



**Metering and Water Efficiency:
A research report**

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October 2021

Relish

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01 Project background and approach

DCWW is developing its 2024 Water Resource Management Plan addressing the supply demand balance in 2025-2050, but also considering longer term planning to 2080.

In order to support the business planning, there is a need to collect feedback from customers to understand their views, preferences and priorities on the subjects of water efficiency, metering and tariffs.

In order to answer these questions, we have undertaken 2 phases of research simultaneously:

1 A qualitative online community with 30 DCWW customers, to explore in depth rationale behind customer preferences and priorities

3 weeks of online activities (c.90 mins per week), enabling us to start high level and build out towards a more informed viewpoint

2 A quantitative survey on the key questions with n=800 DCWW customers, representative of those in Wales

Our response comprised n=700 online interviews and n=100 CATI (computer assisted telephone interviews), to maximise the opportunity for different customer groups to take part

01

Our qualitative sample includes a good cross-section of DCWW customers – 30 participants with 29 completes after the 3 weeks

Sample demographics

(Total sample, n=29)

- All were:
- Aged 18+
 - Living in DCWW regions
 - Customers of DCWW

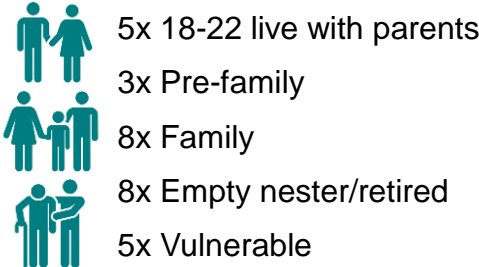
APPROACH



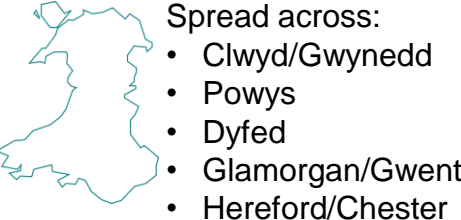
GENDER



LIFE STAGE



LOCATION



RURALITY



9x Urban/suburban
8x Semi-rural
12x Rural

SOCIAL



5x social tariff
24 x non social tariff

WATER METER



11x have a water meter
18x no water meter

Our quantitative sample was representative of the Welsh population

Sample demographics

(Total sample, n=807)

All were:

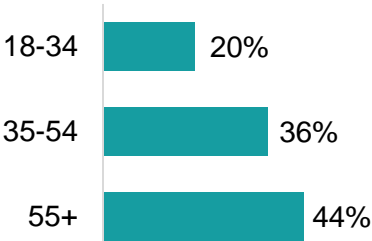
- Aged 18+
- Responsible for paying water bill
- Customers of DCWW

GENDER

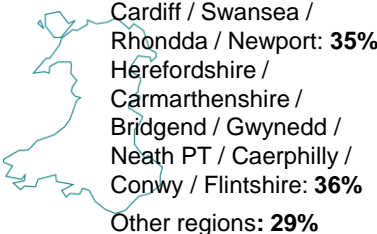


Female: 50%
Male: 50%

AGE



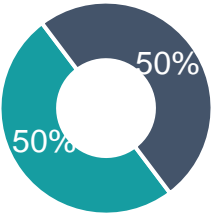
LOCATION



Data has been weighted to ensure a match with census / customer data, by:

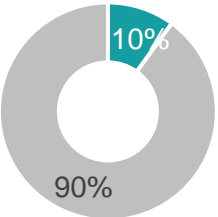
- Gender
- Age band
- Household income
- Region
- Social tariff status

HOUSEHOLD INCOME



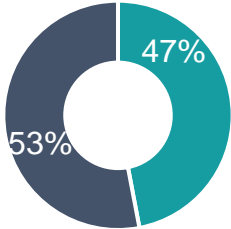
■ Under £30k
■ £30k or more

SOCIAL TARIFF STATUS



■ On social tariff
■ Not on social tariff

METER STATUS

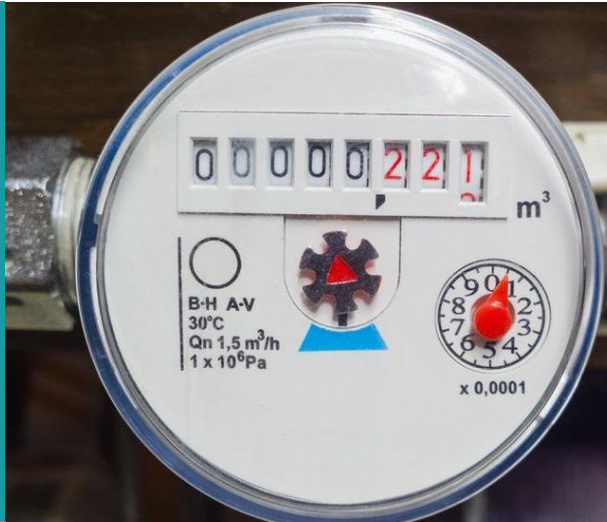


■ Metered
■ Unmetered

01 Key insights

1

On water efficiency, customers acknowledge their role alongside that of the water company, but are looking for more direction from DCWW via further promotion of existing advice, as well as more prominent campaigns and access to water saving devices.



3

Customers recognise that better understanding their usage will help them reduce consumption, and they see a potential role for smart water meters in helping achieve this. They do, however, harbour cost concerns and have high expectations based on energy smart meters, with (for example) IHDs, apps and real-time info.



2

Unmetered customers are often open to more info and to their barriers being challenged. Most also express support for the fairness of paying for what you use, thus progressive metering offers a stepped approach to adoption without making meters compulsory.



4

Applying a tiered pricing tariff structure to control demand struggles to gain traction with customers, primarily because it is felt to penalise families and vulnerable customers. Although not ideal, reducing pressure across the network is often felt to be a preferable and fairer solution.



**Water efficiency
attitudes, behaviours
and opportunities**



02

Having kept a water diary as part of the research, customers often think their usage is average. For those who accept they could do more it is typically small measures they cite

Qualitative self-assessment of household water consumption reveals three attitudinal groupings:

1



Those who consider their households to be high consumers of water are in the minority, and include several 18-22 year olds and some vulnerable customers

2



Customers are most likely to say they are normal/average users of water, though often acknowledge they don't know how to benchmark this properly against other households

3



Those who perceive themselves to be low users are often empty nesters and retired households

There are some for whom keeping a water diary has made them realise they could be doing more, e.g. shorter showers, less baths, less full kettles, bigger washing/dishwasher loads, tap off when brushing teeth; But many struggle to know what more they can do...

"5 of us living at home, with 3 of those being teenagers and 3 dogs who can roll in stinky things every now and then, I think it's a pretty normal few days consumption."

"I don't think we waste water or use it unnecessarily. We are a family of 5 and I would hope our consumption is normal for such a family size."

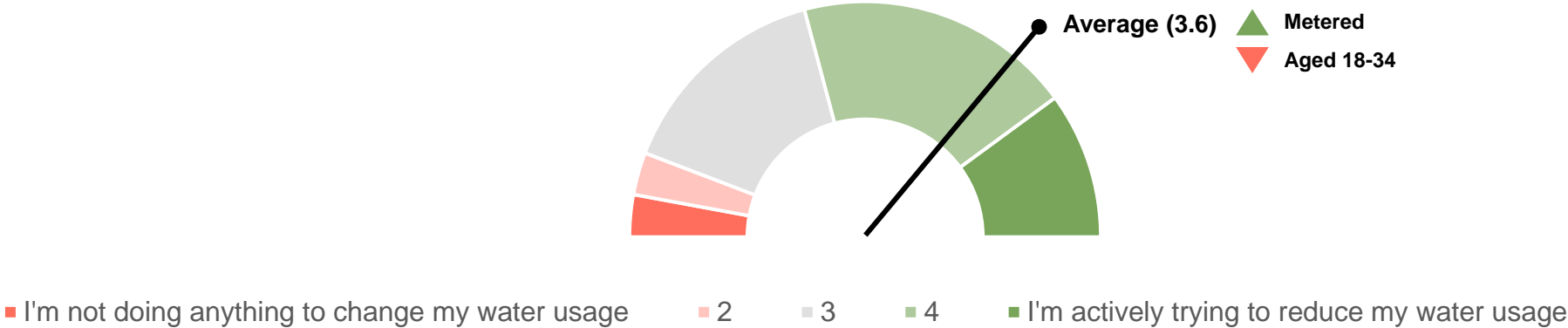
02

Customers are more likely than not to claim they are already trying to reduce usage; notable that saving money is not amongst most common rationales for reducing usage

Attitude to water saving *(Total Sample)*

▲ ▼ Tested at 95% significance

WHERE WOULD YOU PLACE YOURSELF ON THIS SCALE?



- Reasons for not changing water use:**
- We just need to use what we need to use
 - We are unmetered so can use unlimited water
 - We are already very careful with water
 - Consider ourselves to be low usage consumers

- Reasons for trying to reduce usage:**
- We take water for granted
 - We have a large garden
 - We realise we waste a lot/don't re-use water
 - Weekends are high consumption periods for us

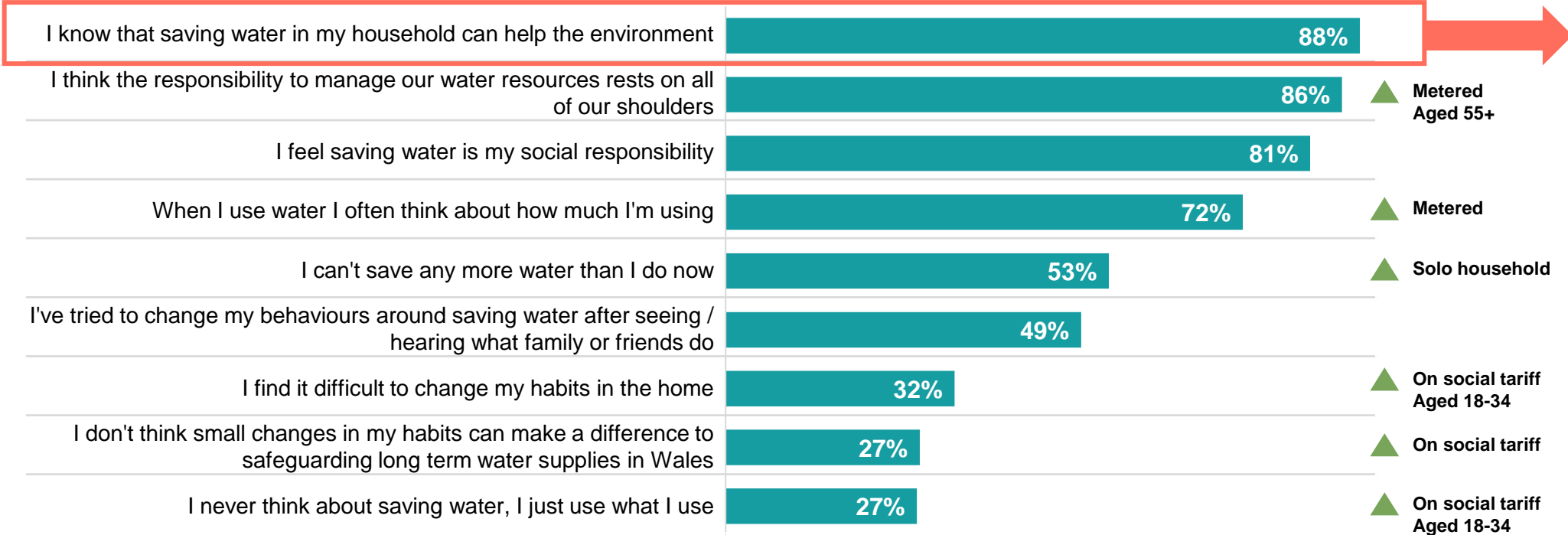
B2. Thinking about your water usage, where would you place yourself on the below scale?
Base: Total sample (807)

Crucially, customers almost always make the link between saving water at home and helping the environment, even if they don't fully understand how

Water usage attitudes: Agreement with statements (Total Sample)

▲ Tested at 95% significance

Slightly / Strongly agree



A lack of basic water knowledge and understanding means customers cannot often articulate the specifics of how saving water at home helps the environment, beyond using less resource during drought periods

B1. To what extent do you agree or disagree with these statements?
Base: Total sample (807)

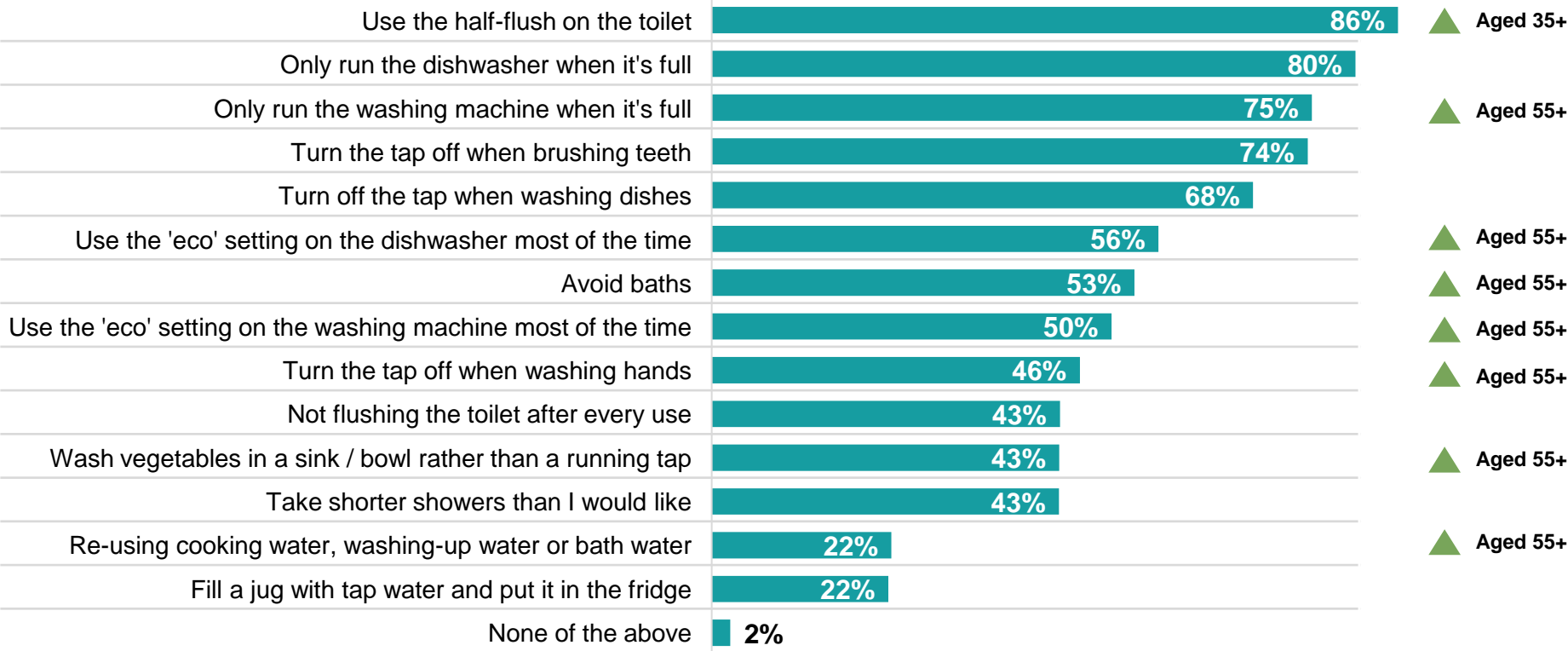
02

Water saving behaviours in the home are more common place amongst older customers – but we need to increase this amongst younger households, too

Water usage | Inside the home *(Total Sample)*

Tested at 95% significance

WHEN I AM AT HOME I...



B5 And which of these, if any, do you do at home?
Base: Total sample (807)

Those taking water saving measures in the home recognise the dual benefit of saving energy and saving water


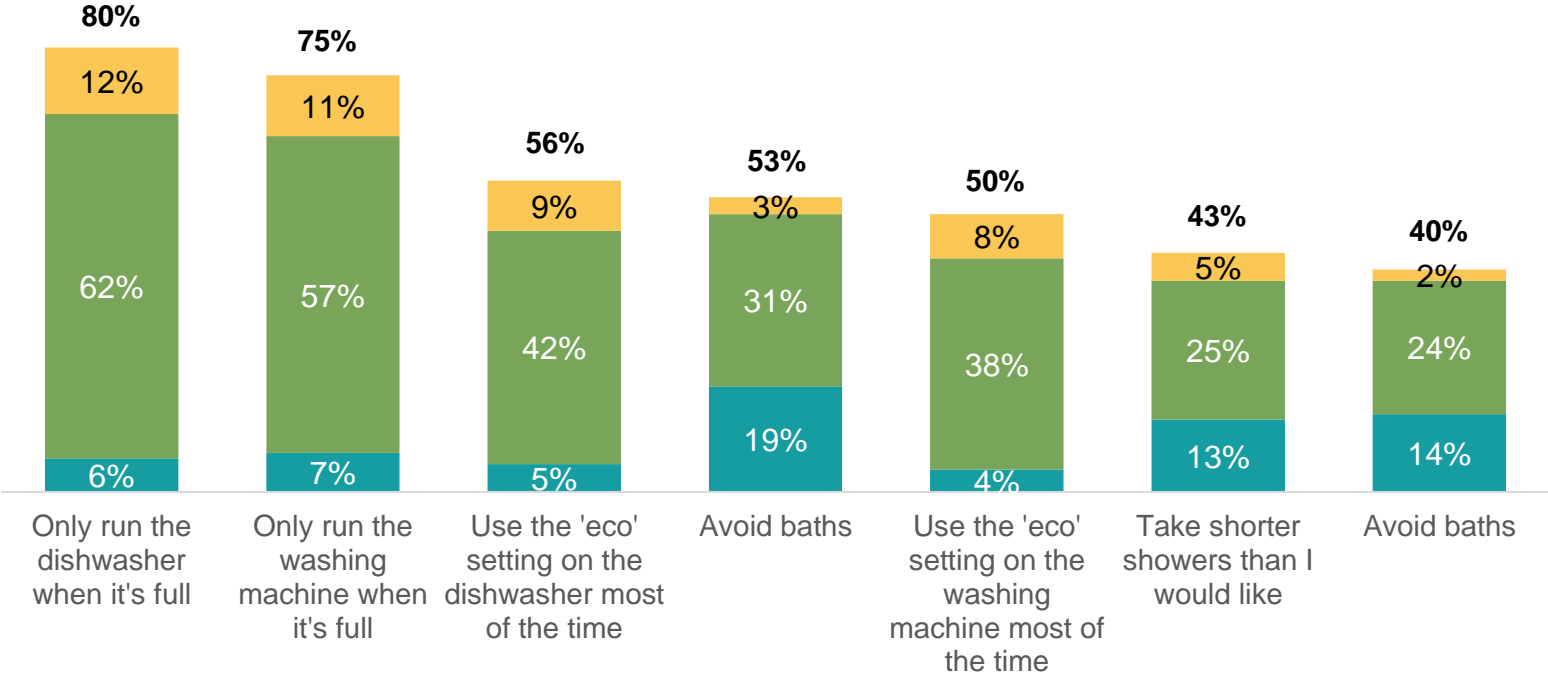
Water usage | Inside the home (Total Sample)

No significant differences

WHEN I AM AT HOME I...

- I mainly do this to save energy
- I do it equally to save energy and water
- I mainly do this to save water
- Total

These behaviours are often motivated by financial savings associated with energy usage (as a large household outgoing), with environmental concerns being secondary

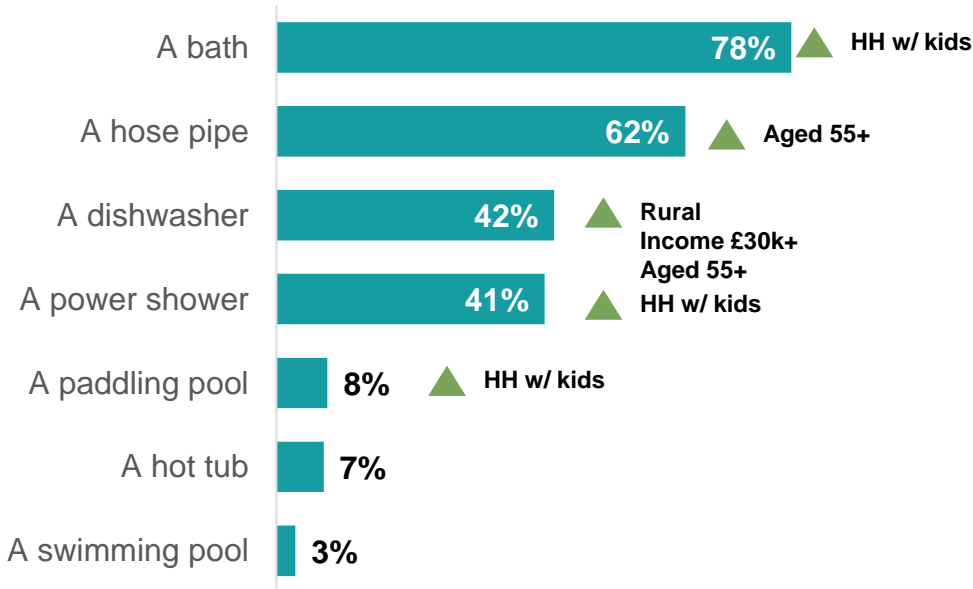
B6. You said you do the below things at home. To what extent do you do this to save energy vs. to save water?
Base: Variable by activity (range from 193 to 599)

Despite positive attitudes towards reducing consumption, there remain large numbers of customers who don't have fairly basic water saving devices in the home

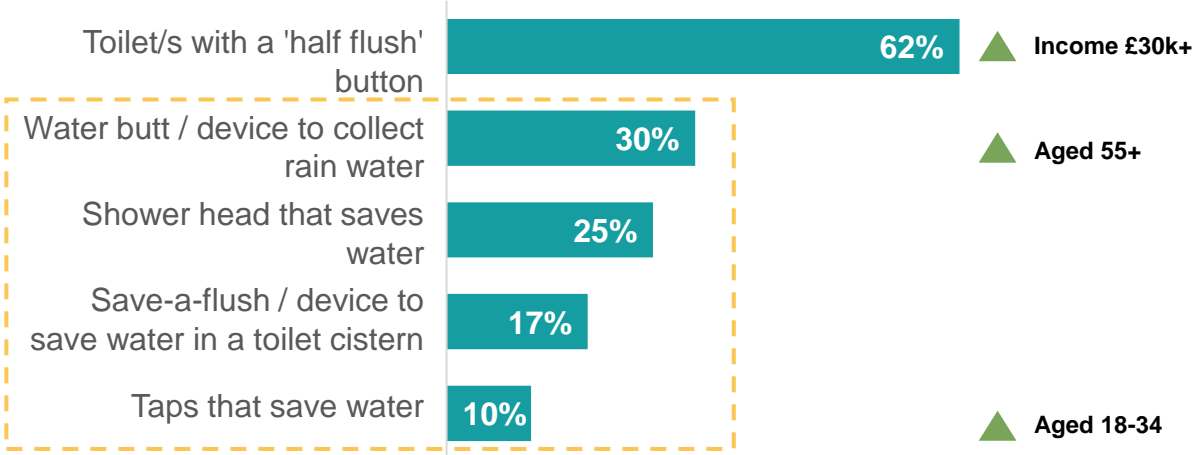
Device ownership (Total Sample)

▲ ▼ Tested at 95% significance

SPENDING DEVICES



SAVING DEVICES



There is scope to leverage positive attitudes and increase prevalence of water saving devices in homes across Wales

B3. And which of these, if any, do you have at home? B4. And which of these, if any, do you have at home?
Base: Total sample (807)

02

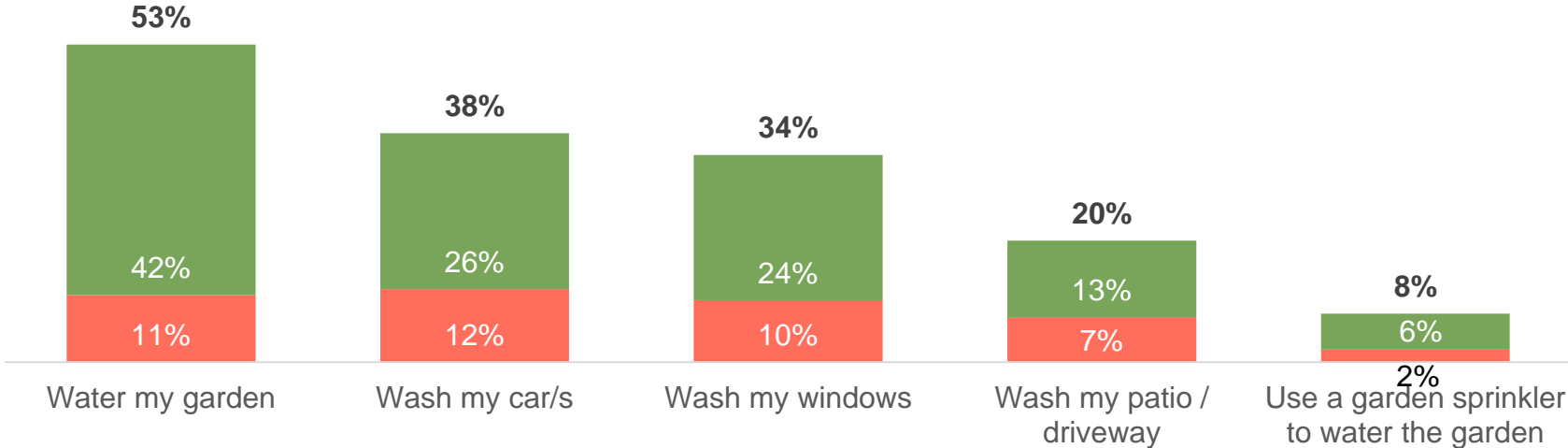
For non-essential outdoor water usage, it is encouraging that most are at least considerate of the amount of water they use and trying to reduce it where possible

Water usage | Outside the home (Total Sample)

No significant differences

OUTSIDE OF MY HOME, I...

- Don't think about the amount of water I use
- Consider the amount of water I use and try to reduce it where possible
- Total



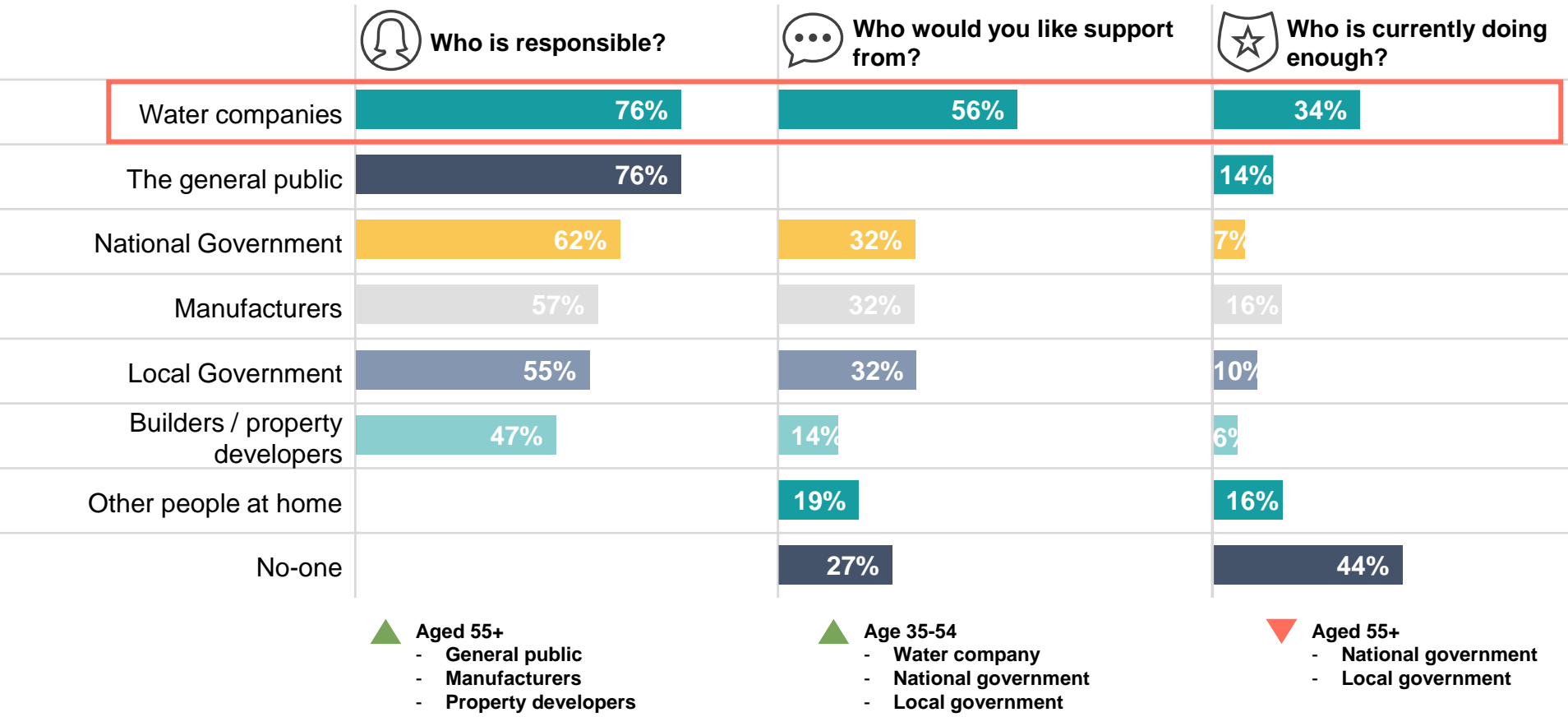
B7. And which of these, if any, do you do outside your home? B8. When doing the below, would you say you...?
Base: Total sample (807)

02

Customers acknowledge that responsibility for saving water is about them collaborating with water companies, but also feel DCWW could be doing more to help

Saving water | Responsibility and support (Total Sample)

▲▼ Tested at 95% significance



"I think everyone needs to make a conscious effort to come together to save water."

"We are the consumers and can control personal usage. Water companies need to ensure effective use of water management and reach targets set by the government."

"I think it's a joint effort – us doing our bit but Welsh Water educating us, too. People forget so reminders are always good. And maybe get children on board through schools too."

C1. The UK as a whole is likely to have an issue with its water supplies in the future. Who's responsibility do you think it is to save water, to ensure we can have sustainable water supplies? C2. Who would you like support from to help you to reduce the amount of water you use, if anyone? C3. And which of these, if any, do you think are currently doing enough to help us save water? Base: Total sample (807)

Almost all of the customers on the online community want to see more information from DCWW on how to reduce their consumption

“Websites are useful but you need to be pointed in the right direction too. I’m not sure I would have taken it upon myself to trawl the internet looking for ways to save water but this research has made me read the info on your website and think about what we do.”

“If I was scrolling through Facebook in the morning and came across a water saving tip, it would be fresh in my head for the day so I’ll be more likely to do it.”

“My brother lives in Australia and has his bill sent through with individual breakdowns of his usage, devices he may benefit from and tips on how to further reduce his water usage.”

“I’d like more emails with tips and advice, perhaps themed like first Monday of the month some stats and ideas on how to save money and on Friday tips and stats related to the environment.”

“I just want to see more about stuff we can do to recycle water and how not to waste as much water as we do as a nation.”

“I think Welsh Water could send out more information into schools so children can learn from a young age to save water.”

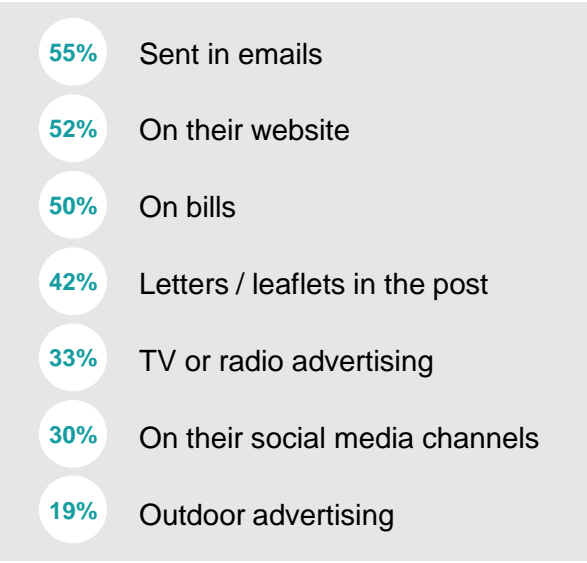
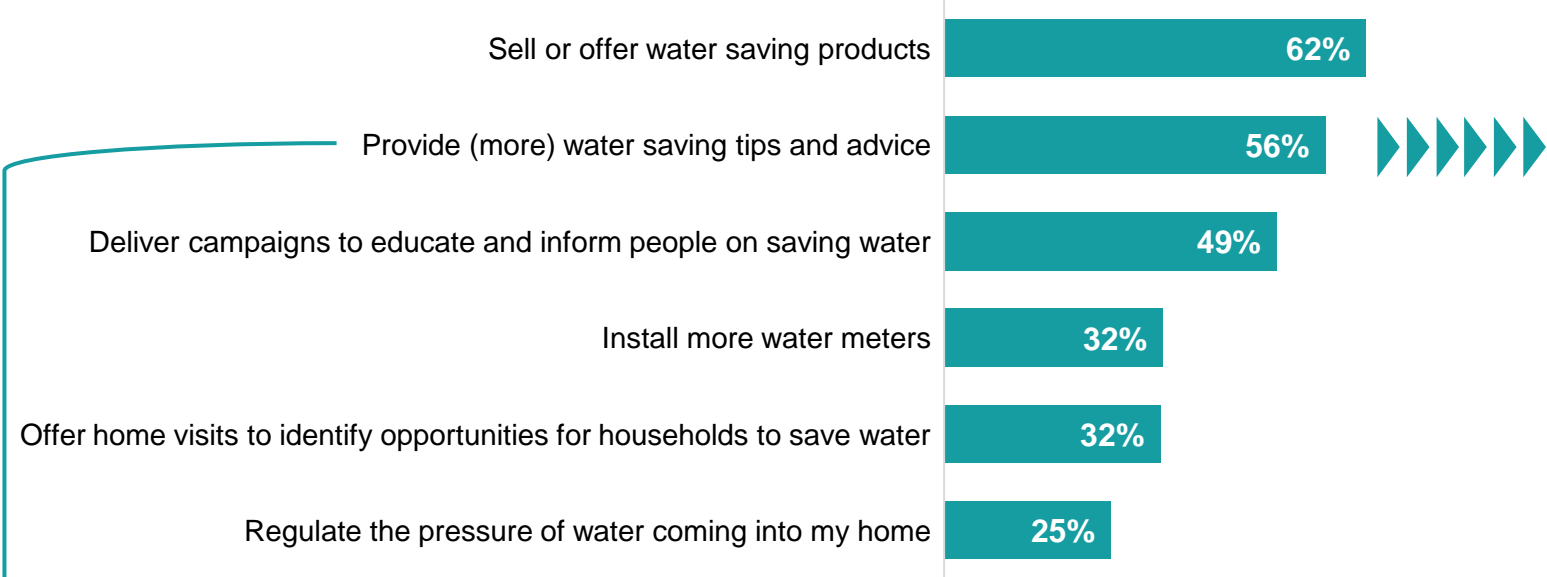
02

It's not just information/advice that customers want from DCWW; there's also a strong desire for hearing more about water saving products

Water company support (Total Sample)

▲ ▼ Tested at 95% significance

I WOULD LIKE MY WATER COMPANY TO ...



▲ Aged 18-34

45% know that Welsh Water offer water saving tips and advice on their website and via its social media channels

▲ Higher among those on a social tariff and/or those with a water meter

Customer elaborate further on what they think will be the most effective interventions in helping them reduce water use to an average of 100 litres per person per day

Water saving equipment



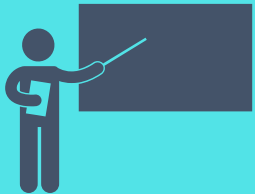
- Tap restrictors, shower flow restrictors, toilet cistern bags/bricks, water butts
- Working with government and industry to ensure more water efficient appliances
- Grants, subsidies and incentives to help fund water saving equipment

Advice



- Background info on potential for water shortages in future
- How much water basic activities use
- Bespoke breakdowns on bills
- Promotion of Water Fit calculator
- Free home audits of water efficiency
- Promote water harvesting and use of grey water for outdoors
- Simple hints and tips on good practice

Campaigns



- Higher profile campaigns on using water sensibly
- Conveying an 'in it together' message
- Supported by education at schools on water efficiency, as well as those about to leave home so they adopt good habits

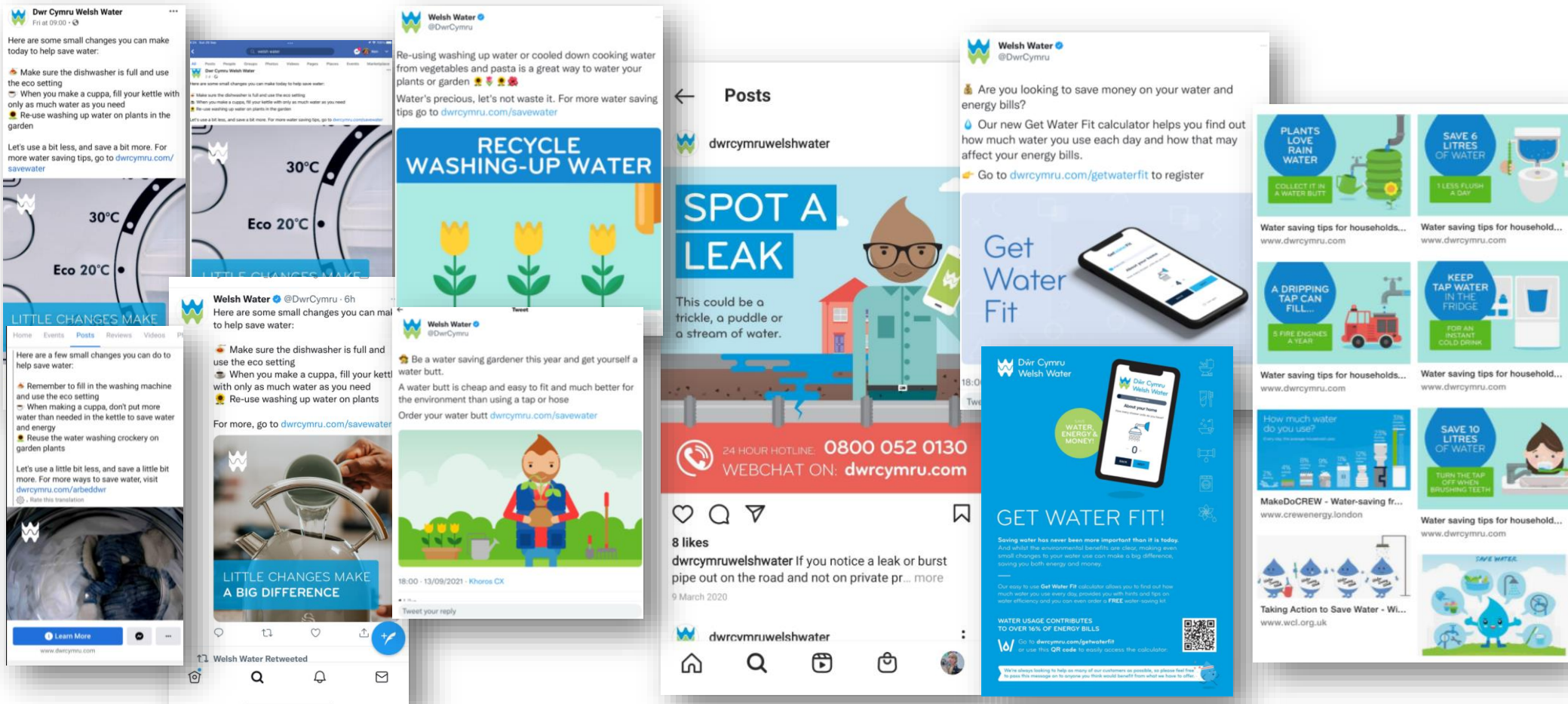
Metering



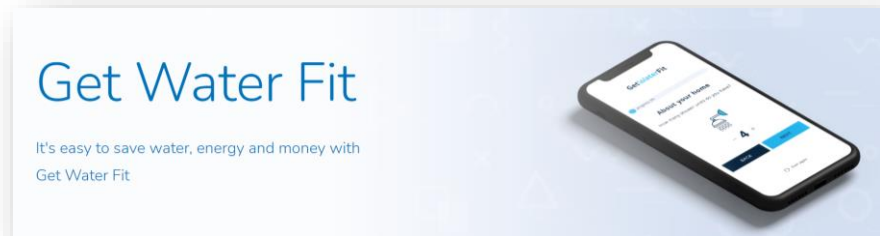
- Encourage targeted uptake of water meters amongst higher users
- Install water meters in all new properties
- Target businesses with water meters
- Develop smarter water meters to help consumers better understand their consumption

02

When tasked with looking for DCWW water saving info on social media, customers are pleased by what they find – but none have seen these messages before



Encouragingly, customers are generally positive about DCWW's water efficiency help offered online – but, again, the challenge is to grow awareness of this collateral



We asked participants to use the water calculator on the DCWW website and the results were very positive:



- ✓ **User friendly**, and **helpful accompanying video**
- ✓ **Thought provoking** to see a breakdown/analysis of daily usage
- ✓ Sometimes **shocking results on extent of consumption** – e.g. how many litres per day and comparison to national average
- ✓ Welcome **access to free water saving devices** (which some have taken advantage of)

But ultimately didn't convince any unmetered to change

Water saving tips for households

Although rain falls freely from the sky, we've been lucky enough recently to experience some dry spells. At Welsh Water we put a lot of work, energy and love into ensuring you get a safe, clean and fresh water supply direct to your taps.

Upon exposure to DCWW website water saving tips, views were more mixed:

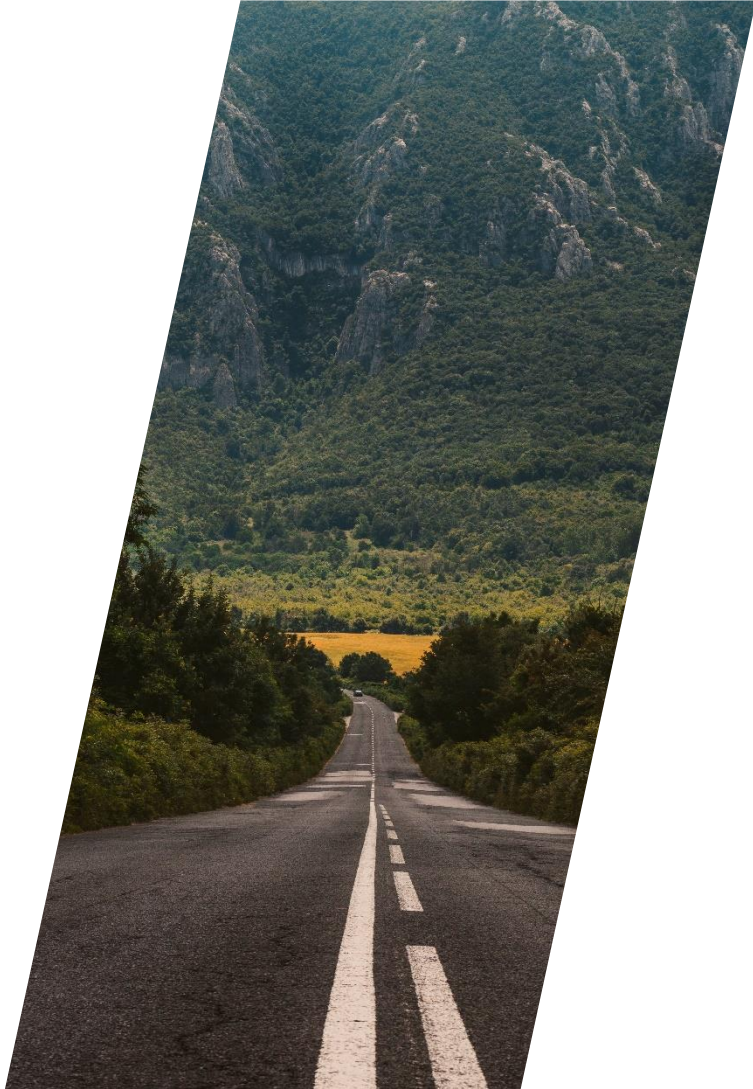


- ✓ **Short, sharp facts**
- ✓ **'Colourful**, friendly and concise'
- ✓ **Attention-grabbing YouTube videos**
- ✓ Infographics make it **quick and digestible** info
- ✓ Welcome **access to water saving devices**

BUT...

- Quite a lot of info **known already**
- **Needs average usage amounts** for benchmarking

WATER EFFICIENCY - what does this mean for WRMP24?

**1**

Customers make the link between saving water at home and helping the environment, even if they cannot always articulate the specifics of the impact – this is important as it evidences a potent rationale for change

2

There is an acknowledgement that reducing consumption requires greater collaboration between customers and DCWW; most seem willing to play their part in this, but need more leadership and direction from DCWW

3

The challenge for many is that they don't believe their usage is above average, so we need to be looking at how we can increase awareness of our consumption relative to others

4

Although many don't feel DCWW is currently doing enough to support them in reducing consumption, the support they require is relatively straightforward - water saving devices, campaigns and proactive advice

5

Leveraging existing water saving content (e.g. the advice and water calculator on the DCWW website) – which customers value when they are shown it – is a relatively quick win

Metering and social tariffs



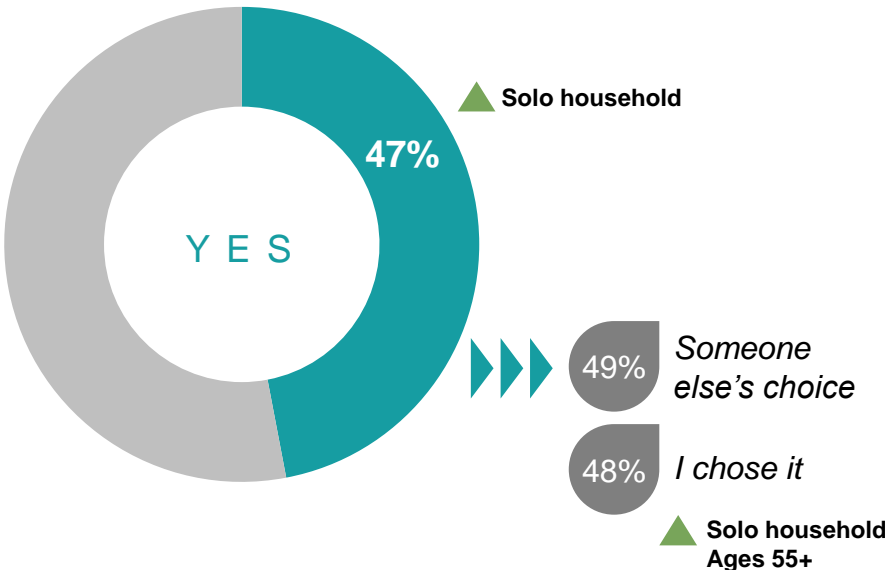
03

Nearly half of our DCWW customers have a water meter, although this is often because it was already in the property

Water meter and water pressure (Total Sample)

▲▼ Tested at 95% significance

ARE YOU ON A WATER METER AT HOME?



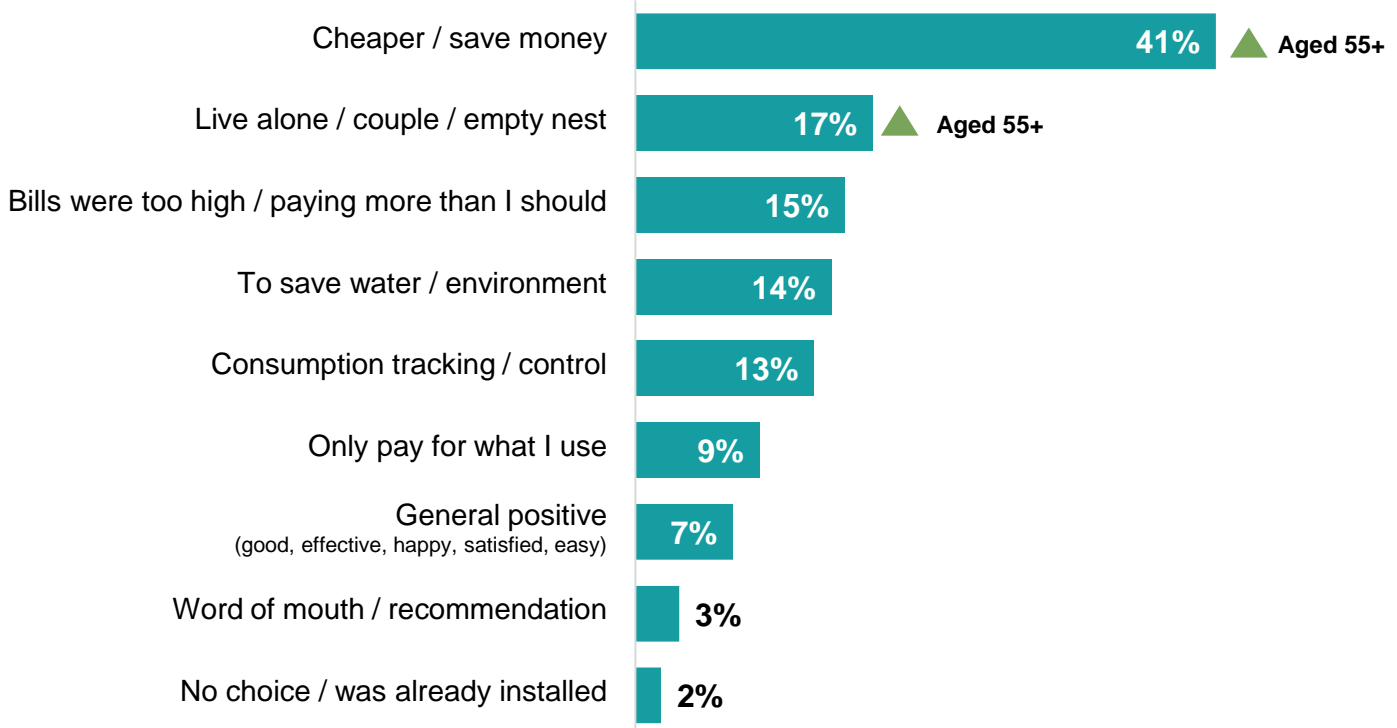
“When we bought the house it was on a water meter so we inherited it. I like having it in that it does make us consider our water usage, and I think we are more careful as a result. For example we rarely use the hosepipe, and try to water the garden with rainwater.”

A12. Are you on a water meter at home? A14. And would you say your water pressure at home is...? Base: Total sample (807)
 A13. Did you choose to get a water meter, or was it there when you moved in / someone else's choice? Base: Those with a water meter (382)

Where customers have made the decision themselves, bill reductions are at the core of customer reasoning for getting a water meter

Reasons behind water meter choice (All metered customers who chose a meter)

▲▼ Tested at 95% significance



“The sons had left home, I was a widow so it was just me on my own and it seemed more economical.”

“We have 4 bedrooms and only 2 adults living in the house. We were advised to change to a water meter.”

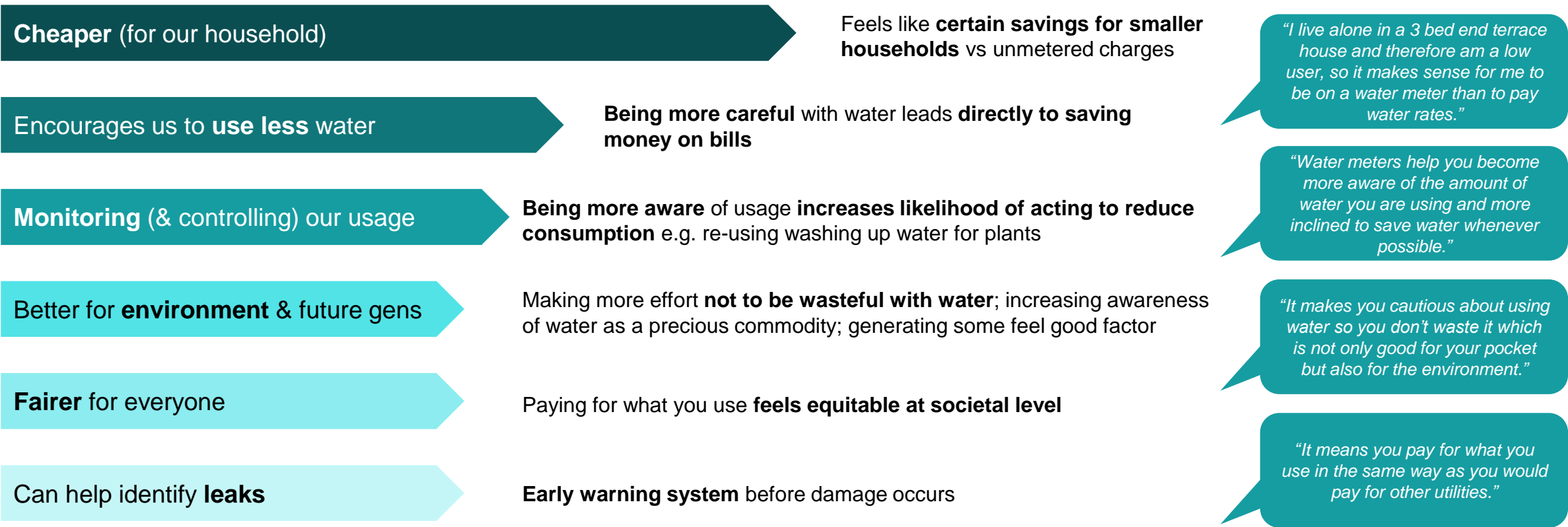
“To reduce bills and help control how much water we use.”

“Fairer to pay for what you use rather than some arbitrary rate calculation.”

03

Exploration of meter benefits reveals that metered customers often care about wastage and reducing environmental damage, but they are most swayed by bill reductions

Perceived benefits of being on a water meter (metered customers)



03

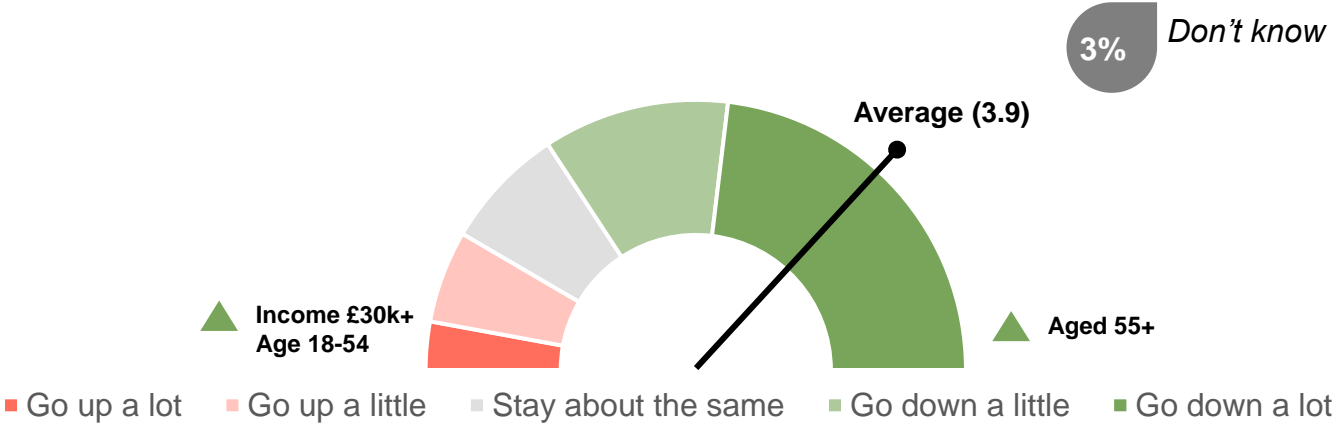
Those who have chosen to be on a water meter on the whole claim that the reduction in bills has been significant – though this is not always the case with families

Metered bill impact

(All metered customers who chose a meter)

▲ ▼ Tested at 95% significance

WHEN YOU WENT ON A WATER METER, DID YOUR BILLS...?




“Although I do think it was a good thing getting a meter, I do also think it has contributed now to our bills being higher now that our family has expanded.”



“I changed to a water meter as soon as possible after moving into my property. I knew that I would be a low user as I live alone, so financially it was always going to give me lower bills.”

D10. When you went on a water meter, did your bills...?
Base: Customers who chose a meter (192)

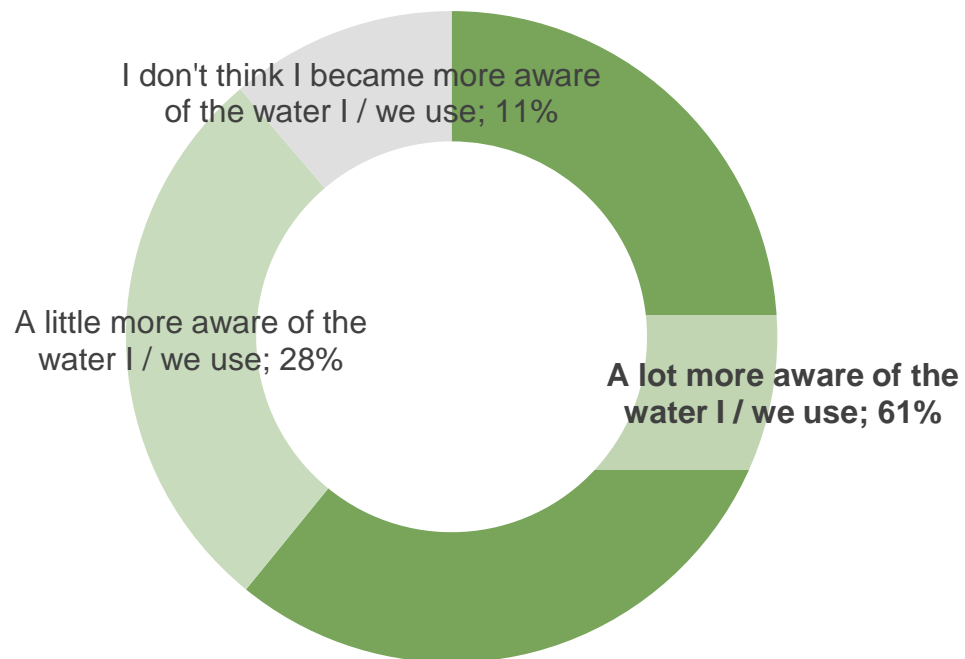
Evidence from those on meters is that it does increase awareness of consumption; however, providing more granular consumption data in the future will increase knowledge further

Meter impact

(All metered customers who chose a meter) 

  Tested at 95% significance

WHEN YOU WENT ON A WATER METER, DO YOU THINK YOU BECAME...?







What metered customers say about the impact of being on a meter

- ✓ Water metering makes **water more front of mind**
- ✓ Fluctuating bills increase **mindfulness** of usage
- ✓ Attaches **financial consequence** to consumption
- ✓ **Encourages small water saving behaviours** such as showers vs baths, full loads of washing, less hose usage etc.
- ✓ If everyone understands consumption better and does a little, there will be a **cumulative impact**
- ✓ Seen as **part of the bigger picture of reducing pressure** on the water system during hotter summers and drought periods
- ✓ Water metering feels more **aligned to electricity and gas** billing

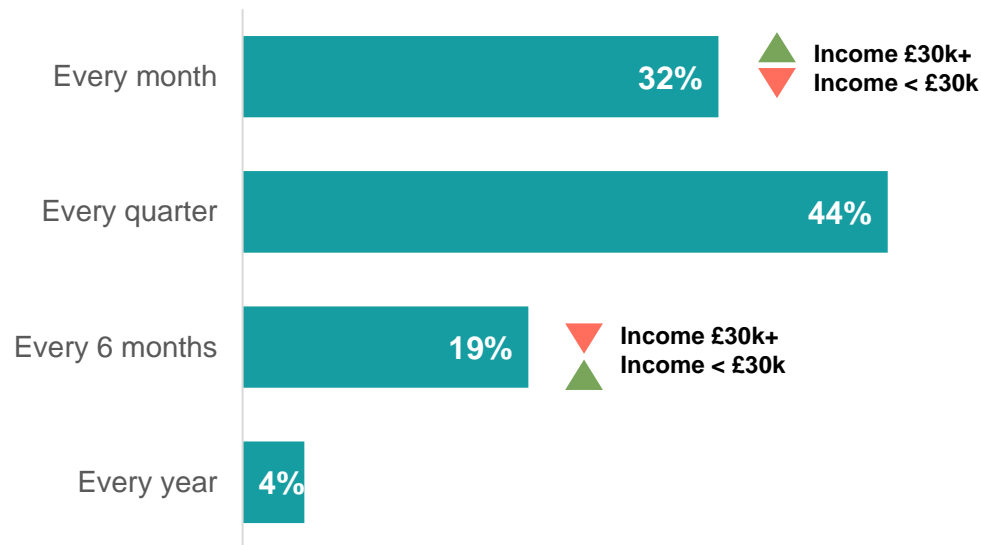
Strong consensus amongst metered customers that more frequent usage updates from DCWW would be beneficial to their understanding and potential behaviour change

Desired read frequency

(All metered customers who chose a meter)  

  Tested at 95% significance

IDEALLY, HOW OFTEN WOULD YOU WANT TO BE UPDATED ON USAGE?



What customers say about metered bill frequency:

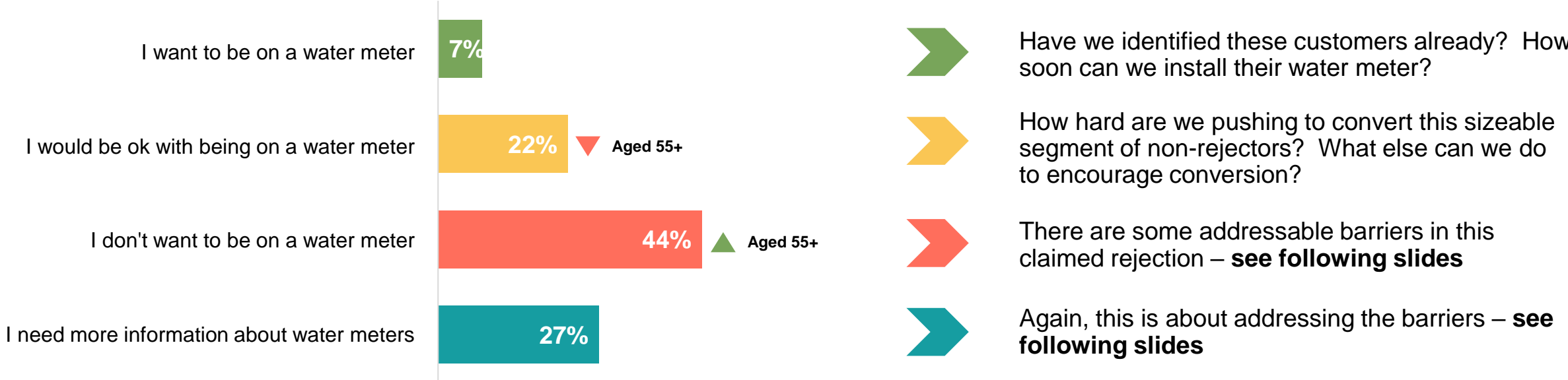
- !! **6 months feels like a long time**, and they would be less likely to pick up on any differences between bills
- !! **Leaks** over 6 months could lead to expensive bills
- ✓ More frequent updates makes it easier to **compare** and benchmark usage, and to monitor impact of behaviour changes
- ✓ Easier to understand **usage by season** if more frequent updates
- ✓ Households often **budget on a monthly basis** so consumption would become part of a more regular household review
- ✓ By submitting **monthly/quarterly readings**, becomes easier to manage the bills

For unmetered customers, there are fairly high levels of rejection of water meters, but this belies multiple opportunities to encourage uptake

Openness to being on meter (All unmetered customers)



▲▼ Tested at 95% significance



HOW WOULD YOU LIKE TO ACCESS INFORMATION?

- 47% with my bills
- 46% water company website
- 38% through the post
- 37% email
- 14% advertising
- 6% via text

D7. Which of these do you agree with about moving onto a water meter? Unmetered customers (425)
 D8. How would you want to see / hear more information about getting a water meter? Base: Those who need more information (114)

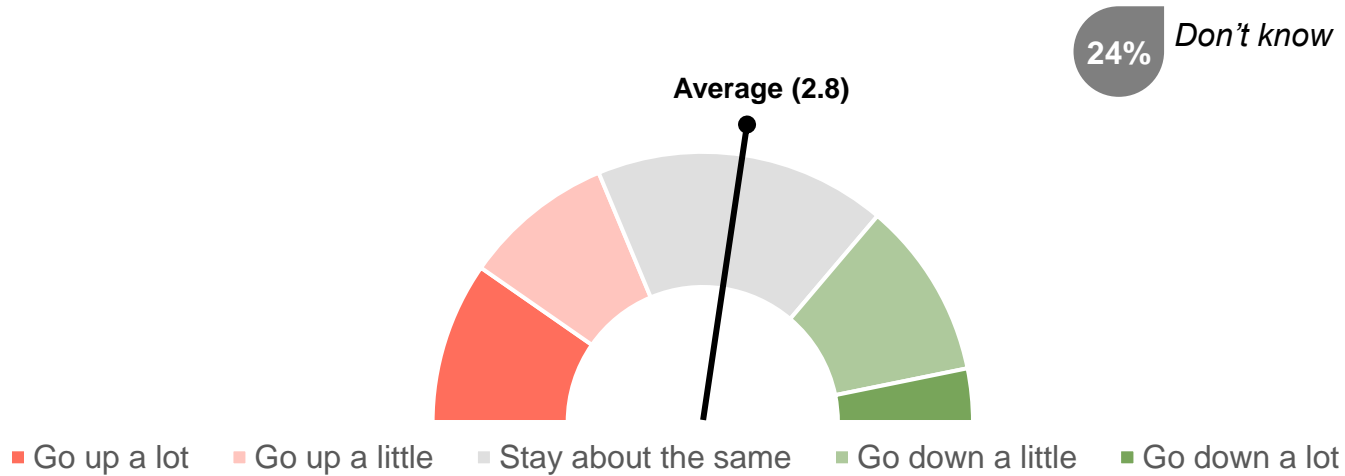
03

Those not on a meter often don't think there is sufficient financial saving to be made by getting a meter – but this is a misperception we can often proactively challenge

Bill perceptions if on meter (All unmetered customers)

No significant differences

IF YOU WERE ON A WATER METER, DO YOU THINK YOUR BILLS WOULD... ?



Progressive metering offers an opportunity to positively challenge this misperception in many instances

D3. If you were on a water meter, do you think your bills would...?
Base: Unmetered customers (425)

03

There are several addressable barriers to water meters, both via addressing misperceptions and by providing more information on the benefits (esp. financial)

Perceived barriers to being on a water meter (unmetered customers)

● = addressable barrier

- **Bill increases** → Most prevalent barrier, particularly for **larger households and vulnerable customers** who need to use more water
- **Non-reversible decision** → **Lack of knowledge** that customers **can swap back** to unmetered billing within first 2 years
- **Leakage concerns** → **Fears about leaks going unnoticed** and being funded by metered customers
- **Need to use what we need to use** → Either those who are **already fairly water conscious**, or those who are **more intransigent** on behaviour change
- **Don't want to monitor consumption** → Metering can feel like an **extra layer of effort for customers**, and not solving a problem or answering a need
- **Don't want to submit meter readings** → Again pertains to an **increase in perceived customer effort**
- **Easier to budget with known amount** → Introduces fluctuation and therefore **less certainty into billing cycle** and can be a concern for those on tighter budgets
- **Unsure about accuracy** → Feels like a fairly weak barrier, and **more of an excuse** than a considered rationale for not wanting to be metered

"For big families it could be very expensive to be on a meter. You can't always reduce the amount of washing you have or make all the children shower."

"If you change to a water meter and it doesn't work out for your household, you can't change it back to a standard supply."


"We just don't need to look at how much we are using and spending on a day-to-day basis."

"If I have a leak, I don't know how quickly that would be identified and rectified. If it happened during the summer it could be overlooked."

03

Here are three 'quick win' areas in which enhancing the knowledge of unmetered customers seems likely to help increase interest in uptake of metering

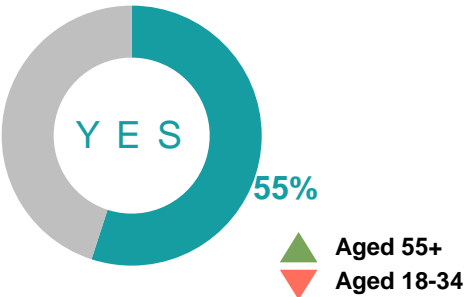
Water Meter Awareness

(All unmetered customers) 

▲ ▼ Tested at 95% significance

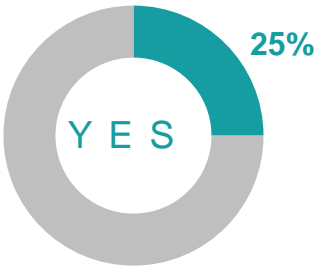
DID YOU KNOW...

YOU CAN GET A WATER METER INSTALLED FOR FREE?



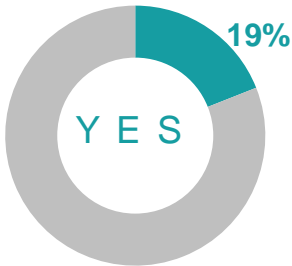
Increase awareness of free optant scheme

YOU CAN SWAP BACK TO UNMETERED BILLS IN THE FIRST TWO YEARS?



Potentially a game-changing message for those with weaker barriers, or who are unsure

THERE IS A METER CALCULATOR ON THE WELSH WATER WEBSITE?



Further promote existing collateral

D1. You mentioned earlier that you are not on a water meter. Did you know you can get a water meter installed for free? D2. Did you know you that if you get a water meter, you can swap back to unmetered bills at any point in the first two years after having your meter installed? D4. Did you know that there is a meter calculator on the Welsh Water website, which can help you to see if you might be better or worse off if you went onto a water meter? Base: Unmetered customers (425)

Customer understanding of how water metering works is patchy and would benefit from DCWW providing clarification via more regular information

Knowledge of extent of metering in Wales

Most believe metering is lower than 50%
But most are also positive about DCWW aiming to increase the number of metered customers...

- ...so long as it remains optional and not compulsory,
- ...and DCWW acts to reduce leakage

Knowledge of consequences of non-payment

There is however a lack of clarity over what happens if metered charges are not paid....

- user is cut off/supply restricted?
- user cannot be cut off?
- financial help will be provided and payment plan developed?
- court action will ensue? fines and even debt collection? customer will be taken off the meter?

Knowledge of how metering and billing works

Basic assumptions are broadly correct

- Seen as similar to gas/electric meters
- Meter readers sent periodically,/ customers can provide their own
- There is a unit price and standing charge
- Annual/6-monthly billing, but can pay DD monthly
- DCWW make adjustments to DD amount based on usage

However, there are still areas of confusion that persist

- Confusing monthly DD with monthly billing
- Some imagine meter reading is digital like a smart meter
- Some presume there are statistics available on daily usage

Knowledge of how metering helps the environment

Only a minority understand how a reduction in consumption via metering is positive for the environment

- Less water taken from streams, rivers, reservoirs
- Eco systems remain more balanced
- Balance between human needs and environmental needs
- Less carbon will be used in the water processes

But there are many who are not able to articulate the environmental impact of metering clearly, indicating a knowledge gap that we should address to strengthen rationale for metering roll-out

Only a handful of customers on the online community claim to have ever had info from DCWW on metering, and virtually all think that more info should be provided

Only very few customers recall receiving info on water meters from DCWW:

“When I was struggling financially, I was contacted and given this option as part of the tariff I was offered. Had I not been struggling, I probably wouldn’t have heard from them.”

“I’ve been told by DCWW that I’m due to have a meter as my usage is so low. However, that was about 2 years ago and I’m still nowhere nearer to getting one.”

More claim they have not received any info on meters, though often they would like to:

“No I’ve never had a letter or leaflet asking or informing me about them. I think it would be good to get an idea of how they work, what they look like, and examples of how much could be saved (water and money).”

“I can’t ever recall hearing anything. I would like to hear how a water meter would benefit me as a customer as well as how it benefits the environment.”

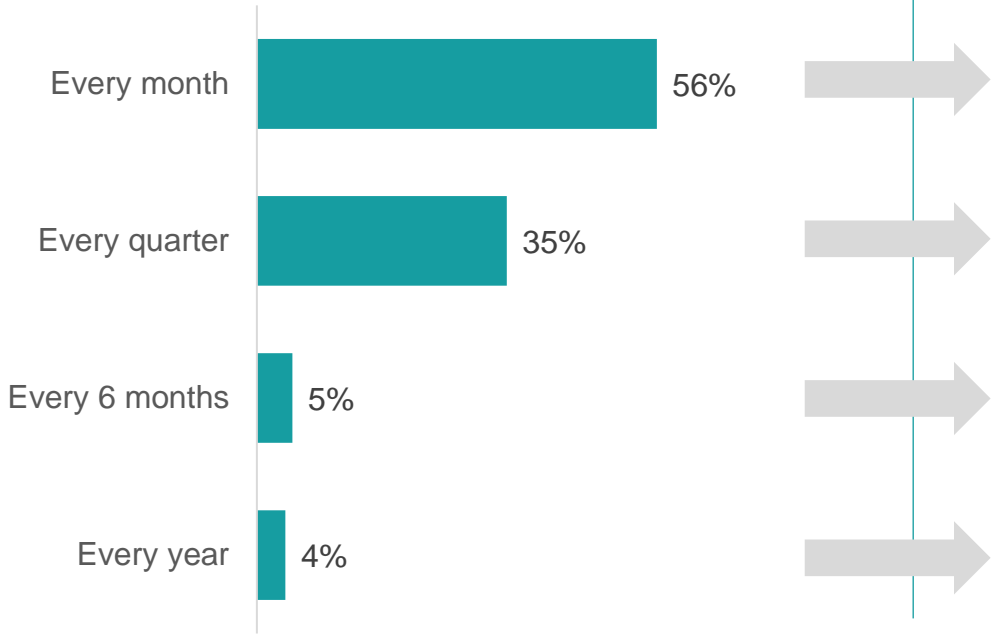
“We get very little from DCWW in the way of info about metering. I think posting flyers or sending emails with cost comparisons and benefits of having one installed would be a great idea.”

03

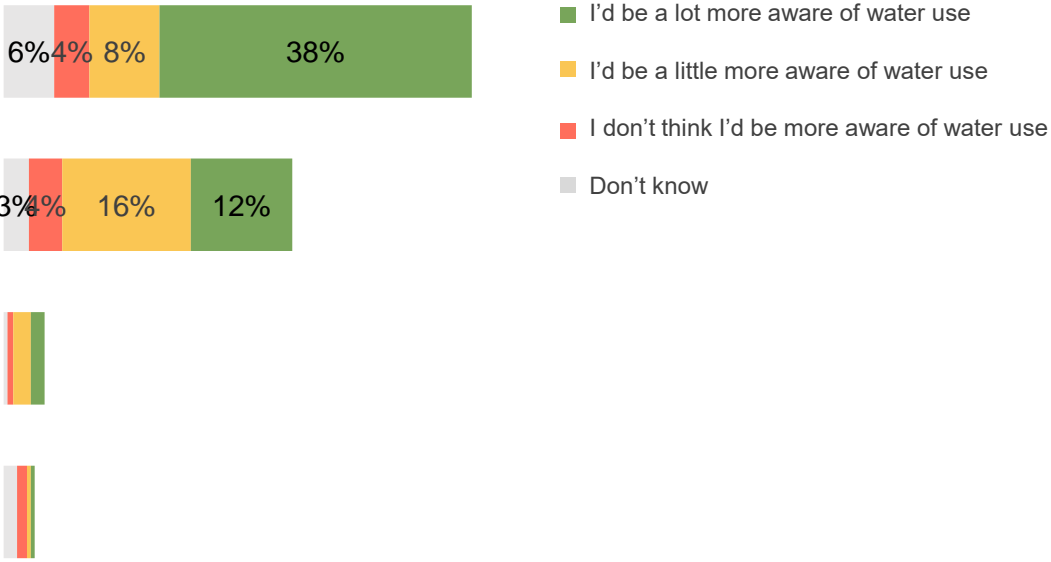
As with metered customers, it is encouraging that many unmetered customers believe that regular usage updates would likely aid awareness of their consumption

Meter read frequency and impact (All unmetered customers)

HOW OFTEN WOULD YOU WANT TO BE UPDATED ON USAGE?



LIKELY IMPACT OF HAVING A METER ON WATER USAGE



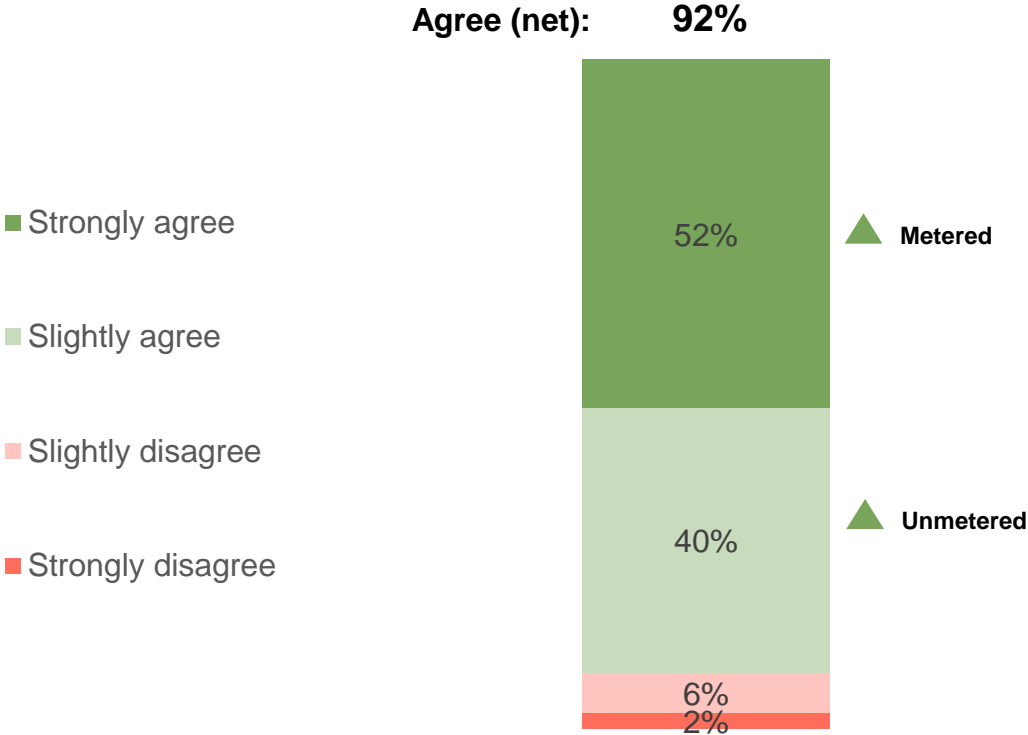
D5. If you were on a water meter, how often would you want to be updated on your water usage (i.e. given a meter reading)? D6. If you were updated on your water usage [INSERT ANSWER AT D5], do you think you would be...?
Base: Unmetered customers (425)

The principle of fairness around ‘pay for what you use’ attains support across our customer base, but we should not mistake this for support for compulsory metering....

Perceived fairness of metering (Total Sample)

▲▼ Tested at 95% significance

“IT WOULD BE FAIR FOR EVERY HOUSEHOLD TO PAY ONLY FOR THE WATER THEY USE”



“Yes I think it’s definitely the fairest way to pay for what you use – you wouldn’t want to be accidentally lumbered with anyone else’s water usage.”
NON METERED CUSTOMER

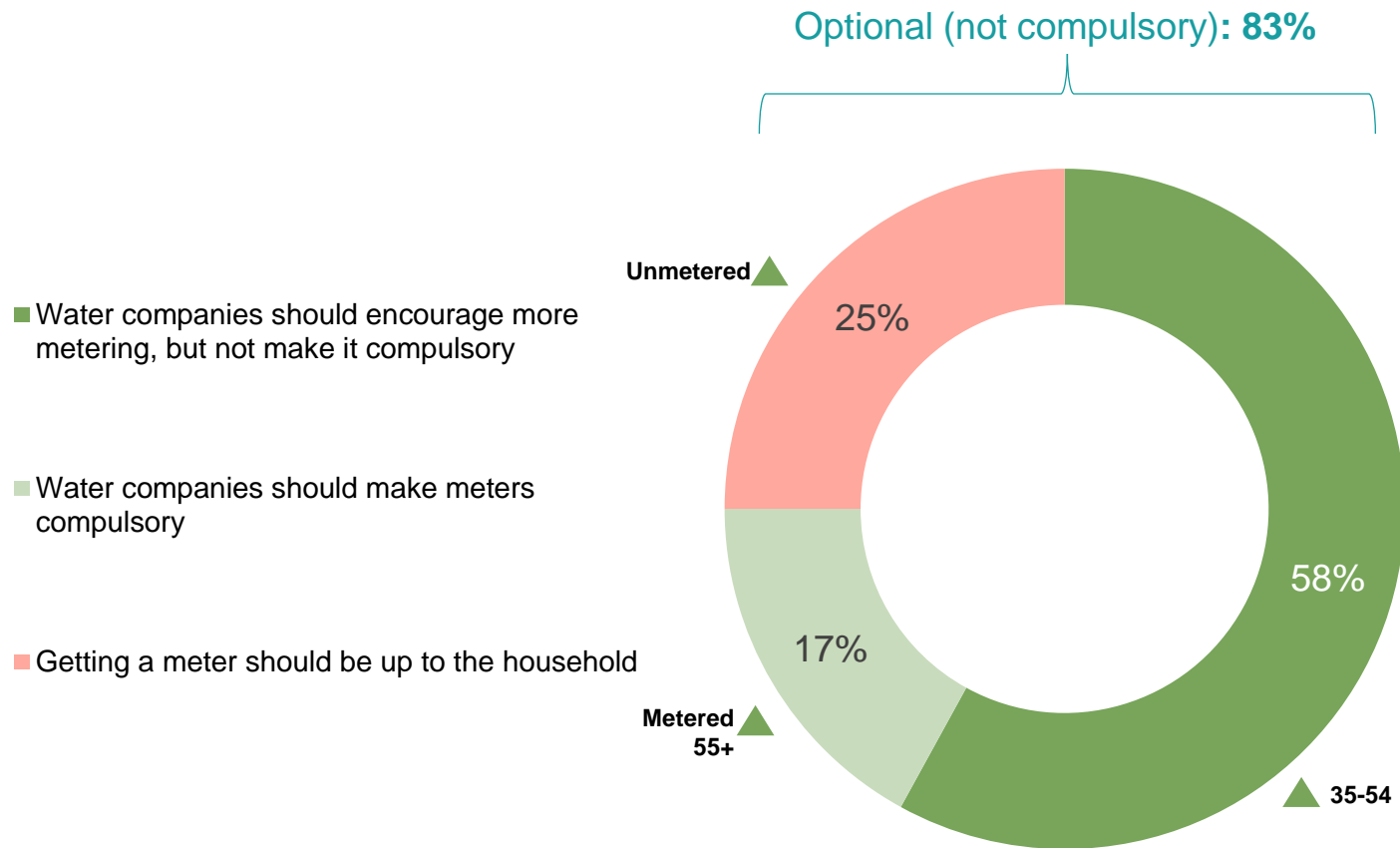
It is apparent that paying for what you use is seen as being likely to make customers more mindful of usage, and ultimately reduce consumption levels overall

D13. To what extent do you agree or disagree that ‘it would be fair for every household to pay only for the water they use’?
Base: Total sample (807)

....because there is a strong consensus that metering should be optional rather than compulsory

Metering attitudes (Total Sample)

▲▼ Tested at 95% significance



“Although I am a big fan of water meters and can certainly see the long term benefits, I also think it is right that people are given a choice and should not be forced onto a meter if they really do not want to be. However, they should be encouraged to do so wherever possible.”

- Optional metering removes the barrier of penalising certain types of household
- Optional feels appropriate to current financial climate and affordability fears
- Important to customers to retain element of control when it comes to budgeting
- Clear that compulsory metering would anger some unmetered customers and cause resentment

Customers are reassured by DCWW policies that focus on optional metering, but want to see this supported by heavier promotion of metering

On the DCWW free meter optant scheme

- Most feel **reassured** that metering is not compulsory
- Seems like a very **fair** system to apply, particularly when they note the comparisons to some English regions
- **Sensitive** to the needs of ALL customers and **non-penal**
- Some do question, however, whether the policies are too '**relaxed**' in favour of the customer and could be strengthened slightly (without going so far as to make metering compulsory)

On whether free meters are adequately promoted

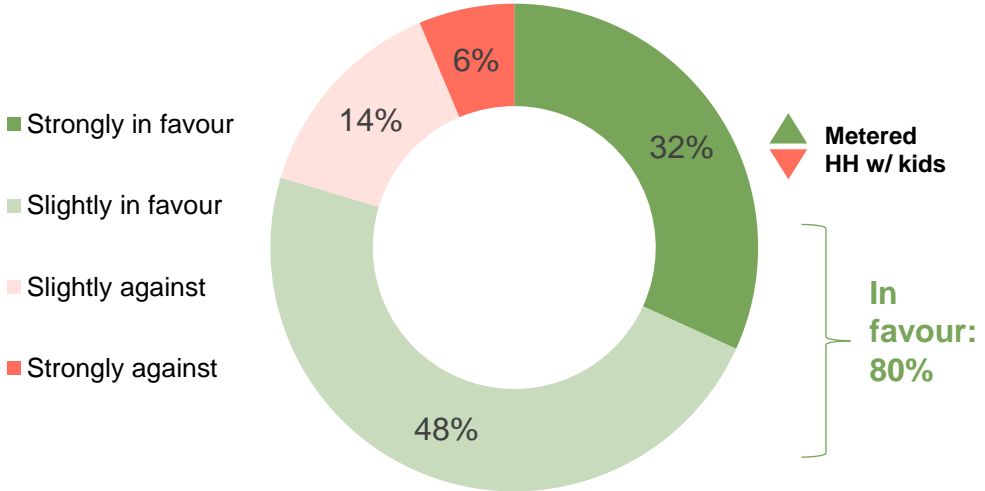
- Consensus on this seems to be a fairly clear-cut '**no**'
- Customers (metered and unmetered) **expect more promotion** of water meters from DCWW
- Given the challenge with climate change and supply for future generations, there is felt to be **sufficient rationale** to do so
- Could be promoted on key correspondence e.g. **bills**
- Potentially **targeted** towards lower users/smaller households
- And promoted in a **balanced** way with both pros and cons of metering

Progressive metering seems to offer the ideal stepping stone towards driving metering roll-out but without compromising on optional – feels like a win-win to most customers

Progressive metering attitudes (Total Sample)

▲▼ Tested at 95% significance

ROLL OUT OF PROGRESSIVE WATER METERS



Customer views on progressive metering

- ✓ Surprised and impressed
- ✓ Seen as very fair to customers and a ‘gentle’ way forward
- ✓ Customer retains control and DCWW progresses meter roll-out
- ✓ Specific benefits include:
 - ability to compare savings before making a commitment
 - potential for reducing bills
 - monitoring usage more closely is also of interest, though the expectation is for fairly regular data points (weekly/monthly)
 - leakage identification
- ✓ Barriers are few and far between –
- !! Just a few mentions of feeling like ‘metering by the back door’, not wanting to negatively affect property value and whether the installation will be problematic

“I like the idea of progressive metering. Using meters as a means of monitoring leaks/waste, whilst only changing billing if a customer can see the advantages of this, would seem a very fair approach with real benefits.”

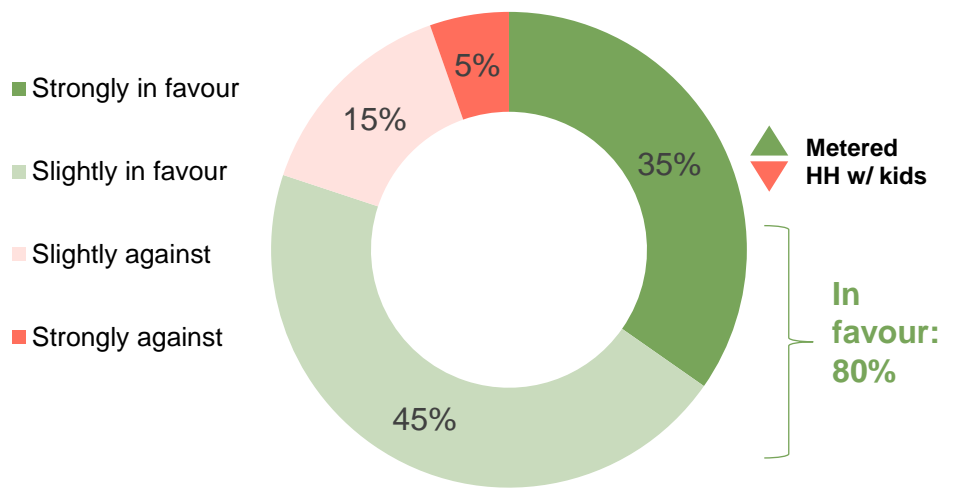
D16. Given what you’ve read, would you be in favour or be against the roll out of more water meters, if customers could still choose whether or not to be billed on their actual usage?
Base: Total sample (807)

Billing new occupiers who move into a home with a water meter on actual water usage also feels like a step DCWW could consider - though it may encounter some resistance

Billing new occupiers (Total Sample)

▲▼ Tested at 95% significance

WATER METERS TO BILL NEW OCCUPIERS ON THEIR ACTUAL WATER USAGE



Customer views on billing new occupiers

- Consensus is that the current policy of NOT installing and billing on a meter where there is a change of occupier is **eminently fair**
- Some however do think **DCWW could go further** and bill new occupiers on water usage – strengthening the current ‘gentle’ approach
- However, there is little doubt that billing on usage would meet with **some resistance** as it goes back to the idea of penalizing larger/vulnerable households and doesn’t take account of the circumstances of the home move – e.g. if a resident is moved by the council/housing association

“I think it would be fair [to bill new occupiers] as long as it is made aware to everyone that from X date all new house moves will be switched to a water meter if a progressive meter has been installed.”

“I think at the very least a period of transition would be needed where customers could monitor their usage and what their bill could potentially be, so they can adapt their usage to ensure it is affordable.”

Social tariffs offered by DCWW are welcomed as helping to ensure we are not penalizing larger and vulnerable households for necessary water usage

“ This is what I’m on and it has been an absolute god-send for us as a family, so thank you! ”

Perceptions of social tariffs

- ✓ Great for those who genuinely need **help**
- ✓ Feels very **supportive** of low income households
- ✓ Seems **fair** to make tariffs contingent upon receipt of certain benefits
- ✓ Applying a **price cap** also feels fair and helps with budgeting as well as reducing worry
- x May not capture those who **don’t get benefits** though who are still struggling
- x **Unlimited usage** questioned by minority if already in receipt of affordable rates

WaterSure Wales

A national scheme available to metered households in receipt of certain benefits which have 3 or more children or an occupant with a medical condition that requires use of large amounts of water.

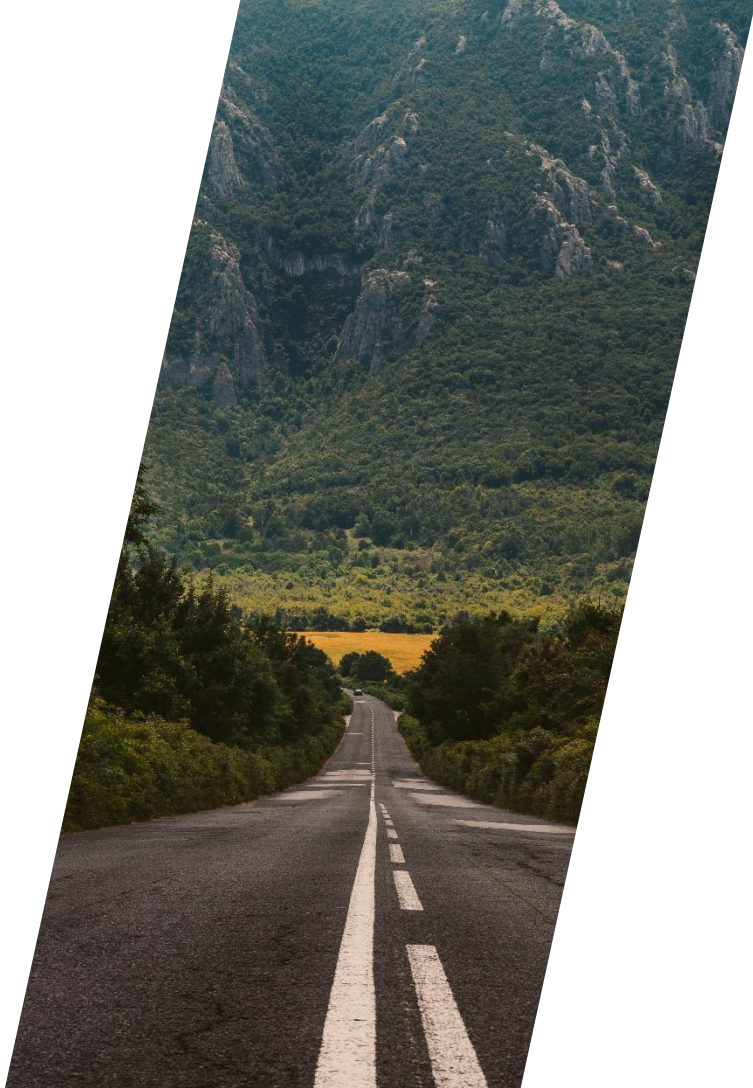
HelpU

A Welsh Water specific scheme to support lower income households. To qualify, the household has to be in receipt of one of 8 means-tested benefits and have income below a certain level.

Other support DCWW could offer

- **More promotion** of social tariffs as they are not widely known
- **Home water audit with free water saving devices** to promote water saving behaviours
- **Free leak fixes** for those who may struggle to afford the cost of a plumber
- **Payment holiday** if customers suffer short term reduction in income e.g. job loss, temporary health issue

METERING AND SOCIAL TARIFFS - what does this mean for WRMP24?

**1**

The 53% of unmetered customers express barriers to metering around cost in particular, but also harbour some misperceptions e.g. once metered you can't go back to being unmetered

2

However, these are views that can often be challenged, and there is openness amongst the unmetered to receiving more information on metering than DCWW currently imparts

3

Despite barriers to metering, most acknowledge that meters increase understanding of consumption, and that the principle of paying for what you use is a fair one; but customers are also very clear that they think metering should be optional and not compulsory

4

Progressive metering (which is not well known) is welcomed as a potential stepping stone towards metering without customers feeling that they are having to commit

5

There is strong support amongst customers for the continued offering of social tariffs to help those who are struggling financially and have a higher need for water due to vulnerability

Smarter metering expectations



There are fairly positive views of energy smart meters on increasing knowledge around consumption – but even with government mandated roll out, uptake is very slow

Around a third of the qualitative online community has an energy smart meter – slightly below the Wales and UK average of 45%

Benefits of energy smart meters

- **Understand consumption** a bit better, via spend per day/week/month
- **IHD** very easy to use/understand – some engage with it multiple times a day
- **Easy to compare** summer and winter consumption
- Some **claimed reduction** in consumption
- **More accurate bills** – no more estimated readings
- Helps to **save** when on a budget

Drawbacks of energy smart meters

- **SMETS1** no longer useful when changing provider
- Hasn't always affected **overall bill amount**
- **IHD not always used**, can even lead to paranoia
- Some **still have to provide meter readings**

Those that haven't yet got an energy smart meter held back by....

- Lack of prioritization
- Not yet offered by energy provider
- Provider has been slow to arrange installation
- Inaccessible meter, insufficient phone signal
- Energy provider gone out of business
- Low user
- Concern about incompatibility if changing energy providers
- Data privacy concerns

With very little knowledge/info about water smart meters, customers' views are shaped by their knowledge/ experiences of energy smart meters

Customer knowledge/ perceptions of water smart meters

Framed by knowledge/understanding of energy smart meters, customers broadly welcome the concept of water smart meters:

- ✓ Better understanding consumption by seeing regular data so can adjust usage
- ✓ No more need for meter readers
- ✓ Lower consumption will have environmental benefits
- ✓ Expect similar in home device and apps to energy smart meters

Level of support for smart water meters closely mirrors support for water meters and paying for what you use

- With benefit of leak identification

Reservations about smart water meters include:

- Water meters often in the street vs energy meters in the property
- Unclear how appliance level data would be achieved
- Concerns about who will fund the smart roll-out and will this be reflected in customer bills
- Some have low interest in levels of consumption
- Rejection conceptually if they reject water meters



Online exploration reveals surprise amongst customers that smart water meters seem to be at a very early stage in UK, with only 2 providers rolling out...



anglianwater

- Thames Water rolling out one year progressive metering, with online a/c for usage data
- Anglian Water rolling out smart over the next 5 years
- Benefits found online seem to focus equally on monitoring/controlling usage and leak identification

"I searched on Google and the first thing I came across was Thames Water advising people to have smart water meters."

Building on their energy smart meter perceptions, customers expect to interact with the data fairly regularly via an app and IHD – thus high expectations



- When customers are told the smart meter will read the data every hour, then they expect **regular data points** – sometimes as often as hourly, and at least daily for many
- Expectations on **accessing the data** is either via an app and/or via an online account, as well as an IHD for inside the home – they often mistakenly refer to the IHD as ‘the meter’
- Some acknowledge from their energy smart meter experiences that **at first they are likely to engage with the data a lot more regularly** until they understand consumption patterns

Providing comparisons with neighbours’ consumption/other areas splits opinions

those who value benchmarking and want to better understand how much more they need to be doing

those who feel comparisons would be inaccurate due to different sized households, and a few who also have data privacy concerns



“I’d try and have the display somewhere like the kitchen where it was in my eyeline regularly. Then I would be more mindful and conscientious on what I was spending.”

“I’d expect to view my data either on the meter [display] or an app. Also, I would like my meter to be giving me info on a daily basis to see how much I am using daily, and then monthly usage to compare throughout the year.”

Although customers readily believe that smart water meters will be beneficial in monitoring consumption, they are much more skeptical about impact on reducing their bills

Benefits of smart water meters

- Leakage alerts
- Tracking consumption and giving more control over it
- Environmentally friendly
- Not paying when away from home
- Accurate billing
- Fair to pay for what you use
- Water bill will reduce**

Drawbacks of smart water meters

- Bill increase**
- Additional cost of overall meter roll-out
- Accuracy/reliability of the technology esp. for drive-past meter readings
- Data storing/sharing
- Installation disruption
- Effort

In most instances, customers think it's unlikely that they will be influenced on take-up of smart water meters by friends, family or neighbours

Progressive roll out of smart meters garners much support because it lets customers assess the value of the smart element to bill reduction before committing

Customer views on progressive smart meters

As with progressive water metering, most customers seem to support the idea of a progressive smart meters

- ✓ Facilitates **informed decision-making** by customers, by demonstrating the benefits in a meaningful way
- ✓ **Fair** because customers do not have to commit to metered billing if they find bills increase
- ✓ Will help to **reassure on barrier of reliability/accuracy** of smart water meters
- ✓ Feels like a **phased approach**, thus keeping roll out costs reasonable
- ✓ Will help customers to **understand more about their usage** and therefore make bill savings

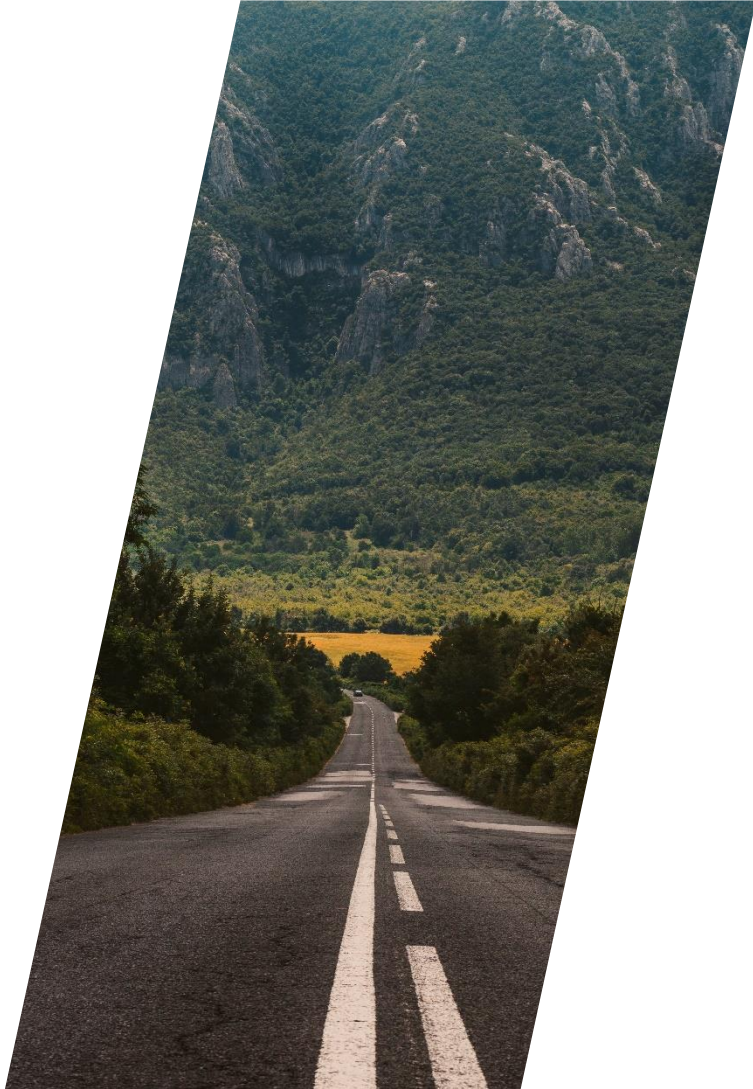
Those who are not supportive

- Are typically anti-water meters and prefer to continue paying unmetered rates – thus it is not the smart element per se that they are rejecting
- Some would also want information on whether it is possible to revert back once they have committed to smart water meter billing if circumstances / life-stage changes

“It’s a good idea as they would be able to see if changing to a meter would save them money or not before switching and also make them aware of what they are using.”

“I quite like this idea as people can make a well informed choice about doing so.”

SMART WATER METERING - what does this mean for WRMP24?

**1**

With little/no knowledge about water smart meters, inevitably customers' views are shaped by their knowledge and experience of energy smart meters – thus expectations are high (IHD, real-time info, free install etc.)

2

There is consensus that smart meters based on the energy smart meter model could play an important role in helping to increase knowledge about consumption via regular engagement and app-based solutions

3

Core benefits to smarter water meters identified are being able to monitor usage (and alter consumption), being alerted to leaks, and having a positive impact on the environment

4

Concerns about smarter water meters focus on potential for metering increasing bills and the wider costs of roll-out being passed onto customer bills

5

A progressive smart metering solution is seen as a fair way of rolling out this type of technology, giving customers the opportunity to see for themselves what the comparative savings would be before committing

Using tariffs to control demand



Adaptive pricing raises some big questions around defining necessary vs discretionary usage and how the national average would be calculated

In this scenario, a certain amount of water used each day would be charged at X pence per litre, but usage over and above this national average level would go up in cost

Benefits

- Treats all customers **equally** on consumption and payment
- Encourages more **thought** about water consumption
- Ensures **bigger consumers** pay more
- Clear and **easy to understand** how it works
- Covers usage for **basic needs** and (arguably) separates this from **non-essential** usage
- Would work well in conjunction with **smarter meters/data** on consumption so customers know what to reduce – at the very least customers would need to have a water meter

Drawbacks

- **Cumulative effect** for those already struggling with higher energy bills lately
- **Anxiety inducing** – constant checking to see whether in/out usage bracket
- Increased **effort/admin/thought** about water
- Unclear how well it sits with additionally asking customers to **reduce consumption**
- May end up with customers just **accepting higher bills** and not changing behaviours
- Smaller households may become **less considerate** about their water usage if they don't breach the cap



Larger families
Households with larger gardens
Those at home during the day
Financially vulnerable
Medically vulnerable who need more water

Seasonal pricing struggles to gain traction with customers as it creates problems for all at the time of year they need water the most

In this scenario, water would cost more during drier/drought seasons and less during wetter seasons

Benefits

- **Similar to energy pricing** but opposite seasons, thus may offset each other
- Fits with basic concept of **supply and demand**
- Encourages consumers to **think more about water**
- Directly addresses those who fill up **swimming pools** and use **hosepipes** in summer
- Will encourage use of **water butts**

“It feels like you would be being penalized for using water at the most crucial time of the year when we drink more, shower more and use more water for other tasks (e.g. garden).”

Drawbacks

- There is no easy means of **storing** cheaper water in winter, thus customer has no control
- Affects **quality of life** and enjoyment of summer
- UK has **less defined seasons** than other countries, making it difficult to budget accurately
- **Same water** from same source should cost the same amount
- Penal at the **time of year you most need water**
- May **discourage necessary usage** in summer months
- Water **shortages can occur in winter** months too
- Does not encourage **year round behaviour change**



Larger families with kids on summer break
Households with larger gardens
Those on lower incomes
Medically vulnerable who need more water all year round

Time of use tariffs may encourage some load-shifting but not necessarily reduction in consumption, and for some would just mean higher bills

In this scenario, water usage at non-peak times would be cheaper and conversely water usage at peak times would be more expensive

Benefits

- Beneficial for **non-working households** and **home-workers** who can load-shift
- Tech can help with **load-shifting e.g. washing machines**
- Reminiscent of **Economy 7** energy tariffs
- Filling **swimming pools and hot tubs at non-peak** times
- Makes customers **mindful** of when they are using water
- Having a **smarter meter** could potentially help customers understand their usage patterns to consider whether they need to load-shift

"I think this could be very unfair. If housing was designed with water storage in mind to smooth peaks in demand then this system might work better."

Drawbacks

- Possible peak times of early morning and late evening would **penalize families**
- Incongruous with changes to work patterns – **no longer 9-5**
- **Having to wait** to do washing, shower etc. is not desirable or often practical
- The **same water** should cost the same whenever it is consumed
- Consumers **may not reduce consumption**, but just change when they consume water
- Can feel like a **price increase** by the back door



Families with children
Those with medical conditions
Working households
Low income households
Shift workers

Types of use charging attracts some positivity by playing to stereotype of inconsiderate rich swimming pool owners, but seems operationally impractical

In this scenario, there would be higher charges for water used for activities such as filling swimming pools, using hosepipes or sprinklers

Benefits

- Draws distinction between **necessary vs unnecessary** usage
- Good to **penalize large and unnecessary usage** of water – thus feels intuitively **fair** to many
- Likely to encourage more use of **water harvesting** for outdoor use

“I think it’s a good idea in principle but it would be tough to implement.”

Drawbacks

- Unclear how this would be **policed**
- **Reduces fun** if families can’t use paddling pools
- If customer is **on a meter they are paying for what they use** so should not have further restrictions on how they use water
- Feels very **penal to gardeners** and those who grow their own produce
- Can feel like ‘**micromanagement**’ and like DCWW has too much control over water usage during non-drought periods
- Affluent swimming **pool owners can afford to pay** higher charges



People who enjoy gardening (often older)
Those who grow fruit/veg
Very affluent with swimming pools
Families with children

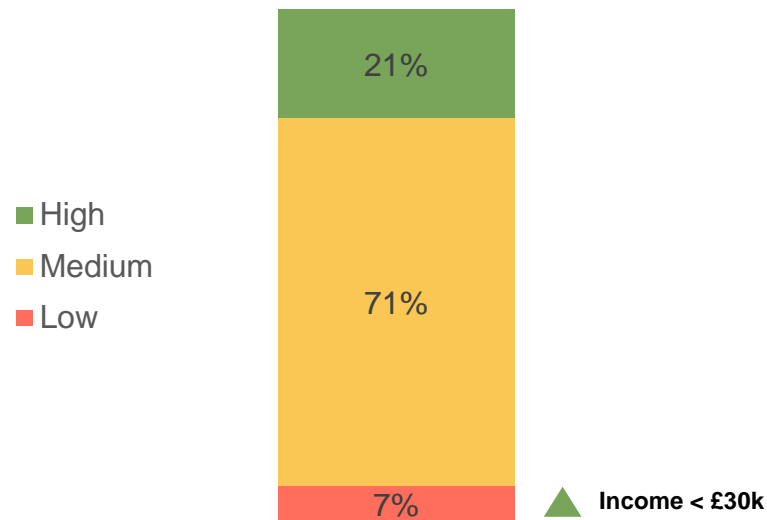
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In the context of most claiming their water pressure is 'medium', it is encouraging that 8 in 10 support water companies regulating pressure across the network to help manage demand

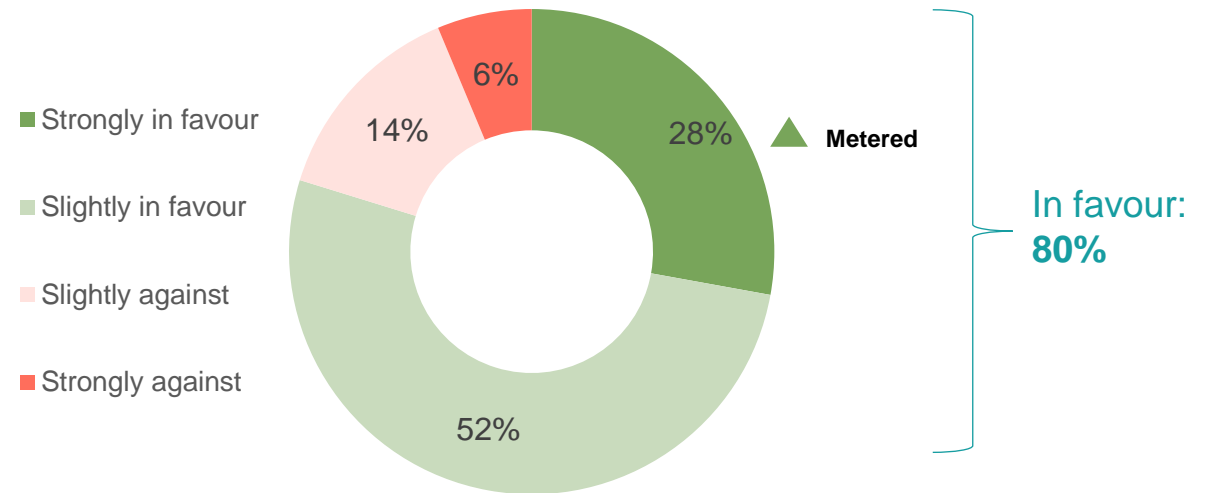
Water pressure and potential for reduction (Total Sample)

Tested at 95% significance

WOULD YOU SAY YOUR WATER PRESSURE AT HOME IS... ?



OPINION ON WATER COMPANIES REGULATING PRESSURE ACROSS THE NETWORK 'TO ENSURE IT'S STRONG ENOUGH, BUT NOT MORE THAN NEEDED'



A14. And would you say your water pressure at home is...? Base: Total sample (807)

D18. Another way to manage water supplies would be for water companies to regulate water pressure across the network - including into people's homes - to ensure it's strong enough, but not more than needed. Would you be in favour or against this? Base: Total sample (807)

Pressure reduction feels much more like a mild inconvenience than a measure that discriminates against certain customer groups

In this scenario, the water company could reduce pressure slightly across the network to help better manage demand

Benefits

- **Fair and equal treatment for all** customers irrespective of affluence, household size, vulnerability etc.
- No customer groups are adversely **financially** affected
- Does **not prevent access** to water
- **Onus is on water company** not consumer to control

“Yes I think I could support this. Everyone is affected equally. Everyone can still access water. It is cheap to operate. Very fair.”

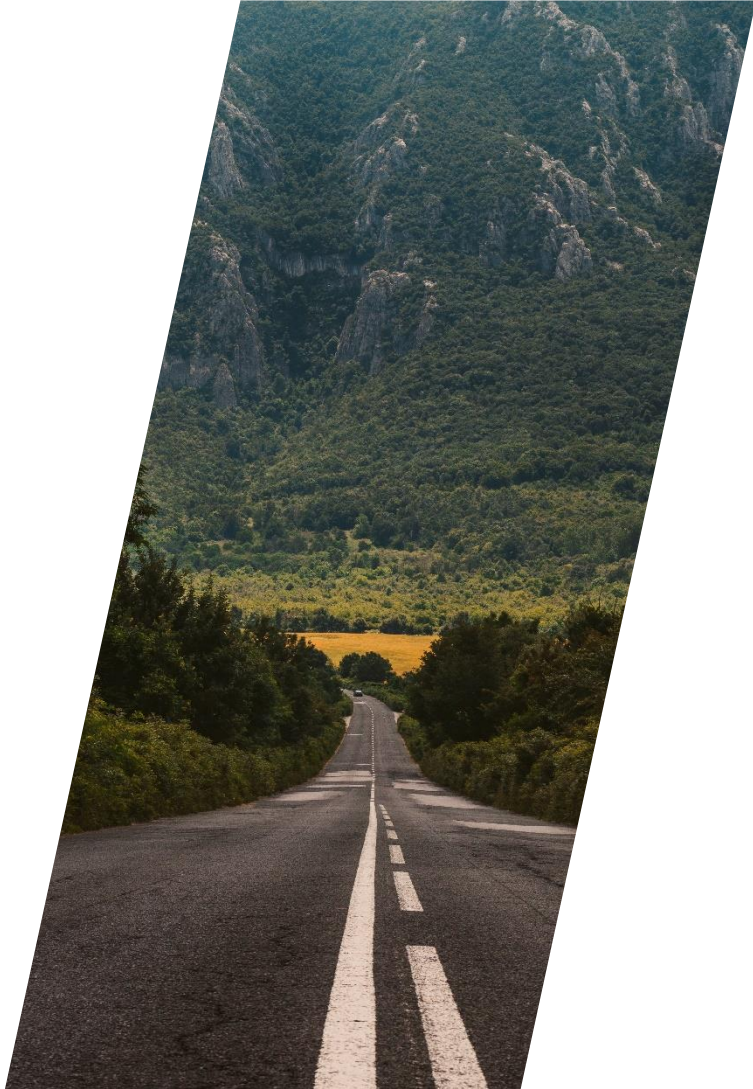
Drawbacks

- Doesn't directly address amount **consumed/demand**
- For small minority who already have **poor water pressure**, it would become problematic
- Pressure required by **fire brigade**
- **Showers** and appliances that need a certain level of pressure to operate
- Impact on businesses needing water for their operations



Those with poor water pressure already – e.g. taller buildings, older properties

CONTROLLING DEMAND - what does this mean for WRMP24?

**1**

Customers are not averse to DCWW exploring ways to help reduce non-essential usage of water, and they understand enough of the broader environmental context to acknowledge that something needs to be done

2

However, there is a widely held belief that access to water is a human right: The application of tiered pricing is felt to compromise this base belief, and artificially create a situation in which there are winners and losers

3

Families and vulnerable customers in particular are felt to be penalized by tiered pricing structures – irrespective of approach (adaptive, seasonal, TOU, type of use) – potentially causing affordability issues, as well as increasing inconvenience and negatively affecting lifestyles

4

Although not ideal, managed pressure reduction across the network is seen as preferable to and fairer than these more extreme tariff options listed above, providing it does not significantly adversely affect day to day water behaviours

Conclusions



Conclusions



On water efficiency, we need to ENGAGE customers with more proactive campaigns, EXPLAIN what we can all do to reduce consumption without impacting on our lifestyle, and ASSIST customers by providing them with access to water saving devices

On metering, customers want and expect more info from DCWW, so let's take the opportunity to challenge their barriers and misperceptions. And by pursuing a progressive metering policy, we can increase roll-out and help make the positive case, without compromising on the customer desire for choice rather than compulsory metering

Although smarter water meters have the potential to increase knowledge and understanding around consumption, customers have cost concerns over mass roll-out. Therefore a soft launch via targeted progressive smart metering may be the short term solution, whilst longer term strategies are developed

Controlling demand via tiered pricing tariffs feels like a step too far for many customers and risks compromising perceptions of fairness to all, especially vulnerable customers and family households. A fairer solution that garners more support in the short/medium term when needs must is to reduce water pressure across the network.

Click on the link below to see our video reel of DCWW customers



<https://vimeo.com/639150175>

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