FEEDBACK ON SCOTTISH WATER'S DRAFT BUSINESS PLAN FOR SRC 2027-2033: APPENDICES

28 August 2025

WICS Economic regulation for Scotland's water

Appendix 1: WICS assessment of the financial model assumptions

SUMMARY OF FINANCIAL MODEL ASSUMPTIONS

This sub-section shows a summary of WICS and Scottish Water's assumptions for the key inputs to the financial model. This is shown in table 1 below.

Table 1: Financial model key input assumptions

Input	SRC21 FD assumption	Scottish Water SRC27 assumption	WICS SRC27 assumption
Household growth	0.90%	1.00%	1.00%
Non-household growth	0.75%	0.20%	0.50%
Non-household consumption	n/a	-1.50%	-1.00%
Opex efficiency	1.00%	0.66%	0.80%
Adjustments to opex	n/a	Scottish Water models a number of adjustments to operating costs. WICS has not applied the uplifts for the remainder of the SRC21 period.	
PFI efficiency on contract expiry	n/a	Varies from 12% (Daldowie) to 72% (Tay)	50% for all contracts
Adjustments to PFI costs	n/a	Scottish Water models a number of adjustments to PFI costs. WICS has not applied these adjustments.	
Tax	c.£5m p.a.	Assumptions for the allocation of investment to tax depreciation pools are broadly similar. WICS has not applied any adjustments to tax profits.	
Interest on new debt	Opening embedded debt was assumed to decrease with a 1.0% efficiency challenge. New debt was assumed to be borrowed at 1% above inflation.	4.00%	4.35% - 4.40%
Interest on cash balance		2.44%	3.40% - 3.45%
Interest on wholesale prepayments		5.00%	5.20% - 5.25%
Price inflation	2.00%	2.00%	1.80% - 2.10%
Cost inflation	2.00%	2.00%	1.90% - 2.00%
RPI	n/a	3.00%	2.80% - 3.00%

The remainder of this appendix summarises the underlying evidence behind each of our key modelling assumptions. WICS will continue to review, update and refine this analysis as we progress through the rest of the Strategic Review of Charges process.

REVENUE ASSUMPTIONS

Household growth rate (band D equivalent)

For the remainder of the 2021-27 regulatory period, WICS has applied the assumption from the SRC21 regulatory period. This assumption is 0.9% per year.

For the 2027-33 regulatory period, WICS has applied the same household growth assumption as Scottish Water (1.0% per year). As noted in Technical Appendix 13, this is in line with household growth in the 2021-27 regulatory period to date.

Non-household growth rate

This assumption is covered in section 5.3 of the main document.

Non-household consumption rate

This assumption is covered in section 5.3 of the main document.

OPERATING EXPENDITURE ASSUMPTIONS

Operating cost efficiency

This assumption is covered in section 5.3 of the main document.

Adjustments to operating costs

This assumption is covered in section 5.3 of the main document.

PFI costs

This assumption is covered in section 5.3 of the main document.

Tax

The UK government sets several inputs to the tax calculation, including tax rates, tax depreciation rates, and allowances for brought forward losses. WICS has applied the same inputs to the model as Scottish Water.

The split between expensed investment (i.e. repairs) and capitalised investment (i.e. refurbishment, replacement, growth, and enhancement) is material to the calculation of tax payable. For this

purpose, WICS has applied the same profile of repair expenditure as Scottish Water applied in its draft business plan financial model.

To assess the model inputs for allocating investment to depreciation pools, WICS has reviewed Scottish Water's Regulatory Accounts submissions. Table M21 contains Scottish Water's tax analysis. WICS's assumption is based on the observed allocation of investment to depreciation pools between 2019-20 and 2024-25. WICS' analysis of these allocations is summarised in table 2 below.

Table 2: Allocation of investment to depreciation pools

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Average
Short life pool	38%	49%	27%	31%	32%	35%	35%
Long life pool	48%	30%	57%	44%	43%	49%	45%
SBA	0%	1%	1%	1%	3%	0%	1%
Investigations	5%	11%	6%	11%	12%	8%	9%

Other inputs to the financial model that Scottish Water has applied include adjustments to taxable profits. WICS believes that Scottish Water has not sufficiently evidenced these adjustments.

Interest rates

To forecast the interest rate for new debt, which is the most material interest rate assumption, WICS has compared Scottish Water's observed interest rate with the Bank of England base rate from 2017-18 to 2024-25. Over this period, WICS noted that the average difference was around 0.6%. This difference was then applied to the Office for Budget Responsibility (OBR) forecast for the Bank of England base rate, as shown in table 3.[1]

Table 3: Scottish Water's observed interest rate versus the Bank of England base rate

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Average
SW interest rate	1.7%	1.8%	1.2%	0.8%	1.2%	3.6%	4.3%	4.5%	
BoE base rate	0.4%	0.7%	0.7%	0.1%	0.2%	2.3%	5.0%	4.9%	
Difference	1.4%	1.1%	0.5%	0.7%	1.0%	1.3%	-0.8%	-0.5%	0.6%

WICS adopted a similar approach to assess the interest rate Scottish Water receives on cash balances and pays on wholesale prepayment. For interest on cash balances, WICS calculates a difference of around -0.35% (i.e. Scottish Water's interest on cash balances is typically around 0.35% below the Bank of England base rate). For the wholesale prepayment interest rate, WICS analysis is over a shorter timeframe (2020-21 to 2024-25) due to data availability. This analysis suggests that

[1] Office for Budget Responsibility (2025), 'Economic and fiscal outlook – March 2025', 26 March 2025.

Scottish Water pays interest on wholesale prepayments at a rate typically around 1.45% above the Bank of England base rate.

INFLATION

Cost inflation

WICS assumption for cost inflation is based on the Bank of England forecasts for Consumer Price Index (CPI) inflation. In the near term, WICS has applied the Bank of England forecasts from the most recent Monetary Policy Report (MPR).[2] MPR reports are published every quarter. WICS will consider the latest forecasts as they become available. Forecasts in the May MPR are provided for each quarter up to Q2 2028. These quarterly forecasts have been used to estimate the CPI figure for each financial year.

Beyond the period that the Bank of England forecasts in the MPR, WICS has applied the Bank of England's long-term target for inflation (2.0%).

Actual inflation to date is based on the financial year average CPI, calculated using data published by the Office for National Statistics (ONS).

The profile that WICS has applied for cost inflation is shown in table 4 below.

Table 4: CPI financial year average forecast

	2024-25 (actual)	2025-26 (forecast)	2026-27 (forecast)	2027-28 (forecast)	2028-29 (forecast)	2029-30 (forecast)	2030-31 (forecast)	2031-32 (forecast)	2032-33 (forecast)
CPI (FY average)	2.36%	3.2%	2.2%	1.9%	2.0%	2.0%	2.0%	2.0%	2.0%

Price inflation

WICS has applied a similar methodology to assess an appropriate forecast for price inflation. Since price inflation is based on CPI as of October of the previous year, WICS has applied the Bank of England's forecast for Q4 for the previous year.

Actual price inflation is in line with the data published by the ONS.

WICS profile for price inflation is shown in table 5 below.

[2] Bank of England (2025), 'Monetary Policy Report – May 2025', 8 May 2025.

Table 5: CPI October previous year forecast

	2024-25 (actual)	2025-26 (actual)	2026-27 (forecast)	2027-28 (forecast)	2028-29 (forecast)	2029-30 (forecast)	2030-31 (forecast)	2031-32 (forecast)	2032-33 (forecast)
CPI (Oct prev year)	4.6%	2.3%	3.3%	2.1%	1.8%	2.0%	2.0%	2.0%	2.0%

Retail Price Index (RPI) inflation

RPI inflation is applied to PFI costs each year. WICS has applied the Office for Budget Responsibility's forecasts for RPI as per the Economic and Fiscal Outlook report published in March 2025.[3] The OBR forecasts RPI up to 2029-30. Beyond this, WICS has assumed that RPI will be 1% above CPI. This is based on the observed difference between the two indices over the previous 15 years.

Actual RPI is calculated based on data published by the ONS.

WICS profile for RPI is shown in table 6 below.

Table 6: RPI forecast

	2024-25 (actual)	2025-26 (forecast)	2026-27 (forecast)	2027-28 (forecast)	2028-29 (forecast)	2029-30 (forecast)	2030-31 (forecast)	2031-32 (forecast)	2032-33 (forecast)
RPI	3.3%	4.2%	3.1%	3.0%	2.8%	2.8%	3.0%	3.0%	3.0%

[3] Office for Budget Responsibility (2025), 'Economic and fiscal outlook – March 2025', 26 March 2025.

Appendix 2: OPEX efficiency

This appendix sets out how WICS has assessed the efficiency of Scottish Water's proposed operating expenditure in its draft business plan. WICS has done this by comparing the modelled operating expenditure, which consists of actual values from 2019-20 to 2024-25 and the proposed additions in the draft business plan, to an efficient benchmark. These are examined in turn.

MODELLED OPERATING EXPENDITURE

WICS has examined Scottish Water's forecast operating expenditure from the draft business plan over the regulatory period 2027-33 and compared it to the predicted efficient level of expenditure for Scottish Water.

For 2019-20 to 2023-24, WICS has used the modelled expenditure from the dataset developed jointly with Scottish Water. This is the total water and wastewater expenditure that is then inflated to 2023-24 prices using the inflation index used in the econometric models.[4]

WICS used the same methodology for the modelled operating expenditure in 2024-25, using the preliminary values reported in the annual return 2024-25. These values may change following WICS' query process for the annual return 2024-25.

WICS has calculated the modelled operating expenditure for 2025-26 to 2032-33 by adding the relevant lines from Table 7 to the modelled operating expenditure in 2024-25.[5] The following lines have been added to give the modelled operating expenditure for the period:

- 7.2b Energy price increases due to end of Purchase Power Agreement (PPA);
- 7.4a Projected changes attributed to Enhancement, Growth and Transformation Projects - pre efficiency;
- 7.4b Non Household (NHH) Smart Metering impact on operating costs; and
- 7.4c Leakage reduction.

As noted in 4.6.32, the proposed additions in the remainder of the 2021-27 regulatory period have not been included in WICS' financial modelling. The additions have been included in Figure 17. These additions are from Line 7.2a 'Projected changes due to 25/26 budget and 26/27 adjustment' with the cloud expenditure outlined in the Table 7 commentary excluded.[6]

[4] Scottish Water should ensure that the inflation index in the econometric models aligns with the actual inflation to date and forecast inflation in the business plan.
[5] Scottish Water (2025), 'SR27 draft business plan: Table 7. Other costs and assumptions', 12 June 2025.
[6] Scottish Water (2025), 'SR27 Draft Business Plan: Table 7 – Other Costs and Assumptions Commentary', 12 June 2025, p.3.

EFFICIENT BENCHMARK

WICS has used Ofwat's base cost models, which are applied on an operating expenditure-only basis, to calculate an efficient expenditure level based on benchmarking Scottish Water's operating expenditure against the expenditure of the companies in Great Britain.

Water and wastewater have been calculated separately using the operating expenditure-only water and wastewater econometric models. WICS and Scottish Water worked collaboratively to agree on the methodological adjustments required to run these models. This analysis has not included sludge treatment and disposal costs.

We have forecasted the explanatory variables used in the models in a manner consistent with Ofwat's approach in their PR24 Final Determination.[7][8] This allows for the efficient level of expenditure to be forecast over the period to 2032-33. WICS notes that Ofwat forecasts explanatory variables until 2029-30; however, we have extended the forecast horizon to 2032-33 to align with the end of the 2027-33 regulatory period.

For water costs, a predicted cost is generated for each of the 24 water models used by Ofwat. This includes 6 water resources plus, 6 treated water distribution and 12 wholesale water models. A weighted average is taken for each part of the value chain, with the weights the same as used by Ofwat to provide a predicted expenditure for 'water resources plus', treated water distribution and wholesale water.[9] A triangulated wholesale predicted expenditure is given by taking the average of the bottom-up view ('water resources plus' and treated water distribution) and the top-down view (wholesale water). The wholesale water models used are shown in table 7.

Table 7: Summary of wholesale water base cost models[10]

Level of cost aggregation	Cost drivers	Explanatory variables
Water resources plus (6 models)	Scale	Number of properties
	Treatment complexity	Proportion of water treated at complexity levels from 3 to 6 (in 3 models) Weighted average treatment complexity (in 3 models)
	Population density	Weighted average density - LAD from MSOA (+ quadratic term) (in 2 models) Weighted average density - MSOA (+ quadratic term) (in 2 models) Properties per length of mains (+ quadratic term) (in 2 models)

[7] Ofwat (2024), 'PR24CA04 - W2 - FD.xlsx', December 2024.
[8] Ofwat (2024), 'PR24CA07 - WW2 - FD.xlsx', December 2024.
[9] Models with density calculated as properties per km of main are weighted twice as much as models using weighted average density. This is because there are twice as many models using weighted average density and the weightings used gives an even weighting between properties per km of main and weighted average density.
[10] Ofwat (2024), 'PR24 final determinations Expenditure allowances – Base cost modelling decision appendix', July 2024.

Treated water distribution (6 models)	Scale	Length of the potable water mains
	Network topography	Booster pumping stations per length of mains (in 3 models) Treated water distribution - Average pumping head (in 3 models)
	Population density	Weighted average density - LAD from MSOA (+ quadratic term) (in 2 models) Weighted average density - MSOA (+ quadratic term) (in 2 models) Properties per length of mains (+ quadratic term) (in 2 models)
Wholesale water (12 models)	Scale	Number of properties
	Treatment complexity	Proportion of water treated at complexity levels from 3 to 6 (in 6 models) Weighted average treatment complexity (in 6 models)
	Network topography	Booster pumping stations per length of mains (in 6 models) Treated water distribution - Average pumping head (in 6 models)
	Population density	Weighted average density - LAD from MSOA (+ quadratic term) (in 4 models) Weighted average density - MSOA (+ quadratic term) (in 4 models) Properties per length of mains (+ quadratic term) (in 4 models)

The efficient level of operating expenditure for the water service is calculated by applying the sector wide catch-up challenge to the predicted expenditure. This is the upper-quartile (1.055) or median (1.113) of the efficiency scores of water companies. This gives the efficient costs for wholesale water.

For wastewater, we have replicated Scottish Water's use of the bottom-up assessment given the scaling issues identified in Scottish Water's Technical Appendix 12 (TA-012).[11] The efficient level of operating expenditure for the wastewater service is calculated based on the weighted average of the three sewage collection models plus the weighted average of the two sewage treatment models.[12] The wastewater network plus models used are shown in table 8.

[11] Scottish Water (2025), 'SR27 draft business plan: Technical Appendix 12 - Efficiency', p.82-83.

[12] For sewage collection, models with density calculated as properties per km of sewer are weighted twice as much as models using weighted average density. This is because there are twice as many models using weighted average density and the weightings used gives an even weighting between properties per km of main and weighted average density. For sewage treatment the two models are weighted equally.

Table 8: Summary of wastewater network plus base cost models[13]

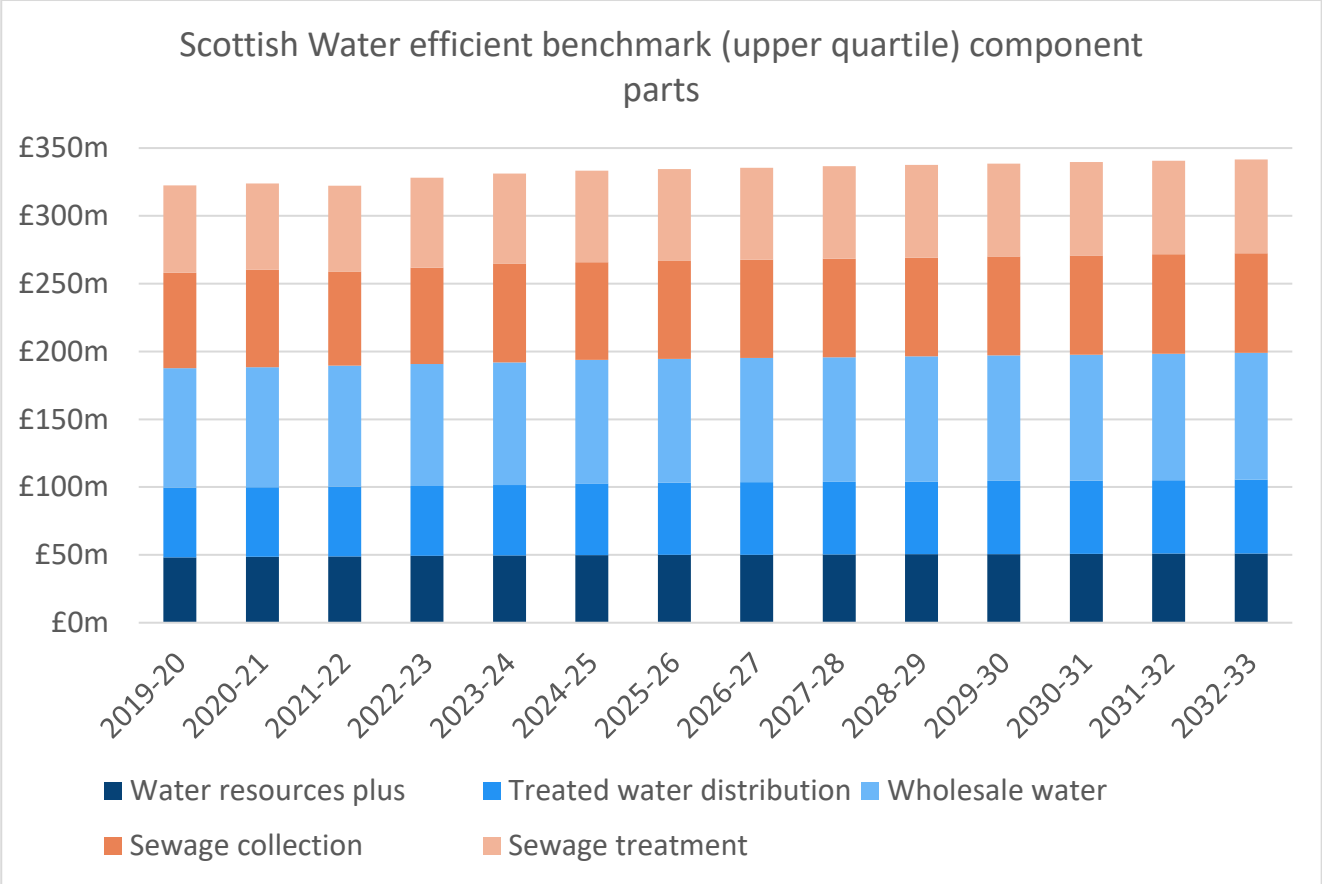
Level of cost aggregation	Cost drivers	Explanatory variables
Sewage collection (3 models)	Scale	Sewer length
	Network topography	Pumping capacity per sewer length
	Population density	Properties per sewer length (in 1 model) Weighted average density - LAD from MSOA (in 1 model) Weighted average density - MSOA (in 1 model)
	Urban rainfall	Urban MSOA rainfall per sewer length
Sewage treatment (2 models)	Scale	Load
	Treatment complexity	Load treated with ammonia permit ≤ 3mg/l
	Economies of scale in sewage treatment	Load treated in size band 1 to 3 (%) (in 1 model) Weighted average treatment size (in 1 model)

As for water, the efficient level of operating expenditure for the wastewater service is calculated by applying the upper-quartile sector-wide catch-up challenge (1.018) and the median sector-wide catch-up challenge (1.060) as appropriate.

The predicted efficient level of operating expenditure for Scottish Water is calculated based on the total efficient level of operating expenditure for the water and wastewater service, as shown in Figure 1.

[13] Ofwat (2024), 'PR24 final determinations Expenditure allowances – Base cost modelling decision appendix', December 2024.

Figure 1: Scottish Water efficient benchmark (upper quartile) component parts



Appendix 3: Other points identified in the review of the draft business plan and data tables

GENERAL

For the purposes of monitoring, WICS' expectation is that Scottish Water will commit to the forecasts and underpinning assumptions set out in the business plan tables and associated commentary, as opposed to ranges given elsewhere in the business plan. For example, the draft business plan (main document) refers to plans to "Continue restoration and management of 500-1,000 hectares of Scottish Water's peatlands within water catchments (range reflects uncertainties in areas still to be fully surveyed)." Whereas, the commentary for business plan line 1.40 (carbon capture/sequestration) notes the assumption that Scottish Water "restore 500 ha of poor-quality peatland assuming land access and tenancies permits, and peatland recovery meets expectations". In this case, we would take the underpinning assumption to be 500 hectares of peatland restoration as per the table commentary.

Page 33 of Technical Appendix 7 contains a link to a file on Scottish Water's SharePoint, leading to a webpage to request access. Please ensure all links are accessible in the final business plan submission.

OUTCOME MEASURES

Scottish Water should provide clear timelines and deliverables for areas under development such as outcomes requiring further development, examples of which are set out below.

- Scottish Water explain that a resource recovery measure (line 1.43) is not yet available and requires further development and engagement, for example to understand the role and timeline for this sort of measure. Scottish Water does not expect resource recovery to be a target outcome or reported in SRC27. Scottish Water note that it does not have the same drivers as companies in England and Wales for phosphorus recovery and that a resource recovery metric can only be considered once there is an Advanced Anaerobic Digestion (AAD) site fully operating. WICS consider this measure to be wider than phosphorus removal and AAD. WICS' understanding from Annual Return 2025 (AR25) development discussions was that Scottish Water were expecting to be in a position to report this measure in AR27. WICS still require Scottish Water to report this measure during the SRC27 period.
- Technical Appendix 14 indicates that Scottish Water does not expect the final biodiversity and nature based solutions measure (line 1.42) to be reported in SRC27. WICS' understanding was that this measure is currently in development and would be established and reported as a "tracker" measure during the SRC27 period.

Scottish Water's response to Query 17 sets out, at a high level, its proposed approach for the interim biodiversity and nature based solutions outcome measure (line 1.41). We agree with Scottish Water that further engagement is required on this measure, particularly given we need to understand Scottish Water's proposals better. At a conceptual level, we welcome Scottish Water's proposal to provide further disaggregation in reporting to aid understanding of the rationale for changes in the area of land positively managed for nature. We expect Scottish Water to set out timelines both for developing and beginning to report the measure(s) relating to outcome 1.41.

Page 42 of the draft business plan (main document) explains "We will respond to stakeholder expectations, in SR27 we will: Aspire to improve water abstraction and compensation Controlled Activities Regulations (CAR) compliance to 100%, currently at 93% and 65% respectively." Other actions in the chapter use clear language such as "will maintain", "will develop", "will reduce" etc. Scottish Water should be clear whether it commits to improving water abstraction and compensation Controlled Activities Regulations (CAR) compliance to 100%, rather than being an aspiration.

Scottish Water explains that the Bioresource Strategy and Daldowie and Allanfearn will contribute 20,000 tCO2e emission reduction (for example, in the commentary for business plan line 1.36 and in Technical Appendix 7 (TA007)). Scottish Water's response to Query 6 clarifies that carbon step change reductions due to Daldowie and Allanfearn are forecast to be 27,381 tCO2e and < 500 tCO2e respectively and that "20,000 tCO2e was used in TA007 and in business plan commentary for Daldowie to provide an abbreviated description." Scottish Water should round to an appropriate value in its final business plan when referring to the emissions reductions associated with the Bioresource Strategy, Allanfearn and Daldowie, as rounding c.27,000 to 20,000 is a material difference.

Scottish Water should clarify when it forecasts it will meet net zero emissions, particularly under the Reference Scenario. The draft business plan contains different messages on net zero emissions, some examples of which are set out below.

- Page 117 of the Table 1 Commentary explains: "this projection shows a net zero emissions level of 30295t CO2e in 2040 and so the target of zero emissions by 2040 would require further future innovation to be delivered beyond that assumed in this profile…Whilst challenging, Scottish Water anticipates that…innovation in wastewater process emissions, carbon capture, and capital investment within SR27 will offer further opportunities to meet the ambition, as will working across wider water catchments to further increase land carbon benefits."
- Page 22 of Technical Appendix 7 (TA007) notes that Scottish Water "will require further progress, particularly on process emissions in SR33 and SR39, but this pathway maintains the goal of net zero by 2040."

- Page 38 of TA007 explains “We highlight there will be a potential shortfall in achieving net zero emissions by 2040 owing to increased scale of investment and increased risks around the scale of land carbon capture…Progress has been made during SR21, but there remain key areas of research and innovation that are vital to the net zero emissions pathway.”
- Whereas, page 11 of the draft business plan (main document) explains that Scottish Water is “committing to net zero emissions by 2040, five years earlier than the national target…This Draft Business Plan is the penultimate business plan ahead of our 2040 target, and it plays a crucial role in ensuring we fulfil our commitments.”
- Similarly, page 63 of the draft business plan (main document) explains Scottish Water's investment will bring about "Continued progress of the delivery of Net Zero Routemap. Reduction of 159 ktCO2 and continue to make changes to achieve Net Zero emissions across operational activities, investment and land management by 2040."

Page 118 of the Table 1 Commentary shows a graph of the forecast net zero emissions over SRC27. Scottish Water should explain in the final business plan submission what the comparator line in this graph represents.

Page 121 of the Table 1 Commentary explains that the operational emissions (water) outcome “is primarily affected by the grid greening and associated emission factor from Dept of Energy Security and Net Zero”. Page 21 of TA007 refers to benefits arising from the “greening of the electricity grid (projections from the Department of Energy Security and Net Zero)”; however, it is unclear how the cited “Energy and emissions projections 2023 to 2050” report has been used. Scottish Water should explain in the final business plan submission the various emission factor assumptions underpinning each of the carbon outcomes in Table 1 of the business plan data tables and the source of these assumptions.

Page 121 of the Table 1 Commentary for the operational emissions (water) outcome notes the assumption that "The electricity grid decarbonises in line with the expected profile, meaning emissions are higher." WICS does not understand this assumption and, as such, requests that Scottish Water provide further explanation in the final business plan.

Page 121 of the Table 1 Commentary sets out assumptions for operational emissions (water) in line 1.35 including that Scottish Water "progress up to 25GWh energy efficiency or onsite renewables by 2033 (reduction from planned investment) with the 90 GWh on-site renewable target in long term strategy no longer possible with funding available". The commentary for line 1.36 then explains “There is a significant dependency on the Bioresource Strategy (80GWh renewable energy generation…)”. This contrasts with Scottish Water not providing SRC27 output forecasts for line 2.15 (Increase in renewable energy generated) for which the commentary explains “At this stage, details of the SR27 outputs cannot be provided as all projects are pre-G50. Output values will be developed

over the SR27 period.” WICS requests that Scottish Water provide further clarity regarding anticipated renewable energy generation in the final business plan submission.

Page 121 of the Table 1 Commentary explains the operational emission outcomes: "The carbon accounting workbook (CAW) boundary is assumed not expanded to include chemicals." Scottish Water should explain this comment further in the final business plan submission.

Page 122 of the Table 1 Commentary for the investment emissions outcome explains "The costs to address investment emissions is 3% of the programme and is not built into the SR27 cost for the programme". Scottish Water should explain what this means and how this relates to the statement "We do not propose additional investment specific to decarbonising the investment programme" in Technical Appendix 7 (page 27).

The commentary for the area of carbon capture sites established or supported in line 2.17 explains that "Forecast is flat year on year as this is a high-level assumption yet to be defined in detail. Detailed profiling will be developed during the SR27 period." Scottish Water should explain the profiling assumptions for the related carbon capture/sequestration outcome in line 1.40, and confirm whether these are more developed than the assumptions underpinning line 2.17.

The Table 1 Commentary and Technical Appendix 14 explain that in Technical Appendix 7 (TA007), there are "three profiles for carbon emissions. The central forecast (the black line in Figure 15 of that Appendix) is used for the purpose of this submission...The elements within the WICS Table 9 set out separately and form the net zero carbon emissions projection of Table 1 line 34." Scottish Water should provide Figure 15, which is missing from TA007, and clarify what is meant by "WICS Table 9".

Scottish Water explains in Technical Appendix 7 (TA007) that meeting the SR21 Ministerial Objective to produce or host three times the amount of electricity it consumes (up to 1320GWh) by 2030 is dependent on hosting a further 650 GWh of renewable generation on Scottish Water land. Whilst Scottish Water’s response to Query 15 confirms Scottish Water “remain committed to achieving the target of meeting 300% of electricity demand”, it notes that “the 650 GWh figure includes the Whitelee Re-powering project (343 GWh), which is anticipated to be commissioned in 2032/33”. Scottish Water should clarify in the final business plan whether it expects to meet the target to host or generate three times the amount of electricity it consumes by 2030. If Scottish Water does expect to meet this target by 2030 and doing so is not dependent on the Whitelees project, Scottish Water should clarify this in the final business plan submission, as the draft business plan explains this target is dependent on hosting a further 650 GWh of wind generation which includes Whitelees.

Scottish Water’s final business plan should explain whether it reflects the following upcoming developments and, if possible, indicate what these developments will mean for investment during the SRC27 period:

- Page 11 of TA007 notes that "The Scottish Government will publish a revised Scottish Climate Change Plan with updated targets, profiles and budgets in late 2025."
- Page 11 of TA007 highlights that an updated land carbon inventory will be reported in Scottish Water's 2025 Annual Return and 2026 Biodiversity Report.

Page 2 of Technical Appendix 7 explains that in SRC27 Scottish Water "will invest in measures to meet statutory obligations to support the Scottish Government's climate change plans and strategies and deliver the Ministerial Objective to meet net zero by 2040, following the pathway set out in our NZER." Scottish Water should clarify when it will publish a refreshed Net Zero Emissions Routemap (NZER) and whether this will impact the forecasts in the final business plan or subsequent delivery plan.

Page 23 of Technical Appendix 7 explains "Decarbonisation of capital investment is **not considered an additional cost to the programme** – i.e. no premium for low carbon choices has been applied under the CPI+4% scenario. Legally binding UK, European and global goals for decarbonisation remain, the costs of which may be reflected in the wider economy and measures such as UK and EU carbon border taxes due to commence in 2026[49] will target high carbon materials, principally those used withing our programme – concrete, iron, steel and aluminium. The goal is to increase the costs of high carbon materials and incentivise low carbon materials, and we expect in the long term that low carbon choices will increasingly be the cost-effective measure." Scottish Water should clarify in the final business plan whether or not investment forecasts allow for upcoming carbon border taxes. If they do, Scottish Water should explain the assumptions made and their anticipated materiality.

Technical Appendix 14 (page 47) indicates that whilst Scottish Water will report the carbon emissions related outcomes, it does not expect them to be target outcomes in SRC27. The exception to this is the Net Zero Emissions (NZE) measure which Scottish Water indicate could potentially become a target outcome. The Table 1 Commentary notes that the NZE measure (line 1.34) "is the 2040 outcome target measure. Its suitability for target outcome needs to take account of the dependency on factors outside of Scottish Water's control." Whilst we recognise that 2040 is the long-term target for achieving net zero emissions, we consider it necessary to set targets for the NZE outcome (at least) for SRC27 to allow monitoring of progress during the period.

Page 19 of Technical Appendix 14 indicates that the base 2026-27 value for the operational emissions (water) outcome 1.35 is 62,882 tCO2e. This is c.10,000 tCO2e higher than the 2024-25 value reported in line C1.29 of the Annual Return 2025. The final business plan submission should explain the reason(s) for the base year forecast being higher than the actual value of 2024-25.

Page 27 of Technical Appendix 14 explains "For Unsatisfactory intermittent discharges (UIDs), ... the reduced investment in Scenario C will lead to increases in the list of UIDs." However, this is not consistent with the information presented in Table 14 on the same page which shows the same

number of UIDs of 748 for both scenarios A and C. The same outcomes are reported in Business Plan Table 1 (Outcomes) and confirmed in the Table 1 Commentary.

Figure 1 in Technical Appendix 7 cites 2023-24 investment emissions of 140,000-210,000 tCO2e. This differs from 2023-24 investment emissions of 174,954-262,431 tCO2e reported in Annual Return 2024 lines C2.4 and C2.5. Scottish Water should explain this difference or update this in the final business plan submission as appropriate.

Table 26 in Technical Appendix 14 appears to have some transposition errors, whereby the cell contents are out of alignment with the column headings, at least for the rows relating to carbon outcomes. Scottish Water should correct these in the final business plan submission to avoid confusion.

INVESTMENT

Page 32 of the draft business plan (main document) explains Scottish Water will "Upgrade nine water treatment works to address risks or failures, in addition to the completion of upgrades at a further nine sites included in our SR21 investment. As a result, we will provide improved water quality for c1.35 million customers during the SR27 period." Scottish Water should clarify in the final business plan whether or not the c.1.35 million customers includes the outcome of investment delivered over 2021-27.

Page 51 of the business plan (main document) explains Scottish Water will "Deliver energy efficiency and renewables programmes that will deliver cost efficiencies and reduce carbon emissions by...Displacing 45GWh of grid electricity through energy efficiency and on-site renewable generation." WICS note that the 2024-25 actual for the operational emissions reduction element of the Annual Out-performance Incentive Plan included an almost 12 GWh reduction in energy from water energy efficiency, wastewater energy efficiency, and renewables combined. Scottish Water should explain how this 45 GWh saving in SRC27 was deemed suitably stretching.

Page 59 of the draft business plan (main document) explains that "our proposed level of maintenance investment during SR27 is approximately 28% higher than in SR21". However, the table on page 62 then explains that Scottish Water plans to "Increase maintenance by 15-20%". Please address this inconsistency for the final business plan submission.

We note there are only 12 lines in Table 5 which have input in column 6 "Benefit type: grey, hybrid or blue-green solution". We also note that no lines in Table 5 have an input in column 7 "Benefit type: catchment or local solution ". If this remains the case for the final business plan submission, please explain the reasons behind it within that submission.

Page 15 and 16 of Table 3a Commentary explain that the data in column 15 "No. of assets" "is currently based on AR24 asset register" and that "Combined, laterals and remaining minor types e.g., Trade effluent and Treated effluent were entered into Foul sewage & surface water shared as this was the closest category. This enabled complete inclusion of sewers so totals to the same length as H4.1 and E7.8".

We note that the only line for sewers which has a value reported in column 15 is line 3a.33 "Gravity Sewers (Excluding Laterals and Private Sewers)" with 45,668km in length (not counting the 3 lines for rising/pumping mains, i.e. 3a.32, 3a.50, 3a.63, which have lengths reported). We further note that the AR24 H4.1 and E7.8 value is 54,690km.

We also note that the total sewer length in Table 4 is 31,841km in Blocks F to H, and 37,599km in Blocks I and J. We recognise that page 28 of Table 4 Commentary explains that the discrepancy in the total sewer length between the blocks will be addressed for the final business plan submission.

WICS expects the discrepancy in total sewer length between Table 3a and the annual return, and between Table 3a and Table 4 to be addressed for the final business plan submission.

Page 20 of Table 3a Commentary explains that in relation to "Block D: Asset Replacement Surplus/Deficit in SRC27 (£m) (2024-25 Price Base)" "For the final submission an analysis of 25 years could be provided if requested as this provides a more holistic view of whether there is sufficient investment in each category". WICS requests Scottish Water to provide the supplementary 25-year asset replacement surplus/deficit analysis in the final business plan submission.

Page 25 of Table 3a Commentary explains that "Table 7 shows a 3% deficit in water assets replacement investment over the 6yrs. Over the 24 year period 2027 to 2051 we anticipate that after taking into account asset condition, the effective age of assets and operability measures the asset replacement surplus / deficit will be addressed for MEICA and CIVIL assets based on the funding profile used to develop the LTIS position 2 (assumed asset replacement life extension)."

We note that Table 7 also shows that the 6-year deficit for service reservoirs is -138m, while for water mains, it is -489m. The final business plan should explain the extent to which the deficit for water mains and service reservoirs over the 24-year period will be addressed using the above assumptions.

Page 27 of Table 3a Commentary explains that "Line 3a.79 the cumulative surplus on Digital assets [£75m] is due to the lives being shorter than normal MEICA and Civil assets and potentially replaced several times in a period which the formula does not allow for. It is proposed to assess between DBP and FBP if this analysis is suitable or required for these types of assets".

It would be useful for the final business plan commentary to explain in more detail the reasons why the estimated annual run-rate of replacement for digital assets is £2m (calculated based on £6m MEAV and 3 years assumed asset life) but the proposed annual replacement in the business plan is over 6 times that amount at £14m.

Overall, we consider that Section 5 of the Table 3a Commentary (pp.20-28) relating to the asset replacement surplus/deficit is helpful in improving our understanding.

Pages 22 and 41 of Table 3b Commentary request WICS' feedback on what type of commentary in the final business plan submission would be most relevant or helpful in relation to the asset health as at 2025 and as at 2033 and 2051, respectively.

Regarding the example commentary in subsection 5.1 for asset health as of 2025, we find the figures dissecting the data by service, function, Civil/MEICA, and EHI band useful, as well as the commentary, which provides further information beyond describing the graph, e.g., the

assumptions and caveats associated with the analysis or the elements Scottish Water plans on improving.

Page 35 of the Table 3b Commentary explains that "AR3 inspections" are included in line 3b.69 "Support Services - Other". It would be helpful to understand in the final business plan submission whether this refers to the same inspections as captured in AR25 Table G1 Block 1 "Inspections and testing" and whether these same inspections are captured in the related line T3a.83 (as opposed to being allocated to the water and wastewater asset lines).

Page 6 of Table 4 Commentary explains that "Table 4 only includes distribution mains (<300mm dia.) and excludes trunk and raw water mains". We note that the total length of all water mains in line 4.6 of 44,436km differs from the length of line 3a.20 "Water distribution mains <=300mm" of 37,894km in column 15. Please address this discrepancy for the final business plan submission.

Page 27 of Table 4 Commentary explains that "Between DBP and FBP we plan to have the trunk mains, raw water mains, sewers (by material type) and sewage pumping mains (by material type) available using EHI Basic (age only). If this information would be helpful, we can discuss if the information should be included in the FBP". It further explains in relation to gravity sewers that "The information by material type (for March 2025 table only) could be provided as part of the FBP if requested". WICS requests Scottish Water to include this information in the final business plan submission.

Technical Appendix 7 (TA007) indicates that Scottish Water plan £127m (2023/24 prices) of investment for fleet decarbonisation. Business plan Table 5 shows capital expenditure of c.£111m (post efficiency) for the "Maintain Existing Fleet" project. Comparing the respective values for these projects on page 4 of TA007 against business plan Table 5 suggest that TA007 shows post-efficiency investment for Juniper House. However, it is unclear how the fleet decarbonisation value in TA007 relates to that in Table 5 (see the table below). Scottish Water should clarify:

- the post-efficiency investment value for fleet decarbonisation; and
- whether all proposed investment values on pages 4 and 5 of TA007 are consistently pre- or post-efficiency. If not, Scottish Water should update these investment values in the final business plan submission to be consistently pre- or post-efficiency.

Reference		SRC27 total investment £m; 2023-24 prices
Table 5, row 457	Juniper-891 (Reference) Scenario A: Continue provision of an accredited laboratory service	104.430
TA007, p4	Juniper House Laboratory	104
Table 5, row 329	AR3-879 (Reference) Scenario A: Maintain Existing Fleet	111.272

Page 29 of Technical Appendix 7 (TA007) indicates £46m of investment is planned to deliver 45GWh energy efficiency and onsite renewables. Whereas, line 2.19 "reduction in energy usage through improved energy efficiency" shows the same 45 GWh output with c.£65m of associated investment forecast for SRC27. The commentary for line 2.19 also covers leakage and demand management: "This area is in development and the output forecast is based on a high-level assumption which includes estimates from the Water Continuity Technical Appendix for leakage and demand management, and The Climate Change Mitigation Technical appendix (energy efficiency and, where cost-effective, on-site renewables)." Scottish Water should explain in the final business plan how these values in TA007 and line 2.19 relate to one another.

Page 32 of Technical Appendix 8 (TA008) explains that "At this point [February 2025] the Working Reference Scenario equated to investment of £8.5bn (post-efficient in 23/24 prices), resulting in an increase in customer charges of Consumer Prices Index (CPI) + 4% per annum assuming an equal annual charge increase profile across the SR27 period."

Afterwards, page 40 explains "The first step was to refine the available budget associated with a CPI + 4% per annum customer charge profile. The Financial Model was re-run using the latest modelling assumptions and the application of the most up to date top-down global efficiency factors to be applied. Working back from this figure resulted in a new “Reference” Scenario budget being set of £8.75bn (2023/24 price base before SR27 efficiency adjustments are applied). This equates to a £8.3bn post-efficiency budget".

Scottish Water should explain in the final business plan submission the difference in financial modelling assumptions responsible for the £0.2bn (or 2.4%) reduction in post-efficiency available investment funding between the Working Reference Scenario from February 2025 and the Reference Scenario A submitted in the draft business plan.

Page 35 of Technical Appendix 8 (TA008), in relation to the first step for systemising the scenarios, explains that "This step synthesised information from the existing rolling investment portfolio and LTIS, and as such addressed issues of deliverability and customer value". Please explain in the final business plan submission how the step for synthesising information in itself addresses issues of deliverability and customer value.

Page 35 of Technical Appendix 8 (TA008) explains that the third main step for systemising the scenarios is to "Undertake a single adjustment of these selected projects and programmes... to form the SR27 Investment Baseline." Scottish Water should explain this "single adjustment" in the final business plan submission.

Page 64 of Technical Appendix 8 (TA008) explains that "This results in a total of 14 projects forming part of the SR27 Investment Baseline with a total forecast expenditure of £648m". Footnote 22 is attached to the £648m value and states "£923m is stated in 23/24 price base after adjustments for efficiency". The total of the values in Table 8 of the document is £648m. Please address this inconsistency in the final business plan submission.

Page 80 of TA008 contains a table outlining what the proposed reference scenario will deliver against each Ministerial Objective. This table is also presented in the main document on pages 62 and 63. The latter table has listed that the investment will deliver more benefits under the 'Environment' MO than those listed in the TA008 table (around Improving Urban Waters Route Map and Bioresources). Please ensure the information in these tables is consistent for the final business plan submission.

REAL PRICE EFFECTS

To adjust for rises in Scottish Water's costs which are materially different from CPI inflation, Scottish Water proposes that Real Price Effects (RPEs) are included in our determination for SRC27. In Technical Appendix 12 (TA012) as well as in analysis shared with WICS previously, Scottish Water has taken an aggregate approach to determining the RPEs it considers to be appropriate. Separate analyses using broadly the same approach have been provided for operating expenditure and capital expenditure.

For operating expenditure, Scottish Water suggests an RPE of 0.7% above CPI, based on historical inflation for each cost category weighted by Scottish Water's OPEX cost distribution.

In Technical Appendix 12 (TA012), Scottish Water explains that labour, energy, and materials costs pass the materiality threshold of 10% of expenditure used by Ofwat and Ofgem for RPEs. However, WICS is unclear on what is included in the materials cost category, as Scottish Water did not include this aggregate category in the analysis previously shared with WICS. In the final plan, please provide further details of what is included in the materials category.

Scottish Water has chosen the ONS EARN01 K5CD construction sub-index for CAPEX and the EARN01 KAC7 public sector sub-index for OPEX to represent labour costs. Scottish Water used the ONS D7DT consumer electricity price index to represent energy costs. WICS considers it may be more appropriate to use the Department for Energy Security and Net Zero's (DESNZ's) energy price index for large industrial users, as Scottish Water's costs can reasonably be expected to be closer to industrial energy costs than to general consumer electricity costs. Generally, WICS would like to understand better how Scottish Water has assessed which indices most closely match its costs for each cost category, and to see the evidence supporting this.

Scottish Water's analysis uses several different time periods to analyse different cost categories. WICS considers 2009-2025 an appropriate time period for historical analysis, given that it

encapsulates a full business cycle and recent years' price fluctuations. Scottish Water should provide the analysis and explanation of the time periods it has chosen.

For capital expenditure, Scottish Water's point estimate for an overall RPE is 0.5% above CPI, based on cost splits of water companies in England and Wales taken from PR24 business plan data tables and historical inflation for each cost category according to selected inflation indices. In the final business plan, Scottish Water should explain how close it considers its capital expenditure cost distribution is to those of the companies in England and Wales and how it has determined this.

Scottish Water provided an additional submission on RPEs in August 2025. WICS continues to review these materials.

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WICS Economic regulation for Scotland's water