Chapter 3: About us and our track record

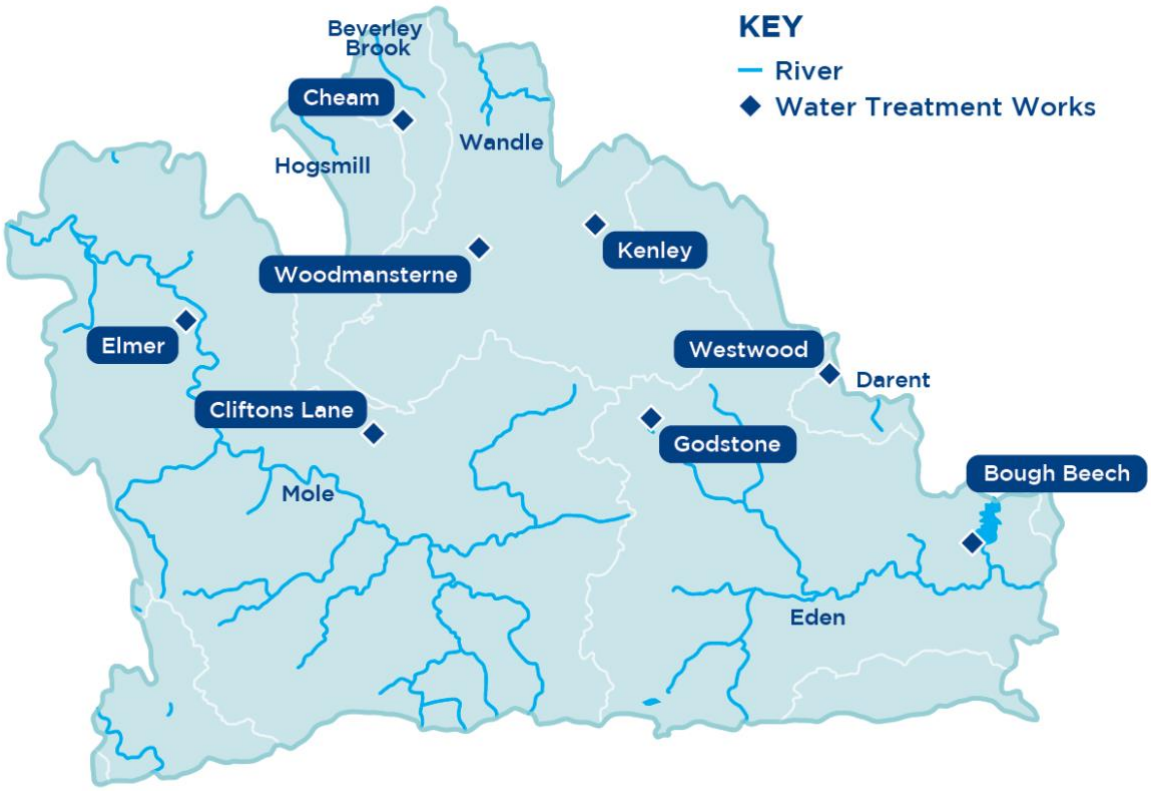
3. About us and our track record

This chapter provides an overview of our company and the area in which we operate. We summarise our past and current performance across all our service areas, with particular focus on the common performance commitments for PR24. We also explain how we have reconciled our financial position against our final determination at PR19.

A. Introduction to SES Water

1. We supply high quality water to more than 750,000 customers in parts of Surrey, Kent, West Sussex and south London. Our origins can be traced back to the mid-19th century when Victorian engineers constructed systems to supply water directly to people's homes. Currently, on average, we supply 160 million litres of clean water every day.
2. Our supply area extends more than 322 square miles, from Morden and South Croydon in the north to Gatwick Airport in the south and from Cobham, Leatherhead and Dorking in the west to Edenbridge in the east, covering 13 local authorities. Depending on where customers live, their wastewater services are provided by either Thames Water where we bill on their behalf, or Southern Water who bill customers directly for wastewater services.

Figure 1 SES Water's supply area



Source: SES Water

Our water resources and supply network

3. You can see from the figure above, that we operate across six river catchments – the Hogsmill, the Wandle, the Darent, the Eden, the Mole and Beverley Brook. 85% of the water we supply comes from underground chalk and greensand sources. Some of these sources support flows in the Hogsmill, Wandle and Darent rivers – all of which are chalk streams. The remaining 15% is abstracted from the River Eden in Kent and stored in our only raw water reservoir at Bough Beech near Edenbridge. This reservoir supplies customers in the east and south of our area and water can also be transferred to northern areas when needed.

4. We maintain over 3,500 kilometres of water mains and have eight treatment works (shown in the figure above), 33 pumping stations and 34 operational service reservoirs and water towers. We operate a single water resource zone, with an increased degree of interconnectivity across our operating region which leads to greater levels of water resource and supply resilience for our entire customer base. By the end of 2025 we will be the only the company in the industry to be able to serve all our customers from more than one water treatment works following a programme of investment to increase the connectivity of our network.

5. We are also the only company in the UK to have a fully smart distribution network. Installed in 2022, it includes around 750 sensors that provide data every 15 minutes to our central data platform, which is fed into our intelligent software. We monitor in near real time what is happening across our network and are alerted to events as they happen.

6. Each year, across our 21 water supply zones, we carry out approximately 120,000 water quality tests on around 13,000 samples taken at every point from source to tap.

7. We have not needed to place any temporary restrictions on water use since 2012, including during 2022 which was the driest year since 1976. This was despite South East England experiencing the driest ever July, combined with England's joint warmest summer on record, with drought being declared across large parts of the country. Our region is classified by the Government as being seriously water stressed.

Our customers

8. We have a diverse customer base, with our customers having differing needs and expectations. While 37%[1] of our customers are classified as highly affluent, there are areas where our customers are experiencing significant financial challenges, with more than 19,000 households currently receiving a 50% reduction on their water bill through our social tariff.

9. On average, household customers in our supply area use 155 litres of water each day which is 5% higher than the UK average and 1.3% above the South East average. 68% of our customers currently have a water meter, and we plan to increase this to at least 85% by 2025.

10. As with the rest of South East England, the number of people living in our supply area is expected to rise markedly in the decades ahead – increasing by around 14%, to over 863,569 people between 2025 and 2050. More people will require more housing, with the number of properties we serve potentially increasing to almost 372,589, up by 19%, over the 25-year period between 2025 and 2050.

[1] CACI data 2023.

11. The population density in our south London area is 4,760 people per square kilometre, which is significantly higher than Surrey or Kent, where there are 584 people per square kilometre. This materially impacts on the demand for water and the way we manage our network.
12. For a significant minority of our customers, English is not their first language, and we have worked hard to ensure they can access our services in a language they are familiar with. Indeed, our website pages have been viewed in 45 different languages this year. More detail about our customers can be found in Chapter 5 'Our customers'.
13. On average, our customers currently pay just over 60p per day for their water services.

Our ownership and finances

14. We are jointly owned by the major Japanese businesses, Sumitomo Corporation and Osaka Gas and each holds a 50% share in our ultimate UK holding company Sumisho Osaka Gas Water UK Limited. At the start of 2023, our shareholders engaged financial advisors to undertake a strategic review of the group business. External advisors were appointed to look at the entire ESH (East Surrey Holdings[2]) portfolio, including SES Water. At this stage, following strong interest from potential buyers our shareholders have decided to move to the next stage of the process, which could result in the business being sold.
15. The Company's financial performance for the year-ended 31 March 2023 reflected a tough economic environment in the last year. Total revenue increased by 7% to £67.4m but operating expenses increased by 11% to £62.8m, primarily due to increased costs for raw materials and consumables. Other operating income decreased by 67% to £1.1m due to the absence of one-off receipts relating to insurance and profits on disposal of assets. Our bad debt provision increased to £9.3m from £7.8m as customers continued to struggle with cost-of-living issues. As a result of this, our operating profit reduced by 58% to £4.3m. In addition, higher inflation significantly increased the cost of our long-term index-linked debt, with an additional £16m being charged in the year-ended 31 March 2023. Overall, our loss after tax was therefore £19.5m, an increase in losses by 13% from prior year.
16. While operational performance remained strong throughout the full year to 31 March 2023, the Board determined not to declare a final appointed dividend payable in respect of the year ended 31 March 2023. An interim appointed dividend of £1.46m was declared in November 2022 reflecting our strong operational performance in the first half of the year. Dividends paid in 2022/23 by the non-appointed business were £5.0m (2022: £0.6m). Non-appointed dividends are not governed by the appointed dividend policy but are assessed separately based on the overall operational and financial performance of the non-appointed business.

Our people

17. We have a workforce of approximately 350 individuals, and we indirectly contribute to sustaining an additional estimated 500 jobs within our supply chain. Our team remains the cornerstone of our success, with their unwavering dedication and drive to consistently provide exceptional service to our customers.
18. We are committed to nurturing our employees through comprehensive training and development initiatives, offering opportunities for growth, ensuring equitable compensation, acknowledging outstanding performance, and implementing programmes designed to both attract and retain top-tier talent.

[2] East Surrey Holdings is the parent company of SES Water.

19. Our median gender pay gap has reduced, down from 17.9% in 2019 to 11.7% in 2022. This is because of an increase in the number of women in our upper pay quartiles. Across the organisation, the gender split is 61%:39%, differing by pay range as is shown in the table below.

Table 1: Distribution of colleagues across the pay range

Pay range	Male	Female
Upper	68.7%	31.3%
Upper-mid	69.9%	30.1%
Lower-mid	53.6%	46.4%
Lower	50.6%	49.4%
Overall	**60.7%**	**39.3%**

Source: SES Water gender pay gap results 2022

20. As is common in the utility industry, the gender pay gap reflects there being more men than women in senior roles, many of whom have moved up the Company hierarchy. There are also more men than women in roles that attract shift pay and other working pattern allowances. We are working hard to shape a future that embraces diversity and equity. This entails cultivating a workforce that is diverse and reflects gender-balance, providing equitable opportunities for all, and aligning with our customer base. Guided by our Diversity & Inclusion Committee we are taking proactive measures to not only bridge the gender pay gap but also foster a workforce that exemplifies true equity.

21. These efforts have included a comprehensive overhauling of our recruitment process, ensuring there is no gender bias across our job descriptions and ensuring females are represented in our recruitment short-lists. Additionally, we are committed to enhancing representation by including more females on our interview panels, creating a fairer and more inclusive evaluation process. We take pride in marking significant occasions such as International Women's Day and have recently collaborated with Pride in Surrey. This partnership aims to encourage members of the LGBTQ+ community to explore career opportunities with us, underscoring our commitment to an inclusive and equitable work environment.

22. Our Investors in People Silver award is a significant achievement which recognises the enduring effort that goes into making SES Water a better place to work. We have also achieved a RoSPA Silver Award for Health and Safety, which demonstrates a very high level of performance, well developed occupational health and safety management systems, culture and outstanding control of risk.

B. Our performance

23. In this section, we detail our current performance. The table below summarises how we are currently performing against our company targets and other water companies, where direct industry comparisons can be made. We are on or above target for 50% of our company performance commitments (PCs) and performing better than industry average in six areas, including the areas that matter most to our customers including water quality, supply interruptions and leakage.

Table 2: Current performance summary

Performance commitment (PC)	Current performance against our target	Current performance against industry average
Water quality compliance (CRI)	On target	Better than industry average
Customer contacts about water quality	Below target	Better than industry average
Supply interruptions over 3 hours	Above target	Better than industry average
Water softening	Below target	No industry comparison
Mains repair	Below target	Better than industry average
Leakage	Above target	Better than industry average
Water consumption (PCC)	Below target	Worse than industry average
Pollution incidents	On target	No industry comparison
Water treatment works unplanned outage	Above target	Better than industry average
Greenhouse gas emissions	Above target	No industry comparison
Customer satisfaction (C-MeX) score	Below target	Worse than industry average
Developer satisfactions (D-MeX) score	Below target	Worse than industry average

Source: SES Water Annual Report and internal analysis of water company annual reports 2022/23.

24. In the following section, we set out more detail on our performance against each PC during the first three years of the current AMP and what we expect to achieve by 2025. We have also provided commentary to explain our track record in each area, highlighting good practice, providing examples, lessons learnt and explaining any challenges and how we have overcome. Where available, we have provided independent performance information from our stakeholders, including Ofwat, the Drinking Water Inspectorate (DWI) and CCW. Our ambition for the PR24 period is based on our past performance in these key areas meaning our proposals are credible and most importantly, deliverable.

Water quality – compliance risk index (CRI)

25. CRI is the measure used by the Drinking Water Inspectorate (DWI), England's water quality regulator. It measures how well companies are delivering drinking water that complies with the standards defined in the Water Supply (Water Quality) Regulations 2016 (as amended). The measure is designed to illustrate the risk to consumers arising from any failures of the standards by considering the likely impact to health, the cause of the failure and mitigation measures adopted, and the potential population affected by the change in water quality. Good performance is reflected in lower figures.

26. Samples are taken from treatment works, supply points, service reservoirs and consumer taps (representing water quality zones) at frequencies set out in the regulations. Failures of the standards could be attributed to the condition, maintenance or operation of company owned assets, but can equally be due to the condition of customer-owned pipework and fittings. A significant proportion of the sample failures reported for the industry will be attributable to issues at customer taps, rather than with the quality of the

water supplied by the water company, such as failures for lead, nickel and coliforms. While sample failures proven to be associated with single properties only attract a very low CRI score, the external influence of sampling random customer properties makes it very difficult to achieve a perfect CRI score of zero. Multiple single property failures can still result in a very low CRI score, whereas just a single failure at a water treatment works, or in a large water supply zone, will attract a much higher score.

Table 3: Compliance risk index (CRI)

CRI	2020/21	2021/22	2022/23	2024/25 forecast
Target performance	0.00	0.00	0.00	0.00
Underperformance deadband*	2.00	2.00	2.00	2.00
Actual performance	2.16	0.00	0.01	0.00
Industry maximum**	7.11	9.77	10.96	NA
Industry average**	2.41	3.23	3.57	NA

Source: SES Water
**The underperformance deadband is 2.00 so if we score above this, we incur a financial penalty.*
***Industry average and maximum performance metrics Ofwat WCPR 2022/23.*

CRI performance summary

27. Our drinking water consistently reaches the high standards required and we are among the industry leaders in this area, performing well above the industry average of 3.23 (2021/22) and 3.57 (2022/23). Our laboratory is UKAS accredited annually, an internationally recognised quality standard, which covers all aspects of activity from sampling and analysis through to reporting the results.

28. We exceeded the CRI underperformance deadband in 2020 due to a higher-than-average number of sample failures (seven), and with one of those being assessed as potentially impacting a significant number of customers over an extended period. We had excellent and industry leading performance in 2021 and 2022 where our CRI score was zero and 0.01 respectively, placing us in the upper industry quartile. Prior to the formal introduction of the CRI measure in 2020, we averaged over 99.96% compliance on the DWI's index of water quality between 2015 and 2020.

29. With a good understanding of our drinking water safety plan risks, and the delivery of effective management and maintenance of our treatment works and distribution network we are confident in maintaining our excellent CRI performance through this AMP. Final delivery will continue to be influenced by the condition of customer pipework and taps.

Independent performance assessment

30. The annual report from the Chief Inspector on the quality of public water supplies, Drinking Water 2022,[3] confirmed our CRI water quality performance as one of the industry leaders.

Ambition for 2025 to 2030

31. Our ambition is to maintain our industry leading performance in this area through continued effective management and maintenance of our drinking water production process and distribution network and on-going reviews of our drinking water safety plans.

[3] DWI: Drinking Water 2022, public supplies in England, July2023.

32. In addition, we will protect the quality of our drinking water supplies through a combination of investment in new treatment facilities where needed and working collaboratively with farmers and landowners to reduce the risk of our sources being contaminated by pesticides and nitrates. Water quality schemes to install UV at two of our treatment works to provide additional mitigation of potential risks are supported by the DWI and are included in our business plan for 2025 to 2030.

Customer contacts about water quality

33. Water quality contacts is a measure of all the contacts we receive from our customers about the taste, smell and/or appearance of their water. Although this data is collected by all companies for the purposes of reporting all customer contacts about water quality to the DWI, this was a bespoke performance commitment for us at PR19.

Table 4: Water quality contacts

Water quality contacts (no/1,000 customers)	2020/21	2021/22	2022/23	2024/25 forecast
Target performance	0.51	0.51	0.50	0.50
Actual performance	0.57	0.58	0.64	0.60
Industry average**	1.22	1.15	1.04	NA

Source: Ofwat, PR19 final determinations: SES Water – Outcomes performance commitment appendix; discoverwater.co.uk
***Industry average performance metrics presented on discoverwater.co.uk for 2020 and 2021 and water company Annual Reviews for 2022/23.*

Water quality contacts performance summary

34. We are proud to have one of the lowest levels of contacts in the industry about the taste, smell and appearance of the water we supply. Our performance compares to an indicative industry average of 1.11 contacts per 1,000 customers in the first three years of the current AMP, placing us comfortably in the upper quartile.

35. We have maintained upper quartile industry performance throughout the last AMP and into this one. At PR14, we set ourselves a very challenging target to minimise the number of customers contacting us about their supply, which continued into the 2020 to 2025 business plan period. Unfortunately, while we remain one of the best performing companies in this area, we are falling short of this ambitious target and being penalised financially, despite continuing to achieve upper quartile industry performance for customer contacts.

36. Understanding the cause of contacts is pivotal to improving our performance and these are analysed each month so action can be taken where necessary. The illegal use of hydrants with unauthorised standpipes that disturb our network accounts for 10% of contacts from our customers and we continue to successfully pursue and prosecute companies which do this. Generating local media coverage of the prosecutions and resulting fines is an important way to increase awareness and encourage people to help us identify this illegal activity and prevent it. In 2021 and 2022 we believe the hot weather generated extra contacts due to the increased turnover and demand for water, and in 2022 poor softening performance added 4% total contacts.

37. Another reason for the slight rise is due to changes in the regulatory requirements introduced in 2022. We are now required to log contacts received through all contact

channels, including social media. The increased functionality of our new billing and contact management system also enables additional searches and checks of the system to be conducted and this has identified a low number of contacts that may have previously not been captured, particularly where the key reason for a customer contacting us was not linked to water quality and it was only logged on that alternative basis.

Independent performance assessment

38. The Drinking Water Inspectorate's annual report[4] from the Chief Inspector on the quality of public water supplies confirmed our upper quartile performance in respect of taste and odour contacts and our good performance in respect of discolouration contacts.

Ambition for 2025 to 2030

39. Delivering our goal of high-quality water that looks, smells and tastes good, is our customers' top priority and we welcome the introduction of the common performance commitment for 2025 to 2030. Our target is to halve customer contacts by 2050. However, between 2025 and 2030 our focus will be on maintaining our current performance and consistently meeting our existing target, which will continue to see us performing in the upper quartile of the industry.

Water supply interruptions

40. Water supply interruptions is a measure of the number and duration of occasions in which properties lose supply for more than three hours consecutively in any given year. It is an indication of the resilience and reliability of our water supply service. It is calculated by totalling the sum of all properties impacted by a greater than three-hour interruption, multiplied by the total duration of each interruption and normalised based upon the total number of properties served.

Table 5: Supply interruptions

Supply interruptions (minutes/property/year)	2020/21	2021/22	2022/23	2024/25 forecast
Target performance	0.06.30	0.06.08	0.05.45	0.05.00
Actual performance	0.07.22	0.02.58	0.03.51	0:04:00
Industry average**	0.13.37	0.13.39	0.28.00	NA

Source: SES Water

*** Industry average performance metrics presented Ofwat WCPR 2022/23.*

Supply interruption performance summary

41. Our customers are less likely to experience an interruption to their water supply than most others across the country, with only a 1.3% chance of their water supply going off for more than three hours. In 2021/22 our average minutes lost of 0.02:58 was the third best in the industry, just behind Bristol Water (0.02:31) and Portsmouth Water (02:21) and well below the industry average of 13 minutes lost per property per year. In 2022/23 our average minutes lost was 0.03:51 was second behind Portsmouth Water (0.02:21) and an industry average of 0.28:00.

42. Since the commencement of the AMP, the average time properties in our area incur a water supply interruption of greater than three hours is 04:35. This followed strong performance between 2015 to 2020 where we saw interruptions to supply average 06:14.

[4] DWI: Drinking Water 2022, Public supplies in England, July 2023

The higher level of interruptions in 2020/21 was due to a single burst main impacting around 1,200 properties in the Ewell area, for nearly 16 hours. In both cases, a suitable opportunity to re-zone customers onto another supply was not possible within the timeframes. We have delivered upper quartile performance in the subsequent two years of this AMP.

43. Further evidence of our strong performance came during the 2018 thaw following the 'Beast from the East', where we lost supplies to only four properties for a period of more than three hours. We performed similarly well in the 2022 freeze/thaw. Following an equivalent weather pattern to what we experienced in 2018, we lost supply to only four properties following the burst of a key water main. A further 44 properties temporarily lost supply as we isolated them for slightly over three hours to undertake the repair to the adjacent burst main. This, again, demonstrates a higher level of resilience than many other companies.

44. At times, we need to temporarily interrupt supplies so we can carry out planned work on our pipe network. We have taken steps to significantly reduce the impact this has on our customers by continuing to improve the inter-connectivity of our district metered areas (DMAs) through our investment programme, alongside the use of new technologies indicated at PR19 such as 'instavalves', allowing new valves to be installed without shutting off supplies, therefore facilitating the ability to isolate smaller sections of main in future.

45. Unplanned interruptions are often the result of burst water mains or issues at our treatment works, which temporarily stops water production. By 2025, we will be able to supply all our customers from more than one treatment works if needed, to help make sure their supplies are not interrupted. This follows the successful delivery of our multi-AMP resilience programme which we began in 2010 and is a first in the UK water sector.

46. Our £45 million investment programme involved the construction of a number of new, strategic water mains along with upgrades to pumping stations and water treatment works so water can now be moved across our area, and groundwater supplies in the north can be supplemented with water from Bough Beech Reservoir in the south. At the start, only 10% of customers could be supplied by more than one treatment works, which rose to 56% at the beginning of 2020. While our progress in delivering the remaining part of the programme slowed down during the first two years of the AMP – in part due to the Covid pandemic – we are now ahead of our programme and on track to reach 100% by 2025. As well as building our resilience to short-term events, this investment also helps our management of water supplies during droughts, by enabling us to use our different sources more strategically.

47. We are the first company to have a fully smart water network. This enables us to identify issues that could lead to supply interruptions more quickly and act before they impact our customers. This work was a key focus of our PR19 business plan and we progressed with its roll-out, following a successful proof of concept completed in 2019. This showed the initiative was providing multiple benefits to many of our performance commitment outcomes – including accelerating our response to potential supply interruptions through the early warning of network anomalies (for example, increased flow or decreased pressure), allowing us to mitigate and resolve issues far quicker than historically. The first phase of this work across our entire operation was implemented in 2022.

Independent performance assessment

48. In Ofwat's Water Company Performance Report 2021/22 and 2022/23 we were categorised as a top industry performer for supply interruptions, already achieving our 2024/25 performance commitment level. In CCW's annual performance Water Mark[5] report we were graded as good – the highest grade available – for our water supply

[5] Water Mark performance summary

interruption performance. In late 2022, our smart network initiative (or iDMA, as we call it) won the Utility Awards for innovation of the year.

Ambition for 2025 to 2030

49. Our long-term ambition is for no customer to experience a supply interruption of over three hours by 2050. Between 2025 and 2030 we will:

- Continue to be in the industry upper quartile and further improve our performance;
- Focus on our operational response so we act more quickly and cut interruption time by becoming more efficient;
- Improve our communication and management of the issues which is a priority for our customers;
- Maximise the use of our fully smart network, so we are preventing interruptions where possible by acting more quickly when issues are detected; and
- Continue to enhance our smart network, leveraging the latest technologies to further reduce the detection and location time of network events for the benefit of our customers to minimise interruption time.

Water main repairs

50. The number of water mains we repair each year is a measure of the health of the underground pipework that supplies our customers. We repair around half the number of water mains each year, compared to the industry average, which reflects the good condition of our network.

Table 6: Mains repairs

Mains repair (no/1,000 km)	2020/21	2021/22	2022/23	2024/25 forecast
Target performance	66.5	64.6	62.7	59.0
Actual performance	69.8	57.9	101.5	59.0
Industry average*	154.3	126.5	168.6	NA

Source: SES Water

** Industry average performance metrics presented in Ofwat WCPR 2022/23.*

Mains repair performance summary

51. On average, a water main bursts somewhere in our supply network five times per week. Mains bursts and the associated number of repairs are seasonal with distinct peaks in periods of prolonged dry weather or during freeze/thaw events.

52. We have delivered upper quartile performance in each of the three years of this AMP. In 2020/21 we narrowly missed our target, however our performance remained more than twice as good as the industry average of 154 repairs per 1,000km of pipe. In 2021/22, we exceeded our target and maintained a burst level around half the industry average. In 2022/23 we, along with the rest of the sector saw a significant increase in mains bursts due to the impact of the drought on soil moisture deficit (a key factor known to influence burst rates), which increased to levels not seen since the 1970s. Furthermore, the subsequent freeze/thaw in December 2022 compounded the weather-related impact on network performance. Collectively, this caused our burst rates to increase by around two-

thirds, to just over 100 per 1,000km, but even in this challenging year, it remained 40% lower than the industry average in the first two (benign) years of this AMP.

53. Since 2020 we have replaced 32 kilometres of ageing water mains, and our performance in this area reflects the general good health of our network and the work that goes into operating, maintaining and renewing it, all of which is now benefiting from additional data from our smart network.

54. Since initial pilots in 2019, we have been developing an innovative focus on the stewardship of our network referred to as our DMA Asset Health Programme. This work, which has adopted technology not previously utilised in the UK, undertakes non-destructive, in-situ testing of our metal infrastructure (which comprises around 70% of the total of our supply network) to assess the residual thickness (and therefore indicative condition and remaining useful life). We coupled this approach with a holistic and comprehensive health check of our network, done systematically by zone and by DMA.

55. Our work in this area includes the creation and implementation of recommendations around enhanced pressure management, pressure transient reduction and improvements in network design to improve performance, resilience and flexibility in its operation. Following our fundamental principle of only targeting assets for renewal at the end of their useable life, is allowing us to target mains replacement far more efficiently, reducing unnecessary disruption and expenditure. We have so far assessed 40% of our network using this technique and are delivering considerable measurable benefit in the form of leakage reduction, reduced network events and well targeted asset renewal. This is now forming the basis of our mains replacement programme.

Independent performance assessment:

56. In 2021 Water UK published a report into the freeze-thaw 2020/21[6], reflecting on the improvements made by the industry since the winter of 2018. We had no widespread issues in either 2018 or 2022 freeze-thaw events. In December 2022, eight other water companies had to report ten events to the DWI[7] relating to the freeze/thaw where there was widespread loss of supplies and bottled water had to be distributed. Although we exceeded our mains repairs target for that year, we did not experience any major events.

57. In June of this year, our DMA Asset Health initiative won the asset management initiative of the year at the Water Industry Awards.

Ambition for 2025 to 2030

58. Our ambition is to use our smart network and asset health programme to reduce mains repairs to 54 repairs a year by 2030 with the aim of almost halving this level by 2050. We are targeting the completion of the first round of our DMA Asset Health programme – once complete we will have condition assessed all suitable non plastic pipes over 30 years old in our network. We will have also optimised all zones and DMAs in accordance with our DMA Asset Health approach, and current modelling indicates a required base level of asset replacement of around 0.3%. Our ambition is to re-test the condition of 10% of our pipe network so we can understand the rate of degradation over time and derive degradation curves for different cohorts of pipes. We will use this data to produce bespoke deterioration models to optimise our future asset replacement strategies.

Unplanned outage

[6] Water UK: Freeze-thaw 2020/21: Recommendations from an unprecedented winter, August 2021
[7] DWI: Consolidated review of loss of supplies arising from the freeze/thaw affecting England in December 2022 ,May 2023

59. Unplanned outage at our water treatments works is a calculation of how much treatment capacity is unavailable and is a measure of the health of our above ground water supply facilities.

Table 7: Unplanned outage

Unplanned outage (% of peak week production capacity)	2020/21	2021/22	2022/23	2024/5 forecast
Target performance	2.34%	2.34%	2.34%	2.34%
Actual performance	0.95%	1.36%	0.93%	1.20%
Industry average*	2.21%	2.26%	2.28%	NA

Source: SES Water
**Data taken from Ofwat WCPR 2022/23.*

Unplanned outage performance summary

60. We have outperformed our unplanned outage target since 2020, with roughly half the average of the sector (1.1% vs 2.2%). This is due to a range of factors based on how we operate, maintain and invest in our treatment works over an extended period. Additionally, the capacity of our on-site treated water tanks, compared to the assessed required throughput of the site in a peak week scenario means short-term outages (which could be caused by power blips or control issues) can easily be absorbed by the ability to restart quickly and not impact daily throughput. This is further evidence of our comparative resilience in the operation of our water treatment works.

61. We are beginning to see increases in the frequency and duration of power outages in parts of our supply area, which can impact our performance in this area. This, alongside increased uncertainty over recent years in UK power supply resilience has resulted in Defra requesting all water companies to ensure they possess sufficient capability to continue to supply water and treat wastewater. Doing so will play a role in addressing the risk posed to unplanned outage. We have developed a power management strategy and our business plan includes investment to increase the resilience of our sites where power outages are most frequent including new technology at Bough Beech water treatment works.

62. Ensuring our water treatment works can produce as much water as they are designed to, is a critical part of increasing our resilience to drought. In 2022, despite a drought being declared across much of England, with restrictions on water use imposed by our neighbouring companies, we did not implement Temporary Use Bans (TUBs).

Ambition for 2025 to 2030

63. Our performance target for 2025 to 2030 is to reduce and maintain unplanned outage at 1% of peak week production capacity, paving the way for a target of zero by 2050. This would continue to see us perform in the upper quartile for the sector.

Leakage

64. Leakage is a measure of how much water that is treated and put into supply is leaked from our pipes and the supply pipes within customers' properties. It is calculated as a three-year rolling average figure.

Table 8: Leakage performance (3-year rolling average)

Leakage (Ml/day)	2020/21	2021/22	2022/23	2024/5 forecast
Target performance	24.9	24.4	23.6	22.8
Actual performance	24.9	23.6	23.0	22.1
SES Water performance (litres/property/day)*	82	79	76	NA
Industry average (litres/property/day)*	119	113	108	NA

Source: SES Water
**Industry average performance metrics presented on discoverwater.co.uk for 2020 and 2021 and water company annual reports for 2022/23.*

Leakage performance summary

65. We have stayed at or below our target level of leakage every year since the target was first set more than 20 years ago. We are on track to reduce leakage by over 12% by 2025 from 2019/20 baseline levels on a three-year rolling average. Our leakage performance is among the best in the industry, below the industry average for the two comparative measures used by Ofwat. Against the leakage per property per day measure we rank second in the industry, while against the leakage per kilometre of water main measure we rank 5th and we have consistently been in the upper quartile of the industry over recent years. We are one of the minority of companies who have met their leakage reduction targets in every year of the current AMP.

66. The roll-out of smart technology across our network, completed in March 2022, is helping us to reduce leakage further. The self-learning smart network highlights issues in near real-time so action can be taken more quickly and paves the way for us to continue to lead the industry on leakage reduction. The ground-breaking technology enables data to be received from sensors in the network every 15 minutes at one minute granularity, directly informing operational teams and speeding up response times to reduce leaks and bursts and the total amount of water lost each day. To date we have almost halved the time it takes to detect a leak, reducing the amount of water lost by between 30 and 40%. We have also reduced our environmental impact and disruption to communities by only sending out teams to genuine issues.

Partnering for innovation – our collaborative approach to implementing a smart network

As well as being the first of its kind in the water industry, our smart network programme is the result of close collaboration between partners Vodafone, Royal HaskoningDHV and Technolog - each providing their expertise and knowledge to help roll out the combination of technologies. Vodafone supports the system with its Narrow Band Internet of Things (NB-IoT) service, which is optimised to provide efficient communication, long battery life and lower costs. Technolog is a supplier of the network sensors to help measure flow, pressure, transients and water temperature. Royal HaskoningDHV is providing its AI-powered Aquasuite technology enabling us to analyse the data being collected and make near real-time operational decisions.

67. Being the only UK water company to have a fully smart water supply network means we are now developing this further, trialling how it can help us manage pressure in the network to reduce leakage and we have a wealth of information about how our network is performing to make more informed decisions about how we look after it and invest in it. We are also sharing our results with the rest of the industry so we can all work together to improve networks around the country.

68. Our ongoing DMA Asset Health programme is also key to sustainably reducing leakage. This is a holistic approach to network asset management and optimisation and the key drivers are to reduce leakage through network calming, pressure optimisation and targeted asset renewal. We have partnered with Echologics who carry out mains condition assessments and Atkins who carry out holistic analysis of all data sets, field testing and pressure logging.

69. We continue to be active members of the leakage community and regularly share our experiences with others at industry forums, conferences and other events. We are regular participants at the Water UK Leakage Network meeting and our Innovation Manager is programme lead of the UKWIR leakage big question and actively engages with the industry to help drive forward this important project for the sector.

70. As active members of the National Leakage Research and Test Centre project, we are a non-financial project partner, contributing our leakage knowledge and expertise. We are engaged with the project and intend to actively participate in trials and assessments of the latest innovations, working in partnership with other water utilities and contactors to drive the best outcomes from the project.

Independent performance assessment

71. As mentioned previously, In December 2022 our smart network initiative won the innovation category at the Utility Week Awards, and in June 2023, our DMA Asset Health initiative won the asset management initiative category at the Water Industry Awards. Both of these projects contribute significantly to our leakage reduction strategy.

72. We have proactively shared our experience of leakage reduction and the implementation of our smart network with the wider industry. We have attended numerous national and international conferences and led two knowledge showcases with Spring in late 2022 - covering our iDMA and DMA Asset Health initiatives.

Ambition for 2025 to 2030

73. Despite our strong leakage performance, just over 21 Ml/d of the water we put into supply each day is lost through leaks – two thirds from our pipes and the rest from our customers' supply pipes. That's why reducing leakage further is a key priority for us and an area our customers expect us to prioritise. By 2030 we will reduce it by 26.6% from 2019/20 levels. Using our smart network to detect even smaller leaks and the roll out of smart meters are central to our long-term strategy and we will maximise their use over the next five years. This will significantly contribute to our long-term target to halve leakage by 2041, nine years ahead of the Government's target of 2050. Our long-term ambition is to reduce leakage by more than 62% by 2050, to 9.5 Ml/d of leakage, or around 8% of water we supply.

Per capita consumption (PCC)

74. We measure our household customers' water usage using per capita consumption calculated on a three-year rolling average basis.

Table 9: Per capita consumption (3 year rolling average)

Per capita consumption (litres/person/day)	2020/21	2021/22	2022/23	2024/5 forecast
Target performance	147.5	145.6	143.3	139.2
Actual performance	154.5	152.7	155.2	143.7
Industry average*	145.0	145.6	145.5	NA

Source: SES Water
** Industry average performance metrics presented in Ofwat WCPR 2022/23.*

Per capita consumption performance (PCC) summary

75. Our household customers use 155 litres per person per day on average, 5% more than the UK average. This is due to a combination of factors including the demographics of our supply area, the climate in the South East and the comparative level of meter penetration within our region. Higher levels of affluence across our customer base can result in higher levels of water use, due to factors such as larger gardens and a higher proportion of swimming pools. The typically warmer, drier weather we experience in the South East also gives rise to higher demand, particularly during the summer months.

76. We have not met our PCC performance commitment target so far during this business plan period. The Covid-19 lockdowns in 2020 and 2021 saw more people staying at home and household water use increased significantly. An early collaborative study published by Artesia Consulting (Appendix SES064 - Impact of Covid on Water Consumption) in February 2021, established that nationally, demand had risen in the first year of the pandemic by around 3% (comprising a 9% increase in PCC and a 25% decrease in business use). For us specifically, Artesia calculated demand was 7% higher overall, and that PCC increased by 12%. This was a combination of the ratio of household to non-household properties in our region, and the elevated levels of customers that commuted from our region into London, prior to the pandemic.

77. Since the pandemic ended, hybrid working for many has remained. This has seen levels of non-household demand continue to be supressed in our supply region and household consumption has remained elevated, resulting in PCC levels higher than forecast. Additionally, in two of the first three years of the current AMP, weather conditions over the summer months have resulted in increased demand. In both 2020/21 and 2022/23, summer rainfall averaged only 68% of its long-term value and we saw demand peak at 223 Ml/d, more than 50 Ml/d above average, in July 2022.

78. Analysis of PCC over the last 15 years has shown our metered customers' consumption has remained largely static at around 136 l/p/day, with only the years of the pandemic materially changing this. Conversely, unmetered customers (excluding Covid) have tended to use between 155 and 177 l/p/d, dependent on underlying weather conditions. As meter penetration increases towards our minimum target of 85% in this AMP, we project PCC will move towards 136 l/p/d as an average for all customers. This is around 5 l/p/d higher than the average seen in Southern Water's customers, who have had just under 90% meter penetration since 2015.

79. We are progressing our programme to install meters for the majority of our household customers who don't already have one - this was around 30% in 2020. Progress has been slower than planned, largely due to the impact of the Covid lockdowns. Despite this we forecast at least 85% of our customers will have a meter by 2025.

80. Our Every Drop Counts water efficiency programme continues, and activities include:

- Partnering with Save Water Save Money to provide the GetWaterFit tool to our customers – a personalised dashboard for the home with free water saving devices and a free leak repair with our partner SES Home Services. This, together with our home audit and device retrofitting service, has saved 2.3 million litres a day so far this AMP.. We will continue with these activities as part of our demand management strategy – planning to increase the reach of these services over the planning horizon so we achieve a further 8.0Ml/d benefit by 2050;
- Our Every Drop Counts Community Fund allows local non-profit organisations to apply for funding to help with a project linked to saving water, such as drought resistant planting, plumbing repairs on installing water efficient toilets, taps, or showers;
- Personalised water saving advice on customer bills and through our new online portal; and
- Awareness campaigns, including supporting Water UK and Waterwise.

81. Recognising efficient water habits need to be instilled at an early age, in October 2020 we opened a brand-new state of the art education centre, 'Flow Zone' at our Bough Beech Treatment Works, to complement the talks and workshops we deliver in schools, with community groups and at public events. The centre, a finalist in the Better Society Awards 2021, welcomes around 3,000 people every year to learn more about where their water comes from and how to use it wisely.

Independent performance assessment

82. We have been awarded the Waterwise Checkmark for Offices at our Redhill head office demonstrating the measures that have been taken to save water there, including a rainwater harvesting system, which provides 30% of the water used in the building.

Ambition for 2025 to 2030

83. Earlier this year we consulted on our draft Water Resources Management Plan (dWRMP) for 2025 to 2075 which was based on the WRSE's draft best value regional plan. Our revised draft WRMP[8] focuses heavily on bringing down demand for water leakage. It aims to meet the Government's Environmental Improvement Plan (EIP) target to reduce consumption to 110 litres per person per day by 2050. By 2030 we intend to bring PCC down to 132.6 litres per person per day which is a 11% reduction on 2019/20 levels. This reduction is dependent on the introduction of new water efficient government polices by the Government.

84. Our rdWRMP proposes to accelerate smart metering over seven years to make quicker progress in PCC reductions and crucially tackle customer-side leakage which is required to meet our leakage reduction ambitions. Reducing water consumption is one of our greatest challenges and it will require a transformation in how we work with our customers and help them to change their behaviour. This will only be delivered through the combination of smart meters, enhanced data analysis, integrated digital platforms and extensive customer engagement, which our plan seeks to deliver.

Business demand

85. We don't currently have a performance target for business water consumption. The non-domestic sector accounts for 30% of total water consumption in England and Wales and retail services are provided by companies that act in a competitive market. During the period November 2020 to March 2023, Groundworks visited 312 schools to conduct water saving visits, which we funded and were free of charge to the customer. These

[8] SES Water revised draft WRMP, August 2023.

visits saved more than 400,000 litres of water per day through the installation of water saving devices and repairing leaks. We are in the process of expanding the service we offer to include other types of non-household with high consumption and high footfall.

86. The Government has set a 15% reduction target by 2050 in the EIP, which we work with our colleagues in the retail market to achieve, targeting a 5% reduction in business demand by 2030.

Pollution incidents

87. If not properly managed, our operations can pollute the environment. We capture information on any actual or potential pollution incident, irrespective of severity, and report these to the Environment Agency (EA). Our current bespoke performance commitment requires us to measure the number of serious pollution incidents that occur each year – which are those classified as Category 1 (Cat 1) and 2 (Cat 2) by the EA. We are the only water-only company to currently have a pollution-related performance commitment.

Table 10: Pollution incidents

Serious pollution incidents (number)	2020/21	2021/22	2022/23	2024/5 forecast
Target performance	0	0	0	0
Actual performance	0	0	0	0

Source: SES Water

Pollution incidents performance summary

88. We have caused no Cat 1 or Cat 2 pollution incidents for more than 15 years, a notable indicator of the importance we place on protecting the environment. When we are responsible for pollution, it is caused by burst mains, the after-effect of which can result in debris such as soil and sand being washed from the burst site into a nearby watercourse, resulting in discolouration or turbidity. Such instances generally get classified at category 4 (Cat 4) or 3 (Cat 3) pollution incidents.

89. While our underlying rate of mains bursts is one of the best in the sector – and therefore the number of potential pollutions lower than others in the sector – it remains a risk and we have implemented several initiatives to further reduce the risk of serious pollutions. Firstly, the introduction of our smart network allows us to respond to mains bursts far quicker than historically, through the provision of near real-time data. Secondly, we have worked closely with the EA to deliver joint training to ensure our teams are suitably informed to be able to assess, classify, report and mitigate pollutions once they arrive on site.

90. The result of the work we have completed so far is that we have a more comprehensive view on the totality of potential or actual pollution incidents that occur. Cat 3 and Cat 4 incidents are classified as minor or unsubstantiated pollutions and comprise the full extent of pollutions we have been responsible for over the last three AMPs. Such incidents are captured by the EA in their shadow environmental performance assessment (EPA) report that covers water-only companies (its main EPA report scope currently covers water and sewerage companies – WaSCs – only).

91. Since 2020, our increased efforts to ensure all Cat 3 and Cat 4 incidents are reported has seen an increase in numbers of low or no significance pollutions attributed to us. The view of the EA is these numbers are accurately reflecting our operation, whereas other companies are believed to be potentially under-reporting Cat 3 and Cat 4 incidents. In parallel with this, and to ensure we are held to the same account in the shadow EPA as WaSCs are in the main EPA, we continue to work hard to self-report all pollution incidents we are responsible for. Since measuring this metric commenced in 2019, we have increased our performance from 67% to an average of 92%, achieving 100% in two of the three years so far in this AMP.

Performance ambition for 2025 to 2030

92. We will continue to minimise the impact our operations have on the environment and cause no Cat 1 or Cat 2 pollution incidents over the next five years or beyond. Equally, we will work to ensure the number of Cat 3 and Cat 4 incidents are minimised as far as is practicable.

Discharge permit compliance

93. Discharge permit compliance measures the performance of our water treatment works where they routinely discharge either a washwater or wastewater stream to the environment. We are currently not required to report against this performance measure, but our past performance is shown in Table 12.

Table 11: Discharge permit compliance

Discharge permit compliance	2020/21	2021/22	2022/23	2024/25 forecast
Target performance	100%	100%	100%	100%
Actual performance	100%	100%	100%	100%

Source: SES Water

Discharge permit compliance performance summary

94. We operate four discharge consents at our water treatment works and an additional consent associated with our artificial recharge scheme at Hackbridge. All are monitored by and subject to permits issued by the EA. Our compliance in relation to these consents has been very good, apart from a minor infringement in 2020 regarding Godstone WTW.

95. Godstone WTW produces a washwater by-product which we are consented to discharge to a local lagoon, which we own. In 2020, it was discovered and escalated to our directors that we were breaching the discharge consent by discharging volumes of washwater above that allowed under the permit. The issue was immediately investigated and reported both to the EA and to Ofwat. As part of the investigation, our Board of Directors instructed an independent external advisor to assess the root cause of the issue and make recommendations as part of the resolution of the issue.

96. Additional investment, operational safeguards and further training were delivered as a result of the investigation by early 2021. Following this, both the EA and Ofwat were updated of the outcomes. A formal warning letter was received from the EA in April 2021 and the issue closed. Data provided by the EA has confirmed we have remained in full compliance of our discharge permits since this time, comparing favourably with other WoCs, where only half the sector is achieving full compliance.

Performance ambition for 2025 to 2030

97. We will continue to remain fully compliant with all applicable discharge consents associated with our operations.

Biodiversity

98. At present, we are not required to measure and report on biodiversity gains delivered through our work. However, we made a bespoke performance commitment at PR19, which was to achieve the Wildlife Trust's Biodiversity Benchmark at three of our sites by 2025. We have already achieved this at two sites with work underway at the third. As part of the improvements to biodiversity management, we have started to capture biodiversity units through ecological surveys completed at our sites as well as when updating site management plans. We have done this understanding that with the introduction of the Environment Act 2021 and the EIP, we will need to demonstrate through measuring biodiversity net gain (BNG) that we leave the environment in a better state following construction work or projects that require planning permission.

Biodiversity performance summary

99. To protect and enhance the environment both now and in the future, in 2018 we launched our Biodiversity Action Plan which sets out our current business plan commitment to keep the land we own rich in biodiversity and make our sites attractive habitats to a variety of plants and animal life. Work began with biodiversity surveys at our sites to help inform decisions with many improvements being made including improving habitats, reducing mowing to allow wildflowers to flourish, installing bird boxes and the creation of bug hotels and deadwood piles to provide a food source and habitat for a range of species from stag beetles to bees and birds. Other actions taken as part of our plan included:

- Hedgerow improvements;
- Wildflower seed sowing; and
- Biodiversity training for all our staff.

Independent performance assessment:

100. In 2021 we were the first and only water company to be awarded The Wildlife Trusts' Biodiversity Benchmark at our Elmer Treatment Works in Leatherhead, Surrey. In publicising the award, The Wildlife Trusts were keen to emphasise that 30% of land needs to be managed for wildlife and Elmer demonstrates that nature can thrive alongside vital infrastructure. The benchmark is a demanding standard but in 2022 we retained it at Elmer and achieved the recognition at a second site in Fetcham, Surrey. We plan to achieve the Biodiversity Benchmark at a third operational site, Bough Beech Reservoir, by 2025.

Ambition for 2025 to 2030

101. We will build on our work of recent years and nominate 80% of our land for net gain work, delivering 25 additional biodiversity units by the end of the PR24 period and 530 additional biodiversity units by 2050 on our own land. Longer term, we will nominate additional tracts of land – both our own and others – to deliver net gain through partnerships as part of WINEP and wider activities, this has not been calculated yet.

Operational greenhouse gas emissions

102. At PR19 we put forward a bespoke PC for greenhouse gas emissions, which was unique for a water only company.

Table 12: Operational greenhouse gas emissions (current bespoke PC)

Operational greenhouse gas emissions (kgCO2e/Ml)	2020/21	2021/22	2022/23	2024/25 forecast
Target performance	55	55	55	55
Actual performance	40[9]	47	41	<45

Source: SES Water

Operational greenhouse gas emissions performance summary

103. We have been measuring our carbon footprint for the last 10 years, using the Carbon Accounting Workbook, and have proactively lowered our carbon emissions and reduced our impact on the environment. Using this calculation methodology, our carbon footprint today is 90% lower than 10 years ago because of the changes we have already made to how we source and use energy.

104. Since 2018 we have relied entirely on renewable electricity backed by Renewable Energy Guarantee of Origin certificates (REGO) which trace the source and destination of every megawatt-hour (MWh). This means that renewable electricity generated in the UK is allocated specifically against our consumption by registering the certificates with Ofgem in our name. This certification scheme helps to drive further investment in renewable generation in the UK, particularly from generators who do not have direct relationships with end users. This switch to renewables is the equivalent of taking 4,000 cars off the road. Other actions we have taken include:

- Focusing on water efficiency and leakage reduction measures to reduce the amount of water needing to be abstracted, treated and distributed in the first place;
- Investing in energy efficient pumps and variable speed drives and renewable energy generation solutions on our own sites, including small-scale solar;
- Switching to electric vehicles for our fleet and company car scheme which saves up to three tonnes of CO_2e per year, as well as reducing the impact on local air quality; and
- Improving how we monitor and control our energy use.

105. We have established two Board committees whose remits include scrutinising our performance in this area, alongside our Environmental Scrutiny Panel (ESP):

- The Energy Strategy Committee – this considers various aspects of our energy policies, including power purchasing and key initiatives to achieve net zero carbon; and
- The Environmental, Social and Governance (ESG) Committee – this is responsible for the development and implementation of our ESG strategy, including measurement and monitoring of the key performance indicators such as emissions.

106. Currently we produce around 9.5 tonnes of greenhouse gas emissions every day (2,800 tonnes a year) through our day-to-day operations which equates to 46 kilograms of greenhouse gasses per million litres of water we provide. This means we are creating fewer emissions than our current business plan target.

[9] Degree of 2020/21 outperformance driven largely by impacts of Covid-19 lockdowns.

Ambition for 2025 to 2030

107. The common performance commitment for AMP8 significantly changes the scope of emissions reported compared to our current bespoke performance commitment. While we recognise the need and accept the logic for this change, it does fundamentally alter the level of emissions reported (based on our historic decisions as a business) and the extent to which our future actions will influence their reduction over time.

108. Our net zero operational carbon routemap, published in June 2021, set out our ambition to achieve net zero operational carbon emissions by 2030 and focused on five strategic areas of focus: water efficiency, energy efficiency, renewables, vehicles and fossil fuels. The ambitions we set were challenging and tackled all sources of emissions within our operational carbon footprint with an equal degree of priority. We are soon to publish an updated version of our net zero routemap.

109. In preparation of our business plan for 2025 to 2030 we have reassessed our position and ambition associated with net-zero operational emissions. By 2030 we want to incrementally decrease operational greenhouse gas emissions, and by 2050 we will achieve net zero total carbon emissions, in line with Government's target. This includes the embedded carbon emissions produced through construction work and other activities.

110. Our rationale for moving away from the 2030 operational emissions target is because we expect there to be significant change between now and 2030, both in terms of legislation related to climate change and developments in markets and technology. Fast-tracking investment to reach the target by 2030 is unlikely to deliver best value for our customers and will require additional investment, which will increase bills at a time where many customers are facing financial pressures. Taking a more incremental approach through base expenditure will come at no additional cost to our customers. We have therefore adopted a 'mid-case' trajectory of operational emissions reduction and have proposed two metrics to sit alongside the new common PC we believe better demonstrates our progress towards achieving net zero. Detail is set out in Appendix SES035 - Operational Greenhouse Gas Emissions - Proposed Trajectory.

Softening

111. We are the only company in England and Wales with a statutory obligation to soften our water before it is supplied to our customers. As a result, we have a bespoke performance commitment which monitors our performance, which we propose to continue for 2025 to 2030.

112. The performance commitment is measured across the five treatment works where we deliver partial softening of the treated water and is based on the results of testing undertaken three times per week at each site. The average hardness of the treated water in those samples taken in each two-week period must not exceed 80 mg calcium per litre (mg Ca/l). Consistently delivering the required level of softening across all sites and in all periods therefore results in a performance target of zero. Any extended periods of reduced softening will result in an average hardness in excess of the 80 mg Ca/l target that is then also linked to the relative distribution input from the treatment works in question to determine the actual annual performance. Achieving the annual target performance requires each site to meet the average treated water hardness of 80 mg Ca/l in every two-week period of operation. A performance of zero signifies all sites met the 80mg Ca/l for all periods throughout a given year.

Table 13: Softening

Softening (mg average of calcium per litre)	2020/21	2021/22	2022/23	2024/5 forecast
Target performance	0	0	0	0
Actual performance	6.3	2.3	5.6	0

Source: SES Water

Softening performance summary

113. Water is partially softened at five of our eight water treatment works where the raw water hardness averages around 120 mg Ca/l. The five sites all abstract water from naturally hard groundwater sources located predominantly in chalk aquifers. These same sites produce around 80% of the water we put into supply.

114. We are required to keep average hardness levels at no more than 80 mg Ca/l per fortnight at each site. This is part of the agreement we have with local authorities in which our customers and sites are located. While we achieve this level regularly across our five applicable treatment works over different time periods, we have not consistently met this target at all sites over the current business plan period. Reasons for this include:

- Stopping softening if either pH or turbidity levels increase as this poses a risk to the wholesomeness of our water and we would fail to meet the strict requirements of the Water Industry Act;
- Short-term operational outages or breakdowns, as well as longer-term site upgrades and planned maintenance where the site is required to continue to run during these works;
- Significant and rapid increases in required throughput, for example if a site goes offline unexpectedly, requiring an alternative site to make up the difference, or when weather conditions change rapidly and require significant ramp-up in site throughputs over short periods of time; and
- European chemical shortages, such as the supply of hydrochloric acid.

115. All the above reasons have played a part in the level of performance delivered so far during the current AMP. We continue to focus on ensuring the appropriate level of softening reliability at each of the sites and have invested heavily in Woodmansterne and Elmer WTWs over the last seven years to help achieve this.

Independent performance assessment

116. Our softening performance is independently assured by the consultants Mott MacDonald as part of the annual performance report technical audit process. Additionally, annual update reports of our performance are shared with the London Borough of Sutton, the local authority who is counterparty to the primary legislation which places the softening obligation upon us.

Performance ambition for 2025 to 2030

117. We will continue to deliver partially softened water at our target level while ensuring our sites remain reliable and resilient and will work to minimise any reduction in softening performance on sites where significant and potentially disruptive planned work is taking place. This is particularly pertinent to Kenley WTW, where we intend to replace a range of assets critical to reliable operation – including softening – as part of a major scheme in AMP8.

C-MeX

118. C-MeX is the water industry's measure of customer satisfaction. The calculation is based on an average of two satisfaction surveys:

(a) asks a randomly selected sample of residential customers about their overall satisfaction with the company.

(b) asks a sample of residential customers who have contacted the company about how satisfied they are with how the company has handled their issue.

119. The score is reduced if the company does not offer at least five communication channels. Ofwat produces an annual league table of the overall annual C-MeX scores, and each company can receive a penalty or incentive based on its performance compared to other companies.

Table 14: C-MeX performance

C-MeX score	2020/21	2021/22	2022/23	2024/25 forecast
Target performance	Upper quartile	Upper quartile	Upper quartile	Upper quartile
Actual performance	78.97 (14th)	76.35 (15th)	76.03 (13th)	79.00 (9th)
Industry median*	82.35	80.43	79.08	NA

Source: SES Water

** Industry average performance metrics presented in Ofwat WCPR 2022/23.*

C-MeX performance summary

120. Over the last three years we have not met our overall target of being in the upper quartile of the water industry C-MeX table and improving our performance continues to be a business priority. We have made investments in resource, recruiting for positive attitudes and increased capability across our customer teams, including our leadership team. We have also developed a new data engineering capability and made significant investment in our systems and processes, which has led to improved performance. In quarter four of 2022/23 we achieved tenth place which is the highest position we have held since the measure was introduced. For the full year we finished in thirteenth place which is an improvement of two places on the first two years of this AMP.

121. Key drivers of improvement included a strong focus on improving our speed of response and delivery of operational service level agreements (SLAs) in the areas that matter most to our customers including telephone SLAs and abandonment rates, email response times and the elimination of backlogs in our field teams. We have also leveraged the benefits of our new billing system and a strong 'right first-time' mentality to deliver significantly improved billing accuracy in our annual billing run, resulting in lower levels of customer contact through this period than we have seen historically (March 2023 inbound volumes 12,521 vs. 20,383 in March 2021 and 20,138 in March 2022).

122. In 2021 we became the first UK water company to implement a new digital billing system on the Salesforce platform, opening up a wide range of future opportunities to improve our billing service and engagement with customers. This innovation was the biggest change we have made to this area of our business in more than 20 years and the largest technology investment in our history. Soon after, we launched an online self-service portal through our website making it easier for customers to manage their account and bills online at a time that suits them. We have reduced the number of times customers have to contact us about the same issue, with 85.1% of inbound contacts being resolved first time in 2022-23 vs. 81.1% in 2021/22.

123. We are working on several programmes to further improve our customer service, including deepening our understanding of who our customers are and what they need, re-designing our core end-to-end customer journeys, improved complaints handling, listening to and acting on customer feedback, embedding a customer-centric culture, improving customer communications and reducing bill shock – something of increasing importance as more customers are metered and charged for what they use, rather than a flat rate.

124. We responded to more than 215,000 customers calls and emails last year and we visit around 30 community groups each month to meet our customers face-to-face and talk about the support we can offer. 7.2% of our customers are currently on our register to receive priority services, which exceeds our target of 6.2% by the end of 2023/24, and more than 80% of our customers think the extra services we offer are helpful. At the end of 2020/21 there were 13,081 households on the PSR scheme and currently there are 20,890.

125. Building on our investment in new technology and improvements in the way we collect and use customer data, we've been testing new approaches to help our customers use water wisely. We've been proactively calling customers as soon as we see indications of increased water usage so we can work with them to understand what has caused this and help them take action to reduce it. This includes providing advice, carrying out a home visit, installing water efficient devices and identifying leaks within their homes. In the future, we plan to further leverage technology to automate this approach through our digital channels enabling us to reach more customers. The roll out of smart meters will mean we can identify high consumption in almost real-time, so we can provide targeted support to help customers save water, energy and money by using less water.

Independent performance assessment

126. CCW published its latest annual Water Matters[10] survey results in May 2023 which contains household customers' views on their water service. Metrics for SES Water respondents showed 93% of our customers were satisfied overall with their water supply and 75% were satisfied with value for money, both of which are in line with the industry average.

127. Our Customer Scrutiny Panel (CSP) has been running since PR14. This panel ensures the interests and expectations of our customers are put at the heart of our activities. It is independently chaired by Steve Crabb, who is a specialist in consumer affairs with a particular focus on customers in vulnerable circumstances. Panel members include customer representatives and other important stakeholders. In its most recent annual report, the panel highlighted how we have built on the introduction of our new billing system, which is providing more accurate billing and a far clearer picture of how customers are being served.

Ambition for 2025 to 2030

128. Delivering our goal of consistently delivering better than sector median C-MeX performance will require us to continue to build our understanding of our customers and use that knowledge to inform the design and delivery of our service to them. Building the trust of all our customers will be essential in delivering a number of our future performance ambitions which require customer action and behaviour change. Further details on how we will improve our service to customers is in Chapter 10: Making it happen, and in Appendix SES013 - Household Customer Strategy.

[10] CCW: Water Matters 2022

D-MeX

129. D- MeX is the water industry's measure of housing developer satisfaction. Each company receives a D-MeX score based on two components:

(a) a qualitative component based on monthly interviews with developer services customers that have transacted with a water company in the previous month; and

(b) a quantitative component based on the water company's performance against a key set of Water UK metrics which measure the service provided by water companies to their developer services customers.

Table 15: D-Mex performance

D-MeX score	2020/21	2021/22	2022/23	2024/25 forecast
Target performance	Upper quartile	Upper quartile	Upper quartile	Upper quartile
Actual performance	60.20 (17th)	77.39 (16th)	84.91 (we anticipate 12th)	87.50
Industry median*	82.40	83.65	86.76	NA

Source: SES Water
**Sourced from water company annual reports.*

D-MeX performance summary

130. We have improved our D-MeX performance from a score of 60.20 in 2020/21 to 84.91 in 2022/23, the highest level of improvement in the industry. While it will be challenging to move up the ranks given the high expectations from developers, we are building on the foundations we have put in place to continue to improve the service we provide.

131. Each year we collate our developers' verbatim comments to inform our annual improvement objectives. Some key highlights to date have been the embedding of our new work order management system, removal of restrictive process bottle necks and expanding communication routes. Our ownership of communication has been enhanced through individual project ownership, coupled with an improved inbound call performance, reducing our customers' call abandonment rate. Additionally, we've transitioned to a more proactive approach to communicating with customers, including sending SMS notifications at key stages.

132. We have expanded our service benchmark to align with the 14 days target used by the energy industry rather than the statutory water industry target of 28 days, to ensure our service is up to the standard of other utility providers. By creating a shared internal vision of performance through an embedded culture of management information engagement and continuous improvement we are meeting developer expectations while also providing a learning process for process refinement where we've under delivered. This has resulted in a quicker service for surveys and quotations. As part of our ongoing efforts to reduce the cost of developer quotations we continue to deliver efficiency savings, remove obstructive upfront fees and promote financial environmental incentive savings.

Independent performance assessment

133. Comparing the Ofwat published Accent report: C-MeX and D-MeX 2020-21 with the Accent report: C-MeX and D-MeX 2021-22, we see a 11.6 increase in our customer satisfaction score, the largest increase in the industry, for comparison the second highest was an improvement of 3.6.

Ambition for 2025 to 2030

134. We have made great strides forward in delivering a consistent and reliable service to our developer customers, our ambition is to continue this improvement and deliver at a consistently above industry median level.

C. Financial reconciliation of past performance

135. The preceding section has described how the Company and its Board carefully assessed performance during 2020 to 2025 and how this has informed our proposed performance ambition for 2025 to 2030. This has included how our recent performance has resulted in specific AMP 8 proposed actions and initiatives – and how current and past performance supports the credible delivery of our AMP8 plans.

136. We have considered the impact of past performance beyond just financial impact. However, in line with Ofwat's Final Methodology, we have reconciled our reported costs and performance for 2020 to 2025 against the PR19 final determination. This will ensure appropriate adjustments are applied to the 2025 to 2030 price controls for past performance. Such adjustments will take the form of adjustments to revenue and RCV during 2025 to 2030.

Past performance reconciliation adjustments

137. Adjustments to the 2025 to 2030 price controls for past performance are determined via a set of reconciliation models which we have completed and accompany the business plan submissions. This involves reconciling actual company performance against the TOTEX allowances from PR19 and residential retail revenues over the PR19 period at PR24, adjusting the total revenue allowance for actual customer numbers.

Blind year adjustments

138. The blind year refers to the final year of the control period, where actual performance data is not available until after Ofwat set the final determination for the price review. At PR19 Ofwat used forecast performance for 2019 to 2020, and then calculated and adjusted for the difference between the forecast and actual performance in 2020. After consultation, we agreed with the final PR19 blind year adjustments, which were then reflected in 2021/22 revenues and RCV.

139. For PR24, Ofwat will use a similar process, and, while confirmation of final blind year adjustments will not be received until late 2025, our financial models have estimated the impacts of such adjustments for 2025-2030.

Summary of adjustments

140. Ofwat use two feeder models to take the outputs from the 2019/20 blind year and PR19 reconciliations and convert them for use in our financial model. These are the revenue adjustments model and RCV adjustments model. The first profiles the revenue adjustments in the 2025 to 2030 price controls and the second directs the RCV adjustments from the reconciliations into the right price controls.

141. Based upon our AMP7 performance a series of proposed adjustments to revenues and RCV for 2025 to 2030 will be applied, which have been estimated in our PR19 reconciliation modelling and will be reviewed by Ofwat as part of the Final Determination.