STRATEGIC REVIEW OF CHARGES 2021-27 Draft Determination



SCOTLAND'S WATER IS WONDERFUL. LET'S KEEP IT THAT WAY.

CONTENTS

BOARD FOREWORD	Page 1
INTRODUCTION BY THE CHIEF EXECUTIVE	Page 2
OUR DRAFT DETERMINATION	Page 5
BENEFITS FOR CUSTOMERS AND COMMUNITIES	Page 8
THE BASIS OF OUR DRAFT DETERMINATION Charges determination process The Scottish water sector journey Our transparent and consultative approach to SRC21 Timeline of the Strategic Review of Charges process Customer representation within the process The Covid-19 pandemic Determining the maximum amount of charges Scottish Water's investment appraisals Scottish Water's Transformation Plan	Page 10 Page 11 Page 12 Page 14 Page 15 Page 17 Page 18 Page 22 Page 23 Page 24
Next steps OUR DETAILED REASONING Background Futureproofing the regulatory framework Scottish Water's Strategic Plan Managing the required transition in funding The calculation of the maximum amount of charges Conclusion	Page 25 Page 26 Page 27 Page 38 Page 49 Page 58 Page 76 Page 83
 APPENDICES 1. The Scottish Government's Commissioning letter 2. The Scottish Government's Revised Commissioning letter 3. SRC 21-27 - Confirmation of Revised Timetable 4. Further detail on maximum charges and investment levels 5. Cooperation Agreement establishing the Customer Forum 6. Minute of Agreement between Scottish Water and Customer Forum on Strategic Plan 7. Minute of Agreement between Scottish Water and Customer Forum on expectations for the Transformation Plan 	Page 88 Page 89 Page 91 Page 93 Page 94 Page 98 Page 105 Page 113
8. Letter to Scottish Water Chief Executive on National Engagement Programme 9. The Commission's Decision Papers 10. Glossary of terms	Page 117 Page 118 Page 119

BOARD FOREWORD

The Board of the Water Industry Commission for Scotland (the Commission), is pleased to introduce its draft determination for the regulatory control period 2021-27.

This draft determination sets out our view of the maximum amount that Scottish Water can charge its customers during the forthcoming regulatory control period. Our role is to ensure that customer charges are no more than is necessary to deliver the Objectives that the Scottish Ministers have set for Scottish Water. These Objectives, which include the long-term vision for the water sector in Scotland, are ambitious and far-sighted, not least in setting an industry-leading target to achieve (both on an operational and an embodied basis) net zero emissions by 2040.

In reaching our view of the maximum amount of charges that Scottish Water will require in the years ahead, we have analysed carefully the investment necessary to achieve the Objectives of the Scottish Ministers, including the industry vision. We recognise the challenges Scottish Water will face as it transforms its business to achieve net zero emissions and address an ageing asset base. But customers will rightly expect Scottish Water, as it makes this transformation, to continue its drive to become more effective and efficient – and we have set our targets accordingly.

The draft determination represents the culmination of more than three years of work on the Strategic Review of Charges. As with

every aspect of life, the Covid-19 pandemic has impacted on our approach to the Strategic Review. In the same way that household and business finances have been impacted by the pandemic, it has caused us to reassess carefully Scottish Water's future finances. What remains clear, however, is that the sector will require more investment if the Ministers' Objectives are to be achieved. We have sought to maximise Scottish Water's scope for flexibility in preparing its annual Scheme of Charges. We welcome Scottish Water's commitment to engage directly with customers through a national engagement programme as part of its annual Scheme of Charges proposals.

We would like to express our thanks to the stakeholders who have supported our work throughout the Strategic Review process. Our approach has been significantly different to previous regulatory periods. It has involved a much higher degree of collaborative working – as part of the transition to Ethical Business Regulation and Practice – and a number of innovative approaches: for example, in relation to identifying investment priorities. This has required much greater involvement from stakeholders in the process but, we believe, has resulted in a significantly better outcome for customers and communities. We are particularly pleased to see that the Customer Forum has reached an agreement with Scottish Water, which will ensure that customer and community views are at the heart of future decision making.

We would welcome any comments on our proposals by 19 November 2020. This will allow us to publish our final decisions on the maximum amount of charges by 10 December 2020.

Finally, we would like to thank our staff very much for their hard work in providing the analysis and innovative thinking that underpins our proposals.

Professor Donald MacRae, Chair Ann Allen Jo Armstrong Robin McGill Alan D A Sutherland, Chief Executive

INTRODUCTION BY THE CHIEF EXECUTIVE

I have pleasure in introducing the Commission's Strategic Review of Charges, which includes our draft determination of the maximum amount of charges we propose to allow Scottish Water to raise from its customers. As previously, we have set the maximum amount of charges that Scottish Water can levy on its customers relative to the Consumer Price Inflation index (CPI). This maximum amount of charges reflects our analysis of the lowest reasonable overall cost that Scottish Water will incur in meeting the draft Objectives that the Scottish Ministers have set.

The Strategic Review also outlines our expectations for this, and future, regulatory control periods. This Strategic Review begins a process of increasing investment to the level required to maintain and replace assets in an economically optimal way (taking account of carbon, circular economy considerations. natural and social capital). I recognise that my office has an important role in ensuring that Scottish Water continues to improve its efficiency, delivers sustainable levels of service, and more than meets the expectations of the customers and communities it serves. The proposed maximum amount of charges is designed to make sure that customers continue to see the benefit of a well-managed. sustainable water sector.

The sector in Scotland has come a long way since Scottish Water was created in 2002. The Commission's targets to reduce operating expenditure have resulted in Scottish Water's average bills being around 20% lower than they would otherwise have been. And this does not take account of Scottish Water's improved capital expenditure effectiveness and efficiency. Levels of service have also increased markedly during this time.

My office and I will continue to challenge Scottish Water to spend every pound wisely. As Scottish Water is publicly owned, every pound it raises will benefit the customers and communities it serves.

In spite of the improvements to date there is no room for complacency. Current generations have benefited from the prudent investment of previous generations. Scottish Water is playing its part by becoming ever more efficient in improving the way it manages its assets. Scotland has invested more per person per year than any other part of the United Kingdom since 2002 (£135 compared with around £105). Even so, the focus to date has had to be on improving services while keeping the assets 'ticking over'. As a result, many of Scottish Water's assets, such as pipes and sewers, have had their lives prolonged rather than being renewed. Although this has meant lower bills in recent years, the Scottish water industry is now at something of a crossroads.

The recent gains in performance could all too easily be lost if we do not continue to invest. Although Scotland has invested more and currently enjoys a much improved level of service, we still face a challenge – in both the short and the long term – to maintain service levels, given that there is an ageing asset base and a changing climate.

If we do not invest sufficiently today there is a risk that we slide backwards. This investment will mean that bills have to go up although the increases over the next six years will still mean customers and communities are paying broadly the same in real terms as they were in 2002. But delay would risk even higher bills, reduce service reliability and water quality, and result in a failure to meet the net zero target. Borrowing more now will simply lead to higher bills in future. That would be poor value for both current and future customers.

My office and I wholeheartedly support the vision for the water sector that the Cabinet Secretary for Environment, Climate Change and Land Reform outlined in June 2019. If Scotland is to achieve this vision, the sector will need to embrace the fundamental changes required to achieve the target of net zero emissions by 2040 that Ministers have set. Scottish Water will have to transform its business in a radical way if it is to meet the long-term challenges it faces, by driving further efficiencies, by ensuring that levels of service are maintained, and by bringing a new focus on the wider costs and benefits of its activities. This draft determination ensures that Scottish Water has the opportunity to deliver its part in achieving the sector vision.

The draft determination is the product of extensive discussion, research and analysis, including detailed engagement with customer representatives and other stakeholders. The process also continues to be peer reviewed by the OECD. The OECD will publish the results of its peer review during 2021. Since the Strategic Review process was initiated in 2017, my office and I have adopted a transparent and staged approach, listening to and working jointly with our wide-ranging stakeholders and publishing 23 Decision Papers that clearly explained our evolving approach.

We published the last of these Decision Papers in February 2020, setting out our view of the prospects for prices in the next, and subsequent, regulatory periods. Much has changed since then. The Covid-19 pandemic has brought major disruption, not only to Scottish Water and the wider water sector, but also to every business and household in Scotland. There are inevitable impacts on Scottish Water's finances and on its capital programme delivery. Our draft determination acknowledges these impacts but requires Scottish Water to manage them effectively and efficiently. The challenge that Scottish Water faces – to maintain its levels of service and achieve net zero – has therefore increased from that which was set in February. The investment challenge remains.

We have sought to take account of the impact of the pandemic in our draft determination by maximising the scope for flexibility in how the Scottish Government and Scottish Water can respond. We have done so by setting average annual caps on Scottish Water's charges, whilst recognising that it should have flexibility in how it utilises the cap on total charges during the regulatory control period from 2021-27. We have also set an indicative cap on the future total amount of charges that Scottish Water may need to raise from its customers in the subsequent regulatory control period 2027-33.

The total amount of charges is arrived at after having allowed for the increased investment necessary to meet the Scottish Ministers' Objectives for this regulatory control period. These Objectives require Scottish Water to ensure the ongoing resilience of services and improvements in water quality and environmental performance in a way that is consistent with the Scottish Ministers' Statement on the Principles of Charging for the period.

My office and I have encouraged Scottish Water to think differently about how it meets future challenges, and to embrace stretching efficiency targets. Taking prudent decisions now will ensure that both current customers and those of future generations can look forward to high-quality water and sewerage services delivered at the lowest reasonable overall cost. We are clear that customers are best served by making steady but decisive progress in meeting these challenges. This reduces the risk of unpleasant surprises in future – whether in relation to charges, levels of service or environmental performance.

The draft determination is underpinned by the expectation that Scottish Water will undergo the fundamental transformation necessary if it is to deliver the long-term vision set out in its Strategic Plan. Scottish Water should continually seek to deliver at a level that exceeds the expectations of its regulators and the customers and communities it serves. The onus is now on Scottish Water to evidence that everything it does is for the benefit of customers (both now and in the long term) and fully to justify its investment needs.

My office and I would like to recognise Scottish Water's success to date in managing the risks where assets are coming to the end of their lives, thereby postponing investment for as long as possible. Looking forward, however, it is evident that Scottish Water cannot reasonably be expected to extend further average asset lives. Scottish Water has now to begin to invest much more in maintaining and replacing its assets.

While committing the required investment brings with it a clear cost, it is equally the case that customers would experience a significant cost in deteriorating levels of service if this investment is not made in a timely manner. This investment is also likely to be critical to the achievement of Scottish Water's net zero emissions target.

It should be noted, however, that allowing for increased investment does not mean there is a blank cheque. Rather, we expect Scottish Water to demonstrate how it is continuing to drive efficiency and to improve its risk management.

The draft determination takes full account of the agreement that has been reached between the Customer Forum and Scottish Water. In particular, we welcome the commitment by Scottish Water to work with customers and communities to identify the levels of service and price profile they consider reasonable. We also very much welcome the concept that Scottish Water should take all of its investment decisions as if an active customer voice were in the room. We would like to thank the Customer Forum for their significant contribution and for ensuring that the customer voice has been at the heart of the Strategic Review process.

The next phase of the process is for stakeholders to provide their feedback on the proposals in this document. We welcome any comments and will publish our Final Determination on 10 December 2020.

In closing, I would like to take this opportunity to recognise Scottish Water's efforts in ensuring that we have all been able to count on a continuous supply of highquality drinking water and the safe disposal of our wastewater throughout the ongoing Covid-19 pandemic. With hand washing a major line of defence against the virus, the essential importance of a reliable supply of water has never been so clear.

I would also like to thank the many other individuals and organisations who have contributed to the Strategic Review process to date, and to thank my staff for their work in providing the robust analysis that underpins these proposals.

Alan D A Sutherland Chief Executive 8 October 2020

OUR DRAFT DETERMINATION

OUR DRAFT DETERMINATION

The following section sets out the Water Industry Commission for Scotland's draft determination of charges under the Water Industry (Scotland) Act 2002, and proposes the maximum amount of charges that Scottish Water may levy on its customers.

The draft determination ensures that Scottish Water can meet the draft Objectives set by the Scottish Ministers in a manner fully consistent with the Scottish Ministers' Draft Statement of Principles of Charging^{1,2}. Our final determination on 10 December 2020 will reflect the Final Principles of Charging and Objectives for the sector, which are due to be published in November 2020.

During the regulatory control period, 2021 to 2027, Scottish Water's total charges, in 2018-19 prices³, is limited to £8,032m. This should allow it to deliver £4.5bn in investment in 2017-18 prices, an increase of £1,095m (around 30%) from the allowed for investment in the 2015-21 regulatory control period. For the first time, it also includes a ring-fenced allowance

of £133m to cover any additional costs that Scottish Water has incurred in selecting an option that has a higher net present value (NPV) after allowing for externalities such as carbon, natural and social capital than the lowest financial cost option. Scottish Water will only be able to access this ring-fenced allowance if it is clearly evidenced in an appraisal.

The charges cap includes a demanding 1% real efficiency challenge year on year in the allowed for 'Tier 1' expenditure (which covers PFI costs, interest, operating costs and reactive asset maintenance investment). We have also included a £150m capital efficiency challenge in our assessment of the long-term sustainable level of investment⁴. The maximum amount of charges that Scottish Water can levy on its customers is set at CPI+2% for each year, on average, of the regulatory control period. Scottish Water must propose charges in its Annual Scheme of Charges that are consistent with this annual cap and/or the cumulative application of this cap.

The Commission has a statutory duty to promote the interests of customers and, in so doing, have regard to the interests of future customers. As such, within this draft determination, the Commission would expect that its charge caps would allow Scottish Water's annual revenue in the final year of the current regulatory control period 2026-27 to be no less than £1,393m in 2018-19 prices.

Scottish Government (2020), 'Investing in and paying for your water services from 2021: Final Consultation', January. Available at: https://www.gov.scot/publications/investingpaying-water-services-2021-final-consultation/pages/1/ ²The Commission has the statutory duty to set the maximum amount that Scottish Water can charge its customers during the regulatory control period. This maximum amount reflects the lowest reasonable overall cost to Scottish Water of delivering the Objectives of the Scottish Ministers in a manner consistent with their Statement of Principles of Charging. It follows that if the Scottish Ministers change their Objectives or their Charging Principles, the Commission would amend its view on the maximum amount of charges required appropriately. ³Please note that allowed for revenues are presented in the same price base as revenues reported in the charging year 2018-19. This is based on Consumer Price Index (CPI) inflation reported in October of the previous financial year. This allows for a like-for-like comparison to Scottish Water's reported revenues of £1.217m - the last full year of revenues before the beginning of the Covid-19 pandemic. The calculation of allowed for charges from the projected money of the day is provided in the Appendix. All other numbers in this document are presented in a 2017-18 price base using Retail Price Index (RPI) inflation until 2021 then CPI inflation thereafter unless clearly labelled. The only exception is in relation to borrowing and interest payments which, given its nature, is always guoted in the money of the day. Regulators historically have used the Retail Price Index. More recently, and in line with the advice of the Office for National Statistics on measuring the Retail Price Index, Regulators have transitioned to using the Consumer Price Index (CPI). This change typically has the effect of making increases in bills seem larger and reductions smaller as RPI has consistently been higher on average than CPI. ⁴It is the norm for regulators to consider the cashflows of a regulated company in real terms (without the impact of inflation). The inflation index includes an estimate of the extent to which the goods and services that we have the opportunity to purchase today are better than those of the previous year. Observed increases in prices are reduced in the reported measure of price inflation to take account of these improvements. Some industries (for example, services and technology) can improve markedly in relatively short timeframes. It is much more difficult for an asset-intensive business, such as Scottish Water, to improve at the same rate. As such, the underlying efficiency challenge for Scottish Water is to match the productivity improvement of the economy as a whole and then to exceed that economy-wide improvement by £150m a year by 2040.

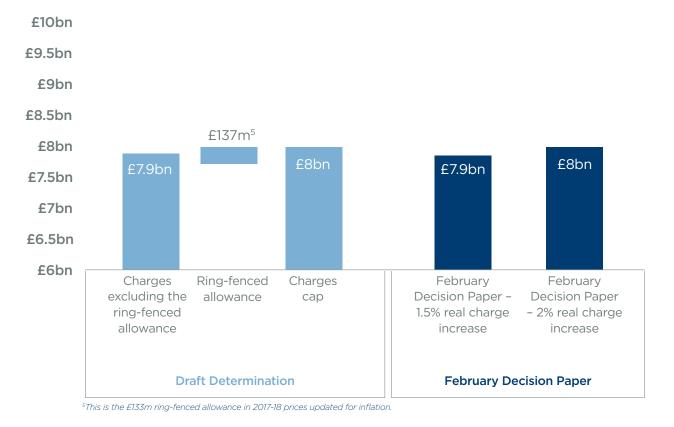
This level of revenue is consistent with ensuring that future generations of customers are not disproportionately impacted by the costs of both achieving net zero emissions and of replacing a backlog of worn-out assets (with their associated additional emissions). By ensuring such a transition in revenue, Scottish Water is looking after its future customers and ensuring that levels of service to current customers are not compromised.

We would expect around 70% of the total revenue over the regulatory control period to come from households, with the remainder coming from nonhousehold customers. This is our expectation based on our analysis of the historic costs incurred in serving household and non-household customers. The Commission will carry out further work with Scottish Water and other stakeholders to review relative cost allocations between household and nonhousehold customers if Scottish Water considers that new evidence is available. and that the current allocation is no longer broadly cost reflective.

Figure 1:

Reconciliation to the February Decision Paper, Prospects for Prices

Total amount of charges over the 2021-27 period (2018-19 prices)



BENEFITS FOR CUSTOMERS AND COMMUNITIES



Our draft determination allows Scottish Water to deliver wide-ranging, long-lasting benefits for Scottish customers and communities.

BEST VALUE FOR CUSTOMERS:

- Today's levels of service to customers are as good as has ever been recorded by any company in Great Britain. Our proposals will allow Scottish Water to ensure that these high service standards are maintained now and into the future.
- Our proposals allow Scottish Water the flexibility to reflect the results of its planned national engagement programme in its annual Scheme of Charges.
- Our decisions protect the interests of today's customers and future generations.

A FLOURISHING ENVIRONMENT AND EXCELLENT QUALITY DRINKING WATER:

- Scottish Water has the funding it needs to continue to deliver a flourishing environment and excellent quality drinking water.
- The investment will ensure that Scottish Water's assets, such as its pipes and sewers, are better able to withstand future unexpected events.

A GREENER SCOTLAND:

- Scottish Water has the funding it will need to deliver the first phase of its ambitious net zero emissions target for 2040.
- It is also being supported to provide wider benefits for customers and communities, and to provide additional benefits such as access to land for leisure.

A MORE PROSPEROUS SCOTLAND:

- We are allowing for significantly increased investment in a £1.2bn industry that improves infrastructure, creates jobs and supports livelihoods across Scotland.
- Scottish Water is and will continue to be – a financially sustainable business and an exemplar model on the international stage.

THE BASIS OF OUR DRAFT DETERMINATION

THE STATUTORY FRAMEWORK WITHIN WHICH WE OPERATE

The Commission has a statutory duty to promote the interests of water and sewerage customers in Scotland. We do this by determining the 'lowest reasonable overall cost' that Scottish Water will have to incur if it is to meet the Scottish Ministers' environmental, quality and customer service objectives for the sector. The cap on the amount of charges that we determine is the maximum amount of charges that Scottish Water can levy on its customers and, subsequently, Scottish Water's annual Schemes of Charges that we agree must also comply with both the Scottish Ministers' Principles of Charging and our determination.

The process we undertake is called a Strategic Review of Charges. The current Strategic Review process covers the period 2021-27 (SRC21). It is the sixth such review that has been undertaken in the Scottish water sector.

Ministers initiated the SRC21 through an official commissioning letter to us in January 2017. This set out the initial policy framework and timetable. An updated Commissioning letter was provided in June 2019 and this included a revised timetable for the SRC21. A further letter was provided in October 2020 setting out a subsequent revised timetable in light of the Covid-19 pandemic. These letters are included as Appendices 1, 2 and 3. The charges determination process is set out on the following page.

11

Around the beginning of February (and annually thereafter), Scottish Water has to set out the charges it proposes to set for particular groups of customers in its Scheme of Charges. It has to agree this Scheme of Charges with WICS.

10

Scottish Water has 60 days to decide whether to accept WICS's final determination or to refer it to the Competition and Markets Authority for a redetermination.

09

WICS publishes its final determination, setting out the maximum amount of charges Scottish Water can levy on its customers during the coming regulatory control period to ensure that Scottish Water is reasonably funded to deliver Scottish Ministers' Objectives in a manner consistent with the Statement of the Principles of Charging.

12

During and after each Strategic Review of Charges there is a process of ongoing monitoring, review and stakeholder feedback; the outcome of this review process informs the Scottish Ministers' future Objectives and WICS's methodology for future Strategic Reviews.

O1 The Scottish Ministers ask WICS* to conduct a Strategic Review of Charges.

>

<

02 The Scottish Ministers publish

draft Objectives and Principles of Charging for consultation.

 \sim

CHARGES DETERMINATION PROCESS

1

O3 WICS publishes its proposed methodology for the forthcoming Strategic Review of Charges.

04

V

There ensues an iterative process through which Scottish Water explains what it thinks it needs, and the Scottish Environment Protection Agency, the Drinking Water Quality Regulator and Citizens Advice Scotland explain their views.

80

WICS considers the responses to the draft determination and any amendments to the Scottish Ministers' Objectives or Statement on the Principles of Charging.

The Scottish Ministers finalise their Objectives and their Statement on the Principles of Charging in the light of the conclusions of the draft determination.

07

06 WICS publishes a draft determination for consultation.

05

WICS publishes papers setting out its thinking for the forthcoming determination. Stakeholders comment on these papers and WICS adjusts its views in the light of the responses received.

> *WICS is the Water Industry Commission for Scotland.

THE SCOTTISH WATER SECTOR JOURNEY

The Scottish water sector has come a long way. When Scottish Water was created in 2002 its operating costs, adjusted for its geography and assets, were nearly double those of the best performing private company in England. Its level of service as measured by the Overall Performance Assessment lagged 67% behind the leading companies south of the border. Its leakage was double its sustainable level. There was a considerable backlog of investment.

⁶The 16% difference is based on the average increase in England and Wales divided by the reduction in Scotland. This is calculated as ((1 + 4%)/(1 - 10%)) - 1.

Since 2002. Scottish Water has invested annually more per person (an average of £135 in 2020 prices) than any water company in England and Wales. Its service levels are as good as have ever been recorded by any company in Great Britain and its leakage has reduced significantly. While Scottish Water has invested over 30% more per person than the average company south of the border, its operating cost savings have ensured that the average household pays £372, 24% (or £90) less than it otherwise would have done. Since 2002, average household charges have fallen by 10% in real terms. As a result, average water charges - despite Scotland's much more rural and challenging geography - are among the lowest in Great Britain. In England and Wales, the average increase has been 4% in real terms over the same period

- charges are therefore 16% lower relative to the England and Wales average than they were in 2002⁶.

In spite of these improvements there is no room for complacency. Our work with Scottish Water has identified that by 2040, Scottish Water will have to be investing more than twice as much each year (in real terms). If we fail to invest. service levels will deteriorate and the water quality and environmental improvements achieved over the past 20 years will be put at risk. It is increasingly difficult and expensive to reverse a trend of deteriorating performance, the longer it has been allowed to persist. The challenges that Scottish Water faced when it was first established in 2002 represent a clear warning as to the consequences of consistent underinvestment.

The Scottish Ministers' revised commissioning letter in June 2019 asked the sector (Scottish Water, SEPA, DWQR, CAS, the Customer Forum and the Commission) to develop and work towards a coherent vision. The sector has since developed its common vision:

THE SECTOR VISION

- Together we will support the health and wellbeing of the nation. We will ensure that all of Scotland gets excellent quality drinking water that people can enjoy all of the time. Scotland's waste water will be collected, treated and recycled in ways that generate value and protect the environment. We will enable the economy to prosper.
- We will transform how we work to live within the means of our planet's resources, enhance the natural environment and maximise our positive contribution to Scotland achieving net zero emissions.
- We will involve and inspire Scotland's people to love their water and only use what they need. We will promote access to the natural environment and encourage communities to enjoy and protect it.
- We will be agile and will collaborate within the sector and with others to be resilient to the challenges that will face us. We will keep services affordable by innovating and delivering the greatest possible value from our resources, helping those who need it most. We will serve all customers and communities in a way that is fair and equitable to present and future generations.
- We are a vital part of a flourishing Scotland.

It is within this policy framework, set out in the Objectives of the Scottish Ministers and their Statement on the Principles of Charging, that we have undertaken our review.

The Scottish Government has set Scottish Water the challenge to achieve net zero emissions on both operational and embodied⁷ carbon by 2040. If Scottish Water were not to invest in adapting its assets to deal with our changing climate, there would likely be consequences for the reliability and quality of services that can all too easily be taken for granted. There is a clear cost to committing the required investment, but equally, customers would experience a significant cost in deteriorating levels of service if this investment is not made in a timely manner⁸.

Achieving the net zero emissions target and the future vision will require Scottish Water fundamentally to transform the way in which it manages and develops its network. We require Scottish Water to do this in an economically optimal way which ensures that levels of service and security of supply are maintained at all times. As such, Scottish Water will have to take account of circular economy principles, the benefits of natural and social capital, and the costs of carbon over the lifetime of its assets.

⁷We are using the term embodied here to represent the carbon dioxide or greenhouse gas emissions associated with the manufacture and uses of a product or service. We take this term to be wider than the term 'embedded' as it allows for the consideration in decision taking of the implications of potential asset decommissioning.

^eRecent events such as the major disruption to the rail network following extreme weather or the Finsbury Park flooding give some indication as to how much we take our infrastructure for granted. The recent Genoa bridge collapse shows the catastrophic impact of a critical asset failure.

OUR TRANSPARENT AND CONSULTATIVE APPROACH TO SRC21

We have run a fully transparent and consultative process since the start of SRC21. We began discussions on our emerging thinking in relation to the regulatory framework in 2016, holding a series of collaborative advisory panels and stakeholder brainstorming sessions. These discussions formed the basis of our methodology, 'Innovation and collaboration: futureproofing the water industry for customers', published in April 2017. The document identified the need for a different regulatory approach on the basis that, although Scottish Water had responded well to previous reviews, the challenges the sector was facing were now longer term in nature and required a more flexible approach if they were to be met effectively.

The methodology explained our proposal to move to Ethical Business Regulation (EBR), an approach based on the work of Professor Christopher Hodges of the University of Oxford⁹. EBR supports longer term thinking by requiring candour in all conversations and interactions between regulator and regulated company. It seeks to avoid, or at least to reduce substantially. asymmetries of information and the risk of time inconsistency. The approach contrasts with the previous focus purely on how much money is spent during a regulatory control period. It is the appropriate response of a regulator to a company that adopts Ethical Business Practice (EBP). The Commission is convinced that EBR can bring material benefits to delivering better outcomes for all stakeholders. It should allow Scottish Water the opportunity to achieve its target of net zero emissions in an economically optimal way, unconstrained by the arbitrary deadlines of fixed regulatory control periods.

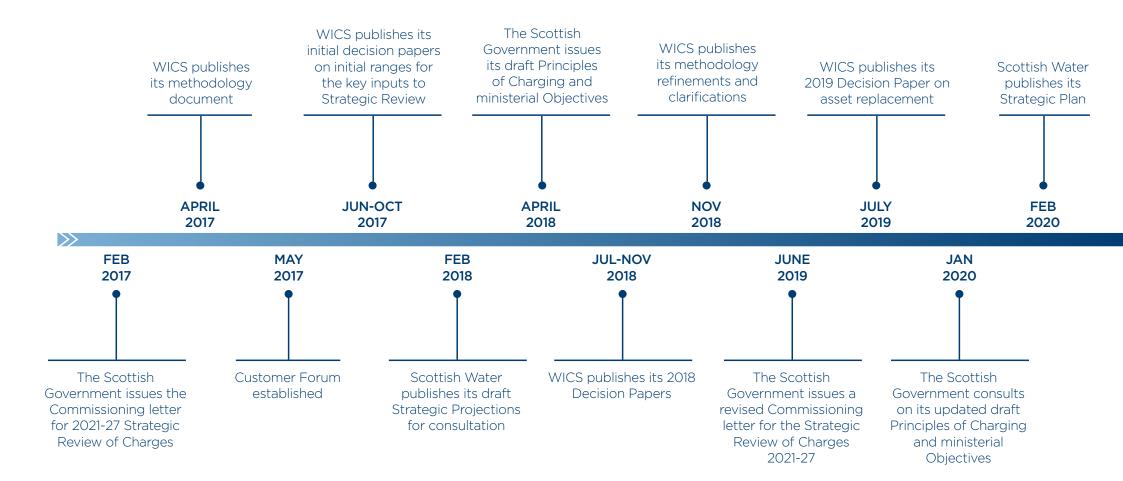
Following close working with stakeholders, we refined and clarified our approach in November 2018. Over the period between then and February 2020 we published a series of 23 Decision Papers. In these documents we set out our views on all material aspects of the Strategic Review and explained what we would consider consistent with Scottish Water delivering the ministerial Objectives at the lowest reasonable overall cost.

Stakeholders were consulted at every stage and this engagement was underpinned by robust analysis and by extensive customer research commissioned by the Research Co-ordination Group¹⁰.

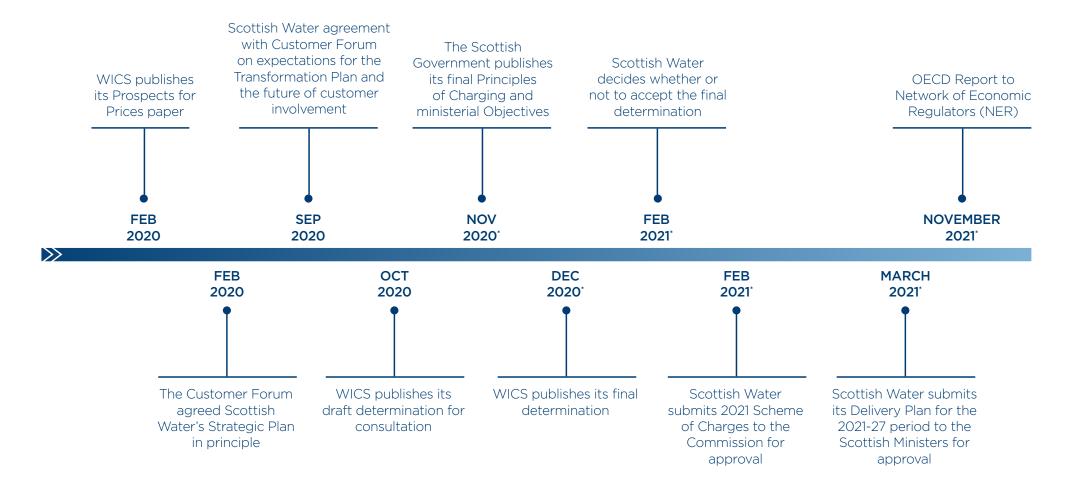
^oSee Law and Corporate Behaviour: Integrating Theories of Regulation, Enforcement, Compliance and Ethics by Professor Christopher Hodges. Published by Hart and Beck 2015 and Ethical Business Practice and Regulation by C Hodges and R Steinholtz. Published by Hart and Beck 2017.

¹⁰The Research Co-ordination group comprised representatives from the key sector stakeholders including Scottish Government, Customer Forum, Scottish Water, CAS, SEPA and DWQR.

TIMELINE OF THE STRATEGIC REVIEW OF CHARGES PROCESS



TIMELINE OF THE STRATEGIC REVIEW OF CHARGES PROCESS



*Expected

CUSTOMER REPRESENTATION WITHIN THE PROCESS

At the last Strategic Review of Charges (covering 2015-21) the Commission set out to ensure that customers' views were at the heart of the process. A new body, the Customer Forum, was asked to establish what it considered to be reasonable within a framework, for the determination of the maximum amount of charges set out by the Commission as consistent with the effective and efficient delivery of the Ministers' Objectives.

The Commission recognised that customer input would again be critically important to the SRC21 process as the sector began to consider how to address both the much longer term challenges of asset replacement and resilience and the need to adapt to and mitigate climate change. Along with Citizens Advice Scotland and Scottish Water, we therefore established a second Customer Forum. Throughout SRC21 the Forum has championed the priorities and preferences of customers for 2021-27 and for the longer term, based on a programme of research undertaken with Scottish Water and other stakeholders.

The initial intention was for the Forum to seek to agree the maximum amount of charges with Scottish Water that were consistent with our Decision Papers (in a similar way that the first Customer Forum had done at the previous review). As we worked with Scottish Water better to understand the asset resilience challenge, however, it became clear that the second Forum should play an important role in working with Scottish Water as it developed its Strategic Plan. The broader customer interest required that the Forum should focus not solely on the maximum amount of charges for the next regulatory control period, but engage more in the Plan's development and ensure it reflected the priorities of customers and communities. Having provided its input into the co-created Plan, the Forum agreed the final Strategic Plan in January 2020.

Our final Decision Paper, Prospects for Prices, set out the Commission's latest thinking on the maximum amount of charges that should apply for 2021-27. The Commission also set out its thinking on charges in a longer term context and provided its indicative view of what would be required in the 2027-33 regulatory control period. This paved the way for the Customer Forum to seek to agree the maximum amount and advance any thinking on an appropriate profile for charges during the regulatory control period such that Scottish Water could deliver Ministers' Objectives in a manner consistent with the Principles of Charging.

In the event, however, this has not proved possible because the Covid-19 pandemic forced a change of approach. It quickly became clear that Scottish Water would require flexibility in how it utilised the cap on the total amount of charges that we would set and that a fixed profile for the next six years would be inappropriate.

As a result of this change, we asked the Customer Forum to focus on two critical questions:

- How should Scottish Water's Transformation Plan reflect customers' expectations? and
- How should Scottish Water deliver on its commitment to become more customer-centric and community focused?

We consider that addressing these questions built on the substantial commitment of the Customer Forum

in inputting to Scottish Water's Strategic Plan. The Customer Forum was able to reach an agreement with Scottish Water on how these questions should be addressed (see Appendices 6 and 7), which the Commission fully endorses. The agreement includes a commitment from Scottish Water to adopt the principle that 'every decision should be the one it would take if the customer were in the room'. It also confirms proposals for a national engagement programme to listen to customers and communities and to understand their needs and aspirations.

The total amount of charges ensures that Scottish Water will be adequately funded provided it meets its efficiency targets. As such, it should be able to make good progress in improving the resilience of its levels of service and towards meeting its net zero emissions target. The Commission will report on its view of progress each year. Scottish Water will seek the agreement of the Commission to its annual Scheme of Charges. In so doing they will be able to take account both of their national engagement programme and the expected growth of household and non-household customers year-on-year.

THE COVID-19 PANDEMIC

When we published Prospects for Prices in February 2020 it was our expectation, based on the agreed timeline and milestones for the Strategic Review, that we were entering into the final stage of the process. However, just a few weeks later the pandemic started to take hold, bringing major disruption to all aspects of life and to every business and household in Scotland.

The pandemic required us to delay publication of the draft determination (originally scheduled for May 2020) to allow additional time to consider the pandemic's implications.

For Scottish Water, the pandemic has inevitably brought a range of short-term impacts on day-to-day operations, capital programme delivery and company finances. It is not yet possible to establish the full extent of these impacts and how long they will persist, but it is clear that they will be significant and that they will affect Scottish Water's financial position in the next regulatory period and beyond.

For many businesses and households, the pandemic has brought an economic shock that will affect business liquidity, debt levels and personal incomes. It appears inevitable that a significant number of businesses will struggle to survive, while many household incomes will be under severe pressure in the months and years ahead. Looking forward, it is also clear that government measures to encourage the recovery from the pandemic are likely to impact on Scottish Water. Both the Scottish Government Advisory Group on Economic Recovery¹¹ and the Infrastructure Commission for Scotland¹² have noted that a key response to the crisis should be a focus on the 'green recovery'. This primarily targets infrastructure investment and accelerating progress with the transition to net zero emissions. As a major infrastructure business - with a clear target set by Ministers for net zero emissions by 2040 - Scottish Water will have a key role in delivering the green recovery in Scotland. Such a key role is entirely consistent with the sector vision, the challenge to deliver net zero emissions, and the expectation of customers that Scottish Water is resilient and can adapt to our changing climate.

"https://www.gov.scot/news/working-towards-economicrecovery/ ≌https://infrastructurecommission.scot/storage/276/ Phase2_Delivery_Findings_Report.pdf

IMPLICATIONS OF THE PANDEMIC FOR SRC21

This draft determination takes account of the impacts of the factors noted above. In particular, the pandemic affects the analysis that we had used to derive the price cap ranges set out in Prospects for Prices. The following factors impacted our approach:



THE IMPACT ON CUSTOMERS

It is already clear that the economic impact of the pandemic will lead to higher than expected levels of unemployment, poverty and business failures.

For household customers, this will impact on affordability and ability to pay in the short to medium term, and may, unfortunately, lead to increases in customer debt. We recognise that Scottish Water is currently receiving less aggregate charge income from household customers – but we are setting a cap on the total amount of charges for the next six years, not just for the next couple of years.

The Commission recognises that the Scottish Government may adopt measures to help customers pay their water charges in their Principles of Charges for the sector; for example, through the council tax reduction scheme. These mitigating measures are matters for the Scottish Government. That said, it becomes even more important that Scottish Water explains to its customers how it is delivering value for money.

Non-household customers are also being impacted by the pandemic. The lockdown

has reduced non-household consumption. It has also affected some businesses' ability to pay for the services they receive. The Commission recognises that some disruption to the retail market is likely, which may impact on wholesale revenues. There will undoubtedly be challenges for licensed providers who are expected to play an important role in supporting their customers through this pandemic. The Commission has acted separately to ensure that this effect is managed and limited¹³.

We therefore propose to continue to set default retail tariffs for the non-household retail market¹⁴. These tariffs are the maximum that any licensed provider can charge for a standard level of service. Any non-household customer has the right to require any licensed provider to offer the standard level of service for this default retail tariff. The Commission is proposing to establish the default retail tariff for each year that reflects Scottish Water's proposals for non-household wholesale charges in its Scheme of Charges and offers the same percentage gross retail margin to the licensed providers as exists currently.

SCOTTISH WATER'S FINANCIAL POSITION

It is likely that Scottish Water may continue to incur additional costs associated with its response to the pandemic. These will include, for example, the costs associated with safeguarding operational staff, carrying out increased testing at wastewater treatment works, and ensuring resilience of supplies where demand has increased during lockdown.

We have reviewed the assumptions in Prospects for Prices concerning the amount of 'Tier 1' expenditure that Scottish Water will require over the regulatory control period¹⁵. We consider that the starting range for the regulatory period and the efficiency challenge remain reasonable, notwithstanding the current higher levels of operating costs that may be being incurred by Scottish Water.



) IMPACT ON THE WIDER ECONOMY AND GROWTH

It is clear that the pandemic is having significant impacts on economies throughout the world, including Scotland. The IMF has predicted that the impact on world economies will be worse than the 2007 financial crash¹⁶.

IMPLICATIONS OF THE PANDEMIC FOR SRC21

We recognise that the assumptions we made before the pandemic on the rate of growth of household and non-household customers will have to be kept under review.

For that reason, we have allowed Scottish Water flexibility in how it utilises the cap on the total amount of charges. We now expect Scottish Water's annual Scheme of Charges to draw on the national engagement programme that it has agreed with the Customer Forum.



INVESTMENT DELIVERY

Prior to the pandemic¹⁷, we noted that Scottish Water was making good overall progress in delivering the 2015-21 investment programme. The requirement to suspend all non-essential project work during lockdown has inevitably introduced a significant delay in progress. Scottish Water reports that it will be some time before the full impact on delivery of the remainder of the 2015-21 programme is clear. It therefore appears inevitable that there will be a higher than expected 'carry over' of projects from the 2015-21 period into the next regulatory control period. At this stage, the extent of this carry over is unclear but it will impact on the profile of investment delivery during 2021-27.

There are also significant uncertainties related to the pandemic's impact on Scottish Water's supply chain and the associated costs of future capital works. For example, it appears

likely that - at least in the short term - the additional measures associated with Covid-19 protection at site works will lead to higher costs and lower levels of productivity. This may lead to capital works cost inflation during the regulatory control period being higher than originally assumed. Other supply chain impacts could include higher costs associated with a reduction in the number of market participants and/or skill shortages associated with government stimulus measures - such as the infrastructure investment associated with the 'green recovery'. We assume that any such increase in construction prices is typical of prices across the economy and is therefore reflected in the economy-wide inflation rate.

We have reviewed the level of capital expenditure that Scottish Water will need to incur to deliver the Ministers' Objectives. The challenge for Scottish Water to maintain its levels of service and achieve net zero has certainly not reduced and may even have increased. This reflects the inevitable shortterm impacts on Scottish Water's finances and capital programme delivery.

We consider that, despite the impact of the Covid-19 pandemic, our assessment of the overall level of capital expenditure that is required to meet the Ministers' Objectives – as set out in our Investment Decision Paper of 2019 and in Prospects for Prices earlier this year – remains valid. Recognising that the pandemic has impacted on all parts of the economy, our draft determination requires Scottish Water to rise further to the challenges it faces and to manage the impact of the pandemic on its activities without asking its customers to pay even more than we identified as being required in our February paper.

The Commission therefore considers that it should set the total amount of charges to reflect the need for investment and for Tier 1 expenditure, minus the debt that Ministers have indicated may be available. This is on the basis that it is still reasonable to expect Scottish Water to achieve over time the £150m efficiency challenge in capital efficiency included in our assessment. In other words, the investment need has not changed and we are requiring Scottish Water to deliver that investment in line with our earlier analysis. And just to be clear, the Commission proposes to determine the maximum amount of charges that it should allow Scottish Water, recognising that this may require Scottish Water to make additional efficiencies in order to absorb any additional costs associated with the impact of the Covid-19 pandemic.

THE IMPACT ON SCOTTISH WATER'S FUTURE FUNDING

The Commission's proposed maximum amount of charges for the regulatory control period allows Scottish Water as much flexibility as possible to address the impact of the Covid-19 pandemic and to position itself as well as possible to deliver the long-term challenges it faces. Against this backdrop, the Commission

IMPLICATIONS OF THE PANDEMIC FOR SRC21

has also asked Scottish Water to ensure that its revenue in the final year of this regulatory control period is no less than £1,393m in 2018-19 prices¹⁸.

We consider that setting the maximum amount of charges over the whole regulatory control period should allow both the Scottish Government and Scottish Water to balance an appropriate response to the impacts of the pandemic with ensuring that customers' interests over the medium and long term are protected.

The Scottish Ministers also asked that we consider the prospects for charges in the regulatory control period after 2027. Our analysis shows that, given the need to continue to transition to a long-term sustainable level of investment, charges will have to increase by a similar amount in real terms (by around 9-13%) over the next regulatory control period. This would involve a further real term increase of 28% in the overall size of the capital programme between 2021-27 and 2027-33.



In summary, the pandemic has had, and is likely to continue to have, material impacts on customers and the wider economy. Perhaps most importantly, the crisis has brought into focus the need to ensure that infrastructure is resilient, properly maintained and able to cope with unexpected events, including the growing impact of climate change on Scottish Water's operations. The pandemic has not changed the need to respond urgently to the target Ministers have set for Scottish Water to achieve net zero emissions by 2040. Scottish Water will also have a key role in implementing the Scottish Government's call for a 'green recovery'.

It therefore remains essential that Scottish Water has sufficient resources to deliver the full set of ministerial Objectives.

¹⁵For further information see the Commission's Press Release on the water charge relief scheme for business customers, dated 14 May 2020. ¹⁴The non-household market is not part of Scottish Water's core (regulated) activity. The Commission licences organisations that want to act as retail suppliers, buying services at the wholesale charges set out by Scottish Water in its annual Scheme of Charges and selling these services to non-household customers in competition with other licensed providers.

interest payments, the cost of the legacy PFI contracts, an allowance for reactive repair of assets and payments to developers for connecting new properties.

^{is}https://www.imforg/en/Publications/WEO/Issues/2020/04/14/weo-april-2020 ⁱ⁷https://www.watercommission.co.uk/UserFiles/Documents/2018-2019_ Performance%20report pdf

¹⁸As outlined above, allowed for revenues are presented in the same price base as revenues reported in the charging year 2018-2019. This is based on Consumer Price Index (CPI) inflation reported in October of the previous financial year. This allows for a like-for-like comparison to Scottish Water's reported revenues of £1,217m in 2018-19.

DETERMINING THE MAXIMUM AMOUNT OF CHARGES

Notwithstanding the considerable impact on customers and wider society of the pandemic, we can have confidence in the level of Tier 1 expenditure that Scottish Water will incur over the regulatory control period. Similarly, we can have confidence in the level of investment that Scottish Water is likely to have to commit if it is to deliver the ministerial Objectives in an economically optimal way. The cap on the total amount of charges reflects the total of this investment and the required Tier 1 expenditure, minus the debt that Ministers have indicated may be available.

The Commission's approach is the same as for previous regulatory control periods. There has always been flexibility between years on the use of the maximum amount of charges allowed for in the Commission's final determination; this has most recently been the case in the current period, where charges were agreed to be fixed in nominal terms for the first three years (at a rate that later proved to be above the rate of consumer price inflation). Charges increased by less than the rate of inflation in later years of the current regulatory control period such that the overall cap was met.

Setting a clear expectation for revenue at the end of the regulatory control period, and monitoring progress towards this target carefully, will allow for short-term flexibility in charges, while maintaining progress on the transition to a financially sustainable sector in the long term. It also provides a clear direction of travel to a sustainable level of investment in the industry.

We have allowed for an additional ring-fenced allowance of £133m of capital expenditure in the total amount of charges for the regulatory control period. This amount is to cover any additional costs that Scottish Water has incurred in selecting an option that has a higher risk-adjusted NPV after allowing for externalities such as carbon, natural and social capital than the lowest cash cost option (and this has been clearly demonstrated in an appraisal).

It will be for Scottish Water to advance its plans for charges in its annual Scheme of Charges for approval. The Commission expects that Scottish Water will take account of the actual economic conditions as Scottish Water experiences them. In this regard, the Commission regards the Customer Forum's agreement with Scottish Water for there to be an on-going conversation with customers and communities about water services in general, and the future for charges in particular, as a significant positive development. In light of the agreement between the Customer Forum and Scottish Water, we have written to Scottish Water to request that they commence their national engagement programme as soon as possible (see Appendix 8). We expect that Scottish Water's proposed Scheme of Charges for 2021-22 will reflect some early results of this engagement.

Our process of approval of Scottish Water's annual Scheme of Charges will include an assessment of whether:

- It reflects the results of the agreed national engagement programme with customers;
- It is consistent with the allowed for cap on the total amount of charges; and
- Scottish Water can explain how it is consistent with it achieving the level of revenue in 2027 that the Commission considers will ensure that future customers do not face paying a disproportionate share of achieving the desired level of service resilience and net zero emissions.

SCOTTISH WATER'S INVESTMENT APPRAISALS

We are clear that Scottish Water should make its investment decisions in an economically optimal way (thereby keeping bills as low as they can be for the long term). This means that the appraisal of options must take account of the costs of carbon over the life of an asset and the costs and benefits of natural and social capital and other externalities. The move from taking investment decisions on the basis of lowest economic cost, to one in which choices are made on the basis of the most beneficial long-term outcomes including service, net zero, environment, amenity and economic terms, is a significant one for Scottish Water. It will require them to balance technical expertise with the expectations of customers, communities, regulators and other stakeholders. Scottish Water will need to assess and evaluate decisions in new ways, changing the approach of the organisation. This will take time to get right.

Putting customers at the heart of Scottish Water's investment decisions will be a particular challenge, requiring insight into the needs and aspirations of their broad customer base. Further. Scottish Water must understand the views of communities on specific projects, being clear if there are additional benefits that can be secured. For this reason, we have allowed for a ringfenced allowance of £133m to be available. to cover any additional costs that Scottish Water has incurred in selecting an option that has a higher risk-adjusted NPV after allowing for externalities such as carbon, natural and social capital than the lowest cash cost option. Scottish Water will only be able to access this allowance if it is clearly evidenced in an appraisal.

To draw down this funding for broader benefits, Scottish Water will need to demonstrate that it has understood and applied an understanding of the expectations of customers and communities, as well as those of regulators and other stakeholders, to their decisions. This will help meet its commitment to the Customer Forum that: 'every decision made by Scottish Water should be the one it would take if the customer were in the room.'

With our partners in the Investment Planning and Prioritisation Group (IPPG), we will develop a mechanism for agreeing the draw down of broader benefit funds. This could be in relation to individual projects, or as a programme of work. We will seek to ensure that this mechanism helps secure Scottish Water's move to delivering the most beneficial long-term outcomes in an efficient manner, without placing unnecessary hurdles in the investment decision-making process.

This reliance on appraisals will also require Scottish Water to improve its analytical capability and its use of asset information in making its decisions. This will be vital if Scottish Water is to be able to rise to the challenge of making all of its decisions robustly and in an appropriately customercentric fashion.

SCOTTISH WATER'S TRANSFORMATION PLAN

As part of this draft determination, we are again setting out our expectations in relation to the move by Scottish Water to an EBP approach, and the major transformation within the organisation this entails.

We provided extensive material in relation to EBR and EBP in Prospects for Prices, including our expectations of what would be required of Scottish Water. It is critical that the transformation within Scottish Water that EBP requires is appropriately developed and implemented during the course of this regulatory control period.

The onus is now on Scottish Water to explain and to deliver, and to demonstrate to all of its stakeholders that it is operating effectively and efficiently. In particular, there is an opportunity for Scottish Water to show leadership in explaining the need for increased investment, and therefore charges.

Prospects for Prices stated the Commission's expectation that Scottish Water should develop a Transformation Plan of its organisation and activities, and should provide evidence of its progress in order to maintain the trust and confidence of its customers and communities. This draft determination reiterates that expectation.

The Commission is clear that Scottish Water should take ownership of its future strategy and explain its needs and the potential choices available to its customers. In particular, we expect Scottish Water to:

- take full ownership of enduring relationships with the customers and communities it serves;
- promote an open discussion of its purpose, aspirations and values;
- set out clearly and in a way that is accessible to all – its current performance and plans for improvement;

- engage in regular and frank discussion of performance, recognising that performance expectations will always change and become more demanding;
- adopt a collaborative, timely and pro-active approach to meeting the needs and aspirations of its regulators, aiming to address their concerns even before they have had to ask; and
- embrace these challenges as an opportunity – and be seen to do so in a positive and constructive way.

At the same time the Commission is clear that it has an important role to be reasonable but frank in judging and evidencing its assessment of performance. It will support, where the evidence is good, Scottish Water's plans for meeting the expectations of the customers and communities that it serves.

NEXT STEPS

We are now publishing our draft determination for consultation, and we welcome comments from all stakeholders.

Please email your views to: draftrepresentation@watercommission.co.uk.

Representations should be submitted to us on or before 19 November 2020. All representations will be published by us, unless respondents request otherwise.

We will take account of any representations made by 19 November 2020, ahead of publishing our final determination on 10 December 2020.

Scottish Water will then need to decide whether or not it will accept the final determination by 8 February 2021. It will publish its Scheme of Charges for 2021-22 before the end of February 2021.

This Strategic Review of Charges and draft determination mark only the beginning of the transformative journey required to transition to a sustainable sector. As such, and given the progress to date, we have set out here our initial timetable for future action and the next price review (SRC27).

This will include an assessment of Scottish Water's progress in delivering the requirements set out in our determination. The extent of Scottish Water's progress will have a direct bearing on our approach to SRC27.

Milestones	Provisional dates
Developing our approach for SRC27	From the first half of 2022
Methodology	Publish spring 2024
Information/consultation papers published	From summer 2024 until early 2026
Draft determination	End of May 2026
Final determination	Beginning of September 2026

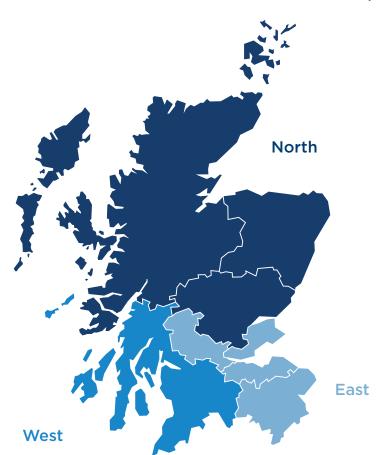
OUR DETAILED REASONING

BACKGROUND

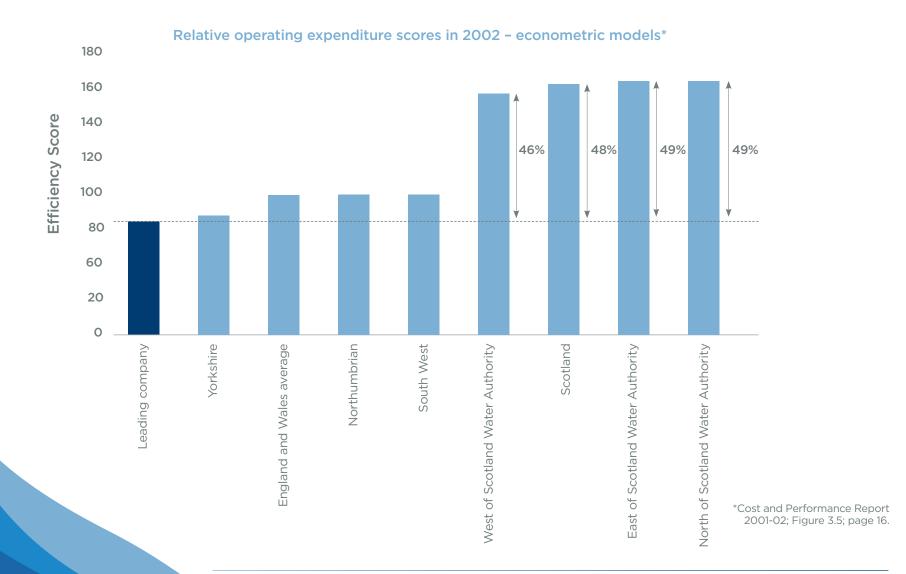
The Scottish water industry has come a long way



- In 1996, the UK Government had created three regional water authorities in Scotland: the North of Scotland Water Authority; the East of Scotland Water Authority; and the West of Scotland Water Authority.
- But investment continued to lag behind England to such an extent that wastewater compliance required the Government to turn to Private Finance Initiative (PFI or concession-style) contracts (that turned out to be very expensive; unit costs being more than 40% above what Scottish Water would achieve today).
- Overall, its relative operating costs and unit capital expenditure efficiency were very poor, relative to the industry in England.
- And, moreover, the Scottish industry lagged far behind in service levels and, in many cases, had only a limited understanding of how its operations were affecting customers.



When economic regulation was first introduced in Scotland, the extent of the challenge facing the Scottish industry was all too clear



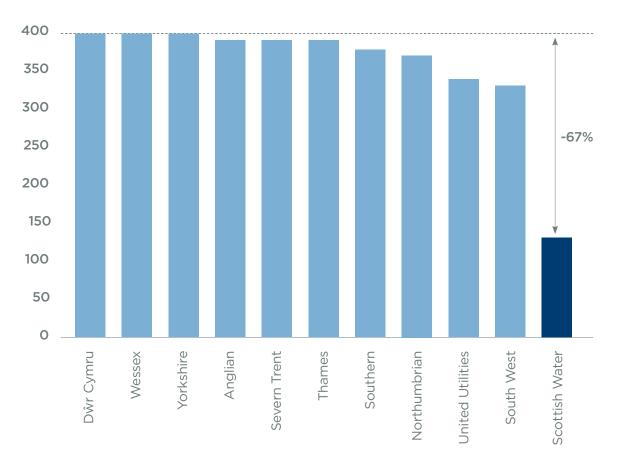
PAGE 29

And not only were costs too high, but Scotland lagged well behind on levels of service

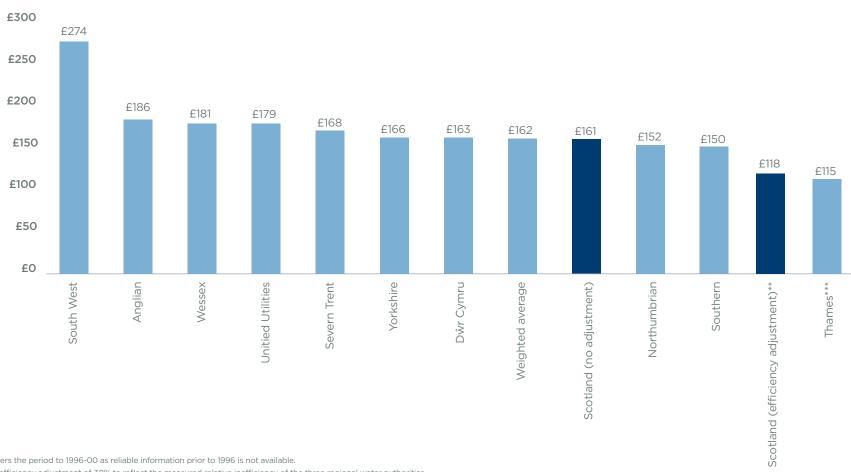
450

- Ofwat introduced the overall performance assessment (OPA) in 1999. It covers four broad categories of measures. These are:
 - Water supply: inadequate pressure, unplanned supply interruptions, water restrictions and water quality;
 - Wastewater service: internal sewer flooding incidents (due to overloaded sewers and other causes) and properties at risk of sewer flooding;
 - Environmental performance: leakage, sewage sludge disposal and noncompliant wastewater treatment works; and
 - Customer contact, which covers telephone contacts, response to billing contacts and response to written complaints.
- WICS has actively measured Scottish Water's performance since 2001/2.

Overall Performance Assessment score in 2002



This poor performance can be traced directly back to the level of investment that had been committed



Investment per property from 1989-2000; Annual average (1999/00 prices)*

Scotland covers the period to 1996-00 as reliable information prior to 1996 is not available

" Includes an efficiency adjustment of 30% to reflect the measured relative inefficiency of the three regional water authorities.

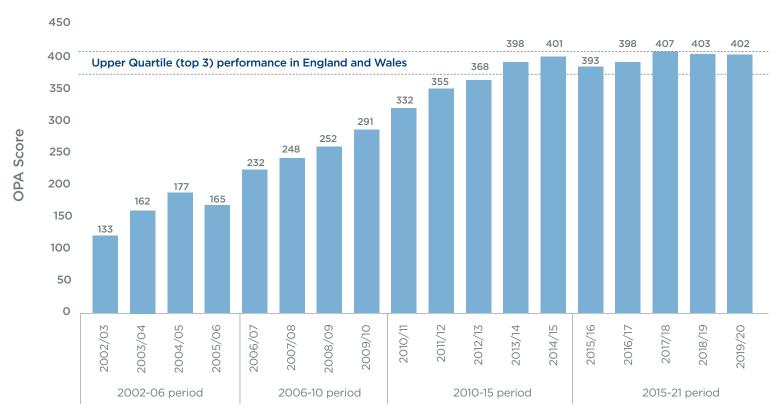
"The Thames investment level reflects the lower level of per capita investment that is normally required in more urban areas.

The merger of the three authorities to create Scottish Water in April 2002 led to a marked increase in investment

2002-20 (£ per head of population served; 2019/20 prices)	Average annual investment
Scottish Water (very rural, coastline)	135
United Utilities (rural, coastline)	127
South West (very rural, summer population, coastline)	123
Wessex (rural)	121
Dŵr Cymru (rural, coastline)	119
Southern	119
England and Wales average	102
Thames	100
Anglian	95
Yorkshire	92
Northumbrian	83
Severn Trent (no coastline, quite urban)	83

BACKGROUND

With this concerted level of investment, Scottish Water's performance now matches that of the best performing companies in England and Wales

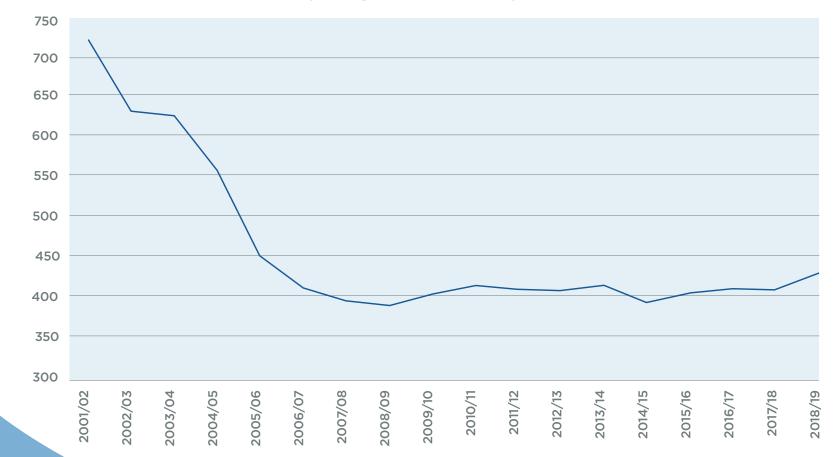


Levels of service comparison to Scottish Water (2002-2020)

BACKGROUND

£m

At the same time, Scottish Water has reduced its operating costs by over 30% – despite the additional operating costs that arise from enhancement investment



Operating costs (£m; 2018/19 prices)

And even before considering improved investment efficiency, these operating cost savings have reduced the average household bill by £90 per year on average

Line reference	Description	Price base	Value	Source/calculation
А	Operating costs reported in 2001/02	2001/02 prices	£444m	Annual Return E tables for the three former water authorities
В	RPI inflation index from 2001/02 to 2018/19 prices	-	1.63	Office of National Statistics
с	Operating costs reported in 2001/02	2018/19 prices	£723m	Calculated as A multiplied by B
D	Operating costs reported in 2018/19	2018/19 prices	£428m	Regulatory Accounts M tables for 2018/19
E	Reduction in operating costs between 2002-19	2018/19 prices	£295m	Calculated as C minus D
F	Revenue reported in 2018/19	2018/19 prices	£1,217m	Regulatory Accounts M tables for 2018/19
G	Percentage increase in revenue in 2018/19 required to cover operating costs reported in 2001/02	-	24%	Calculated as E divided by F
н	Average household bill in 2020/21	2020/21 prices	£372	Published on Scottish Water's 'About your Charges' page*
-	Increase in the average household bill required to cover operating costs reported in 2001/02	2020/21 prices	£90	Calculated as G multiplied by H

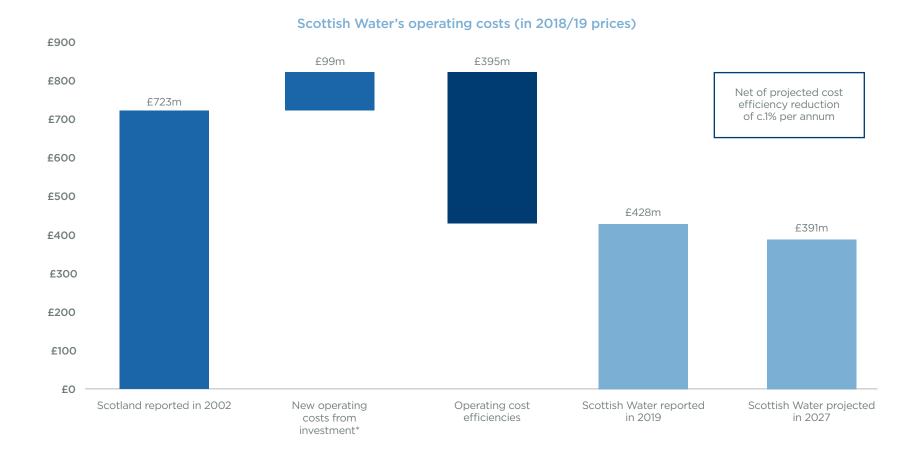
*available at: https://www.scottishwater.co.uk/your-home/your-charges/your-charges-2020-2021

These savings have meant that Scotland has enjoyed a real reduction in household bills since 2002

2002/03-2020/21 (real terms)*	Total increase in household bills				
Scottish Water	-10%				
Anglian Water	-8%				
South West	-4%				
Northumbrian	-3%				
Southern	-3%				
Dŵr Cymru	-2%				
England and Wales average	4%				
Severn Trent	6%				
Wessex	8%				
United Utilities	9%				
Yorkshire	13%				
Thames	19%				

*Based on Retail Price Index inflation which was the measure of inflation used in England and Wales until 2020/21.

And this draft determination challenges Scottish Water to continue to improve its operating cost efficiency



* This information is not reported consistently and has therefore been estimated based on Scottish Water's enhancement investment over the period multiplied by 2% (the new operating costs as a percentage of enhancement investment observed in England and Wales).

FUTUREPROOFING THE REGULATORY FRAMEWORK

The Commission recognises that the scope for capital expenditure efficiency and risk management is now reduced. How then to future-proof these levels of service to customers and communities?

- Scottish Water has improved as a direct result of the Commission's setting a hard budget constraint in an analytically robust way. The Commission recognises Scottish Water's performance stands scrutiny with the very best performing water companies in the UK and in other countries. Going forward, capital expenditure efficiency will likely see greater benefits (such as in natural or social capital) being achieved per pound of investment, rather than further reductions in unit costs.
- Scottish Water's risk management has improved markedly, allowing them to target investment more effectively to maintain and improve performance. This has materially postponed the point at which Scottish Water needed to commit investment to replacing or refurbishing its assets. But the need to replace assets was only being postponed

 there will now need to be a greater focus on asset replacement and maintenance if performance is to be sustained.
- For this SRC, the Commission has adjusted its approach to encourage Scottish Water to pursue the long-term asset management approaches that will be required to deliver net zero.

- The requirement on Scottish Water to achieve net zero emissions on both its operational and embodied carbon makes asset replacement and maintenance all the more important.
- The Commission is clear that Scottish Water should manage its assets in an economically optimal way. This requires Scottish Water to conduct rigorous appraisals of its proposed interventions, recognising and costing risk, carbon, natural and social capital and any other material factors. In committing the resources that it has available, it should adopt the highest risk adjusted net present value (NPV) solution, not simply adopt the lowest cash cost option – even on a whole-life basis. Only such an approach can truly offer best value for money to customers.

In its methodology for this price review, the Commission set out how the regulatory framework should evolve

- The Commission explained that economic regulation in the UK had proved effective in improving the efficiency of both public and private sector entities.
- Economic regulation in Scotland and in other jurisdictions was effective because it had traditionally sought to establish a hard budget constraint for the period for which prices are being set. There is a general acceptance that keeping a regulated entity tightly financially constrained encourages efficiency.
- Indeed, and as set out earlier in the case of Scottish Water, the evidence strongly suggests that regulated companies subject to this discipline have reduced their operating costs and improved their operational effectiveness and efficiency. The hard budget constraint has been reasonably effective in mimicking market forces, requiring regulated companies to improve their cost effectiveness if they are to perform better for their customers.
- Regulated companies have delivered real benefits for customers and the environment, as regulatory scrutiny and performance reporting have provided a clear reputational incentive to perform.

• The demonstrated improvement in Scottish Water's performance since 2002 has shown the benefit of this approach. But now there are new, and longer term, challenges – such as the resilience of levels of service and the adaptation to, and mitigation of, climate change – that require the Commission to adjust its regulatory approach.

In the light of these longer term and more strategic challenges, the Commission identified aspects of traditional regulation that should change

- Traditional economic regulation establishes a regulatory contract which the regulated utility agrees to deliver. As such, the regulatory relationship is similar to that of a parent and child. There is a consequent risk that the regulated utility lacks ownership of its strategy and, for example, cites a lack of regulatory funding as a reason for not having done something.
- Regulators have focused on funding regulated businesses for a regulatory control period to establish and maintain the hard budget constraint. In so doing, regulators and utilities have not been able to have full regard either to the long-time horizon of investment or the application of whole-life cost analysis.
- It is also important to note that the hard budget constraint focuses on the availability and use of cash. It leads to the selection of the lowest cash consuming option within a regulatory control period. The hard budget constraint is actually inconsistent even with adopting the lowest net present cost solutions, let alone non-cash costs such as environmental externalities.

- Such externalities have typically not been included in setting the charges of regulated utilities. Not surprisingly therefore, regulated companies have had little focus on reflecting non-cash costs in their investment choices.
- The Commission identified that this focus on cash during the relatively short regulatory control period had made it more difficult to address longer term challenges. The regulator has a dilemma: allowing for cash in excess of immediate need is not consistent with a hard budget constraint, but not allowing for it makes it more difficult to achieve longer term outcomes, beyond a single regulatory control period.

The absence of a focus on the long term is a key weakness of traditional economic regulation.

The Commission has committed to Ethical Business Regulation (EBR) for the next regulatory control period

- The collaborative nature of the work required to agree on long-term investment needs is clearly very different from the adversarial approach that resulted from the hard budget constraint. To maximise the likelihood of this approach being successful, the Commission turned to the ideas of EBR advanced by Professor Christopher Hodges of the University of Oxford.
- EBR supports taking a longer term approach by requiring candour in all conversations and interactions between the regulator and regulated company. It seeks to avoid, or at least reduce substantially, the asymmetries of information (what both regulator and regulated know and understand) and the risk of time inconsistency (an approach might be good for the immediate period during which it was chosen but demonstrably wrong on a whole life basis).
- The EBR approach therefore contrasts sharply with the previous focus on how much money was spent. The onus is now on the regulated company to deliver and to demonstrate to all of its stakeholders that it is operating

effectively and efficiently. The regulated company will need to demonstrate that it is spending customers' money effectively and efficiently – to act as though there is a customer in the room when the issues that it faces are discussed and agreed.

- The regulator's focus is now on how and why the money is spent – and on ensuring that the interests of current and future generations are protected. The regulated company should be evidencing, on an on-going basis, that it is performing at least in line with expectations. If it is doing so, then the regulator should reflect this evidence in its decisions on future charges and its comments on the performance of the regulated company.
- An approach of regulatory action by exception is consistent with customer research and the application of behavioural insights. Customers expect regulators to take proactive steps to avoid sudden bill increases and to phase any increases in bills where possible.

EBR is a response to a company following the principles of Ethical Business Practice (EBP) (1)

- Scottish Water must therefore focus on earning and maintaining the trust of its regulators, customers and communities. Regulators respond not only to their observations of how a company is delivering, but also to how the company's customers and other stakeholders view its performance. As such, Scottish Water has to:
 - be open and honest about its successes and its shortcomings; and
 - tailor its messaging to the wide range of customers and communities that it serves.
- Scottish Water should involve and empower customers in all that it does. Full empowerment of customers means that all interventions – whether operational or in terms of capital expenditure – have fully embedded the views of the customers and communities that will be impacted. It is a step change – it is not just relying on peer review or an assurance process.

- No strategic intervention should happen without striking a genuine balance between the viewpoint of customers and communities and the vital technical engineering input. As such, when Scottish Water advances projects to its committed list for delivery, the customer and community view of what should be done should already have been taken into account in determining the proposed approach.
- Customer and community complaints should reflect only relatively small and genuine human errors. There should be no systematic issues that could be identified by a review of customer and community contacts.
- In instances where there are negative effects for some customers or communities (as will sometimes happen), Scottish Water should seek proactively to mitigate the impact on those affected.

EBR is a response to a company following the principles of Ethical Business Practice (EBP) (2)

- Scottish Water should report its performance and prospects regularly and transparently. These should be demonstrably consistent with the implementation of Scottish Water's strategy and should set out clear expectations of what it will achieve (both with regards to organisational change and in meeting stakeholders' expectations) in the short, medium and long term. This goes beyond meeting the needs of its regulators – for example, when it comes to the completeness of the information it provides.
- The context and explanation of information should be exemplary, allowing regulators to see consistent, evidenced trends of improved performance. A shortfall in behaviours would, as a direct consequence of adopting this approach, also become increasingly obvious.
- Scottish Water should take the difficult steps required to take full ownership of everything that it does and to build and maintain trust in all that it does. As such, it should develop a transparent internal assurance process, which shares its conclusions (initially 'warts and all') with all who are interested. The way it is perceived to behave will be a clear indicator of the likely level of trust and confidence that stakeholders will have.
- Scottish Water should strive for the same pro-active relationship with its regulators as is the case in the aviation industry. Likely as not, initiatives to improve aviation safety will come from the airlines. As such, aviation safety represents a genuine partnership between regulator and regulated – and a potential model for Scotland's water industry.

What EBR means in practice (1)

- Under EBR, the regulator intervenes by exception. The regulator will act only if the regulated company deviates from a reasonable path. Provided the regulated company has clearly explained what it is doing, and why, the regulator should no longer have to come close to micro-managing the performance of a regulated company.
- EBR requires the Commission to have trust and confidence in Scottish Water – and to be able clearly to justify a more informed and less intrusive method of intervention. This will require Scottish Water to be clear to its customers, communities and other stakeholders how much it will cost to meet their expectations and how Scottish Water is acting to mitigate that cost.
- Notwithstanding this commitment, the Commission retains a clear potential to intervene robustly if trust and confidence (and any and all attempts at restoring it) have failed. A robust intervention would require a reassessment of how the framework was working for customers and communities.
- The Commission acknowledges that such an intervention (particularly after a period of reactive regulation) would be far from easy but that it could become necessary. The Commission is clear that the pressures on it, given the need to act fully in line with its statutory duties, are every

bit as challenging as its expectations of Scottish Water if Scottish Water is to act in line with EBP.

- The Commission is committed to defending the customer and community interest in a different, but equally robust, way. It will now focus on a wide range of sources of information – beyond that which comes directly from the regulated company – drawing on the reported information, frequent conversations with a full range of stakeholders, and a thorough understanding of the performance of similar companies in other jurisdictions and sectors.
- There may be times when matching or improving on best practice in other jurisdictions or industries will appear to be daunting. It may not be clear how such an improvement can be made or, indeed, funded. But any such issues need to be discussed objectively and analysed.
- The Commission is clear that it will act in line with the principles of EBR, as outlined earlier, during this next regulatory control period. There is an appropriate review point on progress with EBR and EBP as the Commission plans its methodology (around April 2024) for the next Strategic Review of Charges.

What EBR means in practice (2)

- Specifically, the Commission expects Scottish Water to:
 - promote an honest discussion of its purpose, aspirations, values, current performance and plans for improvement;
 - engage in regular and frank discussions of performance, recognising that performance expectations will always change and become more demanding;
 - be committed continually to seek out opportunities to improve;
 - set out clear plans accessible to all; and
 - embrace these challenges as an opportunity and be seen to do so in a positive and constructive light.
- The Commission is also clear that just as customers expect better service from a company that they regard highly – so too will expectations of a highly performing industry be more demanding.
- In this regard, the Commission recognises that it has an important role: it must be reasonable but frank in judging and evidencing its assessment of performance. It must also support, where the evidence is good, Scottish Water's plans for meeting the expectations of the customers and communities it serves.

The key now therefore is for Scottish Water to take pro-active ownership of its strategy

- The Commission has recognised that traditional regulation had become an adversarial process and had worsened asymmetries of information. As such, it has sought out ways to encourage Scottish Water to adopt a long-term investment strategy and still focus on improving efficiency. The Commission sees this as essential if Scottish Water is to meet the long-term challenges set out in the Objectives of Scottish Ministers.
- The Commission's draft determination makes clear that Scottish Water should take ownership of its future strategy and explain its needs and the potential choices available to its customers.
- In this regard, the Commission regards the Customer Forum's agreement with Scottish Water for there to be an on-going conversation with customers and communities about water services in general, and the future for charges in particular, as a significant positive. It is important that this conversation starts as soon as possible so that it can inform Scottish Water's annual Scheme of Charges.
- The Commission also expects Scottish Water to improve its analytical capability and use of asset information in making its decisions. These improvements will be vital

if it is to be able to rise to the challenge of being able to make all of its decisions as though the impacted customer or community were in the room – to draw again on the Customer Forum's agreement.

- The Commission has, however, been surprised by the reticence of Scottish Water to be clearer about its success in delaying charge increases in the past through its improved risk management and improved operational efficiency. The Commission recognises Scottish Water's success but is clear that Scottish Water now faces a substantial challenge to manage the transition to its long-term sustainable funding level. This will require a more complete reporting of its performance and the issues that it faces.
- Funding Scottish Water appropriately will be essential if Scotland is to improve water quality and its aquatic environment, and address the challenges of climate change.

In the light of these key challenges, the Commission is focused on taking steps to ensure Scottish Water's investment decisions are as good as they can be

- As set out in its methodology for this SRC, the Commission's expectation is that Scottish Water:
 - Takes ownership of its strategy;
 - Becomes increasingly customer-centric and community focused;
 - Improves further its asset information and makes decisions drawing on rigorous engineering and financial analysis, including the costs and benefits of externalities such as carbon emissions, natural and social capital (the economically optimal approach); and
 - Prioritises and selects its interventions after rigorous appraisals that will ensure that it takes, as far as possible, this economically optimal approach to delivering the Objectives of the Scottish Ministers and the expectations of the customers and communities that it serves.

- The introduction of the Investment Planning and Prioritisation framework requires Scottish Water to improve its understanding of all of the interventions that may be required (whether these are capital or are addressed by committing operating expenditure).
 - Scottish Water will need to assess these interventions on an on-going basis and to decide their relative importance and urgency. In doing so, it will have to ensure that it meets the expectations of its water quality and environmental regulators.
 - It will then need to prioritise these potential interventions (there will likely be more than there are resources available and there will always be limits as to what can be delivered effectively and efficiently).
 - Finally, once a need has been confirmed, Scottish Water should conduct a rigorous appraisal of the available options in order that the economically optimal intervention is advanced. An economically optimal option is not just the cheapest. It is the option with the highest NPV when due account has been taken of carbon costs, natural and social capital benefits or costs and other externalities.

SCOTTISH WATER'S STRATEGIC PLAN

Scottish Water's Strategic Plan was much clearer and more focused than its previous regulatory business plans

- The Commission regards the January 2020 Strategic Plan as an important first step in Scottish Water taking full responsibility for its future strategy and performance.
- The Strategic Plan starts with a clear vision. It explains future challenges and commits to addressing them effectively by:
 - mitigating climate change;
 - adapting to climate change;
 - replacing its assets in an economically efficient manner;
 - committing to supporting the needs of Scotland's households and businesses.
- Importantly, the Strategic Plan was based on an extensive programme of research, the use of innovative behavioural insights approaches, and wide consultation. This programme of work had been shared regularly with other stakeholders.

- The Strategic Plan also reflected the detailed, open and collaborative approach pursued by Scottish Water. There are no surprises about the issues that are covered in the Strategic Plan.
- But the Commission considers that the Strategic Plan was also something of a missed opportunity. Scottish Water could have been clearer about its implications for customers' charges and the efforts that it planned to mitigate these increases in customers' charges.

The Commission considers that a root and branch transformation is required to deliver the outcomes set out in the Strategic Plan

- By 2027, 40% of the time available to achieve net zero emissions will have elapsed. As such, making substantial progress in this next period, and being seen to do so, will be critical given that the Scottish Ministers require Scottish Water to achieve net zero emissions by 2040.
- Scottish Water should want to be more than 40% of the way towards its 2040 net zero emissions by 2027 given that the last steps to net zero are likely to be the most difficult.
- In the spirit of EBP, Scottish Water should be able to evidence that it is seeking to make clear progress in the transformation of its organisation. As such, the Commission considers that Scottish Water should produce a Transformation Plan that clearly sets out the following:
 - How its organisation, procedures and practices will be different at the end of the 2021-27 regulatory control period, including a clear description of the resources required and key milestones.

- How it is improving its asset management: it will now balance engineering, customer, community and economic pressures in a pro-active way.
- How it plans to control its costs and to demonstrate not least to its economic regulator – that it is operating as efficiently and effectively as possible.
- How it reports on its performance.
- How it provides targeted and comprehensive reassurance to stakeholders that it is making appropriate progress towards addressing the long-term challenges that it has set out clearly in its Strategic
 Plan, beyond achieving straightforward performance indicators or milestones.
- How it will establish and maintain the same collaborative relationship, based on trust and confidence, with its regulators as the aviation industry currently achieves in relation to passenger safety.

This transformation will fundamentally change Scottish Water for the better and has to be appropriately funded

- Turning now to the concrete steps that the Commission wants to see as a result of the Transformation Plan.
- The Commission agrees with the Infrastructure Commission for Scotland that there needs to be a radical change in how reducing emissions and other benefits to society are included in appraisals and broader asset management. Scottish Water will likely have to build significant additional capability and capacity in its strategic thinking, programme management, analytical functions and in involving customers and communities.
- To deliver net zero emissions and the efficiency challenge of the Commission, Scottish Water will have to prioritise how it uses its resources, decide the right things to do, and be able to explain and justify them to its stakeholders. Being excellent at delivering a very defined set of outputs for a defined price in a defined time period will no longer be good enough.
- In this regard, the Commission is clear that appraisals will need to be the central focus of Scottish Water's asset management. A series of ad hoc initiatives, however well coordinated, will not be sufficient.

- In particular, the Commission requires Scottish Water to share its appraisals widely, while recognising that these may fall short of what will ultimately be required. It is important that Scottish Water shares its appraisals – even when they are not fully satisfied with them – so that lessons may be learned from the experience.
- Scottish Water should look to involve customers and communities in its decision making whenever it is realistic to do so. It should be clear that its primary purpose is to deliver the Scottish Government's vision for water and wastewater services and, in so doing, to meet the expectations of both current and future customers. It should act as though there is a customer in the room when all key decisions are being discussed and decided.
- The Commission accepts that the transformation will take time to plan and to implement. But it is important that Scottish Water sets out clearly how it intends to evidence – to its customers, communities and other stakeholders – progress in developing and implementing its Transformation Plan.

A successful transformation will be underpinned by, as a minimum, addressing four key strategic issues: firstly, the required level of charges

Strategic issue	Description of issue					
Level of charges	 Obviously, Scottish Water has to be able to deliver the Objectives of the Scottish Ministers for this regulatory control period and make appropriate progress against those Objectives that fall later within its allowed for charges. Scottish Water needs to be open and honest about the charge increases that will be required from customers. It needs to be equally clear how its approach will keep these increases to a minimum. The Commission regards a comprehensive and effective Transformation Plan to be a clear condition of the allowed cap on the total amount of charges. Such a plan should evidence its progress towards meeting the longer term targets with deadlines beyond the end of the next regulatory control period. 					

Secondly, ensuring the effectiveness and efficiency of Scottish Water

Strategic issue	Description of issue			
	 The Commission has ensured that Scottish Water faces challenging efficiency targets for both operating and capital expenditure. These targets ensure that customers' bills are no higher than they need to be. 			
	 Achieving and sustaining net zero emissions will have major implications for how Scottish Water manages its assets. 			
Maximising effectiveness of delivery	 Scottish Water will need to transform the way it operates and invests to achieve the net zero emissions target. Detailed and well-evidenced appraisals will have to become the 'new normal'. 			
	 Scottish Water should be able to explain how its organisation will be different by 2027 and by 2040, and how this will contribute to achieving the twin challenges of net zero emissions, and efficient and effective asset management. 			
	 However, Scottish Water's Strategic Plan does not set out how it plans to achieve these savings and what the implications are likely to be. Scottish Water must therefore build confidence in its approach. 			

Thirdly, Scottish Water must report in full on its performance and build trust and confidence

Strategic issue	Description of issue
Building trust and confidence with stakeholders	 Transparency of planning and reporting is crucial to confidence. Given the need to increase investment and the efficiency challenge that Scottish Water will have to deliver, there is a pressing need to build (then maintain) the confidence of stakeholders. Effective reporting is a dynamic process that involves continuing communication, a proactive 'no surprises' approach and an openness to discussion with stakeholders. A company that has adopted EBP understands fully how it is perceived by its customers, communities and other stakeholders. The Commission believes that Scottish Water has more to do to achieve this. In particular, the Commission expects Scottish Water to provide significant context and narrative in its commentary on performance, not just performance indicators (however meaningful).

Finally, how Scottish Water will involve customers and communities

Strategic issue	Description of issue			
Involvement of customers and communities in decisions	 Ultimately, the successful delivery of the industry vision and ministerial Objectives requires customers and communities to have confidence that their views impact Scottish Water's approaches and decisions in a meaningful way. Scottish Water taking ownership of its strategy will have implications for how it seeks to involve customers and communities in its decisions and priority setting. Its strategy will of course have to meet the Objectives of the Scottish Ministers. Adapting the traditional approaches to engagement of an economic regulator - whether written consultations, working with stakeholder reference groups or negotiated settlement - will not be sufficient to discharge the requirement for Scottish Water to 'own' its strategy and be fully accountable for its performance. A clear Transformation Plan with defined milestones will be required to support effective and impactful discussion with customers and communities. 			

Scottish Water faces a substantial challenge: it will have to build and maintain high levels of trust with its customers, communities and other stakeholders

- This draft determination now sets out the financial and economic parameters that the Commission has adopted to ensure that Scottish Water can meet the Objectives of the Scottish Ministers in a manner consistent with the Ministers' Statement on the Principles of Charging.
- The Commission expects Scottish Water to take steps to put customers at the heart of its business. Customers' views should be at least as important as those of the asset managers. Appraisals should demonstrate how customers' views have been heard and included in its analysis. It should be, as set out in Scottish Water's agreement with the Customer Forum, that 'decisions should be taken as if the customer was in the room'. The Transformation Plan must give longer term visibility and confidence to customers, communities and other stakeholders.
- Looking beyond its Transformation Plan, a future Scottish Water strategy must now build on the first Strategic Plan in the following areas:
 - Prospects for charges;
 - Maximising the effectiveness of delivery;
 - Reporting on and reassuring stakeholders about performance; and
 - Involving customers and communities in decisions.

MANAGING THE REQUIRED TRANSITION IN FUNDING

Scottish Water will have to increase its annual capital expenditure significantly if it is to meet the Objectives of the Scottish Ministers

- The Commission has to ensure that Scottish Water can deliver the Objectives of the Scottish Ministers at the lowest reasonable overall cost. The Commission expects Scottish Water to evidence consistently and proactively that it is addressing the long-term challenges it faces.
- The Scottish Government has made it clear that it wants the industry to be financially sustainable for the long term. Such financial sustainability will require Scottish Water to be adequately funded to meet its future challenges such as asset replacement and achieving net zero emissions.
- The Commission notes that the Scottish Ministers have now tasked Scottish Water with facilitating a 50% increase in the generation of renewable energy from its land and

assets by 2030; and to achieve net zero emissions by 2040 – five years before the Scotland-wide net zero target. This reduces the time available to transition to the level of investment consistent with sustainable performance.

• The level of investment is, by far, the most important single driver of charges. Transitioning to this level of investment will ensure that levels of service to customers and communities will be sustained.

The Commission has considered carefully how to make resources for investment available to Scottish Water

- The Commission's view is that the needs and expectations of SEPA, DWQR and developers, as set out in the ministerial Objectives, are likely to require investment on average of around £300m a year in current prices. This is broadly in line with historic levels of enhancement investment.
- Equally, the Commission's review of Scottish Water's asset replacement costs and lifetimes has confirmed that it is robust and could well be optimistic. As such, the Commission considers that Scottish Water has to transition to the point where it can replace its assets when it is economically optimal to do so. This will take time.
- Scottish Water will need to take account of cash and noncash costs and benefits in its appraisals if it is to identify the economically optimal approach. This will involve considering the nature, extent and timing of its asset replacement.

- Such rigorous assessments could identify that in some cases accepting a higher failure risk is the optimal approach, but in other cases will identify that carbon, cash and other benefits would result from earlier action.
- To fund this additional investment in asset replacement, the Commission has had to balance:
 - The capacity and capability of Scottish Water and its supply chain to deliver the increase in investment that will be required; and
 - The impact on customers' bills.

The Commission has considered carefully how best to manage the increase in investment required

- The investment required to deliver the Scottish Ministers' Objectives requires a significant uplift in the level of investment that Scottish Water will need to make in the next regulatory control period.
- In considering how customers pay for this investment, it is important to differentiate between funding and financing. The Scottish Ministers have indicated that there will be more than a 40% increase in lending available to Scottish Water. This will greatly assist Scottish Water in transitioning charges and mitigating the impact on current customers. But it is important that, in the longer term, future revenues are able to cover the long run average need for asset replacement and refurbishment – otherwise future customers will end up paying disproportionately more.
- The Commission has considered carefully how Scottish Water can transition effectively and efficiently and with as limited an annual change in average bills as is possible. It has:
 - considered the maximum level of investment in the current period that could be delivered without impacting on the efficiency and effectiveness with which it could be delivered;

- recognised its allowance would already have to be greater on a per capita basis, after adjusting for relative efficiency, than Scottish Water has delivered previously; and, in finalising its view,
- noted that Scottish Water has had to deliver more investment per capita (than the privatised companies) because of Scotland's relatively low population density.
- The substantial increase in investment also requires, even with the greater borrowing available, real increases in household and non-household charges.
- If the Commission does not allow for this increase in investment now, then it would place at risk Scottish Water's ability to deliver resilient services and meet its obligation to achieve net zero emissions by 2040. In short, Scottish Water would not be funded to meet the Objectives of the Scottish Ministers.
- The Commission expects Scottish Water rigorously to appraise its investment choices to ensure that it invests these substantially increased resources at least as efficiently as in previous regulatory control periods.

This draft determination challenges Scottish Water to improve the efficiency and effectiveness of its capital expenditure to meet the Objectives of the Scottish Ministers

- The Commission has considered the scope for efficiency carefully and sets out its expectations below. The Commission can rely on observed evidence to estimate a reasonable efficiency target for the operating, asset maintenance and financial expenditure of Scottish Water. The Commission has taken into account the Determination of Ofwat for the privatised companies in England and Wales, and the work of Professor David Saal with Frontier Economics.
- Capital expenditure efficiency can only be assessed over a substantial portfolio of projects and over time. Its assessment will be complicated significantly by the need to include carbon in appraisals and the (potentially) resulting increase in the cash outlay that Scottish Water may have to make. As mentioned previously, it is unlikely to manifest itself in lower costs but rather in broader societal benefits such as in natural and social capital.
- The Commission welcomes and accepts Scottish Water's stated intention to seek to absorb any additional cash costs that arise from the inclusion of emissions and other public benefits in its appraisals and the adoption of alternative solutions.

- However, at the same time, the Commission recognises that, were it not to allow for the possibility of there being additional costs arising from including the costs of emissions in Scottish Water's investment decisions, it may be more difficult to deliver the extent of transformation that the Commission sees as essential to meeting the net zero emissions and asset replacement challenges.
- The Commission therefore considers that it is prudent to make a ring-fenced allowance for such additional cash costs. This allowance will only be available to Scottish Water if there is a robust appraisal that demonstrates a clear need.
- The Commission will expect Scottish Water to be able to evidence how it has confirmed that any such appraisal is consistent with the expectations of the customers and communities that it serves.

Asset replacement is becoming an increasingly important consideration, especially if Scottish Water is to achieve net zero emissions by 2040

- As explained in the Commission's asset replacement Decision Paper, a critical enabler of delivering on its emissions reduction commitment will be that Scottish Water is able to meet its asset replacement needs when it is economically efficient to do so. Otherwise, Scottish Water may have to rely on short-term interventions that would likely result in higher carbon and resource use.
- The Commission considers that it should plan on Scottish Water having high confidence that it can meet its need to replace short and medium life assets as soon as this is practically possible.
- It is important to emphasise that during the required transition, however effectively and efficiently it is managed, the overall condition of assets will deteriorate. Scottish Water will have to continue to manage the associated risks to levels of service and compliance.
- There is more replacement of short and medium life assets likely to be required in the period to 2030 than initially expected. This reflects new analysis on when investment may be required that Scottish Water has made available

in the last few weeks. It does not, however, materially impact the total need for investment. Prior to this new information becoming available, it had seemed likely that the transition in charges to 2040 (and consequently the levels of investment available) meant that the most difficult prioritisation choices would be in the 2027-2033 regulatory control period. However, this new analysis by Scottish Water is indicating that even more difficult choices will now be required in this regulatory control period too.

- There will, of course, be uncertainty about the cost that will be incurred in replacing assets. There is particular uncertainty with regard to the replacement cost and timing of long-life assets. Scottish Water recognises that it has to take steps to improve its understanding of asset lives and replacement costs.
- Professor Dr. Bryan Adey of the Institute of Construction and Infrastructure Management (IBI), ETH Zürich, is working with Scottish Water and will be reporting regularly to stakeholders on progress.

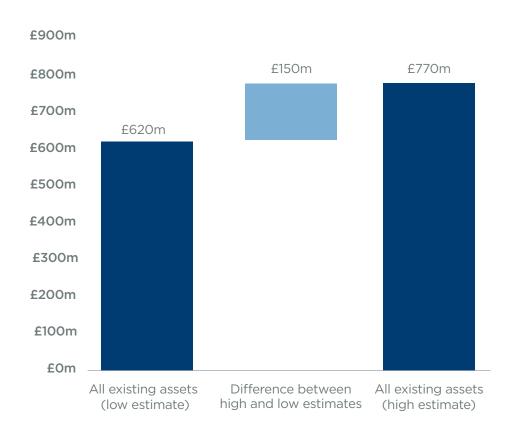
The Commission worked with Scottish Water to understand its need for investment to replace and refurbish assets

	Assum	ned cost	Assume	d lifetime	Cost per ye	ar of life	
Water Services	from £m	to £m	from years	to years	from £m/year	to £m/year	
Source							
Raw Water Pumping Station	£106	£144	31	44	£2.4	£4.7	
Raw Water Mains	£595	£845	98	132	£5	£9	
Water Treatment Works							
Civils	£1,328	£1,652	69	91	£15	£24	•
MEICA*	£1,628	£144	31	44	£2.4	£4.7	
Distribution							
Treated Water Storage	£1,812	£2,588	69	91	£20	£37	This analysis
Treated Water Pumping Stations	£173	£227	31	44	£4	£7	showed that
Water Mains > 300mm	£4,015	£5,265	102	128	£31	£52	Scottish Water
Water Mains < 300mm	£9,325	£11,575	92	118	£79	£126	
Water Meters	£89	£101	7	13	£7	£14	will need to
Waste Water Services							invest up to
Collection							£770m a year
Sewage and Sludge Plumbing Mains	£450	£590	62	88	£5	£10	by 2040 before
Combined Sewage and Emergency Outflows	£335	£415	89	111	£3	£5	-
Sewage Pumping Stations	£1,002	£1,238	31	44	£23	£40	any further
Other Sewage Structures	£200	£400	60	100	£2	£7	improvements
Cess and Septic Tanks	£240	£470	50	80	£3	£9	to levels of
Waste Water Treatment Works							
Civils	£1,653	£2,057	69	91	£18	£30	service are
MEICA*	£2,020	£2,510	19	21	£95	£133	taken into
Discharge	ļ						account.
Sludge Treatment Facilities	£165	£235	66	94	£2	£4	
Long and Short Sea Outfalls	£350	£550	80	130	£3	£7	
Business Services							1
					£35	£50	
Waste Water Services PFI Sites							
Civils	£630	£940	60	100	£6	£16	
MEICA*	£770	£1,150	15	25	£31	£77	
	£26,890	£34,970	45	57	£470	£770	

*MEICA is mechanical, electrical, instrumentation, control and automation equipment

Achieving net zero emissions will require Scottish Water to replace its assets when it is economically optimal so to do

- The Commission's Asset Replacement Decision Paper published in July 2019 explained that Scottish Water should pay particular attention to the management of its short and medium-life assets, which are so often critical to the service levels received by customers.
- Scottish Water also must make progress towards meeting its estimate for the annual allowance that it will, in future, need to commit to the replacement of its long-life assets.
- The Commission concluded that a target range for the replacement costs of assets of between £620m and £770m was reasonable. The top end of the range was in line with Scottish Water's analysis. The lower end assumed that by 2040, there would be a 50% probability that Scottish Water is adequately funded to replace its long-life assets. The Commission considered that the Asset Management Improvement Plan may narrow, but was unlikely to lower materially, the potential range of replacement costs identified so far.
- Scottish Water is now funded by this draft determination to make appropriate progress in replacing its assets such that it will be able to maintain service and achieve the net zero target no later than 2040.



Initial long-term target range for replacement

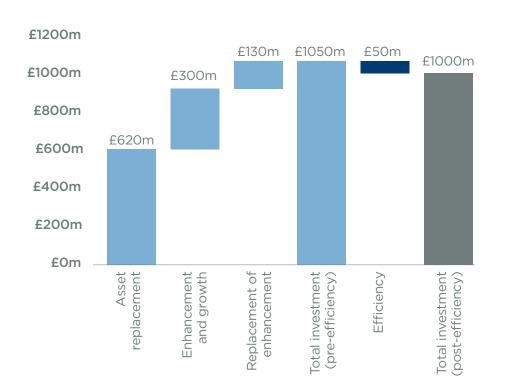
The Commission confirms that the minimum likely level of investment in 2040 will be approximately £1.0bn to £1.1bn (1)

- As explained earlier, the Commission considers that it should allow £300m a year on average over the long term for Scottish Water to meet the expectations of the quality regulators and to respond to the needs of developers.
- Taken together with the resources required for optimised replacement (£620m-£770m) and recognising the future replacement need arising from improvement investment before 2040, the minimum cash need for investment is likely to be in a range from £1.05bn to £1.25bn by 2040. This allows for £130m to £180m of additional funding for replacement of assets created as a result of enhancement investment prior to 2040. As such, the Commission is targeting a relatively wide range of £200m for the required transition. Modelling has given the Commission confidence that this range is reasonable.
- The Commission has identified scope for efficiency beyond that already included in matching the economy-wide productivity improvement included in the CPI inflation rate. The Commission considers that additional efficiency of £50m to £150m represents a reasonable expectation. This gives a target range of £1.0bn to £1.1bn for 2040. Such an allowance assumes that Scottish Water can

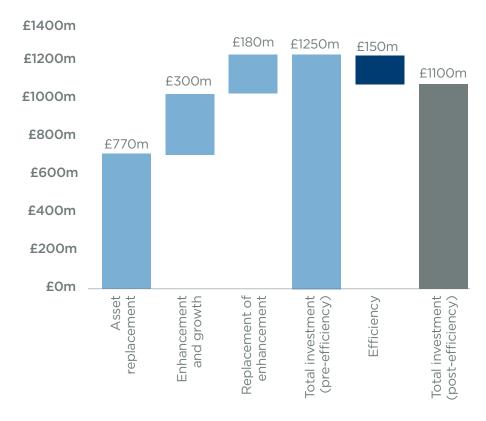
absorb the cash costs arising from any innovative interventions required to achieve net zero.

- If Scottish Water were to be unable to absorb the additional cash cost of alternative solutions (the potential result of having adopted an alternative solution with a higher cash outlay because of the cost of emissions included in appraisals), the £1.1bn would have to increase.
- The Commission has made a ring-fenced allowance of £22m per year available to address that possibility during the coming regulatory control period.

The Commission confirms that the minimum likely level of investment in 2040 will be approximately £1.0bn to £1.1bn (2)



Target total investment, enhancement and growth investment (low estimate)



Target total investment, enhancement and growth investment (high estimate)

Achieving a level of investment that will underpin net zero emissions by 2040 is dependent on Scottish Water increasing its revenue during the next four regulatory periods

£,1400m Colour Description Value to 2040 Code Investment available as a result £6.1bn of the 2021-27 price increases £1,200m Investment available as a result £5.3bn of the 2027-33 price increases Investment available as a result £4.4bn £1,000m of the 2033-39 price increases Investment available as a result £0.6bn of the 2039-40 price increases £800m £600m £400m £200m £0m 2021/22 2027/28 2033/34 2039/40

Additional investment from revenue increases during each SRC (£m; 2017/18 prices)*

*The figure shows enhancement, growth and asset replacement ('Tier 2') investment.

Even a very significant change in replacement cost estimates does not lessen the funding challenge significantly

To impact the target range by £100m (by varying replacement cost) – just half of the potential required range currently targeted by the Commission

		Replacement cost		Lifetime		Cost per year of life	
Water Services	low £m	high £m	low years	high years	from £m/year	to £m/year	
Source							
Raw Water Pumping Station	-10%	-20%			£2	£4	
Raw Water Mains	-20%	-20%			£4	£7	
Water Treatment Works							
Civils	-20%	-10%			£12	£21	
MEICA	-30%	-10%			£59	£93	
Distribution							
Treated Water Storage	-40%	-20%			£13	£29	
Treated Water Pumping Stations	-40%	-20%			£3	£6	
Water Mains > 300mm	-30%	-10%			£24	£45	
Water Mains < 300mm	-20%	-10%			£65	£112	
Water Meters	0%	-30%			£6	£11	
Waste Water Services							
Collection							
Sewage and Sludge Plumbing Mains	-50%	-30%			£3	£6	
Combined Sewage and Emergency Outflows	-40%	-20%			£2	£4	
Sewage Pumping Stations	-30%	-10%			£17	£35	
Other Sewage Structures	-50%	-30%			£1	£5	
Cess and Septic Tanks	-40%	-20%			£2	£8	
Waste Water Treatment Works							
Civils	-20%	-20%			£15	£24	
MEICA	-20%	-10%			£79	£118	
Discharge							
Sludge Treatment Facilities	-40%	-20%			£1	£3	
Long and Short Sea Outfalls	-50%	-10%			£1	£6	
Business Services							
					£35	£50	
Waste Water Services PFI Sites							
Civils	-50%	-10%			£3	£14	
MEICA	-40%	-10%			£18	£69	
					£370	£670	

There is a similar picture if the focus is on asset lives

To impact the target range by £100m (by varying average life) – again, just half of the potential required range currently targeted by the Commission

	Replacen	nent cost	Life	time	Cost per year of life	
Water Services	low £m	high £m	low years	high years	from £m/year	to £m/year
Source						
Raw Water Pumping Station			20%	20%	£2	£4
Raw Water Mains			10%	20%	£4	£8
Water Treatment Works						
Civils			10%	20%	£12	£21
MEICA			10%	30%	£62	£89
Distribution						
Treated Water Storage			10%	40%	£15	£31
Treated Water Pumping Stations			10%	40%	£3	£6
Water Mains > 300mm			10%	40%	£23	£43
Water Mains < 300mm			5%	30%	£62	£112
Water Meters			30%	10%	£6	£11
Waste Water Services						
Collection						
Sewage and Sludge Plumbing Mains			30%	50%	£3	£7
Combined Sewage and Emergency Outflows			20%	40%	£2	£4
Sewage Pumping Stations			10%	30%	£18	£34
Other Sewage Structures			20%	50%	£1	£6
Cess and Septic Tanks			10%	40%	£2	£8
Waste Water Treatment Works						
Civils			10%	30%	£14	£25
MEICA			5%	30%	£78	£113
Discharge						
Sludge Treatment Facilities	ĺ		20%	40%	£1	£3
Long and Short Sea Outfalls			20%	50%	£2	£6
Business Services						·
					£35	£50
Waste Water Services PFI Sites						
Civils			10%	50%	£4	£14
MEICA			10%	40%	£22	£70
	· · ·				£370	£670

The Commission has looked in detail at the trade off between asset life estimates and the required allowance for investment

- The £200m range (from £1,050m to £1,250m before efficiency) for the required transition in funding is very wide. Expected asset lives would have to increase by more than 50% in order for such a range not to be reasonable.
- The Commission notes that some of Scottish Water's estimated asset lives (for example, water mains) appear more likely to understate rather than overstate the asset replacement challenge.
- Factoring carbon into this investment decision may further shorten asset lives (because of the carbon implications of more frequent repair interventions).



As a further check on the analysis, the Commission reviewed carefully what other industry experts have said about asset lives

- The Commission has now reviewed the estimates of asset lives used by other organisations, including Deloitte, Atkins, JASPERS and UKWIR. Unfortunately, the latter two, despite the expectations of the Commission, remain unpublished. The Commission considers that it should make clear all material influences on its decisions.
- IPART (the economic regulator for the state of New South Wales in Australia) commissioned Atkins to review the asset lives of State Water for its 2009 price review. Using these asset lives would increase Scottish Water's total annual replacement expenditure by up to £130m (c. 15%)¹.
- The ACCC (Australian Competition and Consumer Authority) commissioned Deloitte to review State Water's assets in 2013. Using these asset lives would result in broadly similar estimates for Scottish Water's total annual replacement expenditure².
- JASPERS (Joint Assistance to Support Projects in European Regions) advises the European Investment Bank (the biggest lender to the UK water industry) on asset management, asset lives and individual projects. Their suggested asset lives are some 25% to 40% lower than that advanced by Scottish

¹Atkins (2009), 'Review of the Weighted Average Asset Life of State Water Corporation Assets', December. ²Deloitte (2013), 'Final report – asset lives for State Water's 2014 pricing proposal'. Water and reviewed by the Commission. Using these asset lives would increase Scottish Water's expected total annual asset replacement expenditure by just over £300m (c.40%).

• Work carried out by UKWIR (UK Water Industry Research) would appear to indicate that average asset lives for water mains could be around 70-80 years. Such an estimate (on its own) would increase Scottish Water's expected total annual asset replacement expenditure by around £50m to £80m a year (c.10%).

The Commission has concluded that Scottish Water did not overstate its likely need for investment

- The Commission has therefore concluded from its review of the analysis, its own sensitivity analysis and its review of other available literature – that Scottish Water's estimates of the likely level of investment that would be required to replace its assets on a sustainable basis are reasonable and prudent and, perhaps most importantly, are consistent with its obligations to achieve net zero emissions by 2040.
- Expenditure in the next several years will be much more certain on the shorter life assets that Scottish Water manages and operates. As noted earlier, there will be some difficult decisions to be made in the next regulatory control period as to the priorities for investment.
- The Commission has challenged Scottish Water to achieve demanding operational efficiencies: these efficiencies increase the amount available for capital expenditure and so keep charges as low as possible.

- The Commission accepts that Scottish Water faces a challenge to manage its assets in such a way that it can achieve the asset lives that it has used in its analysis. It sees effective investment appraisal as having an essential role to play.
- The Commission's draft determination has sought to give customers a good level of confidence that there will be appropriate resources available to Scottish Water to address asset replacement when the time comes. Such resourcing will be critical to the achievement of net zero emissions. The Commission considers this to be in the best interests of customers.
- The calculation of the allowances that the Commission is making available is set out in the next pages. The Commission plans a smooth transition from the current funding position to that which will be required in 2040. To do otherwise could lead to either current or future customers and communities being disadvantaged.

The Commission recognises that there is uncertainty about the impact on cash costs of including emissions in appraisals

- If Scottish Water is operating efficiently, valuing emissions (and other non-cash costs) in appraisals can only increase the cash cost of investment.
- The Commission welcomes Scottish Water's intent to seek to absorb the additional cash cost of alternative solutions adopted when it includes emissions in its appraisals. Absorbing these cash costs would be in addition to its cash efficiency challenge. At this stage, it is not yet possible to say whether this intention will ultimately be fully deliverable.
- There is no robust way to estimate how significant any such increase in the cash costs of including emissions in appraisals may be. Scottish Water should report proactively on the progress it is making in this area.
- It is, however, clear that were the Commission not to allow for such additional cash costs, it may inadvertently impede progress in including emissions robustly in appraisals.
- The Commission therefore considers it is prudent to allow for the possibility of an increase in additional cash costs arising from including emissions in appraisals – whilst recognising that there is a possibility that Scottish Water may prove able to absorb them.
- Such an allowance should not cover separate initiatives that Scottish Water will have to take to achieve net zero emissions, simply those where including emissions in the appraisal results in a different choice from that which would otherwise have been made.
- This allowance will be ring-fenced in each year. The Commission expects that Scottish Water will be able to evidence customer and community support for the approach that it adopted, which ultimately leads to a request for access to this ring-fenced allowance.

Scottish Water faces a substantial challenge to meet its net zero emissions target by 2040

- The Commission confirms that this draft determination represents an initial step towards meeting the future challenges of the industry. The Commission accepts that Scottish Water will have to invest some £1.0bn to £1.1bn each year (2017/18 prices) by 2040 to operate sustainably and with net zero emissions. It is not likely that Scottish Water could invest less and still achieve its target.
- To meet this challenge, Scottish Water will have to:
 - improve its asset management and appraisal of appropriate options;
 - transform as an organisation; and
 - provide confidence to its customers and to other stakeholders that it is on track to meet its long-term challenges and that it is committing customers' money as effectively and efficiently as possible.

- It is inevitable that charges will have to rise to fund the increased level of required investment. The Commission has been surprised by the reticence of Scottish Water in explaining the impact on customers' charges of its Strategic Plan or in explaining the robustness of its analysis of its potential need for investment.
- The Commission now sets out what it has determined to be an appropriate total amount of charges for the next regulatory control period. The Commission's draft determination should ensure that future generations are not left with lower resilience and levels of services, and disproportionately higher charges.

THE CALCULATION OF THE MAXIMUM AMOUNT OF CHARGES

Scottish Water's Tier 1 expenditure breaks down as follows

- Scottish Water incurs operating expenditure of around £400m.*
- Scottish Water's current interest charges before its new borrowing are £150m.
- The cost of the legacy PFI contracts is £155m.
- The allowance for reactive repair of assets is £170m.
- Other allowances (for example, developer costs) are around £30m.
- This gives a starting total of around £900m in 2017-18 prices.
- The Commission expects that Scottish Water should operate within a band of +/- £30m each year. Both the top and bottom of this band will be linked to CPI inflation but will reduce by 1% real each year. The Commission considers that a 1% compound annual efficiency target is very challenging."
- The Commission has had regard to the benefits of Ethical Business Regulation to Scottish Water in setting this very demanding target.
- This implies that a Tier 1 allowance of £870m to £930m in 2017/18 prices (pre-efficiency) is reasonable for the regulatory control period.

Operating expenditure and PFI costs are based on an average over 2016/17 to 2018/19 and are provided in 2017/18 prices.

[&]quot;Professor David Saal estimated that the UK water companies improved by no more than 1% a year in the period 1994 to 2017. Saal and Frontier Economics (September 2017), 'Productivity improvements in the water and sewerage industry in England since privatisation'.

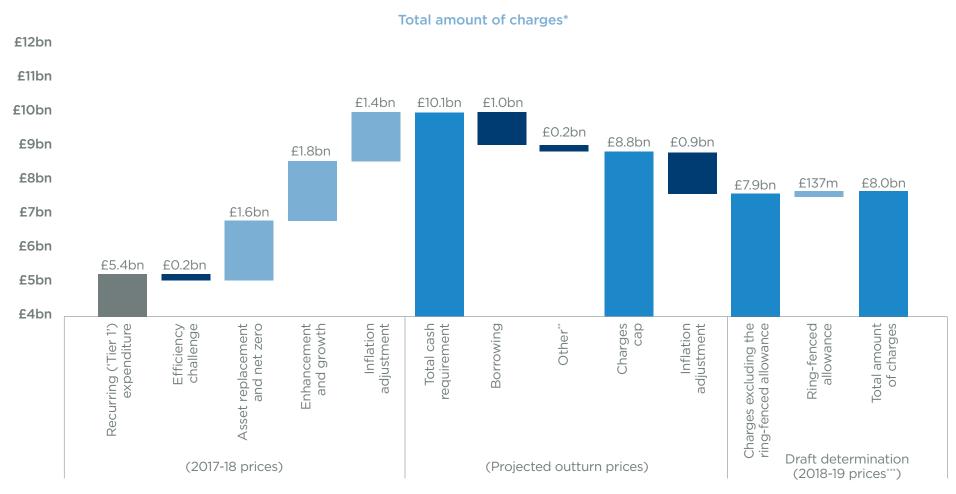
Scottish Water's capital expenditure allowance is as follows

- The allowance for enhancement and growth is, as noted previously, £300m a year in 2017-18 prices.
- The allowance for asset replacement (resilience) and transition towards net zero emissions is £1,590m for the regulatory control period in 2017-18 prices.
- This amounts to a total immediately accessible allowance for capital expenditure of £3,390m in 2017-18 prices or £3,965m in projected outturn prices.
- These investment allowances do not include reactive repair work that was previously included in investment totals but is now allowed for as Tier 1 expenditure. If included, investment over the regulatory control period would be around £980m higher (30%).
- The Commission has deducted the £1,020m of borrowing that the Scottish Government has made available. This reduces the capital expenditure immediately funded by customers to £2,945m in projected outturn prices.

- The following slide shows the capital expenditure allowance in graphical terms.
- The Commission has also allowed for a ring-fenced sum of £133m^{*}, which will be released, following the approval of the IPPG, when an appraisal clearly demonstrates that Scottish Water has incurred additional cash costs in selecting an option that has a higher risk adjusted NPV (after allowing for externalities such as carbon, natural and social capital) than the lowest cash cost option.

£133m is in 2012/18 prices. It is £137m in 2018/19 prices. On the next two pages, this allowance is presented in 2018/19 prices.

In its February 2020 Decision Paper, the Commission allowed for the same amount of cash resources to be made available (1)

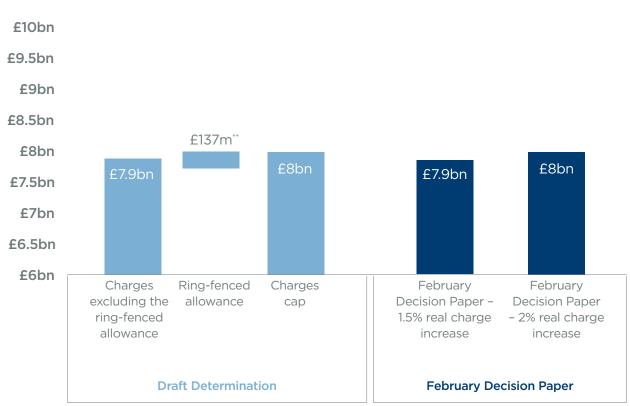


"Numbers may not add due to rounding.

"'Other' relates to the use of cash balances and income from infrastructure charges.

"Allowed for revenues are reported in 2018-19 prices for ease of comparison to reported revenues in 2018-19.

In its February 2020 Decision Paper, the Commission allowed for the same amount of cash resources to be made available (2)



Total amount of charges over the 2021-27 period (2018-19 prices)*

Allowed for total charges are reported in 2018-19 prices for ease of comparison to reported revenues in 2018-19. "This is the £133m ring-fenced allowance in 2017-18 prices updated for inflation.

The Commission therefore sets a cap on the maximum amount of charges at CPI+2% on average each year

- In the February Decision Paper, the required total amount of charges over the regulatory control period was expected to be up to £7.9bn in current prices (2018-19 prices).*
- Based on the assumptions made on the customer base and the rate of growth of business and household demand, the Commission expected that annual charge caps in a range between 1.5% and 2% above the rate of inflation would be sufficient for Scottish Water to access the revenue required to deliver Ministers' Objectives and to put it on track to meet the net zero and asset resilience challenges.
- Having carefully reviewed Scottish Water's prospects, the Commission was able to confirm that its previous analysis of Scottish Water's required expenditure during the regulatory control period remained reasonable. As such, despite the current uncertainties around the current customer base and future growth, the Commission has set a cap on the maximum amount of charges at CPI+2% for each year of the regulatory control period. Scottish Water must propose charges in its Annual Scheme of Charges that are consistent with this annual cap and/or the cumulative application of this cap.

 CPI+2% for each year, on average, translates into projected revenue of £1,434m in 2026-27 (2018-19 prices). The Commission considers that the interests of future customers are important and that Scottish Water should seek to utilise its full cap (before its ring-fenced allowance).

(2018-19 prices)*	Annual Revenue**
Reported revenue in 2018-19	£1217m
Projected revenue in 2026-27 excluding the ring-fenced allowance	£1393m
Projected revenue in 2026-27 including the full ring-fenced allowance	£1434m

Allowed for revenues in the draft determination are reported in the same price base as revenues reported in charging year 2018/19. This is based on Consumer Price Index (CPI) inflation reported in October of the previous financial year. This allows for a like-for-like comparison to Scottish Water's reported revenues of £1,217m in 2018/19 (the revenue baseline). Appendix 4 shows the calculation of allowed for revenues from projected outturn prices. "The annual revenue incorporates the Scottish Government's proposed changes to the Water Charges Reduction Scheme as set out in the Scottish Government draft Principles of Charging.

This results in a total amount of charges of £8,032m for 2021-27

- As previously explained, the Commission has allowed £133m to cover higher cash costs when the economically optimal intervention causes these to be incurred within the cap on the total amount of charges.
- The Commission therefore confirms that it is setting a cap on the total amount of charges of £8,032m (in 2018-19 prices) with £137m* ring-fenced and subject to release by IPPG. Scottish Water will have to evidence how this is in customers' interests and supported by customers.
- The Commission expects Scottish Water to achieve a revenue level of £1,393m in 2018-19 prices in 2026-27 to be able to deliver the Ministers' Objectives and be on track to deliver net zero emissions by 2040. If Scottish Water were not to raise the full amount of charges allowed for under this determination, this would be to the disadvantage of future customers. They would face higher increases in charges and less resilient services.
- The Commission therefore considers that by setting an expectation of the desired revenue at the end of the regulatory control period it has safeguarded the interests of future customers and ensured that they do not make a disproportionate contribution to the costs of transitioning to net zero.

- To be clear, this will still mean that charges for future customers will increase in real terms and that these customers will pay more proportionately than current customers.
- As regards the non-household market, the Commission proposes to set a default retail tariff for each year that reflects Scottish Water's proposals for non-household wholesale charges in its Scheme of Charges, and offers the same percentage gross margin on average to the licensed providers as exists currently.
- The Commission will work jointly with Scottish Water to undertake a comprehensive analysis of the costs to provide wholesale services. The Commission reserves its right to make, in consultation with the industry, any necessary adjustment to individual gross retail margins to ensure that charges are, and remain, consistent with the Scottish Government's Principles of Charging and competition law.

CONCLUSION

In summary, the Commission sees a need for an industry transformation to ensure that the Objectives of the Scottish Ministers are met

- The Commission has made the first move. It has reformed how it regulates Scottish Water precisely to give Scottish Water the opportunity to think long term, transform its organisation and meet the challenge of net zero emissions by 2040. Scottish Water must now take clear ownership of its performance and meet the challenges that it faces.
- By 2027, 40% of the time available to achieve net zero emissions will have elapsed. As such, making substantial progress in this next period, and being seen to do so, will be critical given the ambition of achieving net zero emissions by 2040.
- Scottish Water should want to be more than 40% of the way towards its 2040 net zero emissions by 2027, given that the last steps towards net zero are likely to be the most difficult.
- Scottish Water requires certainty in its funding if it is to take the steps necessary to meet the Objectives of the Scottish Ministers – most particularly the requirement to transform its capabilities to implement EBP and achieve net zero emissions by 2040.

- Scottish Water would likely reassure its stakeholders if it could explain clearly how its organisation and processes will look different in 2027, how such a change contributes to the achievement of its strategic objectives and what would remain to be done to achieve net zero emissions.
- It should produce a Transformation Plan with annual or bi-annual updates. Such a plan should set out how its organisation, procedures and practices will be different both in 2040 and at the end of the 2021-2027 regulatory control period, clearly outlining the resources required and key milestones.

The Commission also recognises that Scottish Water will have to prioritise its resources

- Subject to the achievement of the ministerial Objectives, and sufficient progress being evidenced on its longer term targets, Scottish Water's charges have to trade-off:
 - what Scottish Water believes it can deliver;
 - what Scottish Water considers will build and maintain the confidence of stakeholders;
 - expectations of customers and communities as to current prices and service levels; and
 - expectations of customers and communities with regard to future prices and service levels.
- Scottish Water intends to absorb the additional cash costs of emissions associated with choosing lower carbon solutions in appraisals. At this stage, it is not yet possible to say whether this intention will ultimately be fully deliverable.
- The Commission recognises that there is no robust way to estimate how significant any such cost increase may be - but were it not to allow for such additional cash

costs, it may inadvertently impede progress in including emissions robustly in appraisals. The Commission therefore considers that it would be prudent to make an allowance of £133m in 2017-18 prices over this regulatory control period for such additional cash costs. This amount is ring-fenced. Scottish Water will have to evidence its need through its appraisals and the support of the customers and communities that it serves.

 Modelling suggests that, under any scenario, Scottish Water will have to make difficult choices in prioritising its investment by the end of the next regulatory control period. In the interim, there are spend-to-save options that should allow customers to be reassured that their money is being used wisely.

The Commission has set a cap on the total amount of charges for the 2021-27 regulatory control period

- Covid-19 has caused great disruption to the lives of ordinary citizens, businesses and our economy. However, the Commission has used very long run averages of growth in housing and non-household use of water services. There is no evidence which suggests that these estimates will be materially incorrect over the long term.
- The Commission has set the maximum amount of charges to reflect the costs that Scottish Water will incur in meeting the Objectives of the Scottish Ministers; in so doing it allows for the debt that Scottish Ministers have said may be available.
- The Commission's draft determination is fully consistent with its February Decision Paper: at that time, the required aggregate revenue over the regulatory control period was expected to be in excess of £7,884m in 2018-19 prices.
- Having carefully reviewed Scottish Water's prospects, the Commission was able to confirm that its previous analysis of Scottish Water's required expenditure during the regulatory control period remained reasonable. As such, despite the current obvious economic uncertainties, the Commission considers that its cap on the total amount of charges, set at CPI+2% on average each year, is reasonable for the six-year period.
- As previously explained, the Commission has allowed £137m* in 2018-19 prices to cover higher cash costs when the economically optimal intervention causes these to be incurred.
- The Commission therefore confirms that it is setting a cap on the total amount of charges at £8,032m (in 2018-19 prices), with £137m ring-fenced and subject to release by IPPG. Scottish Water will have to evidence how this is in customers' interests and is supported by customers.

The interests of future customers are also important

- The Commission recognises that investment levels will have to increase further in future regulatory control periods. Average annual investment levels will need to reach between £1.0bn and £1.1bn by 2040 if Scottish Water is to deliver on its net zero commitment.
- For that reason, the Commission expects Scottish Water to achieve a revenue level of £1,393m in 2018-19 prices in 2026-27.
- The Commission is clear that in setting an expectation for revenue at the end of the regulatory control period, it is safeguarding the interests of future customers and ensures that they do not make a disproportionate contribution to the costs of transitioning to net zero.
- To be clear, this will still mean that charges for future customers will be higher in real terms and that these customers will pay more proportionately than current customers.

- It will be for Scottish Water to set out its proposals for tariffs in its annual Scheme of Charges submission to the Commission. The Commission expects this submission to reflect the views of customers and to be consistent with the interests of future customers, ensuring that they do not pay disproportionately more.
- The Commission welcomes the national conversation that Scottish Water has agreed with the Customer Forum and expects that the results of that conversation should start to be reflected in the Scheme of Charges that it submits for the 2021-22 financial year.
- The Commission expects Scottish Water to own its strategy and explain the benefits that will ultimately accrue to customers and communities across Scotland. It must also show clear leadership and set out clearly how it will meet the challenges that lie ahead, and the charge implications for customers and communities across Scotland.

APPENDICES

APPENDIX 1: THE SCOTTISH GOVERNMENT'S COMMISSIONING LETTER

Environment and Forestry Directorate Water Industry Division

T: 0300-244 0246 E: Bob.Irvine@gov.scot

Professor Gordon Hughes Water Industry Commission for Scotland First Floor Moray House Forthside Way Stirling FK8 1QZ



31 January 2017

Dear Gordon,

_

STRATEGIC REVIEW OF WATER CHARGES: 2021-27

The Water Industry (Scotland) Act 2002, as amended by the Water Services etc. (Scotland) Act 2005, places duties on both the Scottish Ministers (Ministers) and the Water Industry Commission (the Commission). In particular it requires Ministers to specify the time period for the Strategic Review of Charges (SRC) and the date by which a Determination must be made. In furtherance of these powers I am writing to inform you of the broad arrangements that Ministers wish to be followed in the next Strategic Review of Charges.

The Commission is to undertake a Strategic Review of Charges for the six-year period 2021 to 2027. The Final Determination of Charges should be published by the end of March 2020.

In conducting the Review, Ministers look to the Commission to work with Scottish Water, Consumer Advice Scotland and other regulators and stakeholders to build on the arrangements put in place successfully in previous regulatory periods. Those arrangements have developed and evolved over successive reviews. They have ensured stability and continuity in financing and investment planning and have created a framework within which Scottish Water has significantly improved levels of efficiency and service delivery. This has ensured that the water industry has made an essential contribution to the Government's purpose of increasing sustainable economic growth.

It will be important that these regulatory mechanisms continue to evolve. In particular Ministers invite the Commission to ensure the processes of the Review give customers an enhanced voice in the consideration of levels of charges and service profities. Ministers also recognise that the coming regulatory period will present some important challenges to Scottish Water and accordingly invite the Commission to work with Scottish Water to ensure they are properly addressed. These include most significantly:

Capital Maintenance - Over this and future regulatory periods, Scottish Water should continue the transition to a risk based approach to maintaining the overall condition

Victoria Quay, Edinburgh EH6 6QQ www.gov.scot



and performance of the assets so as to ensure no deterioration of service levels to customers over the long term. Ministers recognise the increasing importance of capital maintenance in achieving and maintaining service levels and statutory obligations in relation to drinking water quality and the environment and to reflect customer priorities that may affect longer term asset planning. This requires to be efficiently planned and delivered within successive regulatory periods. They wish the Commission to ensure that there is a stable and sustainable funding regime for this important part of the investment programme.

Resilience – Ministers recognise the progress Scottish Water has made in developing a strategic approach to identifying the work required to ensure the resilience of the network and requests that the Commission provides assurance that Scottish Water's approach is proportionate, fit for purpose over the long term and represents value for money for customers.

Strategic Capacity – Ministers wish to ensure that Scottish Water is properly financed and incentivised to provide water and sewerage assets in a manner that does not place a constraint or restriction on the achievement of their housing and economic development targets. To achieve this Ministers look to the Commission to ensure that finance is available to Scottish Water for this purpose over the regulatory period and that the funding arrangements for additional capacity (including the Reasonable Cost Contribution) remain fit for purpose and strike the correct balance of cost between existing customers, new customers and borrowing.

Private Finance Initiative funded Projects - Ministers recognise that 3 of the 9 PFI contracts mature in the period 2021-27. They have asked Scottish Water to consider the options and costs for the future operation and funding of these assets. They request that the Commission undertake a full examination of Scottish Water's approach to establishing the options and costs.

Partnership Projects – Ministers recognise the progress that Scottish Water has made in delivering improvements in partnership with other stakeholders, and in particular Local Authorities. They consider that, increasingly, delivering outcomes particularly in relation to the reduction of flood risk and compliance with bathing water standards will require Scottish Water to work closely with Local Authorities and communities. Ministers therefore request that the Commission ensures that the funding arrangements are sufficiently flexible so that Scottish Water can deliver to agreed timetables.

Supporting innovation – Ministers look to Scottish Water to contribute to inclusive and sustainable economic growth to which end they are encouraged to be innovative in their operation and with regards to capital enhancement and maintenance. In addition, Scottish Water is expected to support the Hydro Nation programme through their renewable energy and energy efficiency programmes and by working with communities and customers in Scotland and, through SWI, overseas. Ministers therefore request that the Commission ensures that the financing and funding arrangements for Scottish Water's regulated elements create appropriate incentives towards efficient delivery of these objectives.

Victoria Quay, Edinburgh EH6 6QQ www.gov.scot



APPENDIX 1: THE SCOTTISH GOVERNMENT'S COMMISSIONING LETTER

Principles of Charging:

Ministers recognise that their Principles of Charging for past regulatory periods have provided a framework which has secured significant stability and clarity for Scottish Water, its customers and stakeholders. Ministers will confirm the Principles of Charges to be applied by December 2019 following consultation.

Ministers expect that the Principles for the period 2021-27 will be broadly consistent with previous versions which may therefore be useful in guiding the initial stages of the review.

Ministers will consider the advice from the Long-Term charging group on the modernisation of water charges so as to ensure that these continue to deliver the principles of cost reflectivity and cost recovery. As in previous periods, the Principles of Charging will indicate the level of finance they are willing to make available in support of the investment programme. Their present expectation is that this will be lower than in previous periods.

Statement of Objectives

Ministers will present their draft objectives in April 2018 and finalise their objectives in December 2019.

Ministers expect that the objectives for the period 2021-27 will be broadly consistent with those set in 2014. They expect that the programme of outputs identified to achieve these objectives should reflect the best possible value for money in terms of the improvement in outcome achieved for the investment made. They will look to the Q&S4 Project Management Team, and the Output Monitoring Group, for advice on this matter and to develop the outputs necessary to secure this aim.

The current objectives recognise the importance of the security of Scottish Water's physical assets, the evolution of new threats to public services requires also that, relevant security standards in relation, IT systems and personnel, as advised by Scottish Government Resilient Essential Services, should be met.

Average annual expenditure on the investment programme should remain of a size that allows efficient delivery.

Ministers expect the Q&S4 Project Management Team, with advice from the Output Monitoring Group, to develop the outputs necessary to deliver these objectives. Consistent with Ministers' policy of continuity of investment, draft objectives for the subsequent period 2027-33 should also be developed. As for previous investment periods, these must demonstrate how they will contribute to the Government's purpose of increasing inclusive and sustainable economic growth. Scottish Water will also be required to continue to meet their statutory obligations to respond to future climate change making necessary climate change related adaptations to operational practice and assets and should ensure systematic monitoring of carbon emissions.

Timetable

In agreeing the timetable for this SRC, Ministers ask that all parties ensure that, in keeping with good practice, sufficient time is made available to ensure appropriate consultation with the wider stakeholder group, communication with customers and for the Government's own public engagement.

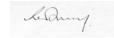
Victoria Quay, Edinburgh EH6 6QQ www.gov.scot



Ministers look forward to receiving regular reports on the progress of the strategic review.

I am copying this letter to the Chair of Scottish Water, the Chair of Scottish Environment Protection Agency, the Drinking Water Quality Regulator for Scotland, the Chair of Consumer Advice Scotland and the Chair of the Competition Commission.

Yours sincerely

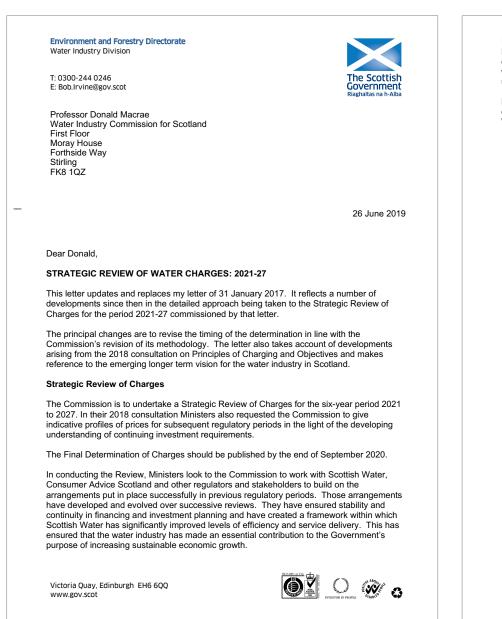


Bob Irvine

Victoria Quay, Edinburgh EH6 6QQ www.gov.scot



APPENDIX 2: THE SCOTTISH GOVERNMENT'S REVISED COMMISSIONING LETTER



It will be important that these regulatory mechanisms continue to evolve. In particular Ministers invite the Commission to ensure the processes of the Review give customers an enhanced voice in the consideration of levels of charges and service priorities. Ministers also wish for a wide engagement on the final determination of charges to ensure it is widely understood in terms of the investment and services it intends to support.

Ministers also recognise that the coming regulatory period will present some important challenges to Scottish Water and accordingly invite the Commission to work with Scottish Water to ensure they are properly addressed. These include most significantly:

Capital Maintenance - Over this and future regulatory periods, Scottish Water should continue the transition to a risk based approach to maintaining the overall condition and performance of its assets so as to ensure no deterioration of service levels to customers over the long term. Ministers recognise the increasing importance of capital maintenance in achieving and maintaining service levels and statutory obligations in relation to drinking water quality and the environment and to reflect customer priorities that may affect longer term asset planning. This requires to be efficiently planned and delivered over successive regulatory periods. They wish the Commission to ensure that there is a stable and sustainable funding regime for this important part of the investment programme.

Resilience – Ministers recognise the progress Scottish Water has made in developing a strategic approach to identifying the work required to ensure the resilience of the network and requests that the Commission provides assurance that Scottish Water's approach is proportionate, fit for purpose over the long term and represents value for money for customers.

Strategic Capacity – Ministers wish to ensure that Scottish Water is properly financed and incentivised to provide water and sewerage assets in a manner that does not place a constraint or restriction on the achievement of their housing and economic development targets. To achieve this Ministers look to the Commission to ensure that finance is available to Scottish Water for this purpose over the regulatory period and that the funding arrangements for additional capacity (including the Reasonable Cost Contribution) remain fit for purpose and strike the correct balance of cost between existing customers, new customers and borrowing.

Private Finance Initiative funded Projects - Ministers recognise that 3 of the 9 PFI contracts mature in the period 2021-27. They have asked Scottish Water to consider the options and costs for the future operation and funding of these assets. They request that the Commission undertake a full examination of Scottish Water's approach to establishing the options and costs.

Partnership Projects – Ministers recognise the progress that Scottish Water has made in delivering improvements in partnership with other stakeholders, and in particular Local Authorities. They consider that, increasingly, delivering outcomes particularly in relation to the reduction of flood risk and compliance with bathing water standards will require Scottish Water to work closely with Local Authorities and communities. Ministers therefore request that the Commission ensures that the funding arrangements are sufficiently flexible so that Scottish Water can deliver to agreed timetables.

Supporting innovation – Ministers look to Scottish Water to contribute to inclusive and sustainable economic growth to which end they are encouraged to be innovative

Victoria Quay, Edinburgh EH6 6QQ www.gov.scot



APPENDIX 2: THE SCOTTISH GOVERNMENT'S REVISED COMMISSIONING LETTER

in their operation and with regards to capital enhancement and maintenance. In addition, Scottish Water is expected to support the Hydro Nation programme through their renewable energy and energy efficiency programmes and by working with communities and customers in Scotland and, through SWI, overseas. Ministers therefore request that the Commission ensures that the financing and funding arrangements for Scottish Water's regulated elements create appropriate incentives towards efficient delivery of these objectives.

Principles of Charging:

Ministers recognise that their Principles of Charging for previous regulatory periods have provided a framework which has secured significant stability and clarity for Scottish Water, its customers and stakeholders. Ministers have consulted on Draft Principles of Charging for 2021-27 and will confirm the final Principles of Charges to be applied no later than June 2020.

Ministers would wish the Commission to give priority to measures that ensure a smooth transition of customer pricing and investment activity during the final year of 2015-2021 period and the following period

Ministers will consider the advice from the Long-Term charging group on the modernisation of water charges so as to ensure that these continue to deliver the principles of cost reflectivity and cost recovery. As in previous periods, the Principles of Charging will indicate the level of finance they are willing to make available in support of the investment programme.

Statement of Objectives

Ministers consulted on their draft objectives in April 2018 and will finalise their objectives no later than June 2020.

In the light of that consultation Ministers expect that the objectives for the period 2021-27 will be broadly consistent with those set in 2014. In the time since that consultation the importance and relevance of these objectives have become clear not only through the work of the Commission, Scottish Water and its stakeholders, but the concerns of the wider stakeholder group and customers generally in relation to the challenges of climate change.

Ministers will look to the water industry to develop and work towards a coherent vision describing the longer term nature of the industry and what it can achieve. The Commission has played an important part in the development of that vision and should continue to do so.

The current objectives recognise the importance of the security of Scottish Water's physical assets, the evolution of new threats to public services requires also that, relevant security standards in relation, IT systems and personnel, as advised by Scottish Government Resilient Essential Services, should be met. They also require a fully appropriate response by Scottish Water to mitigate and adapt to the challenges of climate change.

Ministers expect that the programme of outputs identified to achieve these objectives should reflect the best possible value for money in terms of the improvement in outcome achieved for the investment made. Average annual expenditure on the investment programme should remain of a size that allows efficient delivery whilst facing up properly to the challenges the industry faces.

Victoria Quay, Edinburgh EH6 6QQ www.gov.scot



Ministers expect that, with advice from the Outputs Monitoring Group, a suitable governance structure be developed, to identify the outputs necessary to deliver these objectives. Consistent with Ministers' policy of continuity of investment, and the development of the longer term vision for the water industry, draft objectives for the subsequent period 2027-33 and beyond should also be developed. As for previous investment periods, these must demonstrate how they will contribute to the Government's purpose of increasing inclusive and sustainable economic growth and make progress towards delivering the longer term vision. Scottish Water will also be required to continue to meet and where appropriate exceed their statutory obligations to respond to climate change making necessary climate change related adaptations to operational practice and assets and should ensure systematic monitoring and reduction of carbon emissions.

Timetable

In agreeing the timetable for this SRC, Ministers ask that all parties ensure that, in keeping with good practice, sufficient time is made available to ensure appropriate consultation with the wider stakeholder group, communication with customers and for the Government's own public engagement.

Ministers look forward to receiving regular reports on the progress of the strategic review.

I am copying this letter to the Chair of Scottish Water, the Chair of Scottish Environment Protection Agency, the Drinking Water Quality Regulator for Scotland, the Chair of Citizens Advice Scotland and the Chair of the Competition Commission.

Yours sincerely

Bob Irvine

Victoria Quay, Edinburgh EH6 6QQ www.gov.scot



APPENDIX 3: SRC 21-27 - CONFIRMATION OF REVISED TIMETABLE



	Water and wastewater investment	Water and wastewater connected properties (average)	Investment per connected property
rice base; units	2019/20 prices; £m	'000 properties	2019/20 prices; £
eference	Annual Return G Tables	Annual Return A Tables	Calculated
002-03	£581m	2,311	£251
003-04	£586m	2,425	£242
004-05	£765m	2,422	£316
005-06	£952m	2,410	£395
006-07	£600m	2,431	£247
007-08	£871m	2,449	£356
008-09	£966m	2,498	£387
009-10	£874m	2,509	£348
010-11	£565m	2,510	£225
011-12	£565m	2,521	£224
012-13	£579m	2,547	£227
013-14	£549m	2,545	£216
014-15	£532m	2,552	£209
015-16	£517m	2,553	£203
016-17	£687m	2,587	£266
017-18	£684m	2,604	£263
018-19	£677m	2,626	£258
019-20*	£665m	2,651	£250

Total	£12,214m	-	-
Average	£679m	2508	£271

*At the time of preparing the draft, 2019/20 numbers are provisional and subject to the Annual Return audit process.

The Commission's view is that the needs and expectations of SEPA, DWQR and developers, as set out in the ministerial Objectives, will require investment on average of around £300m a year.

	Enhancement and growth investment
Price base; units	2017/18 prices; £m
Reference	Annual Return G Tables
2002-03	£322m
2003-04	£317m
2004-05	£388m
2005-06	£519m
2006-07	£315m
2007-08	£434m
2008-09	£553m
2009-10	£588m
2010-11	£286m
2011-12	£283m
2012-13	£242m
2013-14	£211m
2014-15	£218m
2015-16	£214m
2016-17	£299m
2017-18	£252m
2018-19	£270m
2019-20	£302m

Total	£6013m
Annual average (2017/18 prices)	£334m
Annual expenditure on replacing assets during implementation of incremental enhancement projects (2017/18 prices)*	£80m
Annual average enhancement and growth investment (2017/18 prices)	£254m
Additional enhancement investment going forward to meet Ministers' Objectives*	£50m
Enhancement and growth investment from 2021 onwards	c.£300m

*WICS (2019), '2019 Decision Paper SRC 2021-27: Asset Replacement', July, p.15.

Maximum amount of charges for the 2021-2027 regulatory control period

Excluding the ring- fenced allowance	Price base	2018-19	2019-20	2020-21	2021-22*	2022-23	2023-24	2024-25	2025-26	2026-27	Total over 2021-27
Charges	Projected outturn	£1217m			£1315m	£1373m	£1433m	£1496m	£1562m	£1631m	
CPI inflation**	CPI reported in October of the preceding financial year		2.40%	1.50%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
CPI inflation index	Projected outturn to 2018/19 prices		1.024	1.039	1.060	1.081	1.103	1.125	1.148	1.170	
Revenue in real terms	2018/19 prices	£1217m			£1241m	£1270m	£1300m	£1330m	£1361m	£1393m	£7895m

Including the ring- fenced allowance	Price base	2018-19	2019-20	2020-21	2021-22*	2022-23	2023-24	2024-25	2025-26	2026-27	Total over 2021-27
Charges	Projected outturn	£1217m			£1322m	£1387m	£1454m	£1526m	£1600m	£1678m	
CPI inflation**	CPI reported in October of the preceding financial year		2.40%	1.50%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
CPI inflation index	Projected outturn to 2018/19 prices		1.024	1.039	1.060	1.081	1.103	1.125	1.148	1.170	
Charges in real terms	2018/19 prices	£1217m			£1247m	£1282m	£1319m	£1356m	£1394m	£1434m	£8032m

"The allowed for revenue in 2021/22 incorporates the Scottish Government's proposed changes to the Water Charges Reduction Scheme as set out in the Scottish Government draft Principles of Charging. "Due to the timing of the annual charges scheme, CPI inflation in each charging year is based on reported inflation in October of the preceding financial year. For example, CPI inflation of 2.4% in 2019/20 is the inflation reported by the Office of National Statistics in October 2018.

The inflation assumptions used in this draft determination

	Description	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Inflation applied to costs	RPI financial year average until 2021; CPI financial year average thereafter	3.1%*	2.6%*	2.8%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Inflation applied to revenues	CPI reported in October of the preceding financial year		2.4%*	1.5%*	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%

"Reported actuals

CO-OPERATION AGREEMENT

among

THE WATER INDUSTRY COMMISSION FOR SCOTLAND, a body corporate established under section 1 of the Water Industry (Scotland) Act 2002 (the "2002 Act") and having its principal office at First Floor, Moray House, Forthside Way, Stirling FK8 1QZ (the "Commission")

SCOTTISH WATER, a body corporate established under section 20 of the 2002 Act and having its head office at 6 Castle Drive, Dunfermline, Fife KY11 8GG ("Scottish Water"); and

CITIZENS ADVICE SCOTLAND, the operating name of the Scottish Association of Citizens Advice Bureaux, a company limited by guarantee and a registered charity, and designated as a consumer advocacy body under section 1 of the Consumers, Estate Agents and Redress Act 2007 having its principal office at Spectrum House, 2 Powderhall Road, Edinburgh EH7 4GB ("CAS"), including its internal Consumer Futures Unit ("CFU") and any reference to CAS shall include its CFU and vice versa.

Whereas

- (1) The Commission has the function under Part 3 of the 2002 Act of determining maximum amounts of charges for services provided by Scottish Water by such time and in respect of such period (the "Review Period") as the Scottish Ministers may specify (the process by which the Commission discharges this function being known as the "Strategic Review of Charges" or "SRC").
- (2) The Commission is required to exercise this function for the purpose of ensuring that (a) Scottish Water's income from charges, taken together with certain other resources, is not less than sufficient to meet the expenditure it requires for the effective exercise of its core functions (which is taken to be the case where Scottish Water makes such use of its resources that it achieves the objectives set for it by the Scottish Ministers (the "Ministerial Objectives") at the lowest reasonable overall cost); and (b) so far as is consistent with (a), any charges scheme made by Scottish Water gives effect to the statement of policy regarding charges issued by the Scottish Ministers in respect of the Review Period (the "Statement of Policy").
- (3) The Scottish Ministers must, before setting the Ministerial Objectives or issuing the Statement of Policy, consult CAS. The Commission must, before determining maximum amounts of charges, invite representations on a draft of its determination from the Scottish Ministers, Scottish Water and CAS.
- (4) The CFU performs an important role in inputting to the Scottish Government's "Quality and Standards" exercise which informs the setting of the Ministerial Objectives and will be conducting research (and coordinating with Scottish Water) in that context (such research being known as the "CFU Research").
- (5) A customer forum was established further to a previous co-operation agreement between the Commission, Scottish Water and the National Consumer Council and supported the representation of customer views in the development of the Strategic Review of Charges in respect of the 2015 - 2021 Review Period (the "SRC 2015-21").
- (6) The Commission is expecting to receive a letter from the Scottish Ministers requesting it to undertake a Strategic Review of Charges in respect of the 2021 - 2027 Review Period (the "SRC 2021-27") and to build upon the successful involvement of customers throughout the SRC 2015-21.
- (7) The Parties have held a series of discussions in light of the anticipated request from the Minister and have concluded, building on the lessons from the previous customer forum and having regard to the requirements of the 2002 Act, that they should establish a second customer forum to play a formal role in facilitating effective customer engagement and acting as a conduit for customer views in the context of the SRC 2021-27 (the "Forum").

(8) The Commission proposes, in an iterative and progressively more focused process, to issue to the Forum a series of decisions (the "Commission Decisions") as to the range of issues and range of costs relevant to the determination of lowest reasonable overall cost and establishing a framework within which the customer engagement described above should take place.

2

- (9) The Parties envisage that the Forum will seek to agree with Scottish Water a business plan for delivery by Scottish Water in 2021-27 which is fully consistent with the Ministerial Objectives, the Statement of Policy and the Commission Decisions (a business plan agreed on such a basis being known as an "Agreed Business Plan").
- (10) The Commission is minded (subject to the provisions of this Agreement) that the draft determination made by it in respect of the 2021 - 2027 Review Period should reflect fully and completely the terms of a draft business plan agreed by the Forum and Scottish Water which would (if adopted) amount to an Agreed Business Plan (a "Draft Agreed Business Plan").
- (11) Assuming that the draft determination made by the Commission is made in the circumstances contemplated above, the Parties envisage that, following the receipt of representations on the draft determination, the Forum and Scottish Water will review the Draft Agreed Business Plan in light of such further Commission Decision(s) issued to the Forum in light of those representations.
- (12) The Commission is minded (subject to the provisions of this Agreement) that the final determination made by it in respect of the 2021 2027 Review Period should reflect fully and completely the terms of a business plan agreed by the Forum and Scottish Water in light of the review mentioned above and amounting to an Agreed Business Plan.

Now it is agreed as follows

1. Definitions and interpretation

- 1.1 Words and expressions defined in the 2002 Act shall, unless otherwise provided, have the same meaning when used in this Agreement.
- 1.2 The capitalised words and expressions shown in column 1 below shall have the meaning shown in column 2 below.

Column 1	Column 2					
Agreed Business Plan	has the meaning ascribed to it by recital (9) of the preamble to this Agreement.					
Business Plan Agreement Committee or Committee	has the meaning ascribed to it by clause 4.1 of this Agreement.					
CFU Research	has the meaning ascribed to it by recital (4) of the preamble to this Agreement.					
Commission Decisions	has the meaning ascribed to it by recital (8) of the preamble to this Agreement (and "Commission Decision" shall be construed accordingly); a non-exhaustive list of proposed Commission Decisions is set out in part 1 of the Schedule to this Agreement.					
Draft Agreed Business Plan	has the meaning ascribed to it by recital (10) of the preamble to this Agreement.					
Financial Year	a financial year of the Commission.					
Forum	has the meaning ascribed to it by recital (7) of the preamble to this Agreement.					

	3
Ministerial Objectives	has the meaning ascribed to it by recital (2) of the preamble to this Agreement.
Parties	the Commission, Scottish Water and CAS.
Review Period	has the meaning ascribed to it by recital (1) of the preamble to this Agreement.
Statement of Policy	has the meaning ascribed to it by recital (2) of the preamble to this Agreement.
Strategic Review of Charges or SRC	has the meaning ascribed to it by recital (1) of the preamble to this Agreement.
SRC 2015-21	has the meaning ascribed to it by recital (5) of the preamble to this Agreement.
SRC 2021-27	has the meaning ascribed to it by recital (6) of the preamble to this Agreement.
SRC 2021-27 Completion Date	means the date which is the later of (i) expiry of the period during which Scottish Water may request the Commission to make a reference to the Competition and Markets Authority in respect of the determination made by it at the conclusion of the SRC 2021-27 process; and (ii) in the event that such a request is made, the date upon which the Competition and Markets Authority reports to the Commission on the reference made by it.
SRC Research Programme	has the meaning ascribed to it by clause 2.1.1 of this Agreement.

2. Aims and principles

- 2.1 Subject to the remaining provisions of this clause 2, the purpose of the Forum is to play a key role in the SRC 2021-27 process by:
 - 2.1.1 working with Scottish Water (subject to clause 6.1) on a programme of high quality, behavioural, quantitative and qualitative research within the context of the SRC to establish customers' priorities for service level improvement and expectations in terms of the level of charges (the 'SRC Research Programme');
 - 2.1.2 ensuring that the SRC Research Programme includes a meaningful level of engagement from communities (in both a geographic sense and in the sense of persons sharing particular interests);
 - 2.1.3 understanding and representing to the Commission and to Scottish Water the priorities and preferences of customers (as a whole) in the SRC 2021-27 process as identified through the SRC Research Programme; and
 - 2.1.4 seeking to secure, through its participation in the SRC 2021-27 process, the most appropriate outcome for customers (as a whole, both now and into the future) based on those priorities and preferences, in particular by seeking to establish an Agreed Business Plan;

in a manner consistent with the provisions of this Agreement.

- 2.2 Scottish Water, the Forum and CAS will put in place operational arrangements to ensure effective co-ordination of their research programmes in the context of the SRC 2021-27 process.
- 2.3 Following such consultation with Scottish Water, CAS and the Scottish Ministers as it considers appropriate, the Commission shall provide the Forum with a letter (which may be amended or supplemented from time to time), such letter (as amended or supplemented) being referred to as the "Commissioning Letter") dealing with (i) the process and timescale envisaged in relation to the SRC 2021-27, (ii) the arrangements to be made for dialogue between the Commission and the Forum in the context of the SRC 2021-27 and (iii) the steps to be taken by the Commission in assessing whether a business plan (or Draft Agreed)

Business plan (if adopted)) would represent an Agreed Business Plan and the Forum will perform its role in line with that Commissioning Letter.

4 The Forum may undertake such activities as it considers (having regard to the need to keep within its agreed budget) to be necessary or desirable in order to perform its role under this agreement and shall, where appropriate, consult with Scottish Water and the industry quality regulators, SEPA and DWQR, as to such matters as:

4

- 2.4.1 in the context of the SRC 2015-21, what Scottish Water has done to deliver the business plan agreed between the previous customer forum and Scottish Water; and
- 2.4.2 in the context of the SRC 2021-27, how Scottish Water has decided what needs to be done in order to meet the Ministerial Objectives and the associated costs of this activity and also to any customer priorities and preferences for expenditure beyond that which is required to meet those objectives (and any associated cost challenge); and

the Forum may request information from the Commission for the purposes of such activities and may provide comments to the Commission on information received.

- 2.5 The members of the Forum will be accountable to the Parties for ensuring that they act at all times in a manner consistent with the aims and principles set out above and otherwise in accordance with this Agreement.
- 2.6 The Parties undertake to do all such things as may be necessary or desirable for the purpose of giving effect to this Agreement and shall cooperate in good faith with each other and with the representatives of the Forum with a view to securing the aims and principles set out above.

3. Constitution and governance

- 3.1 The Forum is not intended to be constituted as a separate legal entity and will consist of a panel of nine Ordinary Members and a Chair each of whom will be appointed jointly by the Parties.
- 3.2 The procedure and terms governing the appointment of members is set out in Part 2 of the Schedule. The members of the Forum will be selected in line with appropriate recruitment provisions and with due consideration to the principles of diversity and equality of opportunity, as outlined at Part 2 of the Schedule
- 3.3 The members of the Forum will be required to act within the terms of clause 2. The Forum will have discretion as to how to frame the discussions between the Business Plan Agreement Committee, as outlined at clause 4 below, and Scottish Water but with reference to the views and opinions obtained from the public generally in consumer research. It is not expected to be involved in policy decisions nor is it intended to be a voice for the community generally in relation to matters outwith the purpose outlined in clause 2. The Parties will ensure that all members are fully aware of the time commitments required of Forum membership.
- 3.4 While respecting the Forum's independence:
 - 3.4.1 the Forum will provide quarterly reports (i) to the Parties on its activities over the relevant period and (ii) to the Commission and the CFU on its current view on progress towards the agreement of an Agreed Business Plan within the timescale envisaged by the Commissioning Letter;
 - 3.4.2 there will be an annual meeting between the Forum, CAS and the Commission; and
 - 3.4.3 the Commission and the CFU will also meet the Chair and (if appointed) Vice Chair of the Forum every six months.
- 3.5 The accountable body for the Forum is the Commission. The operational activities of the Forum must be consistent with the governance and remit of the Commission as the accountable body. This will not detract from the Forum's independent role with regard to the SRC 2021-27 process. In particular, the Forum will not have power to acquire or lease any property, borrow any sums, engage any employee or enter into any legally binding contracts or other arrangements, or undertake any other operational activity that is not consistent with the Commission's administrative policies or procedures. The Forum will provide quarterly reports on expenditure to the Commission.

- 3.6 Resources will be provided to the Forum by the Parties, as set out in clause 5
- 3.7 If, notwithstanding the research programme described at clause 2.1.1 above, the Forum determines that additional research is required, the Forum may carry out such additional research and the costs of such research shall (unless otherwise agreed by the Parties) be paid from, and within the parameters of, the previously agreed Forum Budget.

5

3.8 No member of the Forum shall incur any third party expenses without having a prior, written delegation from the Chair. All such approved third party expenses shall be subject to the Commission's finance and procurement rules and reimbursed from the Forum Budget administered by the Commission. No member of the Forum shall be entitled to be reimbursed any third party expenses which have not had the prior approval of the Chair or which would exceed the balance of funds within the Forum Budget.

4. Business Plan Agreement Committee

- 4.1 The Forum will form a committee of its members to undertake the role of engaging directly with Scottish Water as regards the establishment of an Agreed Business Plan (the "Business Plan Agreement Committee" or "Committee"). The Committee will be established and will operate in accordance with the provisions of Part 3 of the Schedule.
- 4.2 After considering and discussing the customer research and the scope of the matters set out in clause 3 and the Commissioning Letter, together with the Commission Decisions, the Forum will provide the Committee with an initial remit for the engagement with Scottish Water. The Forum may amend or expand the remit at any time. In addition, the Forum may give specific directions to the Committee, which must be included in the package agreed with Scottish Water.
- 4.3 If the Committee agrees a position with Scottish Water, which is within the remit given to the Committee by the Forum, then the Forum will automatically approve the agreed position.
- 4.4 If the Committee is unable to agree a position that falls within the remit given to it by the Forum, it must go back to the Forum for approval. If the Forum agrees a position then the Committee must adopt that position in its discussions with Scottish Water.
- 4.5 If agreement is reached with Scottish Water, the Forum and Scottish Water will prepare a joint report to the Commission setting out the agreed terms.
- 4.6 If agreement cannot be reached with Scottish Water, the Forum and Scottish Water will endeavour to submit a joint report to the Commission setting out the points in issue and reasons for the disagreement, failing which the Forum and Scottish Water shall be required to submit separate reports to the Commission setting out their view of the points in issue and the reasons for disagreement.

5. Resources

- 5.1 The Parties agree that they shall meet the financial liabilities of the Forum and provide additional resources to the Forum as follows:
 - 5.1.1 The Commission shall provide the Forum with:
 - i) a budget of £250,000 for Financial Year 2017-18, £250,000 for Financial Year 2018-19, £375,000 for Financial Year 2019-20 and £250,000 for Financial Year 2020-21 to meet the expenses of the Forum (the "Forum Budget") to allocated and paid out of the Commission's agreed annual levy, provided that the Commission and Forum may (without increasing the aggregate amount payable) agree on a different annual budget profile to that set out above; and
 - technical assistance, upon request by the Forum, including any resources necessary to analyse information provided by Scottish Water.
 - 5.1.2 The Commission shall:
 - provide the Forum with payroll and other banking and accounting functions (including, without limitation, the preparation of monthly management accounts and audited annual accounts);
 - ensure that such Forum Budget is managed in accordance with the principles of regularity, propriety and value for money observed by the Commission in respect of its own affairs;

- provide corporate services support in terms of facilities management, information technology (IT), human resources (HR) and senior management;
- (iv) act as a contracting entity for any external resources that the Forum may have to engage such as consultancy services and customer research; and
- (v) provide office accommodation, access to meeting room facilities and general administrative support services.
- 5.1.3 Scottish Water shall:
 - provide the Forum with access to all existing and ongoing customer research required for the purpose described at clause 2.1 above;
 - and both Scottish Water and CAS shall provide the Forum with:
 - (ii) technical assistance upon request by the Forum; and

6

- (iii) meeting rooms on request by the Forum, at no additional cost to the Forum.
- 5.2 For the avoidance of doubt, direct costs incurred by the Forum shall be covered by the Forum Budget and will include staff costs, programme costs and running costs.
- 5.3 On termination of this Agreement and the disbanding of the Forum, the balance of the Forum Budget remaining after payment of all liabilities properly incurred by the Forum, if any, shall be retained by the Commission.
- 5.4 Other than the Forum Budget to be contributed annually by the Commission, the Parties shall have no obligation to contribute to the costs or liabilities of the Forum. The liability of the Parties to the members of the Forum shall be limited to the funds representing the balance of the Forum Budget held by the Commission.

6. OECD peer review and advisory input

- 6.1 The Parties agree that (i) there shall be an independent review by the OECD of the activities of the Forum and (ii) the OECD shall also provide the Forum and the Parties with advisory input on the behavioural research to be carried out pursuant to clause 2.1.1 and shall co-operate with the Commission to specify such further details of that review and input as may be required.
- 6.2 The Parties note that, in order to provide sufficient funds within the Forum Budget needed to cover the activities described above, the Commission may reduce repayments which would otherwise have been made to Scottish Water in respect of annual levy income.

7. Review of terms

7.1 The Parties agree to review the terms of this Agreement as soon as practicable following the SRC 2021-27 Completion Date. In addition, the Parties agree to review this Agreement in good time before any Party for any reason ceases to exist in order to ensure the continued operation of the Forum.

8. Termination and transfer

- 8.1 Subject to clauses 8.2 and 8.3, the Forum shall remain in place for at least such period as is required to facilitate effective customer engagement in the context of the SRC 2021-27 process and to complete any further role assigned to it by the Parties under this agreement. Thereafter the Parties may disband the Forum and may terminate this Agreement, other than clauses 2.6, 5.2, 5.3, 13, 14 and 15 which shall survive such termination.
- 8.2 The Parties shall co-operate to ensure that the activities of the Forum are effectively wound down. This shall include, but not be limited to, ensuring that all information, analysis and any records generated or held by the Forum are retained and accessible to the Parties and that any reviews of the work of the Forum can be completed effectively.
- 8.3 In the event a statutory body is established which is considered suitable for the purpose of assuming the functions of the Forum under this Agreement, the Parties shall co-operate to ensure the orderly transfer of those functions to that body, the winding down of the Forum and the termination of this Agreement.

9. Announcements

9.1 Save as otherwise set out in this Agreement, no announcement, circular, advertisement or other publicity in connection with this Agreement, its subject matter or any ancillary matter shall be made or issued by or on behalf of any Party (save as required by law or any governmental or regulatory organisation) without the prior written consent of the other Parties (such consent not to be unreasonably withheld or delayed).

7

10. Notices

- 10.1 Any notice, demand or communication in connection with this Agreement shall be in writing and delivered personally or sent by pre-paid first class post (or airmail if overseas) or by fax to the recipient's address as set out at the beginning of this Agreement or to any other address which the recipient has notified in writing to the sender not less than 7 days before the notice is despatched.
- 10.2 The notice, demand or communication is deemed given:
 - 10.2.1 if delivered personally, at the time of delivery to the address provided for in this Agreement; or
 - 10.2.2 if sent by pre-paid first class post, on the second business day after posting it; or

provided that, if it is delivered personally or sent by fax on a day which is not a business day or after 4pm on any business day, it shall instead be deemed to have been given or made on the next business day.

11. Entire agreement

11.1 This Agreement and the documents referred to in it, constitute the entire agreement between the Parties and supersede and replace any previous agreement, understanding, undertaking or arrangement of any nature between the Parties relating to the subject matter of this Agreement, save that nothing in this Agreement shall limit or exclude any liability for fraud.

12. Variation

- 12.1 Subject to clause 12.2, this Agreement may only be varied by an agreement in writing signed by or on behalf of each party to this Agreement.
- 12.2 If a Party ceases to exist the consent of that Party shall not be required for any variation of this Agreement.

13. Legal effect

- 13.1 Nothing contained in this Agreement, and no action taken by the Parties pursuant to this Agreement, shall be deemed to constitute a relationship between the Parties of partnership, joint venture, principal and agent or employer and employee. None of the Parties has, nor may it represent that it has, any authority to act or make any commitments on the other Parties' behalf or otherwise bind the other Parties in any way.
- 13.2 Nothing in this Agreement shall be construed as limiting or restricting the ability of any of the Parties to exercise any powers or functions conferred on it by or under any enactment, or to perform any duty (including a duty to exercise discretion) imposed on it in relation to any such power or function.

14. Governing law

14.1 The formation, existence, construction, performance, validity and all aspects whatsoever of this Agreement or any term of it (including non-contractual disputes or claims) shall be governed by the laws of Scotland.

15. Dispute resolution

15.1 In the event of any dispute arising out of or in relation to this Agreement, each of the Parties shall use all reasonable endeavours to consult and negotiate with each other, in good faith and, recognising their mutual interests, attempt to reach a settlement of the dispute to the satisfaction of all Parties. Within 7 days of a dispute arising the Parties shall convene a

meeting between persons nominated by each Party (the "Appointed Persons") to attempt to resolve the dispute.

15.2 If the Appointed Persons agree upon a resolution of the dispute, they shall sign a statement setting out the terms of the resolution and the Parties shall use procure that the resolution is fully and promptly carried out.

8

IN WITNESS WHEREOF these presents consisting of this and the **7** preceding pages and the Schedule consisting of **3** parts have been subscribed as follows:

EXECUTED for and on behalf of THE WATER INDUSTRY COMMISSION FOR SCOTLAND	
at	
on	
by	
its authorised signatory in the presence of this witness:	Authorised signatory
Witness	
Full name	
Address	
EXECUTED for and on behalf of SCOTTISH WATER	
at	
on	
by	
its authorised signatory in the presence of this witness:	Authorised signatory
Witness	
Full name	
Address	
EXECUTED for and on behalf of CITIZENS ADVICE SCOTLAND at	
on	
by	
its authorised signatory in the presence of this witness:	Authorised signatory
Witness	
Full name	
Address	

9 This is the Schedule, consisting of three parts, referred to in the foregoing Co-operation Agreement among The Water Industry Commission for Scotland, Scottish Water and Citizens Advice Scotland.

SCHEDULE

Part 1

Non-exhaustive list of proposed Commission Decisions

The following table sets out the proposed Commission Decisions to be issued by the Commission which, together with such other Commission Decisions as the Commission may issue from time to time, will inform the discussions between the Customer Forum and Scottish Water in establishing an Agreed Business Plan.

When	Description
	The Commission issues Decision Paper 1
	This paper would cover:
May 2017	Initial views on the inflation, interest rates and other macro-economic assumptions.
-	Initial views on the customer base and growth assumptions.
	Initial views on the initial range for the investment requirements to meet growth.
	The Commission issues Decision Paper 2
	This paper would cover:
July 2017	Initial views on operating expenditure.
	Initial levels of service ranges.
	Initial views on resilience and its investment implications.
	The Commission issues Decision Paper 3
	This paper would cover:
Oct 2017	Initial views on operating efficiency.
	Initial views on capital efficiency.
	Our initial approach to encourage innovation.
	The Commission issues Decision Paper 4
	This paper would cover:
Dec 2017	Initial views on financial strategy.
Dec 2017	Initial views on the capital enhancement ranges.
	Initial views on the capital maintenance ranges.
	Initial views on evolving the financial tramlines.
End	The Commission has published its initial decisions on the key regulatory parameters
December 2017	which constitute the lowest reasonable overall cost of meeting ministerial objectives.
	The Commission issues Decision Paper 5
June 2018	This paper would take account of SW's 25 year strategic projections and any new information and would cover:
	Revised inflation, interest rates and other macro-economic assumptions.
	Revised customer base and growth assumptions.
	Revised ranges for the investment requirements to meet growth.

Aug 2018	The Commission issues Decision Paper 6 This paper would take account of SW's 25 year strategic projections and any new information and would cover: Revised ranges on operating expenditure. Revised levels of service ranges. Revised views on resilience and its investment implications.
Oct 2018	The Commission issues Decision Paper 7 This paper would take account of SW's 25 year strategic projections and any new information and would cover: Updated views on financial strategy. Revised views on the capital enhancement ranges. Revised views on the capital maintenance ranges.
Dec 2018	The Commission issues Decision Paper 8 This paper would take account of SW's 25 year strategic projections and any new information and would cover: Revised views on operating efficiency. Revised views on capital efficiency. Revised approach to encouraging innovation.
End Dec 2018	The Commission has published its revised decisions on the key regulatory parameters which constitute the lowest reasonable overall cost of meeting ministerial objectives.
July 2019	The Commission issues Decision Paper 9 This final paper takes account of information set out in SW's draft business plan for 2021-27 and sets out the Commission's final decisions on all the above key regulatory parameters.

11 SCHEDULE

Part 2

Constitution of Forum

1. Appointment of Chair and members

- 1.1 Subject to paragraph 1.12 below, members will be appointed jointly by Scottish Water, the Commission and CFU, but on the basis of the following nominations procedure:
 - 1.1.1 Scottish Water, CFU and the Commission shall jointly nominate an independent Chair;
 - 1.1.2 the Chair, in consultation with CFU and the Commission, shall nominate as Ordinary Members up to three persons who previously served on the customer forum established for the SRC 2015-21 (whether as a result of nomination by water services providers and/or sewerage services providers (the "Retailers") (a "Previous Retailer Member") or otherwise (a "Previous Other Member"));
 - 1.1.3 CFU shall seek nominations for such number of other Ordinary Members (as shall equal six minus the number of Previous Other Members nominated under paragraph 1.1.2) through posts publicly advertised through an appropriately open recruitment procedure (and CFU shall arrange for the Chair to participate in the interviews conducted as part of that procedure), and
 - 1.1.4 the Commission shall seek nominations for such number of other Ordinary Members nominated by the Retailers through an appropriately open recruitment procedure as shall equal three minus the number of Previous Retailer Members nominated under paragraph 1.1.2.
- 1.2 The persons nominated shall be appointed by the Parties, and there shall be no ability for any Party to veto the appointment of any person so nominated provided that such persons fulfil the criteria set out at paragraph 1.4 below. The Members shall hold office in their personal capacities and not as a representative of the person(s) who nominated them or any other person or body.
- 1.3 In developing any recruitment procedure, the Parties shall ensure that such process gives due consideration to the principles of diversity and equality of opportunity.
- 1.4 The Chair and Members must satisfy the following criteria:
 - 1.4.1 they must not hold a political office or be standing as a political candidate for election at any level;
 - 1.4.2 they must not have any criminal convictions;
 - 1.4.3 they must not have been disqualified from acting as a director;
 - 1.4.4 they must be prepared to engage constructively in the process outlined in clause 2 of the Agreement in a personal capacity without representing any political, local, community or specific interests; and
 - 1.4.5 they must not be an employee of, or have any commercial relationship with, Scottish Water, CAS or the Commission (and must have disclosed in writing to the other members of the Forum any former such role performed during the previous five years).
- 1.5 The Chair shall also be the Chair of the Business Plan Agreement Committee.
- 1.6 The Chair shall appoint a Vice Chair from the other members of the Forum. The Chair may determine what role(s) should be performed by the Vice Chair, but the Chair may not delegate to the Vice Chair any function expressly allocated to the Chair by this Agreement.
- 1.7 If a Chair is appointed who is already an existing Ordinary Member, they shall vacate that existing position and the entity, which originally nominated him to be an Ordinary Member pursuant to paragraph 1.4 above shall be entitled to nominate someone else in his place as an Ordinary Member.
- 1.8 The Ordinary Members and the Chair shall be appointed for such period as is required to complete the roles assigned to the Forum under this Agreement.
- 1.9 The Chair may conduct an annual appraisal of each of the other Members' performance in respect of their Forum duties and may share the results of those appraisals with the Parties.

12

1.10 Notwithstanding paragraph 1.4 above:

- 1.10.1 the appointment of the Chair and each Ordinary Member will automatically terminate:
 - (i) if the Agreement is terminated; or
 - (ii) if a separate legal entity is established to take on the role of the Forum;
- 1.10.2 the appointment of the Chair may be terminated by a unanimous decision of the Parties on the grounds of:
 - (i) misconduct
 - being incapable over a period of twelve weeks or more of discharging their responsibilities and duties as Chair due to illness or other cause;
 - (iii) insolvency; or
 - (iv) failure to fulfil the criteria set out in paragraph 1.4 above;

and Scottish Water, CFU and the Commission shall jointly nominate another Chair in his or her place;

- 1.10.3 the appointment of an Ordinary Member nominated by the CFU may be terminated at the discretion of the Commission and CFU on the recommendation of the Chair on the grounds of:
 - (i) misconduct;
 - being incapable over a period of four weeks or more of discharging their responsibilities and duties as an Ordinary Member and/or member of the Business Plan Agreement Committee (as the case may be) due to illness or other cause;
 - (iii) insolvency; or
 - (iv) failure to fulfil the criteria set out in paragraph 1.4 above;

and CFU shall be entitled to nominate another Ordinary Member in their place; and

- 1.10.4 the appointment of an Ordinary Member (other than one nominated by the CFU) may be terminated at the discretion of the Commission on the recommendation of the Chair on the grounds of:
 - (i) misconduct;
 - being incapable over a period of four weeks or more of discharging their responsibilities and duties as an Ordinary Member and/or member of the Business Plan Agreement Committee (as the case may be) due to illness or other cause;
 - (iii) insolvency; or
 - (iv) failure to fulfil the criteria set out in paragraph 1.4 above;

and the party responsible for the original nomination of the Ordinary Member concerned shall be entitled to nominate another Ordinary Member in their place.

- 1.11 If the Chair resigns a new Chair will be appointed pursuant to paragraph 1.1.1 and paragraph 1.4 above.
- 1.12 If an Ordinary Member resigns a new Member will be appointed by the entity which originally nominated the person to be an Ordinary Member (or, in the case of the resignation of an Ordinary Member nominated by the Chairman, by the CFU) pursuant to paragraph 1.1.3 or 1.1.4 (as the case may be) and 1.4 above.

2. Remuneration

- 2.1 The Chair shall:
 - 2.1.1 be paid an annual sum calculated on the basis of a commitment of up to 100 days per Financial Year at an daily rate equal to that payable from time to time to the Chair of the Commission minus ten percent; and
 - 2.1.2 be entitled to reimbursement of properly incurred expenses in line with the Commission's travel and expenses policy (or any policy that the Commission

13

creates for this purpose) upon submission of the relevant receipts to the Commission.

- 2.2 Ordinary Members that are not employees of, board members of, or otherwise related to, or engaged by CAS, or the Retailers shall:
 - 2.2.1 be paid an annual sum calculated on the basis of a commitment of up to 50 days per Financial Year at a daily rate equal to that payable from time to time to a member of the Commission minus ten percent; and
 - 2.2.2 be entitled to reimbursement of properly incurred expenses, which have been approved in advance by the Chair, in line with the Commission travel and expenses policy upon submission of the relevant receipts to the Commission.

3. Meetings

- 3.1 The Forum shall be entitled to decide how to regulate its affairs, including participating in meetings by telephone or video conference, but will be required to meet in person not less than once every quarter.
- 3.2 On request, CFU, Scottish Water and/or the Commission will make available an appropriate meeting room for the Forum meetings.
- 3.3 Unless otherwise agreed by all members of the Forum all members must be given not less than 14 days' notice of any meeting and the notice must include details of the business to be discussed at that meeting.
- 3.4 All members of the Forum will be entitled to receive copies of the minutes of each meeting and the papers tabled at each meeting.
- 3.5 Any matter which could be determined at a meeting of the Forum, may be validly determined if approval of the matter is given in writing (including by email or other form of electronic communication) by the percentage of members that would have been required to approve the matter had it been determined at a meeting.
- 3.6 Members of the Forum will be required to keep any information which they obtain or receive as a result of their participation in the Forum and (save as provided for in paragraphs 3.7 and 3.8) the content of all minutes and all such other papers together with the terms of the remit given to the Business Plan Agreement Committee and the discussions leading to the agreement of that remit, confidential and will not be entitled to pass any such information to the person who appointed them without prior approval of the Chair. A breach of this restriction will entitle to be removed from the Forum.
- 3.7 Subject to paragraph 3.8, the Chair will ensure that copies of all minutes and any associated papers shall be delivered to each of the Parties to enable them to be published on their respective websites not later than 3 months after the date of such minutes.
- 3.8 The obligation to deliver copies of minutes and associated papers within three months of the date of the relevant minutes shall not apply during the period in which the Business Plan Agreement Committee is in active engagement with Scottish Water and all minutes and papers relating to that period shall instead be delivered to the Parties as soon as reasonably practicable after the SRC 2021-27 Completion Date.

4. Quorum

The quorum for meetings of the Forum shall be six (unless fewer than six members have been appointed in which case all of the members shall be required for a quorum) and must, include the Chair or Vice Chair and one member nominated by the Retailers, provided that if at any meeting a quorum is not present it will be adjourned to the same time and place 7 days later, and if at the adjourned meeting a quorum is still not present it will be adjourned again to the same time and place 7 days later at which time those members in attendance will constitute a quorum.

5. Voting

- 5.1 Members will have one vote each at Forum meetings.
- 5.2 Decisions of the Forum will require the approval of at least 60% of the Forum members present at the meeting.

14

SCHEDULE Part 3

Business Plan Agreement Committee

- 1. The Committee will consist of no less than three nor more than five members, each of whom must be a Forum member, one of whom must be the Chair, one of whom must have been appointed from the publicly advertised posts pursuant to paragraph 1.1.3 of Part 2 of the Schedule and one of whom (a "Retailer Nominee") must have been nominated by the Retailers pursuant to paragraph 1.1.4 of Part 2 of the Schedule (provided that the foregoing requirement for the inclusion of a Retailer Nominee on the Committee shall not apply if no Retailer Nominee is willing to perform such role).
- The initial member of the Committee shall be such person as is appointed as the initial Chair of the Forum and the Chair shall select the remaining members.
- 3. The members of the Committee (other than the Chair) may be changed at any time by the Forum in accordance with the procedures in paragraph 2 above on the Chair giving not less than one month's written notice of the proposed changes to Scottish Water (or such lesser period as Scottish Water may agree from time to time).
- 4. Any member of the Committee who ceases to be a member of the Forum for any reason shall automatically cease to be a member of the Engagement Committee.
- Decisions of the Committee will require unanimity, with each member of the Committee having one vote.

APPENDIX 6: MINUTE OF AGREEMENT BETWEEN SCOTTISH WATER AND CUSTOMER FORUM ON STRATEGIC PLAN

Scottish Water	customer forum	Scottish Water
		research, seekin
MINUTE OF AGREEMENT ON T BETWEEN SCOTTISH WATER AND 1		charges.
Introduction	HE COSTOMER FOROM	0 The Custom
		9. The Custome
1. The Water Industry Commission for Scotland	, ,	operational area community inpu
Strategic Review of Charges 2021-2027 'Innovation		community inpu
water industry for customers' built on the succe	÷ •	
Scottish Water's Business Plan at the last Strategic F		Outcomes for cu
that review the Customer Forum worked effectivel interests of customers were at the heart of the SRC:		
interests of customers were at the heart of the skc.	LO DUSITIESS FIAIT.	1. The Custome
2. In March 2017, through a tri-partite agreement,	Scottish Water Citizens Advice Scotland	evidence provid
and the Commission established the second Custo		implementation
views of customers and communities in the Strateg		2. Over the last
process.		Water, the Cust
		expectations of
3. The role of the Customer Forum is to seek to agree	ee with Scottish Water:	the Strategic Pla
a) a Strategic Plan which has taken proper acco	unt of the evidence on the priorities and	3. Scottish Wate
preferences of current and future customers	; and	achieve better o
		have focused on
b) an associated price profile for 2021-27 which	h is fully consistent with the Ministerial	
Objectives and their Principles of Charging	Statement, and the ranges set by the	a) Adop
Commission.		custo
		reliab
4. The Commission has set out in its methodology		b) Tackli
Strategic Plan and an associated price profile for 202	21-27 as part of its Draft Determination.	strate
5. This Minute of Agreement is the agreement bet	ween Scottish Water and the Customer	Strate
Forum with regards to the Strategic Plan. It reflects		c) Aimin
aspirations, and the aspects where further assurance		efficie
Scottish Water outwith the Strategic Plan document		incre
		d) Optir
6. This Minute of Agreement should be read in	the context of the Strategic Plan 'A	to, th
Sustainable Future Together', the Customer Forum'	-	
and the Customer Insight supporting document.		- Ei
		- D
7. The Commission will publish their Prospects for		q
Following that, Scottish Water and the Customer F	-	- Fi
price profile for 2021-27, and suitable safeguards for		w
does not imply that the Customer Forum is endorsing	g any specific price profile at this time.	in
9. The Customer Forum has played a line set.	sources reduct sustainer and community	a
8. The Customer Forum has played a key role in er	-	e) Deliv
input into the co-creation of the Strategic Plan. It sector stakeholders to commission high quality b		active
sector stakenolities to commission right quality b		- Co
	1	

¥			

customer forum

customers' views and expectations of service levels and the level of

Forum developed evidence-based positions across key strategic and relevant to the SRC21 process and these informed their customer and into the Strategic Plan.

stomers

Forum considers the Strategic Plan has taken proper account of the ed on the views and aspirations of current and future customers. The of the Strategic Plan will transform Scottish Water.

two years through research, insight and engagement programmes, Scottish omer Forum and other industry stakeholders have sought the views and more than 25,000 people from across the diverse customer base to inform

has actively sought to accommodate the Customer Forum's positions to utcomes for customers and communities. The discussions between them areas of key interest for customers, including, but not limited to:

- ting a longer-term view to meet the needs of both current and future mers, seeking to ensure the maintenance of service excellence and ility in the face of challenges of climate change and replacing ageing assets.
- ng climate change by going beyond net zero emissions as one of the three gic outcomes.
- g to deliver and demonstrate great value in investing customers' money ently, with customers seeing the benefit of Scottish Water developing using revenue streams from energy and circular economy activity.

ising the role Scottish Water can play in securing the health of, and access wider environment; by:

- abling access to their assets, particularly reservoirs and upland catchments r leisure purposes;
- evelopment of catchment management and partnerships to manage the ality of source waters;
- rther understanding and mitigating the risks of emerging pollutants; orking in partnership with others to undertake research, identify and plement source control and promote regulatory change where necessary d possible.
- ering additional public benefit, including through a step-change in building relationships with customers and their communities, including:
 - ontinuation of the Learn to Swim programme;

2



- Pursuing charging structures for business customers that incentivise good practice (e.g. incentivising the right behaviour through appropriate charging structures for surface water management solutions).
- f) Working with partners and others to provide access to a lead-free water supply, with all lead removed from the public network by 2045.

4. The Customer Forum welcomes the prioritisation of maintaining a reliable service and addressing climate change and its impact on water and waste water services, which reflect customers' aspirations.

Further assurance and clarifications

There were a small number of proposals identified by the Customer Forum as representing the views of customers which were more detailed or short term in nature than appropriate for the Strategic Plan. Here the Customer Forum has sought clarification and commitment from Scottish Water.

The clarification and assurance sought, together with Scottish Water's response and commitments, are detailed below. These are structured to align with the three Strategic Outcomes outlined in the Strategic Plan.

Strategic Outcome: Service excellence – adapting to a changing climate, dealing with our ageing assets and meeting customers' evolving expectations

1. Supporting customers in vulnerable circumstances

There were several research projects within the SRC21 process which sought to understand the needs of vulnerable customers and identify the best solutions for important services which affect them.

The Strategic Plan states that Scottish Water will adopt new technology and enhance support to customers in vulnerable circumstances. Scottish Water will also work with other stakeholders to ensure that household customers in the most vulnerable financial circumstances receive appropriate support in paying charges.

The Customer Forum sought clarity from Scottish Water on a number of points on how it would enhance support to vulnerable customers, work in partnership with other organisations representing these customers and run a campaign to increase the number of people on the Priority Services Register.

Scottish Water

customer forum

In response, Scottish Water clarified that it will:

- Develop and provide tailored support to customers in vulnerable circumstances. Recent
 customer research indicates proactive communications are a key area of focus for this
 customer group and a pilot is underway to improve these.
- Provide further training to Scottish Water staff to better support customers in vulnerable circumstances. A training pilot is planned to help them identify and effectively deal with customers who may be in a vulnerable situation.
- Remain committed to the ongoing operation and maintenance of a Priority Services Register and campaign to encourage customers in vulnerable circumstances to sign up to the register. Scottish Water will run a series of events in 2020 across Scotland, with other public service organisations, to raise awareness about their new Priority Services Register and to promote information about the risk of bogus callers.
- Continue to work with Age Scotland and seek out other appropriate partnerships with those representing customers in vulnerable circumstances to provide further support and promote its register and services.

2. Licensed Providers and business customers

The Strategic Plan states that Scottish Water will create the best possible retail environment, be a great wholesaler and ensure it is easy for Licensed Providers and business customers to do business with Scottish Water. Additionally, Scottish Water will pursue charging structures that incentivise good practice.

Research and direct engagement with business customers and Licensed Providers identified a number of areas which will help Scottish Water become a great wholesaler.

The Customer Forum sought assurance from Scottish Water that a number of specific areas raised through Customer Forum engagement with business customers and Licensed Providers would be addressed, including:

- Alignment with best in class organisations to meet business customers' expectations and to have the ability to respond to requests in a timely manner.
- Service improvements including:
 - Improvements in the new connections process for both developers and business customers.
 - Scheduling Scottish Water activity to accommodate the needs of business customers, with appointments rearranged only by mutual consent.
 - Increased transparency so the business customer, Licensed Provider and Scottish Water all have sight of job progress, including when problems arise and the job is returned to the beginning of the specific process.
 - Introduction of a new approach to reading meters in circumstances where it is impractical for Licensed Providers to comply with Scottish Water's requirements and results in unavoidable performance charges to the Licensed Provider.

3

Scottish Water	The basic estimation for a matter and a material an	
		3. V
• In light of the commitments in the Strategic Plan to tran		Redu
management and/or to pursuing charging structures that incen		thro
 Promoting a market review of the Section 29e frame improvements which would support achieving b customers. 		that
 Where business customers remove/re-use surface v 	water this would be	The
reflected in the proportional element of the charges.		the r
 Where business customers make efforts to increase 	water efficiency this	The
would be incentivised through the charging structure.		the a
response, Scottish Water commits to improvements in its wholesale	service including:	emis
	Service metading.	mea
 Identifying characteristics of "best in class" wholesale service an elsewhere that can be implemented in Scotland. 	d improvements from	Scot
 Implementing the results of the current end-to-end wholesale pro improvements. 	ocess review to deliver	•
Delivering further service improvements through implementation	on of a new customer	
relationship management system and portal for new connection	is and to adopt a new	
customer experience measure for the development community	y to drive continuous	•
improvement.		•
 The development and delivery of schedules of work that as structured and planned to accommodate and meet the ne 		
customers as well as meet relevant market KPIs.		
Working with the Central Market Agency (CMA) and other stake	Ū I	4. Ir
the creation of a customer portal which would enable customers		Seve
of their requests for service. This would also allow Scottish Wa	iter and other market	term
participants to measure the end-to-end customer journey time. Consulting with market participants to ensure that its meter asset	ts are of the right type	cont
and in the right place so that Licensed Providers can more eas	•	How
obligations and to identify if there are other potential innovative		inter
reading that would benefit the market and customers, and if so ac	lopt these.	perio
 Promoting that a market review of the Section 29e framework is any improvements that can be made. 	undertaken to identify	com
Continuing discussion with the Scottish Government to consider	how to take forward	The
modifications to drainage charges that incentivise the remo		wate
currently entering the sewerage system so proposals can be		that
Principles of Charging statement in June 2020.		that
Promoting discussion with industry participants about what	-	ʻsix o
charging structure may support achieving net zero emissions and a Working with the independent customer perspective, testing wi	•	The
Working with the independent customer perspective, testing wi whether with the implementation of these measures they regard		of cu
great wholesaler and responding to make any necessary further in		of ur
		¹ The
		ine

Scottish

customer forum

3. Water availability – reducing water use and leakage

Reducing leakage was identified as important to both household and business customers through a number of different research studies. The *Future Strategy* research also identified that Scottish Water should encourage customers to use water wisely.

The Strategic Plan sets out that Scottish Water will reduce the amount of water it takes from the natural environment by reducing leakage and inspiring customers to use water wisely.

The Customer Forum sought assurance on how Scottish Water would align a reduction in the amount of water it takes from the natural environment with its commitment to net zero emissions, how it would provide updates on progress and how it would implement a measure of reduction in water use.

Scottish Water commits to:

- Strengthening its assessment of the economic level of leakage by incorporating an
 appropriate cost of carbon to set a revised economic and carbon level of leakage, and
 to continually seek out ways to reduce the cost and carbon impact of addressing
 leakage so the target level reduces over time.
- Report both the target level of leakage and its performance towards achieving it.
- Report levels of abstraction as well as per capita consumption, and to seek to reduce these over time.

4. Interruptions to supply

Several research projects indicated that household customers tend to be tolerant of shortterm interruptions to supply, recognising that things can go wrong within the network. In contrast, business customers are less able to cope with short term interruptions to supply. However, both household and business customers are less likely to cope with long-term interruptions, where homes, businesses and communities are without water for extended periods. Where there is an interruption to supply customers expect that Scottish Water will communicate effectively.

The Strategic Plan states that Scottish Water will transform the interconnectivity of major water supply systems over the coming decades, prioritising the highest risk systems first, so that customers will ultimately have a more resilient water supply. Scottish Water will ensure that competing investment priorities are appraised and considered appropriately against a 'six capitals' framework¹.

The Customer Forum sought assurance that Scottish Water would continue to stay abreast of customers' evolving expectations in this area with regards to the frequency and duration of unplanned interruptions to supply to shape investment decision making.

¹ The 'six capitals' are social, natural, human, intellectual, manufactured and financial.



customer forum

In addition the Customer Forum sought assurance that Scottish Water would seek to continue to meet customers' communications expectations during interruptions to supply, and seek feedback from those customers who have experienced an interruption to supply to inform future service.

Scottish Water commits to:

- Continuing to undertake regular research to understand and anticipate how customers' expectations continue to evolve in this area, to incorporate this insight into investment decision making and to continue to meet customers' communications expectations.
- Continuing to seek feedback from customers who have reported a service issue to drive continuous improvements.

5. Preventing sewer blockages and sewer flooding

The *Future Strategy* research concluded that sewer flooding was seen as an issue which could have a physical and psychological impact on customers. The management of sewer flooding was seen as an essential part of Scottish Water's role, and customers need to be provided with clear information about their role in minimising blockages of the sewer network.

The Strategic Plan states Scottish Water plans to lead the transformation of surface water management, promoting blue-green approaches; investing to reduce the risk to customers impacted by repeat high consequence sewer flooding where it is not disproportionately expensive; and boosting its work to influence and inspire manufacturers and customers to change their approach to disposal of inappropriate items to sewers.

The Customer Forum sought assurance that the definition of 'disproportionately expensive' would be kept under review. Further there would be a proactive approach to blockage prevention, building on the 'Fats, Oils and Greases (FOG)' and '*Keeping the cycle running*' pilots in SRC15, with a defined and increasing programme size and tailored approaches for household and business customers.

Scottish Water commits to:

- Keeping the definition of 'disproportionately expensive' for sewer flooding investment under regular review and to ensure an independent customer perspective is included as part of any review.
- Building on recent pilot approaches and continually utilising customer and behavioural insights to develop its proactive approach to preventing blockages.
- Setting out in its Delivery Plan the approach and scale of activity on blockage prevention.

C Wal
Scottisk

customer forum

6. Community Engagement

Throughout the research programme, customers and communities indicated that they would value strengthening relationships with Scottish Water.

The Strategic Plan states Scottish Water will transform relationships with customers and communities, making them active and two-way.

The Customer Forum sought assurance as to the first steps that would be taken on transforming relationships with customers and communities and Scottish Water reporting on community engagement implementation.

Scottish Water commits to:

- Extending the Community Engagement pilot programme to enhance the way it involves customers and communities in investment decisions.
- Refreshing its Consultation Code, '*Keeping you in the Picture*' for the 2021-27 period to ensure a consistent, published engagement process for all planned works.
- Evaluating and reporting the performance of its community engagement, and inviting periodic independent assessment.

7. Private water and waste water management

The Strategic Plan states Scottish Water will support the Scottish Government in its approach to private water supplies, making this a key focus area for innovation and committing to developing support services on a not-for-profit basis.

This commitment was welcomed by the Customer Forum and they asked for clarification on the support Scottish Water will provide to customers with private waste water solutions.

Scottish Water clarified that it will:

- Continue to offer a septic tank desludging service on a not-for-profit basis.
- Continue to work with SEPA and others to develop guidance to householders, communities, developers and planners to support the installation of suitable systems for private use.

Strategic Outcome: Beyond net zero emissions – showing leadership in mitigating climate change and enhancing Scotland's natural environment

8. Natural Capital

In the *Wider Environment* research, several environment-related initiatives were presented to customers for consideration. Many attracted interest and were perceived as worthwhile and seen to connect well with Scottish Water's role and the natural environment.



customer forum

9

The Strategic Plan states that Scottish Water's reservoirs and other landholdings are a significant resource and Scottish Water will manage them in a way that increases the contribution they can make to our natural and social capital.

The Customer Forum sought assurance as to the early steps that would be taken to deliver this commitment, including an audit of Scottish Water assets and estates which has the potential for customer, community and biodiversity benefits, and should help identify outdoor access opportunities and potential carbon offsetting initiatives. The Customer Forum also suggested Scottish Water should work with the broader stakeholder community to ensure a joined-up approach to environment and species management.

Scottish Water commits to:

- Undertake during 2021 an audit of its assets and estate to identify which have the most potential for biodiversity gains for Scotland and for catchment restoration.
- Implement the findings of the audit, seeking to work in partnership with local communities, other land owners and third sector groups where appropriate, to realise the potential gains and support the development of national ecological networks.
- Pilot opening up its estate where appropriate to the community for outdoor access opportunities.

Implementation of the Strategic Plan

Both parties recognise there is much yet to work through to move towards achieving the outcomes the Strategic Plan sets out. Significant building blocks will include on-going engagement with customers, the 2021-27 Delivery Plan, the route map to net zero emissions, Strategic Environmental Assessments and the reporting performance and information framework.

In particular with relation to the reporting performance and information framework the Customer Forum has sought assurance from Scottish Water that this would:

- Record progress toward the Strategic Plan outcomes.
- Provide visibility of performance against objectives and targets that are set in Scottish Water's Delivery Plan.
- Be understandable and accessible to customers.
- Include an open and transparent narrative around outcomes, progress, innovation and areas of learning.
- Drive the transformation and behaviours required within Scottish Water to meet the Strategic Plan outcomes.

Scottish Water

customer forum

Scottish Water commits to continuing to work with the Customer Forum and other stakeholders to develop reporting that meets the above requirements.

Empowering Customers and Communities

The Customer Forum welcomes Scottish Water's commitments in the Strategic Plan to ensure an independent, active customer perspective on the services they provide. Both parties agree that it is important that there is a strong voice ensuring the needs and aspirations of customers and communities are articulated and addressed as Scottish Water undertakes the transformation set out in its Strategic Plan.

The remit of the future perspective is likely to include:

- · strategic challenge and insight from and on behalf of customers;
- ensuring the views of customers and communities are considered in investment decisions;
- supporting Scottish Water's work to increase public benefit and develop active, engaged relationships with customers and communities; and
- supporting Scottish Water in assuring customers that they are getting what they regard as value².

The Customer Forum also welcomes Scottish Water's commitment to establish a 'world leading' national engagement programme, building on the success of the customer and community engagement which has informed the Strategic Plan.

The national engagement programme will seek to build understanding of the challenges facing the water sector. It will set out Scottish Water's long-term strategies and plans to tackle them and customers' role in addressing them. It will inform the rate of progress towards the strategic outcomes that customers and communities wish Scottish Water to achieve.

The programme will need to be given sufficient time and use a full range of engagement methods to reach a broad audience. The Customer Forum welcomes the opportunity to support Scottish Water's development of its plans for the national engagement programme.

Scottish Water commits to:

 Jointly with the Customer Forum agreeing the remit of a future active, independent customer perspective and how it will be established, in consultation with other stakeholders.

² Note that 'value' in this context is used in the broader sense of 'value to customers' rather than a strict economic appraisal of value.



customer forum

- Jointly with the Customer Forum, ensure that the independent customer perspective has the capacity and capability to achieve its objectives and that it will be established to follow on immediately from the conclusion of the Customer Forum.
- Working with the Customer Forum, and the future independent customer perspective, on the development and implementation of the national engagement programme.

Agreement of the Strategic Plan

Given the assurances detailed above, the Customer Forum agrees the Strategic Plan has taken proper account of the evidence on the priorities and preferences of current and future customers and welcomes Scottish Water's commitment to seek to continue to understand, anticipate and meet customers' and communities' expectations in the delivery of the Strategic Plan.

Approved by the Board of Members on 29 January 2020 and signed on its behalf by:

Douglas Millican Chief Executive, Scottish Water DATE 31 January 2020 Approved by the Customer Forum and signed on its behalf by:

Peter Peacock Chair of the Customer Forum DATE 31 January 2020

Scottish Water	The local and the second secon
ANNEX A	
CUSTOMER FORUM'S FORMAL RESPONSE TO SCOT	TISH WATER'S STRATEGIC PLAN
Douglas Millican	
Chief Executive	
cottish Water	
2nd December 2019	
Dear Douglas	
Scottish Water's draft Strategic Plan	
Fhank you for sending the Customer Forum Scottish Water will briefly summarise the Forum's view before setting it o	- ·
The draft Strategic Plan is the result of extensive effort an Lustomer Forum and other stakeholders over nearly thre he candour and willingness to engage demonstrated by S his process. No doubt there will be further edits befor considers that the Strategic Plan has taken proper accour has provided on the views and aspirations of current and plan, subject to the Minute of Agreement currently under	e years. The Forum has greatly appreciated cottish Water and other stakeholders during re publication, but at this point the Forum nt of the evidence that the Customer Forum future customers and is minded to agree the
 The pace at which implementing the Strategic Plan and the upward pressure on costs that implies will to agree the 25-year Strategic Plan does not imply t specific long-term price profile. 	need ongoing consideration. Being minded
 Scottish Water and the Customer Forum will discus suitable safeguards for customers, after the Water their approach to consideration of potential price r approach these discussions in the context of the cu endorsing any particular approach to prices or cust 	Industry Commission for Scotland publish anges in early 2020. The Forum will stomer research and at this stage it is not
The Strategic Plan will transform Scottish Water's object strategic Review of Charges could be seen as phase 1 of S be building public understanding and ownership, while levelop better understanding of zero emissions and asse he conclusions at scale.	Scottish Water's transformation; phase 2 will Scottish Water concurrently continues to

In that context the proposed National Engagement exercise is a critical step in building customers' understanding and confidence that Scottish Water is doing the right thing for them, in line with their long-term interests. I set out the evidence for this in more detail later in this letter.

The Vision

The plan is rooted in the sector vision which the Forum was pleased to be part of creating, and which the Forum has endorsed as an appropriate aspirational statement to help give direction to future priorities and actions.

The Strategic Plan

The Forum has been very appreciative of the attention given by Scottish Water to the voice of customers as represented by the Customer Forum. We believe the plan is all the stronger for the constructive and rigorous dialogue that we have had in our bi-lateral discussions in recent months. In these we have used the customer research evidence to identify and articulate many issues and have been pleased to see these reflected in the plan. These customer expectations include:

- ensuring the maintenance of service excellence and reliability in the face of twin challenges of climate change and asset replacement;
- tackling climate change by going beyond net zero emissions as one of the three strategic objectives;
- delivering and demonstrating great value in investing customers' money efficiently, with customers seeing benefit in Scottish Water developing additional revenue streams from energy and circular economy activity
- the role Scottish Water can play in securing the health of, and access to, the wider environment;
- delivering additional public benefit, including through a step-change in building active relationships with customers and their communities;
- removing lead from the public water network by 2045.

The Forum recognises there is much detail yet to work through to move toward delivering on the ambitions the Strategic Plan sets out. The envisaged Delivery Plan, the route map to zero emissions, strategic environmental assessments and the performance information and reporting framework, will all be significant milestones in moving to implementation. Ongoing engagement with customers will be important to ensure these reflect their expectations. This is particularly so given the current political, and therefore economic uncertainty and its implications for customers' needs, priorities and aspirations.

Implications for prices

The Forum notes Scottish Water's view that to achieve the plan's ambitions water charges will likely have to rise slightly above the rate of inflation for an extended period. This is linked to the Water Industry Commission for Scotland's (WICS) work with Scottish Water, as set out in the recent Decision Paper on Asset Replacement.

The Forum acknowledges this work implies upward pressure on investment and the potential for this to impact on customer charges. We also note that Scottish Water has been open about the fact its asset data will need to mature over coming years, and that a great deal of work is necessary to understand the cost of meeting the net zero carbon challenge. This suggests that the financing required, and therefore customer charges and other sources of income, will need to be kept under ongoing scrutiny and reassessment.

The Forum welcomes Scottish Water's commitment to limiting the need for charge rises through efficiency. Meeting the challenge of the climate emergency will require considerable innovation and which may well hold the potential to reduce some cost and/or develop new income streams for Scottish Water, which could also constrain the need for charge rises in the longer-term, albeit that it may add to costs in the shorter term.

As you state in your letter, Scottish Water and the Customer Forum will commence discussions on customer charge levels for the 2021-27 period once the WICS publish their approach to the prospects for prices early in 2020.

National Engagement

Research has told us that customers do not have an informed understanding of Scottish Water and want to know more about Scottish Water and their water systems, and that they want to feel reassured that they are getting value for money.

The Forum's Future Strategy research demonstrated that when customers understand the challenges facing Scottish Water (and therefore why additional funding might be needed and what it will be used for) there is greater preparedness to recognise that the challenges identified should be addressed and that holds the potential for acceptance of charge rises. In the scenarios tested in that deliberative research around¹ 10% of these **informed** customers favoured charge increases at CPI; 50% at CPI+1%; and 40% at CPI+3%. In other words, the better customers understand the challenges ahead, the more likely they are to accept that a measure of price increases may be necessary. That said, though informed customers accept that price increases may be necessary, they also have real concerns about affordability. It is clear from other research (ESRI 1) that when customers are not as well informed the majority do not support above inflation rises.

The Forum therefore welcomes the commitment in the Strategic Plan to a major engagement exercise with customers to share the Strategic Plan. It notes that public engagement is only likely to succeed when the public don't think there is already an agreed outcome, and in the spirit of ethical business practice, the intent should be to enable customers to reach an informed view about futures challenges and potential solutions.

Minute of Agreement

Our ongoing discussions on a Minute of Agreement (MOA) dealing with issues that, while important to customers, are more detailed than appropriate for the Strategic Plan, are proceeding well. The Forum

¹ As this was qualitative research these figures are not statistically robust, but instead an insight to relative strength of view.

hopes that these discussions can conclude satisfactorily, and that the MOA will be part of any final agreement with Scottish Water.

Future Customer Role

During the transformation that Scottish Water will undergo as it gears up to deliver the Strategic Plan over time it will be important that the needs, priorities and aspirations of customers and communities remain at the heart of decision making. The Forum therefore welcomes Scottish Water's commitment to "a continuing, active, independent customer perspective on the services we provide". There are key areas where a customer voice could be valuable including the national engagement, strategic challenge, scrutiny and reassessment processes, customer and community assurance on performance and progress towards strategic objectives, prioritising needs, and progressing investment needs to the committed list amongst others. We look forward to discussing this further.

Conclusion

The Strategic Plan is a significant document, and Scottish Water deserve credit both for the ambition it sets out, and for the open and constructive way in which you have developed it. It represents a further and significant step in Scottish Water's evolution from being primarily a core service delivery company to one ever more focused on the climate challenge, its customers' water and wastewater needs and on delivering wider public benefit, increasingly in tune with what people and communities aspire to.

In that context, and subject to the foregoing caveats and statements, the Customer Forum would be minded to agree a final Strategic Plan in line with this draft.

Yours sincerely

Peter Peacock

Chair, Customer Forum

customer forum Scottish Water MINUTE OF AGREEMENT ON THE CUSTOMER FORUM'S EXPECTATIONS OF SCOTTISH WATER'S TRANSFORMATION PLAN Introduction 1. In March 2017, through a tri-partite agreement, Scottish Water, Citizens Advice Scotland and the Water Industry Commission for Scotland (the Commission) established the second Customer Forum (the Forum) to act as a conduit for the views of h 2. Household and non-household customers and communities¹ in the Strategic Review of Charges 2021-2027 (SRC21) process. 3. The role of the Customer Forum is to seek to agree with Scottish Water: a. a Strategic Plan which has taken proper account of the evidence on the priorities and preferences of current and future customers: b. the Forum's expectations of Scottish Water's Transformation Plan that the company will seek to ensure are addressed as the Plan is developed and implemented; and c. the future involvement of customers and communities in Scottish Water's decisionmaking processes. 4. The Commission has set out that it is minded to accept such agreements as part of its Draft Determination. 5. The Customer Forum has played a key role in ensuring robust customer and community input into the co-creation of the Strategic Plan. It has worked collaboratively with water sector stakeholders to commission high quality behavioural, quantitative and qualitative research, seeking customers' views and expectations of service levels and the level of charges. 6. A Minute of Agreement between Scottish Water and the Forum was signed on the 5th February 2020 on the Strategic Plan. It agreed the Plan reflected customer and community priorities and aspirations and outlined the aspects where further assurance or points of detail were required from Scottish Water outwith the Strategic Plan document. 7. This further Agreement outlines the Forum's expectations of Scottish Water's Transformation Plan and the future involvement of customers and communities in Scottish Water's decision-making processes. Scottish Water commits to meeting these expectations as it develops and implements its Transformation Plan. The Customer Forum's Expectations of Scottish Water's Transformation Plan ¹ Throughout this document customers refers to household and non-household customers; and communities refers to those of place and interest

1

ttish

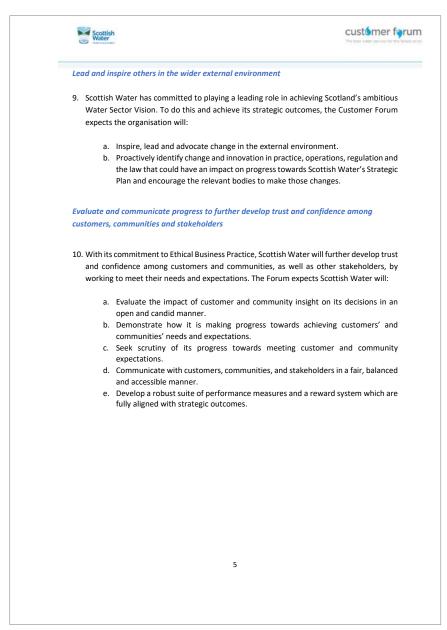
customer forum

- The Customer Forum recognises Scottish Water's firm intent to play its leading role in achieving the ambitious Water Sector Vision and achieve the outcomes, objectives and commitments set out in its Strategic Plan and the associated Minute of Agreement. In essence, Scottish Water has committed to doing the right thing for Scotland, for people, our planet and the economy. Success will require a holistic and far-reaching transformation of the way Scottish Water works to bring about change in all areas of its business.
- 2. In this section of the paper the Forum sets out:
 - a. The strategic context for transformation from a customer and community perspective, including their view of the key drivers of transformation, and what it means to be a fully customer-centric organisation.
 - b. High-level expectations of the transformation required across Scottish Water to achieve its three strategic outcomes of service excellence, beyond net zero emissions and great value and financial sustainability.

TRANSFORMATION DRIVERS

- 3. To play a leading role in the Water Sector Vision, and to achieve its three Strategic Plan outcomes, Scottish Water will need to build on its strong track record and be an inspirational and innovative organisation. It will need to develop a shared understanding of the challenges and opportunities ahead with customers and communities. The Customer Forum considers the key drivers for Scottish Water's transformation from a customer and community perspective to be the need to:
 - Adopt a more prominent profile as a confident, responsible, ambitious publiclyowned company, leading, forming partnerships and driving change.
 - b. Enhance and further embed its focus on customers and communities, putting their needs and priorities at the heart of all they do; and achieving service excellence.
 - c. Embrace its commitments to delivering wider public benefit and enhancing the natural environment.
 - d. Transform to achieve net zero emissions and ultimately going beyond that commitment.
 - e. Adapt to deal with climate change and protect levels of customer service.

Scottish	customer forum	Scottish Customer forum The base water serves for the foreigners
 f. Implement investment decision-making procommunity expectations and reassure custor value now and in the future. 4. The Forum recognises that, operationally, Scottish Wa approach to serving and understanding its customers stage, the Forum recommends that Scottish Water additional Every decision made by Scottish Water should be the owner in the room. 	mers that they are receiving great ater has made great progress in its . To take that progress to the next opts the following principle:	 d. Promote confidence in its customer and community insight by synthesising, analysing, and triangulating customer and community information from this programme and from internal sources across the organisation. Sharing this collective insight in an accessible way so that others can actively understand and engage with customer and community views. e. Seek, develop and implement best practice and innovative approaches in customer and community engagement and assess these against internationally recognised standards. Take customer-centric decisions Scottish Water and the Customer Forum agree that a customer centric organisation is one
TRANSFORMING HOW SCOTTISH WATER WORKS		which engages customers with integrity and empathy; which understands their needs, expectations and aspirations, ensuring they are central to its decisions and services; and which is delivering what customers want today and anticipating what they will want tomorrow.
transformation, including developing, and regularly re map, that will outline how Scottish Water will seek to:	-	8. The Forum expects that to become fully customer centric Scottish Water will:
 a. Inform, engage, understand and empower cub. Take customer-centric decisions c. Lead and inspire others in the wider external d. Evaluate and communicate progress to build customers, communities and stakeholders. The Forum expects that Scottish Water's aim will be for al elements to be evident throughout the organisation. Inform, engage, understand and empower customers and 	environment trust and confidence among I four of these fundamental	 a. Adopt the principle that every decision should be the one it would take if the customer were in the room. b. Ensure customer and community expectations are understood, promoted and addressed at senior level and throughout the organisation. c. When making decisions balance technical expertise with customer and community expectations and priorities. d. Undertake a comprehensive programme of cross-functional process redesign, to ensure that customers are at the heart of all investment decisions; are made in the context of a long-term, system management approach; and are evaluated through its Benefits Framework, ensuring wider public benefits are considered. e. Seek independent input from a customer group (see appendix).
 6. The Forum expects that Scottish Water will: a. Recognise its services reach nearly every hous lead, inspire, involve and empower stakehold play their part in taking forward the aims objectives of the Strategic Plan. b. Develop, and coordinate with other stakehor engagement and research to keep in close to needs and priorities. c. Engage with business customers and Licenset their diverse views and needs. 	ers, customers and communities to of the Water Sector Vision and olders, an ongoing programme of uch with customer and community	4



Scottish Water

customer forum

SCOTTISH WATER COMMITMENT

- 11. Scottish Water recognises and appreciates the significant contribution the Customer Forum has made throughout SRC21, which has led to the development of an ambitious Water Sector Vision and its Strategic Plan which reflects customers and communities' needs, priorities and aspirations. The Scottish Water Strategic Plan sets out three strategic outcomes: service excellence, beyond net zero emissions and great value and financial sustainability, and Scottish Water recognises that to achieve these outcomes it must transform how it works. Scottish Water commits to:
 - a. Ensuring the Forum's expectations of its Transformation Plan set out above are fully addressed as the Plan is developed and implemented.
 - b. Putting customers and communities at the heart of its decision making.

AGREEMENT

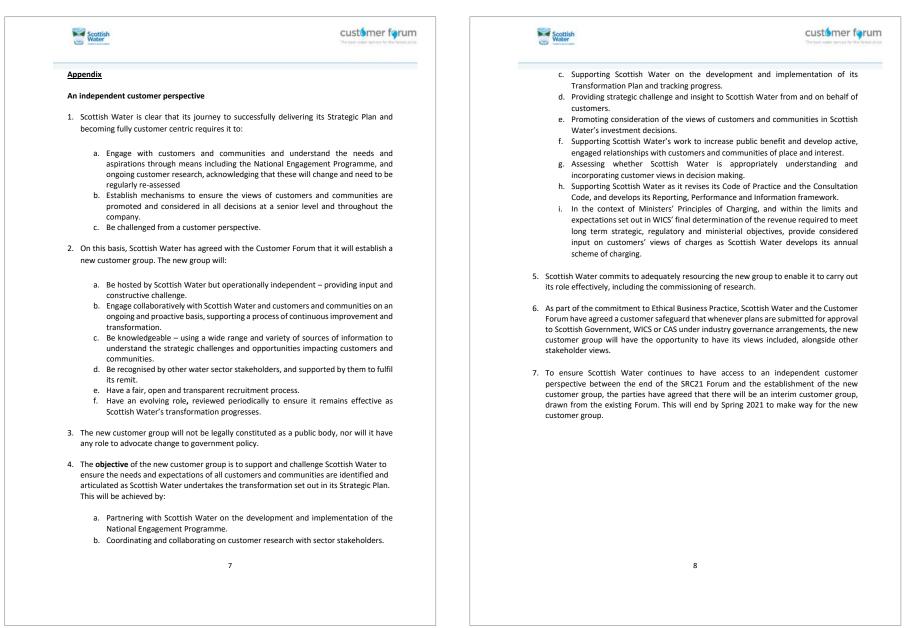
The Customer Forum welcomes the assurances given above and expects that when incorporated into the Transformation Plan that they will enable Scottish Water to become a fully customer centric organisation, committed to understanding and delivering the needs and aspirations of current and future customers.

6

Signed

Signed

Douglas Millican Chief Executive, Scottish Water DATE xxxxx 2020 Agnes Robson Chair, Customer Forum DATE xxxxx 2020



APPENDIX 8: LETTER TO SCOTTISH WATER CHIEF EXECUTIVE ON NATIONAL ENGAGEMENT PROGRAMME



Date: 11 September 2020 Our Ref: ASDM110920

Douglas Millican Chief Executive Scottish Water Castle House 6 Castle Drive Dunfermline KY11 8GG

Dear Douglas

Scottish Water National Engagement Plan

The Commission is pleased to note the recent Minute of Agreement between Scottish Water and the Customer Forum in relation to the Forum's expectations of Scottish Water's Transformation Plan.

The Commission particularly welcomes the requirement in the agreement for Scottish Water to engage with customers and communities including through the National Engagement Programme. We would very much hope that the initial results from the National Engagement Programme could be reflected in the Scheme of Charges that Scottish Water submits for the 2021-22 financial year.

We look forward to learning more about Scottish Water's plans and approach for future customer and community involvement and the programme of national engagement.

Yours sincerely

Al PA Suthal

Alan D A Sutherland Chief Executive

Water Industry Commission for Scotland First Floor, Moray House Forthside Way Stirling FK8 1QZ

Chair: Professor Donald MacRae OBE FRSE

Telephone 01786 430 200 Email: enquiries@watercommission.co.uk Web_www.watercommission.co.uk Web_www.scotlandontap.co.uk

APPENDIX 9: THE COMMISSION'S DECISION PAPERS

Title	Date published	
2017 Decision Paper 1 - What impacts prices?		
2017 Decision Paper 2 – Prospects for prices		
2017 Decision Paper 3 – Financial tramlines	21 June 2017	
2017 Decision Papers 4 - Overall size of the capital programme		
2017 Decision Paper 5 - communicating output and cost effectiveness		
2017 Decision Paper 6 - Macroeconomic assumptions		
2017 Decision Paper 7 – Futureproofing service levels: sustainable asset maintenance	27 August 2017	
2017 Decision Paper 8 – Enhancement investment	23 August 2017	
2017 Decision Paper 9 – Growth investment		
2017 Decision Paper 10 – Operating expenditure		
2017 Decision Paper 11 - Innovation	- 18 October 2017	
2017 Decision Paper 12 – Financial strategy		
2017 Decision Paper 13 - Performance monitoring		
2018 Decision Paper 1 - Scottish Water's Strategic Projections		
2018 Decision Paper 2 – Assumptions on macroeconomic inputs and customer base growth	25 July 2018	
2018 Decision Paper 3 – Investment planning and prioritisation		
2018 Decision Paper 4 – Meeting long-term investment needs	26 September 2018	
2018 Decision Paper 5 - Capital maintenance		
2018 Decision Paper 6 – Reporting performance		
2018 Decision Paper 7 - Financial tramlines	21 November 2018	
2018 Decision Paper 8 – Prospects for prices		
2019 Decision Paper 1 – Asset replacement challenge	26 July 2019	
2020 Final Decision Paper – Prospects for Prices	14 February 2020	

APPENDIX 10: GLOSSARY OF TERMS

Key terms	Definition
Asset	An item of economic value that Scottish Water owns to help it provide services to current and future customers. They can be physical, such as a network of water pipes and treatment works, or intangible such as intellectual property.
Asset lifetime	The length of time an asset functions before requiring replacement. For example, Scottish Water estimates that its large water mains have an expected asset lifetime of around 100 to 130 years.
Asset replacement	The act of investing in a new asset to replace the existing asset. This can occur either at the end of the asset life or when the economic cost of continuing to operate the existing asset (in Net Present Value terms, as defined below) is higher than the cost of replacing the asset over a pre-determined period.
Asset replacement challenge	Used to highlight a situation when many different types of assets are collectively approaching the end of their respective asset lifetimes and will require replacement.
Capital maintenance	Investment in assets in order to maintain existing service levels to customers. This can comprise extending the life of an existing asset (asset repair or refurbishment) or replacing the asset outright (asset replacement).
Capital Enhancement	Investment in new assets in order to improve existing service levels to customers. These could be improvements to the quality of water that customers receive, reductions in the environmental impact that Scottish Water has, or improvements to customer service.
Charge cap	A limit on the charges that Scottish Water can levy on its customers.

Key terms	Definition
Growth Investment	Investment in new assets that provide existing services to new customers. This investment could either be in the expansion of existing capacity or it could be in investment in new connections for household or non-household customers. The latter results in greater revenue for Scottish Water.
CAS	Citizens Advice Scotland
Charges scheme	The way in which Scottish Water proposes to charge customers for the services it provides for the following financial year. These charges must be in line with Ministers' Principles of Charging and within the limits set by the Water Industry Commission for Scotland in its Final Determination.
Circular economy principles	 The principles by which economic activity can benefit economic, societal, and natural systems. This includes: 1. Eliminating waste and pollution; 2. Reusing of products and materials; 3. Regenerating natural systems.
CPI	The consumer price index measures the proportional change in the weighted average prices of a fixed basket of goods and services which a household typically purchases. Changes in CPI are used to measure price changes associated with the cost of living.
Default retail tariff	The default tariff is a maximum charge that customers pay to Licensed Providers in the retail market.

APPENDIX 10: GLOSSARY OF TERMS

Key terms	Definition	
DWQR	Drinking Water Quality Regulator.	
EBP	Ethical Business Practice.	
EBR	Ethical Business Regulation.	
Economically Optimal	To be economically optimal all investment decisions should take account of cash costs as well as the wider costs and benefits to society and the environment. This should include the cost of carbon and the costs and benefits associated with externalities such as factors impacting on social and natural capital. The impact of an intervention from a climate perspective is an integral consideration of whether it is economically optimal.	
Embodied carbon	The carbon dioxide or greenhouse gas emissions associated with the manufacture and uses of a product or service. We take this term to be wider than the term 'embedded' as it allows for the consideration in decision taking of the implications of potential asset decommissioning.	
ETH Zurich	Public research University based in Zurich, Switzerland.	
Financing	How the upfront investment is paid for. This may involve, for example, borrowing money to meet investment needs or letting a contract (such as a PFI contract).	
Funding	Compared to financing, funding is about who ultimately pays. Such funding can only come from the customers of the service (current and future) or from the tax payer (by way of grants from Government).	
Government stimulus measures	Targeted fiscal policy used by governments to stimulate the economy typically to aid an economic recovery.	
Hard budget constraint	Limiting the cash available to a company to encourage the pursuit of cost reductions.	

Key terms	Definition
IMF	International Monetary Fund.
Information asymmetry	A situation where one party has more information available than a counterparty.
Investment appraisal	Examining the costs and benefits of an intervention.
IPPF	Investment Planning and Prioritisation Framework.
IPPG	Investment Planning and Prioritisation Group.
JASPERS	Joint Assistance to Support Projects in European Regions.
Leakage	Water losses from Scottish Water's system before reaching customers (e.g. due to bursts in pipes). The economic level of leakage is the point where the cost saving of reducing leakage is equal to the economic cost of the water lost (including externalities such as carbon).
Licensed Providers	Suppliers who operate in the non-household retail market, competing for the custom of non-household customers in Scotland.
MEICA	A grouping of Mechanical, Electrical, Instrumentation, Control and Automation assets. These tend to be constituent parts of a larger asset grouping (e.g. a treatment works) but have a much shorter asset life than that larger grouping. As such, they are replaced multiple times over the lifetime of an asset such as a treatment works.
Natural capital	Elements of nature that directly or indirectly produce value to people, including ecosystems, species, freshwater, land, minerals, the air and oceans.
Net present cost (life- cycle cost)	The net present cost of a solution is the total installation and operating costs incurred during its lifetime of a solution discounted at an appropriate rate.

APPENDIX 10: GLOSSARY OF TERMS

Key terms	Definition
Net present value	The net present value of a project is the total benefits achieved over the life of the project minus the total costs, discounted at an appropriate rate.
Net zero emissions	The state at which any emissions emitted by a company are offset by the removal of an equivalent amount of greenhouse gases from the atmosphere.
Nominal / Outturn prices	Values expressed including inflation.
OECD	Organisation for Economic Cooperation and Development.
Operating expenditure	Ongoing, day-to-day costs required to keep a business running.
Operational carbon	Greenhouse gas emissions produced during the lifespan of an asset as a result of its operations.
Per capita	Per person.
Private Finance Initiative contracts	A means of financing public sector projects. There are forms of such contracts but these typically involve a private provider providing an asset or service in return for regular payments over the duration of the contract.
Real terms	Values expressed excluding the impact of inflation.
Regulatory control period	The 6-year period over which WICS sets prices for water and sewerage services.
Resilience	The ability to withstand/recover from unexpected changes without adverse effects.
Revenue	Income generated from collection of water and sewerage charges.

Key terms	Definition
Ring-fence	An allowance which is for a specified purpose and provided certain conditions are met.
RPI	Retail Price Index measure of inflation.
Sensitivity analysis	Investigating how much an output variable of a model changes in response to changing one or more of the inputs.
SEPA	Scottish Environment Protection Agency.
Social capital	Social capital is commonly used to describe the relationships and building of trust that help contribute to the success of businesses.
SRC	Strategic Review of Charges.
Tier 1 expenditure	Tier 1 refers to Scottish Water's recurring costs such as operating costs, interest payments, the cost of the legacy PFI contracts, an allowance for repair of assets and payments to developers for connecting new properties.
UKWIR	UK Water Industry Research.
Unit cost	Expenditure incurred to produce, store, and sell one unit of a particular good or service.
Whole-life cost analysis	Whole-life cost analysis involves assessing the total cost of an asset over its lifetime. This includes consideration of the initial cost of the asset as well as the cost of its operation, maintenance and subsequent replacement or disposal.

8 OCTOBER 2020

WATER INDUSTRY COMMISSION FOR SCOTLAND MORAY HOUSE FORTHSIDE WAY STIRLING FK8 1QZ

T: 01786 430 200 E: enquiries@watercommission.co.uk www.watercommission.co.uk

