



## Non-household customer water efficiency survey results

### Introduction

In spring 2020, the RWG water efficiency sub-group was tasked by Ofwat and the EA with developing an Action Plan to deliver greater water efficiency in the non-household sector. A steering group was established late in 2020 to oversee the delivery of the plan; with a wholesaler and a retailer pairing from the steering group each leading three Task & Finish groups.

One of the Task & Finish groups was responsible for looking at actions relating to customer engagement. One action was to review the existing evidence base of non-household customer views and undertake further research where necessary. Through a series of workshops, the group collaboratively designed a 30 question, 10 minute online customer survey to be delivered on a national scale.

### Approach

The survey subjects and questions were developed with reference to the full Action Plan; to ensure that we collected customer insights that we would need to deliver the plan effectively. The full T&F group was involved in identifying gaps in the evidence base and in developing survey questions. We aimed to use closed, multiple-choice questions as much as possible, to make the survey quick and easy to complete and to minimise the need for analysis or interpretation of the results.

To deliver the survey within limited timescales and at low cost, the T&F group's retailer lead agreed that their company (Everflow Water) would prepare the agreed survey on Microsoft Teams and secured the support of several other retailers to distribute the survey to a large number of customers (approximately 60,000) via an email request with a link; with the aim of achieving 2,000 responses. To encourage customer honesty and retailer participation, it was agreed by the T&F group that the survey would be anonymous and not identify each respondent's retailer. It was also agreed that some form of incentive would be needed to boost the response rate – particularly among customers who are less willing to engage with water efficiency. A £1 donation to charity was pledged for every survey response.

Self-suppliers were also invited to participate in the survey, as customers. Slight wording changes were made to a few questions (e.g., removal of 'your retailer' as a potential multiple-choice answer) before the survey was issued to self-suppliers via WaterScan.

The survey opened on 21/07/2021 and the last response was received on 10/08/2021. Responses were stored in Microsoft Forms on Everflow Water's internal server.

Although the survey was designed to require little data processing or interpretation, it was necessary for Everflow Water to complete more data cleansing and processing than

anticipated. Analysis was also undertaken to verify the representativeness of the sample (see below). This work was done by a member of staff with customer research experience and qualifications, with support from MOSL's Head of Data Insights and Analytics. A review group comprising the T&F group leads (from Everflow Water and Wessex Water), together with the Consumer Council for Water (CCW) and MOSL representatives on the RWG Water Efficiency Steering Group, then checked and approved that:

1. This report accurately presents the findings of the survey;
2. The assessment of the representativeness of the sample is fair; and
3. This report addresses the issue of potential bias in a balanced way.

It was also agreed by the RWG water efficiency steering group that for transparency, and to ensure no unfair commercial advantage for Everflow Water or Wessex Water, that the raw survey data would be released to the market, via MOSL, along with this report summarising the findings. For GDPR reasons, the survey data will not be put in the public domain.

## Representativeness of the sample (see further detail below)

As the respondents to the survey were a 'self-selecting sample', it was not expected that this sample would be highly representative. We also did not achieve the aimed for 2000 responses, but 744 retailer customers and 9 self-suppliers responded in England. This may be because it was conducted during the summer holiday period. 25 Scottish respondents were removed from the sample, as well as one respondent whose responses were mostly inappropriate (which cast doubt over whether the few questions that were answered were done so sincerely). The Water Efficiency Steering Group was consulted on whether to extend the survey to increase the response rate; but the steering group took the view that the representativeness of the sample was more important than increasing the sample size.

Further analysis has found that the sample is reasonably representative of the non-household market in terms of industry type; customer size; usage; and geographical spread. However, the main cautionary note to the survey results is that we cannot be sure how far the sample is biased towards customers who are more inclined to engage with water efficiency, so these results are indicative. The survey response rate was ~1.25% which is a very small sample from a large population. This means that the results will not be as reliable as they would be from a more targeted sample in a smaller population. Indeed, a large proportion of respondents said they had already taken action to improve their water efficiency. This suggests that the sample could be biased towards customers who are more engaged with water saving than other customers.

## Key findings

- Awareness of the risk of water shortages is mixed. Around half were aware of the threat. Awareness of the link between carbon emissions and water usage was similar.
- More than a third of respondents thought that water restrictions during a drought could impact their organisations. However, only half of these were previously aware of the threat of restrictions.
- Water retailers (55%), national government (51%), local government (44%), and regulators (40%) were most trusted to communicate the urgency of the water resource situation in the country. More than three quarters of respondents (77%) thought national government should do more.
- Almost half of respondents said they either didn't have consumption data (26%) or didn't look at their data (18%). More than half (56%) of respondents said they needed

better consumption data to be able to monitor, assess and reduce their water consumption.

- Two thirds of respondents supported the idea of a government target to reduce water usage, and 8% opposed this. Almost three quarters (72%) appear open to adopting the target, although only a fifth (19%) would adopt the target with the incentives they already have, with a further 53% saying they might adopt the target 'if it made sense when viewed from all angles'. *As the sample was self-selecting, these findings may be affected by a bias towards customers who are more engaged with water saving.*
- There is evidence of appetite for greater water efficiency. Over a third of respondents scored it a high priority, and 75% of respondents reported having undertaken action to save water in the last 5 years.
- Customers are unclear as to whether they could become more efficient with water. Nearly two thirds (65%) of respondents said they were already using as little water as they could.
- Almost a third (32%) of respondents thought their consumption may increase over the next five years due to expansion. 11% thought this was 'likely'.
- 73% of respondents estimated how much water they thought they could save over the next five years. On average, these respondents estimated they could make savings of 7.5%. *As the sample was self-selecting, this finding may be affected by a bias towards customers who are more engaged with water saving.*
- The top motivators that respondents said would make water saving more of a priority for their organisation were significant financial savings/incentives (47%), followed by better information about their consumption (29%), and reducing the risk of water shortages (28%).
- The current financial incentives for customers to save water (i.e. cost of water efficiency services weighed against bill savings) are far below the level required.
  - On average, respondents wanted to recover the cost of water efficiency investment through savings with 12-18 months. To illustrate, this would mean a saving of 5% for an average user would need to be delivered for just £35.
  - Respondents were also asked what minimum value of monthly savings would interest them. The mean response across all usage levels was a value equivalent to or exceeding the full value of their monthly water bill. The median response was more encouraging, although still around 50% of the value of the monthly bill.

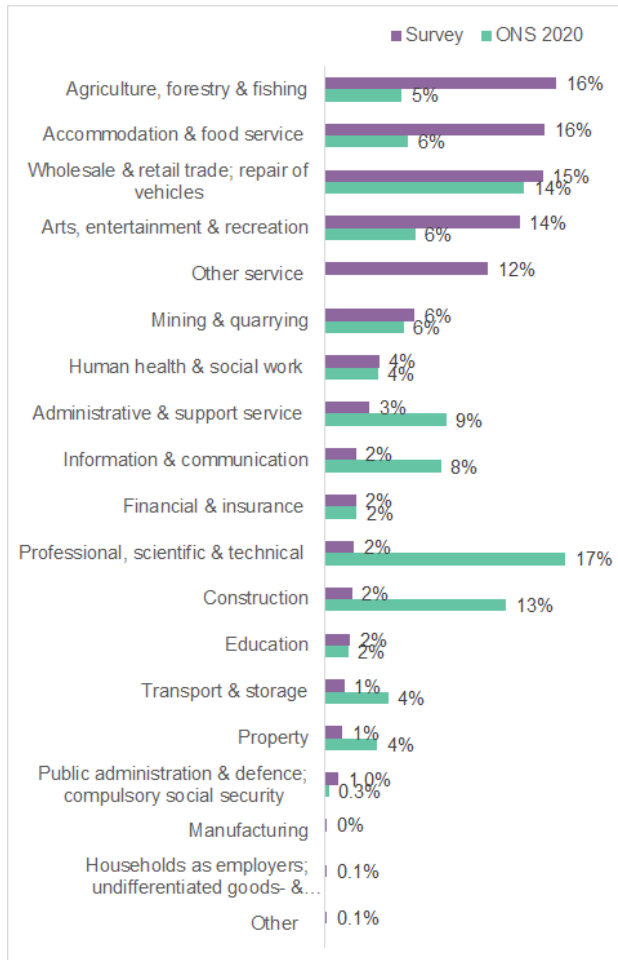
## Sample analysis

### Industry type

Of the 22 sectors that were comparable with the ONS SIC division data for 2020, nine were proportionately represented relative to the wider market. Four sectors were over-represented: Agriculture, forestry and fishing, Accommodation and food service, Arts, entertainment and recreation, and 'Other services.' Six industry sectors were under-represented compared to the 2020 market structure: Construction, Transport & storage, Information & communication, Property, Professional, scientific and technical, and Administrative & support services.

There was nevertheless a good spread of segments, with only three major segments containing 10 or fewer respondents. Some discrepancies between the sample and the business population could be accounted for by our 'other services' category being distributed amongst the other ONS categories. Some sectors, e.g., some construction companies, may be under-represented because they don't always use their own supply, e.g., when undertaking work at domestic properties.

## Q1: Organisation type



## Organisation size

Larger businesses are over-represented in the sample, but not to the extent that the survey results do not include the views of small businesses – with 80% of responses coming from microbusinesses. In fact, the small group reviewing the survey agreed this was actually a good outcome as (a) higher consumers may offer the greatest potential for reducing demand for water, and (b) it was useful to get a slightly larger number of responses from the smaller segments in the market given the overall sample size was lower than desired. Significant differences in responses between larger organisations and smaller organisations will be highlighted throughout the report. Self-supplier responses are included in the presentation of results except in a few cases where the report draws out the self-supplier response separately. This has only been done where there are significant differences between self-supplier views and the views of other large customers, or because the inclusion of self-supplier responses significantly skews the findings.

*Q2: If your organisation operates multiple sites, are you answering for the site at which you predominantly work or for all sites?*

80% of respondents were answering for single site organisations, 7% were from multi-sites but only answering for their own site, and 13% were answering for all sites of their multi-site company.

### Q3: Number of employees

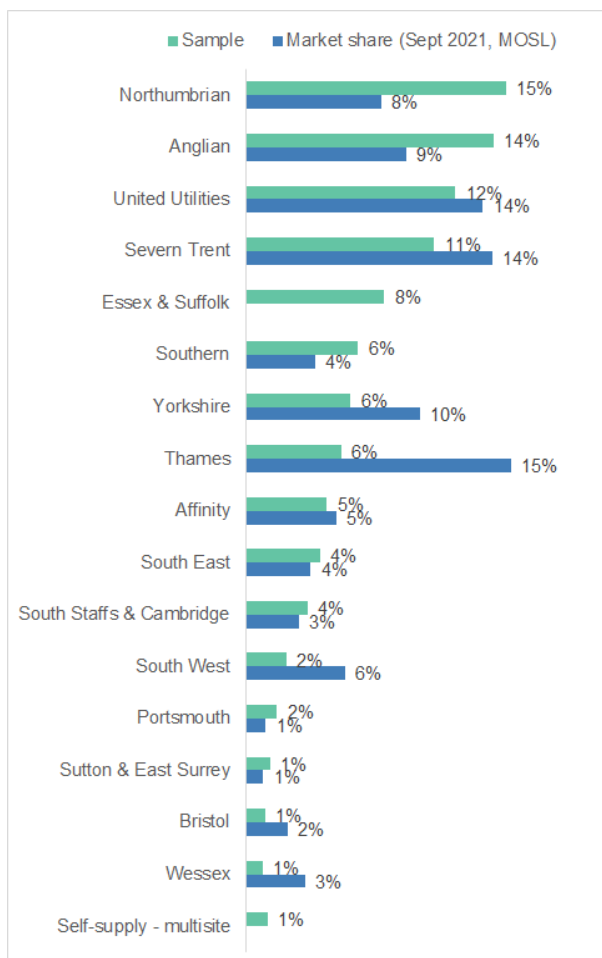
Employees per business/site	Frequencies	Sample	ONS England business workbook 2020
1-9	580	80%	90%
10-49	101	14%	9%
50-249	26	4%	2%
250+	20 (inc. 9 self-suppliers)	3%	0.4%
Totals	727	100%	100%

When comparing usage with business size, usage broadly correlated with the number of employees in an organisation.

### Geographical spread

Respondents in the sample were geographically well spread between Water Resource Regions, including resource constrained and unconstrained areas. As a result, respondents were likely to have received various levels of engagement to date from water wholesalers and retailers about supply and demand issues and the need to save water.

### Q4: Postcode matched to wholesale areas (by MOSL)



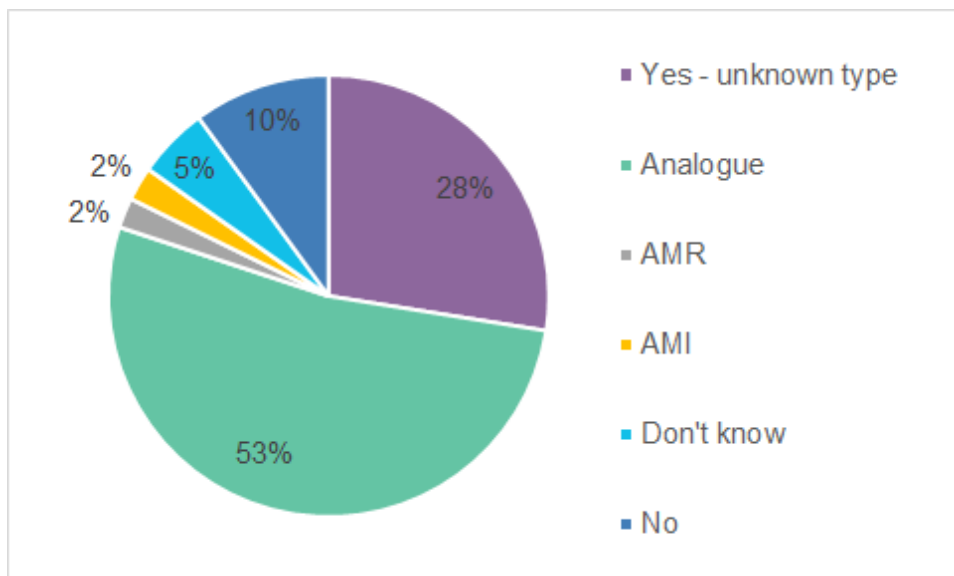
There was overall good geographical representation for England, with only three of the 15 wholesale regions represented by 10 respondents or fewer.

Three areas were over-represented (Northumbrian/ESW, Anglian and Southern) and four were under-represented (Thames, Yorkshire, South West, and Wessex).

### Meter status and usage

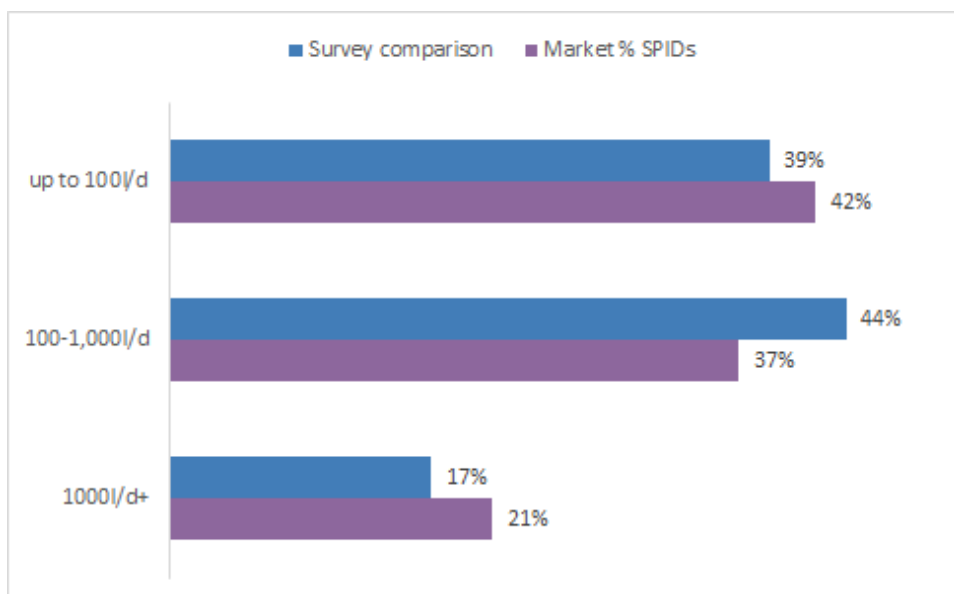
10% of respondents said they did not have a meter/logger, compared to around 11% of SPIDs (according to MOSL data). 38 did not know (5%).

Q10: *Do you have a meter or log your consumption? If you are answering for multiple sites, select the option that best reflects the majority of your sites.*



In terms of usage, the survey was broadly representative of the market, as shown below.

Q11: *How much water does your organisation use? (Check your latest bill or estimate if you don't have a meter.)*



N.B. Survey categories were converted to litres per day from monthly categories. Market categories were combined to match the survey categories and vice versa and do not precisely match, so these are approximate figures.

Q12: *Is your answer above based on consumption data/a device, or was it an estimate?*

More than half (52%) of respondents' answers were based on consumption data from their bills/meter readings/data loggers. The multiple-choice response options to this question were designed to reflect the way volumes are included on bills and to help customers estimate as accurately as possible where necessary, were presented as follows:

- Up to 5 m<sup>3</sup> per month (less than a household would use)
- 5 - 15 m<sup>3</sup> per month (about the same as a household)
- 15 - 50 m<sup>3</sup> per month (more than a household)
- 50 - 100 m<sup>3</sup> per month (significantly more than a household)
- 100 m<sup>3</sup> + per month (high volume user)

The consumption bandings use round numbers for simplicity and are approximate. E.g. household consumption was taken to range from 166 litres/day to 500 litres/day, based on average per capita consumption in England being 142 litres/day in 2019/20.

## Results by question

In order to present the survey findings as objectively as possible, each survey question is presented together with the responses in this section, with minimal additional commentary. Where it was considered useful, and sample numbers by segment were sufficiently large, some question responses have been further analysed by customer segments.

The answers to some of the questions in the survey (particularly questions 17, 18 and 19) do suggest that the self-selecting survey sample could be somewhat biased towards those who are already supportive of the water efficiency agenda, and so may present an optimistic view of customer appetite and support for water efficiency. This would affect the responses to some questions to varying degrees - **but in most cases the review group agrees that it does not make the findings less usable or valuable**. Where relevant, this has been considered in the commentary around each of these questions.

### Awareness questions - national context

Awareness of the risk of water shortages is mixed. Around half were aware of the threat. Awareness of the link between carbon emissions and water usage was similar. This may be a best-case picture of awareness, given that the survey sample may have been biased towards those more engaged with the water efficiency agenda. Regardless of this, there is a clear need to increase customer awareness of the risk of water shortages and the link between water usage and carbon emissions.

Q5: *The Environment Agency said in March 2020 that without action we face a water supply deficit of over 3,400 million litres of water a day by 2050 (about a quarter of the total amount of water currently used each day) due to population growth, climate change and the need to protect and restore the environment. This would pose serious risks to our economy, society and the environment.*

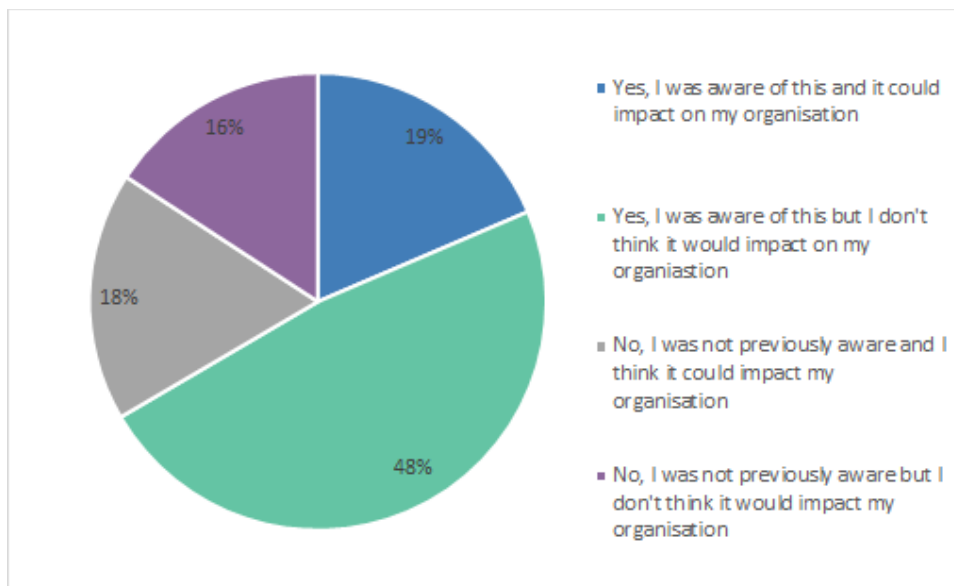
*Were you aware of this? How would you rate your previous awareness and understanding of the pressures facing water resources in this country? 1 being unaware and 10 being highly informed.*

The mean level of awareness was 5.5 out of 10 among respondents. 47% gave an awareness level of less than six out of ten.

Larger organisations (those with more employees) were only slightly more likely to be aware of the threat to water resources.

More than a third (37%) of respondents thought that water use restrictions like temporary use bans and non-essential use bans could impact their organisations. However, only half of these were aware of the threat. Awareness may actually be lower than the survey responses suggest, given the potential bias of the sample towards those more engaged with the water efficiency agenda. It is clear that a significant proportion of customers who could be affected by usage bans need to be better informed of this.

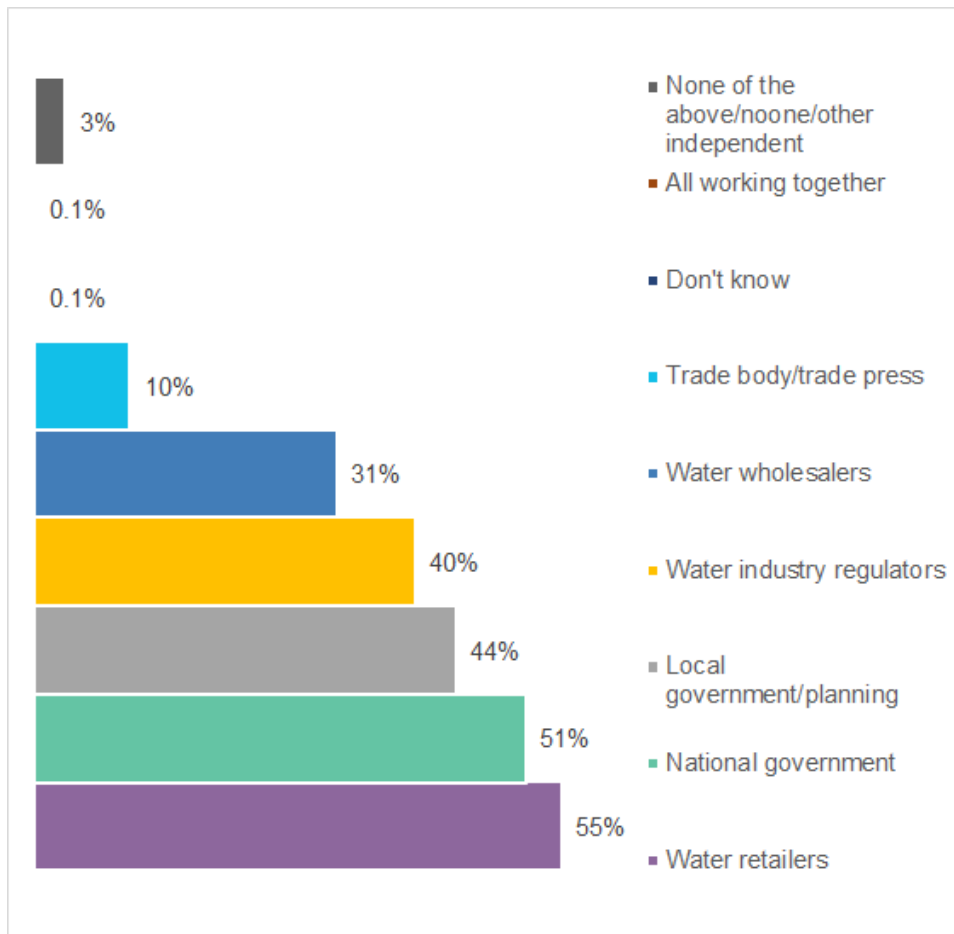
*Q6: All water wholesalers (the organisations which manage the water supply infrastructure) produce Drought Plans that set out how they will respond to extreme periods of dry weather when water resources are stretched. Temporary water use restrictions or 'hosepipe bans' may be used. Under more severe conditions Non-Essential Use Bans could be imposed that restrict organisations from using water for activities such as vehicle washing and sports ground watering. Were you previously aware that some organisations could be required to temporarily cease certain activities that may be core to their business during periods of extreme drought?*



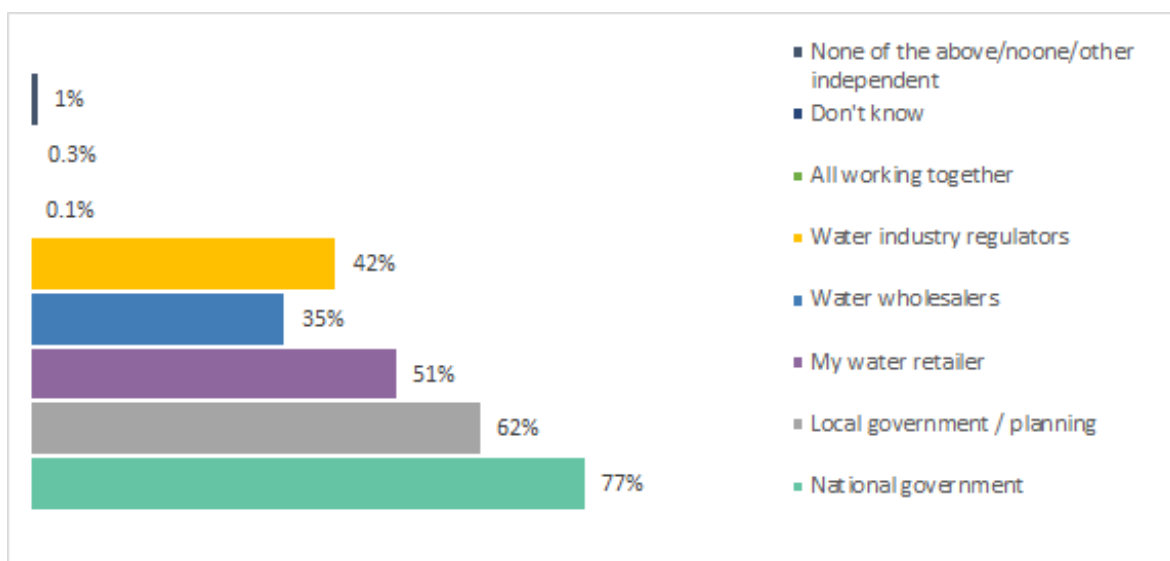
Water retailers (55%), national government (51%), local government (44%), and regulators (40%) were most trusted to communicate the urgency of the water resource situation in the country. More than three quarters of respondents (77%) thought national government should do more, but there was also significant expectation of retailers (51%), regulators (42%) and wholesalers (35%) to do more.



Q7: Who would you trust to communicate the urgency of the water resource situation in this country? Please tick all that apply.



Q8: Do you think any of these organisations need to do more to raise awareness of the threat of water shortages? Please tick all that apply.



Customers were also asked about their understanding of the link between water usage and carbon emissions.

Q9: How would you rate your understanding of the link between your water usage and carbon emissions, especially in relation to hot water usage? (1 being unaware and 10 being highly informed)

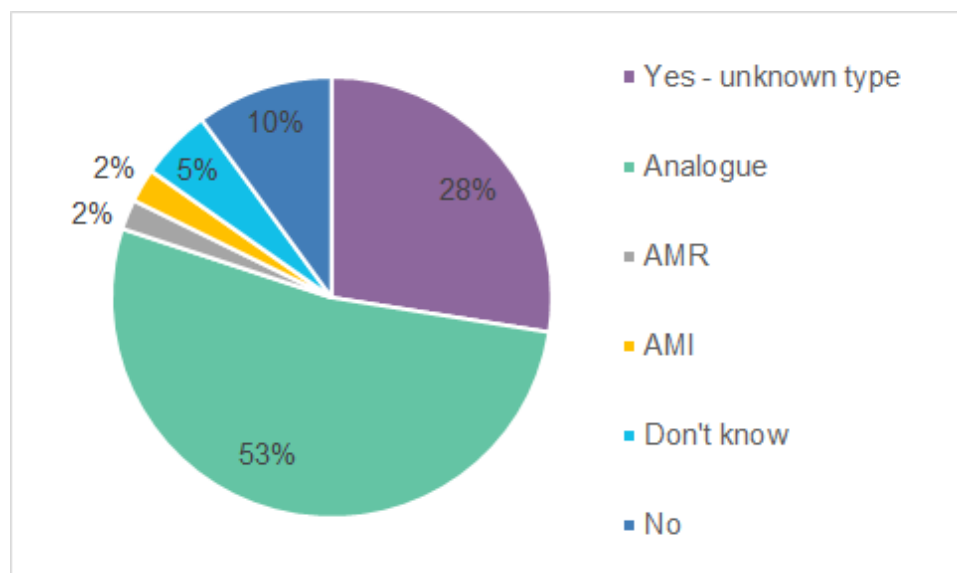
Mean score: 5.78 out of 10. Larger organisation were slightly more likely to have higher awareness.

### Awareness questions - own company

Customers were asked about their consumption and meter status in this section of the survey. Answers to these questions were presented above in the section on the representativeness of the sample, but they are repeated here to draw out the implications from an awareness point of view or give context to other answers.

Larger organisations were more likely to be aware of their meters.

Q10 - Do you have a meter or log your consumption? If you are answering for multiple sites, select the option that best reflects the majority of your sites.



The majority of non-household customers use an equivalent amount of water to a household or significantly less (see page 7). This was also true of the respondents to the survey, with almost two thirds (63%) saying they use about the same amount of water as a household or less. A minority of 18% of respondents (15% excluding self-suppliers) use significantly more than a household.

Q11: How much water does your organisation use? (Check your latest bill or estimate if you don't have a meter.)

Survey consumption category (m3 per month)	Respondents (nr)	Proportion of respondents
Up to 5 (less than a household would use)	286	39%
5 - 15 (about the same as a household)	172	24%
15 - 50 (more than a household)	141	19%

50-100 (significantly more than a household)	80	11%
100 + (high volume user)	54	7%

Q12: *Is your answer above based on consumption data/a device, or was it an estimate?*

More than half (52%) of respondents' answers were based on consumption data from their bills/meter readings/data loggers. By design, the consumption categories related the responding organisation's usage to household consumption so as to make the estimates of consumption reliable enough to use. The alternative to this would have been to offer a 'don't know' option, which risked not capturing much data about consumption levels. Having 52% of respondents answer based on actual data was a surprisingly good result; especially given the answer to question 15.

Larger organisations were less likely to estimate their consumption.

Q13: *Are you aware that any of your organisation sites currently have any leaking toilets, dripping taps, or other pipework issues?*

A significant 15% of respondents were aware that they have leaks on their sites. A further 6% did not know whether there were any. Larger organisations were more likely to know whether they had leaks, and to be aware that they had some. There is therefore a suggestion that customers are currently prepared to tolerate leaks for a period of time before taking action.

This – together with answers to questions 19 & 20 – shows that there is a prime opportunity to deliver greater water saving through a focus on fixing plumbing leaks. The potential financial savings could also be significant enough to be considered an incentive for customers (see findings from questions 28 & 29).

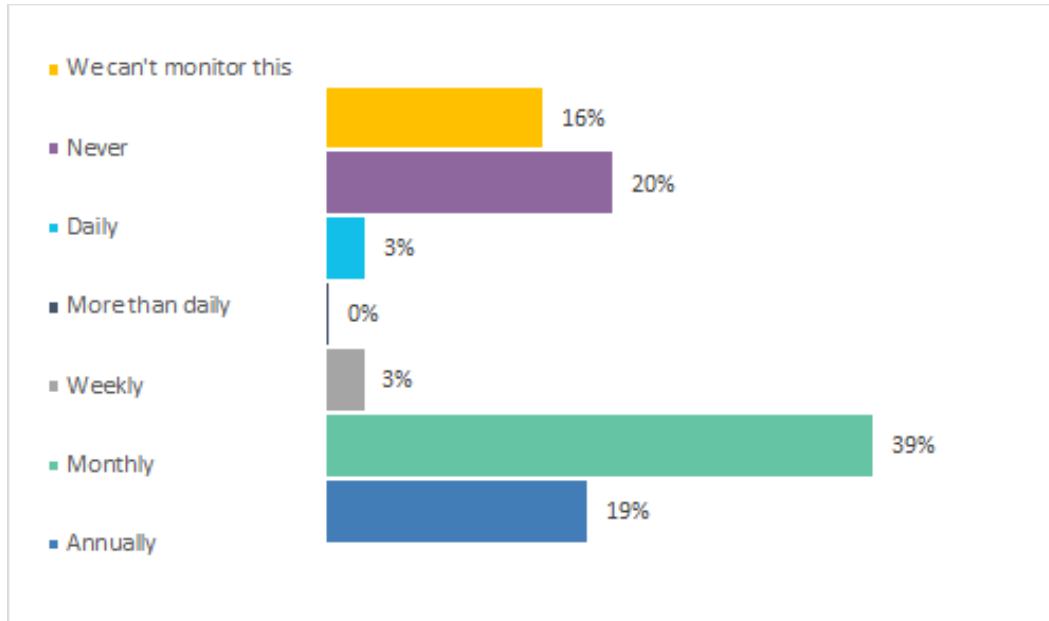
The following questions were designed to understand the extent to which customers monitor their consumption, and how they use their consumption data at present.

The proportion of survey respondents who do regularly monitor their consumption may not reflect the level of customer engagement with usage levels across the market, given the potential bias of the survey sample towards customers who are more engaged with the water efficiency agenda. However, this simply strengthens the case for encouraging customers to engage with and track their consumption.

More than a third of respondents (36%) said they did not monitor their usage – made up of 16% who could not, and a fifth who just don't. 39% monitored their usage monthly and 19% monitored their usage less frequently. Only 10% (73) of respondents identified themselves as unmetered in answer to question 10, although 5% (38) did not know whether they had a meter. So the fact that 16% respondents said that they were unable to monitor their consumption is consistent with this.

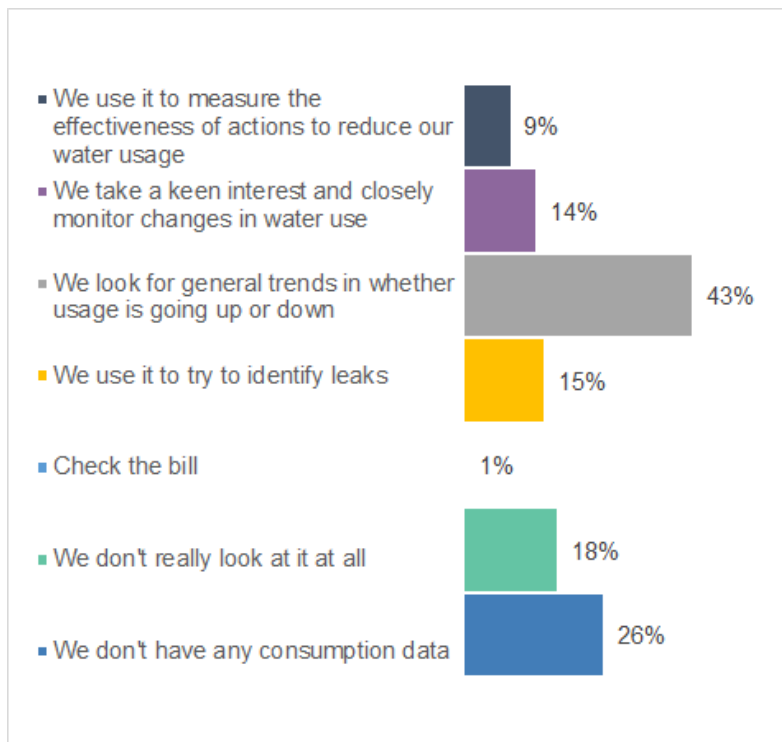
The largest organisations were more likely to monitor their water use monthly or more often. Smaller organisations were more likely to never monitor it, or be unable to.

Q14: How often does your organisation monitor how much water has been used?



When asked how they use the data, 44% of respondents said they either didn't have consumption data or don't look at their data.

Q15: How do you use your consumption data? Please tick all that apply.



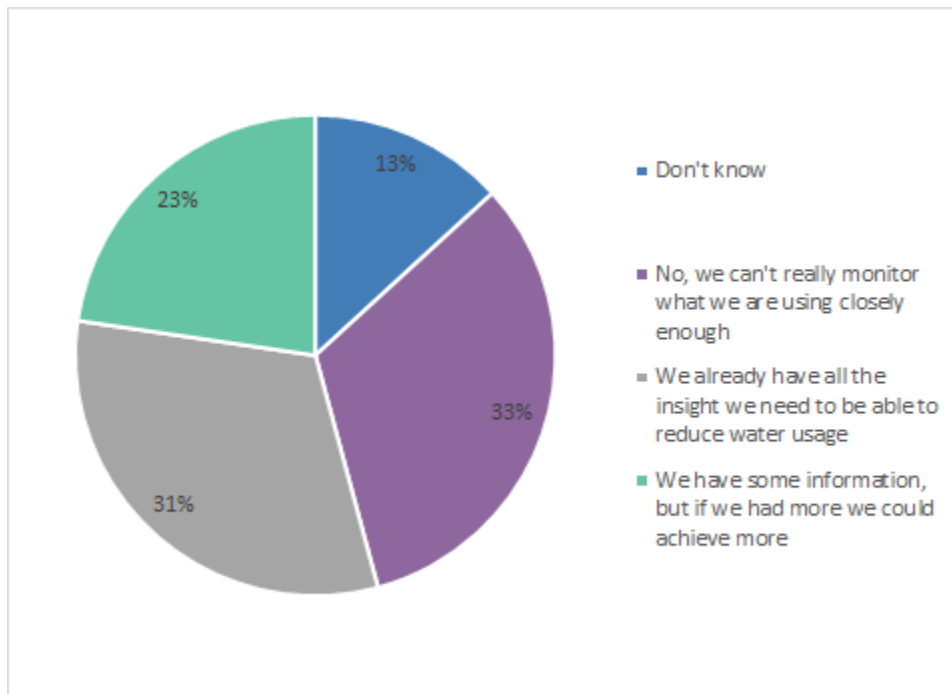
This means that 38 respondents (5%) said they didn't have access to consumption data, but they didn't see this as preventing them from monitoring how much water was being used. It also means that 126 metered customers said they did not have any consumption data. Possible explanations for these responses, as well as 5% of customers saying they didn't know whether they had a meter, include:

- They don't have access to their meter readings;
- They don't understand/their supplier doesn't explain what their meter readings mean in terms of consumption; or
- Their meter has not been read for some time. This seems a plausible explanation, given the number of long unread meters in the market.

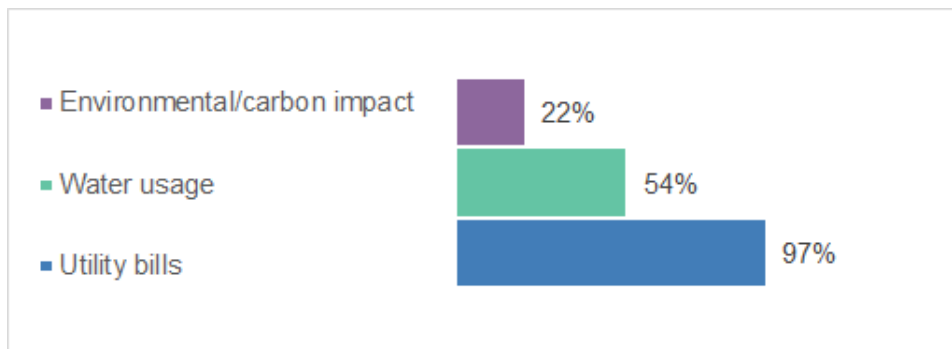
More than half (56%) of respondents said they needed more/better data to allow them to monitor, assess and reduce their water consumption.

Smaller organisations were more likely to say that they don't have enough information to monitor their usage, and larger organisations were more likely to have some information and think there would be potential for them to do more with more information.

Q16: *Do you have enough information (data) to be able to monitor, assess and reduce your water consumption?*



Q17: *Do you have someone in your organisation already designated to manage the following? Please tick all that apply.*



Nearly all (97%) respondents said they had a designated person in their organisation to manage utility bills, but only half (54%) said they had someone designated to managing water usage. However, this was more than double than the proportion (22%) with a designated person for managing the organisation's environmental/carbon impact.

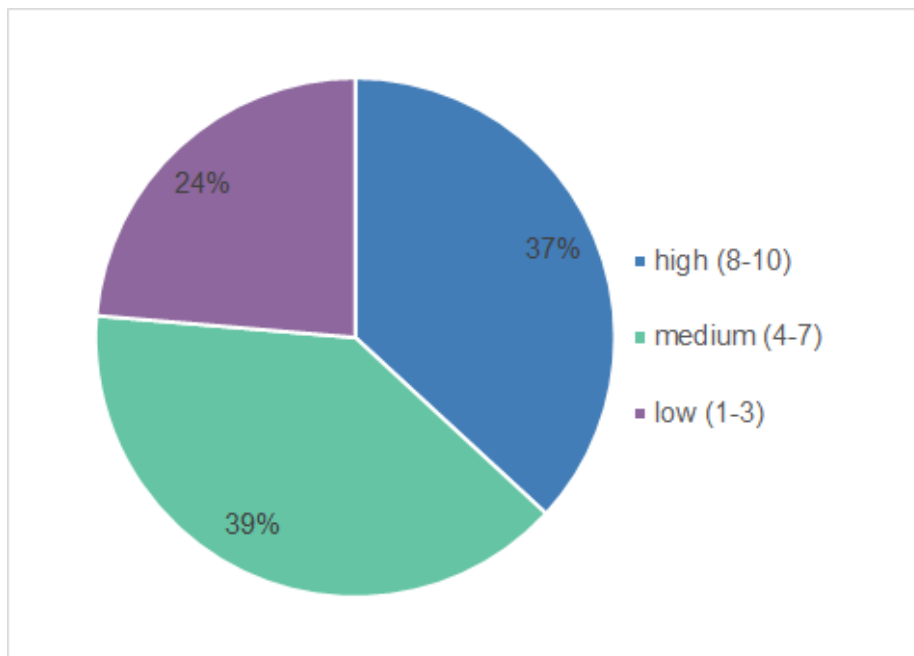
A key first step to delivering water efficiency is getting the customer to engage with their usage, and there is a clear need to strengthen this engagement. The findings from questions 14, 15 and 16 indicate that in order to increase customer engagement with their water usage, customers will need access to more consumption data than they currently have.

### Appetite for greater water efficiency

More than a third (37%) of respondents rated water efficiency as a high priority for their organisation, 39% rated it a medium priority and less than a quarter (24%) rated it a low priority - so a mixed picture. This might present an optimistic picture if the sample of respondents was biased towards the water efficiency agenda. Some respondents may also have wanted to 'say the right thing'. What we can conclude is that the majority of customers do not see water efficiency as a high priority for their organisation at present. However, over half (57%) of respondents gave an answer of 6 or higher which, together with other survey findings, suggests that with the right interventions it would be possible to shift the balance towards the majority seeing water efficiency as a high priority.

The largest organisations were more likely to see water efficiency as a priority but this may be because they were more likely to have dedicated facilities managers answering the survey.

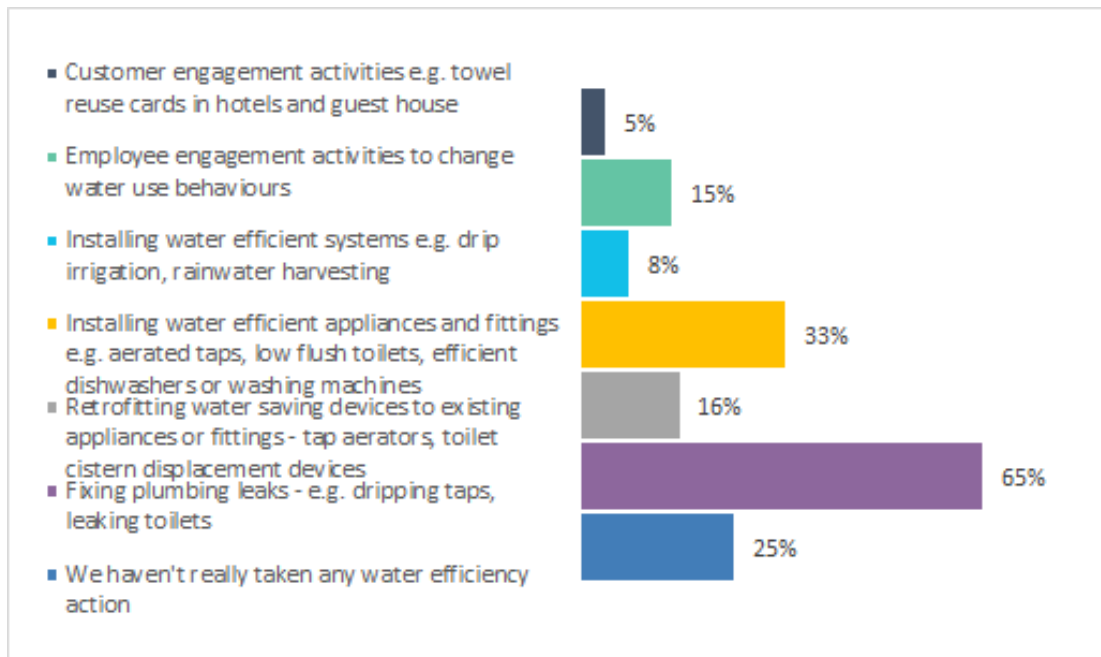
Q18: *Considering all your organisational priorities, how important is water efficiency currently on a scale of 1 - 10? (1 being low and 10 being high)*



Mean score: 6.04

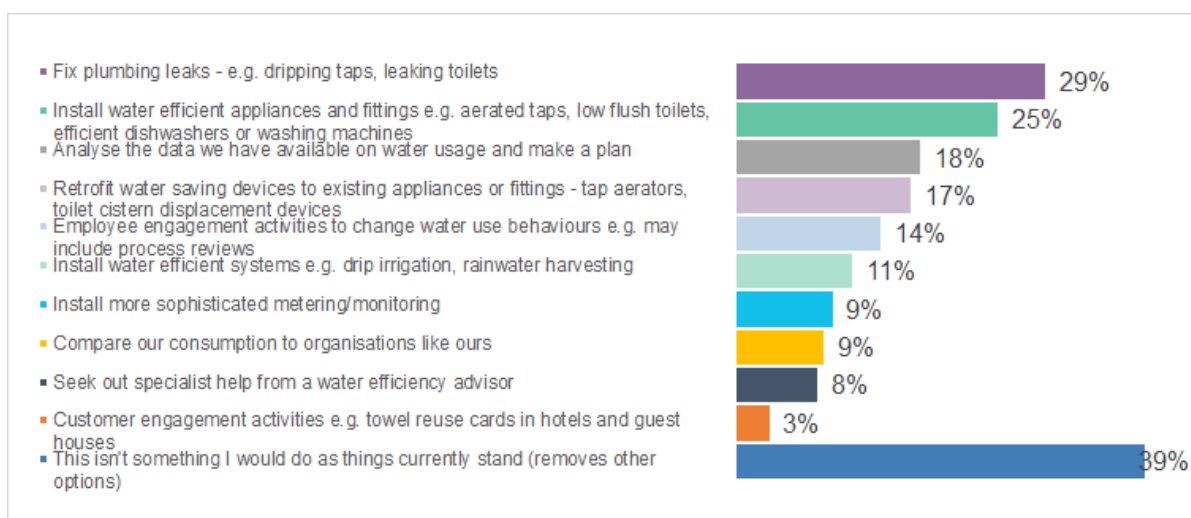
Most (75%) of respondents had taken some kind of action to save water within their organisations in the last five years. The most common action was fixing plumbing leaks (two thirds) and another third had installed water efficient appliances and fittings.

Q19: What actions have you taken (if any) in the past 5 years to save water within your organisation? Please tick all that apply.

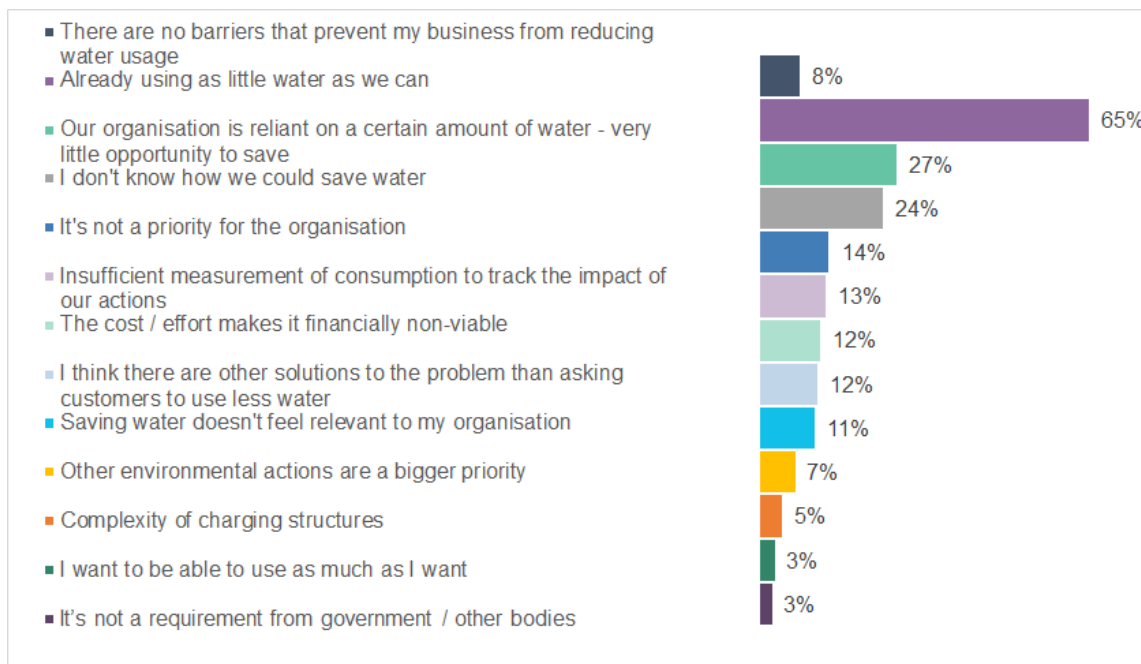


39% of respondents said they wouldn't take any further water efficiency action in future. This may be because nearly two thirds (65%) of respondents said in answer to Q21 that they were already using as little water as they could. Nevertheless, a good number of respondents envisaged themselves taking similar action in future to the most common actions taken by respondents in the past – with leak repairs and the installation of water efficient appliances and fittings featuring the most prominently on the list of possible actions.

Q20: If you were trying to reduce your water consumption (further), what would your first steps be? Please pick up to three.

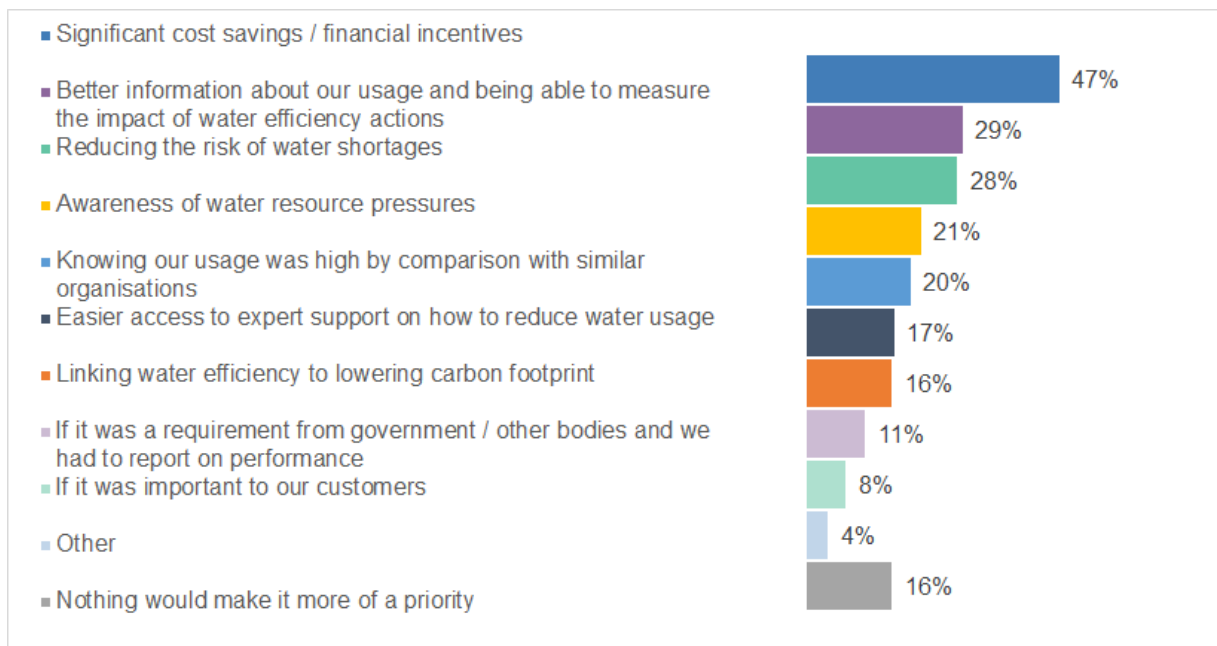


Q21: What are the top 3 things that prevent you from saving water? Please select 3 options, or the first option 'There are no barriers'.



Very few respondents felt there were no barriers to saving water (8%). However, aside from a widespread feeling that respondents could not save any more water, there was not a strong consensus on what other barriers there were. Notably, almost a quarter said they did not know how they could save water (24%).

Q22: What would make water efficiency more of a priority for your organisation? Please select your top three, or the last option (nothing).



Nearly half (47%) of respondents identified significant cost savings/financial incentives as one of their top three things that would make water efficiency more of a priority for their organisation. Being able to measure the impact of any measures they take (29%), being



more aware of water resource pressures (21%) and being able to reduce the risk of water shortages (28%) were frequently selected, and a fifth cited knowing they used more than comparable organisations.

Less than a fifth said easier access to expertise on how to go about reducing water usage or linking water efficiency to lowering their carbon footprint would provide greater motivation. 16% said nothing would motivate them to save water. This could be linked to their belief that it is not possible for them to save water or they have already saved as much as possible in earlier questions.

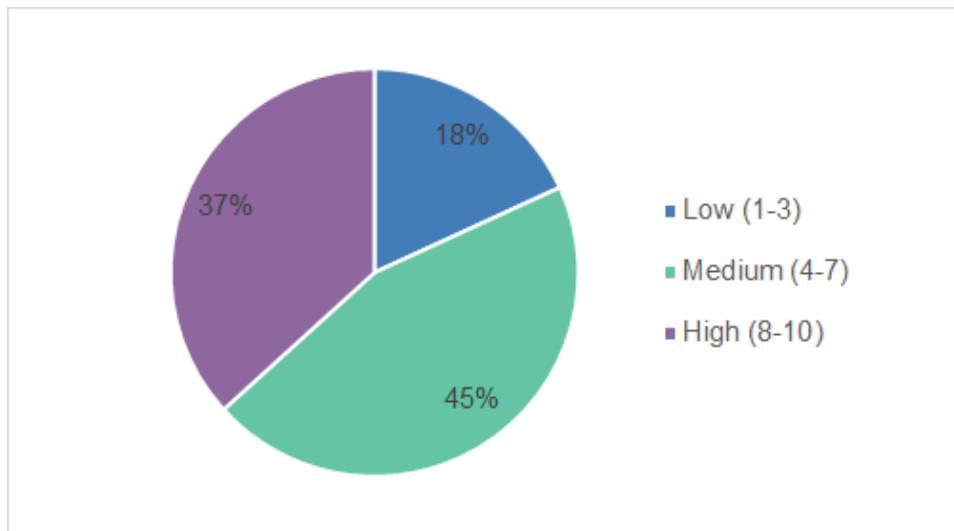
Respondents didn't see the cost of water efficiency services as a *barrier* to water efficiency, but they did identify significant cost savings as their best *incentive* to making water efficiency more of a priority for their organisations.

### Views on water industry action

Most respondents rated the importance of retailers' water efficiency services when choosing to switch or stay with their retailer as medium or high, with less than one in five (18%) rating it less than 4 out of 10. Answers to this question were consistent with question 18. However, this may be suggestive of a sample that is more sympathetic to the water efficiency agenda than the average non-household customer.

Larger organisations were more likely to rate this as a higher priority.

Q23: *On a scale of 1-10 how important is a retailer's water efficiency service when choosing to switch or stay with your retailer? (10 being – it's the most important consideration, 1 being – it's the least important)*

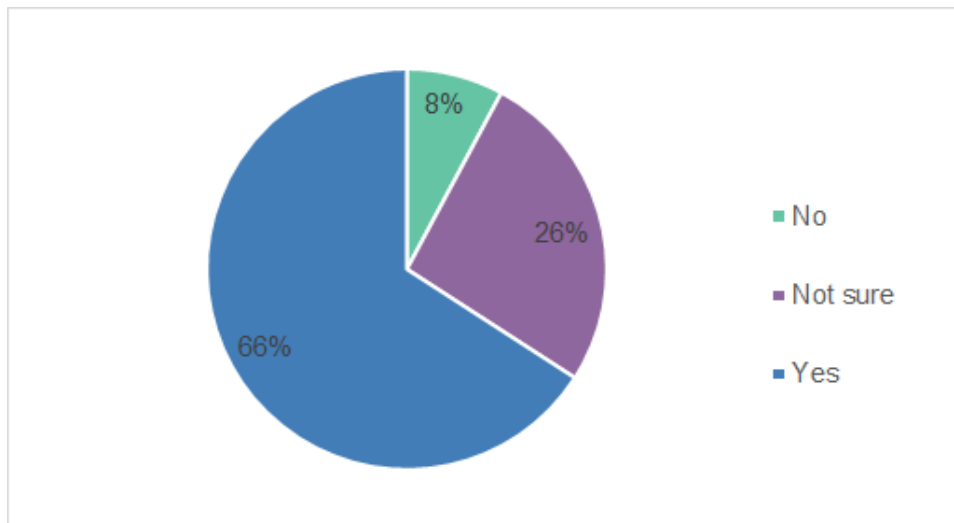


The average (mean) score was 6.11 out of ten.

Only 8% of respondents opposed a national government target to reduce overall organisation water use if it was supported by evidence of what is achievable. A quarter (26%) were unsure, and two thirds supported the idea.

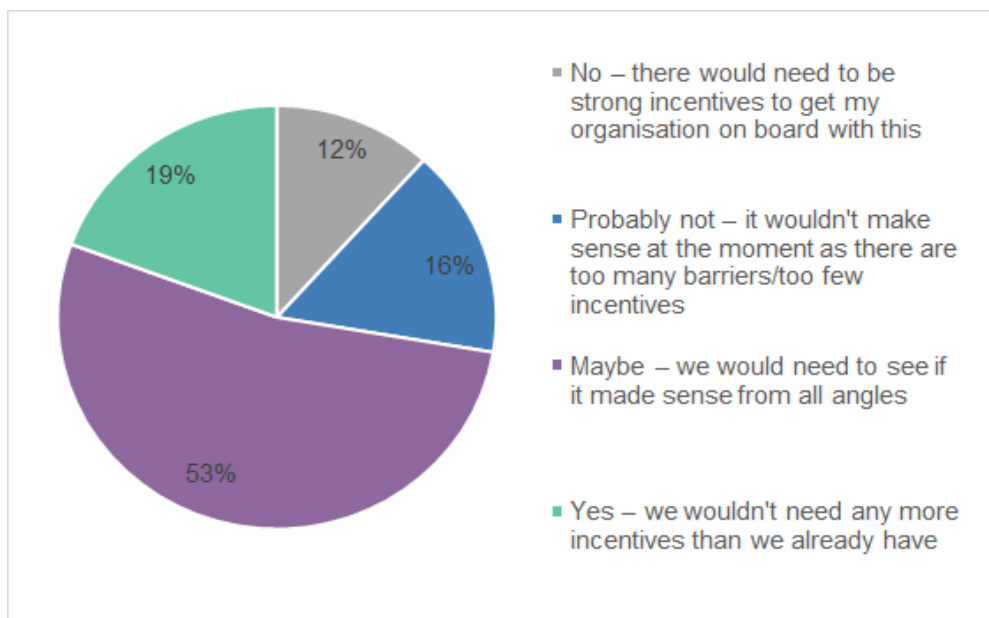
Smaller organisations were less likely to support a government target or not have an opinion.

Q24: Do you support the idea of a national government target to reduce overall organisation water use, assuming it was supported by evidence of what is achievable?



Nearly three quarters (72%) of respondents were open to adopting the target, and 19% said they would be ready to invest time and money in saving water, compared to 28% who said probably or definitely not. It is important to recognise that this level of apparent support may be reflective of a sample that is already sympathetic to the water efficiency agenda. The answers to questions 22, 28 and 29 suggest that customers will need stronger financial incentives for adoption of the government target to 'make sense from all angles'.

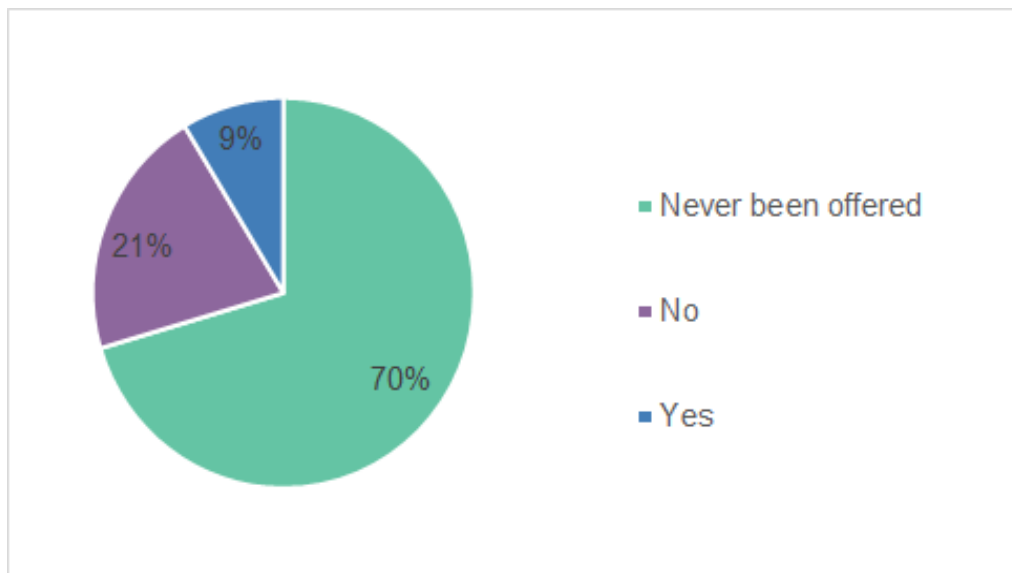
Q25: Would you adopt the target and be prepared to invest time and money in saving water?



More than two thirds (70%) of respondents said they had never been offered water efficiency services by either their wholesaler or retailer. Of those who had, less than a third had taken them up.

The largest organisations were more likely to have been offered water efficiency services and taken them up.

Q26: *Have you ever taken up offers of services from a water provider (wholesaler or retailer) to help you reduce water consumption?*



The most frequently cited reason given by respondents who had not taken up water efficiency offers before was a lack of offers being promoted to them, and therefore their lack of awareness of these offers (so not a reason why they had actively decided against using water efficiency services, but rather evidence that more like 83% of customers could not recall ever being offered water efficiency services by a water provider).

Clearly retailers should consider how to increase customer awareness of the water efficiency services they offer.

Question 27 was intended to tease out why customers may have actively decided against using water efficiency services. There were some common themes that emerged – including that respondents considered their usage to be very low or minimal already, or that it wasn't worthwhile for them.

Q27. *If no, why not?*

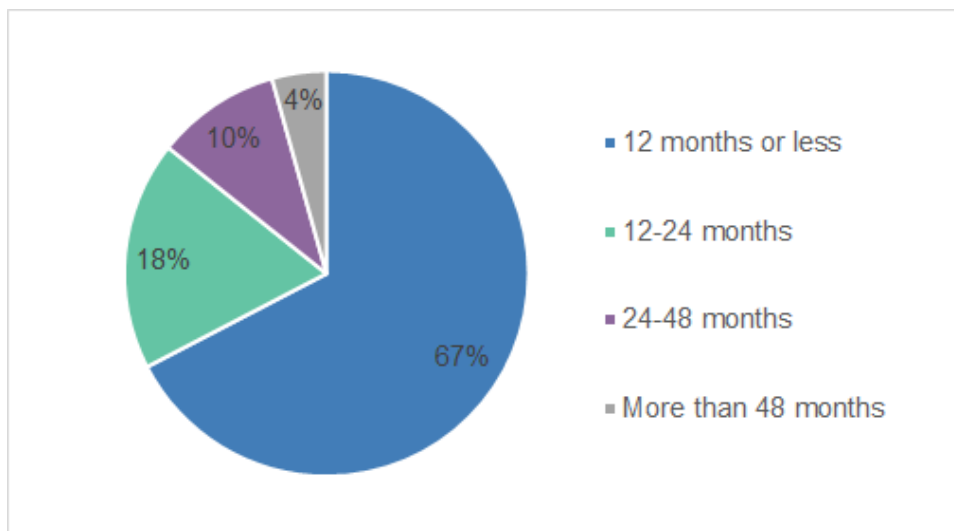
Reason	Frequency	%
None offered/unaware	58	42%
Very low usage already	31	22%
Wouldn't work/add value to own activities	22	16%
Not thought about/new business	6	4%
Cost/time vs benefit	8	6%
Don't see the need/not a priority	6	4%
Poor relationship with retailer/wholesaler	3	2%
Other	4	3%
Total	138	100%

The following questions help to dig deeper into the level of financial incentive that respondents said they would need in order to be motivated to take water efficiency action.

Customer expectations are high. Two thirds of respondents who gave an answer said they would want to make their money back in 12 months or less to justify the investment in water efficiency, and 85% within two years.

*Q28: How quickly would you want to make your money back to justify the investment in water efficiency? Please state in number of months.*

Most respondents gave an answer to this question. The average (mean) answer was 17 months. 47 said they didn't know, and 126 responses could not be used because their answer was not in a format that could be converted into months (e.g. answers in words, such as 'we use too little to make it worth investing').



In practice, that is challenging:

#### **Low user**

For a customer annual bill of £100, an intervention that saves 5% of consumption saves £5. Therefore, to achieve a 17-month payback, the intervention could not cost any more than £7.83.

#### **Household level user**

For a customer annual bill of £500, an intervention that saves 5% of consumption saves £25, so to achieve a 17-month payback the intervention could not cost any more than £35.42.

#### **Above average users**

On an annual bill of £2,000, an intervention that saves 5% of consumption saves £100, so for a 17-month payback the intervention could not cost any more than £141.67.

#### **High volume user**

On a customer annual bill of £10,000, an intervention that saves 5% of consumption saves £500, so to achieve a 17-month payback the intervention budget would be £708.33.

High volume users were more likely to be prepared to accept a longer payback. Users of 100 m<sup>3</sup> per month or more (excluding self-suppliers) gave an average (mean) response of 23 months, while the average answer of the 9 self-suppliers was 41 months.

Q29: How much would the total value of savings need to be per month? Please answer in GBP.

Respondents appeared to find this question difficult to answer, but most (460) did respond. 114 responded to the effect of 'don't know' and 167 answers could not be used – mainly because they were not submitted in the requested format of GBP. A small proportion of responses were excluded as anomalous responses that would have skewed the mean result (e.g. £1m savings per month).

Customers' views about the value of savings per month appear to vary more significantly than their expectations about the payback period, which can be seen in the gap between the mean and median values.

### Mean values

These pose an even greater challenge than the expectations around the payback period for the water efficiency investment. The mean desired level of savings is at least equivalent to the value of a monthly bill – if not in excess of it.

Average answer (mean) = £163.13 per month (excluding self-suppliers)

Usage	Average (mean) desired saving per month
100m <sup>3</sup> per month +	£2050.61
50-100 m <sup>3</sup> per month	£90.68
15-50 m <sup>3</sup> per month	£103.44
5-15 m <sup>3</sup> per month	£43.92
less than 5 m <sup>3</sup> per month	£22.19

### Median values

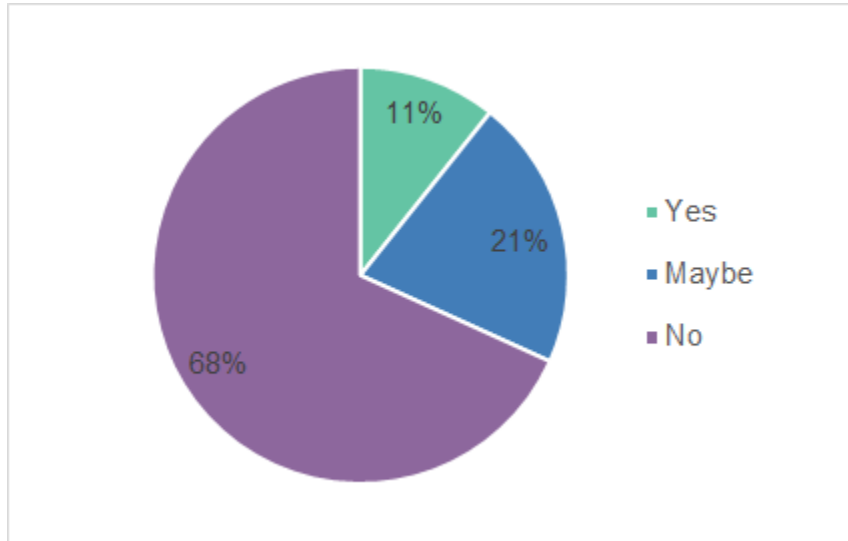
However, the median values show that a good number of respondents are interested in saving smaller amounts – although these values are still equivalent to about 50% of the monthly bill for the majority of respondents.

Usage	Average (median) desired saving per month
100m <sup>3</sup> per month +	£100
50-100 m <sup>3</sup> per month	£75
15-50 m <sup>3</sup> per month	£30
5-15 m <sup>3</sup> per month	£20
less than 5 m <sup>3</sup> per month	£10

Almost a third (32%) of respondents thought their consumption may increase over the next five years due to expansion. 11% thought this was 'likely'.

Larger organisations are most likely to be expanding in the next 5 years, leading to increased water usage.

Q30: *Is your organisation likely to expand over the next 5 years, leading to increased water usage?*



On average, respondents estimated they could make savings of 7.5% over the next five years. A quarter (175) said they couldn't save anything.

Q31: *Based on what you know (and taking account of your previous answer), how much do you think you could reduce your consumption by over the next 5 years? Please estimate in percentage terms (multi-sites refer your answer to Q3)*

- 73% of respondents (532) answered this question.
- 175 of respondents gave an answer of 0%. 40 of these – almost a quarter – had said their organisation's consumption may or is likely to increase. 2 further respondents said their consumption would increase, rather than giving a response of 0%.
- 6% of respondents thought their organisation could save 20% or more.
- Almost a fifth (19%) of respondents though their organisation could save 10% or more.

The responses can be further segmented by consumption:

Estimated saving / usage per month	100+ m3	50 - 100 m3	15 - 50 m3	5 - 15 m3	Up to 5 m3
Mean saving	9.7%	8.7%	9.6%	7.0%	6.1%

Larger organisations were more likely to have the potential to save more than 5% in five years, but middle-sized organisations could have more potential to save larger amounts (20%+). Large users (over 100m3/month) were three times more likely to say they could save 10% or more than nothing. Lower volume users (up to 15m3/month) were more likely to answer 0%; although a significant proportion did think they could make could some water savings.

251 (35%) didn't or couldn't answer.

- 6 said their organisation would be closing.
- 5 said their consumption was weather dependent.
- 96 (13%) said they didn't know or couldn't estimate.
- 86 (12%) gave an answer that could not be interpreted – mostly because the answer was not numerical, e.g. 'very little'.

The response to question 30 must be handled with care, given that the survey sample could include a higher proportion of customers who are supportive or sympathetic to the water efficiency agenda than exists in the market more widely. The question of what savings may be achieved by the non-household market as a whole is highly dependent on the proportion of customers who engage with water efficiency in future.

## **APPENDIX A: survey questions**

### **1. Organisation type (sector – single code)**

Accommodation and food service  
Admin and support services  
Agriculture, forestry and fishing  
Arts, entertainment, recreation and other services  
Construction  
Education  
Electricity, gas, steam and air conditioning supply  
Financial, insurance and property  
Health  
Information and communication  
Manufacturing  
Mining, quarrying and utilities  
Professional, scientific and technical  
Property  
Public administration and defence  
Transport and storage  
Water supply, sewerage, waste management and remediation  
Wholesale, retail and motor  
Other

### **2.If your organisation operates multiple sites, are you answering for the site at which you predominately work or for all sites?**

My organisation has one site

My organisation has multiple sites but I am answering for one site

My organisation has multiple sites and I am answering for all of them

### **3.Number of employees (multisites – ref your answer to Q3)**

1-9

10-49

50-249

More than 250

### **4.Geographical location(s) – first half of your site postcode (if answering for multiple sites: list up to 5 postcode areas, or if more than 5 please state 'multisite')**

[open text box]

### **5.The Environment Agency said in March 2020 that without action we face a water supply deficit of over 3,400 million litres of water a day by 2050 (about a quarter of the total amount of**



water currently used each day) due to population growth, climate change and the need to protect and restore the environment. This would pose serious risks to our economy, society and the environment.

Were you aware of this? How would you rate your previous awareness and understanding of the pressures facing water resources in this country? 1 being unaware and 10 being highly informed.

[scale of 1 – 10]

**6.All water wholesalers (the organisations which manage the water supply infrastructure) produce Drought Plans that set out how they will respond to extreme periods of dry weather when water resources are stretched. Temporary water use restrictions or 'hosepipe bans' may be used. Under more severe conditions Non Essential Use Bans could be imposed that restrict organisations from using water for activities such as vehicle washing and sports ground watering. Were you previously aware that some organisations could be required to temporarily cease certain activities that may be core to their business during periods of extreme drought?**

Yes, I was aware of this and it could impact on my organisation

Yes, I was aware of this but I don't think it would impact on my organisation

No, I was not previously aware and I think it could impact my organisation

No, I was not previously aware but I don't think it would impact my organisation

**7.Who would you trust to communicate the urgency of the water resource situation in this country? Please tick all that apply.**

National government

Local government / planning

My water retailer (provide billing and direct customer services)

Water wholesalers (manage the water supply infrastructure)

Water industry regulators

Trade body / trade press

Other

**8.Do you think any of these organisations need to do more to raise awareness of the threat of water shortages? Please tick all that apply.**

National government

Local government / planning

My water retailer

Water wholesalers

Water industry regulators

Other

**9. How would you rate your understanding of the link between your water usage and carbon emissions, especially in relation to hot water usage? (1 being unaware and 10 being highly informed)**

[scale of 1 – 10]

**10. Do you have a meter or log your consumption? (if you are answering for multiple sites select the option that best reflects the majority of your sites)**

Yes – meter type unknown

Yes – analogue meter (requires physical read)

Yes – AMR meter (drive by)

Yes – AMI smart meter (takes and transmits readings at least daily)

No

Don't know

**11. How much water does your organisation use? (check your latest bill or estimate if you don't have a meter. Multisites, ref your answer to Q3)**

Up to 5 m<sup>3</sup> per month (less than a household would use)

5 - 15 m<sup>3</sup> per month (about the same as a household)

15 - 50 m<sup>3</sup> per month (more than a household)

50 - 100 m<sup>3</sup> per month (significantly more than a household)

100 m<sup>3</sup> + per month (high volume user)

**12. Is your answer above based on consumption data/a device, or was it an estimate?**

My answer was based on consumption data from my bill/meter readings/data loggers

My answer was an estimate

**13. Are you aware that any of your organisation sites currently have any leaking toilets, dripping taps, or other pipework issues?**

Yes

No

Don't know

**14. How often does your organisation monitor how much water has been used?**

We can't monitor this

More than daily

Daily

Weekly

Monthly  
Annually  
Never

**15. How do you use your consumption data? Please tick all that apply.**

We don't have any consumption data  
We don't really look at it at all  
We look for general trends in whether usage is going up or down  
We take a keen interest and closely monitor changes in water use  
We use it to try to identify leaks  
We use it to measure the effectiveness of actions to reduce our water usage  
Other

**16. Do you have enough information (data) to be able to monitor, assess and reduce your water consumption?**

No, we can't really monitor what we are using closely enough  
We have some information, but if we had more we could achieve more  
We already have all the insight we need to be able to reduce water usage  
Don't know

**17. Do you have someone in your organisation already designated to manage the following? Please tick all that apply.**

Utility bills  
Water usage  
Environmental/carbon impact

**18. Considering all your organisational priorities, how important is water efficiency currently on a scale of 1 - 10? (1 being low and 10 being high)**

[scale of 1 – 10]

**19. What actions have you taken (if any) in the past 5 years to save water within your organisation? Please tick all that apply.**

We haven't really taken any water efficiency action  
Fixing plumbing leaks - e.g. dripping taps, leaking toilets  
Retrofitting water saving devices to existing appliances or fittings - tap aerators, toilet cistern displacement devices  
Installing water efficient appliances and fittings e.g. aerated taps, low flush toilets, efficient dishwashers or washing machines

Installing water efficient systems e.g. drip irrigation, rainwater harvesting

Employee engagement activities to change water use behaviours

Customer engagement activities e.g. towel reuse cards in hotels and guest houses

Other

**20.If you were trying to reduce your water consumption (further), what would your first steps be? Please pick up to three.**

This isn't something I would do as things currently stand (removes other options)

Seek out specialist help from a water efficiency advisor

Analyse the data we have available on water usage and make a plan

Compare our consumption to organisations like ours

Fix plumbing leaks - e.g. dripping taps, leaking toilets

Retrofit water saving devices to existing appliances or fittings - tap aerators, toilet cistern displacement devices

Install water efficient appliances and fittings e.g. aerated taps, low flush toilets, efficient dishwashers or washing machines

Install water efficient systems e.g. drip irrigation, rainwater harvesting

Employee engagement activities to change water use behaviours e.g. may include process reviews

Customer engagement activities e.g. towel reuse cards in hotels and guest houses

Install more sophisticated metering/monitoring

Other

**21.What are the top 3 things that prevent you from saving water? Please select 3 options or the last option.**

Saving water doesn't feel relevant to my organisation

I don't know how we could save water

Already using as little water as we can

The cost / effort makes it financially non-viable

It's not a priority for the organisation

I think there are other solutions to the problem than asking customers to use less water

I want to be able to use as much as I want

Other environmental actions are a bigger priority

Our organisation is reliant on a certain amount of water - very little opportunity to save

It's not a requirement from government / other bodies

Insufficient measurement of consumption to track the impact of our actions

Complexity of charging structures

There are no barriers that prevent my business from reducing water usage

Other

**22. What would make water efficiency more of a priority for your organisation? Please select your top three or the last option.**

Awareness of water resource pressures

Better information about our usage and being able to measure the impact of water efficiency actions

Easier access to expert support on how to reduce water usage

Significant cost savings / financial incentives

Linking water efficiency to lowering carbon footprint

Reducing the risk of water shortages

If it was important to our customers

If it was a requirement from government / other bodies and we had to report on performance

Knowing our usage was high by comparison with similar organisations

Nothing would make it more of a priority

Other

**23. On a scale of 1-10 how important is a retailer's water efficiency service when choosing to switch or stay with your retailer? (10 being – it's the most important consideration, 1 being – it's the least important)**

[scale of 1 – 10]

**24. Do you support the idea of a national government target to reduce overall organisation water use, assuming it was supported by evidence of what is achievable?**

Yes

No

Not sure

**25. Would you adopt the target and be prepared to invest time and money in saving water?**

Yes – we wouldn't need any more incentives than we already have

Maybe – we would need to see if it made sense from all angles

Probably not – it wouldn't make sense at the moment as there are too many barriers/too few incentives

No – there would need to be strong incentives to get my organisation on board with this

**26. Have you ever taken up offers of services from a water provider (wholesaler or retailer) to help you reduce water consumption?**

Yes

No

Never been offered

**27. How quickly would you want to make your money back to justify the investment in water efficiency? Please state in number of months.**

[Open text box]

**28. How much would the total value of savings need to be per month? Please answer in GBP.**

[Open text box]

**29. Is your organisation likely to expand over the next 5 years, leading to increased water usage?**

Yes

Maybe

No

**30. Based on what you know (and taking account of your previous answer), how much do you think you could reduce your consumption by over the next 5 years? Please estimate in percentage terms (multisites ref your answer to Q3)**

## APPENDIX B: Additional analysis for sector, postcode and usage

SIC Division	Self-supply sample	Retailer customers	Total sample	Survey	ONS 2020
Agriculture, forestry & fishing		119	119	16%	5%
Mining & quarrying		46	46	6%	6%
Manufacturing			1	0%	
Electricity, gas, steam & air conditioning supply			0	0%	
Water supply; sewerage, waste management & remediation			0	0%	
Construction		14	14	2%	13%
Wholesale & retail trade; repair of vehicles	2	110	112	15%	14%
Transport & storage		10	10	1%	4%
Accommodation & food service	3	110	113	16%	6%
Information & communication	1	15	16	2%	8%
Financial & insurance		16	16	2%	2%
Property		9	9	1%	4%
Professional, scientific & technical		15	15	2%	17%
Administrative & support service		23	23	3%	9%
Public administration & defence; compulsory social security	2	5	7	1.1%	0.3%
Education		13	13	2%	2%
Human health & social work		28	28	4%	4%
Arts, entertainment & recreation	1	99	100	14%	6%
Other service		84	84	12%	
Households as employers; undifferentiated goods- & services-producing of households for own use		1	1	0.1%	
Extraterritorial organisations		0	0	0.0%	
Other		1	1	0.1%	
Totals	9	718	727	100%	100%

Wholesaler	Respondents	Survey %	Market share (MOSL Sept 2021)
Affinity	34	5%	5%
Anglian	104	15%	9%
Bristol	8	1%	2%
Essex & Suffolk Water	57	8%	
Northumbrian	161	15%	8%
Portsmouth	13	2%	1%
Severn Trent	79	11%	14%
South East	31	4%	4%
Southern	47	7%	4%
South Staffs	26	4%	3%

South West	17	2%	6%
Sutton & E Surrey	10	1%	1%
Thames	40	6%	15%
United Utilities	88	12%	14%
Wessex	7	1%	3%
Yorkshire	44	6%	10%
NAVs			0.1%
Scottish (excluded)	(26)		
N/A or multisite	9	1%	
<b>Total</b>	<b>727</b>	<b>100%</b>	<b>100%</b>

Survey category m3 /month	Survey category l/d	Respondents	% Survey	% Survey comparator	Market % SPIDs	Market categories applied
100 + (high volume user)	3,333+l/d	46	6%	17%	21%	1000l/d+
50 - 100 (significantly more than a household*)	1,667-3333l/d	80	11%			
15 - 50 (more than a household*)	500-1,000l/d	142	19%	44%	37%	100-1,000l/d
5 - 15 (about the same as a household*)	167-500l/d	177	24%			
Up to 5 (less than a household* would use)	up to 167l/d	286	39%	39%	42%	up to 100l/d
Totals		731	1	100%	100%	