

customer forum

The best water service for the fairest price



Scottish  
Water

Trusted to serve Scotland

# Customer Insight



SRC21 Strategic Plan Supporting Document

# Contents

1. Summary	page 3
2. Service Excellence	page 6
3. Beyond Net Zero Emissions	page 11
4. Great Value and Financial Sustainability	page 13
5. Annex 1: Technical Annex	page 15

# 1. Summary

This paper by Scottish Water and the Customer Forum sets out the key themes from the customer research, insight and engagement programmes delivered in support of the Strategic Plan development process. All findings have been used to inform and underpin the Strategic Plan, outcomes and objectives as indicated by icons featured through this document.

Customers **expect** Scottish Water to:



**Deliver consistently excellent water and waste water services**

Concentrate on maintaining water quality and reducing sewer flooding, with reliability and resilience of their water supplies being vital



**Deliver the same quality of service over the next 25 years**

Repair or replace ageing assets to protect the environment and maintain services



**Reduce emissions**

Adapt to a changing climate and mitigate the impact of climate change



**Provide value for money and keep charging levels stable**

Not put off price increases if they are necessary to replace assets and protect the environment

Customers **value** Scottish Water:



**Leading others to deliver**

Supporting the wider objectives of the Scottish Government, leading by example, and working with others



**Promoting innovation within the water sector**

Using innovative approaches and technologies, and challenging the status quo



**Operating in a sustainable way**

Ensuring investment is sympathetic to the natural environment



**Engaging with customers and communities**

Providing more advice and information about how they can help support sustainable services



**Helping Scotland to prosper**

Recognising the importance of water in perceptions of Scotland and safeguarding the natural environment to support tourism and the wider economy.

## Putting Customers at the Heart of the Strategic Plan

Scottish Water is publicly owned and commercially managed, ultimately answerable to the people of Scotland through Scottish Ministers and the Scottish Parliament for the services it delivers. Scottish Water continuously seeks to listen to customers and communities to understand their current and future expectations and to meet these wherever possible.

The Customer Forum seeks to understand the views of Scottish Water's customers and the communities it serves and to ensure they are heard in the Strategic Review process. The Customer Forum plays a key role in securing robust customer input into the creation of Scottish Water's Strategic Plan.

Over the last two years through research, insight and engagement programmes, Scottish Water, the Customer Forum and other industry stakeholders have sought the views and expectations of more than 25,000 people from across the diverse customer base<sup>1</sup>, including householders, vulnerable customers, businesses, licensed providers, tourists, developers and community representatives, across the length and breadth of Scotland. As well as engagement at public events, a significant research programme has been conducted using a combination of well-established and innovative methodologies including focus groups, online surveys, in-home interviews, in-depth deliberative research, behavioural insights and an online chatbot tool. Everything from the day-to-day water services, through to the environment, charging and the future of the water industry in Scotland has been part of the discussion with customers and this insight has been used to inform the Strategic Plan.

From the research, insight and engagement programmes it is clear there is a genuine interest from customers and communities to know more about the water industry and

challenges it faces. Achieving the long-term objectives of the water sector vision will require greater engagement with customers and communities to further their understanding and appreciation of the sector and to enable the delivery of mutual benefit for both Scottish Water and its customers.

## A Partnership Approach

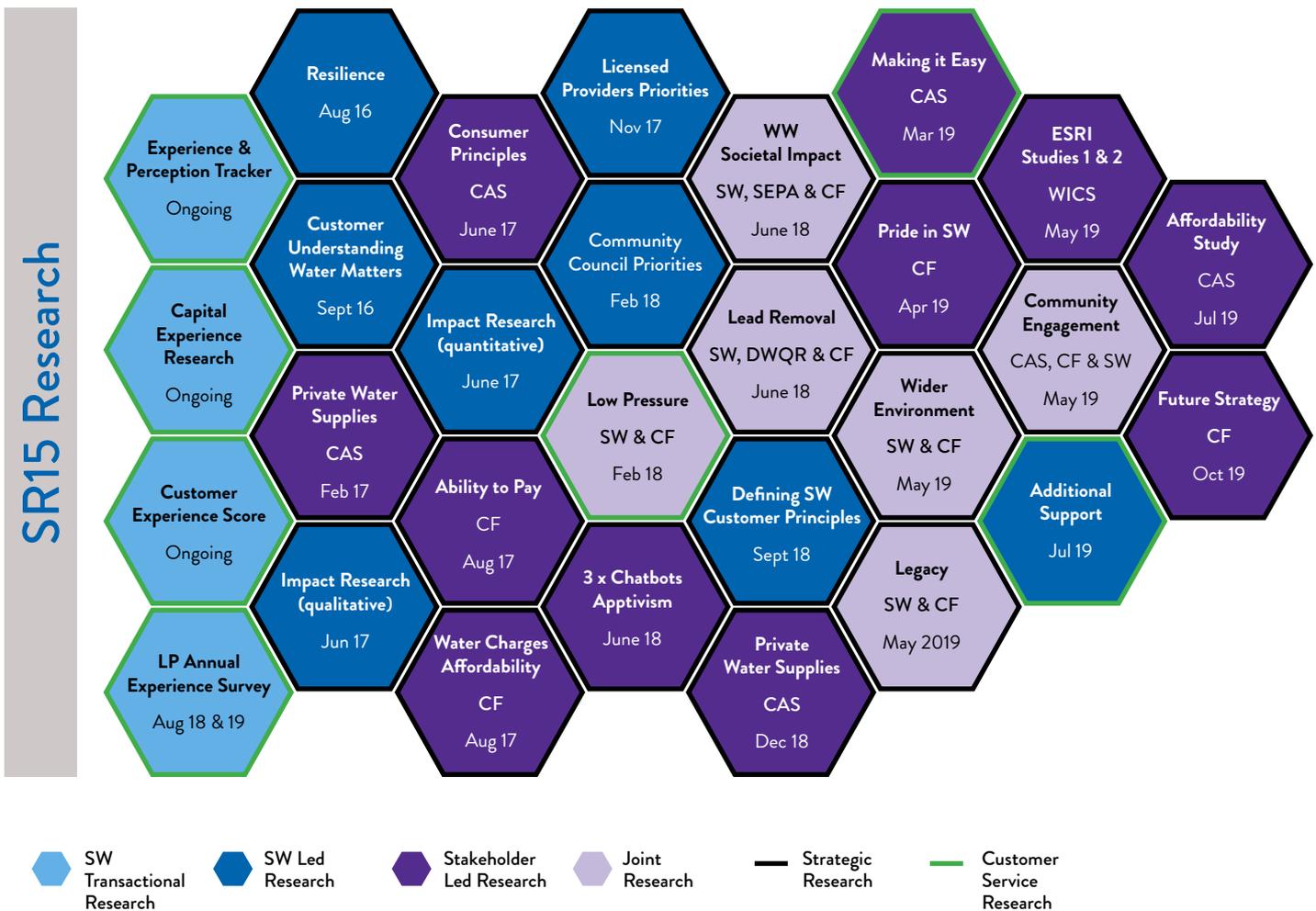
Over the current Strategic Review process, Scottish Water and the Customer Forum have co-created activities and co-commissioned research with key partners including the Water Industry Commission for Scotland (WICS), the Scottish Environment Protection Agency (SEPA), Citizens Advice Scotland (CAS) and the Drinking Water Quality Regulator (DWQR), with the aim of sharing knowledge and expertise to ensure as much benefit as possible for customers from the insight. Collectively 29 insight projects have been completed during the Strategic Review process (Figure 1). This number and range of methodologies has allowed for triangulation of insight outcomes.

Summary details of each of the research, insight and engagement projects and methodologies can be found in Annex 1 which also provides links to the full reports.

## Understanding Current and Future Expectations of Customers and Communities

Scottish Water is a long-term business - where the assets that provide the vital services can last for decades or even centuries, and customers depend upon the services throughout their lifetime. The Strategic Plan outlines the transformation required, in the context of the global climate crisis, ageing assets and net zero emissions. The research in this Strategic Review evolved to reflect the longer term focus; seeking to ensure Scottish Water meets the needs of both current and future customers.

<sup>1</sup>Over 8,000 customers were involved in research and insight projects. Over 16,000 customers were involved in the 2018 consultation exercise entitled 'Shaping the Future of your water and wastewater service'. Ten pieces of research engaged business customers directly. Vulnerable customers were represented in at least eleven pieces of research.



**Fig 1: SRC21 Research Programme**

The rest of this supporting document highlights where research, insight and engagement has provided customer and community views within the context of the three Strategic Outcomes in Scottish Water’s Strategic Plan:

- **Service excellence** – adapting to a changing climate, dealing with our ageing assets and meeting customers’ evolving expectations
- **Beyond net zero emissions** – showing leadership in mitigating climate change and enhancing Scotland’s natural environment
- **Great value and financial sustainability** - customers will receive great value, now and in the future, and we will be financially sustainable

## 2. Service Excellence

Adapting to a changing climate, dealing with our ageing assets and meeting customers' evolving expectations

Delivering Consistently Excellent Water Supply



Across the research and engagement programmes both household and business customers generally expressed high levels of satisfaction with their water service, with particular reference to the quality of drinking water received. From the Future Strategy research 97% of household customers said they were satisfied with the quality of their drinking water.

Customer research indicates that maintaining water quality is a high priority, with reliability and resilience of water supplies also being vital to both household and business customers. In particular, customers told Scottish Water that the service issues that would have most impact on them and their community would come from a problem relating to water quality and a long term interruption to supply. The Legacy research found that for both household and business customers all of Scotland having high quality drinking water was the top priority for current bill payers and all of Scotland having a consistent supply of water was a high importance area for both current and future bill payers.

Research has also shown that customers are looking for service standards to be maintained over the longer term. The Legacy research evidenced that having a resilient water supply into the future is vital. Customers stressed the need to invest in infrastructure to protect the standards they are accustomed to today, with on average 72% of customers indicating 'replacing ageing assets to protect the environment and maintain services' would justify a slight (unquantified) increase in charges. 83% of customers chose 'increasing the reliability, resilience and sustainability of our services' as the most important to them during the Strategic Projections engagement programme. This was important for both current and future customers. In the Future Strategy research reliable service stood out as a top priority for both household and business customers and had strong appeal across all age groups. This was viewed as the fundamental function of Scottish Water, having a direct impact on the day-to-day lives of customers and providing both immediate and long term benefits for all.

Both household and business customers provided insights into infrastructure replacement approaches; both groups showing a strong preference for Scottish Water to work to fix or replace things before they fail as opposed to fixing things when they fail. Reasons given were a greater understanding of the scale of infrastructure supporting the water and wastewater services, the ageing assets information provided and the view that this approach posed less of a risk of future failures in the system affecting the reliability of service and potentially minimising unplanned interruptions to supply. Whilst all customers generally favoured the fix or replacement before failure approach, due to the potentially higher upfront costs associated with this approach they indicated there was a need for assurance that money was being spent wisely and evidence that parts of the system

were at risk of failing. Business customers, in particular, suggested a balance between the two approaches could be the most appropriate and cost-efficient solution.

Household customers tend to be tolerant of short-term interruptions to supply. They recognise that things can go wrong with the network, which they can usually cope with, if they are kept informed. Both the Low Pressure Deep Dive and the Scottish Water Community Council research confirmed previous research findings that customers have identified short term interruptions to supply as causing 'medium' impact. Business customers indicated that they were much less likely to cope with even short-term interruptions to supply.

Household customers are less likely to cope with long-term interruptions, where homes and communities might be without water for extended periods. Customer insight is that long-term interruption events are seen as serious, especially beyond 48 hours or affecting a large area with severe knock-on effects. Both the Low Pressure Deep Dive and the Scottish Water Community Council research confirmed previous research findings that that customers have identified long term interruptions to supply as a 'high' impact; especially felt by business customers.

The removal of lead research provided some early insights into the customer barriers to removal of lead pipes: including the general lack of knowledge of lead pipes, the cost of getting the work done and the upheaval of the work/how long it might take. Customers were unaware of phosphate dosing, split on where responsibility for pipework replacement should lie and largely unaware of health risks. Customers saw communication about lead pipes as a Scottish Water responsibility and key to raising awareness, but customers expected the Scottish Government should lead this as a

health-based issue, with key roles for Scottish Water and Local Authorities. From the Pride research a generational split was evident; 91% of the oldest age group (55+) stated they would feel 'a lot of pride' or a 'fair amount of pride' if Scottish Water removed all remaining lead pipes from the public water supply network in Scotland. This compares to 63% of the youngest age group (18-24).

## Transforming Waste Water Services



Across the research and engagement programmes both household and business customers generally expressed high levels of satisfaction with their waste water service.

Customers found topics linked to waste water flooding easier than other topics, such as environmental pollution incidents and coastal bathing waters, to engage with. Customers fed back that Scottish Water should work in partnership with other responsible bodies, such as local authorities, to provide flood prevention measures and help customers understand how they can help to futureproof the system. Scenarios presented to customers around internal flooding or repeatedly flooded areas were considered to have high customer impact and therefore were considered to be high priority areas for investment.

During the Impact research customers told Scottish Water that the greatest impact on them and their community would come from a problem relating to water quality and internal sewer flooding. In the Future Strategy research sewer flooding was seen as a matter which could have physical and psychological impacts on customers, so management of these issues was seen as an essential part of Scottish Water's role. Over 80% of customers

in the Pride research said they would be proud if Scottish Water invested money to minimise the risk of external sewer flooding impacting their local community and/or environment. Both the Low Pressure Deep Dive and the Scottish Water Community Council research confirmed previous research findings that customers identified internal sewer flooding as ‘high’ impact; and external flooding as ‘medium’ impact. The Wider Environment research highlighted that supporting customers on responsible disposal of items such as baby wipes and cooking oil was third on the list of customers’ priorities, which also echoed customers’ views expressed during the focus groups that they do not know how to properly do this. Through the Future Strategy research, customers indicated it was important for Scottish Water to provide clear information for customers about their role in minimising blockages and to encourage behaviour change. Reducing microplastics was one of the top environmental priorities of both household and business customers in the Wider Environment research.

From the Legacy research, generating income from collecting, treating and recycling waste water appealed more to current customers and protecting the environment appealed more to future bill payers.

## Enabling Sustainable and Inclusive Economic Growth



Customers believed Scottish Water infrastructure should support economic growth, although not at the expense of the environment. Most participants were keen on protecting the environment, even improving it, especially in view of climate change and growing environmental concern. Some of the

business customers included within the Wider Environment research saw a need for a practical balance in environmental measures because an increased cost burden on businesses might impact employment and tax receipts. Yet they also saw a benefit to retail and service businesses in promoting green credentials of an area or Scotland, which are becoming compelling for customers.

New housing and other buildings were considered signs of economic development, which require water and waste water services, so in this sense it was recognised that Scottish Water has an important role in economic growth. However, this development also engendered some apprehension about disruption during construction, the increased burden on existing infrastructure, and perceived risk to the natural environment. As development can put a strain on existing infrastructure, mitigations such as Sustainable Urban Draining Systems (SuDS) were seen as important.

## Empowering Customers and Communities



Research revealed that customers had a mixed understanding of the ownership of Scottish Water. Once they were aware it was publicly owned, this was received positively and customers were keen for this ownership model to continue. They perceived publicly owned companies as more accountable for actions, subject to regulation and high standards; and more responsive to the public’s interests, views and aspirations. Service levels expected from a public company were largely higher (40%) or the same (43%) compared to those from a private company.

There was a strong expectation that publicly owned companies contribute to the wider good. Of the 99 customers who voted in the Future Strategy research, 82 thought this was very important and 16 thought this was fairly important. 82% of customers in the Pride research said that they feel 'a lot of pride' or a 'fair amount of pride' that Scottish Water helps contribute to broader society goals in areas like health, education and the environment, signifying that customers value Scottish Water's contribution to public benefit. Through the Future Strategy research the public benefit activities that emerged as higher priority were: encouraging customers to use water wisely, providing free drinking water in public places (through making Your Water Your Life taps available in all Scottish Council areas), providing apprenticeships and training to help people enter work, and improving water safety awareness through Scottish Swimming Lessons sponsorship. Perceived benefits of some of these activities included a better informed public (and particularly children/future customers) a more protected infrastructure, (resulting in fewer instances of sewer flooding), a reduction in single use plastics, a contribution to the net zero emissions 2040 target, healthier lifestyles and raised awareness of water safety.

Research has told us that enabling access to Scottish Water's landholdings is important to customers: 82% of customers in the Pride research said that they feel 'a lot of pride' or a 'fair amount of pride', that when practical, Scottish Water safely opens up the land they own so that the public can enjoy it for leisure purposes (e.g. walking, cycling and running, etc.). However, the Future Strategy research has shown this is of relatively lower importance than other areas of public benefit such as using water wisely and access to drinking water in public places.

Customers have told us they value the iconic nature of water in Scotland and the benefits

this provides in the promotion of tourism. Customers have discussed the quality of water and surroundings of rivers and beaches, linking them to the part they play in our tourism industry and Community Councils also alluded to this in the Impact research, highlighting the importance of this for rural and coastal communities.

As noted above, a consistent theme across several research projects was that customers value the provision of advice and information about how they can help support sustainable services - such as reducing water use and maintaining the sewer network. From the Wider Environment research this was third on customers' lists of priorities and was mentioned throughout the waste water research. However, there was also some surprise at the information Scottish Water provided to participants, leading to a recommendation for more public information and more support to encourage behavioural change. This is supported by CAS research where customers indicated they required support from the industry to understand better how their behaviour, in terms of inappropriate disposal of household waste using the public network, may have a damaging impact on Scottish Water's assets.

Customers and communities would value strengthening relationships with Scottish Water. In the Pride research 78% of customers said that they feel 'a lot of pride' or a 'fair amount of pride' that Scottish Water engages and consults with local communities about the way their water supplies work, and any engineering work needed that may have an impact on them. Consumers were keen to be more involved in public sector activities that impact upon their communities. However, Scotland's water industry needs to do more to support the development of stronger, more resilient communities, and develop innovative engagement mechanisms to increase consumers' say in how services are delivered.

The Community Councils research underlined the importance of effective engagement with Community Councils; defined as being kept up to date with work in the area, providing a consistent point of contact and sharing information early; being consulted in the case of large scale future projects enabling them both to represent the views of the community and act as a dissemination point for Scottish Water. The Community Best Practice research has highlighted that community engagement by service providers is often the catalyst for bringing a community together over a shared purpose, which can lead to stronger and more empowered communities. With the community and service provider identifying and working towards shared interests this is more likely to achieve better results – if done successfully, it will leave a local legacy of shared outcomes and positive relationships. Organisations need to use the right engagement tools - simple, flexible, adaptable and inclusive of all members of the community; and allow sufficient time and resources for effective engagement.

to support the wider Scottish economy, reduce youth unemployment, boost Scottish Water's expertise and provide apprentices with practical skills to enter the workforce. Concerns raised were around the demographics the apprenticeships would be open to and any perceived extra cost to customers.

## Scottish Water's People



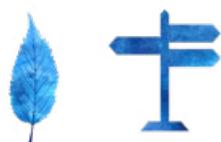
Through the Future Strategy research customers overwhelmingly felt it was important for Scottish Water to lead the way by having high ethical standards of business. With particular reference to Scottish Water's people, customers thought that an ethical organisation would be good to its employees and suppliers, and put people ahead of profit.

One of the public benefit activities that emerged as higher-priority for Scottish Water from the Future Strategy research was providing apprenticeships and training to help people enter work; in particular this resonated with older customers and those with children. This was perceived

# 3. Beyond Net Zero Emissions

## Showing leadership in mitigating climate change and enhancing Scotland's natural environment

### Transforming our Emissions



Customers recognise that climate change is a global issue; this was a strong message that came through in all research in the later stages of the programme. It is an issue that customers believe everyone has a part in combatting although there are differences between generations. Customers believe big businesses and government should lead by example in making efforts to reduce their carbon emissions and publicising what they are doing, to encourage others to do the same - this was a message from both the Wider Environment research and the Future Strategy research.

Most participants in the Wider Environment research were keen on protecting the environment, even improving it, especially in view of climate change and growing environmental concern. Some, though, worried about the likely costs associated with increasing environmental obligations. The concept of a carbon footprint is familiar to most customers: the idea of clean energy and carbon accounting was supported as part of ongoing long-term business planning by Scottish Water and, indeed, all organisations.

From the Future Strategy research, climate change considerations were viewed as essential areas of focus for Scottish Water, both in terms of tackling climate change and protecting water services against the impact of climate change. Whilst the magnitude of this was recognised by all age groups, young customers in rural locations were particularly passionate about the urgent need for action. Tackling climate change and protecting water services were in the top three priorities for household customers. Businesses acknowledged that efforts to tackle and respond to climate change impacts were important for all organisations, and some welcomed the idea of Scottish Water making effort in both these areas, even stating that it was an issue Scottish Water had “no choice” but to respond to. Others, however, questioned the extent to which Scottish Water should be focussing on tackling climate change, as it would not have a direct benefit to them as business customers and therefore would be of lesser importance than ensuring a reliable service was maintained, reflecting businesses’ underlying attitudes towards environmental responsibilities more generally.

From the Pride research 83% of customers said that they would feel ‘a lot of pride’ or a ‘fair amount of pride’ if Scottish Water increased the amount of renewable energy it generated (e.g. energy from waste water, hosting wind/solar farms on land). From the Wider Environment research 77% of customers (household and business) said they agreed or strongly agreed that above regulations, companies need to commit to driving down environmental impacts and enabling new sustainable energy. In addition, younger customers are more inclined to prioritise sustainability over short-term, quick fixes.

Reducing leakage was one of the top environmental priorities of household and business customers in the Wider Environment research- with a particular focus from businesses. Customers were generally shocked by the volume of leakage (although pleased with the reduction in recent years). Almost everyone felt leakage should be reduced, by both Scottish Water and property owners - irrespective of the cost, though a limited number of people thought that economically leaks might have to be tolerated where there is no environmental damage. Both the Low Pressure Deep Dive and the Community Council research confirmed previous research findings that customers have identified leakage as an issue causing 'medium' impact.

Priorities for action can be influenced by local circumstances. The chat-bot tool used in the Western Isles for example identified peat restoration as an issue, with the majority of users (c.70%) thinking that Scottish Water should use a proportion of the annual water charge to keep peatland in good condition. The other 30% said that Scottish Water should focus only on removing peat when it enters the water treatment process.

## Embracing the Circular Economy



Customers expect Scottish Water to adopt circular economy principles, although the term itself did not resonate with customers. From the Pride research 83% of customers said that they feel 'a lot of pride' or a 'fair amount of pride' that Scottish Water is a 'green' company: generating as much renewable power from water infrastructure as practical, re-using waste and using the minimum necessary amount of chemicals.

Customers expect Scottish Water to operate in a sustainable way - ensuring investment is sympathetic to the natural environment and that Scottish Water responds to the challenges of climate change. Within the Legacy research, 'replacing ageing assets to maintain services and protect the environment' was highlighted as one of the top three priorities for customers. 72% of household customers stated that replacing ageing assets to maintain services and protect the environment was the most popular improvement area where customers were most willing to pay slightly more. This triangulates with the Environment research where customers expressed a preference for maintaining, rather than enhancing, infrastructure.

## Enhancing the Natural Environment



In the Wider Environment research, several environment-related initiatives were presented to customers for consideration. Most attracted interest and were perceived as worthwhile; biodiversity was only lightly explored, but was seen to connect well with Scottish Water's role and the environment. There was some interest expressed from customers for Scottish Water to protect wildlife and green spaces within water catchment areas.

# 4. Great Value and Financial Sustainability

Customers will receive great value, now and in the future, and we will be financially sustainable

## Keeping Services Affordable and Financial Sustainability



The principal research conclusions are drawn from the ESRI Behavioural Insights Study 1: Scottish attitudes to water charges, Study 2: Trade-offs between water Charges and service benefits in Scotland, the Future Strategy research and the Fraser of Allander Affordability study commissioned by CAS.

ESRI study 1 aimed to improve understanding of Scottish citizens' attitudes towards different prospective price trajectories for future water charges. No information on the challenges faced by Scottish Water was provided. In this context the majority of participants (86%) wanted prices to rise at or below inflation, though a substantial proportion of Scottish citizens were willing to accept some nominal increase in water charges, both in the immediate 12 months or over the next 6 year period. If price rises above the rate of

inflation were inevitable, research indicated that customers would prefer constant or front-loaded price trajectories, as opposed to back loaded higher price rises in the future. Customers did not want price increases to be put off if they were necessary.

ESRI study 2 highlighted customer's views on the costs and benefits of specific service improvements; with no clear overall preference for personal or societal benefits. Participants, in general, were willing to accept modest additional water charges to improve specific services. People's priorities for improvements were not changed substantially by learning about the costs and time horizons involved, but learning more led some participants to deem a further small price rise acceptable.

A key aspect of the Future Strategy research was to gather participants' views on a range of potential price scenarios for their water supply and wastewater services; to understand if customers' preparedness to pay charges changes if customers understand the benefits and price impacts of alternative approaches. During the research customers were presented with three pricing scenarios for the 2021-27 period (CPI, CPI+1%, CPI+3%) and asked to vote for their preferred scenario. Before deliberation, household customers' immediate reaction to the three pricing scenarios showed a range of views, but an overall preference for Scenario 2 (CPI+1%). Following deliberation and further information provision around the pace of change towards net zero emissions (which resonated particularly with younger customers), opinions changed somewhat: although Scenario 2 (CPI+1%) remained the most popular overall (48% to 51%), support for Scenario 1 (CPI) had decreased (from 25% to 9%), and support for Scenario 3 (CPI+3%) had increased (26% to 40%). For business customers, there was little

change in opinion, where the concerns related to reliability of service as opposed to net zero emissions. Reasons provided for the broad acceptance of CPI+1% were around maintaining the current level of service received; a preference for gradual smaller increases in price; and reflected affordability concerns. Customers were keen to have assurance that if prices were to rise the investment continued to represent good value for money in terms of the level of service received; and clear communication around the amount bills would increase by and the reasons behind it would be required. Communication was cited as a key aspect of ethical behaviour expected by a public organisation, with a desire for Scottish Water to demonstrate the value being delivered.

The research shows concern from customers about the affordability of any future price rise, as individuals and for others; this came through strongly in the Future Strategy research. Despite a general understanding and acceptance that to address ageing infrastructure and climate change further investment was likely to be required (and a general shift of support for this in particular from household customers), concerns were expressed around affordability issues for themselves or others in the community if prices were to rise above CPI. For business customers affordability was seen as a particular issue for small businesses if prices were to rise above CPI, but also for those that used large volumes of water and therefore already considered their bills to be relatively high.

However, the Fraser of Allander Institute research report estimated the proportion of Scottish households likely to pay a charge for

water and sewerage equivalent of more than 3% of net household income in 2021/22 and 2027/28 decreases under a range of scenarios of charges (CPI, CPI+0.5%, CPI+1.0%, CPI+1.5%), driven by the assumption that wages will increase above the rate of inflation. The greatest impact of any increases would be felt by those in the lowest income decile. An earlier report had highlighted the continued pressure on household finances and the increase in poverty levels across the UK which were predicted to continue to increase until the mid-2020s.

## Transforming How Scottish Water Works



In both the Wider Environment and Legacy research projects, customers indicated they were keen for Scottish Water to use innovative approaches and technologies to develop new ways of working and improve water and waste water services. Younger customers in particular expect Scottish Water to challenge the status quo and look to develop new techniques.

This was reiterated in the Future Strategy research. Although innovative approaches as a separate category ranked relatively low in a list of priority areas for future focus for SW (behind reliable service, making things last and climate change), it was seen, particularly by younger customers, as an essential way of working and therefore delivering.

## 5. Annex 1 : Technical Annex

Research projects commissioned in the SRC21 process, (or research projects prior to SRC21 which have informed the Strategic Planning Process) and the Strategic Projections engagement programme which have informed the Strategic Plan are outlined in Table 1 in chronological order.

	Research project	Quantitative/ qualitative	Number of customers (households, businesses, Licensed Providers' and/or stakeholders)
1	Understanding views on resilience	Qualitative & Quantitative	1,300
2	Customer understanding of investment	Qualitative	9
3	Impact Research Part 1: An introduction to update customer views to inform the SRC21 strategic planning process	Qualitative	82
4	Improving information and signposting for users and managers of private water supplies and private sewerage facilities	Qualitative	34
5	Role of Consumer Principles in the UK Energy, Water and Postal industries	Qualitative	NA
6	Impact Research Part 2: Establishing prioritisation of service impacts on customers	Quantitative	1,405
7	Briefing paper on prospects for water charges affordability	Qualitative	NA
8	Ability to pay report	Qualitative	NA
9	Impact Research Part 3: Testing existing household and business customer outputs with Licensed Providers.	Qualitative	12
10	Impact Research Part 4: Understanding Community Council's views on the investment priorities defined by domestic and non-domestic customers	Qualitative	15
11	Chatbot 1: Understanding customers' water consumption views and their understanding of their water charges.	Quantitative	523
12	Chatbot 3: Understanding customer's views on the wider environment and Scottish Water and the environment	Quantitative	805

13	Chatbot 2: Establishing in the Western Isles customer's views on water shortages, perceptions of Scottish Water and the environment	Quantitative	185
14	Low pressure deep dive	Qualitative	74
15	Waste water and the wider societal impact	Quantitative	76
16	Understanding lead removal	Qualitative	53
17	Behavioural Insights: ESRI study 1 (Scottish attitudes to water charges)	Quantitative	600
18	What influences consumers' choice of treatment systems for Private Water Supplies (PWS)?	Qualitative	61
19	Behavioural Insights: ESRI study 2 (trade-offs)	Quantitative	599
20	Pride in Scottish Water	Quantitative	1006
21	Wider environment	Qualitative & Quantitative	1102
22	Legacy	Qualitative & Quantitative	1068
23	Making it easy: simpler registration for consumers in vulnerable situations	Qualitative	65
24	Community engagement best practice	Qualitative	4
25	Additional support research	Qualitative & Quantitative	450
26	Affordability study	Quantitative	NA
27	Future strategy	Qualitative	120
28	Annual Licensed Provider (LP) survey	Qualitative	15/20 LPs
29	Strategic Projections engagement programme		16,000

**Table 1: Research projects**

A full list of all the research projects follows, detailing: research project, objectives, commissioning organisation, date and methodology and links to the full reports available.

## Resilience

Research Project 1	Resilience
Commissioning organisation	Scottish Water
Research agency	Trinity McQueen
Type	Strategic
Date	August 2016
Objectives	To understand what the term 'Resilience' and 'Resilience of Service' means to customers and how Scottish Water should communicate matters of resilience. The project explored perceptions of resilience amongst domestic and business customers, exploring: interruptions to water supply, water quality issues and surface water flooding.
Methodology	Qualitative; 6 x 1½ hour workshops with household customers in Glasgow, Perth and Elgin 12 x 45 minute telephone interviews with hard to reach customers 12 x 45 minute interviews with businesses Quantitative; 1000 customers completed 10 minute online questionnaire 300 business customers completed 10 minute online questionnaire
Qualitative or Quantitative	Mixed: Qualitative, Quantitative
Number of customers/customer representatives	1,300
Link to full report	<a href="#">Link</a>

## Customers Understanding - Investment

Research Project 2	Water Matters
Commissioning organisation	Scottish Water
Research agency	Mindmover – Water Matters online community
Type	Strategic
Date	September 2016
Objectives	To understand customer's thoughts and opinions on a number of different areas of interest including investment, perceptions of different types of companies as well as the best way to communicate with vulnerable customers. Looking to obtain customer opinion and feedback on these specific areas to ensure that this is taken into account when sharing information and communicating with customers.
Methodology	9 members of the Water Matters community took part in a 60-minute live chat
Qualitative or Quantitative	Qualitative
Number of customers/customer representatives	9
Link to full report	<a href="#">Link</a>

## Impact Research Part 1

Research Project 3	Impact Research Part 1
Commissioning organisation	Scottish Water
Research agency	Trinity McQueen
Type	Strategic
Date	November 2016 - January 2017
Objectives	An introduction to update customer views to inform the SRC21 strategic planning process
Methodology	7 customer workshops (Glasgow, Elgin and Stirling) 12 tele-depth interviews with hard to reach customers 14 tele-depth interviews with business customers
Qualitative or Quantitative	Qualitative
Number of customers/customer representatives	82
Link to full report	Business Customers <a href="#">Link</a> Household Customers <a href="#">Link</a>

## Improving information and signposting for users and managers of private water supplies and private sewerage facilities

Research Project 4	Improving information and signposting for users and managers of private water supplies and private sewerage facilities
Commissioning organisation	CAS
Research agency	RDF Consulting Sàrl
Type	Strategic
Date	February 2017
Objectives	Research to improve understanding across the industry on the type and depth of support needed for consumers or communities using private water supplies to make informed and appropriate choices to improve their water quality.
Methodology	Mixed: Interviews with 34 key stakeholders and sources of publicly available information
Qualitative or Quantitative	Qualitative
Number of customers/customer representatives	NA
Link to full report	Available March 2020

## Role of Consumer Principles in the UK Energy, Water and Postal Industries

Research Project 5	Role of Consumer Principles in the UK Energy, Water and Postal Industries
Commissioning organisation	CAS
Research agency	Purple
Type	Strategic
Date	June 2017
Objectives	Research setting out the mechanisms that are used by 40 regulators and service providers within the regulated industries of energy, water and post to develop consumer-focused policy and practice.
Methodology	Mixed: Interviews with a cross section of regulators, service providers and other consumer organisations in the energy, water and postal sectors and a review of market intelligence.
Qualitative or Quantitative	Qualitative
Number of customers/customer representatives	NA
Link to full report	<a href="#">Link</a>

## Impact Research Part 2

Research Project 6	Impact Research Part 2
Commissioning organisation	Scottish Water
Research agency	Accent
Type	Strategic
Date	May-July 2017
Objectives	To establish prioritisation of service impacts on customers
Methodology	905 household customers completed MaxDiff questionnaire 100 face to face interviews with hard to reach customers 400 telephone interviews with business customers
Qualitative or Quantitative	Quantitative
Number of customers/customer representatives	1,405
Link to full report	<a href="#">Link</a>

## Briefing Paper on Prospects for Water Charges Affordability

Research Project 7	Briefing Paper on Prospects for Water Charges Affordability
Commissioning organisation	Customer Forum
Research agency	John McLaren
Type	Strategic
Date	August 2017
Objectives	The Customer Forum commissioned a report from economist John McLaren that would update their knowledge on trends in household economics for Scottish families.
Methodology	Secondary analysis of existing economic data.
Qualitative or Quantitative	Quantitative
Number of customers/customer representatives	NA
Link to full report	<a href="#">Link</a>

## Ability to Pay

Research Project 8	Ability to pay
Commissioning organisation	Customer Forum
Research agency	Danny Phillips Associates
Type	Strategic
Date	August 2017
Objectives	The Customer Forum commissioned external analysis of data held by CAS and the CPAG relating to changes in the benefits system and the impact this may have on Scottish Water bill payers.
Methodology	Secondary analysis of existing data/evidence
Qualitative or Quantitative	Mix of of different data/evidence types held by CAS and the CPAG
Number of customers/customer representatives	NA
Link to full report	<a href="#">Link</a>

## Impact Research Part 3

Research Project 9	Impact Research Part 3
Commissioning organisation	Scottish Water
Research agency	Turquoise Thinking
Type	Strategic
Date	November 2017
Objectives	To test existing household and business customer outputs with Licensed Providers.
Methodology	Of the 23 Licensed Providers operating in the market at the time, 12 took part in a 45-60 minute telephone interview.
Qualitative or Quantitative	Qualitative
Number of customers/customer representatives	12
Link to full report	<a href="#">Link</a>

## Impact Research Part 4

Research Project 10	Impact Research Part 4
Commissioning organisation	Scottish Water
Research agency	Turquoise Thinking
Type	Strategic
Date	January 2018 - February 2018
Objectives	To understand Community Councils' views on the investment priorities defined by domestic and non-domestic customers, and how they align with the needs of their communities in contrast to the original individual impact statements. The project also aimed to understand Community Councils' thoughts on engagement and information expectations of Scottish Water when operational work may impact their community, both now and in the future, and thoughts on engagement and the level of involvement they would anticipate in the strategic review and business planning process.
Methodology	15 Community Councils (mix of rural, urban, island and coastal) took part in a 45 minute telephone interview
Qualitative or Quantitative	Qualitative
Number of customers/customer representatives	15
Link to full report	<a href="#">Link</a>

## Water Consumption and Charges

Research Project 11	Water consumption and charges
Commissioning organisation	Water Industry Commission
Research agency	Apptivism
Type	Strategic
Date	February 2018
Objectives	To understand customers' water consumption views and their understanding of their water charges.
Methodology	Online chatbot tool
Qualitative or Quantitative	Quantitative
Number of customers/customer representatives	523
Link to full report	<a href="#">Link</a>

## Scottish Water and the Wider Environment

Research Project 12	Scottish Water and the wider environment
Commissioning organisation	Water Industry Commission
Research agency	Apptivism
Type	Strategic
Date	February 2018
Objectives	To understand customers' views on the wider environment and Scottish Water and the environment
Methodology	Online chatbot tool
Qualitative or Quantitative	Quantitative
Number of customers/customer representatives	805
Link to full report	<a href="#">Link</a>

## Western Isles

Research Project 13	Western Isles
Commissioning organisation	Water Industry Commission
Research agency	Apptivism
Type	Strategic
Date	June 2018
Objectives	To establish in the Western Isles customers' views on water shortages, perceptions of Scottish Water and the environment
Methodology	Online chatbot tool
Qualitative or Quantitative	Quantitative
Number of customers/customer representatives	185
Link to full report	<a href="#">Link</a>

## Low Pressure Deep Dive

Research Project 14	Low Pressure Deep Dive
Commissioning organisation	Scottish Water (with input from the Customer Forum)
Research agency	Turquoise Thinking
Type	Customer Service
Date	February 2018
Objectives	To understand customers' expectations of water pressure and what low pressure means to customers, how it affects lifestyles; to test the industry definition of low pressure; to examine pressure management techniques and their acceptability; and check the position of low pressure in the 'Total Customer Impact' categories.
Methodology	Qualitative; 6 mini filmed ethnographies (in-house interviews) 6 workshops with household customers and 3 with businesses in Glasgow, Inverness, Largs and Arran
Qualitative or Quantitative	Qualitative
Number of customers/customer representatives	74
Link to full report	<a href="#">Link</a>

## Waste Water and its Societal Impact

Research Project 15	Waste water and its societal impact
Commissioning organisation	Scottish Water (with input from SEPA and the Customer Forum)
Research agency	Trinity McQueen
Type	Strategic
Date	May - July 2018
Objectives	To understand customers' views on the wider, societal impact of waste water flooding, river water quality, bathing water quality and environmental pollution incidents. This built on discussions with customers around the individual impact during the Total Customer Impact research.
Methodology	Qualitative; 6 x 90 minute focus groups with household customers in Aberdeen, Inverness and Edinburgh 2 x ½ day 'intercept' activities at the River Ness in Inverness and Portobello beach in Edinburgh 10 x 20 minute telephone interviews with businesses 10 x 40 minute telephone interviews with hard to reach customers
Qualitative or Quantitative	Qualitative
Number of customers/customer representatives	76
Link to full report	<a href="#">Link</a>

## Lead Removal

Research Project 16	Lead Removal
Commissioning organisation	Scottish Water (with input from DWQR and the Customer Forum)
Research agency	Turquoise Thinking
Type	Strategic
Date	May - July 2018
Objectives	To understand customers' views on: awareness of lead in the network, knowledge around their own property, knowledge of drinking water treatment, water quality regulations and requirements for lead, how best to approach the removal of lead pipes and fittings and how this should be prioritised.
Methodology	Qualitative; 5 x telephone interviews with plumbers On street 'vox pop' film 5 x co-creation workshops with household customers (40 participants including hard to reach) in Glasgow, Edinburgh and Whitburn 2 x co-creation workshops with SME business customers (13 participants) in Falkirk and Dundee
Qualitative or Quantitative	Qualitative
Number of customers/customer representatives	53
Link to full report	<a href="#">Link</a>

## Behavioural Insights 1

Research Project 17	Behavioural Insights 1
Commissioning organisation	WICS (Supported by Customer Forum and Scottish Water)
Research agency	ESRI
Type	Strategic
Date	November 2018
Objectives	Experiment 1; Understand attitudes to changes to water charges and how the size, presentation and timelines of price trajectories affected acceptability.
Methodology	600 customers completed a 15-120 minute online activity (500 online and 100 face-to-face in a mobile laboratory).
Qualitative or Quantitative	Quantitative
Number of customers/customer representatives	600
Link to full report	<a href="#">Link</a>

## What Influences Consumers' Choice of Treatment Systems for Private Water Supplies (PWS)

Research Project 18	What influences consumers' choice of treatment systems for Private Water Supplies (PWS)
Commissioning organisation	CAS
Research agency	Ipsos MORI
Type	Strategic
Date	December 2018
Objectives	Research to understand which criteria consumers who rely on PWS apply to make purchasing choices for water treatment systems, and what external influences impact their decision.
Methodology	Seventeen in-depth interviews and four focus groups with domestic private water supply users; twenty in-depth interviews with non-domestic private water supply users
Qualitative or Quantitative	Qualitative
Number of customers/customer representatives	41 domestic consumers; 20 non-domestic consumers
Link to full report	Available March 2020

## Behavioural Insights 2

Research Project 19	Behavioural Insights 2
Commissioning organisation	WICS (Supported by Customer Forum and Scottish Water)
Research agency	ESRI
Type	Strategic
Date	March 2019
Objectives	Experiment 2; Explore trade-offs between water charges and service benefits, and examine whether additional information (costs and timelines) influence customers' trade off decisions.
Methodology	599 customers completed a 20 minute online activity (500 online and 99 face-to-face in a mobile laboratory).
Qualitative or Quantitative	Quantitative
Number of customers/customer representatives	599
Link to full report	<a href="#">Link</a>

## Pride in Scottish Water

Research Project 20	Pride in Scottish Water
Commissioning organisation	Customer Forum
Research agency	YouGov
Type	Strategic
Date	April 2019
Objectives	To understand customers' pride in Scotland's tap water and Scottish Water across a range of issues.
Methodology	Omnibus online survey -1,006 participants. Various demographic breakdowns were investigated, covering gender, age group, social grade, geographic region, marital status, working status, children in the household, parent/guardian status and social media/messaging service they used in the last month.
Qualitative or Quantitative	Quantitative
Number of customers/customer representatives	1,006
Link to full report	<a href="#">Link</a>

## Wider Environment

Research Project 21	Wider Environment
Commissioning organisation	Scottish Water and the Customer Forum
Research agency	Impact
Type	Strategic
Date	May 2019
Objectives	To understand customers' attitudes, expectations and prioritisation of Scottish Water's approach to their environmental responsibilities - with regard to climate change, our natural environment, and customer water and waste water behaviours.
Methodology	Literature review Qualitative; 4 Engaged customer panels (37 customers) in Glasgow and Inverness – 2 x 90 minute sessions 1 week apart with household customers, including an interim diary task 6 hard to reach customers engaged through WhatsApp for a 60 minute video call 6 SMEs completed 60 minute telephone interview Quantitative; 1,000 household and business customers completed 20 minute online survey
Qualitative or Quantitative	Mixed: Qualitative, Quantitative
Number of customers/customer representatives	905
Link to full report	<a href="#">Link</a>

## Legacy

Research Project 22	Legacy
Commissioning organisation	Scottish Water and the Customer Forum
Research agency	Trinity McQueen
Type	Strategic
Date	May 2019
Objectives	This research set out to uncover what legacy means to customers, how different generations in Scotland plan for legacy, what the current service expectations are for the Scottish water industry and how domestic and business customers would like to prioritise future investment. Of particular interest was what legacy current generations want to leave to future generations, and what future generations want and expect to be left to them.
Methodology	Semiotic Analysis Qualitative; Digital immersion – 40 participants engaged in online tasks and activities over the course of 1 week 12 business customers completed 15 minute telephone interviews 6 x 2 hour in-home intergenerational, family immersion sessions 2 x 2 hour 'conflict' sessions with 10 household customers at each Quantitative; 800 household and 200 business customers completed 15 minute online MaxDiff survey
Qualitative or Quantitative	Mixed: Qualitative, Quantitative
Number of customers/customer representatives	1068
Link to full report	<a href="#">Link</a>

## Making it Easy: Research into Simpler Registration for Consumers in Vulnerable Situations

Research Project 23	CAS Making it easy: Research into simpler registration for consumers in vulnerable situations
Commissioning organisation	CAS
Research agency	IPSOS Mori
Type	Customer Service
Date	March 2019
Objectives	To investigate the experiences and perspectives of Scottish consumers in vulnerable situations with regard to additional support provided by essential service providers, and how could the customer experience and process of registering across sectors for additional forms of support be improved.
Methodology	40 in-depth interviews and 2 focus groups with consumers in vulnerable situations; and an action-planning workshop with key stakeholders.
Qualitative or Quantitative	Qualitative
Number of customers/customer representatives	65
Link to full report	<a href="#">Link</a>

## Community Engagement Best Practice

Research Project 24	Community Engagement Best Practice
Commissioning organisation	CAS, Customer Forum and Scottish Water
Research agency	IPSOS Mori
Type	Strategic
Date	July 2019
Objectives	The research aimed to provide insight into the processes and methods that make community engagement successful. In the process, it aimed to look beyond high level community engagement frameworks and provide evidence of practical application of engagement methods. The primary research question, therefore, was: what are the components of successful community engagement policy and practice? The objectives were to review and describe: a definition for community engagement and its potential scope; existing models and frameworks for community engagement; the legislative, local and governmental drivers for community engagement; and previous research on processes and methods of community engagement.
Methodology	Desk research, and a review of four community engagement programmes.
Qualitative or Quantitative	Qualitative
Number of customers/customer representatives	4 case studies
Link to full report	<a href="#">Link</a>

## Additional Support Research

Research Project 25	Additional Support Research
Commissioning organisation	Scottish Water
Research agency	Turquoise Thinking
Type	Customer Service
Date	July 2019
Objectives	The main objective was to understand customer attitudes and expectations towards the Additional Support Register and support services offered. More specifically, it looked to; understand whether customers perceive Scottish Water as a company that cares for its customers. Are there companies that do this better and if so, how and what do they do and what do they offer?
Methodology	<p>2 x 2.5hr co-creation workshops with household customers who are eligible for, or are already on the Additional Support Register, alongside Scottish Water staff</p> <ul style="list-style-type: none"> <li>- 30 x tele-depth interviews with those who could potentially benefit from the service</li> <li>- 10 x tele-depth interviews with a number of potential signposting partner organisations including charities close to customers with additional support requirements</li> <li>- 50 x house to house quantitative surveys in areas that have previously experienced water supply interruption</li> <li>- 400 x online surveys with defined target groups including; customers with disabilities, carers, elderly and parents with young children.</li> </ul> <p>A documentary film consisting of a number of Scottish Water customers with additional support requirements sharing their opinions of the additional support service</p>
Qualitative or Quantitative	Mixed: Qualitative, Quantitative
Number of customers/customer representatives	450
Link to full report	<a href="#">Link</a>

## Affordability study

Research Project 26	Fraser of Allander Affordability study
Commissioning organisation	CAS
Research agency	Fraser of Allander Institute (University of Strathclyde)
Type	Strategic
Date	July 2019
Objectives	<p>Previous research undertaken for Citizens Advice Scotland by the Fraser of Allander Institute (2017/18) estimated that, in 2015/16, 12% of Scottish households spent more than 3% of their net income on water and sewerage charges. This estimate was derived from the Family Resources Survey, an annual survey of 3,000 households in Scotland which includes questions on household income and household water charge. In future, are more or fewer households likely to spend more than 3% of their income on water and sewerage? The answer to this question clearly depends on the future growth of the water and sewerage charge relative to the growth of household income. In April 2019, Citizens Advice Scotland commissioned the Fraser of Allander Institute to estimate the proportion of Scottish households likely to pay a charge for water and sewerage equivalent to more than 3% of net household income in 2021/22 and 2027/28. The years 2021 and 2027/28 were selected as these represent the start and end year of the next price setting period.</p>
Methodology	Statistical modelling
Qualitative or Quantitative	Quantitative
Number of customers/customer representatives	N/A
Link to full report	Study A <a href="#">Link</a> Study B <a href="#">Link</a>

## Future Strategy

Research Project 27	Future Strategy
Commissioning organisation	Customer Forum
Research agency	Ipsos MORI
Type	Strategic
Date	September 2019
Objectives	What would customers' views on Scottish Water's future strategy be if they understood (a) the potential consequences or benefits of different approaches and (b) their associated impacts on charges for water supply and wastewater services?
Methodology	Deliberative research comprising of a) Four reconvened events in each of 4 locations, engaging a diverse cross-section of Scottish Water domestic customers, including vulnerable customers and younger people (as future customers) and urban/rural split. In total, around 100 domestic participants took part in the research b) 3 hour evening workshops in 4 locations, engaging a range of business customers. In total, around 18 non-domestic customers were recruited to take part (this also included where necessary a number of tele-depth interviews).
Qualitative or Quantitative	Qualitative
Number of customers/customer representatives	120
Link to full report	<a href="#">Link</a>

## Annual Licensed Provider Survey

Research Project 28	Annual Licensed Provider survey
Commissioning organisation	Scottish Water
Research agency	Turquoise Thinking
Type	Customer Service
Date	Annual
Objectives	Since 2015, an independent agency has conducted research to understand the levels of satisfaction that Licensed Providers have with Scottish Water. The key objectives of the research are to: a) Understand service levels, and drivers of satisfaction/dissatisfaction with Scottish Water as a whole, and individual departments, b) Examine specific examples of service successes and failures and c) Understand the improvements that Licensed Providers would like to see from the service provided by Scottish Water.
Methodology	Online quantitative survey, tele-depth interviews
Qualitative or Quantitative	Mixed: Qualitative, Quantitative
Number of customers/customer representatives	2018 – 15 Licensed Providers 2019 – 13 Licensed Providers
Link to full report	Annual Licensed Provider Survey 2018 <a href="#">Link</a> Annual Licensed Provider Survey 2019 <a href="#">Link</a>