

# 3 Overcoming key regulatory challenges

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During SRC21, WICS and other parties aimed to modify the approach to economic regulation in the sector to address a range of interrelated challenges: 1) the limitations of an adversarial approach, 2) challenges associated with long-life assets and time inconsistency, 3) lack of flexibility of investment, and 4) embedding the customer and community voice. This chapter summarises and analyses the components and major milestones of SRC21 within each of these four challenges. Each of the sections summarises the starting point at the outset of SRC21, explores how WICS and stakeholders made progress within this area, and looks ahead towards emerging challenges.

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## Limitations of an adversarial approach

### ***The starting point: balancing efficiency against the need to address long-term challenges***

Looking back at the different SRCs, WICS considered that a regulatory approach based on the use of a “hard budget constraint” to ensure efficient outcomes was reaching its limits. The hard budget constraint is a common tool in the kit of economic regulators that set prices in network sectors, whereby the regulator sets the constraint at a level that is just sufficient to deliver the expenditure required to attain certain levels of service, if the regulated entities are efficient enough. This approach had ensured that the regulated utility had sufficient resources to meet efficiency targets and deliver the desired level of service within the given regulatory period. However, this focus on the efficient use of resources over a regulatory period of six years did not provide sufficient incentives to think long-term about the state of the assets and necessary repair, refurbishment and replacement, as well as the net-zero target. In WICS’s view, traditional incentive regulation featuring a hard budget constraint was no longer delivering adequate results for customers.

WICS considered that the hard budget constraint had outlived its usefulness for a second reason: the adversarial relationship between regulator and regulated entity that this approach encouraged. WICS’s Chief Executive observed that in his experience a more adversarial relationship could contribute further to asymmetry of information, and, in turn, the difficulty of the regulator’s decision making. The adversarial nature can quickly become positively reinforced, as the regulator has to revert to tools like commissioning external reviews to reduce the effects of information asymmetries, which can further strain the relationship between regulator and company (Sutherland, 2021<sup>[1]</sup>).

WICS’s efforts to reduce the adversarial nature of economic regulation in the Scottish water sector would build upon progress made in previous years. Following its establishment, WICS’s 2006-10 price review was marked by a disagreement on the finances necessary to deliver the objectives set by the Scottish Ministers between the regulator and the company. Hendry (2016<sup>[2]</sup>) notes that the relationship between Scottish Water and WICS contributed to the failure to agree a business plan, which led subsequently to the resignation of the Scottish Water chair in 2006 (p. 952<sup>[2]</sup>). Since that time, both the regulator and company have focused on building a collaborative approach and, as a result, the reviews have become significantly less adversarial. Part of the evolution of this more collaborative approach was the development of a new body of specially-selected qualified individuals – the Customer Forum – that added a new dimension to the traditional bilateral relationship between regulator and company. The issue remained that the company was still primarily focused on what the regulator wanted, rather than taking ownership of its relationship with customers and the communities it serves.

As WICS prepared for SRC21, it aimed to build upon previous developments to further de-emphasise adversarial approaches by finding an alternative to a hard budget constraint and give greater ownership to Scottish Water through an open and candid dialogue on needs, priorities and constraints. Such an approach would need to ensure that the regulated entity would use resources set aside to finance long-term maintenance and replacement needs efficiently while enabling the company to attain the net-zero target. In addition, the approach would involve mechanisms to help the parties move further away from adversarial regulation.

Going into SRC21, WICS envisioned an approach based on building trust and fostering collaboration that would facilitate an open and transparent dialogue on the priorities for the sectors that would then serve as a basis for the sometimes-hard choices on where to put resources. The “hard budget constraint” would ultimately be replaced by a shared view on what to do, minimising the need and opportunities for hiding information and rather creating incentives to have an even better view of the challenges for the water sector.

The regulator took inspiration from ethical business regulation (EBR) and ethical business practice (EBP) (see Box 3.1). In the document establishing its methodology for SRC21, WICS described its motivations for shifting from a more traditional approach to economic regulation to an EBR/EBP approach, an idea that was influencing WICS's thinking even before the start of SRC21 with the introduction of the Customer Forum in SRC15. While the traditional approach delivered significant benefits in terms of sector outcomes, WICS expressed doubt that the traditional approach could continue to be as effective in the face of evolving and complex modern challenges including “increased uncertainty, the need to involve multiple stakeholders in identifying sustainable solutions and the timing of required expenditure” (WICS, 2017<sup>[3]</sup>). WICS explained that an EBR approach meant that the regulator would no longer rely solely on its powers of discipline, placing these functions on “stand-by mode” (WICS, 2020<sup>[4]</sup>). In turn, WICS expected Scottish Water to mainstream EBP, reflecting principles of ethical behaviour, openness and trust.

### Box 3.1. EBR and EBP: Ethics in purpose and in process

When defining the concepts of EBR and EBP, the researchers that coined the terms start with EBP. EBP turns towards the entities involved in regulation themselves, establishing an expectation of ethical and fair behaviour by these parties. Hodges and Steinholtz (2017<sup>[5]</sup>) define EBP as “[a]n organisation in which the leaders consciously and consistently strive to create an effective ethical culture where employees do the right thing, based upon ethical values and supported by cultural norms and formal institutions.” The researchers present EBP as a pre-condition for EBR, which is “[a] relationship between a business, or a group of businesses, and a regulator, or group of regulators, in which the business produces evidence of its ongoing commitment to EBP and the regulator recognises and encourages that commitment.” EBR involves a commitment and a shift away from blame culture in regulation towards a culture based on openness and trust.

The concepts of EBR and EBP are multifaceted, but one concept at the heart of the EBR regulatory delivery model is self-assurance by the regulated company. In this case, an EBR approach would establish an expectation that Scottish Water should be able to find the best way to reassure stakeholders that they are meeting their legal responsibilities and beyond. It involves an expectation that the company reports its performance and prospects regularly and transparently, setting out what it will achieve in the short-, medium- and long-term. In this model, “the role of regulators should be mainly to provide information and advice to ensure that organisations assure themselves effectively and reliably, and intervene when they do not” (Hodges and Steinholtz, 2017<sup>[5]</sup>).

WICS defined expectations for how Scottish Water would embody EBP in its final determination. According to WICS, Scottish Water should:

- 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 (WICS, 2020, p. 16<sup>[6]</sup>).

Furthermore, WICS saw alignment between the concept of EBP and evolving ideas of corporate purpose. It cites Colin Mayer, who argues that corporations should “produce profitable solutions to the

problems of people and planet and not profit from producing problems for people and planet” (Mayer, 2018<sup>[7]</sup>; WICS, 2020<sup>[4]</sup>). This concept holds particular resonance in the Scottish water sector, with its publicly owned service provider.

Source: (Hodges and Steinholtz, 2017<sup>[5]</sup>), *Ethical Business Practice and Regulation: A Behavioural and Values-Based Approach to Compliance and Enforcement*, Hart Publishing, Oxford, <https://www.bloomsburyprofessional.com/uk/ethical-business-practice-and-regulation-9781509916368/> (accessed 23 March 2021); (Mayer, 2018<sup>[7]</sup>), Editorial: Averting corporate crises. *British Academy Review*, 3-5, retrieved from <https://www.thebritishacademy.ac.uk/documents/348/BAR34-02-Mayer-Editorial.pdf> (accessed on 23 March 2021).

This approach was a significant change compared to previous SRCs, including the last SRC that already introduced some important new features in the process. EBR and EBP have mostly developed as academic hypotheses rather than a practical methodology to regulate a sector. The novelty in applying these principles and approach has required some degree of experimentation and “trial and error” throughout the process. The following sections present the new elements introduced in SRC21 to support a shift away from the adversarial approach by embracing a new regulatory approach that seeks to mainstream EBR and EBP. It explains how the governance of the process created new opportunities for exchange, describing how collaborative processes furthered Scottish Water’s Strategic Plan and the water sector vision. It presents a support group convened to perform a “temperature check” of EBR values in the process. Finally, it highlights the challenges posed by this new approach and how these challenges were addressed.

### ***Moving ahead: SRC21 structures shift away from the adversarial approach***

This new approach implied a shift from previous SRCs in which bilateral conversations and unilateral research were the norm. Stakeholders committed to a process bringing together regulators, stakeholders and businesses under a shared ethical framework emphasising trust and collaboration. SRC21 convened regular, formalised meetings of key stakeholders (first as Joint Stakeholder Meetings and later as the Stakeholder Advisory Group, or SAG) with working groups to consider specific issues within the regulatory process. Information-collecting processes within SRC21 became collaborative efforts. Decision making on many issues and some products also involved collaboration.

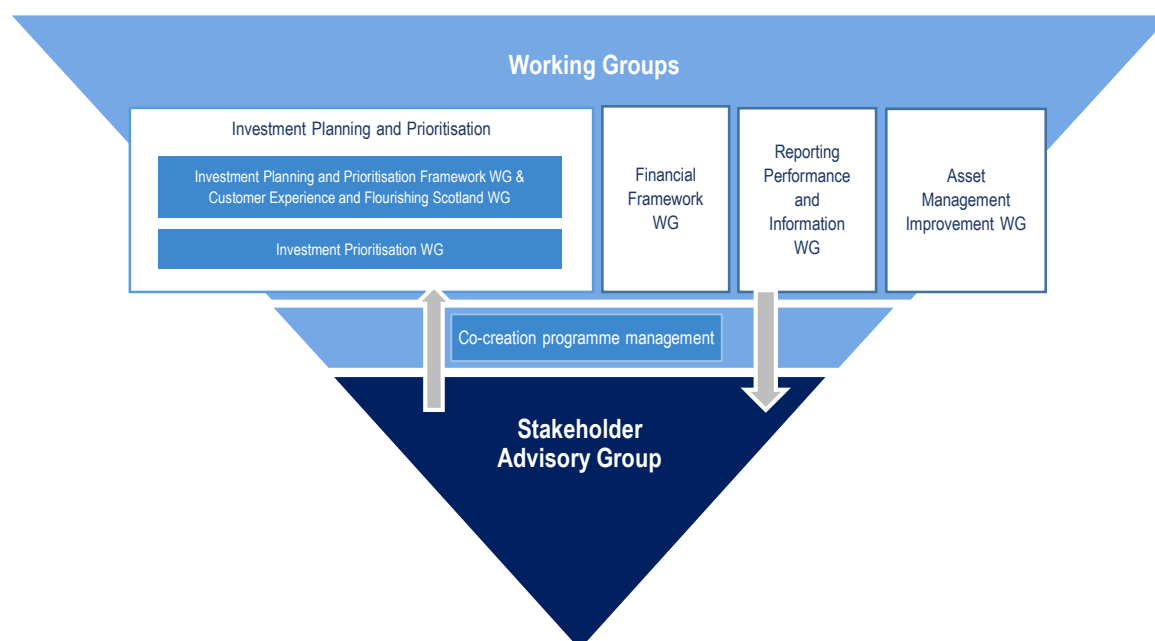
#### *The multi-lateral governance of SRC21 creates new opportunity for exchange*

Throughout the SRC, regular meetings of stakeholders brought together senior representatives of each stakeholder organisation: Scottish Government, WICS, Scottish Water, the Customer Forum, SEPA, DWQR and CAS. The OECD Secretariat was invited as an observer, and experts have been called to present ad hoc. The stakeholder group became a critical forum for advancing decision making, and also for the sharing of information and knowledge. For example, Scottish Water held a series of “deep dive” sessions to stakeholders to help all parties understand how the company operates.

The frequency of meetings increased to extract more value from these opportunities for exchange. Initially, the stakeholder group planned to convene every six months, as WICS agreed to promote both better communication and increased co-operation among stakeholders throughout the SRC. Soon it became apparent that these meetings brought significant benefits to the process, not least the ability to address crosscutting challenges in a transparent manner and profit from opportunities for mutual learning. To take advantage of the benefits of these meetings, more frequent, quarterly meetings were held throughout 2017-18. In the last quarter of 2018, WICS-chaired Joint Stakeholder Meetings occurred every month to enable faster progress. The meetings continued monthly thereafter.

The governance of these meetings shifted during 2018, when the WICS-chaired Joint Stakeholder Meetings became the Scottish Water-led SAG. Scottish Water took ownership of the SAG for the purpose of co-creating its Strategic Plan with stakeholders. In parallel, Scottish Water established six multilateral working groups where stakeholders provided input on key elements of its Strategic Plan and remaining parameters of SRC21. These working groups, each chaired by a Scottish Water employee, operated under terms of reference to produce an output or work towards a goal. The working groups reported to the SAG regularly, which in turn provides input on the working groups' progress. Scottish Water and WICS provided a joint programme management function, helping co-ordinate groups where necessary and maintaining a shared online repository for materials relevant to the SRC21 process. Towards the end of 2019, a representative from the Government helped co-ordinate the SRC as well as the Investment Planning and Prioritisation Group. This structure is pictured in Figure 3.1 below.

**Figure 3.1. SRC21 governance structure**



Source: Modified from the "SR21 Co-creation Approach" diagram presented by Scottish Water to the Stakeholder Advisory Group on 22 November 2018.

### *Stakeholders experiment with co-creation for Scottish Water's Strategic Plan and a sector vision*

The idea of co-creating key outputs of SRC21 appealed to the stakeholder group, but the process was not well defined. After an early try to define principles for co-creation, Scottish Water's Strategic Plan represented a first attempt at co-creation. However, the process ultimately resembled something closer to joint review. A more advanced form of co-creation is exemplified in the sector vision, where stakeholders came together to create the vision from a blank page.

Scottish Water's Strategic Plan was the deliverable of central concern at many of the monthly stakeholder meetings, and the role of the stakeholder group in contributing to the Strategic Plan was established in a process that was more organic than premeditated. The proposal to use a "co-creation" process to create the Strategic Plan originated with Scottish Water, and WICS welcomed the proposal and extended the timeline for intermediate deliverables in order to provide adequate time for the process. The approach to the Strategic Plan first took shape in a series of letters exchanged between the CEO of WICS and the CEO

of Scottish Water in September and October 2018. They agreed that the company would work collaboratively with its owner (the Scottish Government), its customers and its other stakeholders to co-create a Strategic Plan. The letter exchanges also outlined the approach to co-creating the Strategic Plan as one based on openness and transparency, in line with EBR principles.

Further procedural guidance came in the form of a set of principles establishing key parameters and norms for the co-creation process. Scottish Water created the Guiding Principles for co-creation of its Strategic Plan in November 2018. The principles expressed many of the characteristics stakeholders have come to associate with an ethical process: clearly identified roles, established avenues for influence, transparency, and standards for behaviour (Table 3.1). The stakeholder group discussed the principles at length, although the group stopped short of adopting the principles formally. Nevertheless, these principles and the discussions held about them provided a foundational shared understanding of some norms.

**Table 3.1. Guiding principles for co-creation proposed by Scottish Water**

Roles	<ul style="list-style-type: none"> <li>Ministers Objectives have primacy</li> <li>SW own the plan and produce outline</li> <li>Respect regulatory and customer independence ensuring ongoing roles and duties are not compromised</li> <li>This is a voluntary process – all stakeholders see benefit of staying the “in the raft”</li> <li>Enables wider stakeholder discussions as appropriate</li> </ul>
Influence	<ul style="list-style-type: none"> <li>Everyone has proportionate input relevant to their remit and can see their impact.</li> <li>Early engagement – not tinkering round edges at the end</li> <li>Balancing both short term and long term considerations</li> </ul>
Openness & Transparency	<ul style="list-style-type: none"> <li>Share knowledge, expertise, insight and level of understanding</li> <li>Accepting of need for bi-laterals that explore not decide</li> <li>Multi-lateral when committing to positions that may utilise significant resource</li> <li>Collective vision</li> <li>Willingness to test ideas, not polished product</li> <li>Open and questioning</li> <li>Clear and honest about quality of evidence</li> </ul>
Behaviours & Conduct	<ul style="list-style-type: none"> <li>Willingness to consider different views - tension and challenge is explored and positively tackled</li> <li>Candid and no blame culture</li> <li>Trust, value and respect colleagues</li> <li>Positive attitude</li> </ul>
Practical & Usable	<ul style="list-style-type: none"> <li>Recognises reality of stakeholder resource availability and tailors level of co-created product accordingly</li> <li>Recognise that process goes beyond the Strategic Plan, particularly through the IPPF</li> </ul>

Source: Scottish Water, Presentation to the 22 November 2018 Stakeholder Advisory Group meeting.

In practice, the iterative process of engaging stakeholders in the Strategic Plan creation fell short of complete co-creation. The process to draft the Strategic Plan involved group discussions, bilateral meetings, and informal presentations of draft documents as well as formal consultation processes. Many of these mechanisms did not lend themselves to co-creation; instead, Scottish Water would often advance separately (often with WICS or other organisations) and present new documents to the wider group.

The group also questioned whether an integral process of co-creation was desirable. Indeed, “co-creation” raised questions of who would “own” the final product, and whether decisions should be reached by consensus by all parties (which threatened to stretch beyond the statutory mandates of some stakeholders). While the entire process may not have been “co-creation,” it was guided by EBR principles such as openness, a no-blame culture and transparency. This approach created a unique process that ramped up exchange between WICS, Scottish Water and stakeholders considerably.

Although much of the Strategic Plan process closer resembled joint review than co-creation, true co-creation took shape in the development of a sector vision. Stakeholders came together in a daylong workshop that took stakeholders through a series of exercises designed to elicit blue-sky visions of the sector, roadblocks impeding progress, and realistic goals for the sector. Scottish Water and the Customer Forum synthesised stakeholder input into drafts, further soliciting input from the group and from individual stakeholder organisations to maintain alignment. The final product (shown in Box 3.2), was jointly owned by all stakeholders. Stakeholders agree that the shared vision for the Scottish water industry was a successful result and a step towards co-creation (The Water Report, 2019<sup>[8]</sup>).

### Box 3.2. A vision for the Scottish water sector, owned by stakeholders

#### A sweeping vision for the sector

The vision links performance to sustainability and Scottish policy, opening with “Scotland’s water sector will be admired for excellence, secure a sustainable future and inspire a Hydro Nation.” It touches upon water quality, environmental protection, economic prosperity, and affordability. Additionally, it expresses the sector’s goal to strive for agility and resilience through collaboration within and beyond the sector.

The vision was conceived as a touchstone for the process going forward: notably, the vision should drive Scottish Water’s Strategic Plan objectives.

#### Political buy-in supports the vision

After stakeholders launched the process to create a shared sector vision, the Cabinet Secretary for Environment, Climate Change and Land Reform formally called upon the stakeholders to create a vision for achievements in the sector over the next thirty years.

Ministers published the vision in the final Ministerial Objectives and Principles of Charging, giving it legal status.

Source: The Water Report (2019), Scotland’s water sector co-creates vision with social purpose, <https://www.thewaterreport.co.uk/single-post/2019/10/20/scotland-s-water-sector-co-creates-vision-with-social-purpose>; Scottish Government (2020), Investing in and paying for water services: consultation, <https://www.gov.scot/publications/investing-paying-water-services-2021-final-consultation/pages/3/>.

### *The EBR support group offers a periodic “temperature check” of the SRC21 process*

Stakeholders discussed the idea of an external form of assurance to accompany a transition towards EBR and EBP and, over time, the idea of an **EBR Support Group** (EBRSG) emerged. WICS’s updated methodology issued in November 2018 formalised the creation of the EBRSG. The EBRSG would provide a regular “temperature-check” of trust, ownership, collaboration and openness by seeking stakeholders’ perceptions at regular intervals and debriefing them on their findings. Agreeing to create the EBRSG was a key step in the direction of embedding EBR in SRC21 and a testament to stakeholders’ willingness to reflect upon the degree of trust of the process as it happened.

The ways of working of the EBRSG allowed it to collect periodic, anonymous feedback from parties to reflect back to the stakeholder group. The EBRSG was tasked with assessing the SRC21 process on four dimensions: common understanding of the EBR framework, openness and transparency, reciprocal trust, and involvement and collaboration. The EBRSG conducted assessments via regular anonymous online surveys and face-to-face interviews. The survey used mainly closed-ended questions to capture participant views on their own role, the behaviour of stakeholder organisations and the functioning of the SRC21 system. The face-to-face interviews, lasting less than one hour each, allowed interviewers to explore the issues raised in the survey in more depth and ensure that respondents have interpreted the survey

questions correctly. After each assessment, the EBRSG provided their analysis of the results of surveys and interviews to stakeholders along with recommendations and questions for consideration.

Through six assessments, conducted between 2019 and 2021, the EBRSG showed evolving stakeholder perceptions of the use of EBR principles in SRC21. The focus of stakeholders developed in response as the focus of the SRC21 process shifted, as summarised below:

- **Early assessments** showed an emphasis on operationalising EBR principles within the SRC process, increasing transparency within the SRC process and subsequently transparent communication to the public. They highlighted continued room for improvement in the SRC21 ways of working, suggesting that the group further clarify co-creation and roles, improve reception to constructive challenge, communicate clearly about bilateral meetings and reconsider resource demands for stakeholders. They also expressed early visions for the use of EBR/EBP going forward, with the group recommending that investment prioritisation is transparent and considering external communication about the SRC21 process.
- **As the content of the SRC shifted from agreeing key outputs to the phase of delivery**, stakeholders expressed uncertainty about the practicalities of future Delivery Plans, Scottish Water’s Transformation Plan, performance reporting, and customer engagement. However, the periodic assessments showed that stakeholders continued to grapple with some aspects of SRC21 throughout the process, such as the openness of proceedings and the balance between collaboration and ownership.
- The EBRSG review that occurred **during the early months of the COVID-19 pandemic** showed new concerns related to the economic environment. Participants noted that COVID-19 and related developments placing political pressure on the outcome of SRC21. In addition, participants expressed some concerns about changing ways of working as the pandemic required a shift to remote working.

### Box 3.3. EBR in the non-household market

WICS also regulates the retail non-household market, which has grown to include 29 retailers in 2020 (Citizens Advice Scotland, 2021, p. 4<sub>[9]</sub>). In response to the COVID-19 pandemic, the regulator introduced a range of measures to help the retail market weather shocks (WICS, 2020<sub>[10]</sub>). In 2021, the regulator created a working group for these “licensed providers” to consider proposals for measures that would help ensure the recovery and resilience of retailers in the wake of the COVID-19 crisis (WICS, 2021, p. 2<sub>[11]</sub>).

The group also presented the opportunity to experiment with a different approach in the retail non-household market. Inspired by ethical business regulation, the regulator encouraged retailers to take a collaborative approach in the working group to think collectively to improve the market framework. Participation in the working group was voluntary. CAS chaired the group, allowing guidance of the group to originate from an independent source. Indeed, WICS maintained frequent engagement with the group, but limited its formal involvement in an attempt to encourage the group to own its decisions. This represented a novel attempt to apply an EBR-inspired approach to a working group involving competitors in the sector.

The early impacts of the working group are appearing in changes in the regulatory approach for the retail non-household market, which provides advantages for licensed providers acting within what WICS considers to be good ethical business practice. Traditionally, WICS would have been prescriptive about new and changed license measures for retailers. In light of consultation and engagement with the working group and stakeholders, WICS decided to introduce voluntary license conditions in certain areas. In particular, licensed providers are welcomed to include license conditions in the areas of 1) a



new deferral scheme to support customers affected by COVID-19 and 2) a demonstration of financial resilience to WICS and Scottish Water. In its consultation response, WICS writes that such an approach is “consistent with encouraging licensed providers to take ownership for improving the market framework” (WICS, 2021, p. 6<sub>[11]</sub>). If licensed providers adopt either the financial resilience condition only or both of the conditions, they receive certain specified benefits, such as the relaxation of wholesale payment terms and limitations on customer pre-payments. In addition, licensed providers that do not include either condition are marked as “high risk providers” on the WICS website as they will not have participated in the “Market Health Check” of licensed providers’ financial strength (WICS, 2021, p. 5<sub>[12]</sub>).

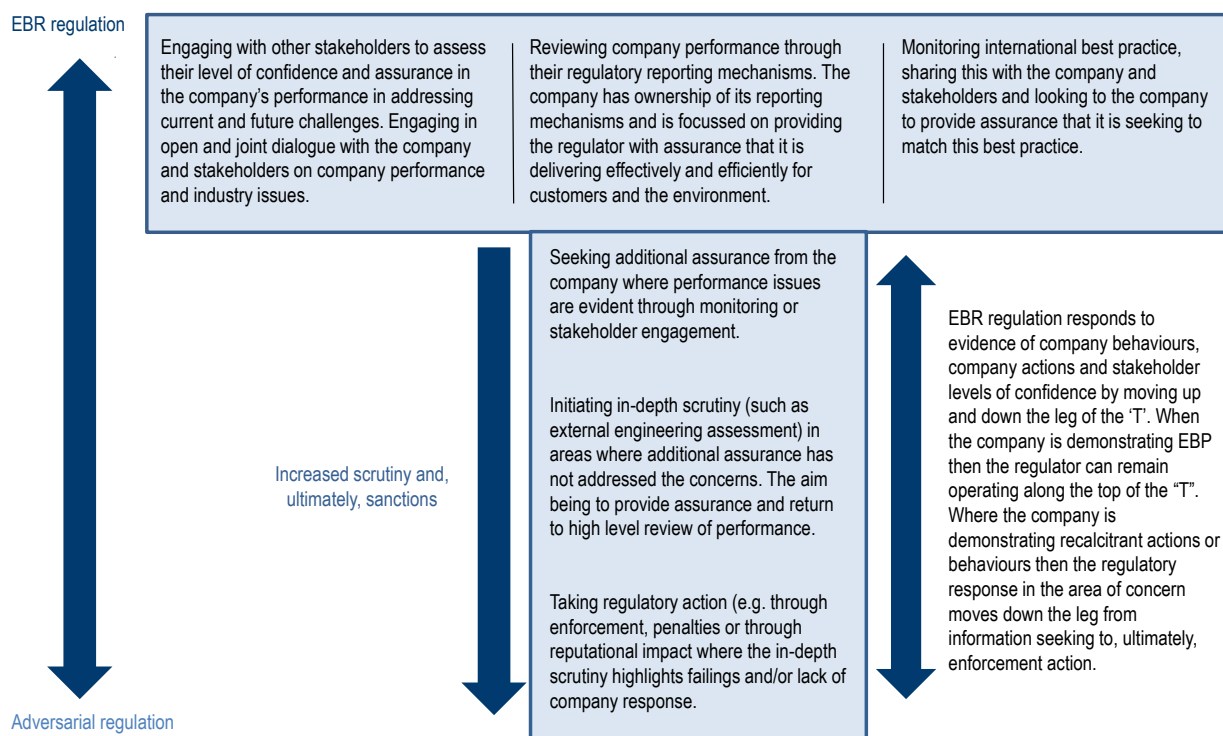
The constitution of the working group and the voluntary license conditions mark an early foray into applying ethical principles to the retail non-household market. The group encouraged ownership and collective thinking. In turn, the regulator defined clear advantages for behaviour in line with principles and clear consequences for behaviour that strays from principles.

Source: WICS, 2021.

*WICS re-imagines the use of its powers to further EBR*

WICS hopes that an EBR-inspired approach will ultimately produce benefits for the sector and the consumer, but it maintains its powers of discipline on standby. If the regulated company does not meet expectations, the regulator envisions a series of stages of escalatory actions on the part of the regulator. These actions will start small, such as seeking additional information from the company. The regulator plans to escalate proportionally to the severity of the company’s action, with the most severe response being enforcement action. A key new skill for the regulator will be its ability to move up and down these escalatory steps. The regulator has summed this up in the “T” Diagram, pictured in Figure 3.2.

**Figure 3.2. WICS’s ‘T’ Diagram shows how it intends to escalate regulatory responses if necessary**



Source: WICS, 2021.

### ***Looking forward: the challenges of moving away from the adversarial approach***

Steps taken to change the relationship between the regulator and the regulated company, involving the other stakeholders as integral participants in the SRC21 process, presented value-added in the Scottish context in terms of increased trust. An EBR-inspired approach has produced valuable outcomes during and in the immediate aftermath of SRC21. Parties appreciated a new emphasis on learning during SRC21, which allowed all parties to advance towards final outputs together. Parties agree that the EBRSG was a useful outlet, allowing SRC21 participants to express sentiments and concerns that were reflected back to the group in an anonymous and constructive way. WICS and Scottish Water have adjusted their ways of working towards a more open exchange of information, and early reports suggest that participants feel the shift facilitates a more productive dialogue. WICS reports a reduction in around 20% in consultancy costs during this price review as compared to those previous, suggesting that changes in resource allocation accompanied new ways of working.

Introducing EBR and EBP principles into SRC21 has proved a challenging task as it requires new norms, culture and behavioural change, and new instruments. As the approach was relatively new and untested in its practical implementation, it faced roadblocks and required adjustments. Parties had to establish shared expectations, ensure that culture change permeated organisations, and translate loose principles into instruments. The innovative nature of SRC21 have made these challenges almost inevitable. Lessons from this experience should be taken into consideration for the preparation of the next SRC.

#### *Investing in relationships and knowledge-building*

The SRC21 process was demanding for participants, but created knowledge- and relationship-building advantages. Monthly stakeholder meetings, spin-off working group meetings, and “deep dive” sessions about aspects of Scottish Water’s operations required considerable time investment from participants. Representatives were often from the highest levels of their organisations: the Stakeholder Advisory Group meetings brought together executive and senior representatives from each participant organisation. Opportunity costs for participant organisations, especially in light of intense and ongoing engagement with executive and senior staff, may justify additional streamlining of processes going forward. While the time costs were high, some stakeholders reported that the process was “worth it” due to the immediate outcomes from SRC21, including a “no surprises” approach for some outputs with a greater degree of transparency.

#### *Establishing buy-in and expectations*

An EBR- and EBP-inspired approach was a marked departure from what had been “business as usual” in the Scottish water sector, and required the development of buy-in and shared expectations among stakeholders. The methodology designed by WICS in 2017 at the outset of the SRC21 clarified expectations and inevitably left some of the practicalities of how to translate these expectations and EBR/EBP principles undefined. With the SRC21 process entering uncharted territory at full speed, the group had to start with a sketch of what EBR/EBP principles would look like in practice instead of a developed picture. While this was inevitable and potentially necessary, the lack of certainty created some discomfort among some stakeholders on “how to” move forward. WICS reports that identifying, communicating and developing understanding of the benefits of the new approach was a key method to moving forward despite uncertainty.

The revision of WICS’s methodology in November 2018 clarified some of the practical next steps. These clarifications were a welcome step to allow stakeholders to take ownership of the process, while at the same time providing guidance and ideas on what ownership would mean in practice. In particular, WICS formalised the move from a business plan to a Strategic Plan, giving more clarity to Scottish Water on what to do and where to put resources.

Even as additional guidance clarified expectations in some areas, the lack of shared definition of co-creation for the Strategic Plan have caused uncertainty. The mechanism of co-creation promised to build trust and ensure that all stakeholders were all going in the same direction, but the process of co-creation was unclear at the start. In the absence of a shared definition for co-creation, expectations for the process ranged from elevated participation to collective drafting. Ultimately, co-creation of the Strategic Plan gave way to joint review to avoid compromising the need for Scottish Water to take ownership of its strategy.

In some ways, the EBR-inspired approach to SRC21 fell short of the early vision of EBR expressed in the guiding principles for co-creation. For example, the hallmark of the EBRSG was the anonymity that it provided to participants. While participants agreed that the EBRSG's feedback was constructive, the tool has not served to further an open exchange between parties on its own. The implementation period following SRC21 brings its own challenges. As the Strategic Plan becomes a living document that should steer the long-term direction of the regulated company, these uncertainties related to co-creation should be less of an issue. However, it will be important to define roles and expectations of the different stakeholders in inputting into the Plan's updates and revisions.

### *Clarifying roles and ownership*

During SRC21, there was some ambiguity about the role of the regulator's decision papers and analysis: was the regulator setting broad boundaries or releasing conclusive and terminal analysis? From the beginning of SRC21, WICS intended to increase the ownership of Scottish Water over its decision making, with the desired is that Scottish Water no longer simply responds to regulator directives. As during the previous SRC, when WICS published a series of "issues papers," the regulator continued to publish regular papers to communicate its evolving understanding and expectations for the regulatory process. However, this time WICS chose to call these papers "*decision papers*," which suggested finality. The terminology communicated that the regulator was making decisions rather than participating in a process designed to promote the ownership that they were seeking. This perception created an unintended dynamic during the final stages of the SRC21 process, when the Customer Forum began its negotiations with Scottish Water. WICS established clear ranges for prices within a decision paper, and the Customer Forum turned to WICS to resolve key issues within these parameters instead of Scottish Water.

### *Fostering a culture change within each organisation*

Stakeholders invested considerably into incorporating EBR-inspired principles into the SRC21 process itself, but successful implementation requires culture change and continuous adaptation and flexibility within the organisations. This culture change requires significant and ongoing effort from Scottish Water as it attempts to embody EBP, and from WICS as it meets the company's efforts with an adjusted EBR-inspired approach to its regulation. WICS expressed its high expectations for EBP in its Prospects for Prices decision paper:

*Implementing pure EBP is not straightforward – it requires a company to go well beyond operating in an 'ethical' way. It involves businesses continually demonstrating evidence of their commitment to open, fair and candid behaviours that builds and maintains the trust of its stakeholders. This is a very high bar – but one which, as a public corporation, Scottish Water must achieve (WICS, 2020, p. 11<sup>[4]</sup>).*

Scottish Water and WICS have taken deliberate steps to facilitate the necessary change, starting with bilateral EBR sessions between Scottish Water and WICS. Each organisation is carrying on culture change work internally, as well. In co-operation with Ruth Steinholtz, an EBR and EBP pioneer in the academic world, WICS launched its work with a workshop on cultural values with its staff in September 2020. The Chief Operating Officer of WICS and Steinholtz have also engaged in EBR conversations with Scottish Water. This conversation broadened to include other stakeholders, with Steinholtz offering a webinar on EBP for all stakeholders.

Scottish Water’s culture change challenge is interwoven with its transformation plan, which requires a shift in organisational culture and behaviours. Scottish Water began this process by engaging with its staff in “Scottish Water Character” conversations to identify aspects of company character that are consistent with future needs and expectations and those that should be shifted or developed. Scottish Water will integrate Scottish Water Character into the workings of the company by adding new modules and topics to a new leadership programme. Scottish Water contracted a management consultancy to take forward transformation planning activities within the company. An EBR and EBP expert will provide support during this process, with Ruth Steinholtz providing tailored input on relevant parts of the transformation planning exercise. Scottish Water has reported on its transformation planning regularly to the Stakeholder Advisory Group.

WICS has reflected information on shifts in its own organisation in its corporate plan. The regulator acknowledges that “the move to EBR will entail a transformation of our own,” and describes how it is adjusting its corporate strategy and ways of working (WICS, 2021<sub>[13]</sub>). WICS identifies six key areas for development. Three of these areas target human resources, including recruitment, retention and development. The other three areas relate to the organisation’s alignment with EBR/EBP, its agility and its transparency:

- “Developing understanding and capability” within WICS to implement the new behaviours and methods necessary for an EBR/EBP approach;
- “Increasing the flexibility, knowledge and communication” within WICS, including through functional integration;
- Enhancing WICS’s capacity to carry out successful external communications, maintaining a conversation with stakeholders and improving communications to a broader audience (WICS, 2021, p. 27<sub>[13]</sub>).

Separately but in parallel, SEPA has been working with Chris Hodges to facilitate an EBR approach within the organisation. This work is in line with its regulatory strategy, One Planet Prosperity, which outlines a new approach to SEPA’s enforcement strategy and states SEPA’s support for businesses that want to go “beyond compliance” (SEPA, 2016<sub>[14]</sub>).

### *Translating principles into instruments*

One of the key principles guiding SRC21 was “trust but verify,” which WICS hoped would take the place of the parent-child relationship that had marked previous regulatory periods (WICS, 2017<sub>[15]</sub>). WICS was acutely aware from the beginning of SRC21 that the new trust environment should be accompanied by a verification mechanism that would further reinforce the mutual trust among the regulated company and the regulators. Defining how this principle would work in practice is a central question of SRC21 that will need to be addressed.

Early efforts to define this instrument came from the Reporting Performance and Information working group, which focused on the metrics of performance reporting. A “trust and confidence model” developed by WICS (discussed further in The performance reporting framework promises to maintain trust and confidence) aims to create a framework within which Scottish Water provides ample assurance that is delivering on its commitments in its Strategic Plan. The model shows the early contours of a performance framework that focuses on behavioural elements to complement formal measures of performance, aiming to create an EBR environment that favours openness and transparency. This approach seeks to assess the extent to which Scottish Water will effectively change organisational culture and behaviours. However, while the trust and confidence model offers some indication of how EBR and EBP principles will feature in the performance framework, parties do not have a collective expression of views on how principles will be translated into specific practice going forward.

## Challenges associated with long-life assets and time-inconsistency of investment need

### ***The starting point: A need for investment decisions to meet long-term challenges***

Decisions on asset management today can affect consumers decades into the future, making a strategic approach to decision making about long-life assets critical. A number of stakeholders had expressed the view that the existing regulatory framework did not fully enable clear-eyed consideration of trade-offs between today's costs and future benefits. WICS felt the need to re-focus and clarify some of the approaches to SRC21. In its Methodology Refinements and Clarifications, WICS expressed that a focus on long-term maintenance, replacement and improvement of assets would become a precondition for the maintenance and improvement of service levels (WICS, 2018, p. 19<sub>[16]</sub>). Suboptimal investment for the long-term also has intergenerational equity implications, with current customers not paying the true costs for services.

While WICS's initial target was asset management, WICS and the stakeholder group began to consider climate change as another long-term challenge during the SRC. The need for aligning investment decisions with a long-term perspective became even more urgent as the SRC21 integrated an increasingly important focus on climate change. The "beyond net-zero" target set by the Scottish Government for Scottish Water created an urgent driver for the company to incorporate sustainability concerns into the core of its activities and to make investment decisions transparently. This includes understanding and communicating how investment decisions influence outcomes such as emissions reductions (WICS, 2017, p. 22<sub>[3]</sub>).

Faced with an asset replacement challenge and a net zero challenge, both involving significant uncertainty, the regulator saw a long-term perspective as a potential solution. The key question for SRC21 was how the regulatory framework would appropriately enable a long-term view. A long-term perspective would not be possible without a clear picture of needs and opportunities, which requires an understanding of asset conditions and high-quality appraisals that reflect strategic vision.

The regulator understood that a long-term perspective must be supported by strong financial discipline. The uncertainty around when increased funding will be necessary adds a significant complication to the regulatory framework. Infrastructure investment needs are notoriously "lumpy," requiring significant expenditure for a discrete and lasting investment, which may deliver the greater part of its usefulness to future generations. Balancing inflows and outflows of money when optimal expenditure is not constant and predictable becomes a greater challenge with a long-term approach.

The following sections present the approach in SRC21 to address the challenges of long-life assets and time-inconsistency of investment need. The first section describes efforts to improve the company's and stakeholders' awareness of capital needs in the short-, medium- and long-term through a Capital Maintenance Advisory Group. The second outlines the use of an asset management improvement plan and roadmap to chart the route forward. The third presents WICS's proposal for a longer regulatory period to better enable long-term planning and a response to COVID-19. The final section presents a new output for SRC21, a Strategic Plan from Scottish Water designed to promote strategic, long-term thinking.

### ***Moving ahead: Squaring future needs with today's prices and investment***

*The Capital Maintenance Advisory Group helps the company and SRC21 parties understand investment needs*

A precondition for a strategic long-term perspective to asset management was a robust understanding of the state of Scottish Water's assets and its needs for the future. In order to better understand the actual needs for an appropriate capital programme both for SRC21 and further into the future, WICS gathered a

small group of experts (the Capital Maintenance Advisory Group) with experience in the regulated industries sector. The group met five times between 2017 and 2018; Scottish Water attended all meetings and produced an increasing amount of evidence with respect to the assets that are managed by the company and, consequently, the capital needs foreseen for the short, medium and long run.

The Group published its recommendations in April 2018. The recommendations identify the need for Scottish Water to strengthen and invest in its capacity to monitor and evaluate asset conditions and risks and develop an organisational culture that supports engagement with customers and communities around the asset stock. Those were endorsed by WICS and shared with SRC stakeholders.

The work of WICS and the Advisory Group on capital maintenance showed that long-term investment requirements were not well understood and pointed to unknowns and data gaps, and Scottish Water would have to dedicate significant effort to evidence its needs. For this, WICS proposed the creation of a comprehensive work plan defining actions and milestones. The performance monitoring regime would help Scottish Water share and evidence its progress. In addition, WICS made clear that the ring-fenced portion of Scottish Water's allowed revenues would be available when the company shows sufficient and verified progress against the work plan (WICS, 2018<sup>[17]</sup>).

#### *An asset management improvement plan and roadmap chart the path forward*

The conclusions of the Capital Maintenance Advisory Group made clear that the company would have to put in place appropriate planning to improve its asset management, from data to delivery. The asset management improvement plan and the asset management transformation roadmap offered the promise of improving data and building confidence that Scottish Water can deliver higher investment in a strategic way. The asset management improvement work benefited from ongoing external expertise and stakeholder scrutiny.

Working with an expert in infrastructure management, Scottish Water prepared a 10-year asset management improvement plan to improve information and decision making on assets. The process of developing the plan included a maturity assessment, with benchmarking of maturity scores against those of other companies in the water sector and other sectors. Asset management planning resulted in an asset management transformation roadmap that outlines the areas Scottish Water has identified for improvement and defines milestones and deliverables. This roadmap would be updated in an iterative process featuring input from stakeholders in an Asset Management Improvement working group, and an external expert will check progress against objectives in the improvement plan every year (Scottish Water, 2020<sup>[18]</sup>).

#### *Consideration is given to long-term planning within a six-year regulatory period*

From the discussions in the Advisory Group and initial brainstorming it also became increasingly clear that the six-year regulatory period was not providing the right incentives to think long-term and plan maintenance and investment in this perspective. While regulatory periods do not in principle prevent consideration for longer-term issues, they could provide an incentive to focus on the set regulatory horizon. An option to address this challenge would be to extend the regulatory periods.

The idea of progressively extending the regulatory periods took more and more prominence as the climate change challenges and net-zero target became an important focus of the discussions with parties. Ministers' principles of charging define a six-year period, but ministers considered proposals from WICS to adjust the length of the regulatory period to better respond to long-term challenges.

The COVID-19 crisis accelerated some of these discussions and provided an opportunity to anticipate and accelerate the thinking around a long-term perspective. In response to a request from the Cabinet Secretary for Environment, Climate Change and Land Reform, WICS laid out options to address the impact of COVID-19 on SRC21 in April 2020. In a letter to the Cabinet Secretary, WICS's Chief Executive underlined the importance of a response that makes sense for long-term asset replacement and climate

challenges. According to WICS, a longer regulatory period would provide the Scottish Government with flexibility to manage the economic impacts of COVID-19 related to the water sector while maintaining sight of long-term strategic challenges.

WICS outlined several options for the start and length of the regulatory period to follow SRC21. Several options relate to the timing of the SRC21, the timing of the release of the final determination, and the end of the current regulatory period without significantly altering the regulatory period. Two options proposed a longer regulatory period, of either 12 or 15 years. WICS made a recommendation for such an extension, without voicing a preference for a 12- or 15-year extension.

An extension would have a range of implications, which WICS laid out in the same letter. Extending the regulatory period would require revisions of the government documents that launch and establish expectations for the SRC. WICS stated that an extended regulatory period would not necessarily require a long-term price profile or policy mix that would bind future administrations. To avoid this, it offered the mechanism of an average annual charge cap and charge floor over the full length of the regulatory period. Ministers could exercise flexibility within the longer period, providing input on how strategic objectives should be operationalised to the IPPG. WICS's modelling suggested that making use of flexibility would likely not change the long-term average annual cap and floor, short of a major change like a decision to advance or delay the net-zero target. In WICS's view, the fifteen-year period has some advantages over the twelve-year period. In addition to adding additional flexibility for charge profiles and available resources, the extra three years would allow WICS's to take into account final progress against Scottish Water's Asset Management Improvement Plan, even if delays result from the COVID-19 crisis (WICS, 2020<sup>[19]</sup>).

After considering the options, Ministers confirmed that the length of the regulatory period would remain the same in their final principles of charging in December 2020. However, the principles of charging underlined Ministers' support for long-term planning. They asked that "work be undertaken to prepare for the period beyond 31 March 2027," taking into account long-term challenges as well as evolving social and economic conditions (Scottish Government, 2020<sup>[20]</sup>).

*Scottish Water's Strategic Plan is designed to enable a strategic approach to long-term challenges*

Scottish Water's a Strategic Plan differs significantly from the Business Plans produced in previous price reviews. Previous Strategic Reviews of Charges would have produced a detailed Business Plan with a list of investment outputs and Scottish Water's view of price caps and borrowing needed to fund these projects. SRC21 resulted in a new type of document, one with fewer specifics but a greater emphasis on strategic vision. The enhanced role of stakeholders in the process, described in Stakeholders experiment with co-creation for Scottish Water's Strategic Plan, provided an ongoing challenge to Scottish Water, which ensured that themes important to stakeholders appeared in the final Strategic Plan.

An amended version of WICS's methodology, which the regulator published in November 2018, formalised a transition from the Business Plan to a Strategic Plan. The regulator also outlined key questions it expected Scottish Water to answer with its Strategic Plan (Box 3.4).

#### **Box 3.4. WICS's expectations for Scottish Water's Strategic Plan**

The WICS's revised regulatory methodology (November 2018) outlined some of the key questions that the regulator expected Scottish Water to consider in co-creating its Strategic Plan with stakeholders.

- What are the expectations that customers and communities have for the water industry that will serve their children and grandchildren?

- How does Scottish Water propose to meet and exceed these expectations in doing the right thing for customers, communities, stakeholders and Scotland more generally?
- How will Scottish Water meet the compliance requirements of its quality regulators?
- How will it address the challenges identified in its Strategic Projections? Which of these challenges need urgent attention?
- How long does Scottish Water believe it can reasonably take to transition to the point where it is fully funded to meet these obligations?
- How does Scottish Water believe its prices will need to change to accommodate this expenditure?
- How does Scottish Water propose to build the confidence of its customers, communities and other stakeholders in its management of this transition?
- How will Scottish Water develop as an organisation in the light of the Commission's revised approach to economic regulation?
- What does Scottish Water believe that it will need from its stakeholders?

Source: WICS (2018), "Strategic Review of Charges 2021-27: Methodology refinements and clarifications", <https://wics.scot/publications/price-setting/strategic-review-charges-2021-27/approach/2021-27-methodology-refinements>.

The process of drafting a Strategic Plan started with Strategic Projections developed by Scottish Water, which were subject to formal consultation and scrutiny by the Customer Forum. These Projections would identify long-term challenges and develop a transparent strategy to address those and improve performance, with the goal of feeding into the Strategic Plan. Scottish Water published a draft Strategic Projections document in February 2018, with a consultation period running through August (Scottish Water, 2018<sup>[21]</sup>). In addition to the formal consultation, Scottish Water discussed earlier drafts of the document with the Customer Forum in two high-level meetings attended by the CEO and senior management of Scottish Water. These provided an opportunity for the Forum to challenge Scottish Water on the knowledge of their asset base, the assumptions used to derive future trends and their ability to reflect lessons from the customer experience indices into forward planning.

WICS and stakeholders provided their reactions during the comment period, pushing Scottish Water to increase the ambition of the projections. WICS reacted to the document in its first Decision Paper July 2018 that contributed also to enriching the evidence provided by Scottish Water (see Annex A for a summary of the regulator's decision papers). SEPA, DWQR, and CAS also submitted responses to Scottish Water's Strategic Projections in August 2018. In line with the Customer Forum's reaction, regulators and consumer bodies outlined a range of opportunities for improving the scope and content of the Strategic Projections, with one overarching theme: the need to plan for long-term challenges in a more ambitious, strategic, measurable and inclusive way.

Scottish Water had another opportunity to rise to meet stakeholder expectations in its Strategic Plan. Scottish Water published a detailed outcome report with the results of the consultation on the Strategic Projections and its planned responses. However, WICS confirmed with Scottish Water that the Strategic Plan would supersede the Strategic Projections, allowing Scottish Water to focus on producing a Strategic Plan reflecting the views of stakeholders rather than honing final Strategic Projections.

Building on the Strategic Projections, Scottish Water presented its first Outline Strategic Plan in December 2018. At the core of the Plan were four key ambitions: to support a flourishing Scotland; to deliver a consistently leading customer experience; to improve the reliability, resilience and sustainability of service to customers; and to treat customers' money with respect. Each ambition was underpinned by 3-4 strategic outcomes, which in turn were supported by a series of activities.



Through an informal consultation, stakeholders sent the message to Scottish Water to strengthen the strategic approach and vision underlying the outline Strategic Plan. Scottish Water collected written feedback from all stakeholders on the Outline Strategic Plan in spring 2019. The main criticisms received were that the vision (“Trusted to care for the water on which Scotland depends”) was not strong enough - and that the Plan was too focused on operational matters and less on strategic priorities. Scottish Water responded to the feedback received in a dedicated session of the SAG.

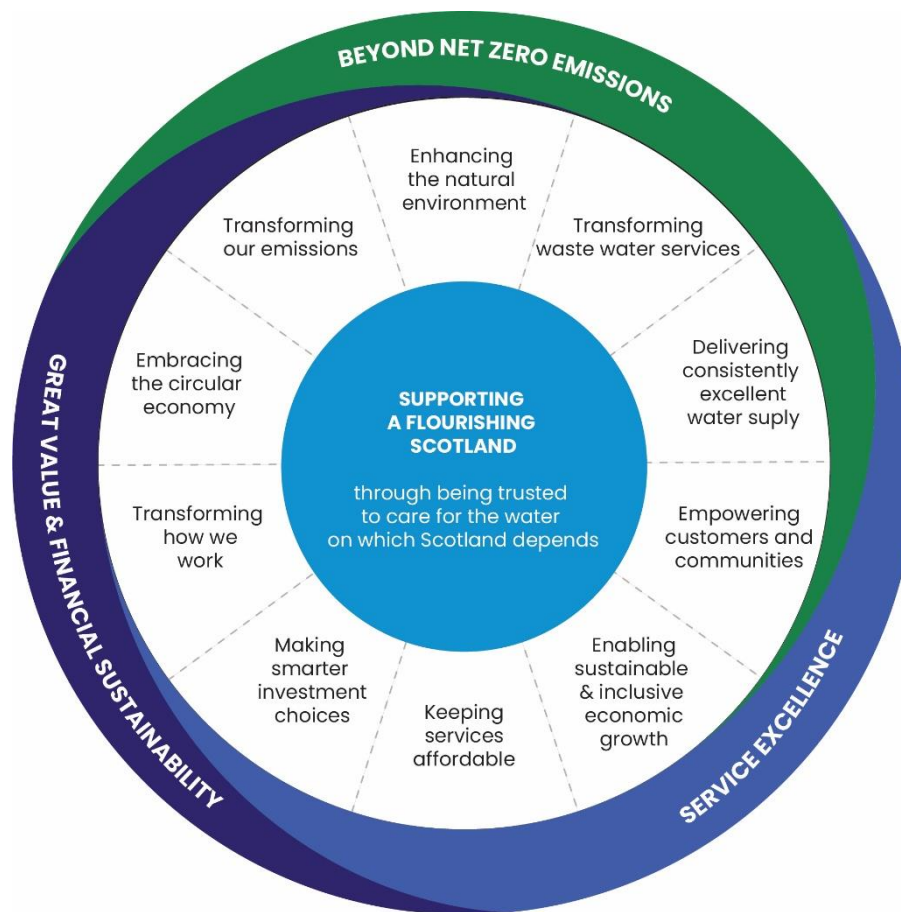
Work on the Strategic Plan continued with bi- and multi-lateral meetings between Scottish Water and SRC stakeholders. In June 2019, stakeholders gathered for a two-day discussion on key milestones of SRC21. They discussed the elements of Scottish Water’s draft Strategic Plan, contributing to finalising the strategic outcomes. The development of the shared sector vision helped streamline the overarching objectives. The intervening changes in climate policies also set emissions reductions and renewable energy at the forefront of the Plan. A September 2019 draft was more ambitious and less heavy on details, reflecting stakeholder comments.

In January 2020, Scottish Water and the Customer Forum entered into a “Minute of Agreement on the Strategic Plan.” The document states “[t]he Customer Forum considers the Strategic Plan has taken proper account of the evidence provided on the views and aspirations of current and future customers.” It notes areas of the Strategic Plan where the Customer Forum sought further assurance, and details how Scottish Water addressed or will address their concerns (Scottish Water and Customer Forum, 2020<sup>[22]</sup>). The Minute of Agreement was followed by the publication of the final Strategic Plan in February 2020. The final Strategic Plan reflects considerable progress as a result of the collaborative process.

Scottish Water’s final Strategic Plan outlines the company’s central strategic outcomes, driven by the overall purpose of supporting a flourishing Scotland. It defines three overarching outcomes: beyond net zero emissions; great value and financial sustainability; and service excellence (Figure 3.3). Each objective is underpinned by several strategic objectives, which outline how the company will achieve the strategic objectives. Through a collaborative process, Scottish Water’s Strategic Plan came to feature many of the themes important to stakeholders, notably the focus on climate adaptation and mitigation (advocated by the Forum, SEPA and DWQR) and the importance of empowering customers and communities.

WICS acknowledged the progress represented by the Strategic Plan in its draft determination, while recognising its limitations (WICS, 2020<sup>[23]</sup>). According to WICS, the Strategic Plan was guided by a clear vision and bolstered by an extensive research programme. It reflects the “no surprises” approach pursued in SRC21, while still serving as an important initial step towards Scottish Water taking ownership over its strategy. However, WICS argues that the Strategic Plan also represents “something of a missed opportunity,” saying that the company could have made implications on charges and plans to mitigate impacts on charges more explicit (WICS, 2020, p. 5<sup>[23]</sup>).

Figure 3.3. Scottish Water's Strategic Plan



Source: Scottish Water (2020), "A Sustainable Future Together", <https://www.scottishwater.co.uk/help-and-resources/document-hub/key-publications/strategic-plan>.

*A net zero roadmap sketches planned movement towards an ambitious goal*

Scottish Water, a major user of electricity in Scotland, agreed to meet a net zero objective set in the Scottish Government's 2019 Programme for Scotland. Scottish Water is the largest purchaser of electricity and the fastest growing sector in Scotland, although it also produces a significant amount of renewable energy relative to its usage. As an energy intensive industry marked by the presence of a large, state-owned service provider, the water sector was a natural target for government climate action. The Scottish Government announced in its 2019 Programme for Scotland that Scottish Water would commit to becoming "zero carbon user of electricity by 2040", five years before the national net zero target in 2045 (Scottish Government, 2019, p. 53<sup>[24]</sup>). The government programme provides the broad contours of an ambitious shift for Scottish Water, including a commitment to produce or host three times of the electricity it uses with renewable energy.

Scottish Water responded to this challenge by charting a course towards net zero operational and embodied carbon. In response to the government programme, Scottish Water developed a net zero roadmap in consultation with an expert panel and stakeholders to guide actions towards the net zero goal. The roadmap explains that the company will go beyond conventional carbon accounting to take into account all emissions associated with the company's activities, including both operational and embodied carbon and looking to the supply chain. Investment emissions along the supply chain are new challenge

for Scottish Water and thus a focus of the roadmap; Scottish Water reports that it is developing a measure of carbon intensity of investment to understand and address emissions from these sources.

The roadmap attempts to guide the steps towards decarbonising the company's activities while maintaining service levels, establishing two intermediate goals before the 2040 objective. In 2025, Scottish Water plans to reduce operational emissions by at least 60% and advance in its understanding of investment emissions enough to set a new goal in this area for 2030. In 2030, the goal for reductions in operational emissions increases to at least 75%. It outlines the improvements the company would like to make in specific areas – electricity, process emissions, gas and fuel oil use, transport and travel, investment, and carbon storage – with some intermediate goals defined. The intermediate goals tend to be qualitative (for example, one 2040 goal is “[a]ll projects routinely demonstrate they have minimised emissions as far as possible”). Scottish Water plans to review progress against the roadmap and make necessary updates annually in consultation with stakeholders (Scottish Water, n.d.<sup>[25]</sup>).

### ***Looking forward: taking a long-term view to regulating the water sector***

#### *Connecting the dots between asset management and strategic ambitions*

Asset management planning is a key determinant of the successful delivery of Scottish Water's strategic ambitions. The Strategic Plan does not establish a plan to achieve its ambitions, which could be a challenge as it could weaken its applicability and impact. Planning products such as the asset management planning improvement plan and roadmap promise to establish the short-term, intermediate and long-term steps necessary to deliver the ambitions. This approach could help at least identify the need to plan ahead. However, the ambition, robustness and effectiveness of asset management planning and implementation must be commensurate with the challenge of delivering the Strategic Plan. WICS emphasises the importance of institutional transformation to deliver the Strategic Plan in its final determination, stating that “[t]his final determination is underpinned by the expectation that Scottish Water will undergo the fundamental transformation necessary to deliver its part in the long-term vision set out in its Strategic Plan” (WICS, 2020, p. 16<sup>[6]</sup>).

WICS, aware of the risk that the company's asset management approach could fall short of delivering on long-term objectives, asked Scottish Water to work with a strategy consultant to make necessary refinements. This would occur under the umbrella of transformation planning, discussed further in Clarifying roles and ownership.

The transformation plan under development by Scottish Water has an aim of transforming decision making and cultural practice from top to bottom. The company's transformation plan promises to provide critical direction on *how* the company will deliver and evolve. This includes the company's relationship with its customers whereby the commitment is to “take every decision as if the customer were in the room” (discussed further in Expanding beyond normal consultation). It will be crucial to see the extent to which the transformation plan identifies concrete milestones and indicators of the extent to which this transformation is embedded across the company, including indicators relating to customers and front-line services that are key in understanding needs and ensuring effective delivery.

#### *Evidencing the needs for investment decisions*

The Capital Maintenance Advisory Group has contributed to broadening the perspective and learning from other regulated industries. Lessons and evidence from other industries on how long-term risks are addressed have proved particularly relevant for understanding how the state of the assets and future needs are assessed and evaluated for. This approach appears to have proved useful not only for the regulated company but also for WICS and the other regulators involved in the process. The challenge is now to ensure that the data and evidence is continuously produced and, crucially, shared and used to take investment decisions and alert on new needs. As the SRC21 ends and WICS is planning ahead for the

next SRC, there is the need to think of an evolution of the Advisory Group. The cross-industry sharing of experience and learning probably need to be complemented by even stronger inputs and advice on how to produce and use data and evidence.

Equally important is to ensure that the data is shared candidly and early. Acknowledging information asymmetries between the regulator and the regulated entity is one of the foundations of economic regulation. An EBR approach aims to develop a relationship between the regulator and company that is marked by trust and transparency, bringing with it the promise of reducing the information asymmetry. Scottish Water's candid sharing of data on its assets and the collaborative working between Scottish Water and WICS to develop the company's ability to deliver its strategic objectives are early wins for EBR within this context. Going forward, being open on any early indication of risks could become a key feature of the approach, taking also advantage of the Ethical Business Regulation concept that has informed the SRC21.

### *Addressing trade-offs*

The strong focus on climate change and achieving net-zero emissions will pose a number of challenges for asset management and investment. There will be inevitable trade-offs between, for example, maintaining and investing in new assets, emission impacts and, possibly, community and customer focus. These trade-offs will need to be made explicit and addressed with the help of the regulators. Research conducted during the SRC21 showed that, when challenge of asset replacement and net zero were clear, customers were behind it. Research and engagement will need to continue to make sure as operational decisions are taken, the public is made aware of the choices made and the rationale behind them.

### *Taking a regulatory long-term view*

The SRC21 approach has embedded a strong focus on taking a long-term view to regulating the water industry. Despite WICS's recommendation that a longer regulatory period would promote strategic long-term thinking, some stakeholders expressed doubts on the effectiveness of a longer period in ensuring that the regulated industry delivers and is held accountable. Ultimately, the extension of the SRC period was not enacted. However, the unfortunate circumstance of the COVID-19 pandemic fit into on-going thinking on the SRC's timeline and accelerated discussions with Ministers on the opportunity to lengthen the regulatory periods.

While stopping short of extending the regulatory period, ministers have nevertheless supported a long-term planning approach. How to "square the circle" then? While much of the discussion arising from SRC21 points to long-term planning, intermediate "checkpoints" will be critical to maintain confidence that the company continues to deliver in line with its commitments on all time-scales. The concerns expressed by some stakeholders point to the need to put in place safeguards and regular checks that leave space for adjustments and does not give the impression that the process is on a sort of autopilot. The six-year regulatory period provides a natural point of assessment, while other processes provide ongoing feedback about Scottish Water's delivery and performance. As the industry looks ahead to the regulatory period and the goals beyond the period, it will be important that the suite of checkpoints provide actionable information about Scottish Water's progress towards long-term goals to the right audiences.

## **Flexibility of investment**

### ***The starting point: A rigid framework discourages ownership and innovation***

As WICS considered a shift towards a long-term perspective, it was clear that a regulatory framework that supported better decision making in the industry for the short-, medium- and long-term would also require a commensurate level of flexibility. In previous regulatory periods, Scottish Water and quality regulators

would settle on a list of investment requirements to achieve Ministers' objectives and statutory obligations, and Scottish Water's business plan (vetted by WICS) would establish how the company planned to deliver. This approach had several secondary consequences:

- It discouraged company ownership over investment decisions. In providing the regulator an opportunity for scrutiny and challenge to the business plan, the framework shifted responsibility away from the company to the regulator.
- It restricted innovative thinking. The business plan gave Scottish Water one opportunity for innovation, and the company always defined a "plan B" to ensure that obligations were met. While a ring-fenced fund promised to fund innovative projects in the last regulatory period, it was underutilised.
- It incentivised decision making based on lowest monetary cost over the regulatory control period. A focus on pure monetary cost provided limited consideration of non-monetary evaluations of costs and benefits in the short- and long-term. Combined with a self-contained, fixed regulatory period, the framework did not incentivise long-term initiatives when the payback occurred beyond the control period (WICS, 2018, p. 48<sub>[16]</sub>). Instead, the company may opt for initiatives without the same long-term benefits but with a lower cash outlay (including "sweating" assets, finding ways to extract additional value out of existing assets), freeing up resources to build a buffer or spend on other priorities.

From the beginning of SRC21, WICS envisioned replacing the "list of projects" with a more flexible arrangement that would enable decision making based on highest value rather than lowest cost. WICS planned to lower the barrier to money entering the business, providing a level of funding consistent with attaining long-term goals. In parallel, the regulatory framework would raise the barrier to money exiting the business in terms of investment, increasing the company's obligation to evidence its investment and decision making.

The regulator planned to use several tools to create a more flexible framework: a flexible system to prioritise investment and a "ring fenced" allowances that would become available only in certain circumstances. These tools would be supported by improved investment appraisals from the company, allowing Scottish Water to demonstrate that it had selected the highest-value investment. Stakeholders agreed with the regulator that appraisals could be strengthened with the consideration of non-monetary benefits, like carbon, social capital, and natural capital. Unlike the previous regulatory framework, this approach promised to promote innovation and widen the scope of benefits considered in investment decision making, advancing progress towards long-term goals.

The sections that follow show the new mechanisms emerging from SRC21 designed to increase the flexibility of the system. The first section explores the Investment Planning and Prioritisation Framework, which enables a flexible rolling approach to investment decisions that mainstreams stakeholder input. The second section describes WICS's final determination, which created a ring-fenced fund accessible for investment expenditure that is higher-cost, but higher value on a whole-life basis. The third section presents early ideas of a performance reporting framework designed to maintain trust and confidence that the company is delivering upon its strategic objectives.

### ***Moving ahead: providing a more flexible and accountable investment framework***

*A new governance framework allows for a flexible, rolling approach to investment decisions*

The Investment Planning and Prioritisation Framework is an important output of the SRC process as a key enabler of a more flexible but accountable investment approach. The final result of stakeholder processes described below is a governance framework that allows for rolling investment decisions with enhanced stakeholder input, rather than a six-year fixed investment programme. While Scottish Water maintains the

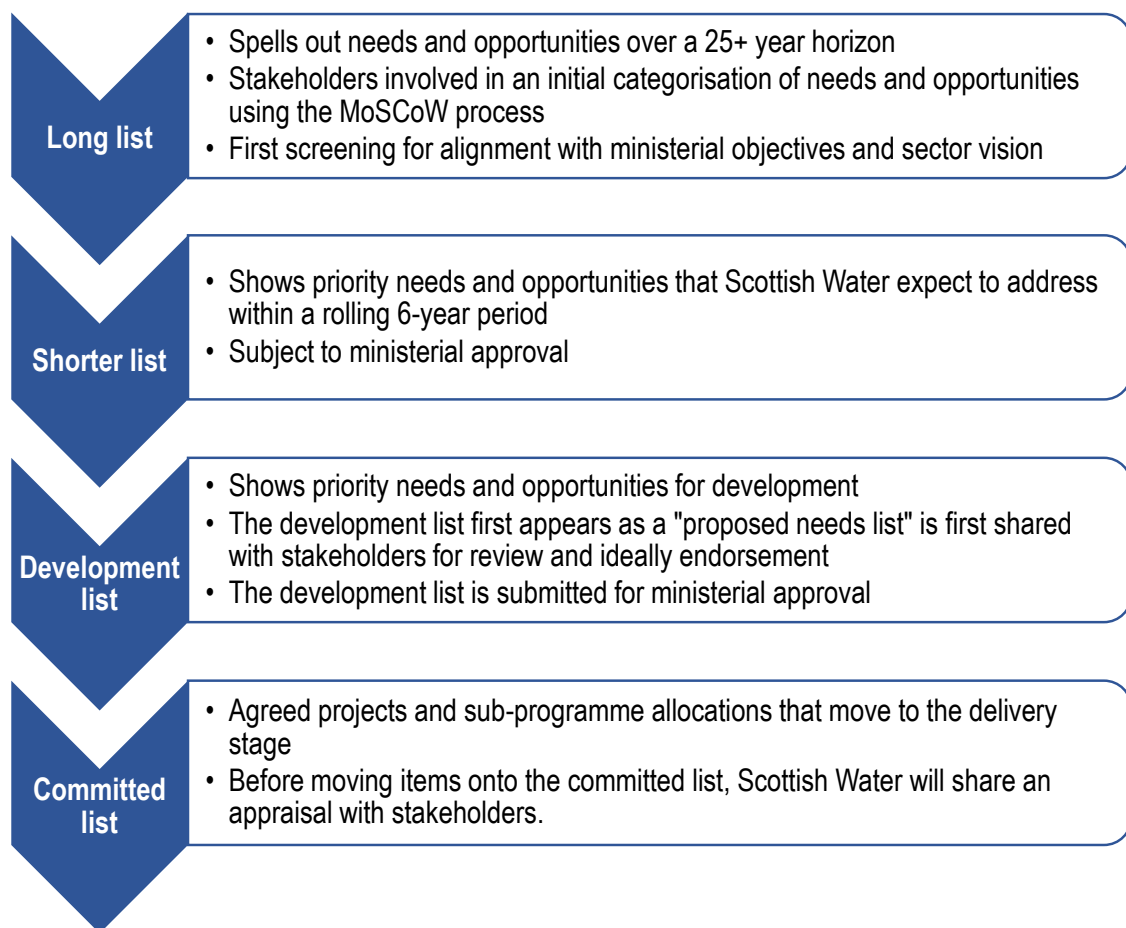
responsibility for making decisions on planning and prioritisation and retain responsibility for outcomes, the process allows for greater flexibility and input from stakeholders.

The flexible process promises to offer benefits in terms of process and outcome. In its 2018 Decision Paper 3, WICS defined how a more flexible investment planning and prioritisation process would benefit consumers, communities and the supply chain. Consumers and communities would benefit from better responsiveness to needs, the supply chain would benefit from longer-term visibility on investment, and all would benefit from Scottish Water's commitment to more long-term strategic projects. The paper outlined a vision for investment planning and prioritisation whereby Scottish Water involves stakeholders in recording an extensive list of investments and stakeholders would help with an initial prioritisation, Scottish Water would develop appraisals for priority investments, and Scottish Water would take into account further stakeholder input when deciding which projects make the final list (WICS, 2018<sup>[26]</sup>).

A short-term stakeholder working group developed the outlines of the new governance framework. The Investment Planning and Prioritisation Framework working group was charged with developing a framework to facilitate engagement and build trust in investment decision making. The working group set out the key steps involved in the IPPF (Figure 3.4). The IPPF is marked by its enhanced accountability, with several opportunities for stakeholder input and ministerial approval and a transparent document trail recording the results of the process over time.

### Figure 3.4. From a “long list” to a “committed list” through the IPPF

Needs and opportunities are narrowed down progressively until a “committed list” is reached



Source: Adapted from Scottish Water (2019), "Investment Planning and Prioritisation Framework: SR21 Strategic Plan Supporting Document," October 2019.

A second stakeholder working group established a preliminary approach to the prioritisation process. The IPPG WG developed a first approach to prioritising investment, which will be taken forward in the Investment Planning and Prioritisation Group (IPPG). This group is tasked with overseeing the development of Scottish Water's rolling investment programme and monitoring progress towards ministerial objectives, Scottish Water's Strategic plan and the sector vision.

The Scottish Government presented a draft ToR for the IPPG at the group's first meeting in August. The Government chairs the group, which brings together Scottish Water, WICS, the quality regulators, CAS and the Scottish Public Services Ombudsman.

The draft ToR outlines the responsibilities of the IPPG, which include:

- reviewing tranches of priority needs proposed by Scottish Water;
- reviewing progress towards the development of needs on the list;
- maintaining a mechanism enabling changes to the Strategic Investment Projections (data and information Scottish Water pulls together to inform their investment programme); and
- the short list of investment needs and opportunities. The draft ToR includes a foresight function for the IPPG, which includes reviewing the long-term vision and trajectories towards the vision and strategy, and considering whether they remain “relevant, achievable and fit for purpose”.

The IPPG will also have reporting duties; the draft ToR states that the group will oversee the development of a monitoring framework for reporting actions and progress to ministers. The ToR is a live document and remains subject to review.

SRC21 maintains the Delivery Assurance Group (DAG), formed in 2006 as the Output Monitoring Group (OMG) to monitor the delivery of committed output. During the regulatory period following SRC21, the DAG will be supported by its own working group.

#### *WICS's determination allows flexibility, incorporates natural and social capital*

WICS draft determination, published in October 2020, submits the regulator's conclusions to public scrutiny and comment. The document fulfils its central purpose of sharing and justifying WICS's view of maximum charges over the forthcoming regulatory period. It also describes the inputs and process supporting the decision and reflects on next steps. The draft and final determinations formalise the shift from the regulator imposing a fixed price profile over time to the regulator allowing for flexibility in how Scottish Water uses charges.

The draft determination includes two main components related to charges:

- **A CPI+2% cost increase and an efficiency challenge:** Stressing there is no evidence that COVID-19 would affect the long-run assumptions WICS used in earlier estimates in the long term, WICS proposed an average CPI+2% cap on charges over the coming regulatory period. The CPI+2% cap is the annual average over the period, and Scottish Water will shape the trajectory of charges through annual Schemes of Charges proposing price levels for the coming year. WICS welcomes Scottish Water's suggestion to hold a “national conversation” while developing Scheme of Charges proposals.

This increase is on the high end of the 1-2% range established in its earlier Prospects for Prices paper, which is consistent with WICS earlier messaging on this issue. It also establishes a 1% real efficiency challenge for Tier 1 expenditure (including operating costs, reactive maintenance, PFI costs, and interest) and a £150 million efficiency challenge for capital investment efficiency.

- **A ring-fenced allowance to account for including externalities in investment decisions:** WICS defined an annual allowance for investment in asset enhancement and growth of £300 million, an amount that does not include the £1,020 million of allowed borrowing from the Scottish

Government. The draft determination takes into account potential additional costs from considering externalities such as carbon emissions, natural capital and social capital in Scottish Water's investment decisions. WICS states that a special ring-fenced allowance of £133 million in 2017-18 prices (137 million updated for inflation) will be available to cover Scottish Water's costs when it selects options with a higher risk-adjusted Net Present Value. The IPPG will be responsible for approving requests to access the ring-fenced funds, after Scottish Water evidences need with appraisals.

The draft determination ends by emphasising the need for industry transformation and significant progress on emissions reductions to deliver the Ministerial Objectives. It includes the requirement for Scottish Water to produce a transformation plan that establishes a path for the company through the end of the regulatory period and to 2040, updated annually or bi-annually (WICS, 2020<sub>[23]</sub>).

The draft attracted 11 comments during the six-week comment period, including comments from Scottish Water, CAS, DWQR, SEPA, an environmental umbrella organisation, a tenants association, a local council, a trade organisation representing the supply chain, and three individuals (WICS, 2020<sub>[27]</sub>). The responses from bodies involved in the Stakeholder Advisory Group show alignment in thinking, but CAS and DWQR emphasise that the new regulatory framework should not negatively affect the issues under their purview – consumer welfare and drinking water quality (see Box 3.5 for a summary of these responses). Other responders emphasised issues such as costs, service quality, and supply chain preparedness.

### Box 3.5. Formal responses from the Stakeholder Advisory Group to the draft determination

Reactions from **Scottish Water** on the draft determination reflect alignment after three years of collaborative working. Scottish Water's CEO welcomed the draft determination and stressed that further investment would be necessary to maintain service levels while addressing the twin challenges of climate change and aging infrastructure. He restates the company's commitment to undergoing the "radical transformation" to become a more open, transparent and iterative organisation (Millican, 2020<sub>[28]</sub>).

**CAS's** response acknowledges the necessity of price increases to protect service levels while investing in infrastructure, noting that principles of intergenerational equity require that current and future customers shoulder a "fair share" of long-term investment needs (CAS, 2020<sub>[29]</sub>). CAS's response also highlights considerations related to the impact of water charges on low-income households and in the context of economic recovery. It asserts that, even as average prices rise over the regulatory period, the percent of weekly income paid by low-income customers eligible for the Water Charges Reduction scheme should not increase. It suggests that Scottish Water consider limiting price increases in the first years of the regulatory period to "provide much needed breathing space recovering from the impact of COVID-19" (p. 1<sub>[29]</sub>).

**DWQR's** response emphasises the importance of maintaining service standards and investing in aging assets. It notes that drinking water quality is an area where England and Wales outperform Scotland, suggesting that this underlines the need for additional investment and improvement. It notes that a 99.92% compliance rate with standards has remained stable despite investment, and stresses that Scottish Water's compliance should not deteriorate further. The regulator welcomes the paradigm shift towards appraisals incorporating longer-term benefits, but emphasises that replacing aging assets that threaten to compromise quality standards should not be delayed. It also echoes concerns expressed throughout the process, that a more flexible system of investment decision making fails to provide certainty to quality regulators about the timescales for addressing needs (Millican, 2020<sub>[28]</sub>).



**SEPA's** comment emphasises the synergies between the proposal and relevant sector policy and strategy. It states that investment and transformation are necessary ingredients to delivering Scottish Government's Water Sector Vision and SEPA's One Planet Prosperity strategy. It strongly endorses the incorporation of natural and social capital in investment appraisals and expresses its willingness to work with the regulator and company to ensure that the ring-fenced allowance delivers upon its promise (Ahearn, 2020<sup>[30]</sup>).

Source: WICS. (2020). Consultation Responses. Retrieved December 17, 2020, from [https://www.watercommission.co.uk/view\\_Consultation\\_Responses.aspx](https://www.watercommission.co.uk/view_Consultation_Responses.aspx).

The final determination, published in December 2020, echoes the main conclusions of the draft determination and adjusting slightly based on updated financial modelling. The final determination maintains the CPI+2% average cap on charges and the efficiency challenges. Several changes – the extension of a water charges reduction scheme, an updated inflation rate, an additional GBP 10 million for borrowing from the Scottish Government, and updated Scottish Water financial performance information – affected the financial modelling, but not enough to change this value. It adjusts the level of the ring-fenced allowance, lowering it slightly to GBP 132 million in 2017-18 prices (WICS, 2020<sup>[6]</sup>).

The final determination clarifies the ring-fenced allowance in response to comments received, emphasising alignment between the objective of the allowance and national environmental strategy. Indeed, SEPA and WICS sent a joint letter to Scottish Water explaining how the concept will enable decision making consistent with national environmental goals. The fund's objective to incorporate consideration of all relevant capitals, including social and natural, in appraisals and resulting investment decisions will further SEPA's One Planet Prosperity strategy (WICS, 2020<sup>[6]</sup>). In the letter, they stress that the allowance should not function as a cap on spending to support One Planet Prosperity (p. 19<sup>[6]</sup>).

The final determination marks a significant departure from thinking at the beginning of SRC21. Initially, parties hoped to ensure financial sustainability for Scottish Water, continuing to offer improvements in service while phasing out government borrowing. The conversation shifted over the course of SRC21, driven by multiple factors. As Scottish Water prepared its strategic projections and as more information on asset state came to light, it became clear that investment needs were much higher than expected. Furthermore, the net-zero goal introduced a new challenge. Taking these factors (among others) into account produced the ultimate parameters of the final determination: including the elements of an increase in the charge cap, specified levels of borrowing, an efficiency challenge, and the ring-fenced fund.

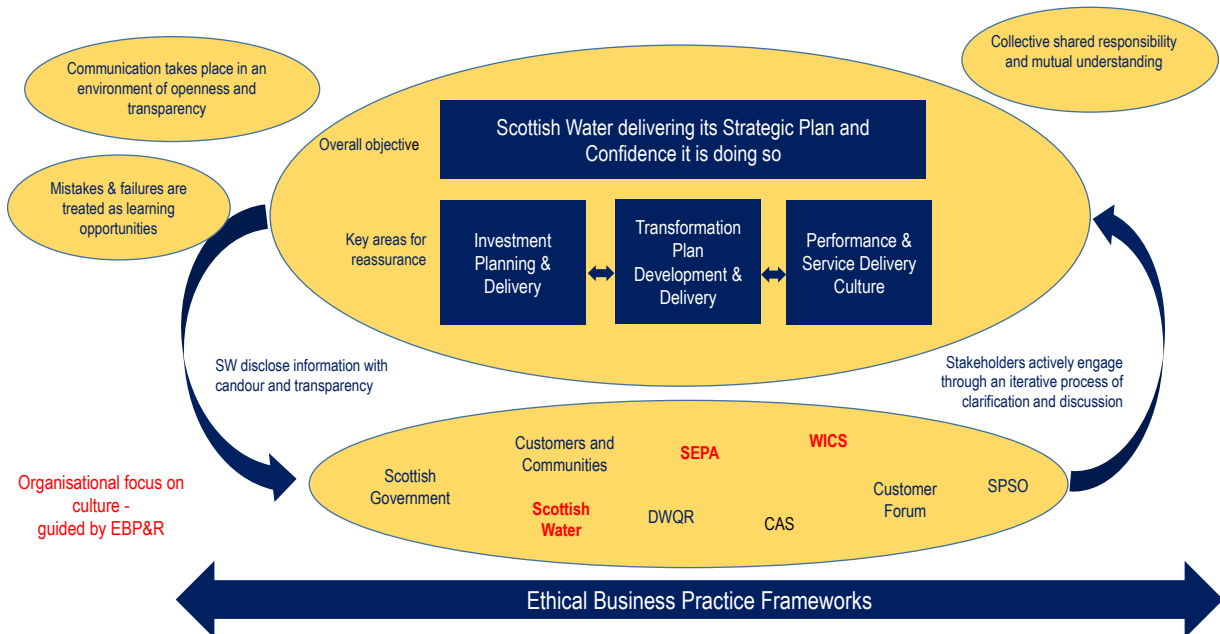
### *The performance reporting framework promises to maintain trust and confidence*

During EBR Support Group assessments, some stakeholders expressed a desire for performance reporting to go beyond metrics. The trust and confidence model, once finished, has the promise to offer reassurance to stakeholders in line with an EBR/EBP approach. The trust and confidence model would add a new level of engagement on top of existing mechanisms for assurance, such as Scottish Water's audit committee. WICS has been working with consultants to develop the model, starting with stakeholder engagement sessions in March 2020 to understand expectations for reassurance. The resulting draft model (reproduced in Figure 3.5) reflects elements stakeholders think are important to create an open and transparent environment going forward. Instead of defining processes, it illustrates necessary behaviours. Key to the model is Scottish Water's provision of adequate reassurance in three areas: (1) investment planning and delivery, (2) transformation plan development and delivery, and (3) performance and the company's culture of service delivery. Scottish Water's reassurance becomes a feedback loop, with the company disclosing information openly and transparently, and stakeholders actively engaging with Scottish Water.

Key to the success of the feedback loop are several behavioural elements, identified in the model:

- Communication takes place in an environment of openness and transparency,
- Mistakes and failures are treated as learning opportunities,
- Collective shared responsibility and mutual understanding.

**Figure 3.5. Draft trust and confidence model**



Source: WICS, Black & Veatch, Oakdene Advisory, Aretework (2020).

### ***Looking forward: ensuring that the greater flexibility translates into innovation***

The SRC21 has created space for addressing climate change challenges over the long-term through innovation and flexible investment. Looking ahead, the challenge will be to ensure that this opportunity is taken up and leads to continuous improvements. The previous SRC included already ring-fenced funds that could be used to support innovative projects, but the take up and impact of these ring-fenced funds are not evident. Ultimately, the impact of the added flexibility will depend on the capability of Scottish Water to appraise projects in a way that allows for innovation, as well as the willingness to take up risks and experiment.

#### *Providing flexibility without compromising accountability*

A system offering a previously unheard-of level of flexibility is underpinned by trust, and maintaining accountability will be key. Appropriate accountability will help Scottish Water provide confidence to Ministers that processes are functioning at an adequate level and that issues are being resolved. In addition, Scottish Water remains accountable to customers and communities, and must demonstrate that its decision making is in their best interest now and in the long term.

Performance assessment will be one tool to promote accountability, and the new system requires a new approach to performance reporting. A long-term perspective might imply that not all impacts will be evident and traceable within a single SRC. This calls for a monitoring framework that is continuous rather than cyclical. During the regulatory period that follows SRC21, the Scottish Government will maintain the Delivery Assurance Group, formed in 2006 as the Output Monitoring Group (OMG) to monitor the delivery

of committed output. A key success factor of the group will be the choice of a set of indicators that allow for checking on continuous progress, with a mix of process indicators tracking how projects and investment needs are assessed and determined and intermediate outcome indicators that tracks progress towards long-term goals.

### *Boosting capacity to make optimal strategic investment decisions*

In light of the substantial shift in regulatory expectations described in these sections, parties will have to develop capacities to understand investment choices in light of strategic priorities. For the first time, the regulated company is being asked to consider how investment choices are optimal on a whole-system, whole-life basis. To do so, the company must ensure that it can produce robust investment appraisals and understand trade-offs in a way that drives progress towards strategic objectives. Members of the IPPG must also have a firm grasp of the issues involved in expanding decision making to include carbon, natural capital, and social capital. Scottish Water, the regulator, and the IPPG will need to understand the performance of the new approach to investment decision making, expanding existing indicators to measure results in new areas.

WICS envisions a high level of internal scrutiny within Scottish Water feeding into investment, complemented by a level of external scrutiny from the IPPG. After going through internal checks, Scottish Water will publish all of its investment appraisals to a portal for the IPPG to review. The regulator has indicated that they would like to see the company attain a level of internal scrutiny that is so robust, the IPPG stops saying “no.” Reaching this point will require the development of capacity within the company, as well as an injection of strategic vision into decision making to allow the company to make trade-offs. The work with experts described in the Challenges associated with long-life assets and time-inconsistency of investment need marked an early stage of the transition period towards a company with the internal capacities to fully meet expectations.

### *Finding the balance between robust external scrutiny and Scottish Water ownership*

WICS has asked Scottish Water to take ownership over its strategy and decisions, and the IPPG should allow the company to preserve ownership if it shows good-faith and well-evidenced reasoning. The role of the government in the IPPG is worth a second look in light of OECD guidance on the governance of state-owned enterprises. The OECD Guidelines on Corporate Governance of State-Owned Enterprises state “the state should act as an informed and active owner” of state-owned enterprises, while allowing such enterprises “full operational autonomy to achieve their defined objectives” and refraining “from intervening in SOE management” (OECD, 2015, p. 20<sub>[31]</sub>). There is potentially a risk that the IPPG will allow the Scottish Government and other involved parties an inappropriate level of influence in the day-to-day operations of the company. There is a delicate balance to be struck between robust external scrutiny of Scottish Water’s investment decision making and micromanagement of the company’s operations.

### *Countering uncertainty for quality regulators*

WICS regulates the sector alongside DWQR and SEPA, and a shift away from a list of projects to a more flexible approach could reduce the certainty for quality regulators the previous approach provided. The potential benefits for drinking water and environmental quality that could arise from an economic regulatory framework that looks long-term and bases investment decision making on value instead of cost are significant. However, early resistance to the idea of a flexible investment framework came from the perspective that certain hard requirements must be met for the company to comply with water quality and environmental regulations. In previous price reviews, quality regulators worked with Scottish Water to define investment priorities from water and environmental quality perspectives. Priority projects joined the list, which offered a degree of certainty about the improvements that Scottish Water would make during the regulatory period that followed.

Maintaining buy-in from quality regulators going forward will require a higher burden of proof: not only will the regulatory framework need to deliver expected levels of compliance with standards, but also it will have to demonstrate that it is providing benefits beyond compliance. Consideration for these potential benefits would need to be taken into consideration and evidenced from the very beginning of any investment project and assessed on a continuous basis as projects are implemented. The new approach lacks the surety of the previous approach, and analytical rigour and transparency measures will be important to manage the risk that quality regulators raise a red flag.

## Embedding the customer and community voice

### ***The starting point: A commitment to improve opportunities for customer and community input***

The price-setting process is high-stakes in the Scottish water sector – affecting a large number of consumers for many years, even beyond the regulatory period – which makes incorporating customer and community views into decision making of critical importance. Stakeholder engagement is a key input to ensure regulations are designed and implemented in the public interest, and the OECD Best Practice Principles on the Governance of Regulators suggests that regulators structure opportunities for engagement in order to favour active participation and exchange of data (OECD, 2014<sup>[32]</sup>). The mechanisms regulators use to solicit relevant views range widely – including formal public consultation, consultative councils, and customer research.

Formal requirements for the Scottish SRC regulatory process provide limited opportunities for customer engagement. The process invited formal public comment at two junctures during the process: on the draft Ministerial Objectives and Principles of Charging and on WICS’s draft determination. WICS considered that such engagement often occurred “after the fact,” once major decisions had been made, leaving only marginal opportunities for customer and community involvement. The introduction of a Customer Forum in the previous price review added a new opportunity for constructive challenge during SRC15. In SRC21, WICS would consider new ways to maximise the utility of the Customer Forum as a conduit for customer views in the process.

Research provides another channel for customer views into the SRC process, and it was identified as an area for development in SRC21. Earlier customer research designed to channel insights about customer needs and preferences often fell short of WICS’s expectations. A regulatory approach that encouraged long-term thinking introduced a new challenge, requiring an understanding of customers’ long-term preferences and evolving attitudes. At the outset of SRC21, WICS sought to explore new ways to better gauge customer views through research, as well as developing the mechanism to translate and incorporate insights into the regulatory process.

The following sections present the mechanisms in SRC21 designed to better represent customer and community voices within the process and during the regulatory period to follow. One section introduces the Customer Forum for SRC21, re-envisioned for SRC21 to have an enhanced role. The second section presents Scottish Water’s plan to use a new customer group to take forward its commitment to act “as though there is a customer in the room,” pushing beyond simple consultation to bring the customer and community voice into the company. The third section explores how a Research Co-ordination Group for SRC21 was involved in the research feeding into SRC21, including research using innovative methods like behavioural insights.

## ***Moving ahead: New and improved mechanisms for engagement and research***

*The Customer Forum amplifies the customer voice within SRC21, with an evolving mandate*

Inspired by the success of the Customer Forum in the previous price review, SRC21 would also feature a Customer Forum for SRC21 to provide a conduit for customer views and negotiating Scottish Water's business plan. WICS defined a broader remit for the Customer Forum in SRC21, with the additional task of reaching out to communities across Scotland to understand their priorities and working with Scottish Water on other customer research. During SRC21, the Customer Forum joined other key stakeholders in Stakeholder Advisory Group meetings (discussed further in *The multi-lateral governance of SRC21 creates new opportunity for exchange*).

A tripartite co-operation agreement between CAS, Scottish Water and WICS established the Customer Forum for SRC21. The agreement, published as an Appendix to WICS's methodology document, reaffirmed the role of the Forum to act as a conduit for customers' views rather than being representative of customers or reflecting the users' demographics, similarly to SRC15. The new Customer Forum retained half of the members (including the then-Chair) from the previous price review, guaranteeing some experience and continuity from SRC15.

The co-operation agreement set out the Customer Forum's responsibilities for SRC21:

- working with Scottish Water on research to establish customers' priorities;
- ensuring that the research programme includes a meaningful level of engagement from communities;
- understanding and representing to WICS and Scottish Water the priorities and preferences of customers; and
- seeking to ensure the most appropriate outcome for consumers (both now and into the future) based on those priorities and preferences, in particular by seeking to establish an agreed Business Plan (WICS, 2017<sup>[3]</sup>).

To accompany the shift from a business plan to a strategic plan, WICS adjusted the mandate of the Forum. The Forum would seek to agree two things with Scottish Water:

- whether Scottish Water adequately takes into account in its Strategic Plan the Customer Forum's evidence on customer views and aspirations, and
- a price profile to deliver the Strategic Plan, within limits defined by WICS (WICS, 2018<sup>[16]</sup>).

In line with these expectations, the Forum and Scottish Water reached a draft agreement on prices in March 2020.

In response to the unfolding COVID-19 pandemic, the Customer Forum's role shifted once again in spring 2020. As infections rose and the government imposed lockdowns across the UK, the Customer Forum and Scottish Water expressed concern about taking price decisions without better understanding of the impact of the pandemic. WICS adjusted its approach to respond to this uncertainty: it took setting a fixed price profile for the regulatory period off the table, to be replaced with a more flexible approach. Therefore, the Customer Forum's anticipated role in agreeing the maximum amount of charges and negotiating price profiles with Scottish Water was no longer necessary. Instead, in April 2020, WICS asked the Forum to engage with Scottish Water focusing on two questions:

- How should Scottish Water's Transformation Plan reflect customers' expectations?
- How should Scottish Water deliver on its commitment to become more customer-centric and community focused? (WICS, 2020, p. 17<sup>[23]</sup>).

Not all Customer Forum members were pleased with this new direction, and this and other concurrent events struck a blow to the trust that had developed between the Forum, the company and the regulator. The change in mandate came as the United Kingdom was experiencing its worst impacts from the COVID-19 pandemic to date, and questions arose about the ability of customers to absorb increased prices. In addition, information that Scottish Water had significant cash reserves surfaced in the same month, attracting critique in the media about WICS's perceived "overcharging" (The Scotsman, 2021<sup>[33]</sup>). After these changes and details came to light, the chair of the Customer Forum resigned in late April 2020. Under its new chair, the Customer Forum took forward the questions posed by WICS, drafting a "Minute of Agreement on the Customer Forum's Expectations of Scottish Water's Transformation Plan". The document expresses the Forum's expectations for the transformation required across the company to deliver its high-level strategic objectives.

While a changing mandate caused discomfort for the Forum and an agreement on prices between the Forum and Scottish Water negotiated was not ultimately used, the group still managed to deliver value in key areas. The Forum released a summary of its achievements during SRC21. It highlighted the engagement of the Forum in SRC21, including through its participation in stakeholder and working groups, its engagement during "deep dive" sessions, and its release of Forum position papers. Among its achievements, the Forum noted its role in crafting the vision and strategic plan, its early championing for climate change as a key strategic issue, and its role in securing Scottish Water's commitment to customer centricity. In addition, the Forum notes that it delivered upon its final mandate, successfully reaching an agreement with Scottish Water on its expectations for the company's transformation plan (Customer Forum, 2020<sup>[34]</sup>).

#### *Scottish Water establishes a new conduit for customer views*

The Customer Forum formally came to an end with the completion of the SRC process in 2020. Going forward, CAS would continue to be the voice of customer on water policy matters, until the newly-created Consumer Scotland takes its place in this area.<sup>1</sup> However, stakeholders judged that neither the Forum nor CAS could effectively support efforts by Scottish Water to involve customers and communities as stated in the Strategic Plan, giving rise to discussions of new forms of engagement and empowerment in order to give customers a voice in the investment process. A new customer group under the ownership of Scottish Water held the promise of ensuring Scottish Water recognised the expectation to go beyond traditional customer engagement.

2020 saw several discussions about the potential shape that a conduit for a customer voice might take post-SRC21. In March 2020, the Stakeholder Advisory Group considered a Scottish Water discussion paper on the future Customer Forum. The discussion paper defines the key principles upon which a future group may be based, including that it be hosted by Scottish Water while retaining its operational independence within the policy framework set by the Scottish Government (Scottish Water, 2020<sup>[35]</sup>).

In the course of discussions between Scottish Water and the Customer Forum, the company and the customer conduit came to an agreement on certain elements of a new Independent Customer Group (ICG), spelled out in the Minute of Agreement on expectations for the Transformation Plan. They echo the discussion paper, confirming that the group will be operationally independent within Scottish Water. They agree on the remit of the ICG, whose functions will include partnering with Scottish Water to develop and implement an engagement programme. The ICG maintains a challenge function; the agreement states that plans submitted to approval from the government, WICS, or CAS will also be submitted to the customer group for their comments. For continuity, an interim customer group was constituted from the existing membership of the Customer Forum. The interim group functioned until the new ICG was inaugurated in spring 2021 (Scottish Water, 2021<sup>[36]</sup>).

*The shared research programme captures customer views and more*

Stakeholders created the Research Co-ordination Group (RCG) to ensure effective co-ordination of the research feeding into SRC21. The research would fall under the SRC21 research programme, designed to identify customer priorities and preferences. By promoting information sharing and feedback, a more streamlined research programme than under SRC15 was expected.

The terms of reference for the group envisioned the participation of representatives from Scottish Water, the Customer Forum (which would also chair the group), and CAS's Consumers Futures Unit. In practice, WICS and stakeholders also participated in the group. The three establishing parties each contributed something different to the research feeding into SRC21: the RCG's terms of reference stated that the activities under the research programme would include CFU research for policy purposes, Scottish Water's customer research, additional research commissioned by the Customer Forum, and other relevant research. The group operated with an 'open data' approach, sharing the results (often at an early stage) of research for SRC21.

Initially, most of the research considered by the RCG originated with one actor, with CAS or Scottish Water taking the lead on studies individually. Over time, more collaborative research has been developed. For example, Scottish Water and the Customer Forum collaborated on two activities: legacy research designed to understand how customers want to be regarded by future generations and wider environment research designed to understand customer attitudes towards Scottish Water's environmental responsibilities. In addition, CAS, Scottish Water and the Customer Forum conducted research into successful community engagement practices.

The RCG reported to the Stakeholder Advisory Group regularly, and the RCG's decisions on research activities have reflected key themes unfolding in the SRC process. The focus of the research programme has evolved, with earlier research investigating matters of short-term, personal impact and later research displaying a longer-term focus. Scottish Water's customer research programme, Engage 21, follows this trend. Early Engage 21 research assessed customer priorities through research involving retail customers, licensed providers and community councils. During the second phase of Engage 21, Scottish Water's research focused on specific issues related to operations, such as water pressure, wastewater, and lead in water. At later stages, the research has tackled questions of strategy, investigating community engagement, legacy, and the wider environment. This evolution followed developments in SRC21, with the shift to a strategic plan creating greater need and opportunity for research of a more strategic nature.

As the SRC progressed, the RCG took steps to ensure that the group prioritised high-impact research with greater potential to materially affect SRC21. The RCG held an independently facilitated workshop in December 2018 to agree on research priorities for the remainder of the SRC process. Stakeholders distilled 39 research priorities into three priority themes:

- pricing and willingness to pay,
- legacy, and
- relative importance of environmental impacts and service quality considerations.

Faced with a small window of opportunity for research to influence SRC21 outcomes, the RCG took action to ensure that the research programme provided coverage of important issues.

The Group also agreed to trial innovative research methods such as behavioural insights and deliberative research. The behaviourally informed research (discussed further in Box 3.2) presented the opportunity to go beyond traditional research methods to explore underlying motivations and biases using empirical methods. The use of behaviourally-informed research to better understand customer preferences was one of the innovations foreseen by WICS to provide better research inputs into SRC21 (Water Industry Commission for Scotland, 2017<sup>[37]</sup>). Deliberative research, which allowed participants to engage with the facilitator and the responses of other participants, generated more subtle insights on how customer views

on Scottish Water's strategy change when presented with additional information about the sector and the challenges it faces.

### **Box 3.6. Behavioural research provides insights on customers' perceptions of long-term prices**

Price setting conducted by economic regulators has significant and lasting impacts, making the quality of input on customer priorities critical. Behavioural insights (BI) research presents an opportunity to explore underlying motivations and biases of participants, allowing the regulator to understand and address biases when designing interventions and anticipate potential pitfalls. The research provides a perspective that is a valuable companion to other research inputs to regulatory processes, like polling research.

The Economic and Social Research Institute (ESRI) produced behavioural insights studies to deepen understanding of behavioural factors that influence customer attitudes. Both studies, described below, involved an online survey and face-to-face laboratory study with participants from across Scotland.

#### **Study 1: Measuring attitudes towards water charges and different price trajectories for future charges.**

The study started by testing participants' priors about acceptable price changes, showing that the largest group of participants preferred no price change, followed by a price increase, and then a price decrease. The study then tested how the size and the presentation of price trajectories affects their acceptability, finding that the greatest number of participants preferred a smooth upward price trajectory, followed by a front-loaded, then back-loaded. The final stage tested whether providing additional information affected participants' acceptance of price trajectories, with results suggesting that providing information about annual costs resulted in a preference for front-loaded trajectories, followed by constant, and finally by back-loaded. When participants were given figures on total (cumulative) costs, there was no longer a significant preference for front-loaded and constant trajectories.

#### **Study 2: Trade-offs between costs and benefits of additional investment in the Scottish water industry**

The first stage asked participants to rank seven benefits in order of importance, including four target benefits (reducing interruptions to supply, reducing external sewer flooding, connecting rural supplies to the water system, and increasing the share of renewable energy generated by the water industry). Results did not show that any one benefit was more important at this stage. Next, participants were asked to allocate an unknown amount of money between the four target improvements. Here, participants allocated the most money to external sewer flooding, followed by renewable energy, interruptions to supply and rural supplies.

In the third stage, participants were asked to state the maximum amount of money they would be willing to add to their current water bill if they knew the revenue would be used towards the four target improvements. On average, participants were willing to add £11.03 to their water bills (an increase of around 2.5% in the bills). However, 40% of participants indicated that they were unwilling to add any additional amount to their charges.

In the fourth stage, the experimenters revealed the costs of the target improvements. The participants could manipulate the amount they would be willing to add to their bill and the percent allocation to each benefit. The programme told participants how much of the improvements would result if everyone invested the same amount. In this stage, participants' percent allocations remained about the same, but 14% of participants increased their water charge. The final stage added time horizons, indicating whether benefits would be delivered immediately, in five years, in ten years or in 25 years. This stage saw a significant increase in allocation towards immediate benefits.



Among the results of this study, one result stands out: the study suggested that participants were willing to pay more for the benefits. Participants were especially willing to pay more for short-term benefits when they knew the time horizons of each benefit (Belton, Lavin and Lunn, 2020<sup>[38]</sup>).

Source: Belton, C., C. Lavin, and P. Lunn (2020), Eliciting trade-offs between water charges and service benefits in Scotland. ESRI Working Paper No. 655. [https://www.esri.ie/system/files/publications/WP655\\_1.pdf](https://www.esri.ie/system/files/publications/WP655_1.pdf).

The RCG also experimented a tool for quick tactical sampling to complement the research programme. The RCG first experimented with the use of a chatbot, partnering with Aptivism to solicit the public's views on water issues through three chats with a Facebook Messenger chatbot. Faced with mixed success in the chats and Aptivism's inability to accept further commissions, the RCG decided not to continue with a chatbot. The RCG agreed that other data collection methods could continue to serve as ways to gauge customer preferences, such as traditional omnibus surveys.

### ***Looking forward: The challenges of embedding the customer and community voice***

Extending beyond business-as-usual consultation, including through the use of behaviourally-informed approaches, represents a significant change to the way customer engagement has been conducted in the Scottish water sector. Attempts to better represent customer and community views in the SRC process and decision making during the regulatory period have met some challenges. Notably, WICS and stakeholders faced the persisting view of engagement as a continuation of business-as-usual consultation and the lack of shared understanding of a "community" view.

#### *Expanding beyond normal consultation*

While WICS had a view of ongoing, integral engagement from the beginning of SRC21, the regulator identified moving beyond viewing engagement as business-as-usual consultation as a challenge. After several years of discussion, the outputs of SRC21 show a commitment to ramping up engagement during the regulatory period. The commitment of Scottish Water to make every decision as though "the customer were in the room" represented a formal commitment to push beyond existing consultation methodologies. Furthermore, the ICG serves to institutionalise engagement, with the promise of engagement becoming more continuous and integral.

The challenge going forward will be to further develop the capacities to solicit and react to the full range of stimuli from customers and communities, including public empowerment. While stakeholders lack a shared definition of "empowerment," public participation literature such as the International Association for Public Participation's Spectrum of Public Participation presents public empowerment as the most participative mode of engagement, where the public adopts a decision making role. WICS hopes to see, and Scottish Water has committed to show, a more proactive exchange with customers and communities that extends beyond engagement to empowerment. Stakeholders have raised the bar, expecting that the company will have to think "outside the box" to broaden the approach. This represents considerably heightened ambition compared to engagement strategies during previous regulatory periods, and the challenge of embedding the customer and community voice has featured in conversations about Scottish Water's transformation.

The commitment to deepening the connection between decision making and customer and community voices is only the first step towards customer centricity, and Scottish Water has a range of tools to advance its goal. The ICG will be one tool to channel customer and community voices into decision making. Certain tools show greater promise to collect new information on customer preferences: behavioural and deliberative research provided interesting insights and could be used more systematically, while other methods like the use of chatbots proved less useful in surveying preferences. Scottish Water is also considering which internal changes will enable a receptive and empathetic approach to customer- and community-facing actions, and ultimately community and customer empowerment.

### *Maximising the utility of the ICG, while recognising its limitations*

The ICG can be seen as an early step towards embedding EBP in Scottish Water's operations, and certain elements can help ensure that it is best placed to provide useful information. The ICG's effectiveness hinges on its ability to channel customer and community voices, as discussed above, but also its capacity to maintain adequate challenge. The group is not stand-alone like the Customer Forum, but instead is housed within Scottish Water. It is still envisioned as an independent body; the ICG's ToR states that the group will be "operationally independent... free from any perceived capture" and also "adequately resourced". While the ToR lays the foundations for independent decision making, the ICG may contend with a reputational risk if stakeholders perceive it to be constrained, controlled or captured going forward. Like the Customer Forum, the ICG does not claim to be representative of the Scottish population. This approach presents another risk: if participants do not appropriately acknowledge and manage the natural biases of the group, it risks replicating its biases in the information it produces.

### *Ensuring research has high-impact results*

Timing is key to ensure that research comes at the best moment to feed into the process. While earlier research by members of the RCG served a scoping function, participants initially lacked a framework to understand where to invest time and resources to ensure that research was high-impact. While desk research conducted in 2017 identified existing research with relevant results for SRC21, a structured conversation about research priorities did not take place until late 2018. The timing of later studies, such as the deliberative research conducted in late 2018, limited the impact on SRC21.

The ICG has taken early steps towards a research approach grounded in a framework that helps the group target high-impact and timely research questions. In August 2021, the ICG re-established the Research Co-ordination Group. Its purpose, according to the group, is "to facilitate coordination and collaboration among water sector stakeholders on research designed to elicit a comprehensive understanding of customers and communities' needs and aspirations." The group has expressed its intention to develop a research framework to guide its actions.

The research programme also could have benefitted from an early and deliberate consideration of its scope to ensure that research reflected areas of highest value. The agreement establishing the Customer Forum sketched out an early view of the scope of the research programme, encompassing "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" (WICS, 2017, p. 80<sub>[15]</sub>). Within this broad mandate, the research programme involved a wide range of research questions and research methodologies. Being driven by a small group of insiders, a risk is that the research programme replicates the personal or organisational views of participants, potentially failing to produce research in areas of highest value and of greatest importance to customers. A more deliberate approach incorporating external challenge could reduce the opportunity for design bias.

### *Establishing shared understanding of what a community view of engagement means*

While the regulator and stakeholders were adamant that the company engage both customers and communities, initially the group had no shared understanding of how a community view could translate into decision making. From the beginning of SRC21, outward-facing messaging about SRC21 expressed that SRC21 would capture the needs of and deliver benefits for "customers and communities" (see, e.g. WICS (2017<sub>[3]</sub>)). To clarify expectations, Scottish Water asked stakeholders to explain what was meant by engaging customers and communities in the process.

The Customer Forum, following a discussion with CAS/CFU, released a short response to Scottish Water in 2018. In the paper, they present their view on how the company can better engage, including with communities of place and communities of interest. These terms represent two different ways of conceptualising community: while communities of place are bound by geography, communities of interest bring together people around shared interests (Robinson and Green, 2011<sup>[39]</sup>). The Customer Forum suggests a range of methods to engage communities of place, including conducting targeted research that yields local insights and co-creating plans for local interventions. To engage communities of interest, the Forum suggests the creation of panels catering to specific interests, including groups representative of vulnerable populations, young people, the elderly, and environment and recreation interests.

## Note

<sup>1</sup> The Consumer Scotland Act 2020 creates a new consumer advocacy and support body, Consumer Scotland (Scottish Parliament, 2020<sup>[40]</sup>). The functions that were previously held by CAS in the water sector will be conducted by Consumer Scotland.

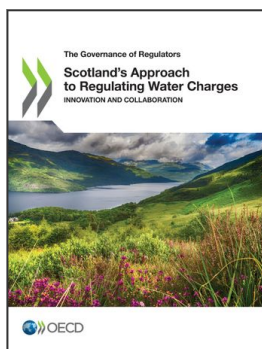
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