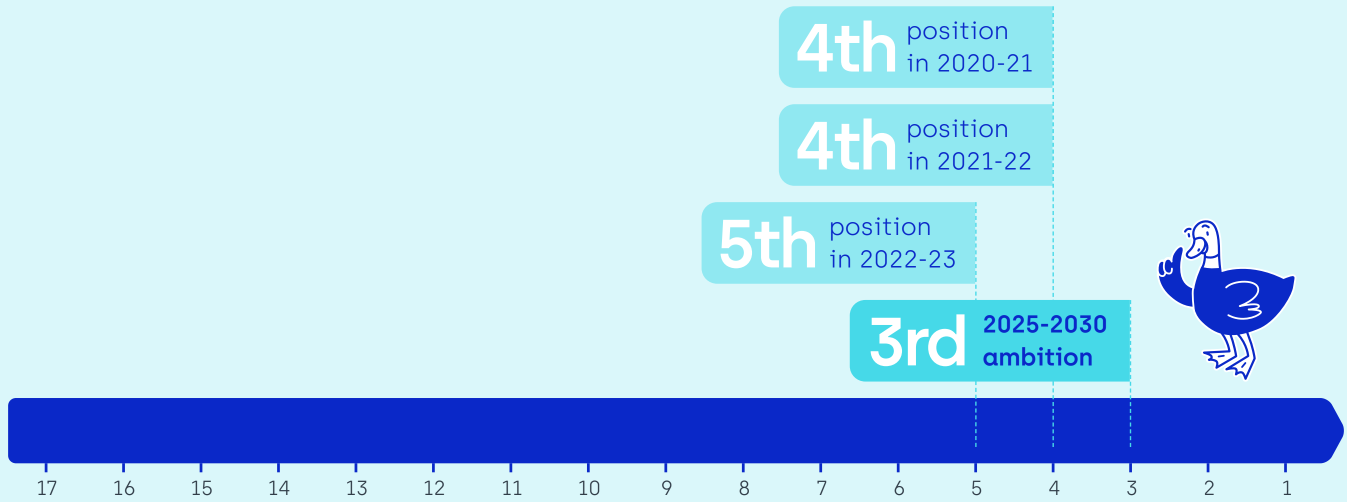
Table 7.15 PCLs water supply interruptions

Performance Commitment:

Compliance risk index (CRI)

Customer

Industry position



Our long-term plans

Our purpose is to provide high quality drinking water and to take care of the environment for our communities now and in the future, reflecting the basics that our stakeholders expect of us.

Our Strategic Direction Statement (December 2021)

Incentives to deliver

Compliance risk index performance is incentivised through penalty only. If we underperform we will give back £0.98m per point. There is no collar on this target. A deadband on performance will be in place for CRI, we await Ofwat's decision on the level this will be set at.

What our customers are telling us

Providing a safe, good quality water supply is our customers' number one priority and it is taken for granted - it is a hygiene factor. When discussed in depth with our customers they trust us to make the 'right' decisions regarding treatment and supply seeing this as a fundamental service

Source: AFW04

Delivering excellence

We have delivered a step change in our inspection programme of our service reservoirs, moving above and beyond our statutory obligations to a risk-based approach to inspection frequency. We have achieved our highest historic number of internal reservoir inspections in the 2020 - 2025 period and will continue to focus on maintaining this level in 2025 - 2030 supporting an improvement in water quality performance

PC details - Compliance Risk Index

Data table references:	OUT1.2 / OUT2.2 / OUT3.2.
Performance commitment description:	CRI is a common performance commitment, and we have adopted the standard definition. This is a continuation of the PR19 PC. CRI is a measure designed to illustrate the risk arising from treated water compliance failures, and it aligns with the current risk-based approach to regulation of water supplies used by the Drinking Water Inspectorate (DWI).
Unit for performance commitment:	Numeric Score under the DWI's compliance risk Index.

CRI performance

Figure 7.15 CRI performance

Details of the activities to build up performance benefit can be found in Appendix AFW17 - Outcomes. Our performance improvement is delivered through enhancement investment.

Reflecting on our past performance

Since 2020, we have maintained our PC performance score for CRI below the dead band and have remained in the upper quartile of companies, placing 4th out of 17 companies in 2021. We consolidated this performance in 2022 finishing 5th and within the performance deadband for the third year in a row. We continue to push improvements in this area, and anticipate further advances in water quality through this period and into the next.

Selection of our plans to deliver

Continuing our enhanced risk based programme of water storage inspections and maintenance, investing in computational fluid dynamics (CFD) to understand how water moves with our storage assets (included in base investment)

- Delivering our DWI Notices at Egham and Iver to install new treatment processes *(included in enhancement investment for Egham and Iver DWI)*
- Delivering our Raw Water Deterioration programme delivering improvement to sources affected by Nitrates, PFAS and Turbidity *(included in enhancement investment for raw water deterioration)*
- Investing in the continuous improvement of our sites, setting ourselves high standards for our assets and operations *(included in base investment)*
- Proactive maintenance of our strategic and distribution network assets (*included in base investment)*

Outcomes

- Engaging with our neighbours, using satellite imagery and site perimeter checks to understand potential catchment risks to our raw water quality *(included in base investment)*
- Removing dead ends of our network (*included in base investment)*
- Investing in our people, ensuring excellence in the competency and training of our teams to make sure that the importance of water quality is understood and remains a priority *(included in base investment)*

Compliance risk index has obvious connections with the customer contacts about water quality PC, so we have considered our plans for both PCs in the round. We believe delivering our water quality PCs is dependent on setting, and achieving, high standards for ourselves. Our success in water quality performance in 2020 - 2025 has verified this view, and we have looked to implement the lessons learnt in this area across our whole portfolio of performance commitments in 2025 - 2030 and beyond.

Our ambition

We target a CRI score of zero, and will set our target at this level for every year. We recognise that this is challenging to achieve; however, we are aiming to reduce our score over the course of 2025 - 2030. We have set our performance level in line with the significant improvements that we have already made, and our planned investments at our large water treatment works late in the period.

2024 - 2030 performance commitment levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment level	0	0	0	0	0	0
Deadband	2					
% Improvement from 2024 - 25						n/a
Incentive rate	£0.982m per unit					

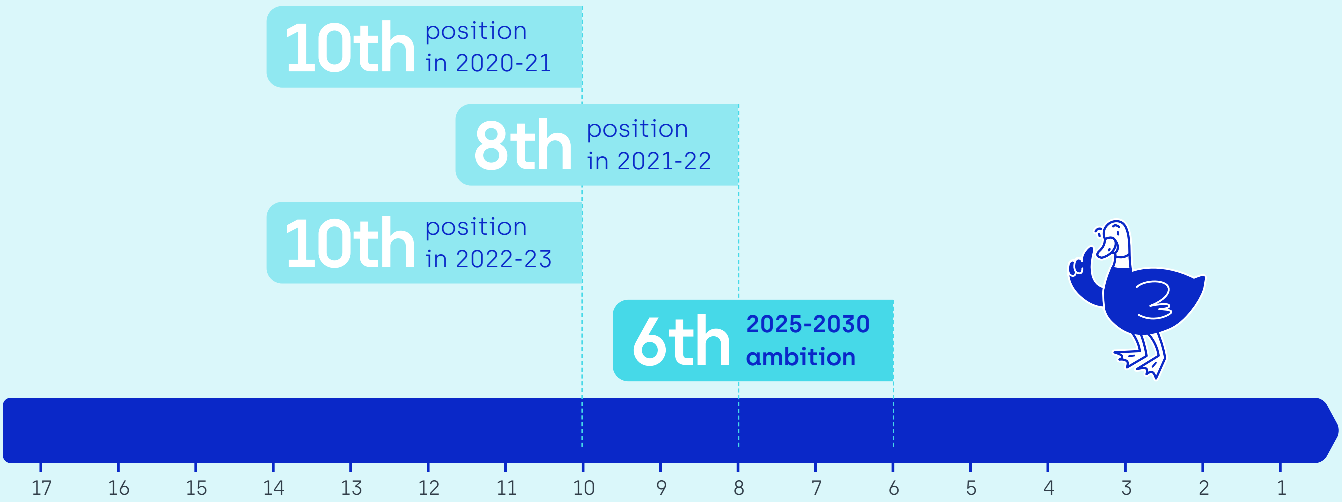
Table 7.16 PCLs compliance risk index

Performance Commitment:

D-MeX

Customer

Industry position



Our long-term plans

We will continue to offer excellent service to developers over the long-term. We understand how developers' needs are different and we will tailor our approach accordingly. We will offer clear communication and quick, simple and easy processes, delivering on time and making the site management journey the easiest possible.

Incentives to deliver

D-MeX is incentivised on an industry comparative basis. This mechanism is currently under consultation.

What our customers are telling us

Our customers and stakeholders support a mix of solutions to ensure we have enough water in the future. These include working across the industry and government on developing white goods labelling and new house building regulations to promote water efficient homes

Source: AFW04

Delivering excellence

We are collaborating to deliver the first at scale water neutral housing development. The project will minimise water demand and offset water consumption using technology and behavioural science

PC details D-MeX

Data table references:	n/a.
Performance commitment description:	D-MeX is a common performance commitment, and we have adopted the standard definition. This is a continuation of the PR19 PC. D-MeX incentivises us to improve the experience of developer services (new connections) customers, including property developers, self-lay providers and those with NAVs. The definition is currently under review.
Unit for performance commitment:	Score out of 100.

Reflecting on our past performance

Significant improvements have been seen in D-MeX over this period. We have moved from 10th position at the start of the period to 8th position in 2021 - 22. D-MeX is calculated from an equal split of scores from qualitative and quantitative surveys. By working collaboratively with our delivery partner, we have consistently improved our quantitative performance and we are delivering 100% in these scores in 2022 - 23.

Our qualitative performance has also consistently increased (70.72 in the 2020 - 21 period; 71.32 in the 2021 - 22 period; 72.35 in the 2022 - 23 period). We have achieved these increases with improvements to timescales and by moving to more proactive communication. Despite these improvements, our table position for 2022 - 23 is 10th. However, while these increases were not reflected in relative industry position, we believe this is only a matter of time.

Selection of our plans to deliver

- Improving our developer portal so that our customers can contact us in a way that suit their needs, with the potential to align with our C-MeX processes
- Utilising technology developments to help reduce aborted jobs and streamline customers journeys
- Embedding market intelligence:
  - To forward plan and improve the efficiency of our delivery, giving stable costs for customers
  - To move to a new, account management style, to proactively engage with customers – becoming less reliant on single transactions

Our ambition

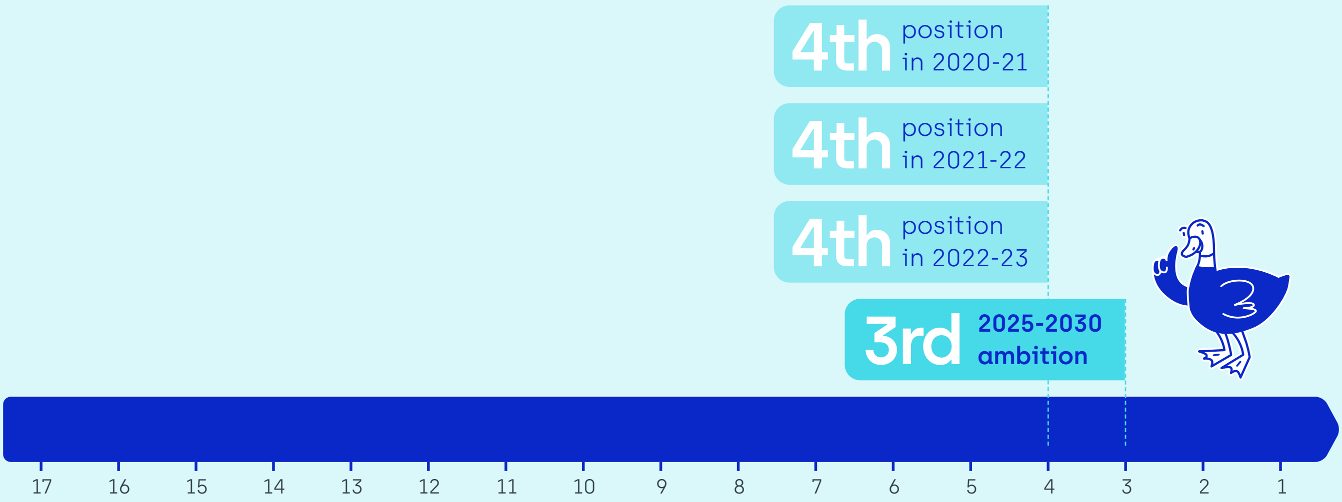
We aspire to become one of the leading water companies when it comes to the services that we provide to our customers through Developer Services. We will continue to identify system enhancements which will support our teams to deliver for our customers within Water UK metric service level agreement timescales (Water UK level of service). Building on the progress that we have already seen, we are striving for further improvements to our quantitative and qualitative performance. We are closing the gap to the top performing companies, and anticipate that we will be an upper quartile performing company by the end of the period.

Performance Commitment:

Customer contacts about water quality

Customer

Industry position



Our long-term plans

We will develop a constructive, collaborative relationship with our customers that enables us to work together to deliver for the future. We plan to exceed customers' expectations for drinking water.

Incentives to deliver

Customer contacts about water quality performance is incentivised through rewards and penalties. If we underperform we will give back £9.87m per contact per 1,000 customers to customers and if we outperform we will receive the same rate as reward. There are no caps or collars on the customer contacts about water quality target.

What our customers are telling us

Our customers take high quality water for granted. Only 0.2% of contacts to the call centre are about water quality and when we have conducted water taste and odour testing our customers are generally satisfied; their only complaint being the hardness level

Hardness is seen as an inconvenience and often links in our customers' minds to water quality - however during in depth discussions on reducing hardness customers are happier maintaining the status quo than supporting investment to soften water

Source: AFW04

Delivering excellence

We have developed and delivered an ambitious flushing programme. We target the highest risk areas by ranking based on sampling results and customer contacts to develop a targeted plan. This targeted approach has meant in 2022, for the first time in 17 years, we had no high risk zones and has helped drive down our customer contacts about water quality

PC details - customer contacts about water quality performance

Data table references:	OUT1.3 / OUT2.3 / OUT3.3 / OUT4.7-4.11.
Performance commitment description:	Customer contacts about water quality is a common performance commitment, and we have adopted the standard definition. This is a continuation from the bespoke PC which we held in PR19. This PC incentivises the requirement to improve the appearance, taste and odour of drinking water by reducing the number of consumer contacts received for each.
Unit for performance commitment:	Number of consumer contacts per 1,000 population.

Customer contacts about water quality performance

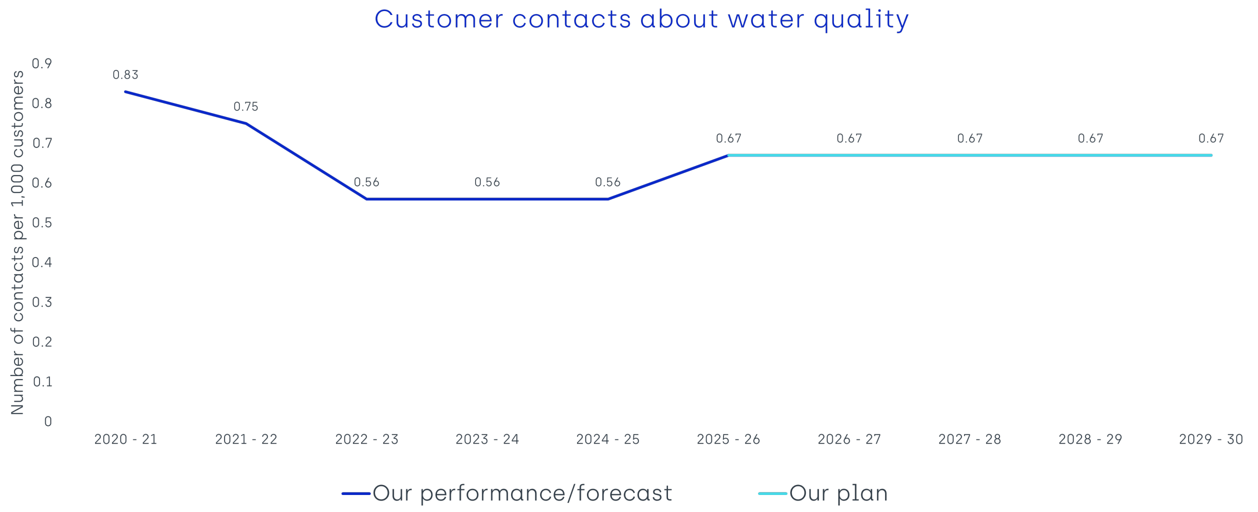


Figure 7.16 Customer contacts water quality performance

Details of the activities to build up performance benefit can be found in Appendix AF17 - Outcomes. Our performance improvement is delivered through base investment.

Reflecting on our past performance

We failed to meet the commitment in the first two years of this period. The performance commitment was detrimentally impacted by the Covid-19 pandemic. During lockdown and the subsequent increasing demand, water contacts increased significantly. We believe that this was due to greater numbers of people being at home, and an increase in the overall awareness and concern over all aspects of health and wellbeing. As 'normality' has resumed, contacts have begun to return to the expected levels, and so we do not consider the increased contact in 2020 and 2021 a reflection of reducing quality.

In 2022, we met the performance commitment for customer contacts per 1000 population for water quality (taste, odour & appearance). During 2022 - 23, we have continued our mains flushing projects in a number of higher risk districts to remove mains corrosion deposits and aluminium deposits, and these activities have helped to keep customer contacts relating to discoloration low.

Industry comparisons are difficult given that figures reported to the DWI are on an individual metric basis rather than as the combined commitment. However, against the appearance metric, we have reported upper quartile performance since 2018 and (excluding the Covid-19 pandemic-impacted year of 2020) have reported better than industry average in taste and odour since 2014.

Selection of our plans to deliver

- Continuing our mains flushing programme which has delivered excellent results

- Continuing and increasing the proactive maintenance of our water network
- Working with our supply chain, third parties and developers to ensure that they understand the water quality risks of working on our network and that their operations meet the same standards that we set for ourselves

All performance will be delivered through our base investment plans.

Customer contacts about water quality is an important PC for us as it is a key indicator of the quality of our asset management and operations. We see interactions between this PC and both mains repairs and interruptions to supply. When we return mains to service following repairs, we will follow our procedures to ensure water quality is not compromised even when under pressure from other performance commitments.

Our ambition

We recognise the significant challenges we are facing in order to maintain strong performance for customer contacts about water quality. To meet our Water Resources Management Plan, we will be moving water further, particularly by transferring river water north into areas historically served by groundwater, as well as using our new Sundon Conditioning Plant to transfer water to a wider part of our supply network. Whilst the water quality will continue to achieve the required standards set out in CRI, these changes result in a change in taste to customers. Therefore, our target is to maintain the existing level of contact and look to mitigate the impact of the wide-scale changes that we are making to our operations.

2024 - 2030 performance commitment levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment level	0.67	0.67	0.67	0.67	0.67	0.67
% Improvement from 2024 - 25						0%
Incentive rate	£9.87m per Customer Contact per 1,000 Customers					

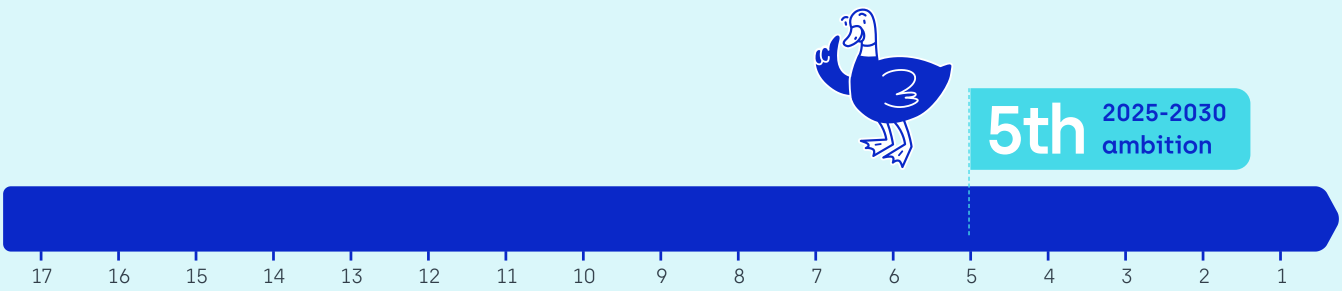
Table 7.17 PCLs customer contacts about water quality

Performance Commitment:

BR-MeX

Customer

Industry position



Our long-term plans

We will target long-term improvements in the experience business customers and retailers receive. We will look to maintain and build on our excellent R-MeX performance by improving our service to business customers and sustaining improved performance for the collective metric in the long-term.

Incentives to deliver

BR-MeX is incentivised on an industry comparative basis. This mechanism is currently under consultation.

What our customers are telling us

Overall our non-household customers are more concerned with supply issues, maintaining water pressure and preventing temporary use bans than our domestic customers who rate leaks and affordability as their top priorities. However, when thinking about investment for the future they tend to pick lower levels compared to household customers - concerned about passing costs to their customers

Source: AFW04

Delivering excellence

We have a dedicated, knowledgeable, and personable Wholesale Operations Service Desk (WOSD) and Wholesale Settlement team that take ownership of any issues and see them through to resolution. Our approach has delivered excellence for Retailers, achieving 1st place in the industry for R-MeX in the two years to 2022-23

PC details - BR - MeX

Data table references:	n/a.
Performance commitment description:	BR-MeX is a common performance commitment, and we have adopted the standard definition. This is a new PC for PR24. BR-Mex is to incentivise the satisfaction of business customers and retailers through the experience they receive. The definition is currently under review.
Unit for performance commitment:	Score out of 100.

Reflecting on our past performance

BR-MeX is a new measure for PR24 and the specification is yet to be defined. Although there are currently no directly comparable measures in the non-household market, we understand that BR-MeX might consist of either two or three component parts: R-MeX, B-MeX and Market performance framework (MPF).

Our performance in R-MeX has been consistently high, and we have been top of the industry for 2021 - 22 and 2022 - 23. Whilst there is no guarantee that BR-MeX will follow the same format, we can take confidence from our industry leading performance for the Retailer Measure of Experience. Similarly, we have performed well in the majority of the MPF's current series of service level and market data quality measures, and we aspire to steadily improve against these performance measures going forward. We ended the 2022 - 23 year in 7th position, and aim to maintain our position in the 2nd quartile.

Should our performance in these BR-MeX related areas be indicative for the new measure, we are looking to place in the 2nd quartile, with aspirations of performing consistently to this level or higher.

Selection of our plans to deliver

Whilst BR-MeX is a new PC for PR24, we see it as an extension of the work that we are already doing with business customers and retailers:

- Improving customer connection experiences with effective identification and billing of missing and new eligible premises
- Improving our notification process to retailers of potential supply pipe leaks
- Continuing a programme of regular updates and review, improving data accuracy of customer data and precision of meter locations
- Investigating long-term vacant properties

We see clear interaction between the BR-MeX and business bemand PCs. We view these as complementary to each other, and conceive that the successful delivery of one will support the other. We have considered how we will work with our non-household customers and retailers so that we offer an excellent experience, and use our relationships and networks to support the drive to reduce non-household consumption.

Our ambition

We have performed at the top of the industry for retailer experience, and we have high aspirations that this performance will translate into a high BR-MeX score in the 2025 - 2030 period.

We aim to be recognised as a market leader in the retailer measure of experience by scoring in the top three companies throughout 2030 - 2035. We will do this by maintaining responsiveness and continually investing in the capability of Wholesale Operations Service Desk, which we know from retailer feedback is important to them. We will also maintain good data hygiene to prevent market friction between trading parties, and ensure that retailers can provide an accurate and quality service to their customers. Critically, we will be flexible in adapting to the needs and requests of the market.

We anticipate that B-MeX will effectively be the non-household version of the operational elements of C-MeX, and therefore improvements in this area will be aligned with our efforts on C-MeX. This will ensure a consistent approach to tackling and driving improvement. We know that non-household customers will have slightly different concerns to household (for example, interruption to supply, loss of business, business continuity, timely meter reads), so we will ensure that we listen and effectively respond to their concerns.

We expect that the focus of the Market Performance Framework will be related to data accuracy and service delivery timescales. Nevertheless, whatever the metrics may be, we will review our relative performance and drive improvements through targeted data and process initiatives.

Performance Commitment:

Average time properties experience low pressure

Customer

Our long-term plans

We need to make long-term improvements for customers that have low pressure. We have plans to develop improvements quickly but also recognise the need to make long-term continuous improvement in this area avoiding persistent and intermittent low pressure.

Incentives to deliver

Average time properties experience low pressure performance is incentivised through penalty only. If we underperform we will give back £0.0165m per minute. There is a collar for average time properties experience low pressure which are set at 56 minutes and 50 seconds above the target.

What our customers are telling us

Most of our customers are generally happy with their pressure, and it often rates fairly low when we test priorities with customers. However, when we prompt customers that do suffer, they are frustrated by low pressure as they see it impacting their daily lives and routines and they want us to do more proactively and communicate what we are doing

Source: AFW04

Delivering excellence

From 2020 we have made significant reductions in the average time customers experience low pressure. We have invested in this area including the build of a new pumping station at our Chaul End reservoir. This new station has boosted the pressure to the Farley Hill area in Luton making sure the pressure to properties is improved

PC details - Average time properties experience low pressure

Data table references:	OUT1.30 / OUT2.30 / OUT3.30 / OUT10.75-10.81.
Performance commitment description:	Average time properties experience low pressure is a bespoke performance commitment we are proposing for PR24, and is also one of our existing bespoke commitment for 2015 - 2020. We have agreed a minor change to the reporting of this metric, with previous reporting exclusions removed from the PR19 definition. This PC incentivises the need to improve water pressure for our customers in areas below 15m head and reduce the time that those properties experience low pressure.
Unit for performance commitment:	The average time (Hours:Minutes:Seconds) per property that water pressure is below 15 metres head.

We have reflected feedback from Ofwat on the definition of this PC, and have made the requested changes from our original PC definition. The definition and our response to Ofwat feedback can be found in Appendix AFW18 - Bespoke performance commitments.

Low pressure performance

The definition of low pressure has been updated to give a more representative view of customers' experiences.

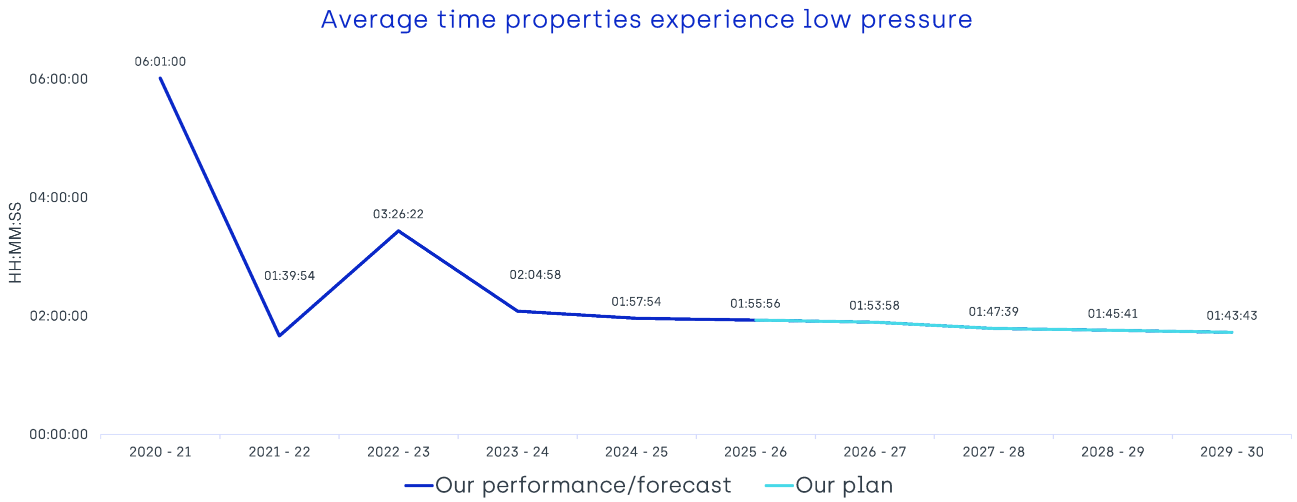


Figure 7.17 Low pressure performance

Details of the activities to build up performance benefit can be found in Appendix AFW17 - Outcomes. Our performance improvement is delivered through base investment.

Reflecting on our past performance

We have liaised with Ofwat on the complex reasons for our performance on low pressure, namely the high number of pressure loggers installed in our network continually monitoring pressures at the high points. Against the average property time performance commitment, our performance during 2020 to date has again been affected by adverse events. In 2020 - 21, when we needed to deal with significant changes in demand profiles due to the Covid-19 pandemic, we reported 05:02:48. In 2021 - 22, we managed our best performance of the period, reporting 01:35:05. In 2022 - 23, with the significant weather events in both summer and winter, we reported 02:33:26.

Despite challenging external conditions we have consistently improved the average time properties experience low pressure.

Selection of our plans to deliver

- Delivering key named schemes to resolve issues for customers suffering with persistent low pressure, which is included in part of our base single points of failure programme
- Applying a source-to-tap approach, focusing on proactive action to improve low pressure
- Investing in smart network management to ensure optimal system operation and management
- Improving penetration of data loggers to improve our understanding of the pressure our customers are receiving and prioritising action to quickly resolve transient issues

All performance will be delivered through our base investment plans.

Many of the common performance commitments focus on lowering network pressure (leakage, mains repairs, interruptions to supply and operational greenhouse gas emissions) which is in direct competition with this PC. To overcome this conflict, we will target our interventions to isolate low pressure improvements and consider the pressure impact of our network calming plans.

Our ambition

We recognise that we must improve against the low pressure measure. Using our tailored systems, we will monitor the ongoing performance of the network in near real-time to identify and resolve short-term issues as they arise. We will also ensure that schemes that are being delivered to realise benefits which are not related to low pressure (for instance, connect 2050 and single points of failure) are fully investigated to understand if there are opportunities to also benefit this PC for little or no extra cost. The same approach will apply to schemes driven by ongoing property development and growth. Further, we will also champion ad-hoc capital schemes to resolve long-term low pressure issues where capital investment can be shown to offer a value for money resolution. With a focus on improving resilience, investing in our network, and investing in our people, we will look to make long-term improvements for our customers by reducing the number of properties that experience pressure below the reference level, or by reducing the length of time that a property experiences low pressure.

Setting incentive rates, caps and collars

Incentive rates for this performance commitment have been developed using customer valuations, details in Appendix AFW18 - Bespoke performance commitments.

We have included a collar for this performance commitment using a top down method and our expected P10 position to inform the % RoRE at risk.

2024 - 2030 performance commitment levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment level	01:42:00	01:55:56	01:53:58	01:47:39	01:45:41	01:43:43
% improvement from 2024 - 25						80.5%
Incentive rate	£0.0165m per minute					

Table 7.18 PCLs average time properties experience low pressure

Performance Commitment:

Abstraction incentive mechanism (AIM)

Environment

Our long-term plans

We have committed to ending unsustainable abstraction from chalk groundwater sources to protect our globally rare chalk streams. We would like, through reducing our abstractions from underground chalk aquifers, to help restore the natural river flows in the upper reaches of rivers in the Chilterns by 2030 – the rivers Misbourne, Chess, Gade, Bulbourne and Ver.

Our Strategic Direction Statement (December 2021)

Incentives to deliver

Abstraction incentive mechanism performance is incentivised through rewards and penalties. If we underperform we will give back £1,361 per Ml to customers and if we outperform we will receive the same rate as reward. There is both a cap and a collar for AIM which are set at +/- 1,512Ml of the target.

What our customers are telling us

There is good level of support from our customers for reducing river abstraction near chalk streams. There appears to be a desire to go beyond government minimum standards, especially with our future customers. There is also strong support for the cost of going above and beyond minimum standards but there is a limit to that cost, especially with non-household customers

Source: AFW04

Delivering excellence

We have developed an early warning system which provides us with advance notice of an AIM trigger being activated. This means we have flexibility to reduce abstraction at the sites when AIM is active and directly contributes to improved performance and environmental outcomes

PC details - Abstraction incentive mechanism

Data table references:	OUT1.27 / OUT2.27 / OUT3.27 / OUT10.1-10.65.
Performance commitment description:	Abstraction incentive mechanism is a bespoke performance commitment that we are proposing for PR24 , it is also a current bespoke PC in 2020 - 2025. We have agreed a minor change to the reporting of this metric from the PR19 definition. It incentivises reducing groundwater abstraction at sensitive sites at times of associated low river flow.
Unit for performance commitment	Ml of water not abstracted when AIM triggers are active, compared to AIM baseline.

We have reflected feedback from Ofwat in our PC definition, and have made the requested changes from the original PC definition. We have commissioned a study to evidence the environmental benefit of reducing abstraction. We have included responses to Ofwat's queries and the updated definition in Appendix AFW18 - Bespoke performance commitments.

AIM Performance

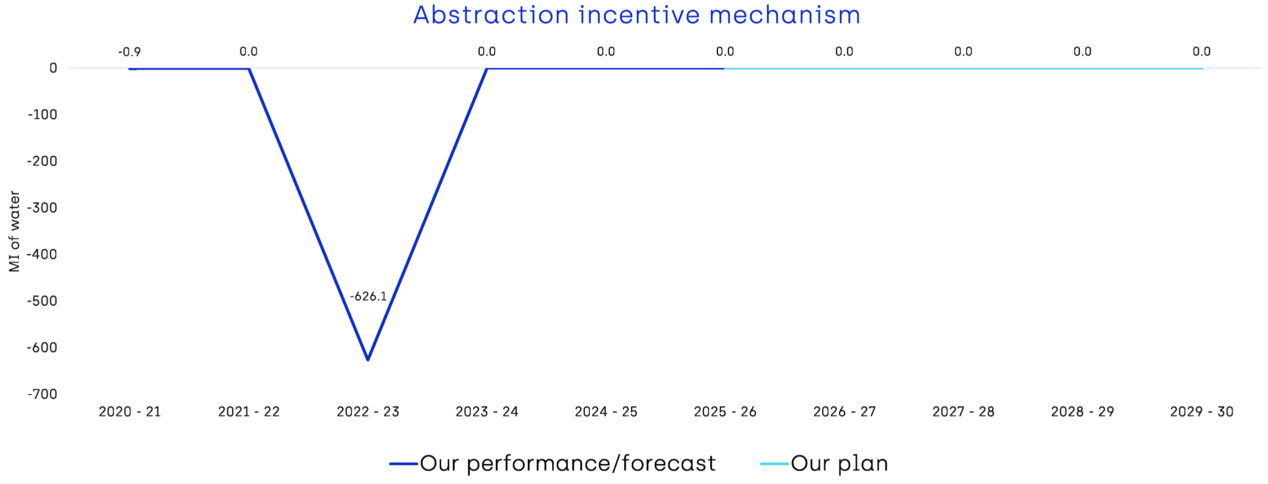


Figure 7.18 AIM Performance

Details of the activities to build up performance benefit can be found in Appendix AFW17 - Outcomes. Our performance is delivered through base investment.

Reflecting on our past performance

Since AIM came into effect in April 2016, we have consistently reported a below zero annual global performance score. A negative score signifies an improved performance compared to historic droughts as average abstraction is lower than the baseline at the global scale. Our 2020 - 2023 performance to date has continued this trend, with scores of -1 in 2020 - 21, 0 in 2021 - 22 and -626 in 2022 - 23. These performance scores show that we have met, and outperformed, the AIM baseline figures at a global scale. This is mainly linked to below average groundwater levels, which provide many opportunities to perform, long-term outages at some sources (e.g. Oughton Head and Runleywood Chalk) and using our early warning system to identify potential trigger activations.

As the number of active AIM triggers varies with background groundwater levels, the scores between years are not directly comparable, and year-on-year variances are expected. As such, we do not observe an improving/declining trend over time.

The global performance is based on the sum of scores for all sources included within AIM. In 2016, we put forward 23 sources to be included, based on the environmental sensitivity of the sources identified in previous studies. From 2016 to date, eight sources have been subject to Sustainability Reductions, with the deployable output at four of these sites being reduced to zero Ml/d. These four sources were subsequently omitted from the AIM assessment, in addition to one other source, which was removed following discussions with the Environment Agency. Therefore, 18 sources remain under AIM as of 2022 - 23. For the rest of this regulatory period, we have calculated and tracked AIM performance on a monthly basis.

Selection of our plans to deliver

- Using early warning systems and processes so that we can prepare for triggers to become active
- Optimising our system management so that we can move water around our network to support AIM sites
- Optimising our planned outage management using our new Planned Works Portal to ensure maximum capacity at our supporting works when low flow triggers would become active at AIM sites

We are not including standalone costs to deliver on this performance commitment, all performance will be delivered through ongoing base investment.

Our ambition

We aim to cease unsustainable groundwater abstraction from chalk stream catchments. AIM demonstrates our commitment to this outcome, given that we have gone above and beyond our Sustainability Reduction Programme by reducing abstraction at times of low river flow.

The target for AIM is set at the lowest, and therefore the most ambitious, level possible. We will manage the performance of AIM using the tried-and-tested processes that we have established in 2015 - 2020 and 2020 - 2025, which we know are working well. We also have a programme of sustainability reductions that are planned at the end of this period. These are in addition to a number of sources currently proposed for sustainability reductions in the following periods to 2050, as based on the environmental destination work detailed in our draft Water Resources Management Plan 2024.

Setting incentive rates

Incentive rates for this performance commitment have been developed using customer valuations, details in Appendix AFW18 - Bespoke performance commitments. We have included a collar for this performance commitment using a top down method and our expected P10 position to inform the % RoRE at risk.

2024 - 2030 performance commitment levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment level	0	0	0	0	0	0
% improvement from 2024 - 25						0%
Incentive rate	£0.00136m per Ml					

Table 7.19 PCLs abstraction incentive mechanism

Performance Commitment:

Whole life carbon

Environment

Our long-term plans

We have ambitious plans to reduce our environmental impact over the long-term. This includes managing our capital projects to reduce whole life carbon. Our definition promotes the use of long-term thinking to asset management, with the 20-year life span of an asset considered at the time of construction. We are committed to reducing our carbon footprint from construction activities and will work with our supply chain to develop long-term options.

Incentives to deliver

Whole life carbon performance is incentivised through rewards and penalties. If we underperform we will give back £0.28m per % to customers and if we outperform we will receive the same rate as reward. There is both a cap and a collar for whole life carbon which are set at +/- 8% of the target.

What our customers are telling us

Customers have told us that transparency over cost and effectiveness of our solutions will give them confidence in our approach to reducing carbon - it is an important area for them, but they want to see a balanced approach

Source: AFW04

Delivering excellence

We have ambitious plans to deliver a step change in our embedded emissions performance. We will use our Risk and Value (R&V) process to drive projects and programmes to find more innovative ways to solve problems, looking to avoid embedded emissions and reducing life time operational emissions of our assets

PC details - Whole life carbon

Data table references:	n/a.
Performance commitment description:	Whole life carbon is a bespoke performance commitment that we are proposing for PR24, it is a new PC for PR24. This PC incentivises reducing carbon emissions through the project lifecycle including embedded and operational emissions.
Unit for performance commitment:	Total percentage reduction of tonnes of CO_2e from project baselines.

We have included a bespoke performance commitment for whole life carbon to support our Net Zero ambitions following Ofwat guidance.

Whole life carbon performance

Whole life carbon is a new performance commitment and we have limited historic data to base our targets. We have used the steer from Ofwat to ensure our commitments support the government's delivery of its Net Zero commitments in guide our target setting. We have used the government published Balanced Net Zero Pathway to 2050 to inform our plans. Using this plan. we have isolated the elements which we contribute to and used the required reduction profile to set our targets.

We will begin setting project baselines in 2025 - 26, therefore incentives will not begin until 2026 - 27.

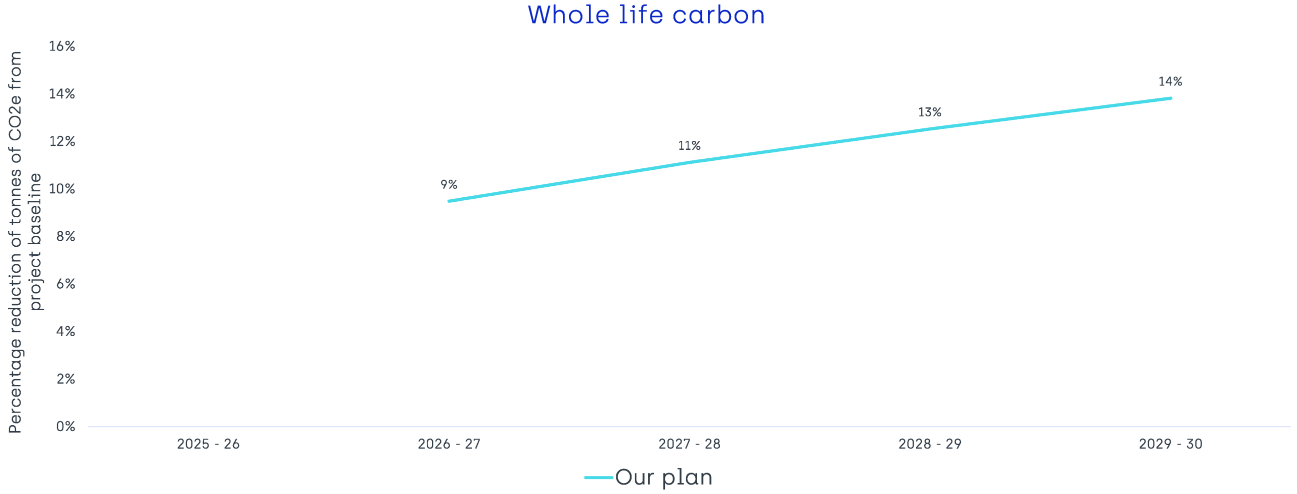


Figure 7.19 Whole life carbon performance

Selection of our plans to deliver

Due to the nature of this performance commitment, improvements will be delivered in individual projects therefore individual interventions that can be used on other PCs is not relevant. The critical element of delivery in this PC will be improved skills, knowledge and experience from our teams and our supply chain to seek new solutions and innovations to reduce both embedded and operational carbon of our capital projects. We will be investing in upskilling of our teams and working with our supply chain to develop plans to reduce the whole life carbon of our investments.

We are not including standalone costs to deliver on this performance commitment, we expect performance to be delivered proportional to the base/enhancement investment.

Our ambition

We are reducing our whole life carbon to support our Net Zero commitments. To set a level of ambition we have reviewed current projects to understand the magnitude of improvements available and used this to create our benchmark. With the definition we have submitted, we expect over 100 individual projects will be subject to this PC which presents a challenge to accurately define a PCL.

Setting incentive rates

We have used a top down approach to setting the incentive rate for whole life carbon. We have used 0.3% RoRE at risk to develop our position with our P90 and P10 positions to determine appropriate caps and collars. Details of this approach can be found in Appendix AFW18 - Bespoke performance commitments.

2024 - 2030 performance commitment levels

	2024 - 25	2025 - 26	2026 - 27	2027 - 28	2028 - 29	2029 - 30
Performance commitment level	n/a	n/a	9%	11%	13%	14%
% improvement from 2024 - 25						n/a
Incentive rate	£0.281m per %					

Table 7.20 PCLs whole life carbon

08.

Deliverability

Affinity Water

Deliverability key points

- Our 2025 - 2030 plans represent a step change in our delivery. We are planning a significant **increase in our enhancement investment plans**, with ambitious plans for our WRMP and WINEP programmes
- Our WRMP and WINEP programmes are in large part dependent on access to land and planning permission - we have a **good track record of working in partnership** with landowners in the current period
- We have **assurance on the deliverability of our plan** at all stages and reviewed cost, time, resourcing and governance
- **Supply chain engagement** of our delivery plan has been successful in confirming the scale and scope of works is deliverable
- We have used lessons learnt from our current and past delivery, including improving: our data and preparation for delivery, our **enhancement investment profile** and **ensuring realism in our forecasting**
- Our **internal delivery approach** and structure is being reviewed and updated to be ready to deliver our 2025 - 2030 plans

How our plan meets the Ofwat methodology

Ofwat methodology	Our plan
The plan is deliverable both in terms of performance and investment proposals *'The company provides sufficient and convincing evidence that the investment proposals within its PR24 business plan are deliverable. This should take into account delivery in the 2020 - 2025 period and any measures the company has put in place.'*	✓ We have developed our proposed performance commitments with our operational teams and supply chains, leading to targets that are stretching and aligned to customer priorities, but achievable. We understand the key activities and drivers behind our performance and have used these to create detailed delivery plans for 2025-30 which provide the assurance that we consider the targets deliverable ✓ We have considered our totex proposals and identified that the high risk area for deliverability is within the significant increase in enhancement investment. Our deliverability risk is different to other companies, in that it lies not with Tier 1 contractors, but due to the nature of our investment programme, our risks are around access to land, land purchase and enabling works. We have engaged in depth with our supply chain around the deliverability of our investment proposals. Through this engagement, we have had confirmation that the supply chain has the capacity and capability to deliver our investment plans ✓ We have recognised the difficult start we had to the 2020 - 2025 period and in particular the poor performance in 2020-21, and have learnt lessons and made significant changes to our teams, processes and governance to improve performance. Our plans for 2025 - 2030 transition from our expected performance for the remainder of the 2020 - 2025 period, which is improving significantly year on year
'For PR24, DPC will apply by default for all discrete projects over £200m of whole life totex'.	✓ We have assessed our totex investment to confirm whether our proposed projects and portfolios fall within the DPC criteria. We have concluded that apart from the Strategic Resource Options, we do not have any projects that can be designated as DPC projects

Chapter guide

In this chapter we outline our approach to the deliverability of our plan and how we have assured ourselves that we can successfully deliver our commitments.

Section	Purpose	Cross reference
Introduction	To set out the deliverability risk for the totex programme, which is within the increase in enhancement investment, the deliverability tests we have set ourselves and a summary of results for two example programme areas.	Appendix AFW32 - Deliverability of our plans
Our delivery track record	The key lessons that we have learned from past delivery and how we have used them to inform our 2025 - 2030 plan	Appendix AFW02 - Past performance
Our 2025 - 2030 delivery plans	The engagement we have carried out with our operational teams and supply chain to provide assurance on our delivery plans. This includes third party assurance on the engagement with our supply chain.	Appendix AFW32 - Deliverability of our plans Appendix AFW41 - Case studiess

Deliverability

Section	Purpose	Cross reference
Direct Procurement for Customers	Our strategy and approach to assessing whether schemes fall into the criteria for DPC, and an overview of the Strategic Resource Options schemes that will be delivered by DPC.	Appendix AFW40 - Direct Procurement for Customers

8.1 Introduction

Throughout the development of our business plan, we have maintained a focus on deliverability. This has spanned from the delivery of our investment programme and outcomes package to our overall financeability. We understand the challenges around delivering an increased investment plan and scaling to this position from our 2020 - 2025 model. Our approach focuses on achieving a seamless transition between two regulatory periods, achieving our commitments whilst delivering our investment plan.

Our 2025 - 2030 plan represents a significant increase in the scale of the investment plan and therefore we recognise that a business as usual approach will not work. The most significant change between the two periods is the growth in enhancement capex, which is driven by a larger scope of work needed to achieve statutory outcomes such as WINEP and strategic water resources investment needed to meet expected demand for water whilst protecting the groundwater environment. These outcomes will be delivered using a greater proportion of nature-based solutions rather than traditional engineering based solutions, and the greater reliance on partnership working poses different deliverability challenges. Our plans are step increases on our existing delivery, in addition to ambitious Raw Water Deterioration and Resilience programmes. Our delivery requires our planning and preparation to be more rigorous and robust to respond to this challenge.

Below we display our 2025 - 2030 portfolio highlighting areas where we will need to deliver above and beyond our existing capacity and where we have challenged and assured the deliverability of our plan.

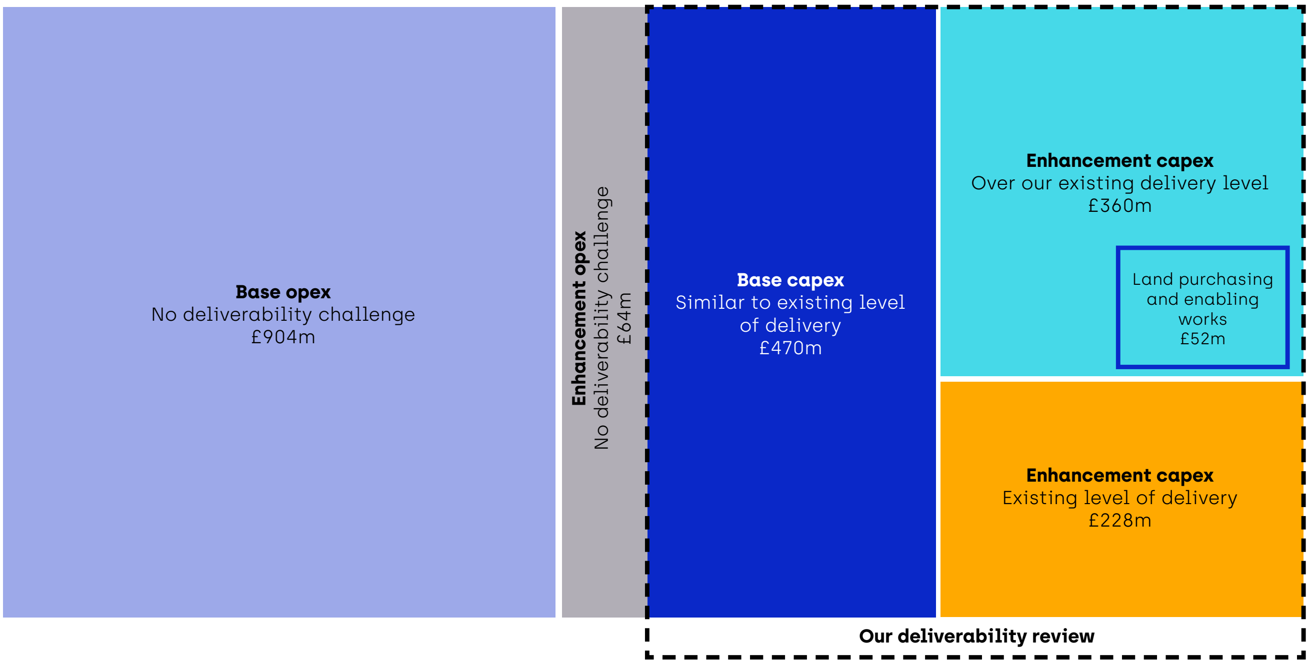


Figure 8.1 How we have focused our deliverability review

- Opex (base and enhancement) - no deliverability challenge associated with our opex investment - low deliverability risk
- Base capex - in line with existing base investment - included in our deliverability review - low/medium deliverability risk
- Enhancement capex - an increase of £360m compared with our existing enhancement delivery, unmitigated this would be a high deliverability risk. Our planning, as described in this chapter,

demonstrates how we have challenged and assured the deliverability of our plans. As a result of this work, we are now scoring our enhancement capex programme with a low/medium deliverability risk

Further work is taking place, in parallel with our business plan submission, to bring our base and enhancement capex deliverability risk to low and expect to reach this level ahead of 2025.

In this chapter, we have set out out the key challenges to deliverability of our plan and how we have addressed them:

- How we have confirmed the deliverability of our key activities from the perspectives of cost, time, resources and governance
- How we have learnt lessons from our previous delivery and implemented them in our plans
- How we deliver efficiency and value in our capital investment plan and drive improvements in our performance commitments
- How we have worked with the supply chain to develop our plans
- How we have identified and developed our plans for Direct Procurement for Customers (DPC)

Deliverability of our plan

At every stage of our business plan development, we have challenged all of our business cases across base and enhancement investment for deliverability, using experts from across the business and externally to give assurance. To ensure the deliverability of activities, outputs, outcomes and investments in our business plan, we have tested across four areas. We have completed an internal review against these tests and gained independent external assurance of each and our overall approach.

Cost	Time
• What type of investment is this? • Are our costs realistic, how have we benchmarked costs? • Is the investment justified?	• Do we understand the schedule to deliver? • Have we optimised our delivery to maximise benefits? • Does our plan reflect our performance capability?
Resources	**Governance**
• What delivery mechanism will we use to deliver? • What internal resource do we need to deliver? • Have we confirmed that our supply chain has the capability and capacity to deliver our requirements?	• How are customers protected? • How have we assured our delivery plans? • How will we track and monitor delivery?

Table 8.1 The deliverability of our plan

To demonstrate our approach we have included three examples below. We have also summarised our answers to the above questions in Appendix AFW32 - Deliverability of our plans, using each of our Strategic Direction Statements as the structure for a selection our programmes and key activities. We provide more detail on our overall approach to capital delivery and how we have engaged with the supply chain, later in the chapter.

Connect 2050

The Connect 2050 programme is an integrated programme that brings together all the additional interconnector and storage requirements required over the 2025-2030 period and beyond to 2050 as part of our LTDS. It builds on the previous Supply 2040 programme put forward at PR19. It has been developed after assessing the ability of the existing supply network to meet water resource challenges we will face over various time horizons. These challenges include population growth, the impact of likely abstraction reduction pathways and incorporating new sources of water from the Strategic Regional Options (SROs) laid out in our WRMP. The option appraisal is holistic, adaptive, and aimed at providing the 'least regrets' investments for 2025 - 2030. It considers future uncertainties around growth, abstraction, and climate change, and has been used alongside WRMP investment modelling when considering the strategic development of new water resources. Whilst Connect 2050 is optimised as a holistic programme, individual scheme costs have been allocated appropriately across enhancement drivers within WINEP, Supply-demand balance and Water resilience.

Cost

Our Connect 2050 programme is enhancement investment of £87m. Cost estimates have been created using bottom-up methodologies with the unit cost model for individual schemes before being summed to a total for the Connect 2050 programme. We have shared scheme details with our supply chain at project level to enable checks by potential supply partners of deliverability. Costs for the programme have been developed as part of the business case development process, discussed in chapter 6.

Time

We understand there are complex interdependencies and interfaces of our Connect 2050 programme. We have therefore profiled the schedule appropriately with delivery in every year of the 2025 - 2030 period. We have shared our target dates with our supply chain and we have received a detailed contractor programme of how we could optimise the delivery plan. Additionally, we will be looking at incentivising on time performance in our supply chain contracts to ensure our partners are aligned to our goals.

Resource

We successfully delivered a significant programme as part of the mitigation works for HS2 passing through our area in 2020 -2025 (outturn cost of £160m). Given the scale of the Connect 2050 programme, we will implement a similar delivery model to HS2. This will involve recruiting new roles into the business, including a programme manager, commercial manager, project managers and engineers in the next year. We worked successfully with a single Tier 1 supply partner for HS2 and will use a similar approach for Connect 2050. Given the number of projects and interfaces involved in the programme, a single supply partner will mean resources can be optimised between projects by smoothing and sharing resources across projects. As part of this engagement with the supply chain, we have received confirmation of their capacity and capability to deliver our plans for Connect 2050 and a fully resourced schedule of delivery.

Governance

Whilst our Connect 2050 programme will deliver benefits across multiple performance commitments, we recognise the need to have suitable customer protection on an investment of this magnitude. Therefore we are proposing a Price Control Deliverable (PCD) to be applied to this programme. Internally, we will maintain governance across cost, time, quality and risk using our financial and programme board processes to ensure successful delivery.

Smart metering

Our smart metering programme is an ambitious programme of delivery, marking a step change in our customers' ability to manage their own demand. Our 400,000 smart meters are justified based on supporting our water demand performance commitments, including: reducing leakage by 8.6Ml/d, PCC by 17.9Ml/d and business demand by 2.0Ml/d. The reductions represent the largest total reduction in water demand in our 2025 -2030 plan.

Cost

We have an ambitious programme of smart metering with £122m of enhancement investment between 2025 -2030. Cost have been extensively benchmarked against industry historic delivery and unit rates from manufacturers to ensure an efficient programme.

Time

We are planning to install 377,000 household smart meters through our optant, universal metering, reactive and proactive replacement programmes and a further 20,000 non-household smart meters through our reactive and proactive replacement programmes. Following the selection of our preferred solution, we will run a pathfinder trial of 20,000 household smart meters in 2024 - 25 through the Accelerated Infrastructure Project which will enable a ramp up in delivery ahead of the full programme initiating in 2025 - 26. To give resource consistency, we have planned a flat rate of delivery with an equal number of meters in each year of the 2025 - 2030 period.

Resource

We have engaged with a smart meter manufacturer as part of our business planning and have received confirmation of supply capacity to meet our programme profile amongst their other commitments. In terms of delivery models, we are reviewing several different options. These options range from a full in-house solution where we will manage, install and quality control, to several hybrid solutions with single or multiple installation delivery partners and finally an outsource solution where a single project delivery partner provides management and installation whilst we retain quality control. We will finalise our decision on the final delivery model in 2024.

Governance

Given the the number and value of smart meters we are planning on installing, we are proposing to include a PCD to the programme which will protect customers from under-delivery. Additionally, customers will be protected via the PCC and business demand performance commitments. We have a dedicated demand management programme board which will provide our internal governance of the programme ensuring delivery in line with our commitments, and Board will have regular oversight of progress.

Access to land and planning permission

We have presented our ambitious water resources plans, including new infrastructure such as our Grand Union Canal and Thames to Affinity Transfer schemes. These require formal planning and the gaining of land access to take place in 2025 - 2030 to be able to hit our delivery milestones in future periods. These schemes have been justified through the supply and demand challenge that our business faces in the medium and long-term.

Cost

We have allowed £52m in our enhancement plans to complete the required land access and achieve formal planning permission. We have estimated these costs using as part of our WRMP development and have used our experience to verify this estimate.

Time

We have timescales associated with the delivery of milestone progress to meet our plan for each of the schemes. Given the nature of the work, we will set ourselves interim milestones to ensure continuous progress towards the key deliverables of this workstream.

Resource

We are looking to recruit a dedicated commercial manager to lead the delivery of these activities, working with our land agency supply partners to facilitate the necessary deliverables for the individual schemes. We will support this role with our project and estates management expertise of our business as usual teams.

Governance

We will manage the delivery of these activities as we would with other large capital projects and programmes. We will used our investment and programme boards to continually the track delivery of each of the schemes providing appropriate business oversight.

8.2 Our delivery track record

Implementing lessons learnt

We have reflected on our current and past delivery with a view to learning lessons and applying them to our future plans:

- **Enhancement investment** - We experienced a slower start to our enhancement programme for 2020 - 2025, although we are fully on track to deliver all required outputs by the end of the period. The variance to FD19 profile is caused primarily by Covid-19, where Government mandated lockdowns affected our supply chains and required the pausing of non-essential work. We have published our

2025 - 2030 Enhancement Action Plan [33] setting out the detailed milestones for delivery until 2025. For 2025 - 2030 we have learnt the lessons from this period. The increased size of our enhancement investment allows us to engage the supply chain with a consistent pipeline of work and embed them within the capital delivery process adding value to our plans. This will allow delivery partners to develop efficient programmes and to invest in resources with the potential continued relationships beyond 2030

- **Starting early** - We recognise that we cannot simply change the scale of delivery in year one of the five year cycle. As such, we have negotiated our major framework contracts to ensure we have continuity of delivery into the start of 2025 - 2030. We have begun detailed discussions with our supply chain in early 2023 to understand how best to approach the delivery of our overall programme. We recognise the importance of expertise within our supply chain for mobilising quickly, project delivery and benefit realisation. Additionally, we have mobilised early using the transition funding mechanism to smooth the move into the 2025 - 2030 period. Starting early will allow us to incentivise the supply chain and share in the benefits of the successful delivery of programmes with a focus on low/no build solutions early on in programme development. A key focus will be to develop a robust benefits management process to ensure we can define and realise the benefits of incentivising the supply chain and project teams
- **Using portfolio optimisation as business as usual** - We know there are challenges ahead in delivering all the benefits within our investment programme. We need to ensure we maximise the value of our investments and look for efficiencies at every stage. We will implement this learning by embedding our portfolio optimisation approach, used for our five and 25-year business planning, as part of the day to day delivery of our 2025 - 2030 programme. Alongside this, we will continue to run our risk and value process for individual investments and challenge ourselves to deliver best value from every investment

As well as the general learning points above, we have reflected alignment to our long-term ambitions to review our current performance and determine lessons learnt, and the actions we will take to improve performance. We have included details of this review in Appendix AFW32 - Deliverability of our plans and this is summarised in Figure 8.2 Outcomes : our lessons learnt.

	Lessons learnt	Actions to ensure delivery in 2025 - 2030
Achieve Net Zero Carbon by 2045 (and 2030 for our operational emissions)	Better understanding of renewable energy opportunities and where these will be most effective and offer the largest savings	Deliver a programme of renewable energy generation and upgrade and optimise assets to deliver energy savings
Deliver a net gain in Natural Capital	Use methodologies to standardise work and enable comparison from year to year and across sites	Integrate Natural Capital approach with approach to Biodiversity, carbon and water to measure Natural Capital benefit
Ensure our physical assets are resilient for the long-term	Better understanding of physical asset systems resilience to inform operational and investment decision making	Focus on long-term adaptive planning and identify investment needs and best-value options
Personalise our services to support different needs and wants	Greater consistency with personalisation across the business to maintain an exceptional customer service standards	Develop a group of stakeholders to help shape and inform decisions and prioritise personalisation and accessibility
Take care of our vulnerable customers and ensure affordability for all	Better understanding of affordability pressures via direct learning from customers with lived experience or representative organisations	Gather evidence from WaterSave Tariff trial and any future charging trials to understand if there are fairer ways to charge
Reducing our impact in the water environment for all	Better informed of current performance data to ensure greater control of performance and delivery in future	Set out delivery activities early on to ensure preparedness and allow delivery to start from day 1 of the next regulatory period

Figure 8.2 Outcomes : our lessons learnt

33. 'https://www.affinitywater.co.uk/docs/corporate/2023/AFW-AMP7-enhancement-spend-action-plan-March-2023.pdf

Delivering financial performance

We have focused this chapter on the physical delivery of our outputs and outcomes for customers. However, we recognise challenges for the financeability of our plans and we discuss this in chapter 9.

Delivering on budget

We have developed robust cost estimates at project and programme level using bottom-up methodologies, historical costs and unit cost models to benchmark where appropriate. We have used our business case review process to challenge costs from an efficiency and deliverability point of view with red team reviews at multiple stages of the process as governance.

Once we receive the Final Determination, we translate that into budgets across the investment programme through an annual business planning process, and mandate work to our partners.

We recognise the importance of accurate and proactive cost management at project, programme and portfolio level to ensure we are achieving value from every pound invested. We have processes in place to manage, govern and report costs for both operating expenditure and capital expenditure and we will continue to use these throughout 2025 - 2030.

We will work with our supply chain to deliver to budget, including sharing of budget costs and using open book contracts where appropriate so that we have line of sight throughout delivery and so that our supply partners are incentivised to reduce cost themselves. Through our supply chain engagement we have shared indicative outlines of programmes and large projects to confirm deliverability, more detail on this engagement can be found in Working with our supply chains.

Delivering efficiency and value

We recognise the responsibility we have for delivering for our customers. We take this responsibility seriously. This means ensuring we are maximising the value of every investment we make and challenging ourselves to deliver our commitments as efficiently as possible.

Risk and value

We are focused on delivering our investment programme as efficiently as possible. This means truly understanding the risks we are looking to mitigate with interventions and thinking differently about the solutions we pursue to maximise the value of investments.

To ensure that we are delivering best value and efficiency for our customers, we embed risk and value into our business activities. This helps us to take a proactive approach, focusing on best value solutions when looking at risks and opportunities.

Risk and value is a structured process that helps us to identify efficiencies and best value solutions. In the same way as our existing project lifecycle governance, it is grounded in data and builds consensus through collaborative working.

Using this approach, we:

- Gather the relevant data
- Define what is causing the problem
- Monetise the risk and estimate the probability of it occurring
- Consider solutions that can mitigate the risk

At the end of the process, the 'best value' solution is the one with the lowest risk index, this then becomes our preferred option for progressing through the project lifecycle.

By implementing a systematic risk and value process, we carry out risk-based investment planning. This ensures we are delivering the most efficient and effective solution possible for our customers, and allows us to plan for the medium and long-term delivering maximum value from our allowed totex.

Delivering on time

We recognise the importance to our customers of delivering our investment on time. We have arranged our investments in a realistic profile using a bottom-up approach to ensure deliverability on a scheme by scheme basis, in addition to a view on the top-down. For our largest investments, we have engaged with our supply chain early and asked them to help support the development of our plans to ensure our milestones can be achieved.

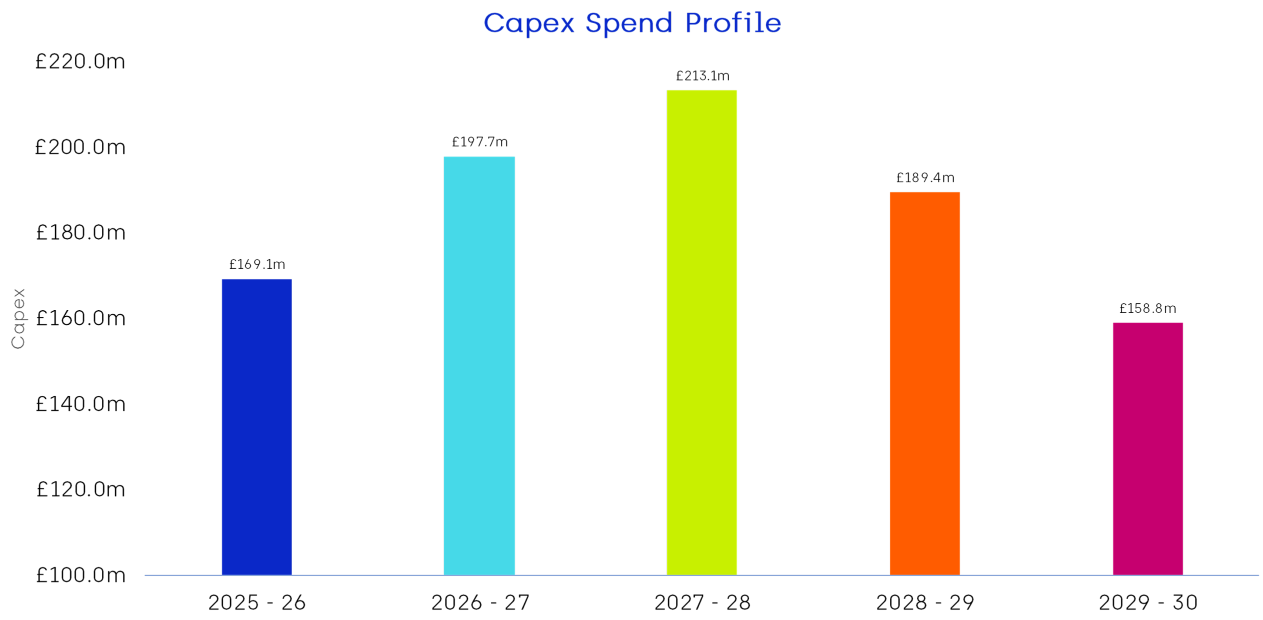


Figure 8.3 Capex spend profile

We are developing our transition process into the next period. This includes a detailed review and action plan for successful delivery. We are working with the supply chain to make sure we deliver customer benefits on time, sharing the outcomes and required timescales for delivery. We are also reviewing mechanisms, such as incentivising early delivery and shared pain/gain, to ensure supply chain integration with outcomes, rather than just the outputs.

We are starting our delivery early. We have been successful in securing AIP funding in 2023 - 2025 across our raw water deterioration and smart metering programmes which enables us to bring planned 2025 -2030 investment forward. This means we can mobilise enabling works early, such as design, and deliver customer benefits earlier. Each of the AIP projects has detailed milestones for March 2025 to ensure progress ahead of the 2025 -2030 period.

Resourcing our plan

Our plan includes a significant increase in our enhancement investment which will require us to develop the way we resource our delivery routes. Through the development of our business cases and bottom-up action plans as part of our outcomes workstream, we have identified the required resources and specialist roles that we need before 2025 to ensure we are ready to deliver from 2025 onwards.

We are developing a new department for our smart metering programme and creating a new team for our Connect 2050 and Grand Union Canal programmes, mirroring our HS2 delivery model. We have already recruited new ecologists to support our biodiversity programme and asset scientists and engineers to support on Net Zero. We have also recruited permanent cost and value engineers who are critical to improving the granularity of planning and enabling early cost estimation in a project or programme lifecycle. This will allow us to maximise the value and benefits, whilst minimising the overall cost.

Skills and competencies will be a key area of focus for us as we move towards 2025 - 2030 and as we review our in-house and contractor split as part of the transition process. We will continue to develop our plans to have the right people, skills and experience to react to a changing delivery environment. At this stage, we have maintained the scope and scale of activities that we deliver in house to current levels, which means that the majority of delivery will come from our supply partners. However as we build our direct delivery maturity and capability we will actively look to increase internal delivery and the proportion of work we deliver ourselves.

Governance

Plans must be controlled and supported with appropriate governance. Managing an increased portfolio will also require enhanced support functions. We have made significant changes in our programme management office function, we have integrated data and insight into our programme support and have mature, director sponsored programme boards to give technical and financial governance and oversight across each of our programmes and for individual outcomes. These report regularly to our Executive Leadership Team and Board.

For financial governance, we have two approval routes, differentiated by the magnitude of the cost. This two route approach means we maintain rigorous governance of our costs whilst ensuring that the process for smaller schemes is not overly onerous. This means we can move through the delivery lifecycle quickly and deliver benefits as soon as possible.

We have mature structures for supply chain management with regular framework meetings reviewing performance, including KPIs, risks, mitigations and overall delivery. This allows us to regularly review performance, ensuring any issues can be quickly addressed.

Whilst we have set up our plans to be deliverable, we understand the importance of ensuring customers are protected in the event of non-delivery. For each of our key activities, we will use either our suite of performance commitments or PCDs to ensure sufficient protection. These will be monitored and controlled through the relevant programme board and formally reported via the annual performance reporting process.

Delivering outcome performance

We have developed our 2025 - 2030 delivery plans using learning from current and previous periods to understand the link between our activities and our performance.

As part of our business processes, we use root cause analysis to identify underlying management and control opportunities to drive performance. We focus on this overall approach, rather than on specific incidents. We believe that this is key to improving holistic performance for our customers across multiple interconnected performance commitments. However, in some circumstances it is necessary to address specific areas of improvement with specific action. To demonstrate this approach, we have drawn connections between our activities and our performance in two ways:

- Organisational based - actions that have been developed using root cause analysis which identified improvements in our management and control approach
- Activity based - where we have identified a specific need to be addressed which offers a clearly defined benefit

We have used this dual approach to improve performance.

Organisational based approach

Water supply interruptions

We have made significant improvements to our supply interruptions performance from 2016 into the 2020 - 2025 period. However, there is no single activity which has driven this improvement.

In tackling our need to improve supply interruptions, we completed a thorough assessment of drivers before developing and delivering wide ranging action plans to improve performance. This included interventions across our people, processes and systems. We focused on improving data visibility; for example, installing pressure loggers so we could quickly identify a loss of supply event, and creating a new 24/7 Network Control Desk team to coordinate our incident response. We changed our operating model to ensure clear source to tap accountability of water supply. All these interventions combined to deliver a step change in our performance.

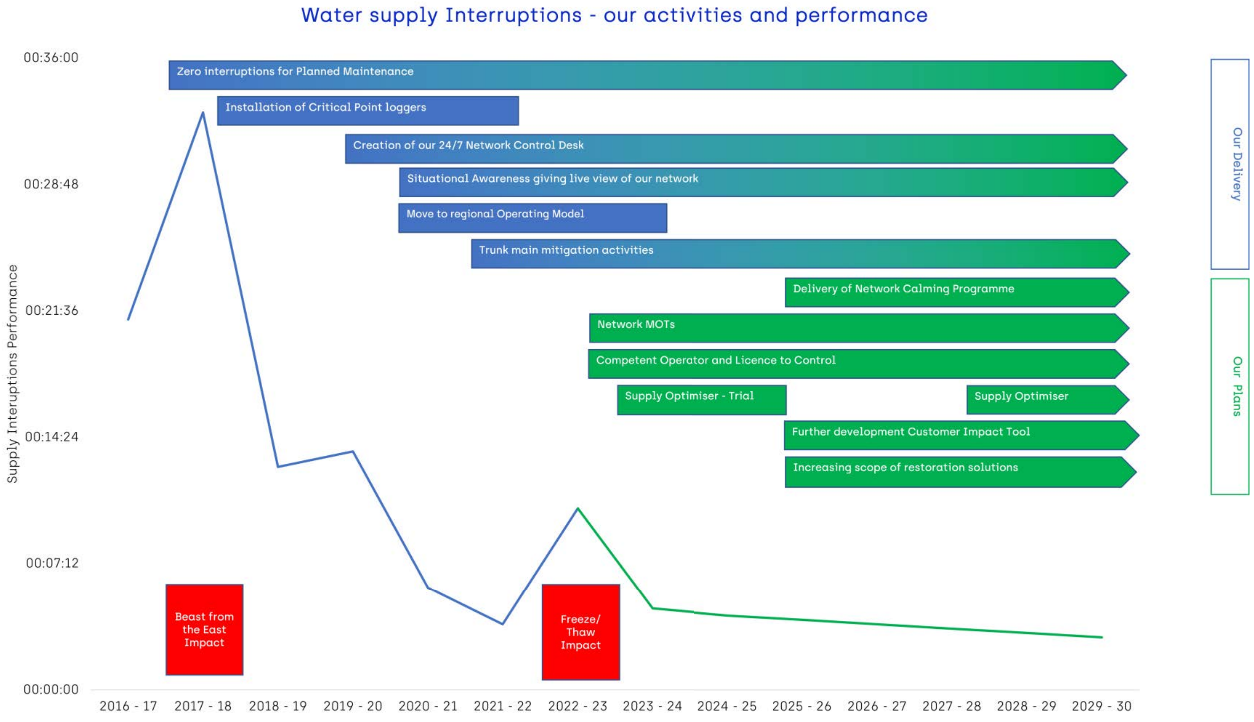


Figure 8.4 Water supply interruptions : our activities and performance

Compliance risk index

Our holistic approach to water quality has seen a significant improvement in our CRI score. Using root cause analysis, we identified a number of areas that needed focus, including storage, behaviours, processes, catchment management and communications. For each area, we assigned a senior leader to own and maintain a monthly CRI programme board to monitor and manage progress.

Our organisational approach to water quality has spanned across our people, including our 'Love where you work' programme, our processes, including changing our approach to storage inspections, and our assets, including investment in sampling facilities.

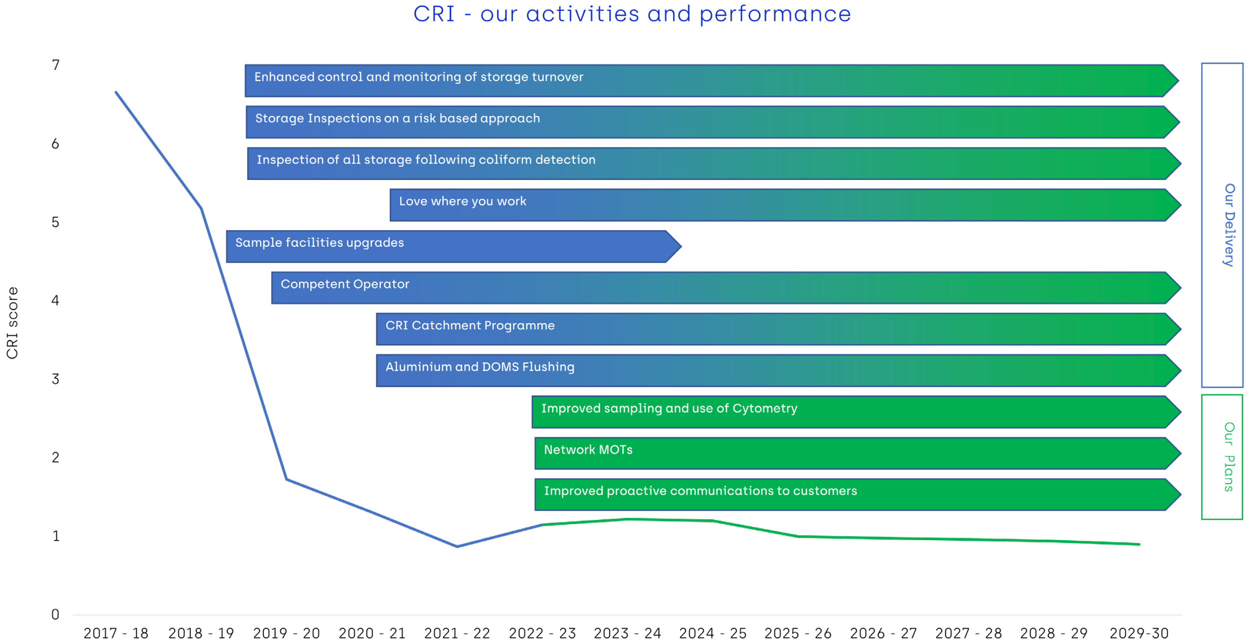


Figure 8.5 CRI : our activities and performance

Leakage

We have applied our organisational-based approach to leakage activities. We understand the importance of reducing leakage for our customers and the environment. We have developed a wider ranging programme of traditional and innovative techniques to rapidly identify leaks. We have also blended short term options, such as active leakage control, with long-term options, such as our network calming programme. We are proud of the leakage performance improvements we have made in 2020 - 2025 using this approach which has enabled us to deliver the largest percentage and Ml reduction in leakage in the industry in this period. We will continue to build on these successes as we move in to 2025 - 2030.

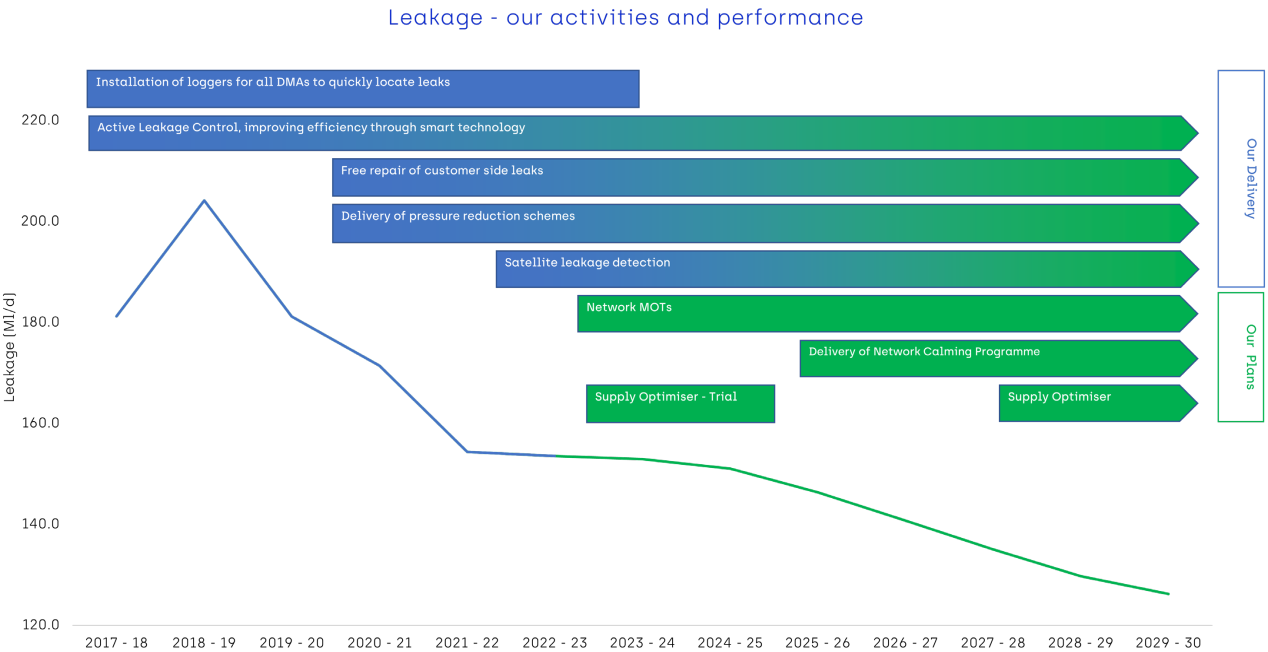


Figure 8.6 Leakage : our activities and performance

Activity based approach

Leakage

In addition to our organisational approach for leakage, we have targeted activity to improve performance using active leakage control. For example, in Wheathampstead our leakage analysts identified that the area was performing poorly in relation to its long-term average and investigated the root cause. Through this processes we were able to identify two separate repairs that were required in the area which were quickly actioned. The result was a 28% reduction in the level of leakage in the area. We will continue using active leakage control as part of our delivery strategy for 2025 - 2030.

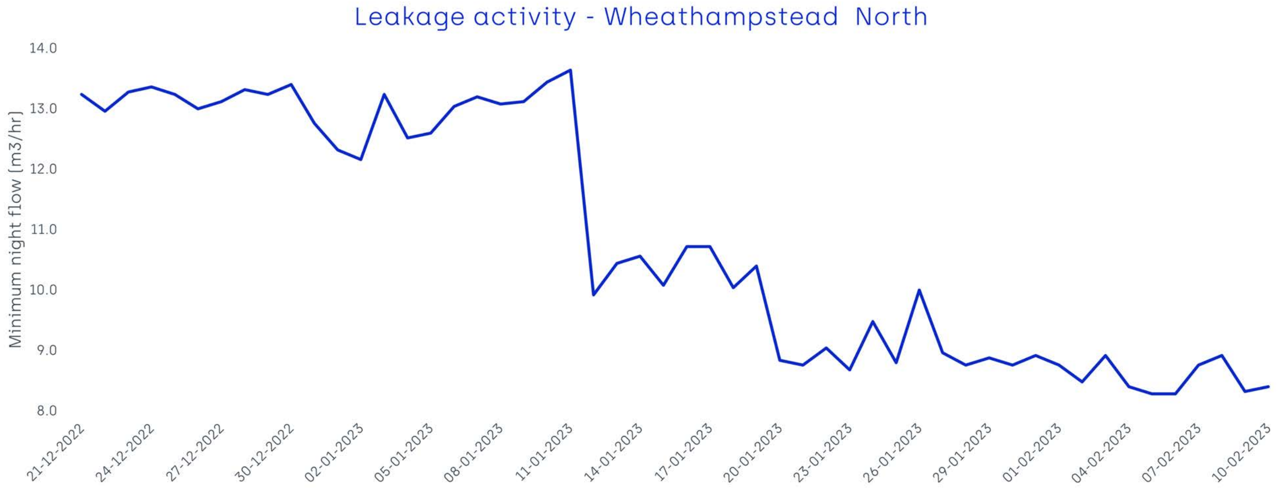


Figure 8.7 Leakage activity : Wheathampstead North

Operational greenhouse gas emissions (Water)

As part of our Net Zero commitment, we recognise the need to reduce energy consumption and, where possible, produce our own energy with renewable sources. At our Walton Water Treatment Works, we installed solar panels on our land to generate electricity and reduce the need to import energy from the grid. This intervention has reduced the site's carbon footprint by 114 Tonnes of CO2e in the first 7 months since installation.

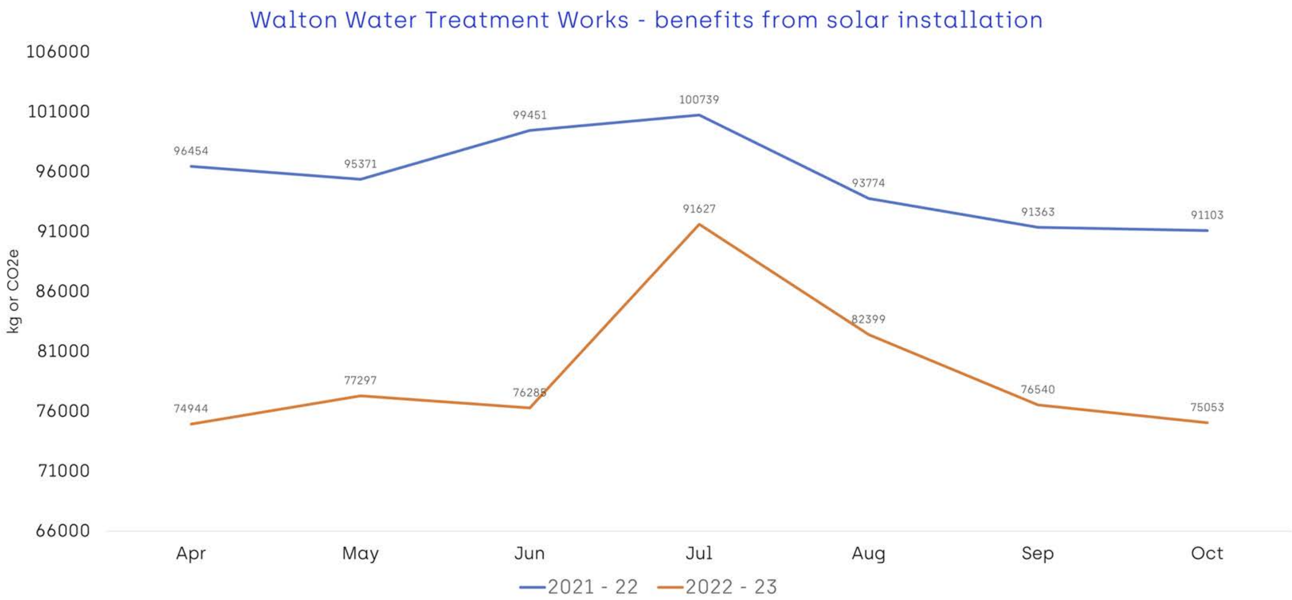


Figure 8.8 Walton WTW : benefits from solar installation

Water Supply interruptions – minimising the impact of repeat incidents

During the 'Beast from the East' weather event in March 2018, we experienced significant challenges in maintaining water supply in our Arkley and Cockfosters supply area. We saw a significant increase in distribution input (DI) driven by an increase in mains bursts and leakage. As a result, we were not able to maintain sufficient storage levels in our Arkley Reservoirs. This caused air locks in the network resulting in loss of customer supply and a total water supply interruptions performance commitment impact of 00:01:05.

We have taken lessons learnt from this event to improve resilience of the Arkley system and avoid a recurrence of these impacts on our customers. We made changes to improve the resilience of the area by installing new pipework connections, control valves and air valves to the network and updated our operating philosophy. During the Freeze/Thaw event of December 2022, we experienced similar DI increases, but due to our interventions we avoided loss of supply in this area with no impact on our water supply interruptions performance commitment.

8.3 Our 2025 - 2030 delivery plans

Our investment plans are ambitious and we need a step change in how we deliver to ensure we achieve cost efficiency and customer benefits in line with our milestone plans. Given the scale of our plans, we cannot afford a standing start to delivery in 2025. To address this challenge, we have created a two year process in 2023 to ensure the readiness of ourselves and our supply chain.

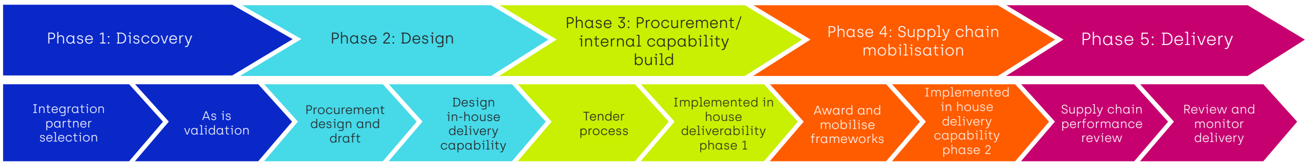


Figure 8.9 Two year supply chain process

Our ambition is to create an industry leading delivery team to deliver our 2025 - 2030 regulatory outcomes and to achieve value for money for customers and to create value for our supply chain partners. To successfully deliver we will adopt a programme based approach that includes our supply chain partners in our decision making and the management and scheduling of our programme. We will do this by ensuring that our selected partners are aligned with our goals and incentivised to outperform our regulatory outcomes fostering a culture of collaboration, trust and open communication. It will be important that we adopt a transparent and pragmatic approach to the allocation of risk taking accountability where this is appropriate and will add value. We have worked with our supply chain to understand key risks and mitigations, which are shown later in this section.

We also have a number of delivery options that we will use for specific programmes and projects:

- **Design and build** - using an end to end contract solution to work with the supply chain from initiation through to benefit realisation. This will be suitable on larger schemes where there are multiple disciplines, interfaces and risks
- **Building in house technical capability** - we are looking to further develop our own in house technical expertise to develop the right solutions to problems. Developing a centre of excellence mentality of continuous improvement with project and programme delivery. This ambition is backed by our commitment to recruit, retain and upskill our teams to deliver a service equivalent of that from the supply chain
- **Build only** - where we design the scheme, we move to a build only model to reduce supply chain overheads

We have developed mature models for working with our supply chain and understand the different needs of our investment plans. We work with a range of supply partners, from large tier 1 operators to small local businesses. Our 2025 - 2030 delivery model will build on successes and learnings of our delivery over many years to ensure we can achieve outcomes and improvements for customers. We will determine the most appropriate delivery strategy for each programme and project based on a number of factors, such as complexity, repeatability and scale. The routes we will use include:

- **Tier 1 supply partners** - used for managing larger and more complex works with multiple interacting disciplines. This approach could be appropriate for both programmes and individual projects depending on specific needs. We have experience of working well with large supply partners to successfully deliver high value programmes. We will only use this approach for our largest investments, such as our Connect 2050 programme
- **Tier 2 supply partners** - due to the size of our business and programmes, we have historically found good working relationships with tier 2 supply partners and they form an essential part of our delivery model. We expect to use this approach for the majority of our portfolio including our treatment investment and pump replacement programmes. Given the demands in the industry for large scale investment, we expect there to be significant pressure on tier 1 suppliers. Our approach to work with tier 2 supply partners means will we less affected by wider industry demands
- **Specialist supply partners** - used for highly specialised or bespoke requirements where we are in a position to project manage delivery. Given the nature of our portfolio, we expect the need to continue to work with a number of specialist contractors and suppliers, for example delivering our biodiversity programme
- **Direct delivery** - during the 2020 - 2025 period, we have developed our own in-house direct delivery function. This team has the capability to deliver end-to-end small scale projects, avoiding the need for contractor overheads and ensuring we have full control over design and construction. We will continue to expand this team for 2025 - 2030, increasing both the capability and capacity, to deliver more work. We will use our direct delivery teams for small and medium-sized maintenance schemes, including pipework repairs, valve and flow meter installations and sample point improvements

Due to the variety in scale and scope of our portfolio, we recognise the need to be agile, flexible and adaptive to deliver. We have retained the ability to deliver through multiple channels. To give confidence that our plans are deliverable, we have engaged with our supply chain across the tiers as part of our business plan development for the first time.

See Appendix AFW41 - Case studies pg.7 for detail on our delivery capability on large infrastructure programmes.

Working with our supply chains

Our plans for 2025 - 2030 are not business as usual for us. These represent a step change in our delivery ambition and approach and we are planning accordingly. Investment will not only increase for our organisation; there will be increases across the sector and wider UK industry. We recognise that this will put pressure on the supply chain and so we have worked with them in the development of this plan.

Our supply chain will be pivotal in helping us to deliver. For our business plan, we have challenged ourselves on the deliverability of our expenditure plans, including the work undertaken by our supply chain. To satisfy this challenge, we have completed a robust exercise in collaboration with our supply chains to ensure our supply partners have the required capacity and capability to deliver our portfolio of work amongst their other commitments.

At the start of this process, we allocated relevant supply partners to the programmes of work within our 2025 - 2030 delivery plan. We then proactively engaged with these supply partners to confirm and evidence the deliverability of our plans and, in turn, what we needed from them to support business plan development. These contractors and suppliers were selected based on the scope and scale of works within the programmes.

Figure 8.10 Working with our supply chain

Through this collaboration exercise, we have asked our supply chain to explicitly confirm the deliverability of our plans and their capacity and capability to deliver the scale of proposed work. All supply partners contacted during the process returned written responses confirming the deliverability of our plans. In total, we engaged 16 companies spanning across our tier 1, tier 2 and specialist partners.

Figure 8.11 Our supply chain engagement

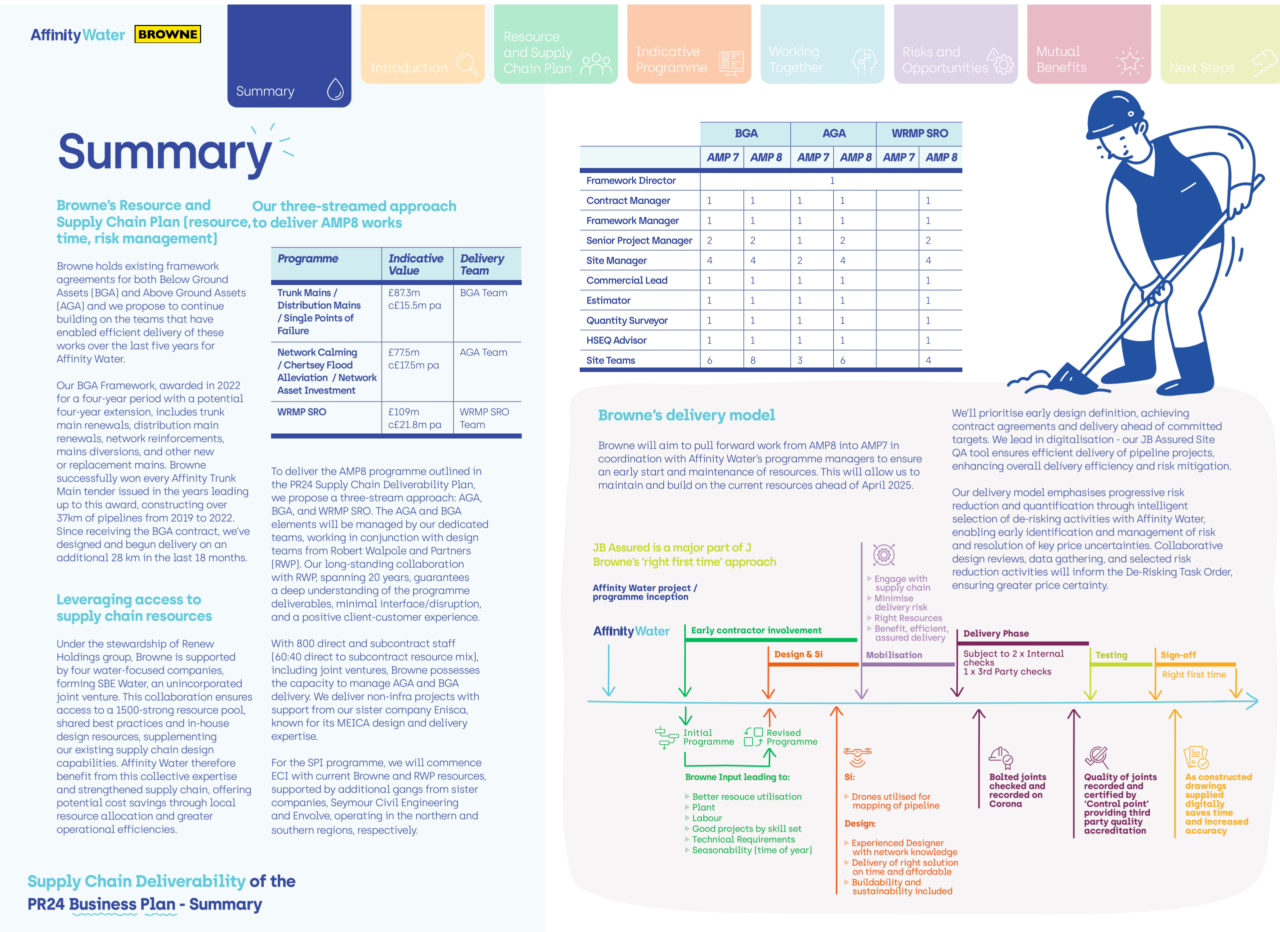
The written responses included several themes which provide further confidence that the supply chain can deliver the investment proposals within our business plan. These included:

- Teams have grown in recent years, meaning capacity and investment has increased to meet increasing demand
- Examples of maintaining best in class service and delivery following increase in scale of works
- Continuing their existing relationship and collaboration with us and will adapt their business models to align with our needs and challenges to ensure they are set up to deliver
- Sub-contracting teams are in place to assist capacity and capability, supplementing existing resources and adding value
- Building sustainability and the environment into delivery

Figure 8.12 Our PR24 supply chain engagement

We took this approach further with the three supply partners that were assigned the highest value of work to complete a detailed project by project review on time, resource and risks. This more detailed review represented expenditure of over £512m, which equates to over 50% of capital investment.

As part of this in depth review, the three supply partners provided an additional submission to outline in more specific terms how they would support us in the delivery of our plans. Covering aspects such as resource and supply chain planning, an indicative programme of works, key risks and opportunities and details of how we could work together to deliver efficiencies in our delivery approach, the submissions provided a wealth of detail that we could point to to evidence the supply partners' capacity and capability to deliver.



Affinity Water BROWNE

Summary | Introduction | Resource and Supply Chain Plan | Indicative Programme | Working Together | Risks and Opportunities | Mutual Benefits | Next Steps

Summary

Browne's Resource and Supply Chain Plan (resource, time, risk management)

Browne holds existing framework agreements for both Below Ground Assets (BGA) and Above Ground Assets (AGA) and we propose to continue building on the teams that have enabled efficient delivery of these works over the last five years for Affinity Water.

Our BGA Framework, awarded in 2022 for a four-year period with a potential four-year extension, includes trunk main renewals, distribution main renewals, network reinforcements, mains diversions, and other new or replacement mains. Browne successfully won every Affinity Trunk Main tender issued in the years leading up to this award, constructing over 37km of pipelines from 2019 to 2022. Since receiving the BGA contract, we've designed and begun delivery on an additional 28 km in the last 18 months.

Leveraging access to supply chain resources

Under the stewardship of Renew Holdings group, Browne is supported by four water-focused companies, forming SBE Water, an unincorporated joint venture. This collaboration ensures access to a 1500-strong resource pool, shared best practices and in-house design resources, supplementing our existing supply chain design capabilities. Affinity Water therefore benefit from this collective expertise and strengthened supply chain, offering potential cost savings through local resource allocation and greater operational efficiencies.

Our three-streamed approach to deliver AMP8 works

Programme	Indicative Value	Delivery Team
Trunk Mains / Distribution Mains / Single Points of Failure	£87.3m c£15.5m pa	BGA Team
Network Calming / Chertsey Flood Alleviation / Network Asset Investment	£77.5m c£17.5m pa	AGA Team
WRMP SRO	£109m c£21.8m pa	WRMP SRO Team

To deliver the AMP8 programme outlined in the PR24 Supply Chain Deliverability Plan, we propose a three-stream approach: AGA, BGA, and WRMP SRO. The AGA and BGA elements will be managed by our dedicated teams, working in conjunction with design teams from Robert Walpole and Partners (RWP). Our long-standing collaboration with RWP, spanning 20 years, guarantees a deep understanding of the programme deliverables, minimal interface/disruption, and a positive client-customer experience.

With 800 direct and subcontract staff (60:40 direct to subcontract resource mix), including joint ventures, Browne possesses the capacity to manage AGA and BGA delivery. We deliver non-infra projects with support from our sister company Enisca, known for its MEICA design and delivery expertise.

For the SPI programme, we will commence ECI with current Browne and RWP resources, supported by additional gangs from sister companies, Seymour Civil Engineering and Envolve, operating in the northern and southern regions, respectively.

Supply Chain Deliverability of the PR24 Business Plan - Summary

	BGA		AGA		WRMP SRO	
	AMP 7	AMP 8	AMP 7	AMP 8	AMP 7	AMP 8
Framework Director	1					
Contract Manager	1	1	1	1		1
Framework Manager	1	1	1	1		1
Senior Project Manager	2	2	1	2		2
Site Manager	4	4	2	4		4
Commercial Lead	1	1	1	1		1
Estimator	1	1	1	1		1
Quantity Surveyor	1	1	1	1		1
HSEQ Advisor	1	1	1	1		1
Site Teams	6	8	3	6		4

Browne's delivery model

Browne will aim to pull forward work from AMP8 into AMP7 in coordination with Affinity Water's programme managers to ensure an early start and maintenance of resources. This will allow us to maintain and build on the current resources ahead of April 2025.

We'll prioritise early design definition, achieving contract agreements and delivery ahead of committed targets. We lead in digitalisation - our JB Assured Site QA tool ensures efficient delivery of pipeline projects, enhancing overall delivery efficiency and risk mitigation.

Our delivery model emphasises progressive risk reduction and quantification through intelligent selection of de-risking activities with Affinity Water, enabling early identification and management of risk and resolution of key price uncertainties. Collaborative design reviews, data gathering, and selected risk reduction activities will inform the De-Risking Task Order, ensuring greater price certainty.

Figure 8.13 An example of our supply chain engagement : J Browne Construction

Through our engagement, the supply chain also identified several key risks and issues based on our portfolio and delivery expansion. For each issue, mitigations were suggested along with proposals for how we could progress into 2025 - 2030 successfully. We will use these to help inform our sourcing strategy and internal plans ensuring risks are understood and proactively managed. A summary of the risks and mitigations is shown in the table below. We will work with our supply chain in readiness for 2025 - 2030 to confirm risk mitigation status and any actions that either ourselves, or the supply chain, will need to take. We have also developed an overall risk register for the PR24 process, of which supply chain delivery risk is included.

Risk and capability constraints	Mitigation
Skilled resource availability and labour market challenges	Focus on sourcing, training, retention, organic growth from within and apprenticeship/graduate programmes to attract new people into the industry. Early sight of work will allow more detailed resource planning and confidence to recruit and train teams ready to deliver.
Limited specialist companies, for example, river restoration	Creation of a detailed planned programme of works, with identified deadlines and deliverables, to allow sustainable service provision and ensure availability of resource to deliver works. Early engagement on growth plans with the supply chain so they can proactively prepare.
General industry growth and demand increase for new works.	Need to maximise efficiency and innovation in working practises across the industry to make sure needs are understood and benefits are delivered.

Risk and capability constraints	Mitigation
Inflation caused by external factors i.e. Covid-19, Brexit, war in Europe.	Effective management and communication of costs. Taking long-term decisions to invest in plant, vehicles and other areas to avoid increasing hire costs. Bring more control into the supply chain and less reliance on third parties.
Impact of skills shortage on salaries.	Controlling wage inflation and ensuring pay is competitive within the industry. Transparency of rates for contracts and maintaining competition where necessary.
Commercial capabilities of the contracts we have in place with suppliers.	Ensuring contracts are mutually beneficial for us and the supply chain, and looking at options of pain/gain sharing to incentivise for mutual benefit.

Table 8.2 Risks and mitigations

The supply partners we engaged with during this exercise cover 75% of the capital investment plan. Business enhancement, strategic planning, reactive and management and general activities delivered internally, or at existing levels, cover the remaining 25% of the portfolio. This means that 100% of the capital expenditure programme value has been confirmed for deliverability. We have also ensured internal deliverability checks at multiple points as part of the detailed business cases development including a director-led red team review process. We have engaged with third party auditors to give assurance to our plans. Overall, we are confident that our portfolio is deliverable.

Independent third party assurance of our supply chain engagement

Based on the documentation provided, we have assessed that Affinity Water has undertaken an ambitious and thorough supply chain engagement process in order to gainconfidence in the ability of its suppliers to deliver supply chain-led PR24 activities and schemes. As part of this process Affinity Water has:

• Engaged 16 suppliers covering five key areas of work covering 75% of the capex portfolio, with the remaining 25% being delivered internally or through reactive work

• Additionally completed more detailed engagement with three suppliers that cover over 50% of Affinity Water's total capex portfolio

• Requested specific information/evidence from all the above relating to their ability to deliver, this included requesting information on their capacity and capability todeliver, and the deliverability of Affinity Water's plans

• Engaged with all key suppliers once, with the three suppliers representing the highest value also being engaged via a workshop in order to follow-up on information requests and in an attempt to capture as much information as possible from said suppliers [34] .

The PR24 business plan represents the first time that we have secured confirmation from our supply chain on plan deliverability at the business planning stage. The benefits of early supplier engagement have been clear; most significantly in confirming that all supply partners can commit to delivering the required scale of work. Starting the conversation early with our supply chain has also provided valuable insights into the ongoing challenges and constraints within the industry and how these challenges are being managed to allow sustainable service provision.

Conducting a more detailed review with a selection of our supply partners also provided a valuable space for questions and clarifications from our partners on the proposed programmes of work, for instance obtaining finer details such as trunk mains lengths. All three companies highlighted the mutual benefits of this early engagement, particularly as some were also reviewing their own business planning cycles.

The assurance exercise has increased the accountability of our supply partners by committing them to delivering a properly resourced, competent and optimal service should they successfully win the work. Early engagement with the supply chain to outline our expectations around delivery, efficiencies and a best value approach will only serve to benefit us in future negotiations.

34. Assurance provided by KPMG

8.4 Direct Procurement for Customers

8.4.1 Strategy and approach

By driving competition in the market, our direct procurement for customers strategy should encourage innovation and investment, ultimately leading to better outcomes for customers. This approach will also promote accountability among water companies, delivery partners and related third parties, as we are collectively held to high standards of performance and efficiency to deliver much-needed strategic water resources.

We fully support DPC where it has clear and demonstrable value for customers and the environment. We have helped Ofwat with the development of their DPC guidance by responding to various consultations, providing solutions to improve areas of concern, and offering advice about the practical application of the guidance in projects.

Historically, we have had very few projects that meet the £200 million threshold. Considering the significant investment required to address supply and demand challenges, and improve resilience to climate change, it is important to explore all opportunities to finance best value solutions for our customers and the environment.

We have thoroughly assessed our proposed 2025 - 2030 investment programme, mindful of the future outline requirements for 2030 - 2035 and beyond, in line with Ofwat's published guidance for PR24. We have developed an eligibility framework derived from Ofwat's guidance. This framework helps to screen investments using a consistent and evidence-based approach, with potential to meet the conditions for DPC. We established a set of eligibility criteria including whole life cost, technical discreteness, and value for money. We also considered if there were any mitigating actions to ensure the integrity of our system resilience and protect services to customers. For more detail on our eligibility framework see Appendix AFW40 - Direct Procurement for Customers.

8.4.2 Which schemes have been considered and the results

We are the largest water only company in England and Wales, but our size remains small in comparison to the large water and sewerage companies. We have lower levels of investment compared to our larger neighbours. However, this has not stopped our ambition to explore opportunities for DPC schemes. We have considered all projects in our portfolio, including discrete projects from different programmes with the potential to combine into a larger scheme, to explore eligibility. We reduced the whole life cost threshold to £150 million, considerably lower than Ofwat's £200 million, to mitigate the potential for cost optimism in our pricing and forecasts of future costs. This will help us to maximise the opportunity for schemes to meet the DPC criteria.

There are no projects, or linked groups of projects, from our proposed 2025 - 2030 base or regulatory enhancement programmes that are suitable for DPC. In Appendix AFW40 - Direct Procurement for Customers, we have included details of our 2025 - 2030 portfolio assessment, together with project-specific screening evaluations for those projects closest to the DPC eligibility criteria.

Those schemes that remain suitable for DPC include the Strategic Resource Options, which we are delivering in collaboration with other water companies and third parties, under the oversight of RAPID. In April 2023, Ofwat notified companies of their draft decisions of schemes to progress post Gate 2. For us, these were GUC/Minworth and SESRO/Thames to Affinity transfer. We would have no further role to play in the South Lincs reservoir/Anglian to Affinity transfer, which would continue for Anglian Water only.

8.4.3 Scope of DPC schemes

All three of our schemes with DPC expenditure in 2025 - 2030 are being delivered as part of the RAPID water resources development programme. These are:

1. The Grand Union Canal (GUC) Transfer

2. Minworth Water recycling
3. The South East Strategic Reservoir Option (SESRO)

The Thames to Affinity Water Transfer is also within our portfolio, but is not scheduled to be taken to the market until 2030 - 2035.

For the Grand Union Canal and Minworth schemes we will continue to partner with Severn Trent Water, as outlined in our RAPID Gate 2 submission [35]. We have procured all of the technical, planning and commercial consultant projects required to take the scheme through to Development Consent Order (DCO) in 2030 - 2035, in line with the timetable contained in the Gate 2 submission. For DPC we plan to consult with the market in late 2023 and early 2024 to determine whether it is feasible to run the procurement in parallel to the DCO process, which will help mitigate delivery risks associated with the 2032 delivery date.

For the GUC scheme we have been consulting with canal stakeholders for over a year already and have just commenced detailed consultation with the local authorities over the site for the treatment works near Leighton Buzzard. We have a well established joint governance model that includes the Canal and Rivers Trust that we propose to maintain until the DCO and DPC arrangements have concluded.

Investigations for SESRO are similarly well advanced, with most of the procurement in place to take the scheme to DCO application. DPC market engagement is due to commence in September 2023. In term of governance the proposal is that this will become a Thames Water led scheme, as current thinking on the scheme is that Affinity will take a bulk supply from Thames at their existing Waysbury reservoir, rather than having a supply arrangement with the SIP/DPC entity itself. Other models are being explored with Ofwat/RAPID and will be discussed during market engagement. We are currently negotiating the legal set up of that governance and delivery structure with Thames Water, but essentially we are proposing to act as a project sponsor via a steering group, with the technical and planning delivery of the project being undertaken by Thames Water.

35. https://affinitywater.uk.engagementhq.com/strategic-resource-options

09.
Risk and Return

Risk and return key points

- Proposed capital structure is financially resilient, maintains strong credit ratings and enables the raising of capital to fund investment
- Proposed equity injection of £150m into the regulated company in Year 1 (2025-26)
- Any dividends will be determined based on performance and service delivery for customers and the environment
- Board assurance that notional company is financeable
- Board assurance that actual company is financially resilient
- Significant downside skew observed in RoRE risk ranges. Plan contains analysis for the reasons and potential mitigations

How our plan meets the Ofwat methodology

Ofwat quality criteria	
Ofwat methodology	**Our plan**
The business plan uses our early view of the allowed return on capital or provides compelling evidence that another rate is more appropriate.	✓ We have adopted the early view WACC but have also provided compelling evidence that a different approach is appropriate
The company's plan provides sufficient and convincing evidence that the overall business plan provides an appropriate balance of risk and return.Plan includes justification of the overall rate of risk and return, including use of RoRE in assessing this.	✓ We have competed significant analysis on risk and have made suggestions for how to tackle high absolute downside risk and the observed downside skew
If the company's business plan includes bespoke uncertainty mechanisms and notified items then these meet the expectations we have set out in our methodology.	✓ We advocate that PR24 price controls make greater use of in-period indexation, or ex-post true-up mechanisms to guard against windfall gains or losses that erroneous input price assumptions can produce (see section 6.6.4 Real Price Effects for more detail)
The company's Board provides assurance that its business plan is financeable on the basis of the notional structure and this is supported by sufficient and convincing evidence that demonstrates financeability and the steps taken to provide this assurance.	✓ Board Assurance provided and external assurance obtained
The business plan provides sufficient and convincing evidence to support PAYG and RCV run-off cost recovery rates. RCV run-off rates are within our expectations set out in Chapter 8 of the final methodology and take account of intertemporal fairness and considerations of affordability for customers now and in the future.	✓ Contained in section 9.6 PAYG and RCV run off rates
The company's Board has provided assurance that it will maintain financial resilience during 2025-30 and in the long-term, taking account of its business plan under its financing and capital structure. We also expect this to be supported by sufficient and convincing evidence of the steps taken to provide this assurance and of the steps to improve financial resilience where necessary.	✓ Board Assurance provided and external assurance obtained
The business plan sets out the company's dividend policy for 2025 -2030 and the policy is in line with our expectations.	✓ We have included our dividend policy with our business plan and have followed Ofwat guidance and expectations
The business plan sets out the company's policy for performance related executive pay during 2025-30 and the policy is in line with our expectations and Board leadership, transparency and governance principles.	✓ We have included our remuneration policy with our business plan and it is in line with Ofwat's expectations and Board leadership, transparency and governance principles

Chapter guide

Section	Purpose	Cross reference
Executive summary	We summarise the chapter and our view on the balance of risk and return.	
2020-2025 Performance	We explain that we are delivering against our PR19 Final Determination despite challenges and that shareholders have reinvested dividends to enable investment for customers, improve operational performance, and maintain strong investment grade credit ratings.	
Capital Structure	Our priority is to have a capital structure which supports the investment for customers, provides financial headroom and maintains our strong credit ratings We explain our plan to achieve this by securing £150m equity in 2026 - 27.	Appendix AFW15 - Green finance framework Appendix AFW41 - Case studies
Risk analysis	We explain our risk analysis on both notional and actual basis, highlighting the downside skew and potential remedies.	Appendix AFW20 - RoRE risk ranges Chapter 7 Outcomes
Return	We explain that we have adopted the early view WACC and highlight our concerns with this. we also outline our Dividend Policy .	Appendix AFW22 - Risk and Return Cost of equity (KPMG) Appendix AFW23 - Inference analysis Appendix AFW47 - Alternative WACC Appendix AFW37 - Dividend policy
RCV Deprecation and PAYG	We explain our approach to cost recovery ensuring intergenerational fairness.	
Financeability and Financial Resilience	We explain how we have assessed financeability of the notional company and financial resilience of the actual company.	Chapter 2 View from the Board Appendix AFW21 - Financeability considerations Appendix AFW48 - Centrus report
Reconciliation Mechanisms	We explain the impact of 2020 - 2025 reconciliation items.	
Sharing rewards	We explain our approach to sharing rewards with customers.	
Remuneration	We explain our approach to executive pay and reward.	Appendix AFW38 - Remuneration policy

9.1 Executive summary

Our financial strategy is to secure an overall risk and return package which balances the need to deliver services at an acceptable price to customers with the need to remain financially resilient and support the raising of capital to fund our investment programme.

We want to build on the strong foundations we have created in the period 2020 - 2023, where we have dealt with several material and unexpected risks, whilst delivering for customers and the environment.

Our plan presents a robust and financially resilient firm with a capital structure that enables us to maintain strong credit ratings and withstand downside scenarios, whilst raising capital to fund our investment programme for the benefit of customers and the environment.

Our plan includes a planned equity injection of £150m into the regulated company in Year 1 (2025 - 26). This equity support and timing thereof is subject to specific conditions, namely that the Final Determination provides a sufficiently attractive investment proposition for equity investors, and the requisite internal approvals of the respective investors. The additional equity will reduce our gearing to 70.7% by 31st March 2026 and support investment over the period 2025 - 2030.

Our equity investors, who have not received a dividend from the appointed business since 2018, in line with their commitment at PR19, will have the opportunity to earn dividends in the period 2025 - 2030. Dividend generation is a fundamental underpinning of the investment thesis for the UK water sector, more so at a time when significant equity support is required to meet investment needs. Any dividend will be determined in accordance with our Dividend Policy (Appendix AFW37 - Dividend policy) which considers performance and service delivery for customers and the environment.

We have conducted significant analysis both internally and externally to analyse the risk profile faced by the actual company and the risk profile faced by the notionally efficient company. Our analysis is presented in 9.4 Risk, our view is that the conditions specified in the final methodology lead to downside asymmetry and higher absolute levels of downside risk in terms of RoRE risk ranges. See Appendix AFW20 - RoRE risk ranges for more detail.

We have articulated some of the reasons for this and in line with the expectations of the final methodology we have outlined ways to correct this downside skew by mitigating risk at source.

We have adopted the early view WACC of 3.29% contained in the final methodology. This differs from our view of the appropriate risk adjusted return as set out Appendix AFW47 - Alternative WACC. Ensuring that the expected, achievable return is commensurate with the risk and is set at a level appropriate to attract investment to the sector is paramount to the equity support outlined above and we discuss this further below.

Finally, in line with the requirements of the final methodology, we have provided Board assurance that the notional company is financeable, and the actual company is financially resilient. The Board assurance statements are contained in section 2.2.10 Risk and return.

9.2 2020 - 2025 performance

Overall, we are delivering against our PR19 Final Determination, despite challenging circumstances, including, significant cost pressures due to Covid-19, energy prices, and tight global supply chains.

In addition to these challenges, we have faced significant weather events which are increasing in frequency and severity, the record temperatures in Summer 2022 are one example of this. Whilst continuing to learn from these experiences, preparing earlier, and investing in our resilience. These risks have significantly impacted our financial performance by increasing base costs and increasing penalties incurred from Outcome Delivery Incentives leading to reduced revenues.

We are delivering for our customers and environment despite these significant challenges. Prioritising innovation and driving efficiency to offset cost increases and performance challenges to deliver both base service and long-term enhancements for our customers.

As per our PR19 commitment we have paid no dividends from appointed revenue in 2020 – 2023, and do not intend to for the remainder of the period. We have reinvested returns, both from appointed and non-appointed business back into the regulated business throughout the current period prioritising service delivery and financial resilience.

Our shareholders have not received a dividend from the appointed business since 2018, instead re-investing returns to support the business through challenging economic conditions, enable investment for customers, improve operational performance, and maintain strong investment grade credit ratings.

9.3 Capital Structure for 2025 - 2030

Due to difficult operating conditions our credit ratings have, with the rest of the industry, come under increasing scrutiny. Despite the headwinds, our credit ratings are at the same level today as they were in March 2020. This is a testament to our ability to adapt to operational challenges, our financial resilience and the protections contained in the regulation. This is not something we take for granted, we believe our financial resilience and target credit ratings provide the necessary stability and liquidity from which to deliver successfully through 2025 – 2030.

We have engaged with our shareholders and external experts to scrutinise and decide on the optimal capital structure for us through 2025 - 2030. Our priority is to have a capital structure which supports the investment for customers, provides financial headroom and maintains our strong credit ratings. This is consistent with the way Ofwat assess financial resilience in the sector. Our current and target credit ratings can be seen in Table 9.1 Current and target credit ratings.

	Moody's	S&P	Fitch
Class A	A3	BBB+	BBB+
Class B	Baa3	BBB-	BBB-
Corporate Family Rating (CFR)	Baa1	N/A	N/A

Table 9.1 Current and target credit ratings

Our plan includes an equity injection of £150m into the regulated company in Year 1 (2025-26). This equity support and timing thereof is subject to specific conditions, namely that the Final Determination provides a sufficiently attractive investment proposition for equity investors and the requisite internal approvals of the respective investors. The additional equity will reduce our gearing to 70.7% by 31st March 2026.

The liquidity and financial headroom will support planned investment over the remaining years of the period, with sufficient headroom to be resilient whilst planning to pay a dividend consistent with the base dividend yield (in the absence of any out/under performance). As we invest, gearing will increase to 76.4% in 2030, this represents the same exit gearing for 2025 - 2030 (post-midnight adjustments), so in essence a flat gearing approach for 2025 - 2030, whilst delivering significant investment in the period. Throughout, gearing will remain at levels which will allow us to remain financially resilient and maintain our strong credit ratings. Table 9.2 Forecast gearing and expected credit rating for the years 2026-2030 below shows forecast gearing and expected credit rating metrics for the years 2026 - 2030.

	2026	2027	2028	2029	2030
Gearing %	70.7	72.7	74.4	75.6	76.4
Moody's AICR	2.54x	2.51x	1.86x	1.76x	1.70x
S&P FFO/net debt	9.10%	8.10%	6.60%	6.40%	6.2%
Moody's CFR	Baa1	Baa1	Baa1	Baa1	Baa1

Table 9.2 Forecast gearing and expected credit rating for the years 2026-2030

Our capital structure will support our debt financing in the capital markets during 2025 - 2030. We plan to raise £328m to refinance maturing bonds and Inflation-Linked accretion, and we plan to raise new debt of £421m to invest on behalf of our customers to provide a better and more resilient service.

We have an established track record of raising bank and bond finance under green and sustainable frameworks. We plan to continue this during 2025 - 2030. As a water only company investing significant capital to achieve stretching environmental outcomes, we have a strong offering to debt investors seeking to invest in green and sustainable companies. Our Green Finance Framework, which aligns with ICMA Green Bond Principles and LMA Green Loan Principles is provided in Appendix AFW15 - Green finance framework and will be a cornerstone of our debt issuance in the period 2025 - 2030.

See Appendix AFW41 - Case studies pg.8 for detail on our green bond issuance.

9.4 Risk

Now more than ever, the needs of customers and investors should be aligned. Given the scale of investment needed in our region now and over the long-term, a fair balance of risk and return is essential to attract investment and ensure the cost of financing remains as low as possible, so that resilient and efficient water supplies can be delivered for customers.

We have considered the RoRE risk ranges proposed in the final methodology for the notionally efficient firm, and we have completed our own analysis with the help of external advisors to form our own view of the RoRE risk ranges faced by the notionally efficient firm. Our analysis shows significant downside asymmetry and higher absolute downside risk in terms of RoRE risk ranges when compared to those proposed in the final methodology which undermines the 'fair bet' principle.

Further to this, in accordance with the final methodology we have also considered the actual risks we are exposed to and the RoRE risk ranges implied by actual risks. The analysis of actual risk also shows significant downside asymmetry and higher absolute downside risk when compared to the RoRE risk ranges proposed in the final methodology.

Our firm view is that changes are required to ensure the RoRE risk ranges that the company is exposed to are symmetrical and the absolute risk level is acceptable. Failure to address this will put equity financeability at risk and will have negative consequences for customers, companies, and the wider industry over the longer term.

Table 9.3 RoRE risk ranges illustrates the RoRE risk ranges we have identified for the actual company, our view of the notionally efficient company and those contained in the final methodology. We have added a new risk range in the table to capture the risk created by the introduction of Price Control Deliverables.

Risk range [1,2]	Final Methodology		Notional		Actual	
QAA	-0.30%	+0.30%	-0.30%	+0.30%	-0.30%	+0.30%
Totex	-1.00%	+1.00%	-2.57%	+1.22%	-0.50%	+0.49%
PCD risk	0.00%	0.00%	-1.56%	-0.51%	-1.68%	-0.54%
Retail costs	-0.20%	+0.30%	-0.29%	+0.11%	-0.43%	-0.27%
Revenue Incentive Mechanism	-0.05%	+0.00%	-0.05%	+0.00%	-0.03%	+0.00%
Financing	-0.65%	+0.70%	-1.09%	+1.92%	-0.28%	+0.46%
ODI's & Mex's	-2.65%	+2.50%	-1.80%	-0.81%	-3.11%	+0.85%
Total (simple)	-4.85%	+4.80%	-7.66%	+2.23%	-6.33%	+1.29%
Total (Monte Carlo)	**N/A**	**N/A**	**-6.54%**	**1.05%**	**-5.35%**	**+0.31%**

Table 9.3 RoRE risk ranges

1. All ranges expressed on notional capital structure basis (55% gearing) to ensure comparability
2. Appendix AFW82 - Affinity Water data tables and Appendix AFW53 - PR24 - Part 2 Commentary - Risk & Return (Table RR30)

Detailed calculations and methodologies are provided in Appendix AFW20 - RoRE risk ranges for our view of risks faced by the notionally efficient firm and our view of actual risk.

The risk ranges presented in the table above show the 'gross' risk, i.e. we have not included the de-risking impact of any potential new regulatory mitigations including those we have discussed below and in 7.1.5 Incentive rates.

In essence, the table and risk analysis show the current downside asymmetry based on the conditions specified in the final methodology, we have made various suggestions for how this can be corrected but we have not embedded these corrections into our risk ranges.

For Table RR30 we have entered the RoRE risk ranges that the actual company is exposed to (on a notional capital structure) but we think both the actual risk ranges and our view of risks ranges for the notionally efficient company are pertinent for this analysis.

Regarding the suitability of the risk ranges proposed in the final methodology and other issues, we would also draw out the following points:

- The totex risk range proposed in the final methodology does not properly capture the current regulatory period data in the historical analysis. Risks crystalised in 2020 - 2023 which affected the industry's ability to outperform totex. This recent and pertinent data should be included in the historical analysis
- The historical analysis for totex in the final methodology excludes any allowance for the introduction of the new regulatory mechanism for Price Control Deliverables which introduces additional penalties to companies who deviate from the totex investment delivery profiles set out in Final Determinations. Given this regulatory mechanism is new and still to be fully developed it is difficult to suggest mitigations of this risk at source, in the absence of these, return would need to increase
- Our analysis shows that for ODIs the actual RoRE risk ranges are negatively skewed when compared to those proposed in the final methodology. We have discussed this in 7.1.5 Incentive rates and have proposed various ways this negative skew can be corrected for individual ODIs using existing regulatory tools
- This downside risk for ODIs is particularly large for the Per Capita Consumption (PCC) Performance Commitment. The PCC targets in our plan and WRMP are rightly ambitious. However, the uncapped downside potential presents an extreme amount of risk for a single ODI which relies, to a significant extent, on customer behaviour which does not fully lie in our control. We propose a cap of -0.5% RoRE which will allow us to retain the ambitious target without creating an unacceptable imbalance in risk and return
- Finally, we advocate that PR24 price controls make greater use of in-period indexation, or ex-post true-up mechanisms to guard against windfall gains or losses that erroneous input price assumptions can produce. A possible index was outlined by First Economics in Appendix AFW46 - PR24 : Input price inflation and represents a low cost and no regrets approach to managing the uncertainties surrounding real price effects prediction (see 6.6.4 Real Price Effects for more detail)

Symmetrical risk ranges and realistic P50 levels are a fundamental cornerstone of the regulatory framework. By following the requirements set-out in the final methodology, our results show an asymmetrical risk package. Failure to address this will create uncertainty over equity financeability, actual financial resilience and will have negative consequences for customers, companies, and the wider industry over the longer term.

9.5 Return

Our business plan incorporates the early view cost of capital proposed by Ofwat of 3.29%. We do however have material concerns over the return proposed in the final methodology.

Our concerns fall into 3 areas:

1. The absolute level of return and particularly the Cost of Equity is low in comparison to the current interest rate environment. There appears to be a disconnect between the early view cost of equity and current pricing of debt. The cost of equity should remain sufficiently above the cost of debt to promote equity investment in the sector. In addition to incorporating the latest market data, we would expect the Cost of Equity to consider the current and forward-looking interest rate environment to ensure companies are financeable. Further information is provided in **Appendix AFW23 - Inference analysis**
2. We have concerns over the calculation methodologies employed for many of the constituent parts of WACC. Further detail and our own analysis on calculation of WACC is contained in **Appendix AFW22 - Risk and Return Cost of equity (KPMG)** and Appendix AFW47 - Alternative WACC
3. As highlighted in the risk section our analysis shows an imbalance in risk and return, which undermines the investibility of the sector, from both an equity and debt standpoint. We have made various

suggestions for how this can be remedied, where risk cannot be or is not mitigated at source, return should increase to compensate investors for bearing this risk

9.5.1 Dividend policy

Our Dividend policy for 2025 - 2030 is provided in Appendix AFW37 and has been developed after considering the final methodology, the Board leadership, transparency and governance - principles document, our licence conditions and corporate finance principles.

In line with these documents, our Board will consider a wide range of metrics before determining the suitability and quantum of any dividend. The starting point for the quantification of a dividend from the appointed business will be Ofwat's base dividend as applied to the notional company. In applying our policy, we will transparently reconcile actual dividend payments with reference to Ofwat's base dividend for the notional company.

Dividends can be increased or reduced from the base depending on the company's actual performance - notably service delivery to customers & the environment, performance in meeting statutory and licence obligations, and out/under-performance against regulatory metrics and benefit sharing.

Finally, our policy will ensure that dividends declared or paid will not impair financial resilience over the longer term.

Our business plan proposes total dividends of £191m from the appointed business over 2025 - 2030 which is an annual yield on notional regulated equity of 4.0%.

9.6 PAYG and RCV run off rates

The assets that we build, maintain and use to deliver water provide benefits to customers over many years. We therefore need to achieve a fair balance of charges over time and in line with customers preferences.

Our customers have told us that they prefer to only pay for the assets at the time that they use them, and that they would prefer to avoid large intergenerational cross subsidies. However, these long held views are softening to consider a longer payback period given the current economic climate.

We have set our business plan PAYG and RCV run-off rates on a long-term stable basis. We have not changed PAYG or run-off rates to solve financeability constraints or to advance cash flows, and they remain in line with the natural rate and within the boundaries set out in the methodology.

For PAYG we have analysed our totex investment plan by price control and determined the natural PAYG rate by calculating the proportion of totex that is made up of operating expenditure plus Capitalised Infrastructure Renewals Expenditure, this is consistent with our approach at PR19.

For Water Network + the natural rate is an average of c.53.5% across the period which is lower than at PR19.

For Water Resources the natural rate is an average of 61.1% across the period which is higher than at PR19.

Our business plan adopts a change in approach to RCV run off when compared to 2020-2025, as we have adopted the reducing balance method of depreciation whereas previously, we employed the straight-line method. This change aligns with our customer preferences as it slows down money and lowers bills in the shorter term but increases RCV and spreads the cost over a longer period.

Outside of this methodological change we have assessed depreciation rates based on historical data to determine asset life. For Water Network + we propose to use rates of 4.21% which is below the guidance for an upper limit of 4.5%.

For Water Resources, our analysis of historical data suggests a rate of 5.40%. However, noting the upper limit of 4.5% we have adopted 4.5%.

9.7 Financeability and financial resilience

Financeability – Notional company

The notional company is financeable and the Board have provided assurance on that basis. The Board assurance statement can be seen in 2.2.10 Risk and return.

We conclude that the notional company is financeable based various assumptions and the definition and inputs employed by Ofwat in the final methodology.

The notional company is the company that has the following features:

- It achieves the efficient totex – no out or under performance
- It does not incur any penalties from ODIs / C-Mex / D-Mex (i.e. symmetrical upside and downside risk)
- Its returns are equivalent to the allowed cost of capital
- Its gearing is in line with the notional gearing assumption of 55% and it benefits from £258m equity injection to enable this

Under these conditions we expect the notional company to be rated at Baa1/BBB+ and could provide a dividend yield of 4.0% which is consistent with Ofwat's view of financeability.

We considered alternative equity and dividend scenarios for the notional company, before settling on the presented notional capital structure. We found that even in a zero dividend scenario, equity is required in the notional company to maintain gearing at 55%. We also considered lowering dividend yield to 2% as per the minimum level suggested in the final methodology, to determine if, this would reduce the equity requirement however, it would still be significant (£152m) and in recognition of the need for the notional company to attract a significant amount of equity we strongly believe the 4% yield presented the best investment proposition in terms of equity financeability.

The key debt metrics of the notional company for our presented case can be seen in Table 9.4 Debt metrics - notional company.

	2026	2027	2028	2029	2030	Threshold
Moody's AICR	1.59x	1.58x	1.56x	1.55x	1.53x	1.5x
S&P FFO/net debt	10.00%	9.79%	9.37%	9.22%	9.25%	9.0%
Rating	Baa1/BBB+	Baa1/BBB+	Baa1/BBB+	Baa1/BBB+	Baa1/BBB+	Baa1/BBB+

Table 9.4 Debt metrics - notional company

In partnership with our external advisor, we have assessed the notional company's credit rating against the Moody's Scorecard and the S&P guidance. which considers a rounded view of both financial and non-financial factors. The key financial metrics are Adjusted Interest Coverage Ratio and Gearing. In assessing the S&P rating, we have utilised the S&P corporate methodology which, like Moody's considers both financial and non-financial factors. The key financial metric is FFO/Net debt.

It is clear that based on the conditions set out in the final methodology and the assumptions we have made the notional company would be rated Baa1/BBB+ and be considered to be financeable. Full analysis contained in Appendix - AFW48 Centrus report.

Credit rating analysis is a measure of debt financeability and whilst this is generally measurable and observable, equity financeability is less so. The balance of risk and return is the key determinate of equity financeability and we have assumed that the current imbalance in risk and return that we have identified and discussed in 9.4 Riskwill be rectified. Failure to do this would put equity financeability at risk.

In addition to our risk analysis and return considerations we would also draw out the following (further considered in Appendix AFW21 financeability considerations):

Our analysis suggests that the financeability assessment for the notional company is dependent on the adoption of the 55% geared notional company newly introduced in PR24. All else being equal, a 60%

geared company, as prescribed in PR19 and supported by the CMA redeterminations would not be considered financeable.

Our analysis suggests that the notionally efficient firm has a time limited benefit in 2025 - 2030 due to fully transitioning to CPIH, which does not repeat post 2030. This poses a risk to longer term financeability which hasn't been addressed at PR24.

Our current analysis assumes the rating agency view of the sector remains unchanged. Any deterioration in the rating agencies' assessment of business risk (including political and regulatory risk) could led to a situation where the current proposed cashflows do not achieve a Baa1/BBB+ credit rating.

Finally, we note the lack of a requirement for the financeability assessment to fully consider financial resilience. This requirement exists for the actual company and we think the notionally efficient company should have to meet this hurdle too.

Whilst the notional company base case is consistent with credit rating metrics at Baa1/BBB+, in many cases, particularly for Moody's AICR, the level of headroom is very low (£1m-£4m).

It is clear that this low level of headroom in the base case means that the notional company would not perform well under downside scenarios and would not be considered to be financially resilient.

Financial resilience - Actual Company

In line with Ofwat's expectations we have provided Board assurance that the actual company is financially resilient. The Board assurance statement can be seen in 2.2.10 Risk and return.

We have completed analysis on financial resilience in partnership with our external advisor. Full analysis is contained in Appendix - AFW48 Centrus report.

Our assessment of financial resilience has considered both the actual Appointee and the actual legal entity, Affinity Water Limited, which benefits from non-appointed cashflows over and above the actual Appointee.

For both Affinity Water Limited and the actual Appointee we have considered the likely credit rating outcomes and in addition for Affinity Water Limited only we have further considered the ability to meet the financial covenants contained in our lending agreements.

Our assessment has focused on performance against key credit metrics and covenants under both the base case and 11 stress test scenarios. Of these stress tests, 8 are consistent with Ofwat's recommendations for stress testing and the remaining 3 represent bespoke combination scenarios which are generally more severe.

The bespoke downside scenarios have been established by internal experts based upon real world experience, business risks and annual testing in the Long Term Viability Statement from the Annual Report.

Our analysis shows that both the Actual Appointee and Affinity Water Limited would be rated Baa1/BBB+ in the base case. The key debt metrics of Affinity Water Limited for our base case can be seen in Table 9.5 Key debt metrics of Affinity Water.

	2026	2027	2028	2029	2030	Threshold
Moody's AICR	2.54x	2.51x	1.86x	1.76x	1.70x	1.3x
Headroom (£m)[1]	43	43	38	38	37	
S&P FFO/net debt	9.10%	8.10%	6.60%	6.40%	6.2%	6.00%
Headroom (£m)[1]	56	46	27	25	24	

	2026	2027	2028	2029	2030	Threshold
Rating	Baa1/BBB+	Baa1/BBB+	Baa1/BBB+	Baa1/BBB+	Baa1/BBB+	Baa1/BBB+

Table 9.5 Key debt metrics of Affinity Water

1. estimated headroom to Baa3/BBB-

This base case provides sufficient headroom to withstand downside scenarios and maintain an investment grade credit rating. See Table 9.6 performance against key metrics for Affinity Water Limited under downside scenarios for further information.

Scenario	Covenant Gearing	Covenant ICR	Moody's AICR	S&P FFO/net debt
Base case	✓	✓	✓	✓
Totex underperformance (10% of totex) over 5 years	✓	✓	✓	✗
ODI underperformance payment (3% RoRE) in years 3-5	✓	✓	✓	✓
Inflation 2% below the base case in the business plan in each year of the price review	✓	✓	✓	✓
Deflation of -1% for 2 years, followed by a return to the long-term inflation target	✓	✓	✓	✓
10% spike in inflation with a 2% increase in wedge between RPI and CPIH, followed by two years at 5% and a 1% increase in wedge	✓	✓	✓	✗
Increase in the level of bad debt (20%) over current bad debt levels.	✓	✓	✓	✓
Debt refinanced as it matures, with new debt financed at 2% above the forward projections.	✓	✓	✓	✓
Financial penalty – equivalent to 6% of one year of Appointee turnover	✓	✓	✓	✓
Combined scenario 1 - Sustained poor performance & macro economic pressure - Inflation -1%, Totex +2%, ODIs 0.5% RoRE & Bad debt +10% for 5 years	✓	✓	✓	✓
Combined scenario 2 - Massive asset failure cost & penalties - Yr 1 Capex +£60m & Opex +£20m, Yr 2 Opex +£10m & Yr3 Opex +£5m	✓	✓	✓	✓
Combined scenario 3 - repeat of AMP7 low inflation -2% Yr 1-2 & +5% opex pressure, high inflation +8% Yr 3-5 & +10% Opex & +4% Capex	✓	✓	✓	✗

Table 9.6 performance against key metrics for Affinity Water Limited under downside scenarios

Summary of our performance in downside scenarios

Gearing

In all downside scenarios modelled, our proposed financial strategy and capital structure allows Affinity Water Limited to maintain compliance with its financial covenants on gearing. In most downside scenarios, the gearing level would stay below 80%. The most severe scenario for covenant gearing is totex underperformance where gearing would eventually rise to 84.4% but this is within our covenant levels.

In terms of credit rating metrics for gearing, in most downside scenarios our gearing level remains consistent with Baa1/BBB+ expectations (<80%). However, it is possible that higher gearing levels in the most severe downside scenarios could lead to ratings pressure below Baa1/BBB+. **Importantly, we expect our gearing levels to be consistent with maintaining investment grade credit ratings throughout the period 2025-2030 under all downside scenarios.**

Interest Cover

The picture for covenant ICR is similar. In all downside scenarios, performance remains above the levels required by our covenants. The most severe downside scenarios for covenant headroom are the totex underperformance and Combination 3 scenarios but even under these conditions compliance with covenants is maintained.

In terms of credit rating metrics for ICR, in most downside scenarios our ICR level remains consistent with Baa1/BBB+ expectations (>1.3x). However, it is possible that ICR performance in the most severe downside scenarios could lead to ratings pressure below Baa1/BBB+. **Importantly, we expect our ICR performance to be consistent with maintaining investment grade credit ratings throughout the period 2025-2030 under all downside scenarios.**

FFO/Net debt

The FFO/Net debt metric is a component of the S&P methodology, due to its sensitivity to inflation this is our worst performing metric under the downside scenarios. This being said, in most downside scenarios, performance remains above the level required to maintain Baa1/BBB+.

The most severe scenarios modelled for FFO/Net debt are totex underperformance, 10% inflation spike and Combination scenario 3. Under these scenarios, the level drops below the 6% required for BBB+ and below the 5% level which is consistent with minimum investment grade BBB-. We have considered this in partnership with our external advisors and take comfort from the following points:

- Based on previous experience and indeed consistent with our current performance against this metric. We believe that isolated poor performance against the FFO/Net debt metric is unlikely to lead to a downgrade below investment grade in cases where high inflation is the driver of poor performance. During the high inflationary period in 2022 and 2023 the FFO/Net debt performance for the sector has deteriorated significantly, in many cases below the implied threshold for BBB- but this has not led to rating downgrades below investment grade
- The downside scenario modelling excludes the impact of any potential management mitigations to offset or partially offset the deterioration of this credit metric

Analysis of the financial performance of the Actual Appointee under downside scenarios has also been carried out. The Actual Appointee does not benefit from non appointed income and is therefore less financially resilient than Affinity Water Limited. However, the overall conclusion is the same.

Based on the significant analysis undertaken we have concluded that the base case rating level will, when taking into account the impact of management actions as well as the ability to defer dividends, provide sufficient headroom to deal with the financial impact of the downside scenarios we have used for stress testing purposes. **In all cases we expect to be rated at least the minimum investment grade Baa3/BBB- credit rating for Affinity Water Limited and the actual Appointee.**

9.8 Reconciliation mechanisms summary

Our business plan submission includes a full analysis of forecast reconciliation mechanisms for 2025 - 2030, this is provided in data tables PD11 and PD12. The net impact of all reconciliation mechanisms is a -£1.9m adjustment to revenues in the period 2025-2030 and a +£57.7m midnight adjustment to RCV.

The reconciliation includes a large adjustment to account for the RPI/CPIH wedge experienced in the period 2020 - 2025. It also includes the impact of transitional expenditure programmes and Defra accelerated projects, which will see us bring forward expenditure previously planned for the period 2025 - 2030 into 2024 and 2025 to ensure our customers receive benefits on time.

The reconciliation includes the full penalty impact of PCC based on failure to meet targets set pre Covid-19. In line with the methodology and table population requirements, no adjustment has been made to allow for the immediate impact of Covid-19 or the enduring effect from increased working from home. We have provided evidence to demonstrate the quantifiable effect of Covid-19 on the PCC Performance Commitment and ODI penalty.

See Table 9.7 Summary of PR24 midnight adjustments .

RCV Adjustments	£m 22/3p	Revenue Adjustments	£m 22/3p
Blind Year Adjustments from 2019/20	13.5	Blind Year Adjustments from 2019/20	6.8
WINEP Adjustment	7.6	ODI Adjustments	-20.9
Totex costs reconciliation	-5.2	Developer services	-18.2
Land Sales	-12.3	Totex costs reconciliation	25.9
RPI/CPIH Wedge Adjustment	36.1	Gearing Outperformance Sharing	-7.1
Transition and accelerated spend	20.1	RPI CPIH Wedge Adjustment	8.4
		Other	3.9
TOTAL	**59.8**	**TOTAL**	**-1.2**

Table 9.7 Summary of PR24 midnight adjustments

9.9 Sharing rewards

We recognise that despite the mature regulatory environment in which we operate, from time to time, unexpected events occur which will not have been considered in the balance of risk and return decision. In some extreme upside scenarios companies can benefit financially from these events. Its difficult to predict what specific unexpected events could create these circumstances and rather than attempting to do this and creating new reconciliation items we believe a principles based approach is the way forward.

This principles based approach is already embedded in our Dividend policy and Remuneration policy where our Board and Committees have committed to consider a wide range of factors including, importantly, performance and service delivery for customers and the environment before determining fair equity returns and remuneration.

We will apply this principles based approach to sharing rewards from extreme and unexpected events with customers. Our Board will consider the financial returns created by the company in each year and consider the drivers of these financial returns.

9.10 Remuneration

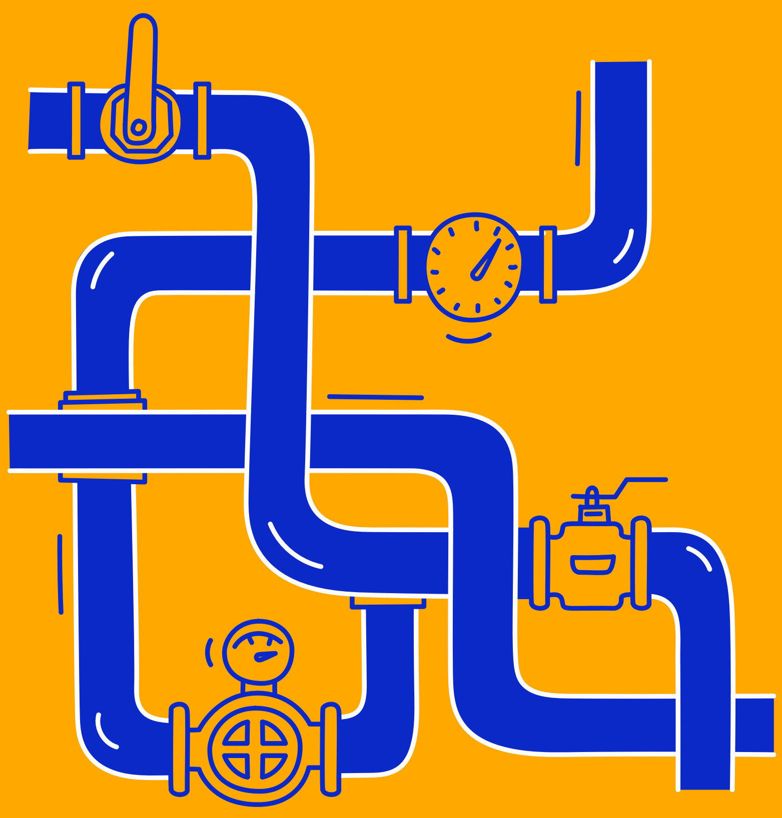
Our executive remuneration policy aligns executive pay to performance and service delivery for customers and the environment. It incentivises stretching performance for customers through delivering high quality performance whilst ensuring the cost of water remains affordable by incentivising financial efficiencies. These stretching targets will be calibrated with reference to our Final Determination in December 2024.

Our policy is attached in Appendix - AFW38 Remuneration policy and includes a mix of long-term and short-term incentives. The metrics are aligned to the expectations set by Ofwat of a minimum of 60% of incentives being aligned to stretching customer and environmental outcomes. Our policy will transparently ensure that executive remuneration is aligned to overall performance delivered for customers, communities, and the environment.

Our Remuneration policy is approved by our Remuneration Committee who recognise their important role in protecting customers, attracting and retaining executive directors, and incentivising delivery.

10.

Water resources, water networks and retail controls



Water resources, water networks and retail controls

Item	£m	
PAYG	136.72	The assumptions in our business plan submission have been combined following the PR24 final methodology through the PR24 Financial Model to build up and produce our final allowed revenue outputs. Within the Wholesale price controls, the assumptions for totex, PAYG, RCV Run-off, allowed return on capital (wacc) and past delivery reconciliations, combine to produce the final allowed Wholesale revenues.
RCV Run Off	60.715	
Allowed Return on capital	41.928	
Revenue adjustments for PR19 reconciliations	-24.070	
Quality and ambition assessment (QAA) reward / penalty	0	
Tax	0	
Grants and contributions after adjustment for income offset (price control)	0	
Deduct non-price control income	0	
Innovation competition	0	
Revenue re-profiling	0	
Final allowed revenues	214.645	

Table 10.1 Calculation of allowed revenue (£ million) for Water Resources

Item	£m	
PAYG	920.687	The assumptions in our business plan submission have been combined following the PR24 final methodology through the PR24 Financial Model to build up and produce our final allowed revenue outputs. Within the Wholesale price controls, the assumptions for totex, PAYG, RCV Run-off, allowed return on capital (wacc) and past delivery reconciliations, combine to produce the final allowed Wholesale revenues.
RCV Run Off	376.379	
Allowed Return on capital	278.178	
Revenue adjustments for PR19 reconciliations	22.295	
Quality and ambition assessment (QAA) reward / penalty	0	
Tax	0	
Grants and contributions after adjustment for income offset (price control)	69,829	
Deduct non-price control income	-15,000	
Innovation competition	0	
Revenue re-profiling	0	
Final allowed revenues	1,652.368	

Table 10.2 Calculation of allowed revenue (£ million) for Water Resources

Item	£m	
Total wholesale revenue - nominal (£m)	1,949.774	The assumptions in our business plan submission have been combined following the PR24 final methodology through the PR24 Financial Model to build up and produce our final allowed revenue outputs. Final Wholesale allowed revenues, retail cost, retail margin and retail adjustments all combine to produce final allowed Residential Retail price control revenue.
Proportion of wholesale revenue allocated to residential (%)	80.26%	
Residential retail costs (£m)	170.966	
Total retail costs (£m)	1,735.850	
Residential retail net margin (%)	1%	
Residential retail net margin (£m)	17.534	
Residential retail adjustments (£m)	-1.834	
Residential retail revenue (£m)	186.666	

Table 10.3 Retail margins, 2020 - 2025 (nominal price base)

Affinity Water