

Chapter 7: Explaining our costs

A.	Introduction.....	2
B.	Overview of our costs and why they are efficient	2
C.	Maintaining our wholesale network: ‘base’ expenditure.....	9
D.	Improving our wholesale network: ‘enhancement’ costs.....	19
E.	Running our retail activities.....	22
F.	Internal cost efficiency processes	29
G.	Assurance and regulatory submissions.....	29



7. Explaining our costs

In this chapter we explain the costs that we expect to incur in our retail and wholesale businesses to support the outcomes that we will deliver for our customers from 2025 to 2030 (Asset Management Plan (AMP) 8).

Over the course of AMP8 we plan to spend £413.0m, excluding our expected spending in areas outside of the price control such as developer services. This equates to £82.6m per year and is an increase of £13.3m per annum compared to the current AMP7. All these figures are in 2022/23 prices.

The forecast step-up in our costs is driven by an increase in our capital expenditure as we invest in our network, including our accelerated seven-year smart meter rollout programme and replacement of assets which support our softening obligations as they reach the end of their technical lives.

We have set ourselves challenging efficiency targets in both our wholesale and retail costs, driven by expected opportunities for operational productivity improvements linked to more effective use of data, automation of processes, our smart network and learnings from our performance so far in AMP7.

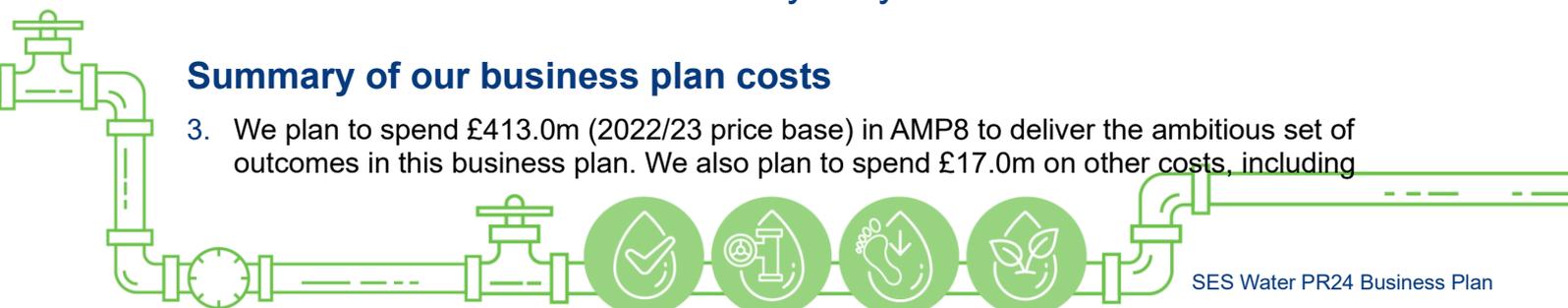
A. Introduction

1. This chapter explains how much our AMP8 plan will cost to deliver. It shows how we have challenged ourselves internally and externally making use of industry benchmarking data to produce an efficient forecast. It also reconciles our forecast to Ofwat's possible view of our efficient costs based on its published cost modelling. All the cost data presented in this section is provided in a 2022/23 price base. Please note that figures in the cost tables below may not always add up due to rounding.
2. This section of our plan is structured as follows:
 - Section B is an overview of our plan costs and why they are efficient
 - Section C explains our Wholesale 'base' costs
 - Section D details our Wholesale 'enhancement' costs
 - Section E explains the cost of running our retail business
 - Section F summarises the measures we have taken and considered internally and externally to ensure the cost efficiency of our business plan and
 - Section G gives an overview of the relevant regulatory submissions.

B. Overview of our costs and why they are efficient

Summary of our business plan costs

3. We plan to spend £413.0m (2022/23 price base) in AMP8 to deliver the ambitious set of outcomes in this business plan. We also plan to spend £17.0m on other costs, including



non-price control expenditure related to activities such as developer services. The table below sets out our forecast AMP8 business plan costs.

Table 1: Forecast AMP8 costs (£m 2022/23 price base)

Area	2025/26	2026/27	2027/28	2028/29	2029/30	AMP8
Wholesale base expenditure	68.0	70.3	66.3	59.4	59.0	323.0
Wholesale enhancement expenditure	9.4	12.6	12.2	9.7	9.0	52.8
Retail activity expenditure	8.0	7.4	7.4	7.2	7.1	37.1
Total price control	85.4	90.3	85.8	76.3	75.1	413.0
Developer services	2.7	2.7	2.7	2.6	2.6	13.3
Non-appointed	0.7	0.7	0.7	0.7	0.7	3.7
Total non-price control	3.4	3.4	3.4	3.4	3.3	17.0
Total	88.8	93.7	89.2	79.7	78.5	429.9

Source: SES Water analysis

4. As shown in the table above, our core business plan expenditure includes:

- £323.0m of routine, year-on-year costs, which we incur in the normal running of our business (what Ofwat refer to as 'base expenditure').¹ This includes £30.4m for water resources and £292.6m for water network plus.² The decline in our base expenditure in the final two years of the AMP reflects the drop off in our capital expenditure (CAPEX) programme (see paragraphs 8-9 below)
- £52.8m to enhance our wholesale network and deliver step changes in performance levels (what Ofwat refer to as enhancement expenditure) and
- £37.1m to run our retail activities.

5. In the above figures, we include our central costs that we allocate to our wholesale base and retail costs respectively.

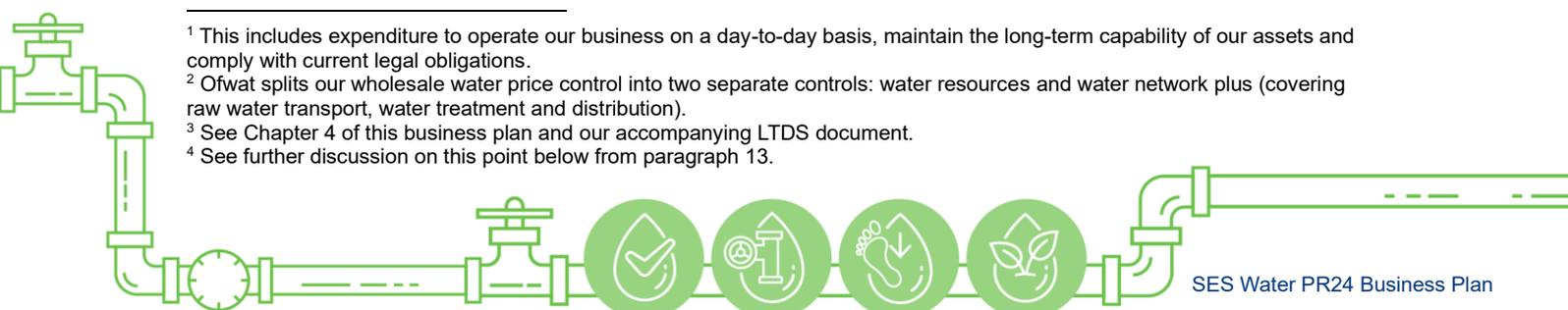
6. This represents a sizeable investment programme in our region which, based on our long-term delivery strategy (LTDS) analysis,³ reflects a package of no and low-regret investments and expenditure required to meet our statutory obligations, deliver on our long-term ambitions and specific performance commitments in the next AMP, and to keep options open for the future. As discussed in Chapter 5 – 'Our customers and their priorities' – we have tested our customers' priorities and their willingness to pay for investment in our water services. Our proposed expenditure plans reflect the insights from this work and is reflected in how we have proposed to sequence and balance the investment we plan to undertake in AMP8 vs. future AMPs to improve performance while managing affordability.⁴

¹ This includes expenditure to operate our business on a day-to-day basis, maintain the long-term capability of our assets and comply with current legal obligations.

² Ofwat splits our wholesale water price control into two separate controls: water resources and water network plus (covering raw water transport, water treatment and distribution).

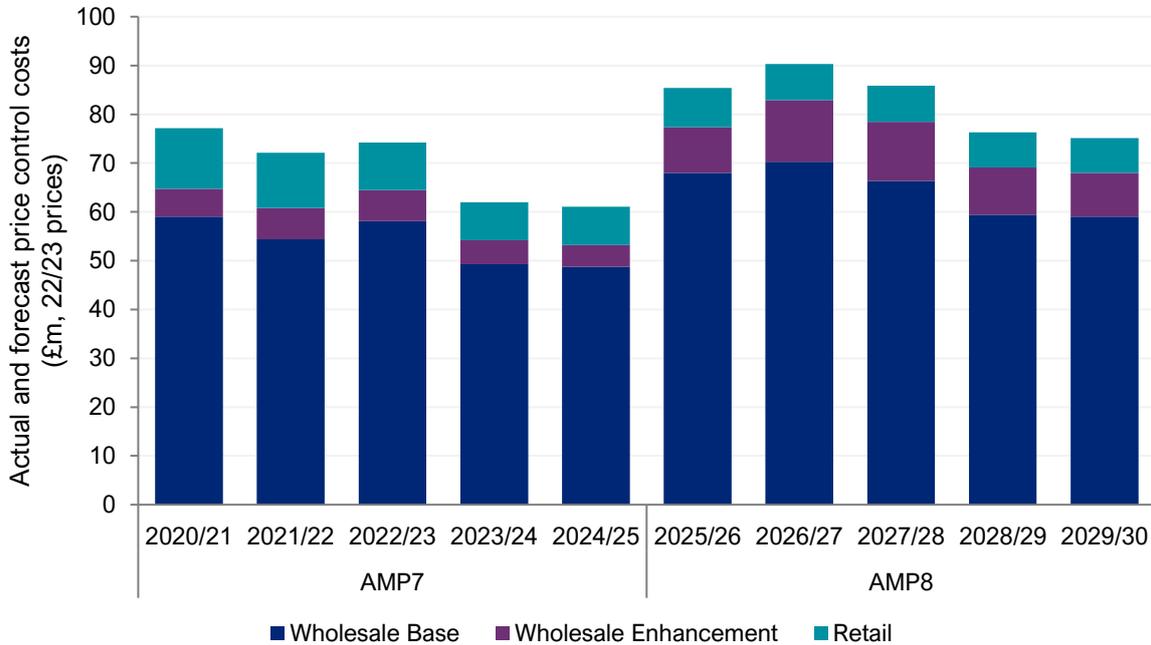
³ See Chapter 4 of this business plan and our accompanying LTDS document.

⁴ See further discussion on this point below from paragraph 13.



7. Figure 1 below illustrates the breakdown of our expenditure in the current AMP and our forecast for the next price control period (AMP8).

Figure 1: Actual and forecast price control costs (wholesale base & enhancement and retail over AMP7 and AMP8 (2022/23 prices))



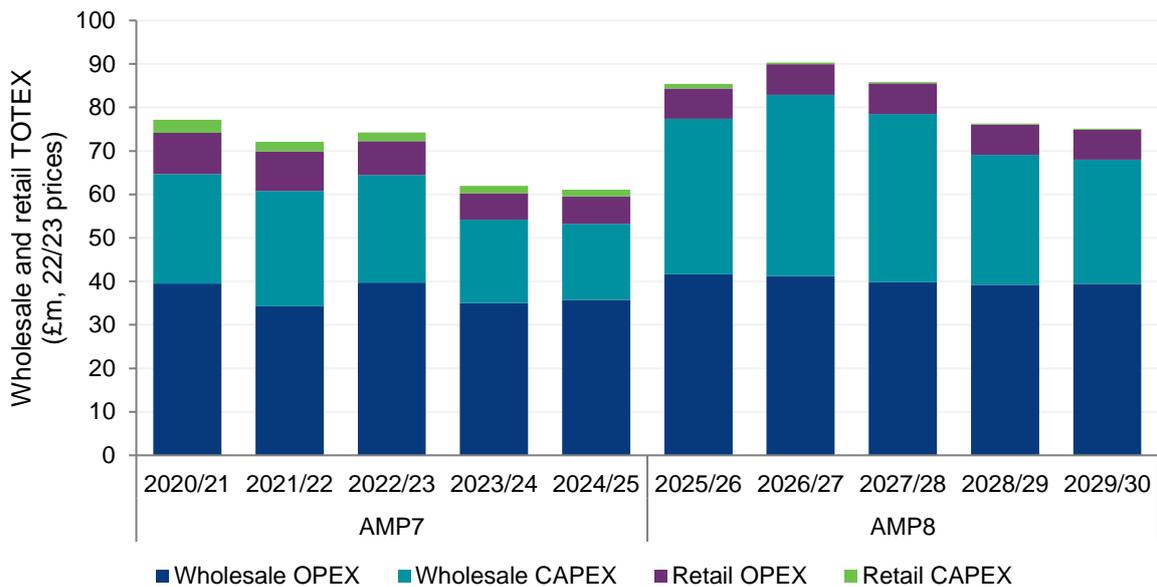
Source: SES Water analysis

Note: 2020-21 to 2022-23 are actuals, later years are forecasts.

- 8. It can be seen from Figure 1 that we plan to spend more in both wholesale base costs and enhancement expenditure compared to the current AMP. Our retail expenditure will remain broadly stable going into AMP8.
- 9. As Figure 2 below shows, our plan is for our operating expenditure (OPEX) to remain broadly flat (in 2022/23 prices) going into AMP8 as we balance opportunities for ongoing cost efficiencies with managing the pressures that we face from a significant increase in input costs and new (incremental) operating costs that support our investment programme.



Figure 2: Wholesale and retail total expenditure into CAPEX and OPEX (2022/23 prices)



Source: SES Water analysis

Note: 2020-21 to 2022-23 are actuals, later years are forecasts.

10. The step up in our costs in AMP8 is, therefore, mainly driven by an increase in our CAPEX. The level and the profile of our forecast CAPEX going into AMP8 is influenced by several external economic and other drivers of our business costs including:

- The price of inputs (e.g., materials) to our capital programme has increased considerably. This inflationary effect has placed updated pressure on our forecast capital spend in both enhancement and more routine base costs
- The accelerated pace of our proposed programme for smart meter rollout in AMP8 and the step up in IT CAPEX in both our base and enhancement spend forecasts, which is needed to transform our data management and customer engagement and communications processes to support our ambitions on PCC and business demand reduction and improvements in customer service
- The increase in investment that is needed in our water treatment works including at the start of AMP8 to support water softening processes as existing assets reach the end of their technical lives (one of the drivers of the step up in our base costs at the start of AMP8 is the softening related CAPEX at Kenley treatment works which is captured in our base cost softening CAC)⁵ and an enhancement programme to install UV treatment at Cheam and Kenley treatment works⁶
- The timings of the investments we plan to make in our network to achieve additional leakage reduction, including in active leakage control and customer side leakage management, and improvements in environment outcomes and biodiversity, including our work on WINEP-led catchment schemes
- Changes to abstraction costs levied by the Environment Agency (EA) and traffic management requirements in our local areas which are placing upward pressures on

⁵ Cost adjustment claims, or CACs, are the adjustments that Ofwat make to its base cost modelling outputs that are required to set efficient expenditure allowances that reflect the specific and unique operating circumstances of individual companies including SES Water in the sector.

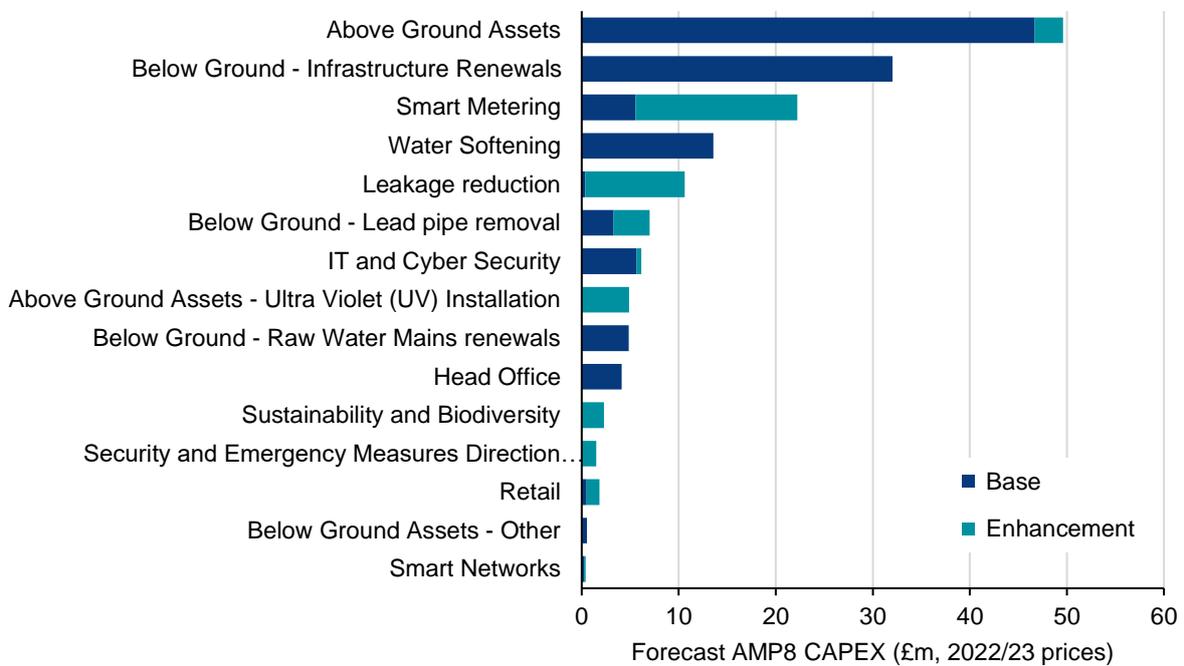
⁶ See further discussion below of our water quality enhancement case within Section D of this chapter.

our costs, for example in our base cost plans for the delivery of the mains replacement programme in AMP8 and

- The natural cyclical nature of our capital maintenance and replacement expenditure (e.g., the need for UV replacement spend at Elmer and Bough Beech water treatment works⁷) and the greater focus of our mains replacement programme in the London area where operating costs are higher.⁸

11. In total we plan to spend £176.8m in CAPEX in AMP8 (excluding Developer Services), an increase of £53.4m from our current forecast CAPEX in AMP7 of £123.4m. As Figure 3 illustrates, the largest components of our capital programme will remain routine (base cost) investment in maintaining our above and below ground assets (infrastructure renewals), but the increase in CAPEX between AMP7 and AMP8 is driven by the factors listed above, in particular our proposed smart meter and data enhancement and base cost investment at Kenley to support our water softening processes.

Figure 3: Breakdown of AMP8 capital programme (2022/23 prices)



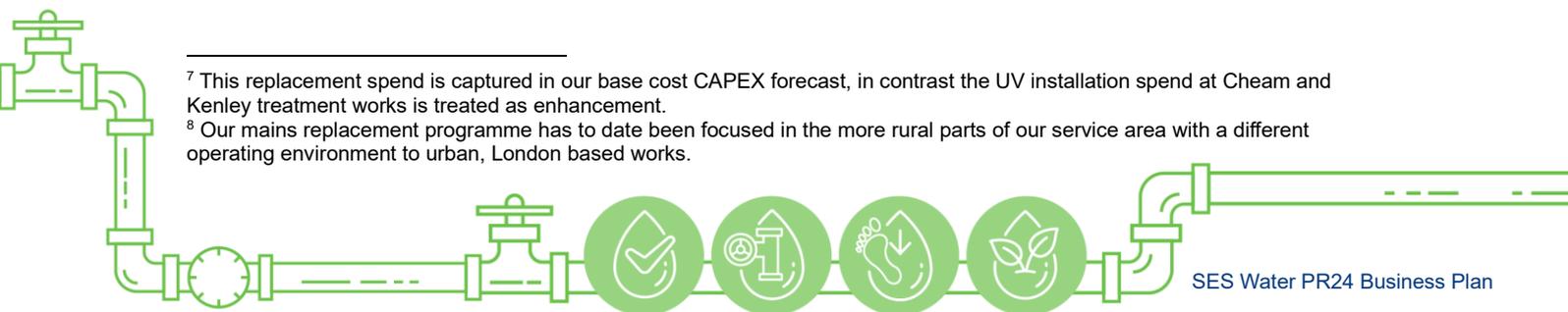
Source: SES Water analysis
 Note: Excludes capitalised OPEX

12. The proposed step-up in our capital spend is significant, but the investment is focused on the delivery of a few key strategic programmes which we will manage via accompanying strategic contracting partnerships for delivery of those schemes (e.g., smart meter roll out and for treatment work CAPEX). The forecast increase in CAPEX is also:

- Spread across IT and data initiatives, as well as more direct investment in our wholesale network asset base, placing less delivery pressure on a single component of the forecast capital programme and

⁷ This replacement spend is captured in our base cost CAPEX forecast, in contrast the UV installation spend at Cheam and Kenley treatment works is treated as enhancement.

⁸ Our mains replacement programme has to date been focused in the more rural parts of our service area with a different operating environment to urban, London based works.



- Smoothed across the AMP to help support with deliverability (e.g., supply chain management) and financeability (see Chapter 8 and 10 for further discussion of the financing and delivery of our plan).

Why our expenditure plans are efficient and reflect the best value options for our customers.

13. We have challenged ourselves to keep our bills affordable for our customers, while meeting our ambition to deliver industry leading performance in key Performance Commitment (PC) areas such as leakage, Per Capita Consumption (PCC) and Water Service Infrastructure (WSI). We are confident that our forecast expenditure plans are efficient, stretching and ambitious because:

- We have tested the efficiency of our current and forecast costs using Ofwat's published wholesale and retail cost models alongside well evidenced Cost Adjustment Claims (CACs) to both our wholesale and retail modelled costs (see below)
- We have challenged ourselves to deliver performance improvements from a combination of the base expenditure that we incur to maintain and run our wholesale and retail businesses and additional enhancement spend, as we evidence in Chapter 6 and our LTDS
- Our forecasts include a 1.0% target for ongoing (frontier shift) cost efficiency over AMP8, aligned with the level of per annum scope for frontier shift that the Competition and Markets Authority (CMA) adopted in its 2019 price review (PR19) water company appeals decision, as discussed in paragraph 37 below and
- We have selected only the best value options for both our base and enhancement schemes in AMP8 based on our bottom-up investment appraisal processes (supported by the Copperleaf's value framework and optimization tool) to ensure that we are stretching ourselves to deliver only low regrets, high benefit-to-cost ratio investments, that are needed in AMP8 to support the delivery of the core pathway we identify in our LTDS.

14. Box 1 overleaf sets out the process we have gone through to develop our business plan and identify the best value options for our customers.



Box 1: Why our plan reflects the best value options for our customers.

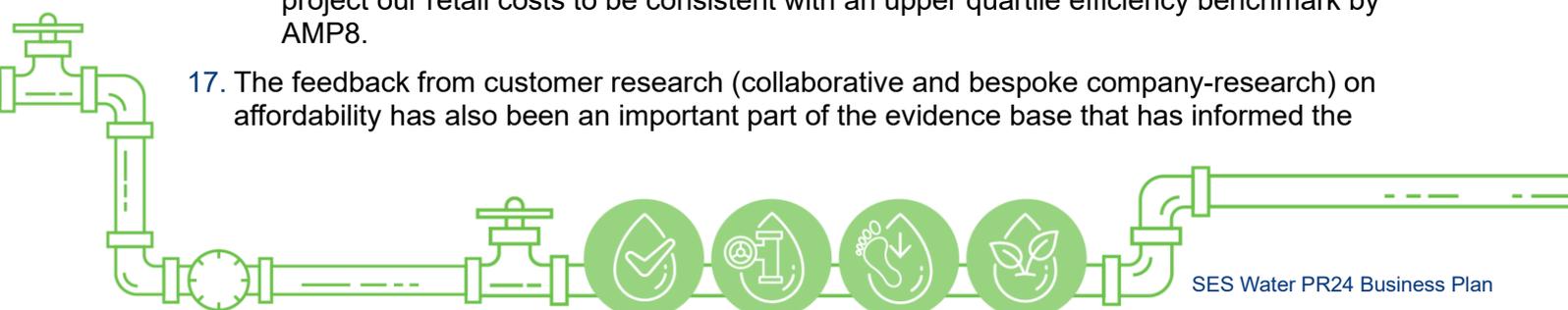
Our PR24 business plan and its expenditure forecast is the result of the comprehensive adaptive planning exercise that has been used to produce our LTDS. We have used the LTDS development process to identify the low regrets, high value, options that are needed in AMP8 to support the delivery of our long-term ambitions under a range of common and bespoke scenarios. We have optimised our plan using a valuation framework and optimisation tool to enable us to identify the best value plan for our customers and the environment (see Chapter 4 – Long Term Delivery Strategy for further discussion).

Specifically, we have used Copperleaf’s value framework to identify the costs and benefits of different options using Copperleaf’s six capitals: natural, social, financial, manufactured, intellectual and human capital. We filtered a long list of projects and activities for AMP8 and future AMPs, and assessed whether they would be technically feasible and relevant in each of the LTDS scenarios. We have then used the Copperleaf optimisation tool to determine the optimised plan across the LTDS scenarios to trade off costs and benefits in respect of each of the six capitals and adjusting the timing and sequencing of projects (within given constraints) to give a plan that delivers the optimal balance between all the relevant stakeholders.

As detailed in our LTDS, we identified a core pathway for the next AMP comprising investments and activities that need to be undertaken to meet short-term requirements, no/low regrets investments and activities, activities and investments needed to keep options open for the future or to minimise the cost of future options, and investments and activities needed to meet the high demand scenario in 2025 to 2030.

To develop our plan, we considered a range of options in detail before concluding on the best value options to address the need, and manage the risks, we identified to deliver on our long-term outcomes ambition. This has been underpinned by our optimisation against the six capitals, and rigorous ongoing testing throughout the course of the adaptive planning process where we identified the most appropriate technical and cost-effective solutions for our local region and asset base. This is evidenced in Chapter 4 of our LTDS and the supporting enhancement cases to our business plan (see Appendices SES006 to SES010).

15. As set out in our response to Ofwat’s April 2023 consultation on base cost modelling, we have some concerns with aspects of Ofwat’s proposed base cost models for wholesale and retail for PR24. Nevertheless, consistent with Ofwat’s guidance we have sought to build upon the consulted base models alongside a series of well evidenced CACs to Ofwat’s models, to test the efficiency of our current and forecast base costs. We have also sought to identify in Appendix SES005B why we consider that Ofwat’s base models do not reflect our true efficient costs.
16. Our analysis shows:
 - Once our cost adjustment claims to Ofwat’s cost modelling are accounted for, our wholesale business costs are consistent with an upper quartile efficiency benchmark in the last outturn year of the current AMP (2022/23)
 - Our plan will continue to target upper quartile level efficiency for our wholesale business in AMP8 once our cost adjustment claims, recent and future cost trends and scope for ongoing efficiencies are accounted for and
 - The efficiency of our retail business has been improving in the current AMP and we project our retail costs to be consistent with an upper quartile efficiency benchmark by AMP8.
17. The feedback from customer research (collaborative and bespoke company-research) on affordability has also been an important part of the evidence base that has informed the



preparation of our expenditure plans in AMP8. As discussed in Chapter 5, our customers have told us that:

- Water quality, water supply interruptions and reducing leakage are high priorities for them, and that they also expect us to plan ahead to prepare for climate change and increase the resilience of our business and
- While they are supportive of our plans to invest in our wholesale and retail businesses in support of these goals, current cost of living challenges are also a concern, together with the fairness of bills.

18. We have taken account of this customer feedback and insight by reflecting the pace at which customers expect to see improvements and where they have identified trade-offs between performance areas that impact our expenditure plans. For example, as discussed in Chapter 5, on leakage:

- We have limited the bill increase at PR24 by maximising the savings that we can make from less costly (base and enhancement driven) intervention methods to help balance improvements with affordability and
- From 2030, a targeted programme of mains replacement will require an increase in bills to meet and exceed the Government target, but we have focused on interventions that prioritise the use of smart network in the forthcoming AMP to help manage affordability.

19. The sections that follow expand on the summary above.

C. Maintaining our wholesale network: 'base' expenditure

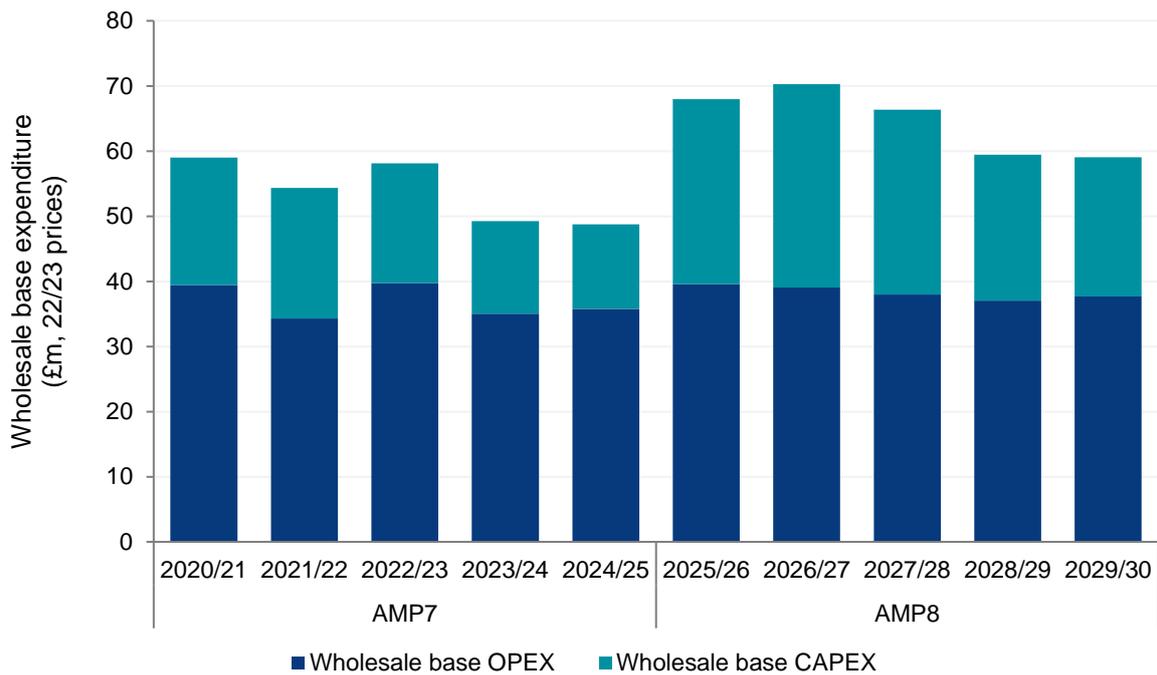
20. Base expenditure reflects the routine, year-on-year expenditure which we incur to maintain our wholesale network. We have therefore looked at our historic expenditure as the natural starting point for forecasting costs in the next AMP.

21. We are projecting expenditure of £323.0m (2022/23 prices) over AMP8 to maintain our operations. This compares with expected outturn expenditure of £269.5m over the current AMP. In the following sections, we explain how we have arrived at this estimate and how we have challenged ourselves to be efficient.

Building up our efficient cost forecasts

22. Figure 4 below summarises our actual and forecast base expenditure over AMP7 and AMP8, split by base CAPEX and OPEX. As the chart shows, our OPEX will be slightly higher than in the current AMP owing to increased pressure on our cost base from higher energy and chemical costs. We expect CAPEX will be higher in AMP8 for the reasons set out above (see paragraph 10), including replacement of key assets that are reaching the end of their technical asset life such as softening-related plant at Kenley.



Figure 4: Actual and forecast wholesale base expenditure (£m 2022/23 price base)

Source: SES Water's Annual Performance Reports (APR) and analysis

Note: 2020-21 to 2022-23 are actuals, later years are forecasts.

23. It can be seen from Figure 4 that:

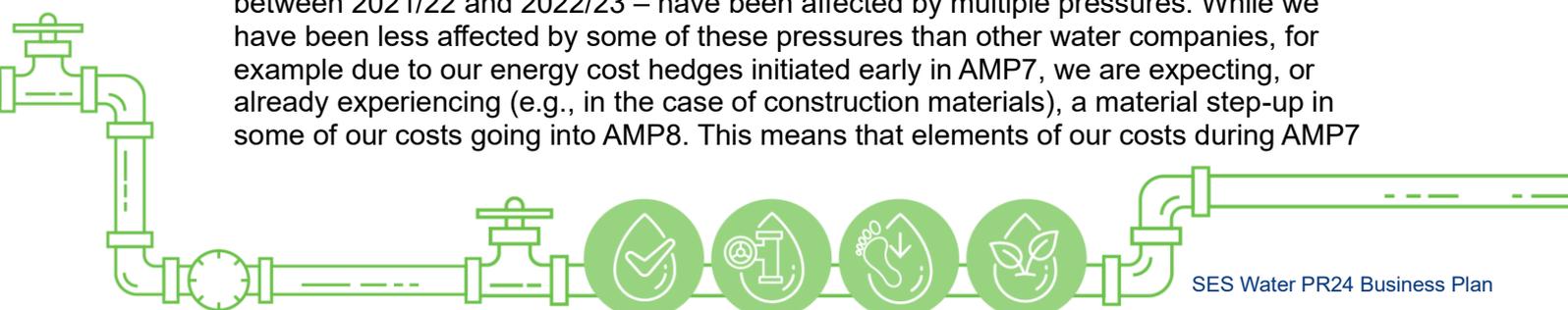
- (a) For OPEX we are challenging ourselves to reduce our annual spending from £39.7m in 2022/23, the most recent outturn year, to a rate of £38.3m per annum over AMP8, driven by operational efficiencies and a programme of re-tendering key contracts between now and early AMP8 and
- (b) For CAPEX, we expect our spending to be higher in AMP8 at £131.8m in total, compared with expected spend of £85.2m over AMP7. This is driven by increases in input costs and in the level and scope of base CAPEX we will need to undertake.

24. Specifically, on the step-up in AMP8 base CAPEX, as discussed above, we expect to spend more on key network assets reaching the end of their lives that will need replacing, in particular investment at Kenley treatment works necessary for our softening processes, but also replacement of UV assets at Elmer and Bough Beech water treatment works.

25. Higher input costs from inflation and operational challenges (e.g., the expected focus of mains replacement in more urban parts of our operating area in AMP8) are also expected to place upward pressure on base CAPEX. For the purposes of forecasting base CAPEX on metering, we have assumed that ongoing renewal costs are reflected in base and so the enhancement element of smart meter installation is the difference between the cost of renewing existing with smart technology.

Trends affecting our cost base over AMP7 and AMP8

26. It has been a challenging time for the industry. Our costs in recent years – particularly between 2021/22 and 2022/23 – have been affected by multiple pressures. While we have been less affected by some of these pressures than other water companies, for example due to our energy cost hedges initiated early in AMP7, we are expecting, or already experiencing (e.g., in the case of construction materials), a material step-up in some of our costs going into AMP8. This means that elements of our costs during AMP7



– and the costs incurred particularly prior to 2021/22 - are not a realistic basis for estimating costs in AMP8.

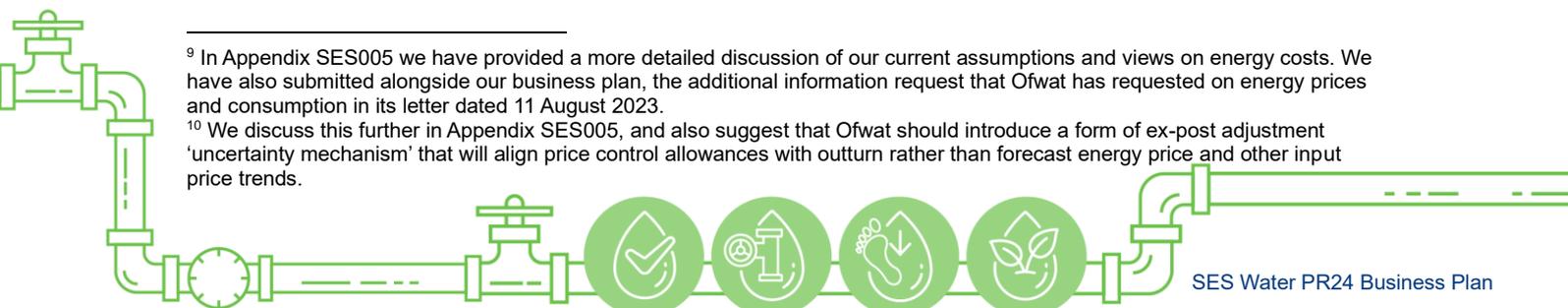
27. Importantly, the pressure to energy and chemicals prices that the industry as a whole has been exposed to in recent years is unlikely to be automatically reflected in Ofwat's industry benchmarking modelling, unless explicitly accounted for. This is important as currently energy costs account for just over 10% of our cost base, while chemicals costs account for around 4.5% of our cost base. Without Ofwat accounting for this in its base cost modelling, either through adjustments to the benchmarking models themselves, or through post-modelling adjustments (see further discussion below), the industry and our business specifically, is unlikely to have sufficient funding to maintain our base operations given the cost pressures that we face leading into AMP8.
28. We have commissioned advice on future energy prices from Cornwall Insight, and we have used this information when building our AMP8 cost forecasts. The advice from Cornwall Insight indicates that energy prices have increased substantially in the past two years but are expected to eventually fall back from their current exceptionally high levels. There is, however, considerable uncertainty of the direction of future energy prices and when would be the opportune time to re-contract for our energy in the next few years, and for how long this new contract should be for.
29. For the purposes of submitting this business plan, we have, therefore, made a prudent, bottom-up, estimate of the energy costs that we may face once our hedges expire towards the end of AMP7. We have used Cornwall Insight's price forecasts and our expected energy consumption to produce this forecast. We do not believe it would be prudent or efficient to contract for our energy at current market price levels and as a result, our expected energy costs are by necessity uncertain and currently an estimate. We expect to keep this aspect of our plan under review as we progress through the PR24 process and have set out below our views on how Ofwat should manage energy price uncertainty in setting its cost allowances.
30. The impact of construction materials and chemicals cost increases on our spending has been more immediate. As shown by the ONS Chemicals and Chemical Products Producer Price Index, prices have increased by over 40% in nominal terms over the period 2020/21 to 2022/23. We have also experienced a significant increase in the cost of materials for our base CAPEX schemes, consistent with trends in other parts of the UK macro-economy. While the input price pressures we currently face may reduce in the next AMP the future outlook for input price inflation is very uncertain, energy in particular. As a result, we would support Ofwat applying a form of ex-post adjustment/true-up mechanism to our input prices in setting total expenditure (TOTEX) allowances for PR24, consistent with the principle that Ofwat look to labour input price inflation at PR19.⁹
31. We have also faced external cost pressures in the current AMP from increased EA abstraction charges and traffic management costs in our local area.¹⁰

Our base OPEX over AMP8

32. Through our forecast, we are challenging ourselves to reduce our operating costs from our outturn expenditure in 2022/23, despite energy and chemicals cost pressures.
33. We spent £39.7m in 2022/23 on base OPEX, which is £132 per customer. We have looked at what we expect our future input prices to be and what an ambitious company should deliver in terms of ongoing efficiency alongside the impact that other cost drivers,

⁹ In Appendix SES005 we have provided a more detailed discussion of our current assumptions and views on energy costs. We have also submitted alongside our business plan, the additional information request that Ofwat has requested on energy prices and consumption in its letter dated 11 August 2023.

¹⁰ We discuss this further in Appendix SES005, and also suggest that Ofwat should introduce a form of ex-post adjustment 'uncertainty mechanism' that will align price control allowances with outturn rather than forecast energy price and other input price trends.



such as network growth, can be expected to have on our base OPEX. On that basis, we have concluded that we can deliver our core services by spending approximately £38.3m per annum in OPEX over AMP8, which is roughly £123 per customer and generally consistent, in 2022/23 prices, with what we expect our OPEX spend to be in the final years of AMP7.

Our base capital plan over AMP8

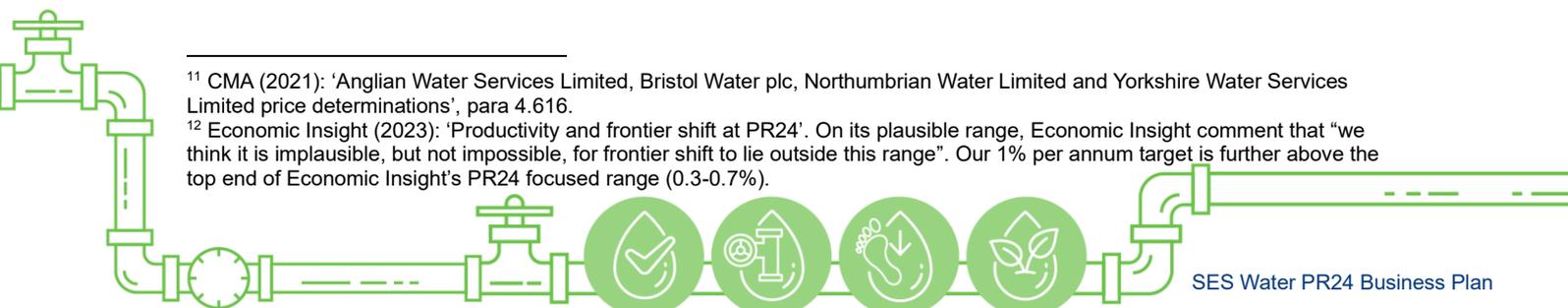
34. We have developed our capital plan from the bottom up, supported by the Copperleaf value framework and optimisation tool. Using this value framework and the Copperleaf tool we have sought to make sure we are delivering as much as we can through base expenditure, and only putting forward enhancements where there is a clear step change in what we are delivering for customers. Through this exercise, we have determined that we need to spend more on base CAPEX to maintain our network than we have in AMP7.
35. Over AMP7, we are expecting to spend £85.2m in CAPEX, while our AMP8 capital budget is £131.8m. As discussed above, there are a number of drivers for the increase, including inflationary pressures, more challenging working / operating environments and because some of our key assets are due major upgrades during AMP8, notably the softening equipment at Kenley Water Treatment Works (WTW). We follow a strategy of spreading out major capital investment schemes to avoid investing in multiple sites within the same price control period, and our historic and current softening cost adjustment claims provide proof of this over recent AMPs. Despite this, our small size means that we are more exposed to cyclical and lumpiness in our investments than other, larger water companies. Our AMP8 capital budget reflects some of this cyclical nature.
36. Figure 3 above provides a breakdown of our base CAPEX plan, by activity. As discussed above, a smart metering provision is included in our base cost forecast reflecting our planning assumption that the enhancement spend element is the difference between the cost of renewing existing meter technology with smart. Areas with comparatively low levels of forecast expenditure are in some cases supplemented by enhancement (see Section D in this chapter).

Our overall base expenditure over AMP8

37. In our plan, we have included a 1% ongoing efficiency target to our base CAPEX and OPEX forecasts for AMP8. For us, this is a stretching and ambitious efficiency target bridging from our latest internal budgeted expenditure for 2024/25 in AMP7, but one we consider necessary to make sure that we continue to maintain our network effectively while keeping bills affordable for customers.
38. We consider a 1% per year target both an appropriate and stretching target for ongoing efficiency because:
- It is aligned with the Competition and Market Authority 's (CMA) decision to apply a frontier shift/ongoing efficiency target of 1% per annum in its 2021 PR19 determination, where the CMA concluded "there were reasons which suggested the water companies would be able to achieve productivity gains greater than the 0.7% average comparator estimate"¹¹
 - It is above the 'plausible range' of 0.3-0.8% that Economic Insight have more recently (April 2023) estimated for other water companies on the scope for frontier shift/ongoing efficiency at PR24¹² and

¹¹ CMA (2021): 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations', para 4.616.

¹² Economic Insight (2023): 'Productivity and frontier shift at PR24'. On its plausible range, Economic Insight comment that "we think it is implausible, but not impossible, for frontier shift to lie outside this range". Our 1% per annum target is further above the top end of Economic Insight's PR24 focused range (0.3-0.7%).



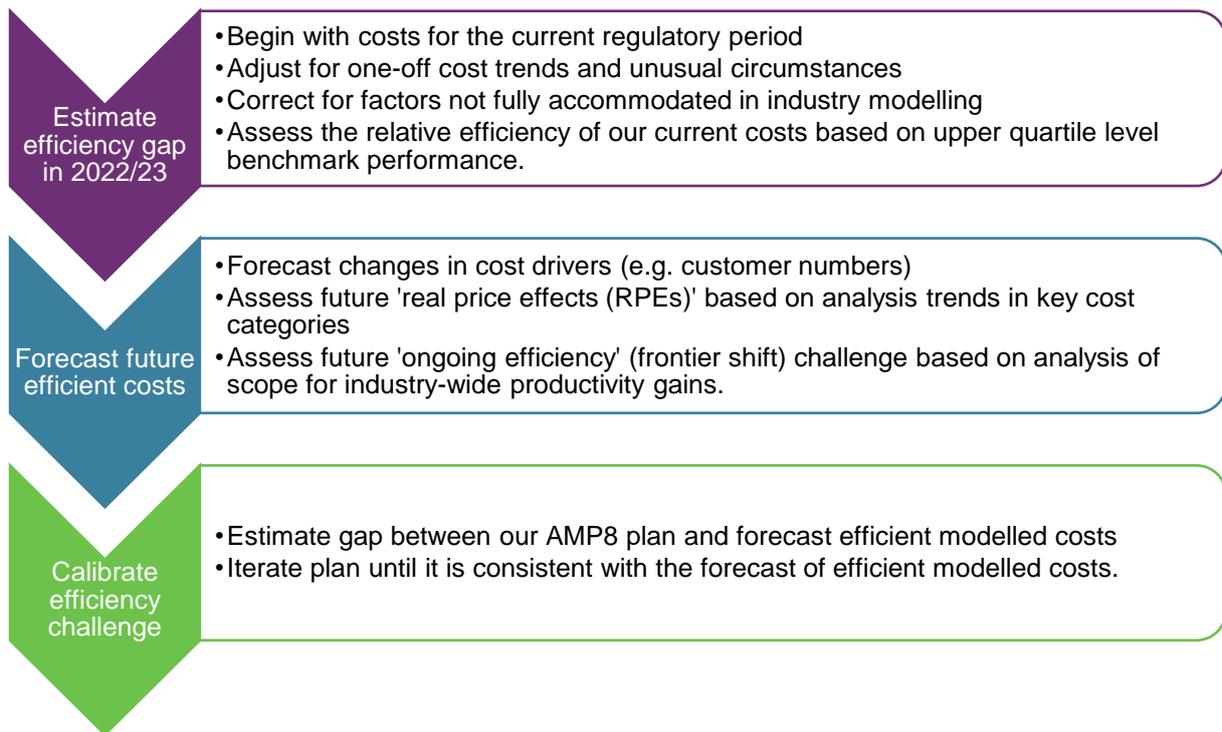
- While we expect to be able to deliver cost savings in our business from greater use of artificial intelligence and digital initiatives during AMP8 (see section F below for further discussion) we are also planning to deliver improvements in our performance commitment levels from base expenditure as part of these initiatives (in particular, in areas such as leakage and supply interruptions via the use of our smart network). The productivity improvements that we are assuming 'base buys' in PR24 are already stretching from a position of industry leading or upper quartile level performance in many areas (see Chapter 6 – The outcomes we will deliver) but with a 1% per annum ongoing cost efficiency target, we are also challenging ourselves to deliver more efficiently for our customers at a per annum rate the CMA only recently concluded was appropriate for water companies even in the face of wider UK economy productivity growth having slowed in recent years.¹³
39. As detailed in the subsequent subsection, we have compared our costs against the likely results of Ofwat's industry benchmarking. This shows that our outturn costs in 2022/23 were consistent with an efficient upper-quartile company once our well justified cost adjustment claims are taken into account.
 40. For the reasons set out above, our business plan for AMP8 does include a step-increase in our base CAPEX. While a simplistic extrapolation of Ofwat's models may imply this step-increase is higher than an efficient operator would spend, we consider the increase necessary and justified by our unique statutory softening requirements and the headwinds affecting the delivery of our capital programme going into AMP8 that we expect to be impacting other companies in the sector.
 41. This includes the impacts of inflation on our own and our supply chain's capital costs, which will need to be captured in Ofwat's benchmark costs for its price controls, as discussed below.

Challenging the efficiency of our plan

42. To test the efficiency of our plan, we have benchmarked our AMP8 forecasts against the allowances we may receive through Ofwat's efficiency modelling. We have followed a robust approach to ensure that our forecast spending is in line with what would be expected from an efficient company.
43. Figure 5 below summarises the approach we have taken to ensure that our projected costs are in line with an efficient forward-looking benchmark.

¹³ We expand on the factors and evidence base that has influenced our ongoing efficiency target in Appendix SES005B.

Figure 5: Base cost forecasting approach



Source: SES Water

44. In summary, there are three key steps we have taken to compare our plan with the approach we expect Ofwat will take to forecast our efficient costs:

- (a) We have first estimated the size of the efficiency challenge (if any) with reference to an outturn year, 2022/23:** We have compared our outturn spending to industry benchmarks to test if there is any unexplained gap between our costs and other companies' costs. As part of this step, we have corrected factors affecting our costs that cannot be fully captured in Ofwat's industry benchmarking analysis (i.e., our CACs), as well as the symmetric adjustments we consider are relevant to us. We also account for cost pressures that are not fully captured in the industry benchmarking analysis, such as the recent substantial increase in energy costs
- (b) We have then forecast future efficient costs based on Ofwat's expected modelling approach:** We have forecast our modelled costs through to AMP8, using expected changes in the models' cost drivers.¹⁴ Where we are expecting certain trends in the prices of key inputs (e.g. labour, energy, chemicals) – positive or negative – we have captured these through real price effect adjustments (RPEs).¹⁵ Finally, we have accounted for the potential to deliver industry-wide improvements in productivity through the application of an 'ongoing efficiency' (frontier shift) challenge and
- (c) Finally, we have calibrated our efficiency challenge by comparing our AMP8 plan against the Ofwat forecast of efficient costs:** To make sure we are putting together an efficient plan, we have compared it against our current expectations of Ofwat's forecast of our efficient costs.

¹⁴ For example, growth in customers numbers and expected changes in other variables that Ofwat use to control for differences in the cost drivers of individual water companies.

¹⁵ RPEs relate to input prices increasing or decreasing in real terms relative to general consumer price inflation (as measured, for example, by CPIH).

45. Through the comparison we outline above, we expect our spending will continue to reflect an efficient company. At the start of AMP7 our costs were broadly in line with Ofwat's industry benchmarking once our cost adjustment claims to Ofwat's modelling were accounted for. While a wide range of factors have increased pressure on our cost base, we have considered carefully which of these are challenges for us to manage and which should be reflected in our allowed expenditure. We have also considered how we can maintain an ambitious plan for what performance improvements we deliver through base as part of the roll forward exercise of our cost base.

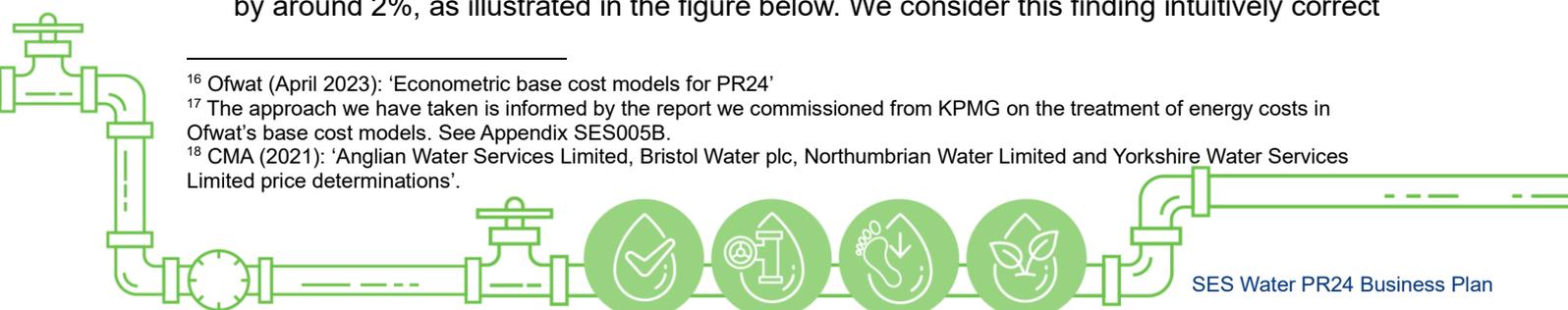
Benchmarking our current base costs

46. Base costs are relatively comparable between companies. We have therefore reviewed our costs and those of the rest of the industry. Our starting point for this analysis has been the wholesale base cost models that Ofwat has recently consulted on for PR24 for setting wholesale price controls.¹⁶
47. As we discuss in detail in Appendix SES005B, we have some concerns with Ofwat's proposed base cost models for PR24 and their capacity to control for and reflect the efficient costs of our wholesale business. The use of booster pumping stations per length of mains as a variable in some of Ofwat's models, and the exclusion of Average Pumping Head (APH) from the Water Resource Plus (WRP) models and the exclusion of water resources related APH from Ofwat's top-down models, materially impacts and distorts our efficiency score.
48. We have benchmarked our costs by updating and adjusting the outputs of Ofwat's consulted models (where they are given equal weight in the modelling as Ofwat has guided companies to assume) to form our own view, including the impact of our CACs related to pumping, regional wages and softening. In our analysis, we have also made an adjustment to Ofwat's modelled costs to account for the impact of higher input costs, the approach to which is described in Appendix SES005B and based upon Ofwat's published base cost models.¹⁷ We consider this approach most consistent with how Ofwat have guided companies to prepare their business plans and CACs.
49. The purpose of this analysis has been to determine, once our CACs to Ofwat's modelling are accounted for, if our current costs are efficient and what (if any) 'catch-up efficiency' challenge our forecast wholesale costs may need to accommodate to ensure that our expenditure remains consistent with Ofwat's stretching efficiency benchmarks.
50. We have assessed the efficiency of our expenditure using an upper quartile industry benchmark on the basis:
- This was the benchmark chosen by the CMA to assess the relative efficiency of companies' costs at the PR19 appeals¹⁸
 - There are limitations with any econometric benchmarking model, particularly in relatively small data sets, which risks modelling error in establishing the true 'efficiency frontier' for PR24 and
 - The model diagnostic tests used by Ofwat to evaluate its PR24 models do not seem to support Ofwat strengthening the benchmark from the level adopted by the CMA in its PR19 decision.
51. Overall, we estimate that once our CACs to Ofwat's (equally weighted) models are accounted for, our outturn expenditure in 2022/23 was lower than Ofwat's modelled costs by around 2%, as illustrated in the figure below. We consider this finding intuitively correct

¹⁶ Ofwat (April 2023): 'Econometric base cost models for PR24'

¹⁷ The approach we have taken is informed by the report we commissioned from KPMG on the treatment of energy costs in Ofwat's base cost models. See Appendix SES005B.

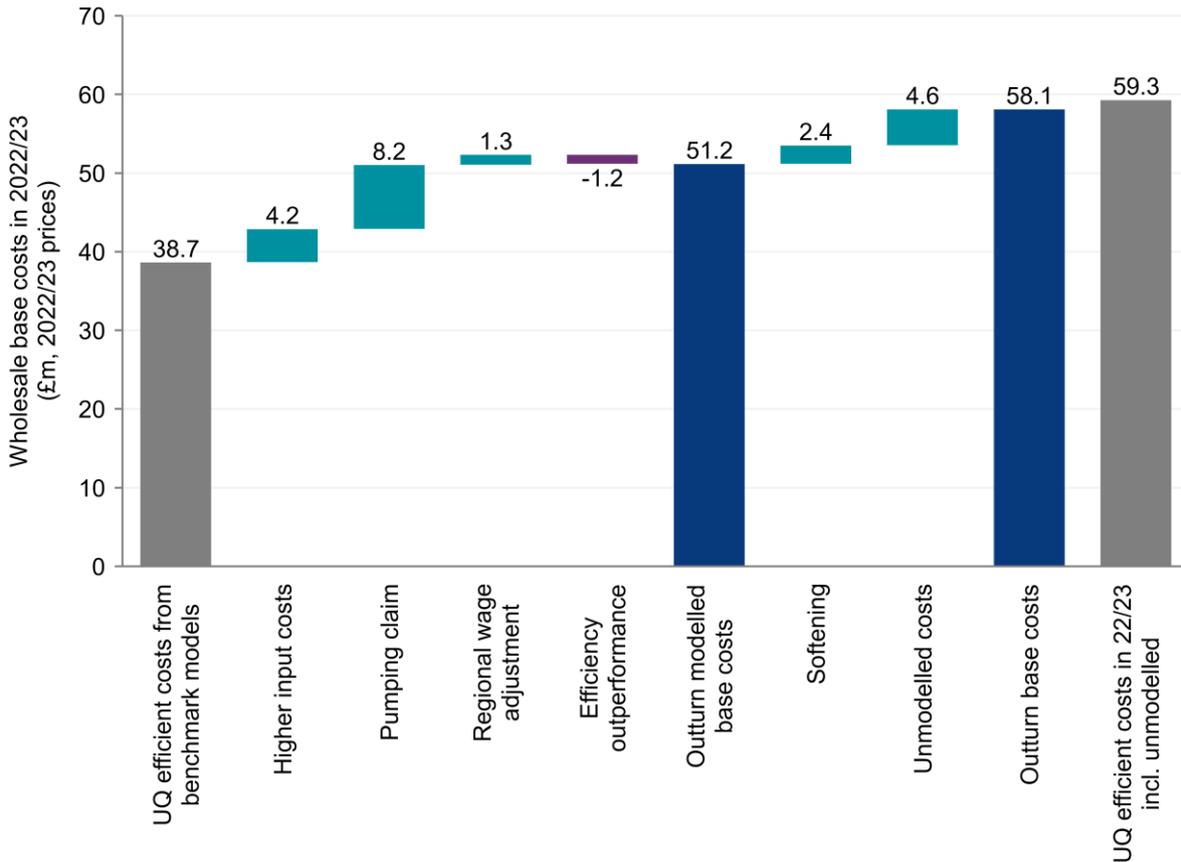
¹⁸ CMA (2021): 'Anglian Water Services Limited, Bristol Water plc, Northumbrian Water Limited and Yorkshire Water Services Limited price determinations'.



given our energy hedging position, which means that our costs in 2022/23 were generally lower than other companies with greater exposure to recent energy price increases.

52. Figure 6 below illustrates the steps in our benchmarking to reconcile between our outturn costs in 2022/23 and Ofwat’s (equally weighted) base cost model outputs, post CACs. It can be seen from Figure 6 that once our well justified CACs are taken into account, the modelled efficient base costs – at an upper quartile benchmark – are above our outturn costs, before adding our efficient, company specific, softening-related expenditure and other costs that are not captured in Ofwat’s base cost models.

Figure 6: Efficiency benchmarking of our 2022/23 base costs¹⁹ (£m 2022/23 price base)



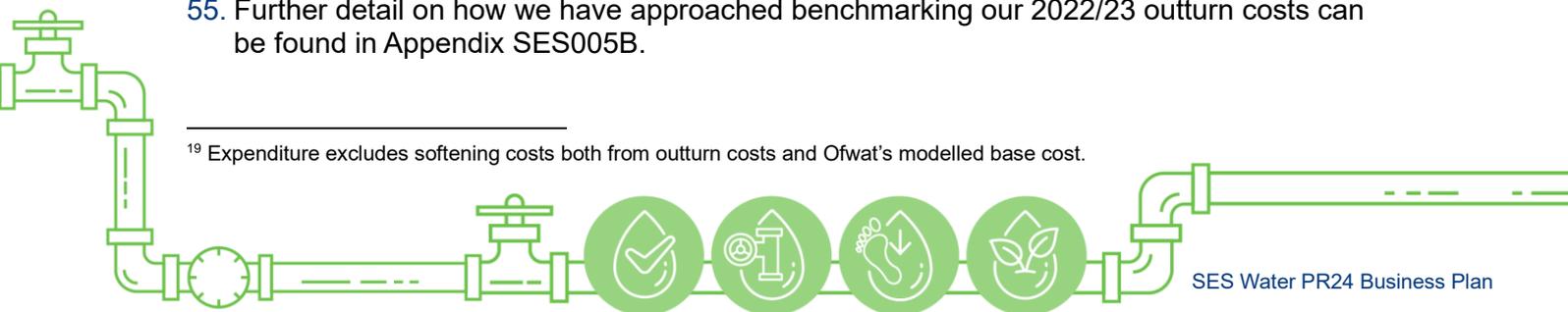
Source: SES Water APRs and analysis

53. Given the inherent empirical challenges in cross-sector benchmarking assessments, the impacts of unusual trends in industry costs in recent years and the challenging upper-quartile industry benchmark that has been reflected in our analysis, we consider our wholesale network’s 2022/23 cost base to be broadly efficient.

54. While we note that Ofwat has signalled its objective is to build upon the wholesale base cost models that were developed at PR19 and subsequently reviewed by the CMA at appeals, we consider the cost challenges and trends impacting the sector leading into AMP8 will require adjustments to Ofwat’s modelling.

55. Further detail on how we have approached benchmarking our 2022/23 outturn costs can be found in Appendix SES005B.

¹⁹ Expenditure excludes softening costs both from outturn costs and Ofwat’s modelled base cost.



Assessing the efficiency of our future base costs

56. To assess the expected efficiency of our forecast base costs in AMP8 we have rolled forward the benchmarking of our 2022/23 base costs to account for:
- Expected growth in the cost drivers of our water business (e.g., the number of customers and the length of the network), which impacts our efficient modelled costs in Ofwat's benchmarking models
 - Impacts of RPEs and scope for future productivity improvements (frontier shift) on our efficient modelled costs over AMP8 and
 - Higher expected softening related costs in the next AMP compared to the costs incurred in current AMP.
57. Figure 7 overleaf, illustrates the steps that we have undertaken in our modelling to roll-forward the comparisons we have made between our actual base costs in 2022/23 and costs from Ofwat's benchmarking models into AMP8. This includes the adjustments described above to account for network growth, the higher expected costs to support softening in the next AMP and the impacts of RPEs and ongoing efficiency.²⁰ The Ofwat 22/23 'efficient' base includes the impact of our base CACs.²¹
58. Taking our analysis in the round,²² we find that our plan is approximately £0.1m per annum lower than an upper quartile benchmark that is constructed by drawing conclusions from Ofwat's models and our CACs.
59. We consider this result demonstrates the efficiency and ambitiousness of the plan, particularly given the following:
- (a) We face company specific and industry wide pressures impacting our base costs (in particular, our capital programme) that may not be adequately accounted for in a simple roll forward of Ofwat's models, even with our energy-related adjustment
 - (b) We have committed to achieving a stretching ongoing efficiency target of 1% per year during AMP8 and
 - (c) We have committed to achieving stretching levels of performance improvements through our base expenditure.
60. While we do not have the industry-wide business plan data available to confirm this, we expect the aggregate increase in our forecast base spend will not be out of line with other companies in the sector.
61. Further detail on the analysis we have undertaken to test the efficiency of our forecast business plan costs can be found in Appendix SES005B.

²⁰ The Real Price Effect step is small (when it might be expected to be larger) as we assume a correction in energy prices over the course of the AMP in our projected modelled efficient costs, consistent with the Cornwall Insight energy price projections we have used to build up our own business plan costs.

²¹ Including softening, the regional wage adjustment, the pumping CAC and the adjustment to account for input cost trends that is needed to get to an appropriate starting 2022/23 base year cost in the analysis.

²² And taking into consideration the uncertainty and range of debatable decisions that need to be made at the different stages of Ofwat's cost efficiency modelling and Ofwat having yet to identify its preferred base cost models for PR24.

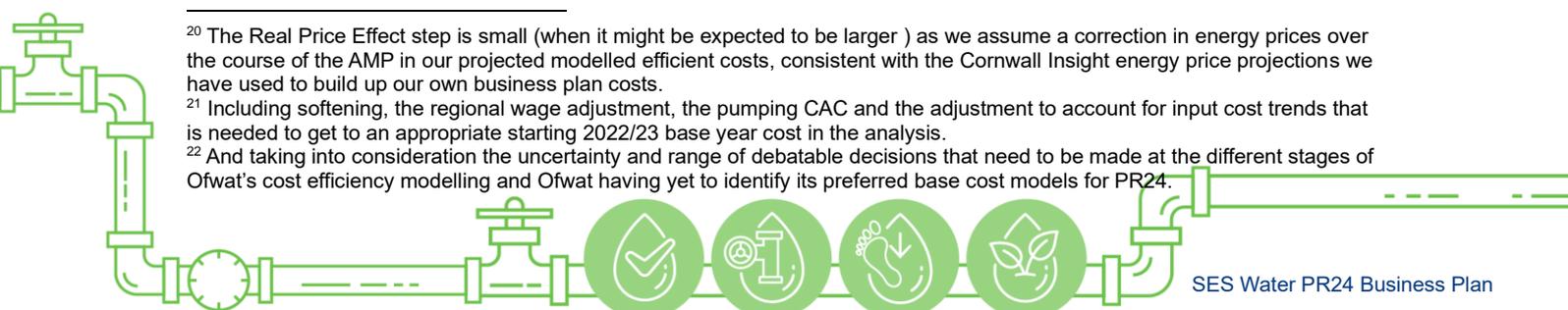
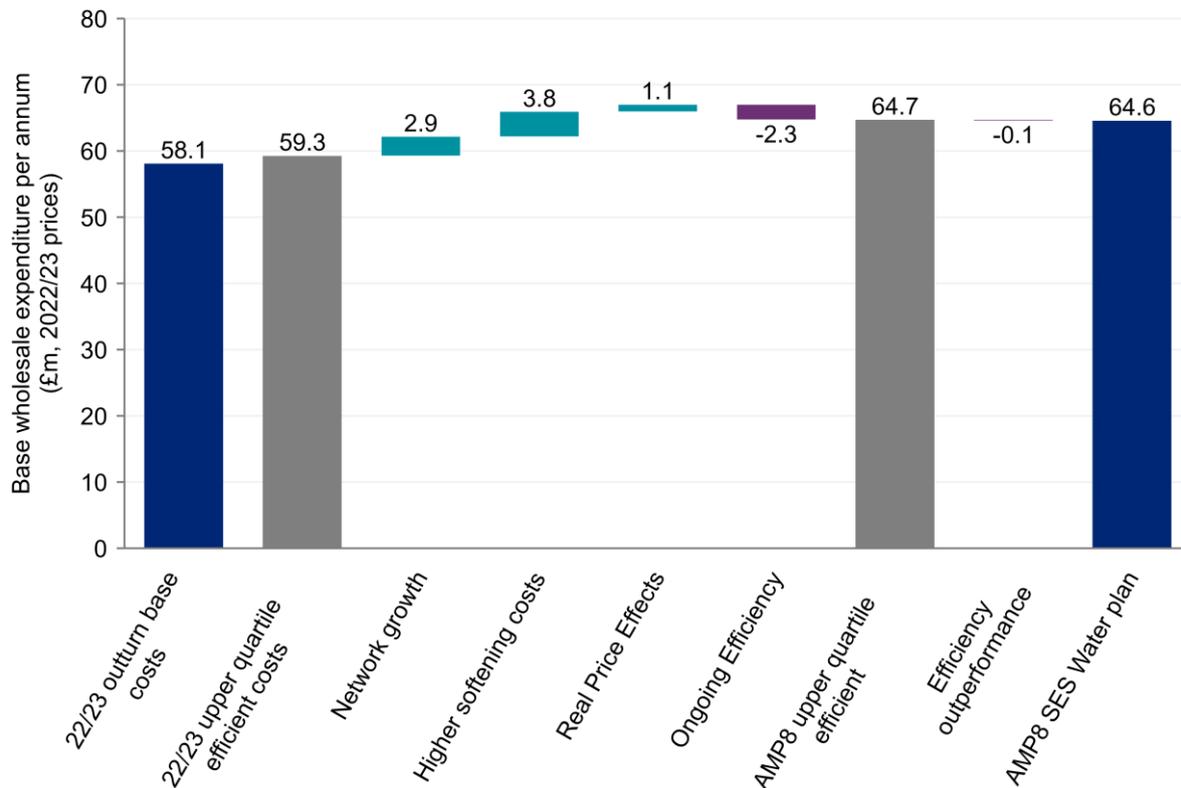


Figure 7: Efficiency benchmarking of our AMP8 wholesale base costs including base CACs and using an upper quartile benchmark (£m 2022/23 price base)



Source: SES Water APRs and internal analysis

Summary

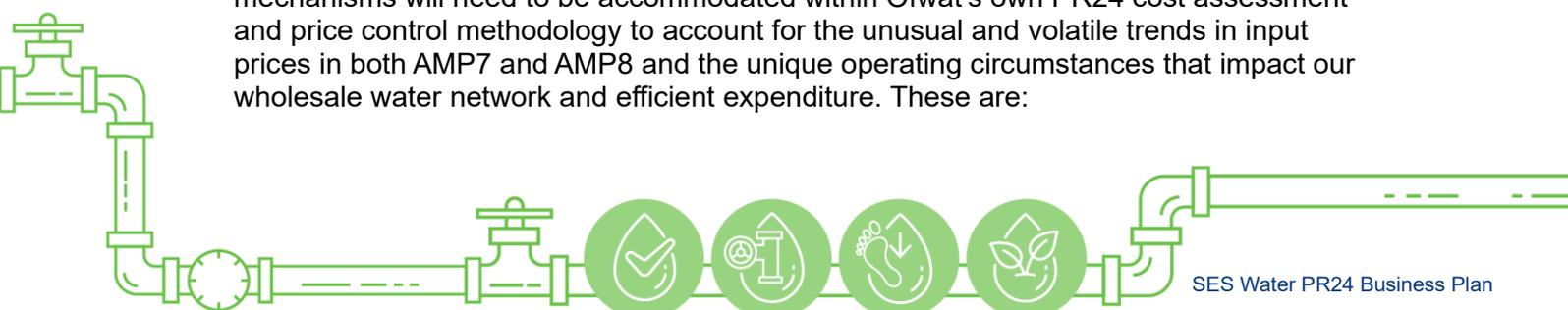
62. The base cost forecast of £323.0m (22/23 prices) is our best estimate of the costs we will incur to deliver the outcomes our customers want and expect in the next AMP. Table 2 presents the breakdown of our costs by price control.

Table 2: Breakdown of wholesale base costs by price control (£m 2022/23 price base)

Area	2025/26	2026/27	2027/28	2028/29	2029/30	AMP8
Water resources	6.3	6.3	6.0	5.9	6.0	30.4
Water network plus	61.7	64.0	60.3	53.6	53.1	292.6
Total	68.0	70.3	66.3	59.4	59.0	323.0

Source: SES Water analysis

63. As we have discussed above, we consider a series of adjustments and adjustment mechanisms will need to be accommodated within Ofwat's own PR24 cost assessment and price control methodology to account for the unusual and volatile trends in input prices in both AMP7 and AMP8 and the unique operating circumstances that impact our wholesale water network and efficient expenditure. These are:

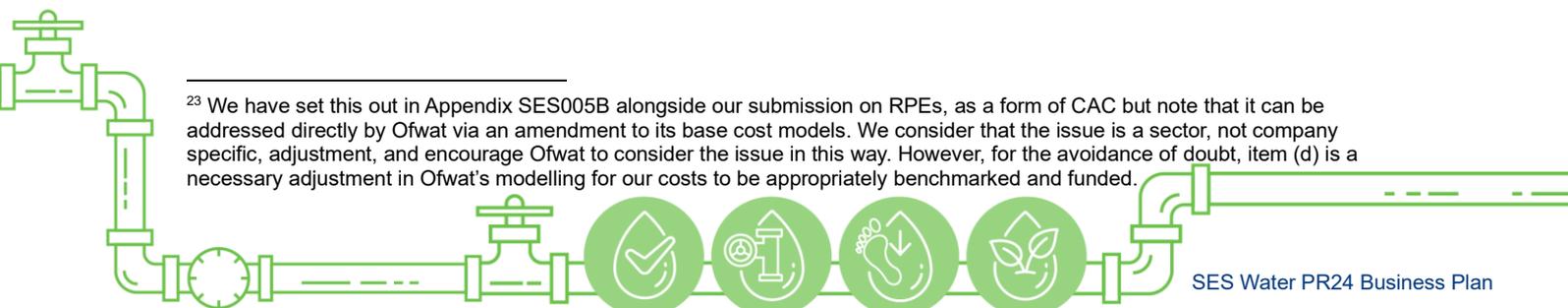


- (a) An adjustment for our higher APH and to adjust for the impact the inclusion of model variables such as booster pumping stations per length of mains in some of Ofwat's models has on our modelled cost – see Appendix SES027- Cost Adjustment Claim: Pumping
 - (b) An adjustment for the additional expenditure we incur from our unique and statutory obligation to soften. These costs are not captured in Ofwat's base cost models and so we have submitted a CAC for this – see Appendix SES029 - Cost Adjustment Claim: Softening)
 - (c) An adjustment for our structurally higher regional wages – see Appendix SES028 - Cost Adjustment Claim: Regional Wages
 - (d) An adjustment to Ofwat's modelled base costs to account for the impacts of recent input price pressures, in particular the significant rise in energy prices, in setting an appropriate 2022/23 base year cost benchmark (as this is not adequately reflected in Ofwat's current published base cost models)²³ and
 - (e) An uncertainty mechanism (in the form of an ex-post adjustment) for outturn input price inflation impacts in the next AMP, either for a subset or all our categories of input prices, particularly energy and chemicals – as discussed in Appendix SES005.
64. We note that these adjustments – in particular (a) to (d) – are critical for ensuring our efficient expenditure is adequately funded in Ofwat's TOTEX allowances and to support the stretching performance improvements we are committed to deliver in the next AMP. Item (e) is important to protect customers and ourselves from material market (e.g. forward energy price) risks that will need mitigation via the price control framework.

D. Improving our wholesale network: 'enhancement' costs

65. We are currently projecting enhancement expenditure of £52.8m (2022/23 prices) to improve our network and deliver our ambitious set of performance commitments. Our cost forecast is driven by our assessment of the work programme that will give us the best chance of delivering the step change in performance outcomes our customers and the wider industry have called for. It is informed by our detailed bottom-up investment appraisal and modelling in Copperleaf (see Box 1 and Chapter 4 above).
66. Figure 8 below compares our proposed enhancement programme in AMP8 to our forecast expenditure in AMP7. On an annualised basis we are proposing to increase our enhancement spend in the next AMP by £5.0m per year in 2022/23 prices. We have grouped a series of individual enhancement interventions/schemes into five enhancement claims (EC) according to groupings of schemes that are expected to contribute to the priority areas and targeted outcomes from our business plan, as discussed in Chapter 6. The five claims are:
- Appendix SES006 – Drinking water quality enhancement (£8.8m)
 - Appendix SES007 – Enhancing the resilience of our water treatment works and processes (£6.8m)
 - Appendix SES008 – Additional leakage reduction and enhanced network resilience (£10.1m)
 - Appendix SES009 – Smart water customer experience (£22.2m)

²³ We have set this out in Appendix SES005B alongside our submission on RPEs, as a form of CAC but note that it can be addressed directly by Ofwat via an amendment to its base cost models. We consider that the issue is a sector, not company specific, adjustment, and encourage Ofwat to consider the issue in this way. However, for the avoidance of doubt, item (d) is a necessary adjustment in Ofwat's modelling for our costs to be appropriately benchmarked and funded.

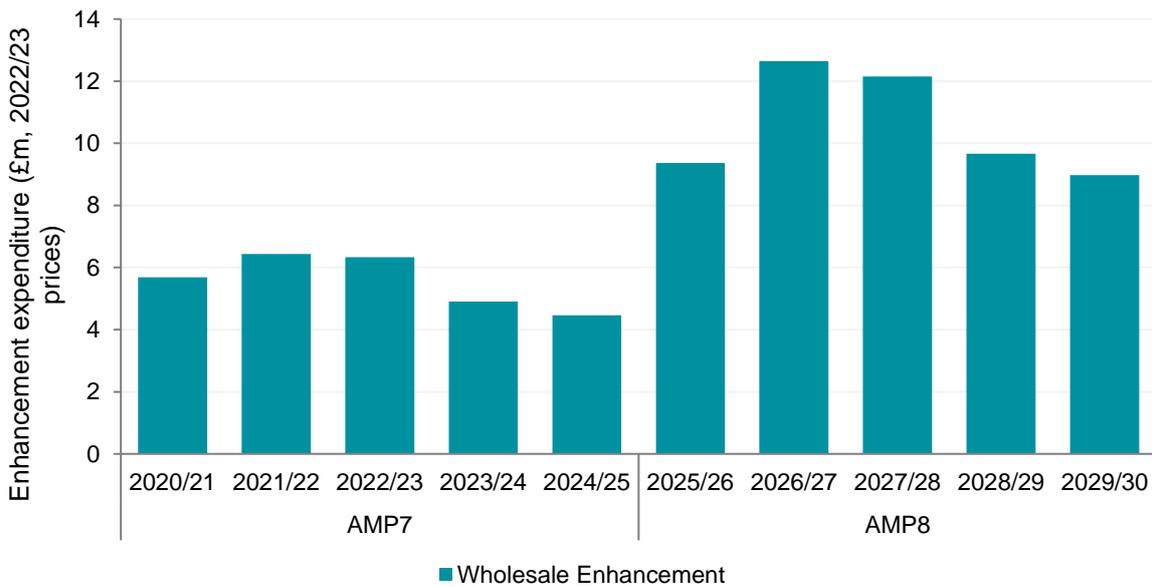


- Appendix SES010 – Environmental improvement (£4.9m)

67. Every pound we propose to spend on enhancement is supported by these detailed enhancement cases. These set out:

- Why there is a need for enhancement investment.
- How our proposals deliver best value for customers.
- What measures we have taken to ensure cost efficiency and provide customer protection.

Figure 8: Enhancement cost build up (£m 2022/23 price base)



Source: SES Water APRs and internal analysis
 Note: 2020-21 to 2022-23 are actuals, later years are forecasts.

68. Table 3 below lists each of the elements of the five ECs and the costs that are associated with the initiatives that fall within them. These enhancement costs include our 1% target for ongoing efficiency in AMP8.

Table 3: Overview of enhancement claims – Wholesale only (£m 2022/23 price base)

Priority area	Enhancement Claim	Intervention / schemes	AMP8 OPEX	AMP8 CAPEX
Provide you with high quality water from sustainable sources	Drinking water quality enhancement	UV treatment at Kenley & Cheam WTWs	0.20	4.88
		Customer focused lead replacement programme	-	3.70
		Total	0.20	8.58
Deliver a resilient water supply and	Enhancing the resilience of our water treatment	Site resilience programme	0.22	3.40
		SEMD security requirements	0.12	1.50
		Regional water resources planning	1.06	-



Priority area	Enhancement Claim	Intervention / schemes	AMP8 OPEX	AMP8 CAPEX
minimise wastage	works and processes	Supply-side improvements	0.28	0.18
		Total	1.69	5.07
	Additional leakage reduction and enhanced network resilience	Leakage improvements	0.39	9.76
		Total	0.39	9.76
Reduce your water footprint and charge a fair, affordable price	Smart water customer experience	Smart meter infrastructure ²⁴	4.95	16.66
		Cyber security	-	0.37
		Smart meter data infrastructure	0.10	0.13
		Total	5.05	17.15
Improve the environment and have a positive impact on the local area	Environmental improvement	WINEP: Eels entrainment screens	-	1.95
		WINEP: Investigations	1.65	-
		WINEP: Drinking Water Protected Areas	0.44	-
		Biodiversity	-	0.30
		WINEP: Water Framework Directive	0.21	-
		WINEP: Invasive Non-Native Species	0.15	0.06
		Environmental Resilience	0.12	-
Total	2.57	2.31		
Total enhancement			9.90	42.88
			52.77	

Source: SES Water APRs and internal analysis,

Notes: 1) Our ECs also include £1.7m of retail expenditure which is covered in the subsequent section, comprising £1.3m in CAPEX and £0.4m in OPEX.

2) Regional water resources planning costs have been incorrectly stated as £1.1m. £500k of this relates to customer side leakage, and a reallocation of these costs will take place post submission.

Benchmarking and testing the efficiency of our enhancement costs

69. We have discussed the steps that we have taken to benchmark, assure and test the efficiency of our forecast enhancement expenditure in each of the enhancement claim appendices. In summary:

- For large capital schemes, we have tested the efficiency of our costs via seeking market benchmarks of indicative prices, or via direct unit cost benchmarking studies from published sources

²⁴ Including the rollout of smart meters.

- We have not applied a catch-up efficiency challenge to our enhancement spend, as we consider the benchmarking of our 2022/23 base costs accounting for CACs, shows we are broadly efficient²⁵ and
- Consistent with our base costs, we have applied an ongoing efficiency challenge of 1% per annum over AMP8 to our estimates of the required enhancement scheme related costs.

70. We have also used cost benchmarks provided by Atkins and Gartner for elements of our CAPEX programme.

Customer protections – Price Control Deliverables

71. As part of the development of our enhancement cases, we have considered Ofwat's requirement for Price Control Deliverables (PCDs) for material investment that would not be adequately protected using PCs or Outcome Delivery Incentives (ODI). Our proposals for PCDs are discussed in Appendix SES063 - Price Control Deliverables and Additional Reporting Metrics and the accompanying ECs in Appendices SES006 – SES010.

72. In summary we are proposing PCDs related to our smart meter programme, enhanced lead replacement programme, and our enhanced water treatment and network resilience programmes.²⁶ For a number of schemes, we have concluded that a PCD is not required either because we consider ODIs will offer sufficient customer protection and/or the forecast enhancement spend is not material or other regulatory protections (e.g., Drinking Water Inspectorate (DWI) or EA oversight) are in place.

Summary

73. Table 4 presents the breakdown of our costs by price control.

Table 4: Wholesale enhancement costs by price control (£m 2022/23 price base)

Area	2025/26	2026/27	2027/28	2028/29	2029/30	AMP8
Water resources	0.6	1.1	1.3	0.4	0.3	3.5
Water network plus	8.8	11.6	10.9	9.3	8.7	49.2
Total	9.4	12.6	12.2	9.7	9.0	52.8

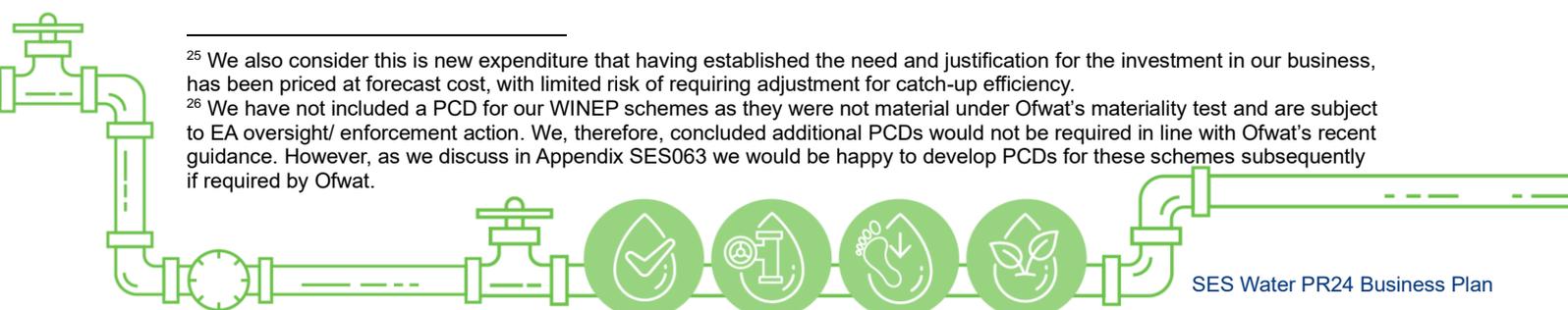
Source: SES Water analysis

E. Running our retail activities

74. We are projecting expenditure of £37.1m (2022/23 prices) to run our Retail activities over AMP8. This compares with expected outturn expenditure of £49.2m over AMP7. In the following sections, we explain how we have arrived at this estimate and how we have challenged ourselves to present an efficient spending plan, with reference to Ofwat's industry-wide retail cost modelling.

²⁵ We also consider this is new expenditure that having established the need and justification for the investment in our business, has been priced at forecast cost, with limited risk of requiring adjustment for catch-up efficiency.

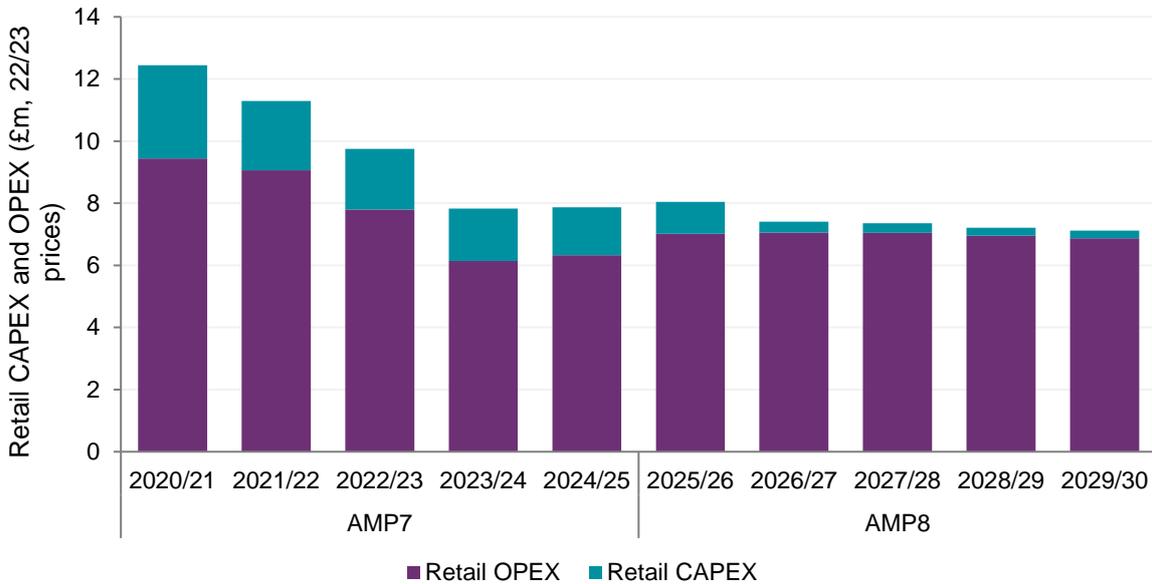
²⁶ We have not included a PCD for our WINEP schemes as they were not material under Ofwat's materiality test and are subject to EA oversight/ enforcement action. We, therefore, concluded additional PCDs would not be required in line with Ofwat's recent guidance. However, as we discuss in Appendix SES063 we would be happy to develop PCDs for these schemes subsequently if required by Ofwat.



Building up our cost forecast

75. The activities we undertake in our Retail business are reasonably consistent from one year to the next. We have therefore looked at our historic expenditure as the natural starting point for forecasting costs for the next AMP. Figure 9 below summarises our actual and forecast expenditure over AMPs 7 and 8.

Figure 9: Historic and forecast retail expenditure (£m 2022/23 price base)



Source: SES Water APRs and internal analysis

Note: 2020-21 to 2022-23 are actuals, later years are forecasts.

76. Figure 9 shows we plan for our retail costs to fall leading into the next AMP. There are several drivers for this observed cost trend. First, our relatively high level of capital spend at the start of the current AMP – driven by our investment in Aptumo – is not expected to be repeated in AMP8.²⁷ Second, we introduced a series of reallocations of costs between our retail and wholesale businesses in the 2022/23 APR to be more consistent with the reporting practices that we have observed other companies have adopted. This has reduced our reported retail OPEX between 2021-22 and 2022-23 and we have continued to account for this in rolling forward our forecast costs into AMP8. Finally, we expect a falling provision for bad debt which also partially accounts for the observed reduction from 2022/23 to 2023/24 in AMP7.

77. As with the industry as a whole, we have also experienced significant cost pressure in our retail activities during AMP7. The Coronavirus (COVID-19) pandemic imposed additional costs – in particular in relation to managing bad debt – and inflation has been much higher than anticipated. We have considered how best to accommodate these unusual trends in our cost forecast.

78. We have built up our cost estimate based on outturn expenditure in 2022/23, as the most recent outturn year. Our OPEX in 2022/23 was £7.8m, which is £26 per customer. We expect this to reduce to an average of £7.0m in AMP8 because:

- (a) We expect the value of doubtful debts to be lower than what we have experienced in recent years

²⁷ Aptumo is our retail utility billing software and infrastructure.

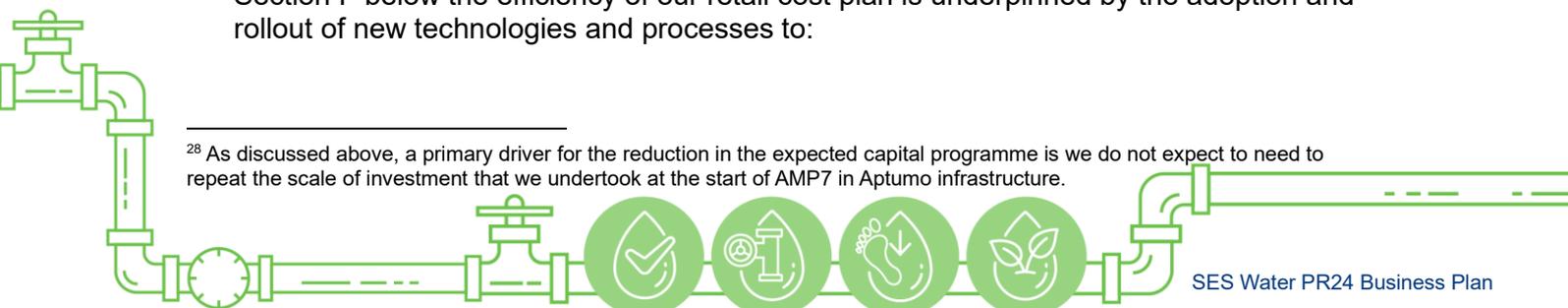


- (b) We are challenging ourselves to limit our exposure to the recent higher inflationary pressures on our costs and
- (c) Consistent with our wholesale business, we have set ourselves a 1% ongoing efficiency target for our forecast costs over the course of AMP8.
79. Within this £7.0m, we include a small element of consequential OPEX (£0.1m p.a.) related to our enhancement initiatives.
80. Our retail CAPEX plan is £2.2m over AMP8 which is a substantial reduction on our AMP7 expected expenditure of £10.4m.²⁸ Of this £2.2m in CAPEX, £0.8m is related to base expenditure while the remaining £1.3m relates to enhancement expenditure.
81. Retail expenditure (£1.7m in total) forms a part of our Smart Water Customer Experience enhancement claim, to transform our customer engagement, digital interfaces and communications to support the investment in our wholesale business (in particular, the rollout of smart meters) and the stretching targets around customer behaviour change, notably PCC and business demand reduction, to achieve government Environmental Improvement Plan targets. The detailed justification of the expenditure against Ofwat's EC criteria, including protections for consumers that the proposed investment is used wisely and delivers benefits, is discussed in Appendix SES009.
82. For the avoidance of doubt, our business plan assumes that:
- Ofwat accept both the wholesale and retail elements of our enhancement claim, given the retail elements are needed to support operational delivery of the benefits from the core wholesale element of the claim (i.e., smart meter rollout) and
 - The enhancement element of our retail spend, will be funded as an additional cost to serve, i.e., in addition to the cost allowances that we would expect to be funded via Ofwat's retail cost models (see discussion below).

Challenging the efficiency of our retail cost plan

83. As with our wholesale base cost forecast, we have benchmarked our retail cost forecast against the allowances we may receive through Ofwat's efficiency modelling, to test the efficiency of the plan. We have followed a robust approach to ensure that our forecast spending is in line with what would be expected from an efficient company.
84. We have followed the same broad approach to wholesale described above:
- (a) Comparing our outturn costs against Ofwat's industry benchmark once adjusted for factors that uniquely affect our business (i.e., our CACs) and using the result to determine our efficiency challenge
- (b) Adjusting for our expected input cost pressures in AMP8
- (c) Applying an ongoing efficiency challenge to reflect our expectation of industry-wide productivity improvements.
85. Overall, we conclude that our forecast retail costs are efficient at an upper quartile benchmark, despite limitations with Ofwat's retail cost models. Alongside our 1% per annum ongoing efficiency target that we have set for the business in our plan over AMP8, we consider this demonstrates an ambitious plan for cost efficiency. As we explain in Section F below the efficiency of our retail cost plan is underpinned by the adoption and rollout of new technologies and processes to:

²⁸ As discussed above, a primary driver for the reduction in the expected capital programme is we do not expect to need to repeat the scale of investment that we undertook at the start of AMP7 in Aptumo infrastructure.



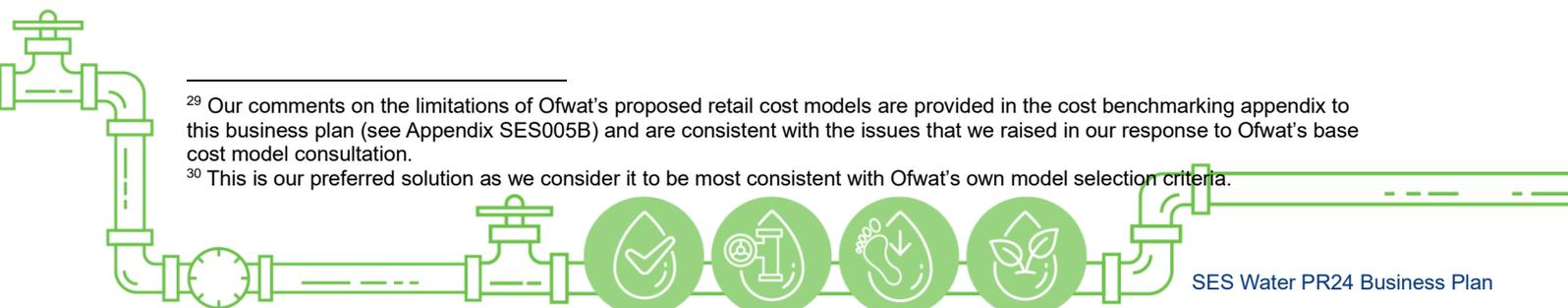
- Reduce the volume of activity our retail business will need to manage on a day-to-day basis (e.g., by increasing billing accuracy)
- Achieve channel shift (i.e., encouraging customers to interact with our retail water business via an expanded set of channels including the new proposed customer app and omnichannel marketing) which will over time help us to reduce our operating costs and
- Further staff training and education initiatives (to reduce the time and need for repeat contacts) and integration of customer data.

Benchmarking our retail costs

86. We have taken into consideration Ofwat's analysis of PR24 base retail costs. This analysis is based on 11 different models with different strengths and weaknesses. It is challenging to model efficient costs accurately, and publishing a broad range of models has helped to highlight which work well and which work less well.
87. For this business plan, Ofwat has guided us to assume that individual models are equally weighted in its modelling. Our analysis of Ofwat's results shows that this way of aggregating results indicates a gap of around 26% between our actual costs in 2022/23 and our efficient modelled costs. We do not consider this is a true reflection of our underlying efficiency or the efficiency challenge that we might reasonably be expected to integrate into our cost forecasting looking forward into AMP8.
88. The varied performance of Ofwat's models – based on Ofwat's own tests – means they do not provide a true reflection of an underlying gap in our efficiency. In some cases, the quality and robustness of the models is too low to warrant their inclusion in the evidence base, as we noted in our response to Ofwat's base cost consultation.²⁹ The bottom-up models in particular are not sufficiently high-quality to support a robust retail cost and benchmarking exercise. In general, the model results for retail – in terms of their implications for efficiency – are also very mixed.
89. We have concluded that part of the efficiency gap that existed between our forecast costs and Ofwat's modelled costs at the time of PR19 can be explained by inconsistencies between how we have previously allocated costs between our retail and wholesale businesses relative to other companies in the sector. We have addressed this in our latest (2022/23) APR.
90. We have also identified the need for a series of adjustments to the results of Ofwat's retail cost models. First, a key driver of industry costs is the scale of operations. Larger companies that serve more customers are consistently able to deliver at lower cost. Failing to take this effect into account would result in under-funding our (and other companies with a below-average customer base) efficient costs. While this is the case in some of Ofwat's retail models it is not the case for all the models.
91. There are two ways this could be captured in the regulatory process:
- (a) The simplest would be for Ofwat to focus on the benchmarking models that perform best and that include a variable that can control for the impacts of economies of scale within the industry³⁰
 - (b) Should this not be the case, it would be necessary to apply our CAC to account for our circumstances, as detailed in Appendix SES030 - Cost adjustment claim: retail scale.

²⁹ Our comments on the limitations of Ofwat's proposed retail cost models are provided in the cost benchmarking appendix to this business plan (see Appendix SES005B) and are consistent with the issues that we raised in our response to Ofwat's base cost model consultation.

³⁰ This is our preferred solution as we consider it to be most consistent with Ofwat's own model selection criteria.



92. In either case, this adjustment would account for around 25% of the gap between our actual costs and Ofwat's modelled costs.
93. We have also reviewed the CACs submitted by Thames Water and Affinity Water in relation to the transience of their respective populations.³¹ We are supportive of those claims and the impacts they evidence of higher population transience on debt and non-bad debt related retail costs.^{32,33}
94. While we recognise the effect of population transience does not meet Ofwat's materiality threshold for us, it does have a material effect on the size of our efficiency gap, accounting for approximately 9% of the gap. We have, as a result, accommodated the (symmetrical) impact of the transient population CAC on our costs as estimated in Thames and Affinity Water's early CAC in our efficiency benchmarking. This adds £0.2m per year to our efficient modelled costs in AMP8.
95. Taking these factors into consideration, the gap between our actual costs in 2022/23 and Ofwat's modelled costs falls from 26% to 17% applying an upper quartile level efficiency benchmark.

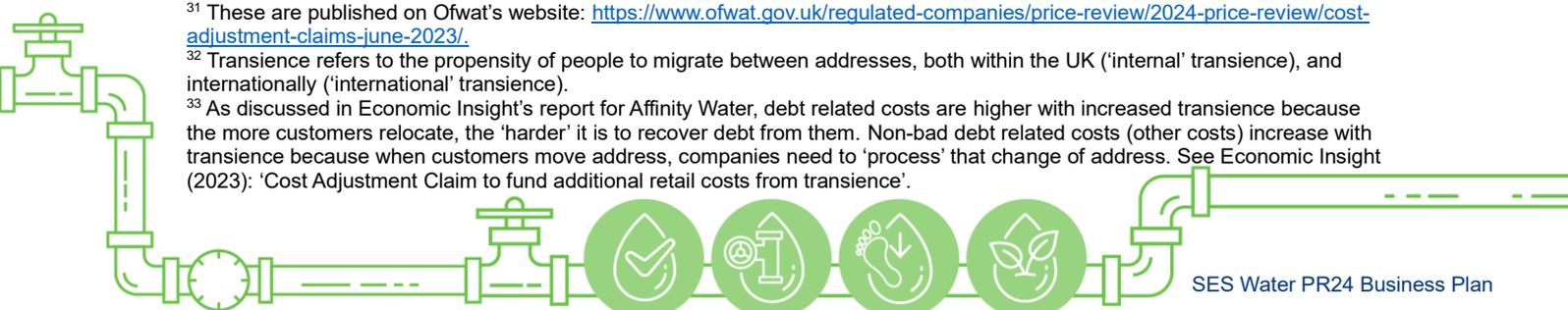
Other RPEs and future productivity improvements

96. A large proportion of our retail expenditure is driven by labour expenditure, to provide high quality customer services, to read meters, and to manage the debts of our customer base. We note that Ofwat has stated in its Final Methodology that it does not intend to index the retail price controls to the Consumer Price Index with Housing (CPIH) and may not provide any uplift for inflation.
97. This implicitly assumes that future ongoing productivity improvements will fully offset the impact of inflation on retail costs, such that retail costs will be flat in nominal terms. We disagree with this. As events of the current AMP has shown, we sometimes experience periods of high inflation. It is not reasonable to assume that in all cases, productivity improvements will fully offset this. And while water companies have some ability to manage inflationary pressures on their retail business, we do not have complete control over input price pressures. It would be preferable for there to be an explicit ongoing efficiency assumption, coupled with CPIH indexation.
98. For the purposes of testing the efficiency of our AMP8 forecast costs, we assume in our cost modelling that:
- Labour costs will rise by the current wage rate forecast by the Office for Budget Responsibility (OBR)
 - Other retail costs will rise with expected CPIH and
 - We will be able to maintain a 1% per annum productivity improvements, which will partially offset the increase in costs.
99. In Appendix SES005B we provide evidence to support these assumptions. If Ofwat does not index the retail cost to serve allowance (a policy for the reasons set out above, we do not support), we consider that our allowances should include an adjustment for expected CPIH inflation and expected increases in wage rates. In summary, we consider the assumptions justified because:

³¹ These are published on Ofwat's website: <https://www.ofwat.gov.uk/regulated-companies/price-review/2024-price-review/cost-adjustment-claims-june-2023/>.

³² Transience refers to the propensity of people to migrate between addresses, both within the UK ('internal' transience), and internationally ('international' transience).

³³ As discussed in Economic Insight's report for Affinity Water, debt related costs are higher with increased transience because the more customers relocate, the 'harder' it is to recover debt from them. Non-bad debt related costs (other costs) increase with transience because when customers move address, companies need to 'process' that change of address. See Economic Insight (2023): 'Cost Adjustment Claim to fund additional retail costs from transience'.



- A substantial part of our retail cost base are salaries which over the medium term can be expected to rise at least with general inflation, but likely at a higher rate given the location of our business and the competition we face with other local water businesses (Thames, Southern, and Affinity) to attract and retain staff
- Several elements of our retail costs are directly related to inflation (e.g., business rates and Ofwat's own license fees)
- Many of our costs are directly related to the size of the bill – which are dominated by wholesale charges, which are themselves directly linked to inflation and
- There are a number of known opportunities to employ new data, technology and artificial intelligence to aid and improve productivity / efficiency within our retail business, and for this reason, we have adopted a 1% ongoing efficiency target in our plan and the efficient modelled cost benchmark, even though this is above the range that has been suggested in a recent published study for other water companies of the scope for frontier shift in water sector retail in PR24.^{34,35}

Testing and calibrating the efficiency of our retail plan

100. As discussed above, we have considered the strength and robustness of cost benchmarking evidence in forming our view on an appropriate benchmark for our retail business. Ofwat's proposed approach has been to set a benchmark based on an upper quartile company performance. Given the poor performance of Ofwat's retail benchmarking models and the exceptionally wide range of modelled efficiency scores, we consider this would give a misleading impression of efficient retail costs.
101. While part of the variation between companies undoubtedly reflects differences in efficiency, part of it simply reflects modelling uncertainty. We consider the choice of benchmark for the retail cost modelling should reflect that, and based on our comments on the models Ofwat has recently consulted on we consider there is a strong case for it adopting a less stringent benchmark than was applied to set retail cost allowances at the PR19 Final Determination (see Appendix SES005B).
102. Nevertheless, given the transformation pathway that our retail business continues to be on, and the strategic role that it is expected to play in delivering on our performance commitments in AMP8, in particular, in supporting demand management (in particular, PCC reduction), together with our customers and Ofwat's expectations that we would set ourselves stretching efficiency targets, we have concluded that an upper quartile efficiency benchmark is an appropriate, but stretching, efficiency challenge for our business plan in AMP8. However, we can only reach a definitive view on the appropriate benchmark level for retail costs in PR24 once we have reviewed Ofwat's modelling proposals at draft determinations.
103. How our plan's forecast retail costs compare to the efficient modelled costs, including our CAC and the other modelling choice decisions we have set out above, is illustrated in Figure 10 below.

³⁴ See Economic Insight (2023): 'Frontier Shift at PR24', Economic Insight conclude "Our analysis [of the scope for frontier shift] for retail suggests: (i) a 'plausible range' of 0.3%-0.6%; (ii) a 'PR24 focused range' of 0.4%-0.6%; and (iii) a 'sensitivity analysis range' of -0.2%-1.2%. Overall, these ranges are highly similar to those for the total water value chain; but note that the upper ends of our 'plausible range' and 'PR24 focused range' are slightly lower for water retail. This is consistent with intuition, whereby we would characterise retail activities as being somewhat more 'vanilla'; with lower value add; lower capital intensity; and (therefore likely) lower scope for technological change that could, in turn, drive improved productivity."

³⁵ Consistent with wholesale, the 1% per annum is reflected in our business plan costs from the start of AMP8 when the efficiency savings can start to be realised. Consistent with how we understand Ofwat may apply the frontier shift challenge in its modelling, our efficient modelled cost benchmark applies the 1% target from a 2022/23 base year.

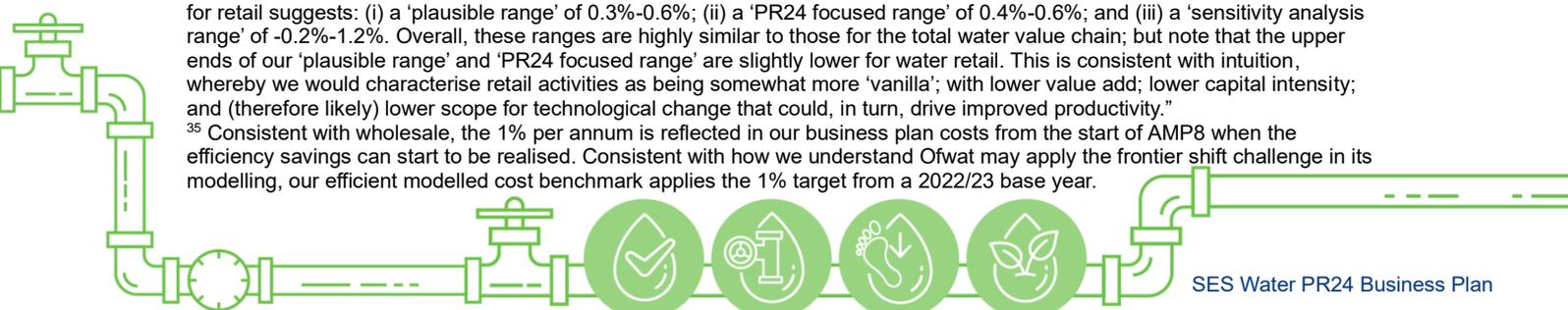
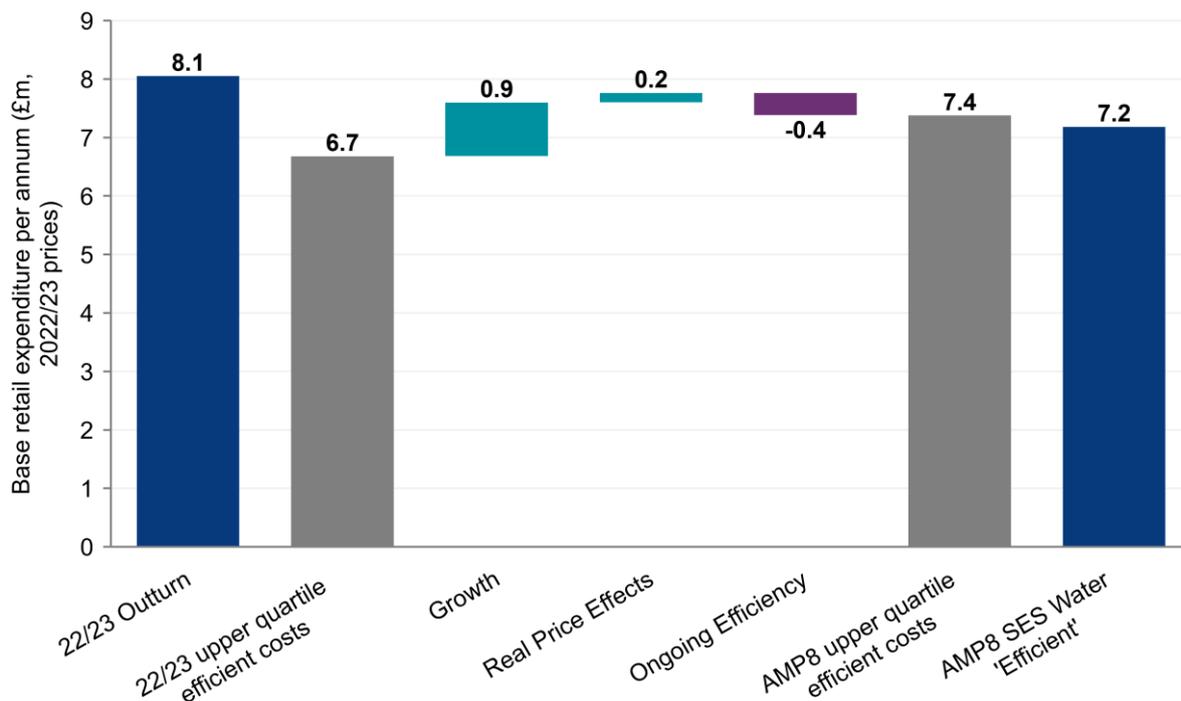


Figure 10: Efficiency benchmarking of our AMP8 retail base costs at an upper quartile efficiency benchmark (£m 2022/23 price base) ³⁶



Source: SES Water APRs and internal analysis

104. As the chart shows, given the range of modelling decisions and uncertainties that exist with the retail cost benchmarking, in the round we consider our forecast plan costs to be efficient. Further detail on our comments on Ofwat's retail cost models and the necessary adjustments to its consulted cost models is provided in Appendix SES005B.

Summary

105. The budgeted retail cost of £37.1m is our best estimate of the costs we will need to incur to deliver the outcomes our customers want and expect in AMP8. Of this, £35.0m relates to OPEX, while £2.2m relates to CAPEX. Of the £2.2m in CAPEX, we are proposing to spend £1.3m on our customer communications and digital interfaces, to support the rollout of smart meters and the stretching targets on customer behaviour change targets for PCC and business demand.

106. It is vital that our plan accounts for high recent inflation and sources of cost pressure. Otherwise, we risk underfunding our retail business and putting service quality at risk.

107. With the amount of uncertainty over inflation and other cost pressures, we think that using measures to adjust our allowed expenditure based on outturn data will offer better value to customers. We know that inflation in AMP8 is likely to be lower than in the past two years – but recent experience has shown just how volatile inflation can be.

108. At PR19 Ofwat assumed that inflation would be broadly offset by overall gains in productivity. This was not the case – and should not be the basis for any forward-looking assumptions. Rather than make an estimate in the face of such significant uncertainty, we propose that Ofwat reconsiders its stance and indexes the retail price control to

³⁶ 'Ofwat 22/23 'Efficient' includes the impact of our retail CAC for scale and the adjustment for population transience. The 'growth' step in waterfall analysis reflects changes in the cost drivers used to produce forecast efficient modelled costs.

inflation, with appropriate assumptions for real price effects and a stretching target for ongoing efficiency reflected in the baseline allowances.

F. Internal cost efficiency processes

109. We set out in Chapter 10 our delivery plan for the next AMP, including initiatives that will support the delivery of the stretching efficiency targets that are embedded in our plan. Appendix SES005B also summarises how we expect to drive cost efficiencies from both our wholesale and retail activities.

G. Assurance and regulatory submissions

110. We have undertaken extensive internal and external assurance of our cost plans, as is described in Chapter 11. Our detailed cost forecasts can be found in the supporting data tables we have submitted to Ofwat including our supporting commentary on those data table submissions.

