

Severn Trent Water

Stakeholder workshop reports

Climate Change stakeholder workshop

21st May 2012



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3. Introduction

3.1. Date and location

The Climate Change stakeholder workshop was held on May 21st 2012 at the Techno Centre, Coventry University, Coventry.

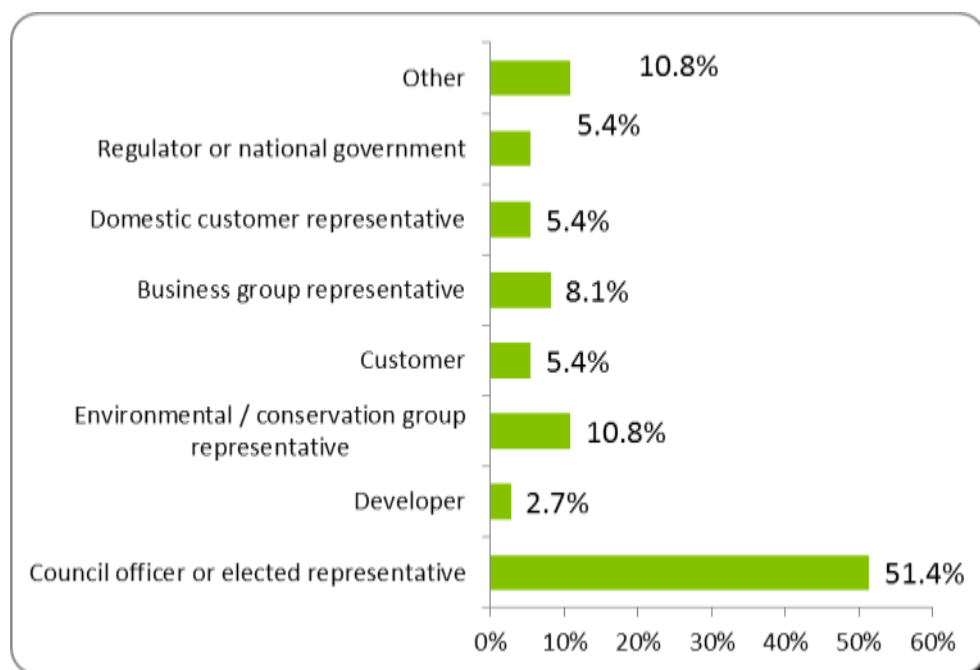
3.2. Attendees:

35 stakeholders attended the Climate Change workshop. Their details are shown below:

- Adam Lines - Midlands Water Manager, Environment Agency
- Alan Carr - Assistant Climate Change Officer, Staffordshire County Council
- Anthony Morris - Recycling and Climate Change Officer, Cannock Chase Council
- Ben Smith - Portfolio holder for Environment, Northamptonshire County Council
- David Wurr - Committee Member, CC Water
- David Clarke - Policy Officer, Malvern Hills Council
- Harjot Rayet - Environmental Policy Officer, Telford and Wrekin Council
- Heather Lammas - Sustainability Officer, Worcestershire County Council
- Isabel Clark - Climate Change Co-ordinator, Rutland County Council
- Jenni French - Environment and Sustainability Manager, Ashfield District Council
- Jim Allen - Managing Director, Green Energy Networks
- Kevin Tozer - Team Leader, Derby City Council
- Kirstein Huizer - Senior Water Management Officer, Wyre Forest District Council
- Liz Lainé - Lead for Green Deal Project, Consumer Focus
- Manoj Mistry - FRM/Drainage Project Manager, Coventry City Council
- Martin Adam - Engineering Co-ordinator, Lovells
- Martyn Wilson - Principal Planner, Worcestershire County Council (Strategic Planning)
- Natalie Jarman - Carbon & Energy Officer, University of Leicester
- Nick Grayson - Climate Change and Sustainability Manager, Birmingham City Council

- Oliver Savage - Team Leader, Climate Action, Leicester City Council
- Philip Thompson - Flood Risk Manager, Leicester City Council
- Philip Hulme - Midlands PR14 Manager, Environment Agency
- Richard Ellam, Western Power Distribution
- Roger Street - Technical Director, Adaptation Science UKCIP
- Roy Stokes - Flood Risk Manager, Environment Agency
- Sian Thomas - Project Manager, Sustainability West Midlands
- Simon Slater - Executive Director, Sustainability West Midlands
- Stephen Bray - Corporate Director Gelding Borough Council
- Steve Moore - Head of Environmental Health, Nuneaton & Bedworth Borough Council
- Steve Webber, Murphy Grp/SBWVI
- Steve Trotter, Staffordshire Wildlife Trust
- Sumi Lai - Planning Officer, Bromsgrove District Council
- Tom McDonald - Executive Board Member, Wychavon District Council
- Tony Marmont, Beacon Energy Ltd
- Tony Jones - Engineering Consultancy Manager, Wychavon District Council

The split of stakeholders according to the type of organisation they were representing on the day is shown below:



Severn Trent Water

- Tony Ballance – Director of Strategy and Regulation (host of the event)
- Stephen Hill - Energy, Climate Change and Carbon Manager (host, presenter and expert on hand to answer questions)
- Mike Keil - Climate Change and Resilience Manager (presenter and expert on hand to answer questions)
- Marcus O'Kane - Water Resources Planning Manager (expert on hand to answer questions)
- Harriet Towler - Government and Stakeholder Engagement (organiser of the event)
- David Essex - (expert on hand to answer questions)
- Matt Foster - (expert on hand to answer questions)
- Neil Liddell-Young - (expert on hand to answer questions)
- Bob Stear - (expert on hand to answer questions)
- Justin Bailey - (expert on hand to answer questions)
- Emma Hill - (expert on hand to answer questions)
- Alex Mortlock - PDaS Project Manager (manning exhibition stands)
- Danielle Salmons - Travel and Energy Co-ordinator (manning exhibition stands)
- Dean Taylor - Contracts Delivery Manager (manning exhibition stands)
- Doug Clarke - Water Efficiency Manager (manning exhibition stands)
- Eleanor Reynolds - Programme Coordinator (manning exhibition stands)
- Gaynor Jerzyszek - Customer Operations Manager (manning exhibition stands)
- Georgina Perkins - General Manager, Energy Management (manning exhibition stands)
- Howard Perry - Carbon and Climate Change Analyst (manning exhibition stands)
- Ian Patterson - Assistant Energy Efficiency Manager (manning exhibition stands)
- Jon Beeson - Renewable Energy Projects Specialist (manning exhibition stands)
- Kieron Maher - Water R&D Manager (manning exhibition stands)
- Lisa Barson - Fleet Manager (manning exhibition stands)
- Mark Jones - R&D Manager (manning exhibition stands)

- Martin Saunders - Environment Manager (manning exhibition stands)
- Martin Dent - Renewable Energy Development Manager (manning exhibition stands)
- Matilda Beatty - Principal Hydrogeologist (manning exhibition stands)
- Min Bansel - Business Planning Manager (manning exhibition stands)
- Rushy Hayer (manning exhibition stands)
- Sheena Clement (manning exhibition stands)
- Stuart Allen Assistant Energy Efficiency Manager (manning exhibition stands)
- Vicky Levine Customer Operations Manager (manning exhibition stands)

Green Issues Communiqué

- James Garland - Director (workshop facilitator)
- Kelly Edwards - Executive Director (workshop facilitator)
- Nick Bohane - Executive Director (workshop facilitator)
- Sophia Goring – Account Director (workshop facilitator)
- Kate Clough – Consultant (workshop facilitator)
- Siobhan Lavelle - Senior Consultant (workshop facilitator)
- Ben Johnson – Senior Account Manager (workshop facilitator)
- Laura Edwards - Account Executive (scribe)
- Farah Pasha - Account Executive (scribe)
- Mike Denness - Account Manager (scribe)
- Fiona McAra - Executive (scribe)
- David King – Account Executive (scribe)
- Floyd Jebson - Consultant (scribe)
- Andres Gassert – Account Executive (scribe)

4. Executive summary

The content of this report reflects discussions of a stakeholder workshop held on 21st May 2012. The comments made by stakeholders were in response to a facilitated discussion. They have been recorded by Green Issues Communiqué but are not verbatim, nor have they been directly attributed to participants. The comments made are not necessarily the views of Severn Trent Water.

The Executive Summary provides Green Issues Communiqué's overview of the discussions on the day and the outcome of the electronic voting.

4.1. Feedback from participants

- Every stakeholder who left feedback after the event stated that they had sufficient opportunity to express and discuss their views
- All stakeholders who attended the workshop and submitted their comments told us that they found the event to be 'useful' or 'very useful'. Almost two thirds were of the view that the workshop was 'very useful'
- 28 out of the 31 attendees (96%) who left feedback after the workshop told us that we had provided enough information ahead of the event
- Manned exhibition stands were set up at the venue so that stakeholders could ask questions of Severn Trent Water staff before the workshops and during breaks. Every stakeholder who left feedback after the event stated that these stands added value to the event

4.2. Reducing our effect on the environment (current priorities)

4.2.1. Questions for discussion

- Q1: Before this session, how aware were you of the issue of carbon reduction for Severn Trent Water?
- Q2: What are your views on our current approach?
- Q3: Is there anything you think is missing?
- Q4: From your experience of other sectors / companies' carbon reduction programmes, how well do you think STW compares?

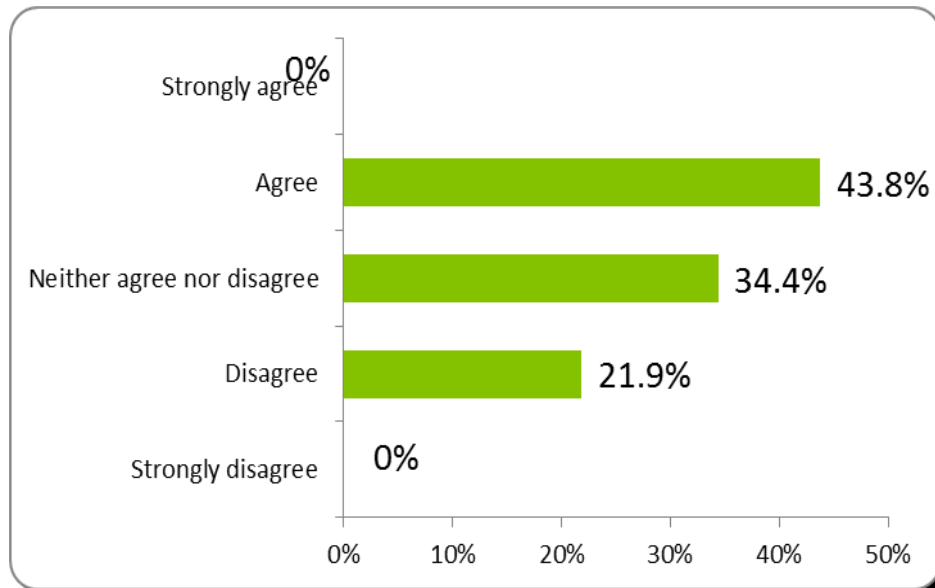
4.2.2. Overview of comments made

- A number of stakeholders commented that they were not aware of the issue of STW's work with regard to carbon reduction or that they had only recently become aware of the challenges facing STW. The point was made by a significant proportion of stakeholders that the company should do more to publicise this work. This was one area where there was a good deal of consensus across the group as a whole

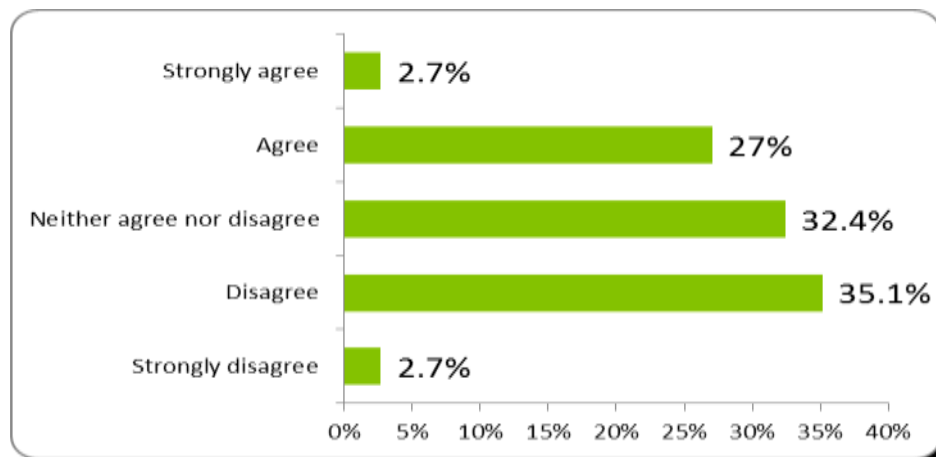
- STW was praised as being an '*early adopter*' of technologies to reduce its carbon footprint. A number of stakeholders felt more could be done to show local communities how they would benefit directly from STW's initiatives
- There was no consensus about how STW should seek to manage its carbon emissions. It was felt by some that STW should do more to look at hydro power as a means of energy generation. It was also felt that there was a real opportunity for the company to invest in anaerobic digestion. While many felt that research and development should play an increasingly important role in STW's future business planning, a number of stakeholders stated that there should be more of an emphasis on initiatives that improve efficiency
- The point was frequently made that STW should look at ways to improve partnership working, particularly with local authorities and developers
- There was a good deal of praise for the way the company aims to reduce its impact on the environment; although a number of stakeholders expressed surprise that there were not stringent Government targets in place for this
- During discussions, a significant number of stakeholders raised the issue of water meters and were in favour of increasing their use

4.2.3. Outcome of electronic voting

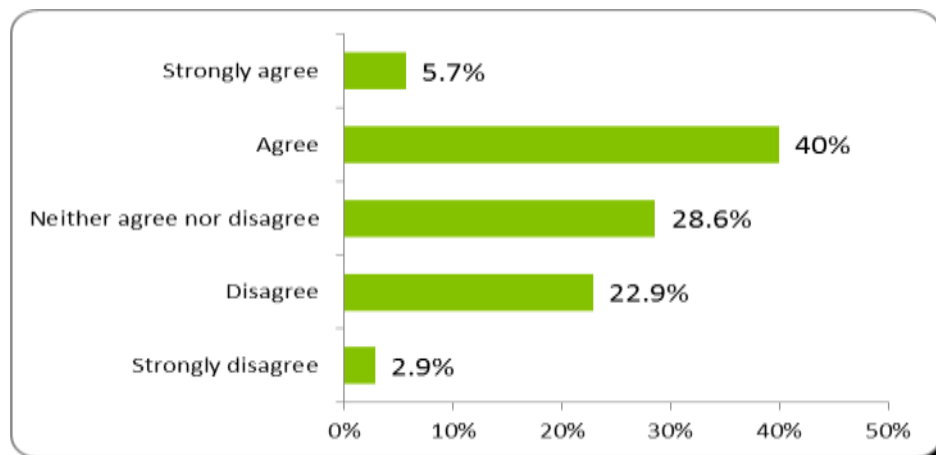
- Q5: To what extent do you agree with this statement? "*STW is currently doing enough to reduce its carbon footprint?*"



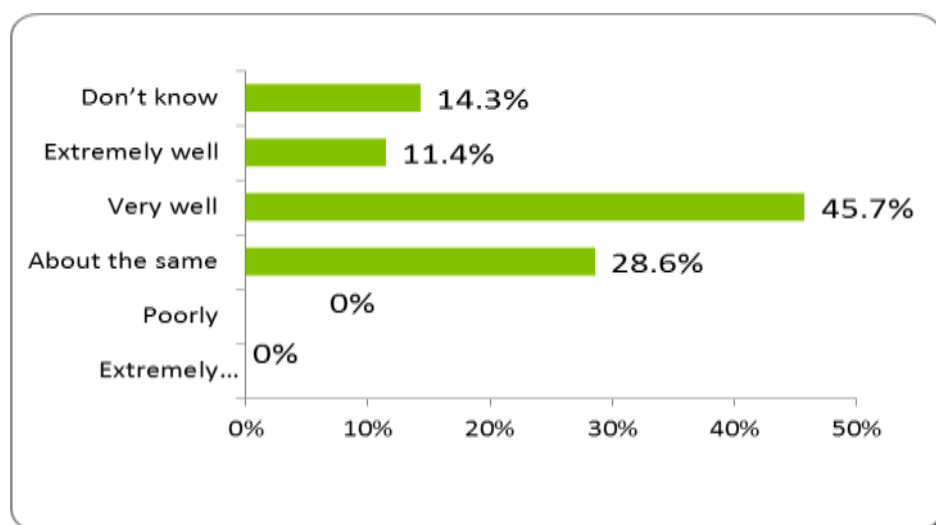
- Q6: To what extent do you agree with this statement? *"STW is currently doing enough in relation to energy efficiency?"*



- Q7: To what extent do you agree with this statement? *"STW is currently doing enough in relation to renewable energy?"*



- Q8: From your experience of other companies' carbon reduction programmes how well do you think STW compares?



4.3. Reducing our effect on the environment (future priorities)

4.3.1. Questions for discussion

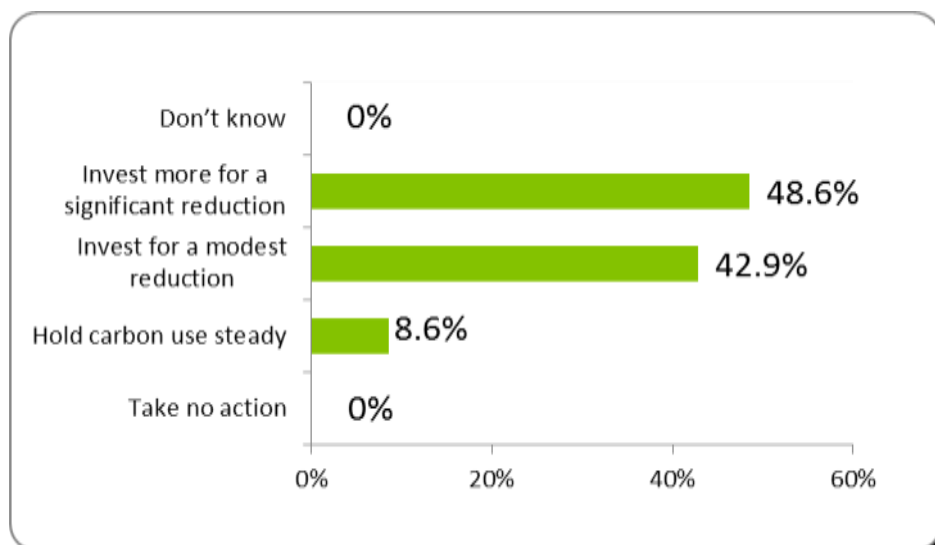
- Q9: What is your view on the pressures we have identified?
- Q10: What do you think our future approach should be?
- Q11: Should we be considering other options?
- Q12: In our current investment period, about a third of our carbon emissions will result from construction activity. Should we be taking more action to address carbon arising from this activity in the future? If so, how?
- Q13: Should STW encourage its customers to use water in a more energy efficient way? If so, how?

4.3.2. Overview of comments made

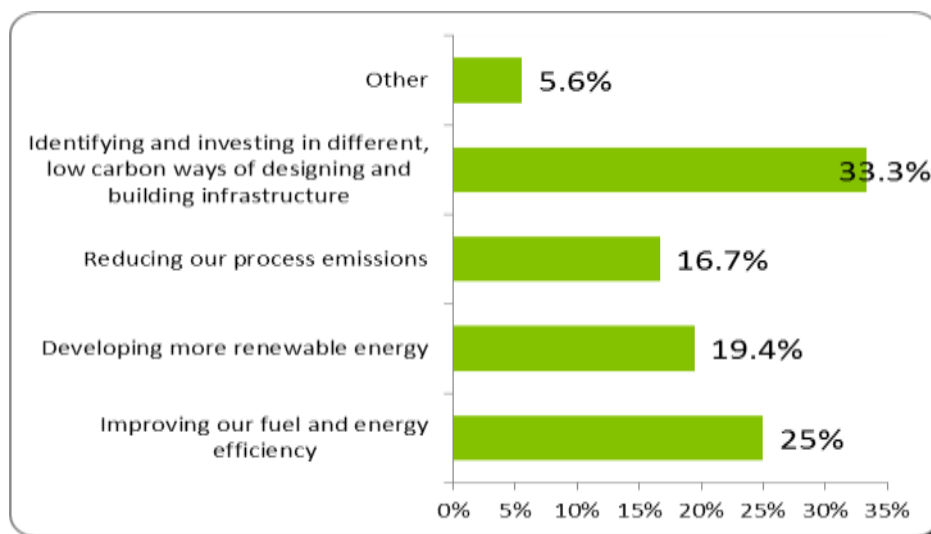
- Most stakeholders felt that population growth and planned new developments presented a real challenge for STW in the future. The need to work alongside developers and local authorities was stressed by a number of participants
- Many stakeholders commented that STW should do more to reduce its carbon emissions in the future, but the point was made that future increases in bills to finance carbon reduction, especially during times of austerity, would be difficult for customers to accept
- It was felt that educating the public so that they understand the pressures STW is facing would be a good thing and the point was made that collaborative working with local authorities was an important way to do this

4.3.3. Outcome of electronic voting

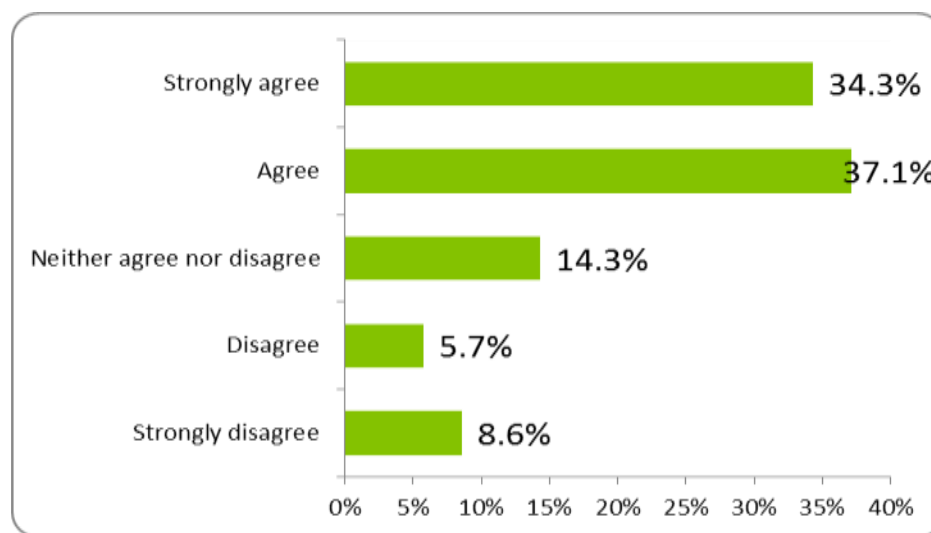
- Q14: Which of the following do you believe STW should adopt towards our carbon footprint?



- Q15: STW could do all or some of the following, but which one would you like it to prioritise?



- Q16: To what extent do you agree with this statement: *"It is STW's responsibility to encourage its customers to be more carbon efficient in the way they use water"*



4.4. Adapting to a changing climate (current priorities)

4.4.1. Questions for discussion

- Q17 Before this session, how aware were you of the challenges climate change presents for Severn Trent Water?
- Q18. What are your views on our current approach?
- Q19. Is there anything you think is missing?

4.4.2. Overview of comments made

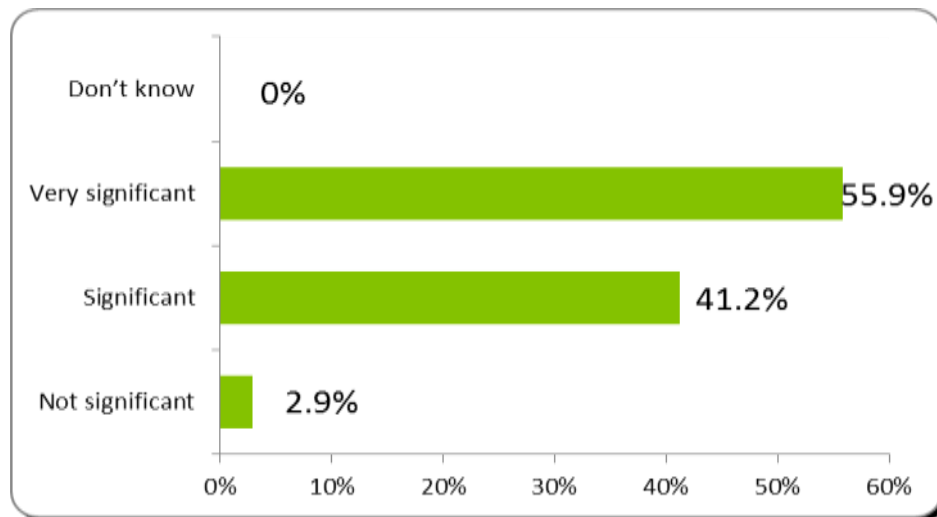
- When asked how aware stakeholders were of the pressures STW faces with regard to adapting to a changing climate, a significant proportion were of the view that this

message hadn't been conveyed well enough in the past, although it was felt that knowledge of this issue is increasing

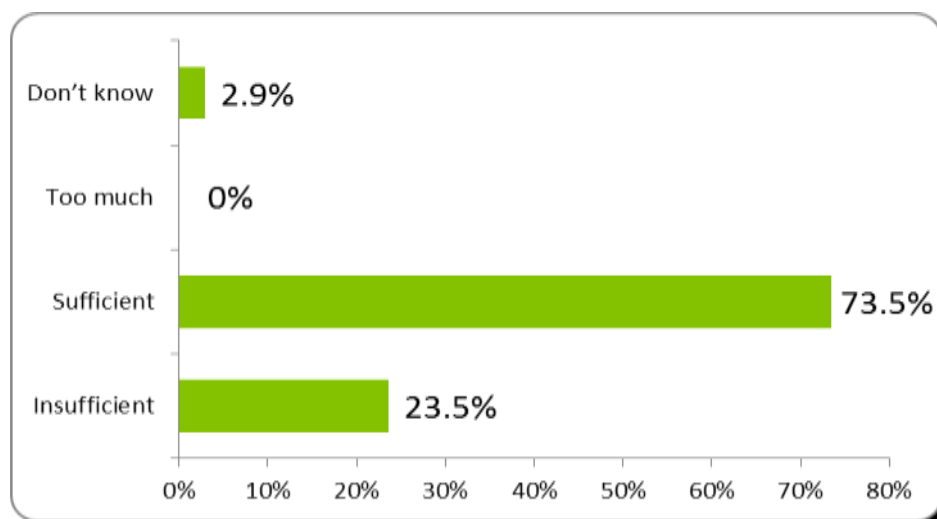
- As with issues relating to how STW reduces its effect on the environment, a key theme that emerged from discussions on adapting to a changing climate was that better partnership working would be beneficial in order to communicate messages relating to this issue to the general public
- Many stakeholders were of the view that planning for the future is incredibly difficult for STW and the point was frequently made that making predictions on future climate patterns presented a real challenge. It was, however, widely felt that scenarios where customers may be left without water for days were unacceptable

4.4.3. Outcome of electronic voting

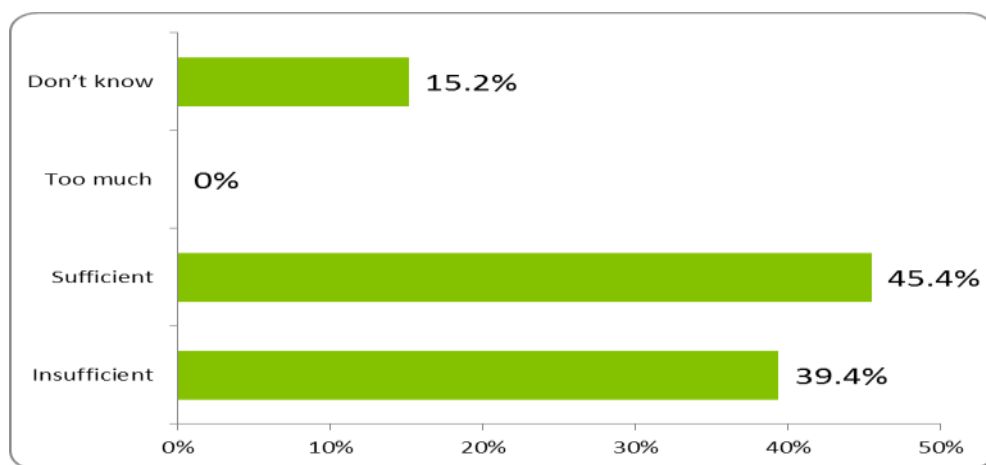
- Q20. How significant do you think the risks of climate change impacts are to the services STW provide?



- Q21. Do you think STW is doing enough to cope with the current weather?



- Q22. Do you think STW is doing enough now to prepare for future climate impacts?



4.5. Adapting to a changing climate (future priorities)

4.5.1. Questions for discussion

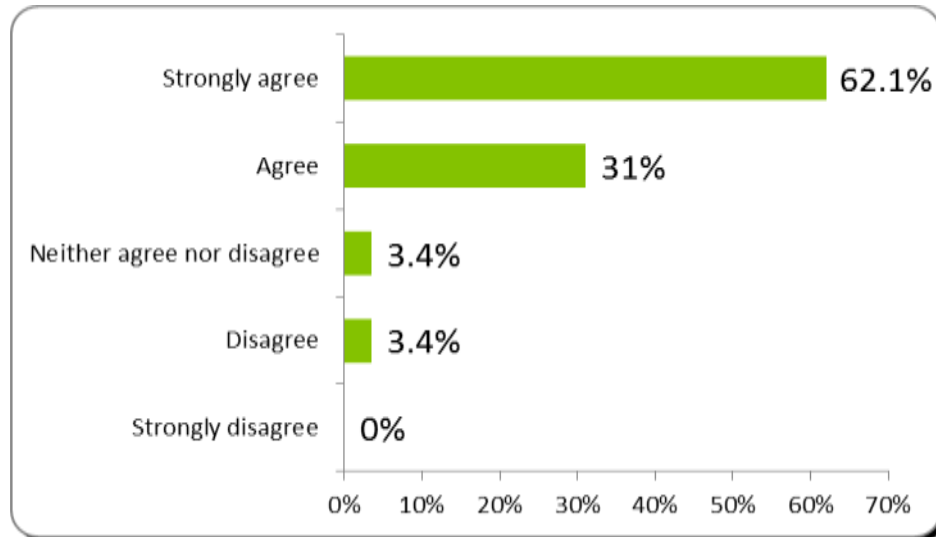
- Q23. To what extent do you think climate change presents a growing risk to our services in the future?
- Q24. When planning ahead, how quickly should we take action to reduce the risks posed by long-term changes to our weather?
- Q25. What approach should we take to adapting to climate change?
- Q26. There are opportunities for innovation to transform the way we do things, but there are risks associated with them. Should we take them?

4.5.2. Overview of comments made

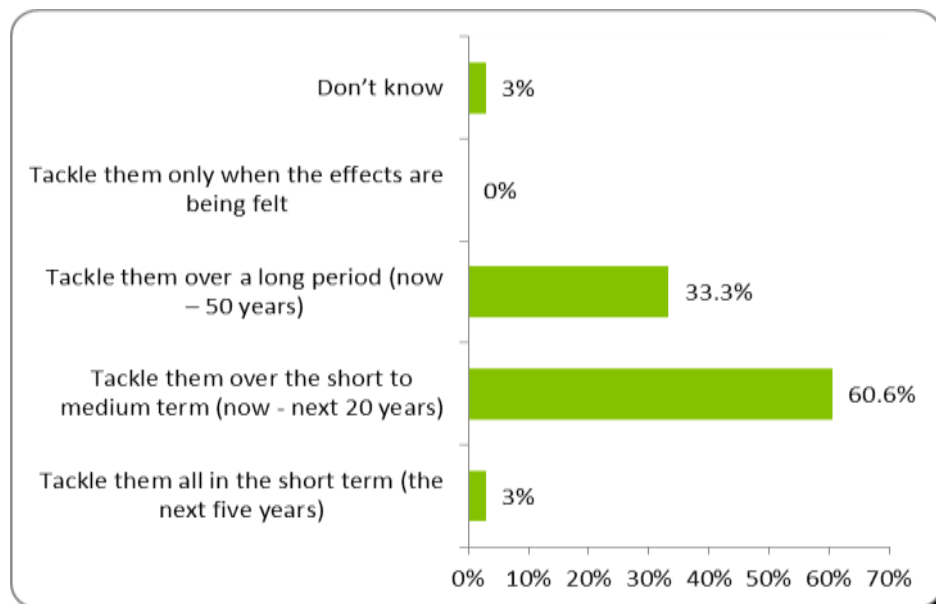
- After discussing STW's future plans with regard to climate change adaptation, stakeholders overwhelmingly told us that climate change presents a growing risk to STW's services
- Whilst stakeholders were very much in agreement in the discussions that climate change presents a growing risk to STW's services although there was a difference of opinion on whether investment should be 'front loaded' or more incremental. A significant proportion of stakeholders were of the view that careful planning is needed in order to ensure that money is not wasted on large infrastructure projects that may not be necessary
- When asked how quickly STW should take action to reduce risks posed by long-term changes to the weather, the majority felt that the correct approach should be to take this action over the short to medium term. Very few considered that this was an issue that should be tackled in the next five years.

4.5.3. Outcome of electronic voting

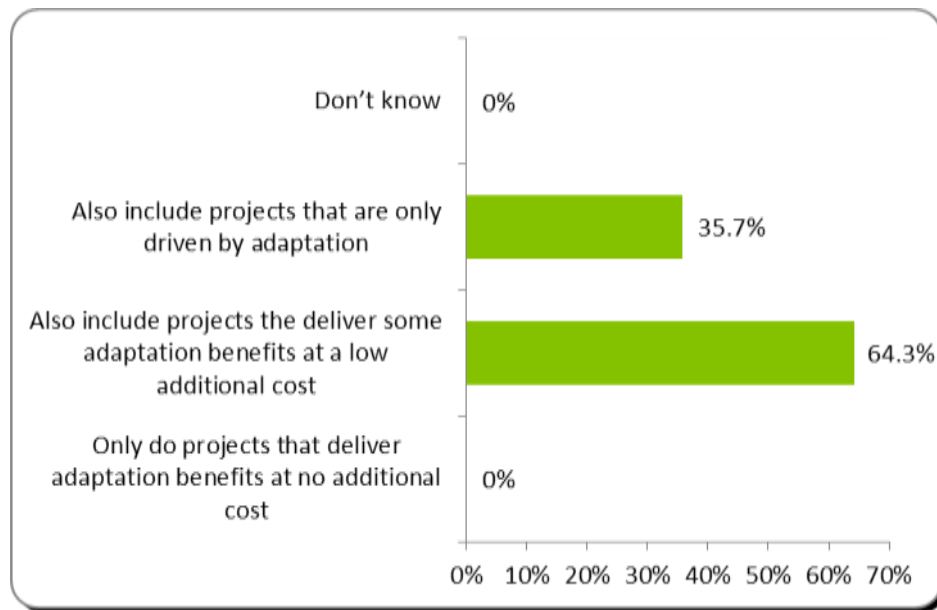
- Q27. To what extent do you agree with this statement: "*Climate change presents a growing risk to STW's services*"



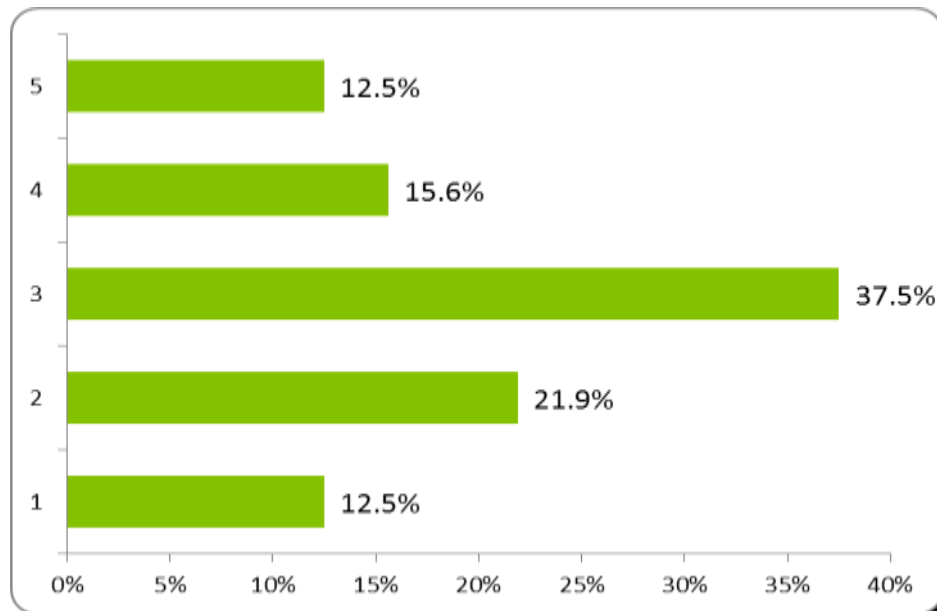
- Q28. When planning ahead, how quickly should we take action to reduce the risks posed by long-term changes to our weather?



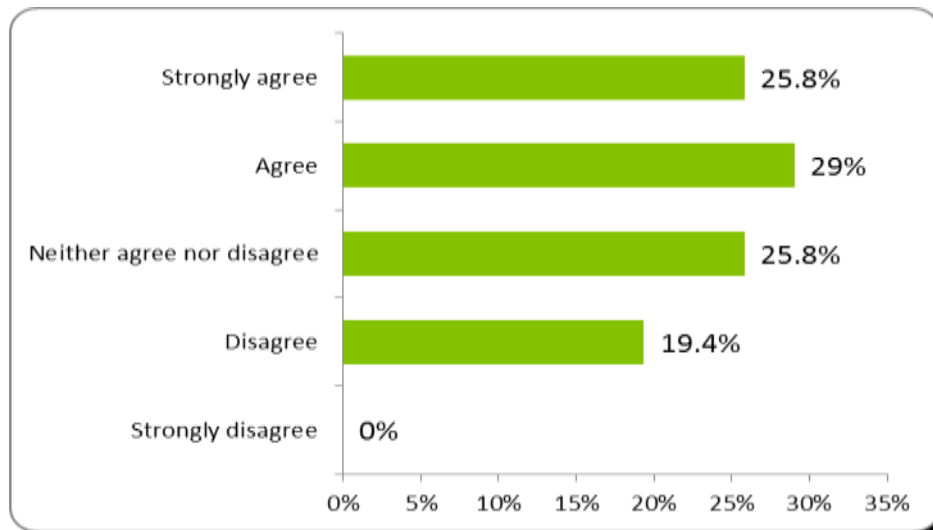
- Q29. How far should we go with our approach to adaptation?



- Q30: If you had to take out an insurance policy against climate change disrupting services, where on this scale would you opt to be?
- *1- Take out lots of insurance against the risk, but at the cost of a high premium*
- *5- Don't bother with insurance and carry the risk of something going wrong*



- Q31. Considering innovation comes with its own risks, to what extent do you agree with this statement: *"STW take every opportunity for innovation presented by climate change"*
- Strongly disagree – strongly agree (1-5)



5. Reducing our effect on the environment (current priorities)

5.1. Q1: Before this session, how aware were you of the issue of carbon reduction for Severn Trent Water?

Table 1

- A council officer stated s/he had a relatively high awareness of the carbon reduction issues that STW faces
- The general consensus across the table was that everyone had a high level of awareness relating to this matter

Table 2

- A council officer stated that s/he was not aware what STW were doing until s/he was invited to this workshop
- An elected representative felt that STW had a very good news story to tell and that the public would welcome more money being invested if they were fully informed about the direction STW was taking
- A council officer commented that the *'positive messages really need flagging up more and that it was important that STW advertised these points strongly'*
- A council officer pointed out that s/he felt there was already pressure on organisations to reduce carbon emissions and s/he had assumed that something was being done
- A council officer talked about carbon targets and said that although there isn't a target currently set *'STW should be expected to reduce its carbon footprint'*
- A business group representative explained that s/he was aware of the work that STW had been doing. S/he was *'surprised the water sector only accounted for 1% of total emissions'*
- An environmental group representative felt that although s/he expected STW to be doing work in this field, s/he weren't aware of the level of work involved
- A council officer felt there was a lack of communication from STW; this view was supported by another council officer
- The council officer explained that s/he certainly felt that more could be done to educate and inform customers of the work being carried out

Table 3

- A domestic customer representative opened the discussion by detailing his / her general thoughts about carbon reduction. S/he emphasised that UK industry specialists need to be cautious about *'how far they go'* in terms of adaptation to climate change particularly if other major global players such as China *'do nothing'*. S/he felt strongly that carbon reduction is a global issue and requires collective global action to help tackle it. On a personal note, s/he stated that it was generally important to minimise carbon footprint
- An environmental group representative agreed that *'there are things that need to be done to reduce our carbon footprint, but these have to be done in a sustainable way'*. S/he believed that the water industry generally needs to develop a much more clear understanding of the issue, what needs to be done to about it and plan for possible changes in a *'sustainable way'*
- A council officer was also in agreement that STW and the water industry *'need to get the balance right'* between taking sensible steps to understand and mitigate this issue whilst avoiding either not doing enough or too much, which, either way could be counterproductive
- Another council officer added that STW also need to communicate the direct/indirect impact of issues surrounding carbon reduction more explicitly to the general public
- An environmental group representative agreed that it was important to improve public understanding of this topic particularly as it was *'mutually beneficial to reduce carbon footprint'* both for the industry and consumers alike
- The general consensus was that although there was a strong awareness among stakeholders about carbon reduction *'more needs to be done'* to develop a more meaningful understanding about the future approach to carbon reduction both within the water industry and among the general public

Table 4

- A council officer stated that s/he was not clear about the problems that STW is facing
- A Conservation group representative was aware of them only because he works in the energy industry

Table 5

- A developer said *'not really'*
- A council officer replied, *'it is an issue for everyone'*
- A business group representative agreed that *'it is an issue for everyone'*
- A developer stated that his / her role doesn't involve thinking about water and energy but does work for a company keen on energy efficiency. S/he didn't realise STW invested so heavily in renewable energy and alternative sources of energy. S/he came to find out more

- A council officer commented that s/he believes it is necessary to reduce carbon and STW could do more as everyone can do more

Table 6

- A Council officer said s/he was *'surprised how well STW is doing'* but it has not been communicated well to customers and other businesses
- A Council officer stated that STW has to know when the right time is to communicate and promote what they are doing
- A business group representative explained s/he *'wasn't aware of how well STW is doing'* but appreciates that communication costs money
- A Council officer said s/she understood that water efficiency is very important for STW
- A business group representative pointed out that customers are aware of the extra increase to bills
- A Council officer said *'people tend to keep their bills and look back to see how prices have changed'*

Table 7

- An elected representative knew about activities in Leicestershire, but was not aware of particular targets
- An environmental group representative added s/he did know of the issue, but had not heard about specific priorities, and didn't know where STW stood nationally in relation to other water companies
- An elected representative explained he was not aware of the specific issues for STW but *'it did surprise me that there aren't enforceable carbon reduction targets for water companies'*
- Two elected representatives expressed the need for more communication from STW around this issue, which the rest of the group agreed
- An environmental group representative was keen that initiatives such as nitrate reduction be balanced with the carbon emissions necessary to complete such initiatives
- An environmental group representative was aware of STW applying for planning permission for wind turbines, and had wondered what they were being used for

5.2. Q2: What are your views on our current approach?

Table 1

- A council officer acknowledged the efforts being made by STW. S/he felt STW should allow there to be more opportunities for hydro power to develop

- A council officer commented that there is a lot of water being wasted by STW and would like to see STW embracing *'more opportunities and ways to address and stop this from happening'*
- A council officer stated s/he was not surprised that STW does not do more to embrace hydro power. S/he said the use of *'small scale sites would be good but there is not enough landscape in the midlands'*
- The overall agreement across the table was that hydro power should be kept in mind by STW
- A conservation group representative asked if a generation plan could be implemented on a smaller than normal scale using smaller technologies. S/he would like to see this being investigated
- A council officer stated that from a company perspective they would like to know who STW is *'working/collaborating with.'* S/he felt knowing this information could create and kick start *'economic potential in the area.'* S/he also commented that *'small scale developments seem to be the way forward.'* S/he stated allowing STW to have a partnership with other companies such as *'universities and allowing them to contribute to future plans would be beneficial'*
- STW explained links with universities and small scales plans
- A business group representative commented that the supply chain process for water needs to be challenged more. *'There should be more partnerships/links between STW and businesses partners as this would be helpful.'* Information relating to future products needs to be made available by STW. *'They need to show what they have looked at, what the outcome was and what can now be done in the future.'* S/he feels there is too much of a fixation on big projects and instead the focus should be on smaller ones

Table 2

- A council officer stated that communication is the problem, a lack of visibility to most people. S/he felt the company is seen as a profit making company which is not for the public good
- A council officer made the point that *'on the exhibition boards down stairs it stated a desire to reduce it by 30% - however what comes after the 30%'*. S/he highlighted solar and asked if this was an opportunity being missed. An additional council officer added that STW *should consider a feasibility study on which form of renewable energy is best, solar, wind etc*
- A council officer stated that s/he felt there was a *'much stronger preference for solar than wind turbines as it is less intrusive.'* There was a strong consensus around the table that there should new ways of engaging wind turbines with members of the public e.g. a community turbine

- An elected representative felt it was *'important to speak to the public from local communities in an effort to draw them into schemes and initiatives.'* S/he advised offering some sort of deal to reduce the impact, like a reduction in charges
- A council officer felt there is a need to look at the range of opportunities available, s/he explained that within his / her authority there were very few opportunities for wind generation. S/he felt that STW *'should look at partnering up with developers to bring schemes to development'*
- An environmental group representative felt that solar power made less of an impact than wind, this was the consensus shared across the table
- A council officer felt satisfied with the overall approach but s/he felt communication was key and that *'STW need to communicate more frequently and clearly with stakeholders and the public'*, this was a consensus shared across the table

Table 3

- A domestic customer representative was of the view that *'STW has done a fantastic job so far and has been consistently ahead of the game, which in a way makes this challenge even greater for them'*
- An environmental group representative was equally positive about STW's current approach and felt that, out of all of the water companies in the UK, it stood out as an *'early adopter'* of new technologies to reduce carbon emissions'. However s/he felt that STW now needs to adjust its focus on its own *'efficiency of operation and energy use'*
- An environmental group representative queried the specifics STW's current strategy and whether there were any viable alternatives to renewable sources
- Another environmental group stakeholder felt strongly that regulators need to take a much more active role in guiding the water industry on climate change adaptation to help water companies future proof their business

Table 4

- A conservation group representative mentioned that it is essential to improve anaerobic digestion. STW can use the co2 that comes out of the anaerobic digester and create fuel out of it. Creating fuel out of air is a new process that has been proven to be cost effective and very reliable. STW should consider implementing this in its industry
- A council officer mentioned that STW need to raise more awareness on what is currently going on in the energy sector. STW need to tell the public of the challenges they are facing
- A council officer also pointed out that STW should raise awareness in schools. *'Early education is a long term investment that will affect STW direct and indirectly'*. STW should take this position seriously

- A conservation group representative mentioned that the current approach has no *'long term vision'*. The whole table agreed that STW should have a longer term approach to the problems they are facing

Table 5

- A council officer said STW current approach is *'fine'*, and necessary for the business as it needs to use the resources available but should go further. Ideas suggested include creating waste from energy and hydropower. S/he also suggested that a next step would be renovating buildings, installing solar panels or water catchers. S/he reemphasised the point that everyone can do more
- The developer disagreed and felt that STW *'can't move too quickly'*, and STW's approach *'must be organised and systematic. Cost must also be considered'*
- A council officer was of the opinion that a phased approach should be considered, with STW moving into new areas within the company- renewable energy generated at low cost. If STW start investing now they will get the payback sooner
- A council officer pointed out that *'costs are going up and oil and gas are running out.'* The UK has large amounts of coal but needs to explore more renewable sources
- A business group representative stated that energy efficiency should come before investment - energy from waste is good but costly, so long term investment needed. S/he thought that *'low hanging fruit'* – air conditioning, heating, lighting should be looked at first and then multi-million pound investments, such as renewable energy should then be considered
- A council officer said that *'heating and cooling systems that work together should be looked into. This makes heating/cooling a building more energy efficient'*
- A council officer also thought that STW *'must make changes now otherwise bills will rise due to demand and supply. STW must reduce reliance on oil and gas to slow price rise due to demand. The supply of water is offset against that. Every treatment requires energy, if the energy used for this is from the grid then STW is reliant on the market cost, therefore STW must reduce the amount taken from the grid. STW should use renewable energy which has been produced within the core business, thus lessening the effects of fossil fuel costs on customers. Renewable sources within the business will reduce the end burden on the customer. Their bills will inevitably go up due to processes but it will be proportionally less if STW are supplying some of their water via renewable sources'*

Table 6

- A council officer explained that *'you have to look to the long term'* and that your perspective also depends on who is interested whether it is investors or customers
- A business group representative said STW *'has to be on the side of cautious and not take advantage of customers'*

- A council officer said *'it comes down to a lack of regulation'* water companies are stuck between a rock and a hard place
- A council officer said *'government has to take a role'* in making sure the water companies cut down on carbon emissions. S/he suggested that STW should try and influence OFWAT more
- A council officer asked *'how do you measure the company's carbon footprint?'* Is it a standard measure or a measure of water per litre?
- STW explained how this is measured
- A council officer asked *'do you have a carbon management plan? Are you sure if you can carry on investing in reducing carbon?'*
- STW answered this question
- A council officer wondered if energy efficiency should come first. S/he asked STW that as *'you have 34 sites across the region for waste water, do you plan to have any more?'*
- STW explained its policy on waste water
- A council officer claimed that in relation to renewable energy STW is taking its opportunities where it is financially viable
- A council officer pointed out that STW always has the opportunity to improve and strive to do better
- A council officer noted that if STW can't pursue renewables then we are in trouble because if *'STW can't do it then who can?'*

Table 7

- An elected representative said the target STW has set itself around carbon reduction seems low, and inappropriate
- An elected representative said *'It depends what the carbon expended is being used for, if it's for carbon improvement programmes or investment in renewables that's a different matter'*
- An environmental group representative stated that in their view a reduction in demand and reduction in leakages was important, as this in turn would reduce energy used to pump water
- An elected representative agreed that this was important, but said that pumping had played a key role in moving water around to the east of the region to avoid drought
- STW explained that it has KPIs in place for energy reduction
- An elected representative asked *'Does STW have a programme for quick wins on these issues, regarding demand reduction?'* S/he then went on to ask *'but what's the customer prepared to pay?'*

- An elected representative gave his / her personal experience of reduction of demand. *'I have found it impossible to get a meter fitted by STW. It is absurd there isn't a drive to get people to pay for what they use'*
- STW explained that there is a policy in place to increase metering
- An elected representative commented that *'a target of 60% metered in 25 years is very low over such a long period of time'*
- A domestic customer representative said that consumers don't know what's available regarding metering, and that there was a lack of awareness and communication around this

5.3. Q3: Is there anything you think is missing?

Table 1

- A conservation group representative commented that the present impressions of STW *'are very good'*
- A business group representative pointed out the issues relating to the finance market and commented they will have an effect on the future of STW. S/he thinks STW should act by continuing to address climate change which is good but to also make the *'best use of assets'* through long term investment
- A business group representative made the point that s/he perceives STW to be in the top quartile of their industry
- A business group representative was of the view that STW and other water companies could damage their credit rating if water companies continue to spend more on high level issues and pressures such as climate change. S/he asked how well prepared are STW for other future pressures?
- A council officer commented that STW should promote the fact they do a good job in promoting water saving facts and are taking measures to install renewable measures
- A conservation group representative commented that a high amount of energy is consumed when moving water. *'Why does so much have to be moved?'* S/he commented on the fact the sewers are from the Victorian era and used to work on a gravity based system. S/he was aware that slippage has occurred overtime and there have been changes made by engineers. S/he asked *'to what extent can STW move back to the gravity movement system?'*
- A council officer felt that the issues relating to climate change have not been clearly stated. S/he stated that s/he would like to see a whole assessment of the issues which will help businesses to shape their future if the basis of the business is renewable energy. S/he asked *'what is the scope of STW thinking outside box?'* S/he would like to see STW working with more partners on adaptation of changes and technology s/he would like to see this happen on a *'collaborative basis rather than on a financial basis one.'* S/he also stated it should not be business as usual next over the next 25 years

and asked *'how can we work with partners to adapt to climate change and use renewable energy?'*

- A business group representative agreed with the point on partnerships. S/he said the *'the balance needs to be right.'* S/he went on to say customers would like to see services still being provided but there still needs to be a balance between business and partnerships
- A council officer felt that to get the best value out of schemes STW needs to work with others. S/he stated that STW should work and forge partnerships with others such as *'Councils'* rather than it all being in house. *'STW should keep their core business but also work with others'*
- A business group representative asked, *'how is STW going to lobby OFGEM? Who pays farmers/land managers?'* S/he would like to see OFGEM giving STW leeway in terms of spending budgets as it could be beneficial in the long term
- A council officer was of the view that if STW continues with business as usual can they predict where they will be in 25 years? *'If so is that where STW needs and wants to be?'*
- A conservation group representative would like to see the link between the *'end of pipe'* customers and where the water comes from advertised. S/he feels the links between the carbon footprint and the cost of water should be explained to all customers. S/he also suggested that adding £1 per year onto every customers bill would help the water treatment and supply process
- A business group representative agreed with the £1 charge and stated it will only be acceptable if STW plans are sustainable. S/he wants customers and businesses to be offered a *'free bus trip to see the site and the local benefits'*
- A conservation group representative commented that customers need to be made aware that having local benefits does not mean the water sites are local
- A conservation group representative stated that there is a *'need to show how money is spent in the local area for customers'*
- A conservation group representative pointed out that small investments in the uplands could wipe out the need for STW to contribute to larger schemes in the future
- A conservation group representative agreed with the above point and pointed out that a *'large chunk'* of the water supply comes from the uplands where *'the land is multifunctional and poor conditions and erosion of carbon affect the water and the atmosphere.'* S/he felt that better management of the area could have a big benefit to water quality and to STW's overall carbon footprint

Table 2

- An environmental group representative felt it was important to use more renewable energy sources, however the overriding principle should be to use less overall

- A council officer suggested that creating energy would help to build up a resilience to the system and less of a dependency on the National Grid
- A council officer felt it was important to look *'towards coping without the national grid and being independent of the grid'*
- A council officer felt that the public could be empowered to get more involved if it was demonstrated how their bills could be reduced
- A council officer pointed out that STW should consider schemes to help customers reduce consumption/energy e.g. by lending customers money to make changes to reduce consumption as the energy firms have done, this loan could then tied to property not the individual similar to the *'Green Deal scheme'*
- An elected representative pointed out that little has been said on how STW react to leaks, this is *'a factor that is important to the public'*
- A council officer felt it is important that STW communicated with the public on how they deal with leaks, s/he *'felt that public perception is that STW are still not dealing with leakages quickly enough especially during the winter time, leading to icy roads etc'*
- A council officer felt that an opportunity exists for STW to get more involved in LEP's. Particularly getting involved with the newly created LEP's, as climate change is something their sub committees look at, other big companies get involved
- A council officer suggested that STW should be looking at their own buildings with regards to the *'BREEAM ratings'*, savings could be made by switching vehicles to bio-diesel
- A council officer felt that *'STW should look at more partnerships such as working with local authorities on risk management'*
- A council officer pointed out that *'EDIE (Environmental Data Interactive Exchange) circular recently talked about companies changing their fleet of cars over'*
- A council officer explained that s/he wasn't aware of any relationship that existed between local authorities and STW

Table 3

- An environmental group representative explained that lots of technology is currently being developed which delivers the same outcome as existing technologies but reduces carbon usage simultaneously. S/he emphasised that heavy investment into such technologies was required from STW in order to deliver a strong service in the future. S/he explicitly stated *'I would expect STW to be looking into using innovative technology, doing things differently and taking calculated risks'* in order to deliver a more efficient service
- An environmental group representative felt that *'lots of challenges'* lie ahead for this issue and that it is important for STW to review existing processes, infrastructure and its wider impact and influence on stakeholders. S/he stated that because STW has a

'huge influence' over stakeholders and it is doubly important for the company to work more closely with its rural and urban stakeholders

- A council officer said *'there's a lot that can be done from a development perspective'* and STW need to develop a more *'strategic and collective approach'* in terms of what needs to be achieved in local areas rather than its current *'piecemeal approach'*
- An environmental group representative agreed that STW could have a greater influence on local development providing it gets involved at an early stage in the planning process
- Another environmental group representative commented that STW need to make more of an effort to be consulted in the pre-application stage
- A domestic customer representative explained that carbon reduction on a local level presents a multi-faceted challenge which requires a flexible approach. S/he explained their first-hand experience about the significance of affordability for end consumers
- A council officer spoke about the authority that s/he represents and the approach taken to encouraging consumers to use less water. S/he said *'our local authority currently rejects every application that doesn't consider the water plan to ensure developers add water saving devices. It's has only just started to be appreciated in the district. Working with STW on local development matters is finally starting to pay off, we're getting there but it's a long job'*
- An environmental group representative felt that water meters should be compulsory. S/he explained that having a meter installed in every home would lend consumers a helping hand with reducing the costs of bills
- A domestic customer representative explained that a water company had been trialling compulsory water meters in Leicestershire, however this had proved unpopular among many and s/he had consequently received several complaints about the new system. S/he commented that the company responsible did not carry out an adequate consultation beforehand and stressed that if STW were to introduce meters it should do so gradually
- An environmental group representative asked what OFWAT was doing about leaks caused by private suppliers
- An STW representative responded to this question
- A council officer felt that more Government incentives were needed to enable end consumers to better manage their energy usage
- A domestic customer representative cited some of the work that STW has been doing to help with affordability issues including working with housing associations to fit in water saving devices in the midlands and felt that these methods were *'working'*
- The group agreed that retro fitting was a really positive way to help tackle affordability issues

- A domestic customer representative commented that it was easy to reduce water consumption on an individual basis, but felt that it was more important to '*help people to understand their consumer behaviour*' to inform how STW sets out to influence this behaviour and improve water use. S/he was concerned about the risks of increasing price as it is the bill payer who will pick up the cost
- An environmental group stakeholder asked whether it was better to tackle problems such as leaks at an early stage and if so do the costs outweigh the amount of electricity required to prevent these. S/he explained that STW should consider using green technology to help mitigate costs
- STW representative responded to this question

Table 4

- Very few comments were made about this question

Table 5

- A council officer commented that s/he is a '*fan of renewable energy*', and that '*we are a highly developed nation so renewables are costly at the moment but they will help in the future and are helping to change energy management.*' S/he believes that photovoltaic is a great prospect and their use should be widely encouraged
- A council officer also stated that there is opposition to wind turbines due to aesthetics. PV cells blend in well. Energy that works 24/7 means storage must be effective and STW should look into this
- A developer remarked that his / her company uses photovoltaic energy in their offices. S/he continued, '*requirements of housing associations means that new homes must be energy efficient and the association gets grants for photovoltaic so the income is coming from that. Occupants are happy as they have lower bills and the extra energy produced goes back to the grid*'
- The council officer mentioned that s/he is a '*big fan of photovoltaic, solar panels and feed-in tariffs as everyone is a winner*'

Table 6

- A council officer expected to hear more about the carbon reduction commitment as it '*going to cost them a lot*'
- A council officer stated the use of water meters should be increased
- STW explained the use of water meters
- A council officer remarked that '*there is a cost of getting pipes to the house in the first place*'
- A council officer pointed out that '*water is a precious commodity that needs to be well distributed*'

- A council officer asked STW if it does school visits in order to educate people about the issues
- A council officer said s/he finds it better to get out and communicate with people face to face in order to explain things
- A stakeholder stated composting toilets could be an alternative to water intensive toilets
- STW talked about long term changes in investment
- A Council officer asked *'have you ever thought about small scale water treatment plants?'*
- STW explained R&D projects

Table 7

- An environmental group representative explained that the adjoining South Staffs Water has a water reduction plan and asked if STW had teamed up with them to pursue this themselves
- STW answered this question
- An elected representative again raised the issue of water meters, and said STW should think more about meters and smart meters
- STW assured him / her it was looking at this
- An elected representative stated *'we don't want to frighten people around water prices, the way they have been frightened by power prices, you need to bring people with you, not try and frighten them about price'*
- An elected representative went on to say *'we need to focus on educating adults and businesses, not just keep talking about young people. We need to model behaviour so it becomes normal behaviour'*
- An elected representative raised the use of grey water for toilet flushing and car washing, saying that there needs to be much more emphasis on this, working with developers of new homes and buildings to make this happen. S/he commented the local authorities have difficult relationships with developers and planners, and that there are tensions around costs and ensuring that desired development takes place on your patch, not frightening them off with regulations

5.4. Q4. From your experience of other sectors/companies' carbon reduction programmes, how well do you think STW compares?

Table 1

- A council officer stated it is difficult to rate STW against other water companies as STW's aim is to stand still unlike his / her target within his / her council position which is a 60% reduction carbon plan
- A council officer commented that the Government needs to adopt a standard approach across the public and private sector
- A business group representative felt it would be *'difficult to adopt a blanket approach'* across all sectors as transport and manufacturing industries will need to have different targets/regulations
- A council officer said that, from an investment point of view, the Government aren't having enough of an influence on STW
- A business group representative made the point that STW has reduced its carbon footprint but this is not obvious. This is because the reduction needs to be shown in a detailed story. S/he explained that the carbon levels are still the same but the *'business has grown'* so the overall levels have been reduced. S/he would like to see other private businesses working hard to reduce their carbon footprint
- A conservation group representative welcomed STW's changes and wants the changes to include measures being put in place to protect climate change and these changes will need to come from renewable sources
- A council officer pointed out that STW customers *'do not know they have a carbon target. All the customer wants is clean water.'* To encourage and show the customer there is a need to use less water, *'STW needs to offer incentives to the customer and money is a big incentive'*
- A conservation representative agreed but also commented that the customer needs to be aware of the amount of electricity involved in moving water. S/he commented that customers do need to use a bare minimum amount of water
- A council officer agreed and thinks there should be more awareness from customers especially if they are paying a flat rate. S/he agreed with the view that customers need to be made aware of how much electricity is being used
- General consensus was that all customers should have a water metre

Table 2

- An elected representative described that his / her area is covered by three water companies, of those companies Thames water have organised a similar thing to this event however s/he felt it wasn't as good, to date s/he have received no contact from Anglian water. S/he feels *'that this is a good format, and that this event was good for stakeholders to learn more about what STW are doing'*

- A council officer had previously organised a partnership of local stakeholders feeding in to plans for his / her area and felt that STW could do more to get involved in similar groups
- A council officer felt that *'a single point of contact within STW would be useful for local authorities'*
- An environmental group representative said that the Floods and Water Management Act now incorporated surface water and flooding, therefore s/he felt it should now be possible therefore to bring everybody together to respond to problems collectively
- A council officer felt that STW was *'doing what it should, but acknowledged and welcomed that STW was ranking higher than other companies from the sector in the charts presented during the PowerPoint'*. This point was certainly well supported across the table

Table 3

- There was very little discussion around this question

Table 4

- A council officer mentioned that partnerships with local authorities are essential for the future of STW
- A Conservation group representative mentioned that STW needs to work with other renewable energy companies to compensate the problems that they are facing. They need to work with other sectors and seek for consulting. S/he acknowledged the fact that this event is a very good way of dealing with the future problems that they will face

Table 5

- A business group representative was *'impressed'*, as there is no regulation from the government or OFWAT so STW is doing it *'off your own back'*. S/he continued, *'I don't know what other companies are doing so I can't compare, but I am surprised OFWAT isn't doing more by setting everyone targets. Companies concentrate on electricity and gas as water costs are minimal comparatively'*
- A council officer remarked that *'when gas and electricity are gone then water will become a high price commodity'*
- A developer said that s/he hopes that his / her company is carbon efficient because they want to be and not because they have to be, but from his / her job role, s/he doesn't see that but his / her company is into energy saving. It has to meet standards, such as offices having photovoltaic panels, signage about turning lights off and energy saving lighting. They continued that it is a *'reputational plus point'* creating energy efficient housing, therefore it is a similar company to STW. S/he continued that STW could do more, such as putting solar panels on pumping stations to help with energy

- A council officer observed that the upfront costs of putting photovoltaic cells on roofs were very costly but prices have since come down. People didn't buy into it 12 years ago, now they do
- A developer agreed that it is cheaper to put photovoltaic cells on when building a structure as opposed to a refit
- A council officer mentioned that when STW thinks about an outlay, they must consider how efficient it will be, how expensive, and the practicalities. Panels are being made in China more and more cheaply so STW should buy in bulk
- The facilitator asked about supply and demand. The developer was not aware of supply problems, but agreed that bulk buying is much cheaper, 20,000 units compared to 200
- The council officer said *'the strategy is too late to be implemented in 2015'* and that STW should be starting now, ready for 2015.
- A developer commented that STW should start now and be ready to implement from 2015 onwards

Table 6

- A council officer remarked *'I think the water industry is ahead,'* water companies are closely linked to the environment and therefore they see the effects first hand of climate change
- A business group representative said it is still a new environment and it is difficult to know where the bench marks are. It is good that STW are saying what they are doing
- A council officer wondered *'does this investment mean you are reducing other energy efficiency measures?'*
- STW answered this question
- A council officer asked *'how energy intensive is STW and the water industry in comparison to other industries?'*

Table 7

- An elected representative said it was difficult to tell how STW compares with other companies
- STW said it was difficult for it to compare and report carbon figures
- This was acknowledged by the elected representative
- STW said it needed to improve the accuracy of the figures around this
- An elected representative said *'The graph in the materials provided shows continuous improvement, but there should be a tough, defined target to work towards'*
- STW stated it has set its own targets, which are stretching targets

5.5. Any other comments?

Table 1

- A stakeholder stated s/he would like to see STW distributing leaflets, printing messages on bills and producing TV adverts to inform customers of the benefits of saving water
- A council officer disagreed as leaflets and TV adverts are extremely expensive and *'information should only appear on customers bills'*
- A conservation group representative commented that *'messages being conveyed in education programs are important'*
- A business group representative commented s/he would like to see a recognition of stakeholders opinions and views and wants *'to see key pilots in some areas'*
- A business group representative commented that there needs to be a balance between the amount of water used and the billing system. S/he stated there needs to be an incentive of a *'financial reward for customers'*
- A conservation representative went on to say that there is a *'negative side to introducing meters'*. The result could be an outbreak of foul play if people are not using the meter correctly. S/he added, *'if water meters were to be introduced. what will the information be used for and how does it impact the customer?'*
- A council officer disagreed if *'electricity and gas are metered so should water'*. The aim is it encourages people to use less
- A conservation representative said they would like to see the introduction of a *'creative billing system where people are rewarded to use the water supply well'*. Incentives should include a flat rate and a discount in price when a customer's water usage is reduced. S/he would also like part of the customers bill being donated to charity
- A business group representative stated there is a *'legal right to clean water.'* S/he said there should be a flat rate charge on a certain amount. S/he felt when the limit is exceeded then *'higher premier prices should be enforced.'* S/he pointed out this is the system used in South Africa
- A council officer agreed with the flat rate scheme and would like to also see *'clear incentives being offered'*
- A conservation group representative asked *'is there smart meter technology for water?'*
- A council officer asked can a target level of *'zero carbon be set?'*
- STW explained the pumping and paying back system

Table 2

- A council officer felt that STW could work with schools to educate students and parents on possible savings

Table 3

- A council officer suggested that STW should grow crops on contaminated land and use them for industrial use
- An environmental group representative asked whether STW had considered carbon offsetting
- Another environmental group representative advised that STW should make its operational sites self-sufficient
- A Local Authority officer stated that STW needs to *'help educate local authorities and, in particular, planning departments'* for this challenge
- An environmental group representative stated that s/he had been involved with the *'Green Deal'* consultation and that STW could potentially *'piggyback'* on to this because so far there has been too great a focus on the reduction of energy over the water agenda

Table 4

- Very few comments were made about this question

Table 5

- A business group representative liked the theory of *'things you can guarantee, such as offshore and tidal, therefore there should be an investment in that, as the UK is a leader in this field so they should invest in it'*
- A council officer agreed but not much tidal power possible in the STW region
- A business group representative is not a fan of getting rid of farmers land. Food waste and sludge waste is good
- A council officer argued that, as long as the land is contaminated, then *'growing crops for energy is fine'*. S/he continued that industrial parks are moving out and destroying land
- A STW official added that it takes roughly 80 years or so to turn contaminated land into uncontaminated land
- A council officer added that if you can do that by natural methods and use crops for energy then *'great'*
- A developer observed that there are no adverts on television and that if people are not directly involved then they don't find out or get involved, hence why s/he came, to find out more
- A council officer remarked that STW doesn't have to use the same advert, they could have different slices and rotate so consumers get the bigger story through different adverts concentrating on different areas

- A business group representative commented that water bills should be like domestic bills, STW should get a slogan and the bill should tell the consumer that these are our costs, this is how it adds up, and this is what we are doing. STW could engage customers by asking them to send off for a free toy or something similar

Table 6

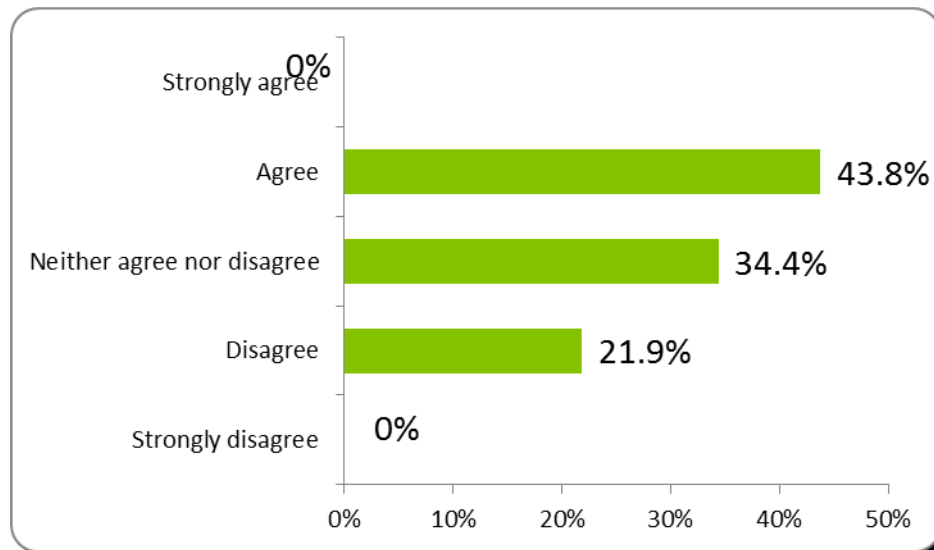
- A council officer said water companies should keep ahead of the general public in their attitude to the environment
- A council officer claimed that flooding can affect the public awareness of environmental issues
- A council officer said the '*media is kneejerk*' in its reaction to draught and extreme weather
- A council officer stated that '*you want OFWAT to give the scientific evidence rather than the media*'
- A business group representative understands that STW feels responsible to communicate issues around climate change
- A council officer argued STW needs to communicate what is happening and understand the views of the general public in order to know if it is '*in the head*' of the public
- A council officer claimed most people aren't aware that it is energy intensive to get water
- STW explained communication with customers
- A council officer mused that we don't do much about water efficiency and maybe it is the responsibility of local authorities to work better with the water companies
- A council officer pointed out that local authorities need to communicate with community about flooding issues and areas that are at risk of flooding
- STW explained how STW and local authorities can work together
- A Council officer suggested that '*STW lobby government and OFWAT in order to get more money to invest in reducing carbon*'
- STW explained regulatory cycles

Table 7

- Overall there was quite an emphasis on the need for more communication around what STW is doing to reduce its effect on the environment (current priorities)

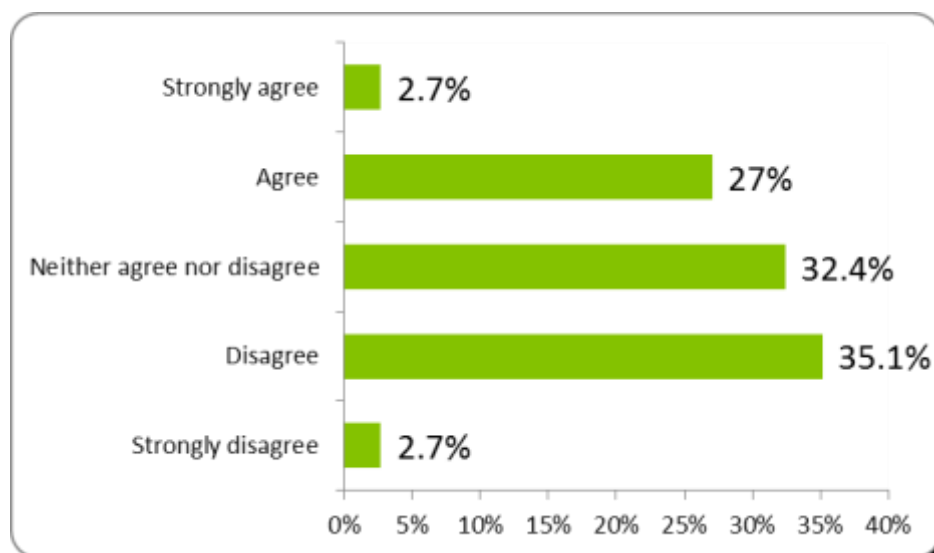
5.6. Q5: To what extent do you agree with this statement?

- “STW is currently doing enough to reduce its carbon footprint?”



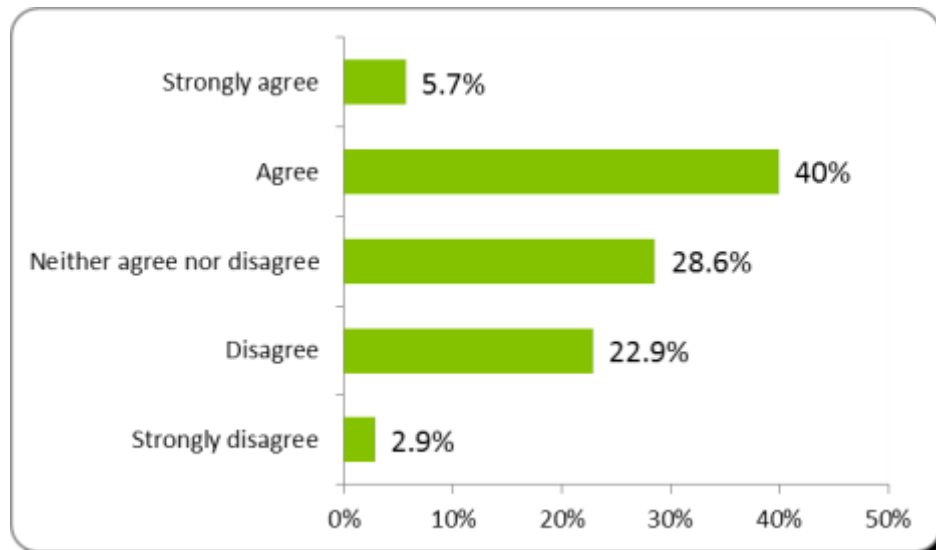
5.7. Q6: To what extent do you agree with this statement?

- “STW is currently doing enough in relation to energy efficiency?”

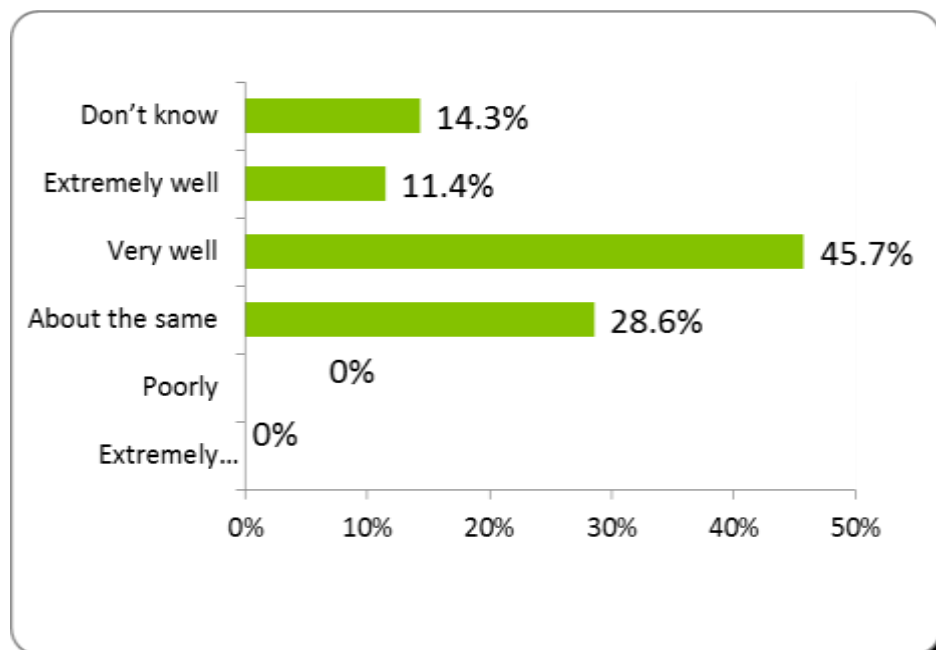


5.8. Q7: To what extent do you agree with this statement?

- "STW is currently doing enough in relation to renewable energy?"



5.9. Q8: From your experience of other companies' carbon reduction programmes how well do you think STW compares?



6. Reducing our effect on the environment (future priorities)

6.1. Q9: What is your view on the pressures we have identified?

Table 1

- STW explained the history behind the ownership of sewer points and that previously the points were owned by the land owner
- A business group representative asked *'what % of the network has grown?'*
- STW stated roughly 50% of the business has grown since they gained ownership of the sewer points
- A council officer pointed out that *'access to sewer points will be difficult to gain due to many being on private land'*
- A council officer made the point that there *'has been no survey information of where the points are.'* S/he continued to state that now STW is responsible for the sewer points a survey should be carried out and that it should have been conducted before STW took over sewer points
- A business group representative commented that due to the *'growth of certain urban areas lots of families are putting more strain on the sewer facilities'* and therefore managing and accessing the sewer points could be very difficult
- A council officer said the growth of the population will also bring more issues to light. S/he stated it is not STW responsibility to address all of them but socially there will be a lot of pressure. S/he said *'STW needs to be seen to be doing the right thing'*
- A council officer asked *'who pays for the new infrastructure when new houses are built?'*
- STW informed them the developer pays for the infrastructure
- A conservation representative made the point that STW needs to *'find extra water and fulfil the demand'*. S/he also said STW needs to *'pay to develop the service to fulfil demands'*
- A conservation representative asked *'is it now harder to plan for future growth in a region if the regional strategies are no longer produced?'* S/he then went on to ask *'does STW have plans to grow in order to cover new developments in the next 25 years?'*
- A business group representative made the point STW could face a legal fine if the quality of water does not meet the required standard

- A council officer gave an example where a site's water quality is below WFD standards and they have 15 years to bring it up to scratch. S/he pointed out that the addition of 100,000 houses will add a lot of pressure in meeting that target
- A council officer was of the view that there is some feeling of uncertainty and that it should be clear what will go into each authority. S/he said the legal planning framework is not as easy as it seems to plan. S/he went on to say this is because councillors and developers will clash and, in the long term, this does not help STW with its future plans. S/he stated there needs to be more partnership working between the different companies/agencies
- A business group representative pointed out his / her business is energy reliant. S/he asked *'how confident are STW that when we have a cold winter it can prioritise key companies to get water?'*
- A business group representative commented on the fact that in the winter s/he had been asked to reduce energy consumption. S/he added *'will STW receive the same request? If so how will STW cope?'*
- A business group representative made the point that STW won't have to reduce power consumed felt this was unfair as STW are not energy efficient. S/he added *'why should other businesses that are energy efficient have their energy restricted?'*
- A conservation group representative pointed out the Government is under pressure to improve the environment including bio diversity. S/he said in order to help the environment STW need to play a key role
- All agreed that since STW has inherited more infrastructure, the challenge to keep the level of carbon emissions the same is as much as a challenge as it is to reduce it

Table 2

- A council officer felt the additional growth in customers and how this is managed is a big pressure
- A council officer pointed out that s/he felt *'fuel poverty is a big pressure currently, people struggling to pay bills'*
- An elected representative asked if STW had noticed an increase in customers struggling to pay bills. The STW adviser felt they had a pretty good record and very few cut-offs. There is a definite increase in the levels of customers struggling
- A business group representative pointed out that s/he had attended a conference where the figure of £1.6 billion of unpaid water bills had been reported, so a definite pressure going forward
- A council officer explained that s/he was concerned that *'customers may begin to feel unhappy that they are being expected to pay for customers who don't have the means to pay their own bills'*

- An environmental group representative felt that *'in 20 years if the climate continues to change, this may overtake all other pressures'* and that it was important for STW to work with customers to try and influence them to use less water
- An elected representative asked if we may find ourselves in a position in 20 years, where *'less water will be purified to drinking water quality and there will a greater level of grey water used in homes'*. The STW adviser felt that rainwater harvesting and other ideas were important to consider in the future
- A council officer felt that grey water technology systems had already moved on, however s/he felt as economies of scale increased further more will be done to drive innovation further
- An environmental group representative asked if more could be *'learnt from the energy sector, investing in future technology by increasing bills slightly'*
- A council officer said *'Green Deals that stay with the houses may be the way to go, especially for vulnerable people who could struggle to pay otherwise'*
- A council officer explained that when planning authorities decide housing numbers they look at water data. S/he felt that if STW worked more closely with local authorities it would help them to build this into their policies going forward at an earlier stage. Local authorities could then work with developers to ensure this is considered
- A council officer talked about SUDS guidance and felt that STW should be working with local authorities as other water companies are and should be looking at upstream measures
- A council officer questioned how *'bill payers feel regarding exporting water to other authority areas, how does this benefit the bill payer in this region'*
- An elected representative asked how water importing affects infrastructure. S/he added *'if the infrastructure was being designed again would it still be done in the same way?'*

Table 3

- An environmental group representative commented on STW's current carbon risks of assets and the cost of energy needed to operate these. S/he rapidly came to the conclusion that STW was *'almost certainly running inefficiently'*
- Adding to this point, another environmental group representative stated that *'it depends on how you view the challenge'*. S/he felt the challenge was about having a realistic approach to how STW delivers services in the future, what can be done differently and factoring in changes such as population growth into the plan to reduce emissions
- A conservation group representative agreed that *'climate change involves more than carbon footprint, other issues need to be considered'*

- An environmental group representative asked why there appeared to be '*so much focus on sewage treatment*' and a lack of emphasis on process emissions and water treatment
- An STW representative responded to this point
- The group broadly agreed that STW should be aiming for carbon footprint reduction '*without a doubt*'

Table 4

- A council officer agreed that the main points have been identified by STW

Table 5

- **Due to low attendance on this table, a decision was taken to move stakeholders to other tables**

Table 6

- A council officer stated '*we need to establish a link between climate change and the pressures on industry*'
- A council officer said s/he didn't know about reduction so maybe that needs to be communicated better
- A council officer said that STW needs more responsibility and to spend more money in order to respond to the pressures
- A council officer said carbon taxes are a good incentive to change behaviour and save energy. The carbon reduction commitment has provided companies with a reason to save carbon
- A business group representative said '*I agree with that*'
- A council officer suggested forcing companies to '*fix things such as broken heating*'

Table 7

- An elected representative stated that growing demand is because of a rising population and this factor seems to be missing in the equation
- An elected representative commented '*as it is now an economic priority to revitalise the manufacturing base, this could mean pressure on water for industrial use, which should be considered*'
- An elected representative said that the re-use of water in new build properties was vital
- An elected representative asked '*does STW have any funds for retrofitting water efficiency measures in existing properties?*'
- STW answered this question

- An elected representative said increased agricultural use should be considered more
- An environmental group representative said there was potential tension between agricultural and domestic use in drought periods
- An elected representative added that domestic consumption is falling, due to low use features on dishwashers, washing machines etc
- STW identified the growth of single occupancy households as a pressure point
- An elected representative remarked that often rainfall is concentrated in intense bursts and short periods, rather than over a long period
- An environmental group representative identified this as a problems in terms of dilution of waste water

6.2. Q10: What do you think our future approach should be?

Table 1

- A business group representative said s/he would like to see the message that bill increases may lead to the creation of more jobs better publicised to customers
- A business group representative commented that measures need to be balanced between reducing carbon emissions and increasing employment. S/he would like STW to be more strategic e.g. *'more apprenticeships even though it is not the most cost-effective option'*
- A council officer stated the priorities come across as being: *'clean water, sewerage efficiently removed, no increase in bills and reduction of carbon emissions'*. S/he said all of these are not a core business concern for customers. The CO2 emissions need to be communicated to customers
- A council officer commented that reducing carbon emissions is of *'no interest to customers, only STW'*. S/he said *'the customer may be more interested if they saw benefits such as more jobs and a personal incentive'*
- A council officer commented that motivational and personal benefits should be presented to the customer rather than the aim to reduce carbon emissions. S/he said the customer should be told clearly why there is an extra cost to their bill
- A council officer pointed out STW must be careful how to separate the issues
- A council officer asked STW *'to explain why bills have increased, what is STW gross profit?'*
- A council officer was of the view that it would be difficult to increase bills if STW profits remain so high
- A council officer pointed out climate change isn't a top priority for customers

- All agreed that customers would be prepared to have their bills increased if the publicised benefit is job creation rather than the reduction of the carbon footprint

Table 2

- A council officer felt that staying at the same level with the existing pressures should be looked on as a success
- An environmental group representative felt that *'supplying more customers at the same costs is a real win'*
- An elected representative pointed out that *'increasing bills during austerity is difficult for customers to stomach'*
- A council officer felt it is important to publicise that keeping current levels demonstrates that STW are working hard
- A council officer asked if there are there areas of planned development that may require *'over engineering'* giving a scheme a high upfront cost. S/he added that benefits may be delivered in the long term as a result

Table 3

- An environmental group stakeholder suggested that a chunk of the profits should be reinvested in sustainability and green technology and that government should enable water companies to *'attractively increase investment'* and reinvest in innovation. S/he expressed their dismay at the volume of regulation in place for energy use and was not convinced that the same level of thought had been put into water
- A conservation group representative stated that Government does not seem to incentivise the creation of such schemes
- An environmental group representative said *'water companies are unique because they're environmental custodians and should be considered differently because their operation is extremely environmentally sensitive'* and asked what STW was currently doing to *'square the circle'*
- STW answered this question
- A domestic customer representative insisted that STW should not wait to be regulated by Government but should take a leading role and set the agenda
- An environmental group representative stated that OFWAT should try to encourage other water companies to use renewable energy sources
- A domestic customer representative explained that although customers *'are increasingly aware of the environmental challenges that lie ahead of us, but when it comes down to what people are prepared or able to pay their attitudes change'*. S/he stated that it was easy for consumers to be altruistic about what can be done but this is of no use if they are *'struggling to pay the bills'*. S/he felt that STW needs to do something to help people that have affordability issues, although s/he agreed that STW cannot hold back on investment

- An environmental group representative commented that if demand reduced then costs will also reduce accordingly. S/he asked what STW was doing to encourage customers to use less water
- STW responded to this question
- A domestic customer representative stated that in terms of challenges that the water industry was facing, parallels could be drawn from the energy industry. S/he explained that the purpose of the smart meter was to enable consumers to better understand their consumption. S/he wondered *'why on earth the Government has not done the same for water'* particularly as it is a *'rarer commodity'*. S/he added *'most customers don't bother managing their water consumption'*
- An environmental group representative disagreed with this point and felt that the general public would be hostile to this type of technology
- A council officer agreed with this and added *'most people are happy in my area without meters because they're happy to carry on using as much as they like and don't see water as a sparse commodity'*
- An environmental group representative responded to this by stating *'it's understandable really, however this goes back to the importance of education and building awareness'*
- A council officer felt that *'getting to the people that aren't interested is the hard part'*
- Another environmental group representative was of the view that *'people who have meters feel they have a God given right to use as much as they want, can afford it and get very upset if they're put under any restriction'*. S/he felt metering water has to be introduced eventually but the pace of this is key to avoid overwhelming consumers
- A conservation group representative commented that the costs of fitting a meter are fairly expensive and considered this up against other future priorities, such as alternative sources of water, fixing leakages, more supply, raising awareness of these issues among consumers
- An environmental group representative stated that leakages were already paid for by the customer
- A domestic customer representative felt that further investment should reduce costs to customer and that STW *'needs to be challenged to deliver lower costs and carbon'*
- An environmental group representative stated that the difficulty was that STW needs to remain commercially sound and *'massage the view of its shareholders'* to consider higher long-term returns in the name of sustainability that ultimately deliver to both customers and investors
- The table agreed that STW should not always look to ordinary bill payers to fund investments and instead encourage private investors to pick up the bill

Table 4

- A council officer mentioned that rainwater harvesting should be a priority for STW

- Another council officer mentioned that new constructions should have the technology to harness rainwater for use or storage
- A conservation group representative agreed with this view. S/he mentioned that s/he had already installed this technology and it has worked perfectly. S/he admitted that it is difficult to install it in older homes; however, it is possible to do so
- A council officer mentioned that STW should focus more on inner city projects and urban areas. It can help urban areas be more '*environmentally aware*' of problems and can therefore help improve the image of many cities

Table 6

- A council officer claimed STW should always try to go further, but wondered what kind of incentives there are when STW has to increase profits for the shareholders
- A council officer said people tend to have localised, rather than global priorities
- A business group representative noted that it's difficult to get a central goal and common objective
- A council officer wondered how STW copes with different local priorities
- A council officer claimed people don't trust government and won't listen to them. S/he claimed people are more trusting of water companies and '*STW needs to educate people that prices are going to increase*'
- A council officer remarked that s/he finds the opposite, that people listen more to local authorities than private companies
- A council officer said s/he will have to do more on water conservation with the public in the future and s/he wants the assistance of STW and the Environment Agency. We need consistency in message and active communication in the community
- A council officer suggested that partnerships have to be more important in the future in order to reinforce the key message and make people change
- A council officer said some people still think that councils offer sewage solutions
- A council officer said STW needs a consistent message in order to communicate in a stronger and more persuasive manner
- A council officer commented that the council can contribute to solving that problem
- A council officer remarked that this partnership becomes a reality when there is an emergency. S/he said '*we need some way to keep that relationship open*'
- A council officer said different people in the local authority have different contacts in STW and sometimes this can hinder communication. S/he wondered '*can the communications team liaise better with local authorities*'

- A council officer noted that s/he needs better knowledge about who to contact in STW with various problems and issues
- A council officer said issues around water conservation and adaption are off the radar for lots of local authorities
- A council officer commented on the varying structures in different local authorities making it difficult to generalise
- A council officer said this is the first time s/he has been invited to a consultation event
- A council officer said it would help knowing who to speak to at STW
- A council officer said it can help to get the workforce involved to understand where there is waste
- A council officer stated that the public sector is a big employer and getting employees involved would make a big difference
- A council officer talked about the different ways of communication available in local authorities
- A council officer said advice lines work well to communicate with customers as do websites
- A council officer thought people can understand water usage more than disposal
- A council officer suggested that STW needs to communicate financial messages more than the environmental messages
- A business group representative agreed people switch off with environmental messages
- A business group representative stated customers *'only understand one thing, the effect on their pocket'*
- A council officer said it would be good to give out water efficiency information
- STW explained about water efficiency

Table 7

- An elected representative stated *'I would favour increased investment now. We should deal with the issue of customer cost via the tax and benefits system and do what is required through these avenues, rather than have the position that we won't do it if it costs the consumer too much'*
- An elected representative asked whether more self-funding initiatives should be considered
- STW stated it was spending £66million on energy efficiency programmes

- A domestic customer representative again raised metering adding that *'people who are doing their bit shouldn't be charged more'*
- An environmental group representative said it was not clear cut, and the approach was not just about financial investment, but investment in time and focus
- An elected representative stated *'People can't really choose their water provider; there is a fixed customer base without a choice. Energy costs are only going one way which is up, so even a case which looks expensive now, would pay for itself when the rising costs of energy are taken into account'*
- An elected representative added that the need to capture water can be reduced by better management of pipes, leaks etc, *'but this is counter intuitive as STW makes its money selling water, the same as electricity and gas'*

6.3. Q11: Should we be considering other options?

Table 1

- A council officer pointed out embracing opportunities of generating income and profit could result in bills reduction, *'which would be good'*. S/he said that although some customers may be interested in climate change many will wonder how the service will be improved and when bills be reduced
- A business group representative commented that the increase of £1 on every bill should go into a pot for future needs
- STW explained there won't be a reduction bills as in the long term they will be kept lower than they would have been if changes had not been made
- All agreed investment in renewable energy could be a good plan

Table 2

- An environmental group representative felt it is important only to take decisions on long-term infrastructure if it is the right thing to do as, obviously, STW has to satisfy its shareholders
- An elected representative explained that it is important *'to look at the volumes of shares that are actually traded on any one day'*. S/he commented the public only tend to look at things in the short term and it's very difficult to convince people to look towards the long term
- A council officer felt that as the asset base degrades, sometimes it is important to look to a like-for-like replacement, although developing systems with the minimum impact is important when looking towards the longer term
- A council officer recommended that STW engage with local authorities, given the current budget cuts local authorities have to work in different ways, e.g. getting private companies involved in services. Local authorities are trying to attract businesses to get involved into synergies with other businesses and other local authorities

Table 3

- Very few comments were made about this question

Table 4

- The idea of STW doing more business with farmers in East Anglia to produce fuel was suggested

Table 6

- A council officer noted that the population is increasing and this should be taken into account
- A council officer wondered *'will flooding have a big effect on energy bills?'*
- A council officer added it might increase pumping costs and cause sewage problems
- STW talked about disruption caused by events
- A council officer asked what the financial costs of flooding are for STW
- A council officer said leakages are not as responsible for droughts as lack of rainfall
- A council officer noted ageing infrastructure causes leaks and is *'inevitable'*
- A council officer said it's a difficult message to communicate when the media scares people with extreme causes
- A council officer said STW needs to respond to leak reports better
- A council officer pointed out it's difficult to contact STW about leaks
- A council officer stated it is difficult to assess what STW does with respect to leaks. S/he said better reporting of leak data would help
- STW talked about its leakages policy
- A business group representative remarked that the customer thinks they are paying for a perfect service but aren't prepared to pay extra in order to keep leaks to a minimum
- A council officer said there needs to be a contract or agreement to enshrine trust between customer and STW
- A council officer asked has STW thought about sponsoring academies in order to get involved in the community more as not *'just a water company?'*
- STW explained its future intentions
- A council officer suggested STW gets involved in the plumbing business
- A council officer asked if STW has information on the number of leaks and the action taken

- STW responded as to what they are doing
- A business group representative reiterated customers only care about getting clean water out of the taps and not about leaks
- STW talked about leakage figures
- A council officer suggested STW could have leakage spend itemised on water bills to customers
- A business group representative suggested that people *'would be annoyed'* if they hadn't experienced a leak
- A business group representative said *'by hook or by crook'* we need to get the public using less water
- A council officer noted the discussion hasn't covered how STW can conserve water better and work with councils to encourage this
- A council officer claimed local authorities are responsible for sustainability issues of water conservation but it is difficult to draw the line between water company and local authority
- A council officer wondered how the national planning framework would affect water use
- A council officer said there is a European Directive about water usage

Table 7

- An elected representative stated that there should be a focus on driving down demand
- This was generally agreed across the table
- An elected representative asked *'if rainfall levels are unlikely to increase in East Anglia, it is only likely to decrease, so what about a national grid for water?'*
- An elected representative said *'big infrastructure projects, such as carbon capture for coal are seen as solutions, we should look at what we could do with this carbon, as the Germans and Danes are doing, not just look to bury it in the ground'*
- An elected representative identified the need to look after our agricultural sector *'we don't have rain we have deluges a farmer told me, so perhaps we do need more holes in the ground to capture it when it does come'*
- A domestic customer representative asked *'why should the consumer pay to clean up run-off from fields?'* S/he continued that *'only around 15% of consumers are particularly bothered, most are not expecting much from the water industry except what they are obliged to do'*
- An environmental group representative said there need to be cost effective solutions
- STW explained it undertakes cost benefit analysis around projects

- An elected representative commented that cost benefit analysis is not the whole story as this is passing on the obligation to pay more to future generations

6.4. Q12. In our current investment period, about a third of our carbon emissions will result from construction activity. Should we be taking more action to address carbon arising from this activity in the future? If so, how?

Table 1

- A council officer said STW should state and explain all factors that have been looked into. S/he thought the results of these findings should be explained to customers and the best options should be displayed
- A business group representative stated that tested products which *'give a good result'* should be recommended to all businesses

Table 2

- A council officer felt *'lessons could be learnt from the Olympics'* with regard to construction materials. S/he added that *'over engineering now, may make things easier for the future'*
- A council officer explained that supply chains needed to be considered, saving money through the process
- An elected representative pointed out that building regulations are more extensive now than ever before. S/he is *'concerned that ECO homes are selling for less than they cost to build'*, s/he feels *'it is important not to allow green credentials to overtake what buildings look like'* and that there is an opportunity/challenge for the manufacturers to design and build buildings that are more desirable
- An environmental group representative felt that the changing look of buildings to incorporate green credentials is something *'we have to get used to in the future'*
- A council officer made the point that it is important to get a balance between green innovative designs and the long-term benefits (and costs) associated
- A council officer questioned how STW works with new technology. S/he explained that his / her authority uses plant work systems as a way of using plants to help filter water. Lots of countries in Europe are already using this innovation. The STW adviser explained that there was an R&D scheme in place
- A council officer felt that levels of communication need to be increased and that greater public visibility of what STW is doing was required
- An elected representative asked about *'cell knowledge'*. S/he felt it was important for STW to look at new ways of thinking. Local authorities are already joining forces to reduce economies of scale

- A council officer felt that *'retro fit needs to be considered along with grey water issues. What else can be done at the time that new houses are built?' S/he felt that there is an 'appetite for this in the market, the public won't want to retro fit their houses twice'. S/he thinks it is important to look now at domestic balancing methods to reduce the impact of climate change and other factors*
- A council officer and environmental group representative both agreed that customers needed the *'carrot and stick approach'* to be persuaded to do more to reduce usage
- A business group representative felt that perhaps STW needed to do more by looking at *'leakage levels after the meter rather than the current scheme of only looking at pipes up to the meter, as leakage levels are so bad'*

Table 3

- An environmental group representative stated that STW should be aiming for sustainable solutions that are sensible, green and *'don't involve pouring concrete'*
- Another environmental group representative was of the view that OFWAT needs to encourage companies to have more confidence in sustainable methods and STW should look at its long-term goals and viable pricing mechanisms that can help achieve this
- A domestic customer representative felt that STW should be giving regulators confidence and can capture these outcomes in more innovative ways. S/he added *'there's no reason the company can't look at longer-term solutions that can be implemented in 10-15 years' time'*
- An environmental group representative stated that the current 5 year price review is too short-sighted and STW should instead produce one that focuses on 10 or 15 years minimum
- Another environmental group representative added that a document like this *'already exists, it is the SDS which documents a 25 year projection, however, OFWAT have taken little notice of this'*
- A domestic customer representative stated that STW's *'risk-based business plan'* is not ideal. S/he went on to explain that *'STW's view of the failure must be accurate, if it isn't it risks poor investment which not only wastes time and it is the end consumer that will pick up the bill'*
- An environmental group representative stated that STW should be looking at better renewable technology, energy efficiency and driving this forward to achieve longer term gains
- Another environmental group representative felt that *'as a country we're at risk due to the bureaucracy that regulates water companies and subsequently mitigates opportunities to be innovative'*. S/he stated that companies like STW should be more confident about R&D
- An environmental group representative agreed that R&D was a good area for investment because it is evidence based

- Another environmental group representative stated that '*ultimately the question for customers is what sort of service levels consumers are prepared to accept*'? S/he added an example '*if flooding only happens once every 5 years in certain areas why bother investing in more flooding mitigation*'. S/he concluded by saying that STW needs to consider the areas of service levels where end consumers are willing to compromise
- An environmental group representative added that '*willingness to pay*' should take care of this

Table 4

- There was very little discussion around this question

Table 6

- A council officer said it depends how STW controls its contracts and whether it passes costs on to their contractors
- STW talked about carbon targets
- A council officer said '*it's not just the finished product but it is also about how we get to the finished product*'

Table 7

- An elected representative said only when contracts are awarded on the basis of the carbon reduction issues/policies of the constructor will there be an impact, and asked if STW is in a position to use this as a criteria for contracts
- An environmental group representative said long-term '*softer options*', rather than hardware or construction, should be considered as part of a suite of solutions and things that may take a long time but would produce benefits in the long term
- An elected representative stated that there needs to be a target, so water companies can see the bigger picture. They should be set a carbon budget, so they can devote so many tons to project A etc
- STW explained that if it did move away from engineering solutions it places greater emphasis on the consumer

6.5. Q13. Should STW encourage its customers to use water in a more energy efficient way? If so, how?

Table 1

- A council officer pointed out '*local authorities promote water butts at reduced prices*'. S/he asked if there is there a range of water products at a reduced price being promoted by STW
- All agreed STW should encourage customers to use methods of reducing water

- A council officer pointed out if STW want customers to use less water then STW should be more active in encouraging them
- A council officer stated unlike electricity and gas customers are unable to choose their providers and, as a result, s/he was of the view that customers would not like to see '*big expensive adverts*' and sponsorships as s/he believes they are '*not needed*'
- A council officer said it would be good to see hints and tips on how to save water being printed on the back of customer bills
- A conservation group representative asked '*will investment in water saving products result in a good return for customers?*'
- A business group representative stated intensive investment to reduce carbon emissions would be a good investment in the long term even though it may be an unpopular decision in the short term
- A council officer said that big united schemes are needed and they shouldn't be carried out in isolation
- A council officer commented that STW should show its reduced levels of carbon every year. S/he asked is it correct to say '*carbon calculations will show some peaks over years?*'
- A council officer commented on the carbon footprint target, s/he asked '*is there a target of carbon emissions per job?*'
- A council officer stated long-term thinking rather than short-term thinking may be the way forward. S/he commented on the Edwardian and Victorian reservoirs, '*they haven't gone wrong*'
- A business group representative commented on local and national Government decisions as to whether to build now or later was a political call. S/he asked '*has there been any pressure from Welsh Assembly members?*'
- A conservation representative stated that Welsh representatives '*would like to charge the English for the water*'
- A council officer said investment should happen only if it is appropriate. S/he went on to say '*planning should be done across the footprint of the region and in the long term planning should be done in co-operation with partners and STW*'
- A council officer asked '*has STW ever asked developers not build in certain areas?*'
- A council officer asked if it is easier for STW to make new water connections if a council has a dispersal strategy or plans for a big new development
- STW stated it is harder to have small developments spread across a number of villages than larger urban extensions to existing settlements

Table 2

- A council officer commented that s/he felt that only a collaborative approach will work. STW needs to look at ways of persuading the public that using less water actually saves them money
- A council officer asked if STW will be going into schools to persuade parents/pupils to take part in water saving schemes
- STW explained what the company does at present including taking children on visits to water treatment plants
- A council officer enquired about liaising with local residents groups in forums and if STW had noticed any benefits with this
- An environmental group representative felt that *'waste recycling has come a long way in recent years - two bins etc'*. S/he felt that the public needed to get to this stage with water and that residents needed to know *'water is such a scarce resource nowadays'*
- An elected representative felt that the *'public are happy to pay for services, as long as they get the service'*; residents pay for water so they may feel they can use it as they see fit
- An environmental group representative asked if compulsory metering is something that is being pursued by STW currently. The STW adviser felt that there is a significant cost associated with this
- An elected representative was of the view that there is a lot of anti-Anglian Water sentiment currently due to the drought, adding that *'some residents with meters feel that, as they are paying for water, they should be able to use it'*

Table 3

- An environmental group representative stated that there is an expectation that energy companies will engage with the end consumer through the green deal and wondered why water companies do not take a similar approach
- Another environmental group representative agreed that it was important to look to the future and for utility companies to work together. S/he asked *'how well'* STW was doing this at the moment and whether the *'drive and direction is the same'* in the Welsh arm of the company
- An STW team member answered this question
- A domestic customer representative added *'decarbonisation won't happen unless organisations build more large-scale activities. STW is well placed to play a big part in this and should help create self-funded projects'*
- An environmental group representative stated that STW could expand this remit and *'more can be done'*. S/he was of the view that the Government should incentivise STW to be more involved early in the planning process

Table 4

- A council officer mentioned that it is of paramount importance to educate the public in these areas. However, he stated that it is unlikely that the public will act in a positive way if they do not have an incentive
- A conservation group representative said *'money talks, and only by giving people money will they start caring about saving energy or installing renewable energy technologies in their homes'*
- All members agreed with his / her opinion

Table 6

- General consensus across the table is that a partnership with others in an area should be implemented in order to communicate the advantages of water and energy efficiency

Table 7

- A domestic customer representative said there is *'not a clear benefit to the consumer in saving energy at a treatment plant, but there is in saving energy in the home for example'*. Use of grey water/rainwater harvesting is an important approach that should be encouraged, but who pays for this?
- An elected representative added that rainwater harvesting is fine, *'but what if it doesn't rain for six weeks? Like wind power, it is fine when the wind blows, but if it doesn't there needs to be a backup'*
- An environmental group representative argued that increased grey water use would mean we don't have to build more reservoirs
- An elected representative argued that people who have money are more interested in it. *'Money isn't the only way to incentivise people to do the right thing, particularly in lower income brackets. I am annoyed that it is only ever sold to the public in this way rather than by conveying the message that people need to do the right thing'*
- An environmental group representative commented that energy and water companies should work more closely together on energy efficient messaging

6.6. Any other comments?

Table 1

- No further comments

Table 2

- A council officer explained that s/he was *'generally in support of increasing bills'* (but not by too much) *to create funding to make carbon reduction measures happen'*. This comment received a lot of support from the table

Table 3

- No further comments

Table 4

- No further comments

Table 6

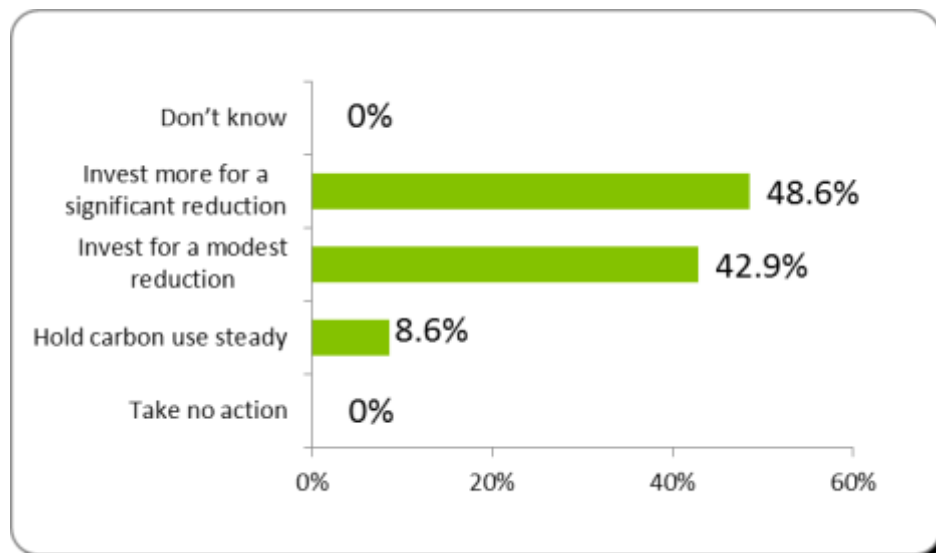
- A council officer said STW must invest more as s/he wants a better service but not so much so that customers have to pay too much
- A business group representative claimed that customers aren't prepared to pay for massive increases in bills without knowing why
- A council officer asked has STW '*done anything about energy social tariffs?*'
- STW explained their consultation project

Table 7

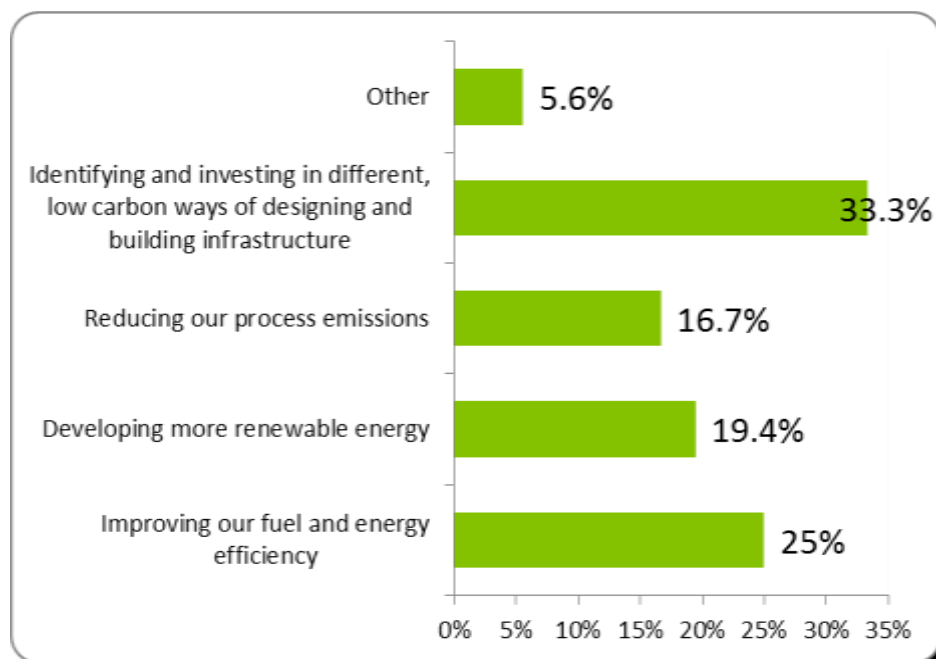
- No further comments

7. Reducing our effect on the environment (future priorities)

7.1. Q14: Which of the following do you believe STW should adopt towards our carbon footprint?

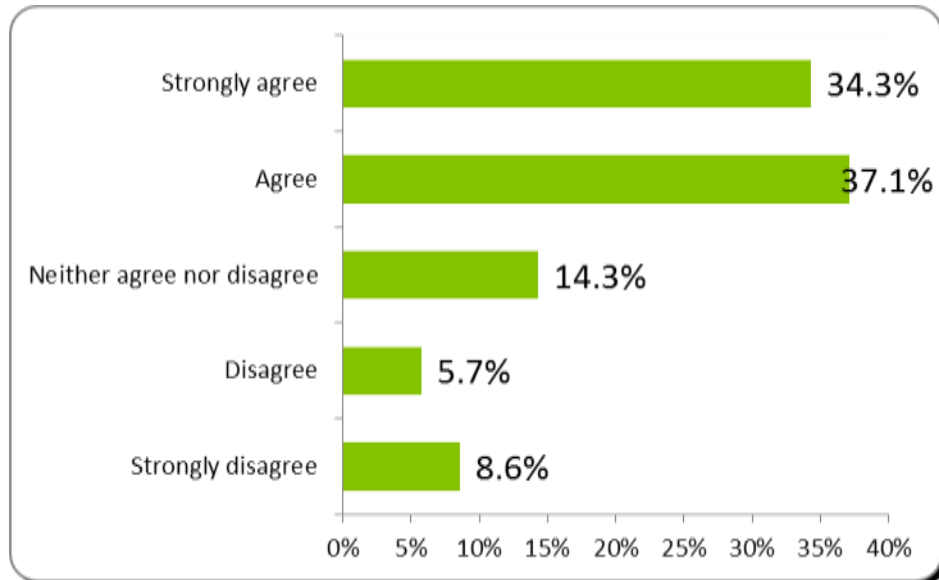


7.2. Q15: STW could do all or some of the following, but which one would you like it to prioritise?



7.3. Q16: To what extent do you agree with this statement:

- "It is STW's responsibility to encourage its customers to be more carbon efficient in the way they use water"



8. Adapting to a changing climate (current priorities)

8.1. Q17 Before this session, how aware were you of the challenges climate change presents for Severn Trent Water?

Table 1

- A business group representative stated s/he wasn't fully appreciative of difficulties STW faced
- A council officer commented that being given the opportunity to collaborate up front about this priority was good to hear as s/he wasn't aware of all factors involved

Table 2

- A council officer working in climate change explained that s/he was aware of the challenges but not sure of the impact on STW
- A council officer felt that s/he knew a little about the challenges facing STW from his / her role
- A council officer felt the message about moving water around is a message that has been missed publically
- An elected representative explained again that s/he felt that they had not been kept aware of what STW have been doing, *'STW needed to decide how much contact needs to be kept up with local authorities or councillors'*
- An environmental group representative felt that *'STW shouldn't worry too much as no one is kept up to date on this from gas or electric companies either'*
- An elected representative felt that an opportunity had been missed; s/he felt that councillors would be able to do their job better if they were kept in the loop by STW. S/he felt it is *'vital that STW worked with councillors as they are in direct communications with their communities'*

Table 3

- An environmental group representative felt that consumers had developed a greater awareness about climate change over the years and added *'if you'd asked the same question 10 years ago your answer would have been very different, there has been a big change in public perception of these challenges'*. S/he then asked how STW could quantify the impact on its business
- An STW representative answered this question

- Another environmental group representative felt that STW needed to assess that challenges it faces and adapt the way it operates. S/he added that it should look to other countries for inspiration
- An environmental group representative stated that it was difficult to differentiate climate change impacts from the '*here and now*' and manage risks in the future. S/he felt that STW now has a good evidence base from the last 15 years and this should be used to plan for the future
- A domestic customer representative stated that STW should communicate this carefully to customers and put it in a meaningful way so that people would be more likely to engage with the debate
- A council officer added that this was very difficult to do. S/he cited the example of communicating the current drought to the general public whilst there has been considerable rain in recent weeks. S/he stated that this was a challenge to communicate and this should be factored into STW's business plan to help manage public expectations around uncertainty
- An environmental group representative stated that the '*challenge is to get people to buy into the fact the charges will increase to mitigate risk*'
- Another environmental group representative suggested phrasing this in a different way i.e. '*pay more to mitigate climate change*'
- An environmental group representative explained that '*the UK average rainfall has been the same since the 1700s, whether that's climate change is very debatable*'. S/he then questioned whether the problem could be a long-term issue with supply given that STW's consumption is in decline
- Another environmental group representative asked whether STW could focus on '*improving resilience*' instead of major schemes without new resource or storage which s/he felt are likely to be carbon intensive
- An STW representative responded to this question

Table 4

- A council officer mentioned that they knew '*generally*' the challenges that they faced
- All agreed that the customers are not aware of these problems
- All agreed that it is a very difficult task to raise awareness of these issues
- A council officer mentioned that customers are not tolerant to changes because they do not understand the problem
- A developer stated that people will ask why should they pay for price rises in the first place

- A council officer mentioned that STW needs to do more to raise awareness on this issue. STW is not looking for the problem because it does not want to give an answer to the problems. People also do not *'want to know the problems that the industry faces'*
- A conservation group representative stated there needs more transparency on how people are being educated
- A council officer needs to be transparent in its projects. The public needs to understand why STW is focusing on these issues
- A council officer mentioned that STW should work better in partnership with local authorities, adding that face to face contact is essential
- A council officer expressed his / her view that STW needs to have a good website to inform the public
- A conservation group representative mentioned that people will not be interested in this and will not use the internet, nor STW's website to inform themselves
- A council officer should use a number of different media to approach the public
- A business group representative mentioned that sending information to the customers direct to their homes is a good way of raising awareness. *'The Slogan stuck with me and it was helpful for me in understanding the projects that they are doing'*

Table 6

- A council officer claimed the public only think about getting warmer not wetter
- A business group representative said STW is doing more than s/he realised before this session
- A council officer claimed s/he wasn't that aware of what STW are doing
- A council officer said s/he already knew as s/he works in education area
- A council officer stated that STW *'certainly does a lot more than other organisations'*
- A council office said the real debate is not about whether climate change is manmade or not, it is about how we can do to adapt
- A council officer claimed unless the public has experienced a drought or a flood it seems a bit distant

Table 7

- An environmental group representative said *'I was aware of the challenges from working on a partnership body with STW'*
- A domestic customer representative said *'yes, I was aware too'*

- An elected representative said s/he was aware *'but it's also important to remember that an excess of water rather than a lack of water can be an issue too'*
- An elected representative commented *'I think things were better in the recent heavy rainfall, compared to a previous incident of heavy rainfall'*
- A elected representative also stated s/he was aware of the challenges, but not aware of what STW is doing around them

8.2. Q18. What are your views on our current approach?

Table 1

- A business group representative stated adaptation is much trickier than s/he first thought. S/he said planning for a 1 in 50 year event may not be cost-effective
- A business group representative asked how STW is using costs and cost analysis to identify cost benefits in order to make an informed decision?

Table 2

- An environmental group representative felt that it was difficult to know what to do going forward as *'you don't know what the future holds'*, s/he felt it is vital to better track things until STW knows, so they know the certainties
- A council officer felt that horizon scanning was important. S/he felt it is important that domestic customers look at what they can do themselves
- A council officer explained that the Flood and Water Management Act presented partnership opportunities which could share the cost and burden. S/he felt it is important for STW to prioritise which of the climate change aspects is going to be focused on
- An elected representative made a point which was broadly agreed on the table, that *'flood defence was a good example of how to get the public involved'*. S/he felt that tying climate change in with flood defence and how it could have an impact may result in a better chance of getting through to the public. Tying it in with future proofing or cost as a way of getting the public to get involved
- An environmental group representative felt that the public will continue to have service expectations and it is important to determine what that is now and in the future. *'Customer expectation is that the water will continue to flow despite what happens'*
- A council officer felt that new infrastructure will need to be built with a level of resilience built in
- A council officer felt that STW should develop relationships with the insurance industry, to discuss measures that can be put into people's homes to build resilience. Supporting the public to make improvements, through the support of loans etc., especially in areas of high flood risk

- A council officer felt that all water companies should work more closely with the public to ensure that service interruptions don't occur in the future and that their impact is reduced
- An environmental group representative expressed concern that residents may blame STW in future if they *'live in non-flooded areas but they are affected by problems elsewhere'*
- A council officer felt that customers expect their service to continue come what may
- A council officer felt that strategic work to make the service more resilient needs to be better communicated to enable local authorities to work more effectively

Table 3

- Very few comments were made about this question

Table 4

- A council officer stated that the water treatment can be improved. STW should search for new ways of improving water-treatment. People cannot be left without water for many days. This will have a significant impact for STW
- A council officer mentioned that STW needs a higher level of protection for water treatment than for sewage treatment
- A council officer mentioned that STW is managing expectations well. If people are aware of the problem they will understand if they spent hours or days without water. The key aspect is to educate people about the problems that STW is facing
- A council officer was under the impression that water trading will be a standard activity in the future

Table 6

- A council officer said *'it depends on how much resilience you want'* as to whether you think the approach goes far enough
- A council officer said there are serious health implications of not having access to clean water

Table 7

- An elected representative said STW seems to be doing the right things
- An environmental group representative said that *'reducing sewer flooding as STW has stated is of course a good thing to do, but what is actually being done to achieve this?'*
- STW said it was looking to reduce the number of incidents, but that it was difficult to set a specific target because of the five-year AMP funding cycle

- An elected representative argued *'if flooding or drought is going to become more widespread, what has been outlined are the things that should be done? You are not future proofing the situation and these are the basic things that should be done'*
- An elected representative went on to say that flood protection is vital, *'major flood event risk estimates have now been changed, forecasting fewer years between floods, so we have to be prepared for this'*
- STW confirmed that the estimates of major flood risks have been changed, and outlined what is being done to address this
- An environmental group representative argued that *'STW should continue with the R&D work outlined on the presentation boards being exhibited here today, to continue to come up with novel process solutions important to address this'*

8.3. Q19. Is there anything you think is missing?

Table 1

- A conservation representative stated there should be a link between different technological research and the type of development that can be undertaken
- A conservation representative said rain water should be used efficiently
- STW said they are working closely with developing groups

Table 2

- A council officer asked if flood vulnerable areas are being mapped out by STW. Local authorities are already looking at this and some local authorities are already sharing their data and maps with STW. The STW adviser said that this is being done, but there are security issues which need to be considered

Table 3

- An environmental group representative responded to this question by saying *'no, I'd say you're looking at everything you need to look at'*
- Another environmental group representative added *'you need to do a fair degree of engagement with the end consumer in order to help them understand it'*

Table 4

- The general consensus around the table was that STW needs to start educating about the problem

Table 6

- A council officer said the use of language is also important and STW has to *'tailor language to its audience'*

- A council officer wanted a partnership with local authorities. S/he said *'we have started talking to other organisations to expand our plan to cover a broader area and make sure everyone is working towards the same goal'*
- A council officer responded that STW hasn't published much of his/her work with regards to flooding strategy as s/he has to be careful of public sensibilities
- A council officer said s/he had never seen the *'baby bath'* product that was shown in the presentation
- A business group representative said STW has to incentivise more for the public. S/he said STW has to put it more into financial terms
- A council officer remarked brochures such as the one seen today are helpful in seeing what STW is doing

Table 7

- An elected representative stated that *'we need to be creative around how we create catchments, such as water features to hold up water in times of heavy rainfall and help prevent flooding'*
- An elected representative said *'there are 850 new build houses in my ward which are now discharging into a river that has experienced flooding in the past. There needs to be more joined-up planning around new building'*
- An elected representative agreed that there is too much fragmentation in flood management and issues, and that there needs to be a more joined-up approach
- An elected representative added that *'local authorities are under pressure to allow houses to be built and this presents difficulties'*
- An environmental group representative said we need better flood modelling
- An elected representative said that his local authority has produced data from flooding incidents to feed into flood maps, so there is data available for this

8.4. Any other comments

Table 1

- The issues of water trading was discussed
- A council officer said trading water used the most energy out of all the processes undertaken by STW. S/he asked *'is it a matter of principle to source water as local as possible?'* S/he commented there seems to be a conflict in the two principles of moving water and saving carbon
- A conservation representative stated *'the main issue is that there is too much water being taken out of the environment'*

- A council officer stated that the question of demand and the sustainability of demand in each location should be looked at before any development takes place
- A council officer made the point that the movement of water is ok in the short term but in the long term STW needs to look at addressing the problem directly
- A conservation representative stated STW appears to be *'dealing with symptoms rather than the cause'*
- Overall it was agreed the movement of water should be a last resort
- A council officer questioned *'whether customers should have to pay extra if their water has been transported in. Should the flat rate be increased?'*
- A business group representative asked *'how many steps did you have to follow to transport water?'*
- A council officer pointed out that *'John Prescott had made the suggestion to move water via the canal network. 'S/he asked 'is this was still a possibility?'*

Table 2

- No further comments

Table 3

- No further comments

Table 4

- No further comments

Table 6

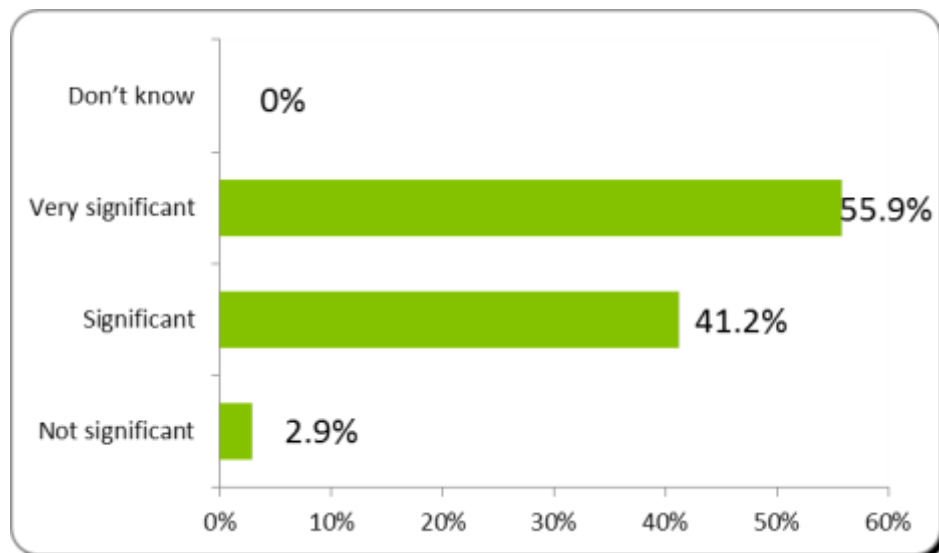
- A council officer noted s/he thinks there are important possibilities in the area of education
- A council officer could imagine droughts and flooding becoming more common
- A council officer wanted better infrastructure to capture the water that falls as rainfall
- A council officer said there has to be *'extra pressure'* on water companies to extract water from the ground
- A council officer asked about the role of the Environment Agency

Table 7

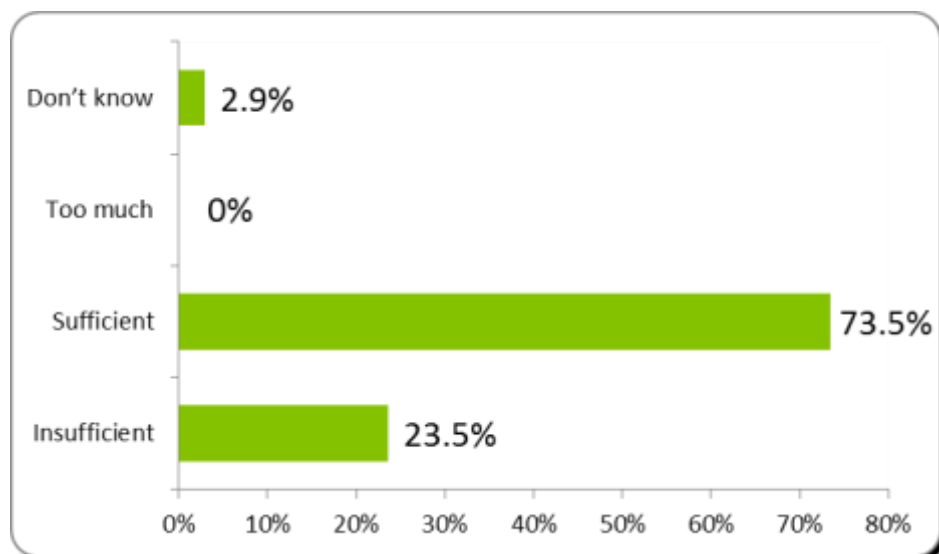
- No further comments

9. Adapting to a changing climate (current priorities)

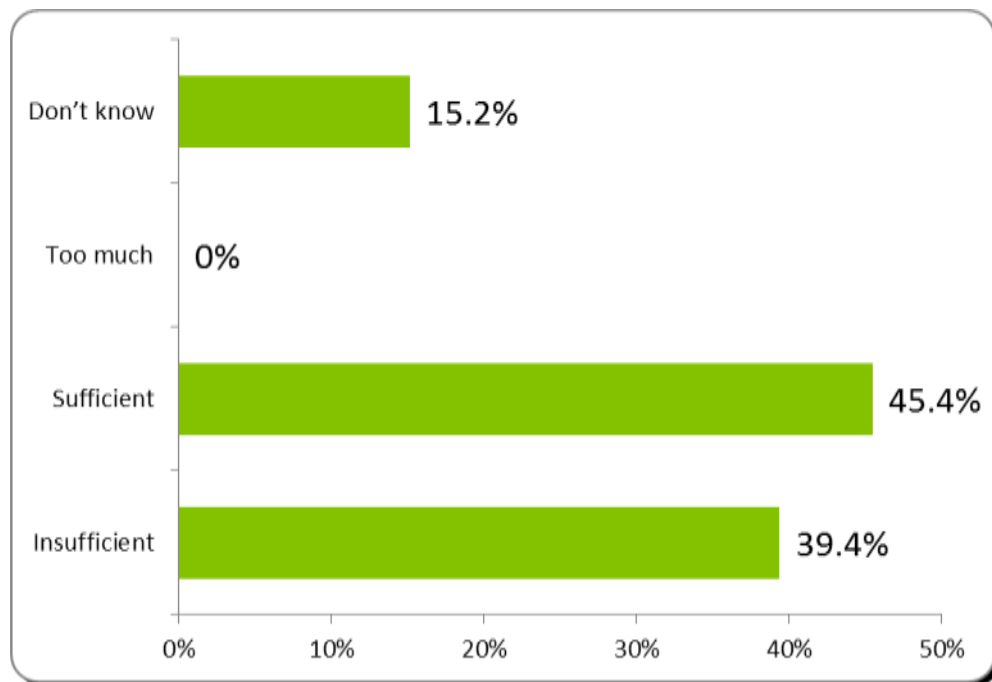
9.1. Q20. How significant do you think the risks of climate change impacts are to the services STW provide?



Q21. Do you think STW is doing enough to cope with the current weather?



9.2. Q22. Do you think STW is doing enough now to prepare for future climate impacts?



10. Adapting to a changing climate (future priorities)

10.1. Q23. To what extent you think climate change presents a growing risk to our services in the future?

Table 1

- It was agreed this question had been discussed previously

Table 2

- A council officer explained that s/he felt that *'drought and heat waves are a big risk going forward'*
- A council officer was of the view that *'the increase in population coupled with an increase in consumption and a warming of the climate will be a big risk moving forward'*
- A council officer felt that the carbon footprint of bottled water should be considered. STW has a good story to tell in comparison

Table 3

- An environmental group representative stated that the impact on resources through traditional leak fixing methods would drive down the economic level of leakages but this would also mean that STW would need to start doubling mains renewal from 1 – 4% per annum and because this is based around a 25-year plan consumers will not see any benefit until 10-15 years' time and questioned whether this was worth the disruption and expense
- A domestic customer representative asked the STW representative *'why does no-one from water companies explain the costs involved with fixing things like leaks to consumers through journalists'*
- An environmental group representative responded by stating that costs were set to *'double anyway'* therefore it is a question of what the money will be spent
- A domestic customer representative asked where this shortfall came from
- An environmental group representative responded by stating that this derived from a growing customer base
- An STW representative added to this point
- An environmental group representative asked the question *'what are the opportunities for water trading with other suppliers to enhance supply in times of difficulty'*

- An STW representative responded to this question
- A domestic customer representative felt that all climate change mitigation should be *'incremental and autonomous anyway'* and that these are all viable things that should be considered. S/he stated *'if you're asking me where I am today it would be incremental adaptation'*
- An environmental group representative agreed that it was critical that SWT invests in its infrastructure. S/he stated *'one of the things I like are your boreholes in Birmingham, I think they are a brilliant idea'*. S/he was of the view that such initiatives sent out the right messages to consumers and were mutually beneficial because they were both low cost and good for the environment
- Another environmental group representative stated that STW should do more to educate consumers
- A domestic customer representative stated that STW should engage in more tangible solutions to get consumers on side and by a lead commentator rather than leaving this area to populist tabloids

Table 4

- A business group representative stated *'very'*
- A developer agreed

Table 6

- There was general agreement that climate change will become an increasingly significant problem

Table 7

- An environmental group representative said this was a growing risk, which was unanimously agreed
- An environmental group representative said there was a need to plan ahead now as it is tricky to determine what level of action is needed now. There is a need to go through the planning phase as soon as possible
- An elected representative argued that *'the investment strategy needs to start now, but we need to avoid unintended consequences of large-scale infrastructure/engineering projects. We need to try and avoid big engineering solutions and develop small-scale solutions, not big projects that need repairing after ten years when the concrete crumbles'*
- A domestic customer representative said the principle of the polluter pays should be the case, and push the costs back up the line
- An elected representative said STW has to answer to its shareholders and is a profit-making organisation. S/he is concerned that the costs of these measures could be externalised and placed on the general taxpayer rather than STW shareholders

10.2. Q24. When planning ahead, how quickly should we take action to reduce the risks posed by long-term changes to our weather?

Table 1

- A business group representative said STW should start '*edging towards front loading, as long as there are no regrets and it deliver's a range of benefits.*' S/he commented that STW should adopt a pay now and have plans for multiple benefits policy
- A business group representative asked '*how will the problem of water shortages be addressed?*'
- STW answered this question
- A conservation group representative asked about the '*approach of how to protect threats e.g. 1 in 10 year event.*' S/he asked '*if the event doesn't happen do we continue to keep the plan?*'
- STW explained the plans in place to protect assets
- All agree there should be some front loading

Table 2

- An elected representative felt that it is all about perception, s/he said the '*public don't accept change, until they realise that change is required.*' An offline watching brief of what is happening is important. Focus groups or surveys on how well the message is getting through and are the public interpreting it the way you want them to
- An environmental group representative explained that the resources available are going to be affected by agriculture in the future, so the way land is managed needs to be considered as they may not have the same level of resources to draw on in the future

Table 3

- An environmental group representative felt that SWT's 5-year business plan was too short-sighted and that the company should have a longer-term plan in place. S/he added that SWT should not become '*a climate change company*' and must instead focus on sustainability and longevity of supply
- Another environmental group representative stated that reliability and uncertainty of long-term changes to weather is a '*real dilemma*'

Table 4

- A business group representative stated that STW should raise the price of the bills. People are willing to pay more if they by doing this they can avoid having longer periods without water
- A council officer stated that bills are not as high as those for other services and that by comparison STW is doing a very good job. If STW does not act now, it will be more difficult for them to raise prices in the future

- A developer agreed that bills are not overly high
- A council officer stated '*STW must plan as far in the future as possible*'. This will help them in planning and financing operations in the future: '*There needs to be a medium and long-term plan for most of the actions that STW undertakes*'
- A conservation group representative stated that there '*needs to be a constant review of the finances and projects of STW*'. Accountability is very important, to the people and shareholders
- A council officer stated that STW cannot have a '*rolling plan*' due to the demands of the energy sector
- A council officer mentioned that a £50 per year increase will upset citizens; however, they will have to pay it eventually
- A business group stated that if the increase is relative to the increase made by other companies, it will not affect STW

Table 6

- A council officer remarked that it '*depends on what you are looking at, for example in terms of short-term vs. long-term*'
- A council officer said '*we need a separation between what are we going to do and we are doing.*' S/he claimed STW needs to plan ahead so that costs are kept down
- A council officer thought you should give advance warning to customers
- A council officer speculated that '*if something is going to happen and we don't know when we can't leave it to chance in the long term, we have to take action now. People want an understanding of the issues now so they can accept it and accept there will be increased costs*'
- A business group representative remarked it is important to keep the core businesses involved. S/he noted some industries won't be very affected
- A council officer thought things that affect a lot of people should be more of a priority in terms of investment and action
- A council officer said it depends on the risk: if the risks are high then STW needs to be able to assess the risks better
- STW explained levels of adaptation
- A council officer said it is better to start long-term action now and spread the risk and costs
- A business group representative said it could be beneficial to think about what we could have done 25 years ago to plan for today

Table 7

- A domestic customer representative said that with SUDS the planning has to take place as developments are built
- S/he continued that *'SUDS should be built into planning permissions now, even if things aren't going to be built for five years'*. S/he also asked how much easier is it to extract water from a full river than to build a reservoir
- STW said there is finite space/storage available to do this, but that it does so on a limited basis at the moment
- An environmental group representative argued that *'when we are in drought the opportunities need to be seized to obtain support for new reservoirs and other measures to address them'*
- While flexible timescales should be adopted, planning is needed now was the consensus

10.3. Q25. What approach should we take to adapting to climate change?

Table 1

- A council officer commented that over a *'wide geographical area'* there needs to be different kinds of solutions on how to reduce the amount of water used. S/he stated it is hard to have a standard approach and instead there should be adaptable leads. S/he said there future and immediate needs should be planned together
- A business group representative felt that there is an incremental approach to the investment of energy efficiency
- A business group representative commented it is cheaper to build small water reservoirs to capture leaks. S/he stated when dealing with leak there should be *'more intervention at a different part of the water cycle'*, in the long term it will be more beneficial than tackling big leaks

Table 2

- A council officer felt that STW needs to curb people's requirements. S/he pointed out that if a resident wanted to use a hose pipe, a system of incentivising residents that use less may prompt them to reduce their usage
- A council officer questioned if the public felt that by reducing wastage it will improve their service
- A council officer questioned if the public actually understood what wastage is
- An environmental group representative felt that residents need to see a balance between *'industry doing their bit and householders doing the same'*. A consistent message needs to go out to all

- A council officer felt that regarding time scales 5, 10, 15 years depends on the asset infrastructure in place, if it is still fit for purpose and the lifespan of the asset
- An elected representative felt a 20-year plan needs to have built in flexibility. Waste management planning has changed in his / her local authority and has been reduced to 7 years. 20 years is too long
- A business group representative spoke about flexible sewage treatment processes, and enquired if this is a possible likely outcome. S/he felt this would save a huge amount of energy
- A council officer commented that STW should work with developers more closely to look for sustainable options for waste water through surface water soakaways etc., in new developments
- A council officer talked about STW's role in liaising with developers. Developers come forward with developments and STW has a dialogue with developers, does it need to be broadened to include more than just supply, s/he asked
- A council officer suggested greater on-going dialogue with developers. S/he felt more pressure needs to be placed on the developers to include BREEAM criteria to their developments

Table 3

- A council officer stated that they would like to see more money invested into educating the population about climate change and *'force developers to integrate grey water and water harvesting into their developments'*
- An environmental group representative stated that it was important for STW to account for its entire *'sphere of influence'*
- A council officer agreed that SWT could even play a part in helping councils implement their local plans to help kick-start the adaptation processes
- An environmental group representative asked whether any incentives exist to help drive the use of grey water
- A member of the SWT team responded to this
- Another environmental group representative felt that STW should store more water to alleviate flooding and work with other extractors such as farmers to help them store water and make *'better use of the water resources available'*
- An environmental group representative asked the STW representative *'at what stage would STW have evidence to make that case and when will you be more certain?'*
- An STW representative responded to this by stating that with time comes *'less certainty and more information about more uncertainty'*

- A domestic customer representative felt that consumers will see this in a different way. S/he stated that the consumer view is that *'water companies should have seen climate change coming and should therefore pay for it'*
- An environmental group representative asked about future opportunities for putting in new local water sources
- An STW representative responded
- Another environmental group representative suggested that STW needs to *'get to a point where you know what the timescales you're working to and the outcomes you're working towards'*
- An environmental group representative stated that as much evidence as possible needs to be gathered to buy time
- Another environmental group representative felt that mitigating leaks might be the *'best value solution,'* although s/he stated that leaks were not necessarily a bad thing and generally have quite a positive impact on the environment

Table 4

- A developer said that it is of paramount importance to involve shareholders in decisions. Involving shareholders will help to increase the bills of the public. The foundation of the public is stronger if all agree to changes and if all take part in those changes
- A council officer stated that since it is very difficult to predict the future, adding that shareholders will be unlikely to vote in favour of drastically changing STW's strategy
- Shareholders and public have a responsibility for climate change, a council officer added

Table 6

- A council officer noted changes aren't going to be only a long-term problem, as they are happening now and are going to increase rapidly
- A business group representative asked *'can STW identify risks in different areas of the region?'*
- STW identified risky areas
- A council officer discussed the specifications of SUDS and community infrastructure levy
- A council officer wondered if the government makes funding available to protect national infrastructure
- A council officer wondered if LEPs would be able to use their resources to help
- A council officer commented that Birmingham had involved the local LEP in their infrastructure projects around water

- A council officer pointed out that another possible partnership is the Local Nature Partnership
- A council officer remarked that developers have a major responsibility in tackling these problems
- STW talked about collaboration
- A council officer said s/he is trying to encourage dialogue between different actors in the field of climate change
- A council officer suggested that the community infrastructure levy should be used more
- A council officer said the local authority has to take the lead to organise partnership to alleviate flooding
- A council officer stated s/he has started a green infrastructure partnership in order to tackle the problem
- A council officer gave the opinion that *'solutions have to be practical and research has to be properly targeted'*

Table 7

- An environmental group representative said there is a need for a balanced approach. Discharge consents, for example, should have some flexibility
- A domestic customer representative said *'we need to take consumers with us, the press is cynical, but we need to do what we can to take consumers on the journey'*
- An elected representative stated that *'If something is manifestly a good thing then it should be done sooner rather than later. But it is all about timing. You need to highlight measures proactively around floods or droughts to take people with you'*
- An elected representative argued that local authorities could pick up some of the costs and invest jointly with STW for specific projects in their particular area

10.4. Q26. There are opportunities for innovation to transform the way we do things, but there are risks associated with them. Should we take them?

Table 1

- A business group representative said *'generally speaking it is autonomous to pick out priorities that go beyond what is already being done'*
- A business group representative commented *'that despite having a plan in place how able is STW to cope if the climate is changing quicker than anticipated. Are you ready to bring plan forward and act quickly or is 5 year plan inflexible?'*
- STW answered question and explained pipelines

- A council officer asked *'in terms of where the major problems lie are they related to flooding or drought? What are the biggest challenges to people?'*
- STW answered both questions
- A council officer commented on the fact the environment agency has taken away extraction licences and this can cause problems when there are shortages. S/he asked *'as a back up is there an option for licences to be given back as a short term solution?'*
- A conservation representative stated too much water is being taken out of the systems. S/he asked *'if this was a reason for the licences being taken away?'*
- A business group representative commented on the fact the environmental agency took away extraction licences due to agricultural reasons. S/he pointed out farmers are encouraged to build small reservoirs
- A business group representative asked how *the 'grab it (short period) approach compares to the sponge approach (long period)?'*
- A conservation representative pointed out installing fixed infrastructure would be a huge cost
- All agreed STW should adopt the sponge approach
- A conservation representative asked *'how far can STW bring forward the investment plans?'*
- STW answered question and explained pros and cons
- A council officer stated that STW should spend more money than OFWAT has limited them to. S/he felt this would enable STW to show innovation above and beyond which is important
- A business group representative commented s/he was happy about innovation. S/he viewed the money being spent by *'private sectors on the supply chain as beneficial as it will help to benefit public sector i.e. universities'*
- A conservation representative agreed and s/he said creative thinking should be nurtured with a creative fund to encourage innovation and lateral thinking
- A business group representative stated it is good to enforce practical changes but rather than just funding the academic side STW should bring in an academic partner
- A business group representative pointed out lots of good ideas have been discussed but they don't show how they will stimulate growth into the mainstream market

Table 2

- A council officer stated that *'SUDS'* is a tried and tested measure of the way things are done. S/he felt lots of businesses already look at the water that they use and it is important that STW works with businesses and other stakeholders like Natural England etc

- A council officer commented that the *'leisure market has no concept of climate change as a whole'*, there is need for leisure firms to look at water levels used and the possibility of grey water

Table 3

- There were very few comments around this question

Table 4

- A developer mentioned that it would be unwise to act too quickly. Preparing for the worst case scenario can hurt the company since the worst case scenario is always changing. All plans must always be subject to scrutiny
- Conservation group representative said new companies should be created, such as *'STW Renewables'* in order to finance future projects. The customer will see that the money is going directly to a cause and it will help also finance the project
- A developer stated that increasing infrastructure levels will help funding future works. Putting a tax into individual people to fund new projects for STW
- A council officer stated that the customers will have a part in innovation. However, the burden on customer should not be too great
- A council officer mentioned that the financial implication of not taking actions is dangerous. The cost of not doing something will be greater than doing it, even though it seems very high
- A business group representative mentioned that costs should be part of the consumer. *'This happens with gas, oil and all of the other resources, so why not water?'*

Table 6

- A council officer suggested pilot projects should be used to find out possible solutions for the future
- A council officer said there had been too much reaction to take decisions, *'we need to be proactive in tackling problems'*
- A business group representative warned adaption must be within reason. *'Projects must be cost effective'*
- A business group representative noted that customers' perceptions about climate change are not focused on water companies
- A council officer said many households have insurance against the effects of climate change such as flooding
- A council officer said risks can be mitigated by pilot projects and sharing the costs with partners

- A council officer asked if there are any international comparisons into research and development

Table 7

- An environmental group representative made the point that there's a risk if you do things, but risks if you don't
- A domestic customer representative expressed concern about flexible discharge consents. S/he felt there needs to be a balanced approach here
- An elected representative agreed, saying it only has to go wrong once to really damage reputation. *'The first salmon to die will create a real problem'* and damage the argument
- A domestic consumer representative said *'flexible is becoming a double speak word, like flexible working, which often meant working longer and harder'*

10.5. Any other comments

Table 1

- A business group representative commented they would like to see evidence of collaboration of partnership and joint investment outside STW
- A business group representative stated STW should work hard to make sure local authorities understand problems it is facing

Table 2

- A council officer asked if STW had examined the possibility of filling aquifers with treated water. The STW adviser said that there are technical issues associated with this but it is something that is on the STW radar
- A council officer felt that resilience planning is needed in the future and the costs associated with making systems more resilient rather than dealing with the consequences is needed
- A council officer felt that the biggest issue of the day is the *'sustainability of water as a resource'*
- A council officer felt that the biggest issue of the day is *'communication'*, and STW needs to look at the criteria and priorities for getting the message out and keeping the public on side
- A council officer stated how impressed s/he was with the level of work that STW is doing with renewables: however s/he asked if the same processes are in place to deliver innovation
- A council officer felt that the biggest issues of the day is *'retro fitting and asset resilience'*

Table 3

- No further comments

Table 4

- A council officer stated the key part of decision making must be addressed. The engagement of shareholders in the making of key decisions is of paramount importance. The directors must have a clear direction on the future of the company and it is of paramount importance that they act a united company with a clear vision
- A business group stated that '*more clarity when we get invoices*'. It is important to show how much STW uses in energy, hoe much comes from renewable energy. This will help the public and society as a whole

Table 6

- No further comments

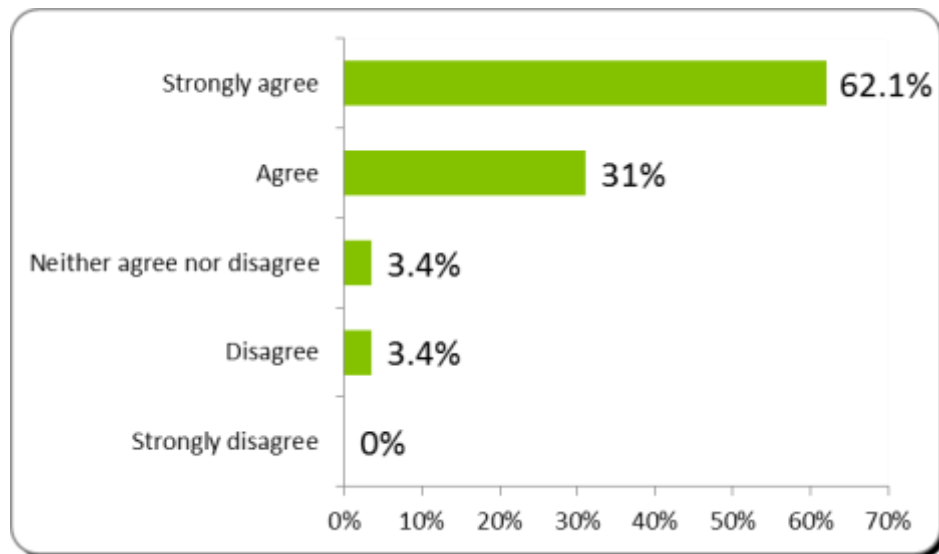
Table 7

- No further comments

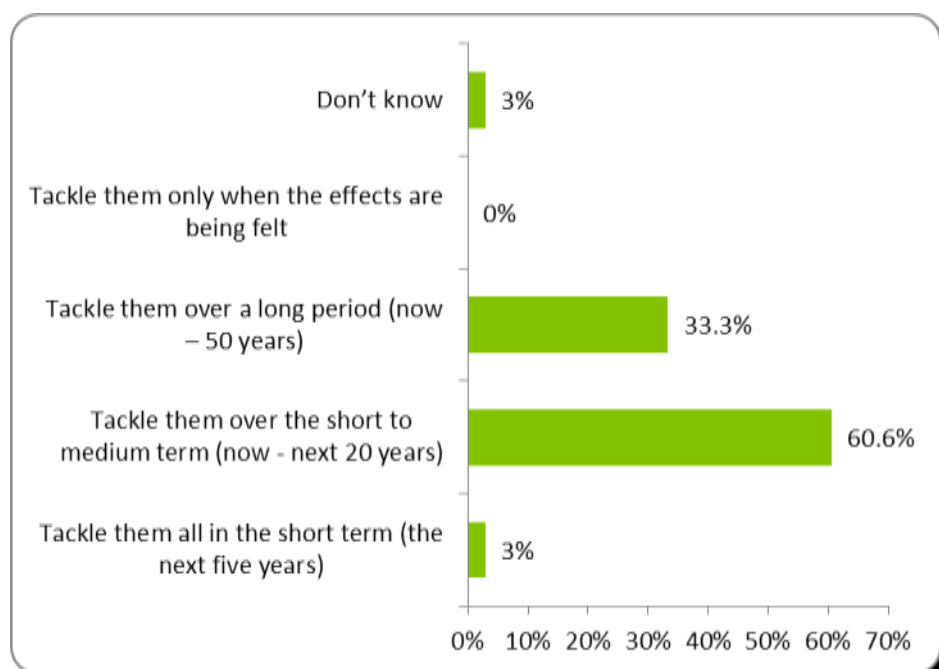
11. Adapting to a changing climate (future priorities)

11.1. Q27. To what extent do you agree with this statement:

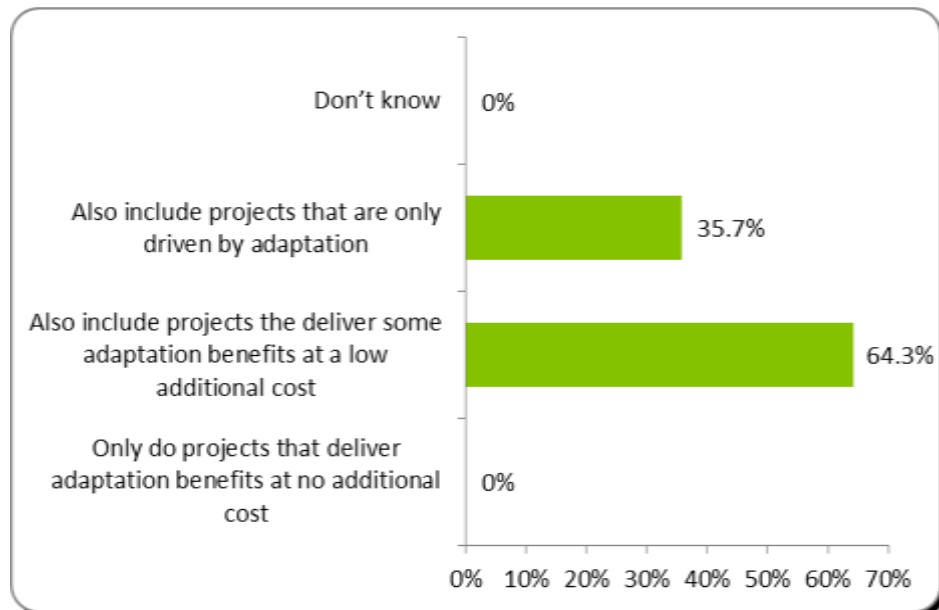
- “ Climate change presents a growing risk to STW’s services”



11.2. Q28. When planning ahead, how quickly should we take action to reduce the risks posed by long-term changes to our weather?

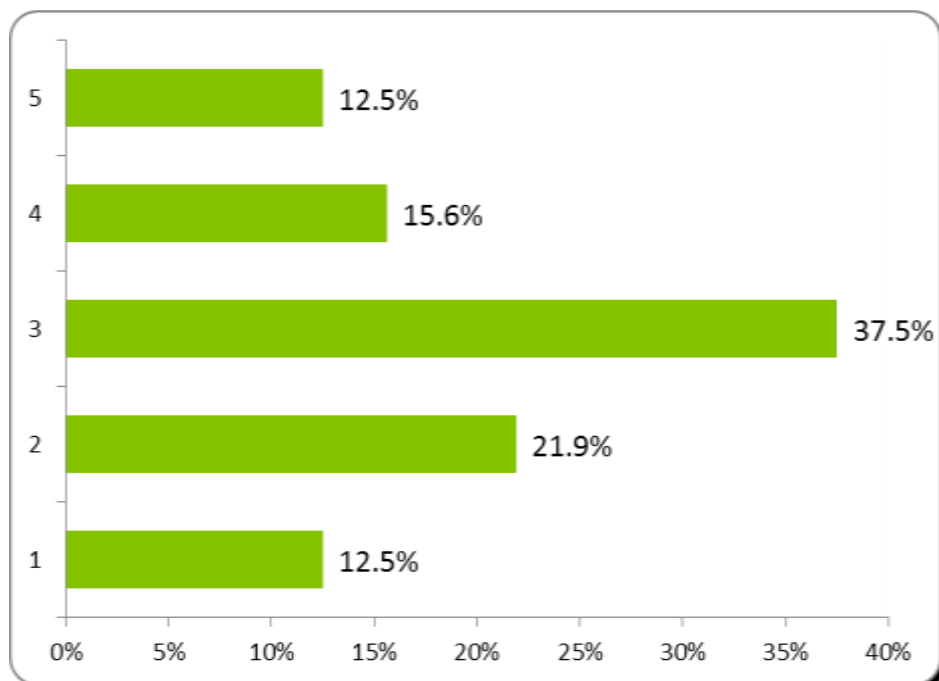


11.3. Q29. How far should we go with our approach to adaptation?



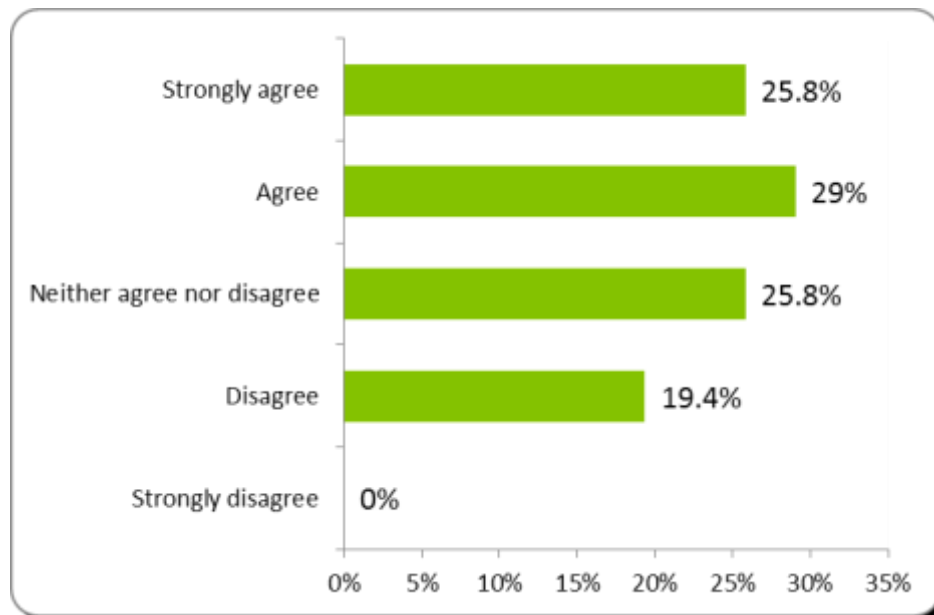
11.4. Q30: If you had to take out an insurance policy against climate change disrupting services, where on this scale would you opt to be?

- 1- Take out lots of insurance against the risk, but at the cost of a high premium
- 5- Don't bother with insurance and carry the risk of something going wrong



11.5. Q31. Considering innovation comes with its own risks, to what extent do you agree with this statement:

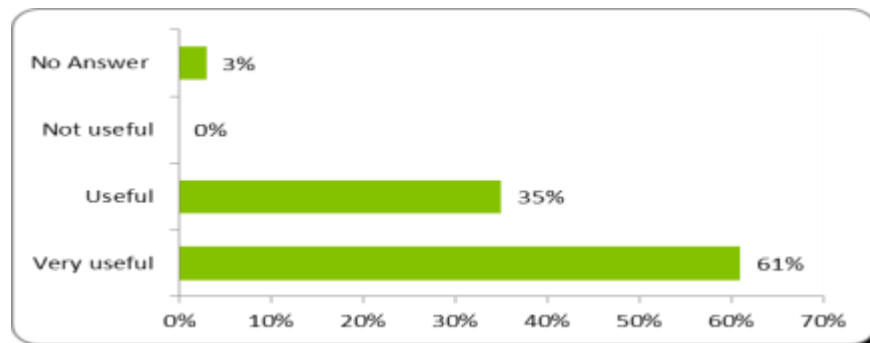
- "STW take every opportunity for innovation presented by climate change"
- Strongly disagree – strongly agree (1-5)



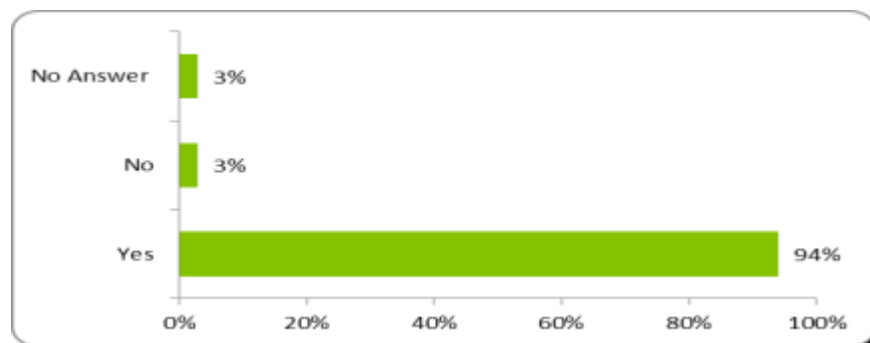
12. Appendix 1: Stakeholder feedback

After the workshop, stakeholders were asked to leave their comments. These comments are shown below:

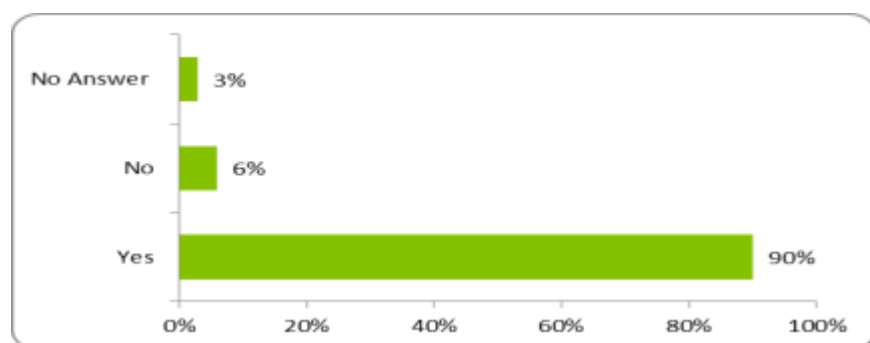
12.1. Did you find the workshop useful?



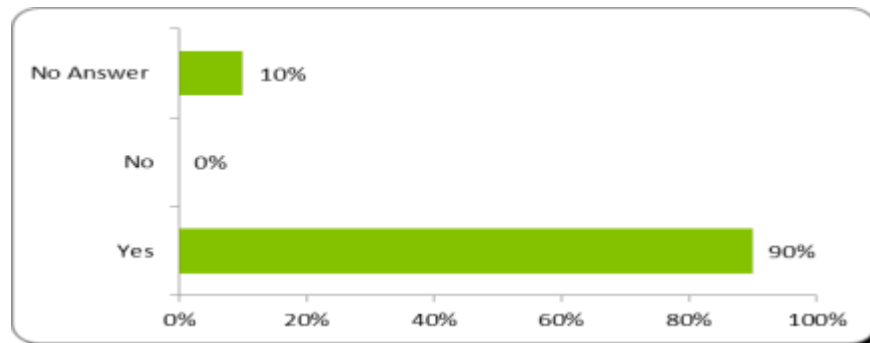
12.2. Was the venue conveniently located for you?



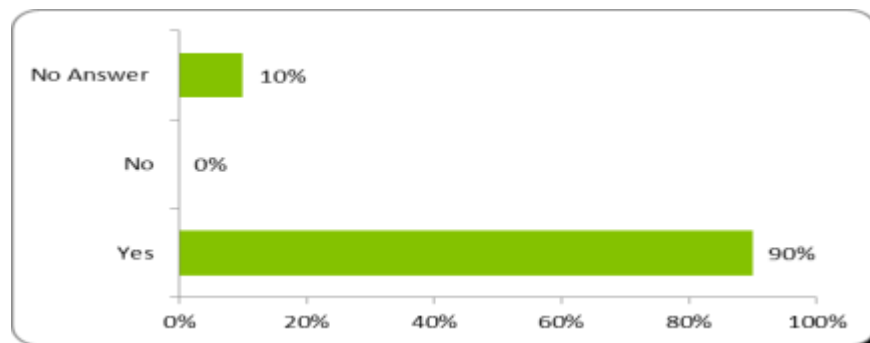
12.3. Did we provide enough information at the workshop



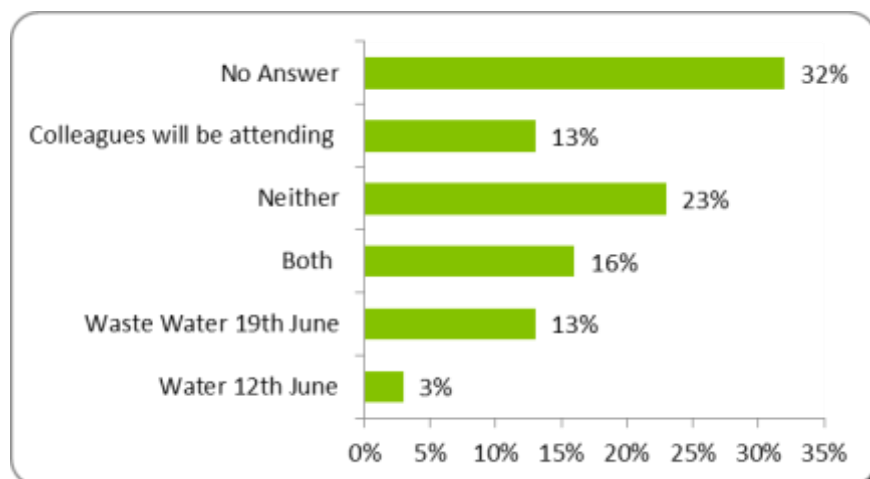
12.4. Did the information stands add value to informing you today?



12.5. Did you feel you had sufficient opportunity to express and discuss your views today?



12.6. Will you be attending one or both of the upcoming workshops?



12.7. Written feedback

A number of stakeholders left written comments on their feedback forms. A sample of these comments is shown below:

- *"Voting system was fantastic. Nice to get immediate feedback to questions"*
- *"Appropriate and informative. Professionally and skilfully run"*
- *"Would have liked to be able to discuss common issues with developers"*
- *"Very good and well organised"*
- *"Facilitator gave everyone opportunity to contribute"*
- *"Break out session very useful"*
- *"Discussions on the tables were sometimes a bit difficult to follow due to the acoustics"*
- *"Good presentation, good participation"*
- *"Delegate list would be helpful. Examples of working with/good practice with stakeholders would be useful for future projects"*
- *"Lots of info in document-but good to have presentations to bring us upto speed during the day"*
- *"Very useful - must have more workshops"*
- *"Need to capture LEPs and more elected members (from a Local Authority). Development industry and businesses are key in this agenda"*
- *"Lots of discussion time which was good"*
- *"Learnt a lot and understood issues better, would have liked to attend more than 1 workshop but couldn't spare the time"*