Research report

Climate Change

Contents

Background, objectives & methodology

Background

The impact of the environment on United Utilities' (UU) activities, and the impact these activities have on the environment, influence how water and wastewater services is delivered to households and businesses in the region. Consequently any environmental change, in particular driven by change, has the potential to have a significant effect on the business.

UU's aim is therefore to maintain a consistent and sustainable level of service to customers and the environment, taking climate change and customers' and stakeholders' views into account.

As part of this aim, UU wanted to engage with customers about their views on the risks posed by climate change to the provision of water and sewerage services, engagement and awareness of climate change initiatives run by UU and the role that customers might play in mitigating the risks from climate change.

Objectives

The purpose of the research was to:

'Understand customer views with regards to climate change on the water and wastewater industry and understand customer awareness and expectations of United Utilities in the effort to protect our environment and mitigate against the risks of climate change.'

More specifically, UU wants to explore the following areas:

1. Understand customer priorities when it comes to climate challenges in the water and wastewater industry (uninformed and informed view)
2. Understanding what customers expect from UU in terms of resilience and climate change and what role UU is expected to play
3. Understanding customers' expectations of their role in tackling climate change as it pertains to water and wastewater
4. Understanding if customers want to engage more frequently/in more detail about United Utilities' climate change initiatives.

Methodology: qualitative

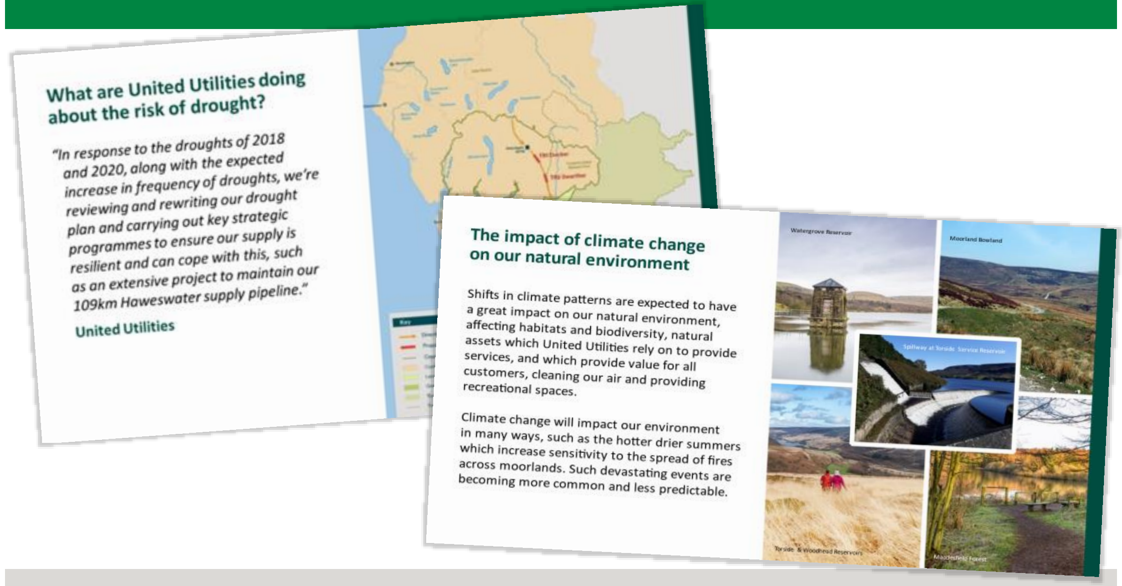
**We conducted 4 focus groups with B2C customers, recruited via our panel and social media.
All respondents were screened based on being a United Utilities customer and sole/joint bill payer.**

Focus group	SEG	Age	Metered	Environmental attitudes
Group 1: urban town or city	ABC1	25-44	Mix	Mix
Group 2: rural town/village/hamlet	ABC1	45+	Mix	Mix
Group 3: urban town or city	C2DE	45+	Mix	Mix
Group 4: rural town/village/hamlet	C2DE	25-44	Mix	Mix
***Group 5:** (future bill payers)	ABC1C2D	16-24	N/A	Mix

*We conducted 1 focus group with future bill payers who were recruited via our panel and social media. These participants were aged between 16-24 and not currently paying a water bill.

In addition, to the focus groups, we conducted 5 in-depth Zoom interviews. These included participants with disabilities and/or of a BAME background.

We asked all respondents to review and comment on stimulus provided by United Utilities



Fieldwork was carried out in December 2020 with 1 group taking place in January 2021.

Methodology: quantitative

We used an online approach to interview business and household customers as well as future bill payers. Sample was provided by United Utilities for the household fieldwork.

Household total sample: 945

The data has been weighted throughout to be demographically representative of United Utilities customers.

Respondents were screened on the following criteria:

- United Utilities must provide their water and/or sewerage service
- Must be over 18
- Must be solely or jointly responsible for paying their water bill
- Quotas were set to gather a mix of ages, gender, CACI segments, location and IMD

Future bill payers total sample: 147

DJS's own panel (OpEx) and social media were used in sourcing respondents and given an incentive for taking part.

Respondents were screened on the following criteria:

- Must be aged between 16-24 years old
- Must be living in areas where UU provides water & sewerage services to
- Must not be responsible for paying a water bill

Fieldwork was carried out in December 2020 and January 2021

Business total sample: 100

Respondents were screened on the following criteria:

- Must be responsible for selecting and/or managing utility suppliers, including and having knowledge of the size of water bills
- Must operate in areas to where UU provides water & sewerage services
- Quotas were set to gather a mix of businesses by size and sector

Sample profile
(quantitative)

HOUSEHOLD ONLY (N=945)

Demographics

	Demographics	Total % (base)
CACI SEGMENT	A (Budget conscious elderly)	18% (167)
	B (Indebted singles)	5% (45)
	C (Comfortable mid-life established families)	17% (161)
	D (Comfortable mid-life established families)	16% (155)
	E (Financially secure empty nesters)	8% (8)
	F (hard-pressed families)	12% (117)
	G (Struggling single pensioners)	9% (86)
	H (Families getting by)	9% (87)
	U	5% (48)
IMD	1+2	34% (320)
	3+4	19% (179)
	5+6	15% (144)
	7+8	17% (160)
	9+10	15% (140)

	Demographics	Total % (base)
REGION	**Cheshire**	19% (182)
	Cumbria	5% (46)
	Greater Manchester	37%% (346)
	Lancashire	27% (258)
	Liverpool	12% (113)
WATER COMPANY PROVIDING SERVICE	**United Utilities** (water & sewerage)	93% (1)
	United Utilities (water only)	6% (59)
	Cumbria	7% (62)
	Merseyside	17% (159)
	Greater Manchester	35% (335)
	Lancashire	24% (229)
	Cheshire	16% (151)
	North Derbyshire	1% (8)
	Extended family	1% (2)
METERED	**Metered**	57% (542)
	Unmetered	43% (403)

	Demographics	Total % (base)
AGE	18-24	1% (13)
	25-34	11% (103)
	35-44	12% (114)
	45-54	16% (148)
	55-64	21% (194)
	65+	39% (373)
GENDER	Male	55% (524)
	Female	44% (412)
	I describe my gender in another way	0% (2)
	Prefer not to say	1% (7)
SEG	A	8% (80)
	B	31% (290)
	C1 + students	24% (228)
	C2	12% (111)
	D	5% (49%)
	E	8% (77)
	Prefer not to say	12% (110)

FUTURE BILL PAYER ONLY (N=147)

Demographics

	Demographics	Total % (base)
BILL PAYERS	Parent/guardian pay the bill	73% (108)
	Landlord pays the bill	18% (27)
	University accommodation	8% (12)
AGE	16-19	7% (11)
	20-29	93% (136)
GENDER	Male	51% (75)
	Female	48% (71)
	I describe my gender in another way	1% (1)
SEG	A	24% (36)
	B	20% (30)
	C1	17% (25)
	C2	16% (23)
	D	5% (8)
	E	15% (22)
	PNTS	2% (3)

	Demographics	Total % (base)
WORKING STATUS	Working full-time	50% (74)
	Working part-time	14% (21)
	Due to start a job in the next month	2% (3)
	Engaged in full-time further study, training or research	12% (17)
	Engaged in part-time further study, training or research	18% (27)
	Taking time out in order to travel	1% (1)
	Unemployed (and looking for work)	5% (7)
IN THE HOUSEHOLD	Living alone	4% (6)
	Parent/guardian	65% (95)
	Siblings	48% (70)
	Partner	25% (37)
	Child/children	14% (20)
	Friends	9% (13)
	Extended family	1% (2)
	Something else	1% (2)
	None of the above	1% (1)

	Demographics	Total % (base)
ETHNICITY	**White**	59% (87)
	BAME	41% (60)
RELIGION	**Christian**	80% (118)
	Other religion	7% (10)
	None	10% (15)
DISABILITY	**Disabled** (self)	7% (10)
	Disabled (member of household)	7% (10)
	No	82% (121)

***BAME:** White & Black Caribbean, White & Black African, White and Asian, Other Mixed background, Indian, Pakistani, Bangladeshi, Chinese, Other Asian background, African, Caribbean, Other Black/African/Carribean background, Arab, Other ethnic group.

BUSINESS ONLY (N=100)

Firmographics

	Firmographics	Total % (base)
REGION BASED	Cumbria	9% (9)
	Merseyside	21% (21)
	Greater Manchester	50% (50)
	Lancashire	28% (28)
	Cheshire	19% (19)
	North Derbyshire	3% (3)
SITES ACROSS THESE COUNTRIES	1 site	58% (58)
	2-3 sites	28% (28)
	4-5 sites	10% (10)
	6-7 sites	2% (2)
	8+ sites	2% (2)

	Firmographics	Total % (base)
SITES ACROSS UK	1 site	55% (55)
	2-3 sites	27% (27)
	4-5 sites	12% (13)
	6-7 sites	1% (1)
	8+ sites	4% (4)
EMPLOYEES IN UK	1 employee	3% (3)
	2-9 employees	21% (21)
	10-49 employees	19% (19)
	50-99 employees	12% (12)
	100-249	19% (19)
	250-499 employees	17% (17)
	More than 500	9% (9)
EMPLOYEES IN NORTHWEST	1 employee	3% (3)
	2-9 employees	22% (22)
	10-49 employees	25% (25)
	50-99 employees	10% (10)
	100-249 employees	20% (20)
	250-499 employees	14% (14)
	More than 5,000	6% (6)

	Firmographics	Total % (base)
WATER USAGE IN THE ORGANISATION	The manufacturing process which is essential to the running of your organisation	28% (28)
	The supply of services your organisation provides	50% (50)
	An ingredient or part of the product or service your organisation provides	29% (29)
	Normal domestic use for your organisation's customers and employees	73% (73)

Understanding views towards climate change

Climate change is a concern across all of society, regardless of age, background or location

When people were asked to rate their level of concern for climate change out of 10, scores were rarely below 7.

We'll see shortly where customers and future bill payers ranked climate change amongst other global issues, however, it is clear that climate change is a key concern.

Whilst there is some reported differing views over the level concern locally (North West) vs the UK as a whole, climate change is regarded as:

'A global issue that we all need to be held accountable for.'

Future bill payer

People recognised that climate change is all around us and cannot be deemed as a just local issue:

"When I think of my local area of course we see things changing and the behaviour of the weather that we see is quite alarming.

For example in summer, we have droughts in reservoirs that are local to me, but then in winter there is floods. So, it is quite concerning but I'd say globally the issues we see on the news is really alarming and that makes me more concerned than I am about just my area if that makes sense."

25-44, ABC1

Customers do recognise the impact of climate change on future generations

Whilst climate change is an issue which is present in the here and now, customers did recognise the impacts are only going to get worse.

The impact on future generations is a concern for many.

"I don't personally have children, but I don't think anything drastic will happen to affect me personally during my lifetime, but I do worry about the planet and the animals and future generations once I'm not here."

25-44, C2DE

"I think I'm more concerned about after my generation because I know the temperature is rising but since the 19th century, it's something like what two degrees, so it's more future generations I worry about, the impact that our behaviour will have on my grandkids and their children and what not."

25-44, ABC1

The COVID-19 pandemic is of most concern across all groups, however, climate change is still a worry

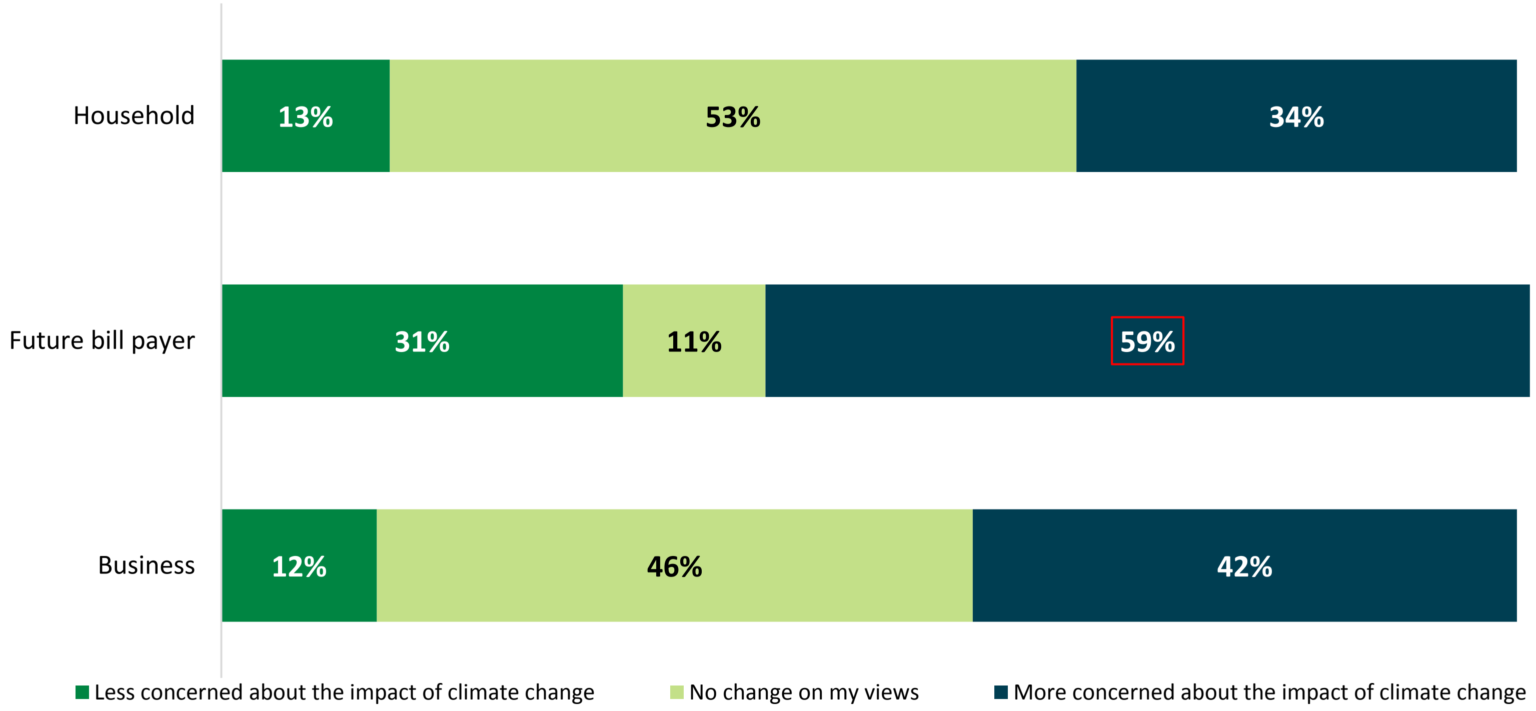
Future bill payers find most areas concerning while the global recession is understandably more concerning for business customers.

Concerns	Household		Future bill payers	Business
Covid-19 pandemic	**8.6**	65+ (9.0) Females (8.9)	**8.5**	**8.4**
Poverty & inequality	**8.1**	Liverpool (8.7) Females (8.6)	**8.3**	**6.9**
Climate change in the UK	**8.0**	Liverpool (8.3) Cheshire (8.3) CACI: B (8.6).	**8.4**	**6.9**
Climate change in the North West	**7.8**	Liverpool (8.1) Cheshire (8.0) CACI: A (8.5).	**8.3**	**6.7**
Global recession	**7.5**		**8.2**	**7.7**
Crime	**7.6**		**8.1**	**6.7**
Brexit	**6.5**		**7.9**	**6.5**

Base: excluding those who selected 'not sure': Q01. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the following?

The COVID-19 pandemic has impacted how some view climate change, with 3 in 5 future bill payers stating it has made them more concerned, significantly higher than household customers

Covid-19 pandemic impact on concern over climate change



Respondents were asked whether a number of other global events such as Brexit, recession and the US election impacted their views on climate change.

All did to some degree (see appendix).

"During lockdown the water in Venice drastically cleared which just proves that if we reduce carbon emissions then there will be a positive impact on the world."

Future bill payer

Females (41%) and those who feel UU should invest more in asset health now (37%) are more likely to be more concerned about climate change following the impact of the Covid-19 pandemic.

Base: all respondents: 100 (all business respondents) **945** (all household respondents) **147** (all FPB respondents)
Q03. Have any of the following events had an impact on how concerned you are about climate change – if so, have they made you more or less concerned?

Comments from the qualitative research support this

Customers cited media reports and articles on social media describing the positive impact COVID had on the climate.

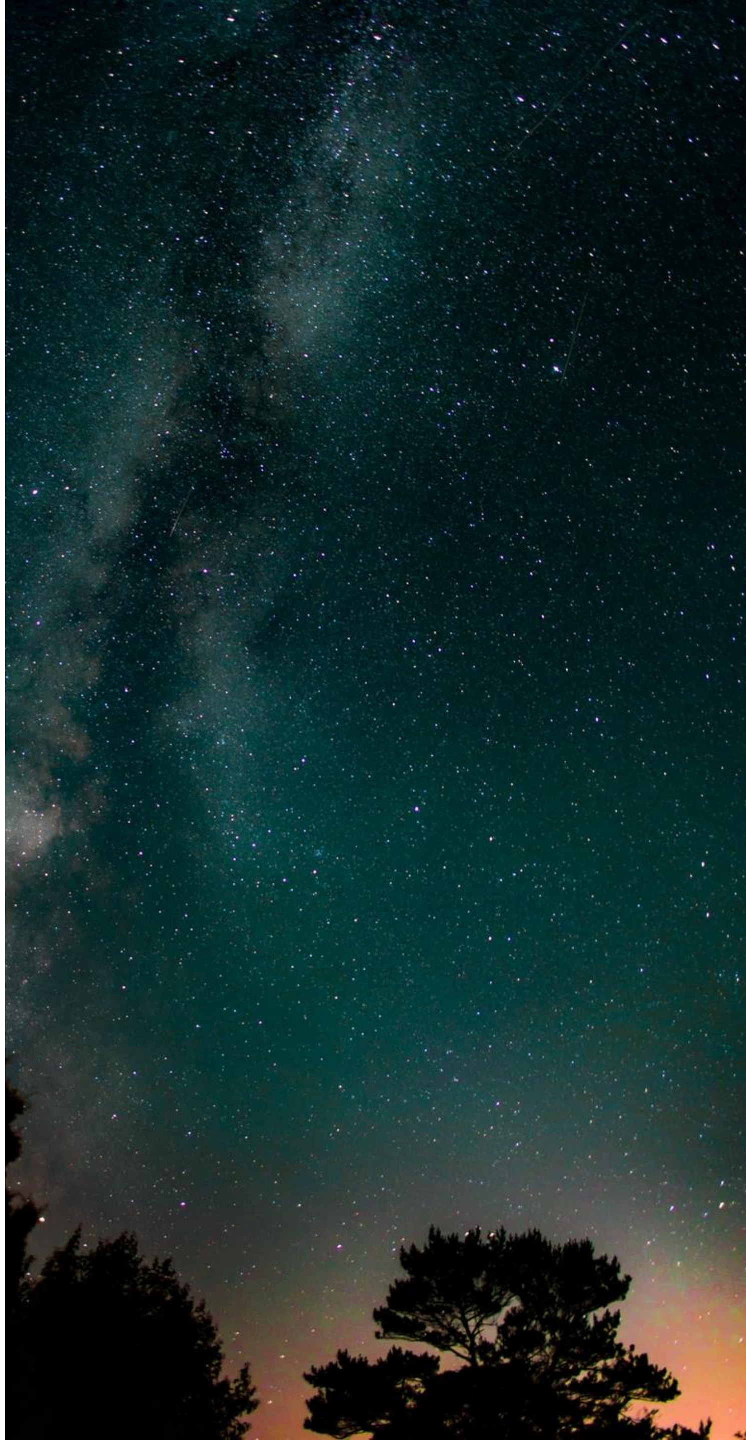
Across almost all qualitative groups and interviews, there was some reference to news items that showed the clear- up of emissions on images of earth captured from space and cities and green spaces where wildlife was returning for decades.

'Seeing those images of animals roaming around in empty cities was really powerful for me.'

Future bill payer

"I would say for me personally, I'm probably more concerned about it since Covid. For example, during Covid when no one was using their cars, at night I could see the stars and things like that. And if you look out of my window now, you can't see anything like that. And so that just shows that the massive contrast in how much emissions we were actually using; it's quite worrying really. I'm much more concerned now I've seen a direct impact of what the humans are doing once that's taken away for a few months."

25-44, ABC1



When thinking about climate change challenges, drought tends to be top of mind

Customers and future bill payers mainly cited droughts in relation to climate change due to the increase in frequency, with many recalling the North West alone has had two in recent years (2018 & 2020)

However, there were a number of other challenges spontaneously mentioned beyond droughts:

- Increased frequency of storms/heavy rainfall
- Flooding
- Increase in temperatures/hotter summers
- Sea levels rising
- 'Polar ice caps'
- Greenhouse gases
- Carbon emissions
- Global warming

"I'm very worried about climate changes, especially over the last 20 odd years. I can remember really bad winters and really good summers and we don't seem to have that now; it seems very mixed up at the moment…especially where I live in Cumbria. We get a lot of bad weather and floods; I'm worried about the floods…it's been shocking in Cockermouth and I worry about that. I've seen it first hand and it's really worrying. I would like to know if this is going to be the norm in the future."

45+, C2DE

However, customers and future bill payers continue ‘to take water for granted’ despite being aware of these challenges

We have heard in previous research for UU and continue to do so, the notion that ‘we take water for granted’.

Despite being aware of challenges faced by climate change, very few make the connection between this and potential disruptions to supply (amongst other things).

With the exception of droughts, customers and future bill payers did often struggle to identify how these challenges will impact how United Utilities services its customers.

This is a really important point to note, as it will play a large part in how customers are educated on the challenges and subsequently consulted on plans to tackle them (should they want to be consulted)**.**

‘For me personally, I live near Manchester, so we get plenty of rain, we get enough rain. So, I'm just thinking how they're managing that and keeping that for like the drought days. As a child when I remember it felt like we had better summer days and less rain. But now I can't understand how we've got more rain and we still experience things like droughts’.

C2DE, 45+

When prompted, the impact of climate change on the natural environment is of most concern to all

Climate change challenges	Household	Future bill payers	Business
Impact on the natural environment (Biodiversity loss, pollution, damage to ecosystems and land)	8.5 Liverpool (8.7), CACI: C (8.9), unmetered (8.7)	8.4	7.3
Greenhouse gas emissions and fossil fuel use (Emissions of carbon dioxide and other climate change causing gases)	8.2 Liverpool (8.5), CACI: A (8.8),	8.3	7.0
Agriculture and food supply (Changing land conditions and their impact on food supply)	8.2 Liverpool (8.6), CACI: C (8.4), unmetered (8.4)	8.3	7.2
Sewer flooding	8.0 CACI: B (8.8), IMD 1+2 (8.3), 65+ (8.4)	8.2	7.0
Drought	7.5 CACI: D (7.8), Females (8.0), those with children (7.8)	8.1	6.8
Asset flooding	7.5 Lancashire (7.8), CACI: B (8.6) IMD 1+2 (7.9), 65+ (7.9)	8.1	6.8
Power cuts	7.5 CACI: A (7.9), SEG:E (8.1)	8.1	7.3
Health and wellbeing (Impact of extreme hot and cold weather conditions on individuals)	7.5 CACI: B (8..2), Liverpool (7.8), Female (7.9)	8.4	7.1

Base: excluding those who selected 'not sure': Q08. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the following climate challenges in our region?

Perceptions of United Utilities’ role in tackling Climate Change

Awareness & knowledge of UU's general role and responsibilities varies

In the qualitative phase of research, customers were asked to spontaneously mention what UU's role was.

Knowledge of UU's role varied, some were able to go into some detail, citing responsibilities such as

- leakage repair
- offering water saving devices
- maintaining infrastructure

These were often due to having personal experience of leaks or seeing UU employees on the street. However, some comments were much vaguer in nature, such as 'they provide us with water'.

Again, part of the challenge of involving customers in decisions around investments, in the lack of knowledge or general awareness of the role UU plays in tackling climate change.

"It's dealing with repairs as well. I know personally twice this year we've had no water on the street because they've been doing repairs."

45+, ABC1

"I don't know much about United Utilities. My teacher said he used to work there and worked with the sewerage."

Future bill payer

There were no clear indicators of what drives having more knowledge of UU. Views were varied across all customer types with the exception of future bill payers who, in general had a lower knowledge levels.

When presented with what UU’s role is, there was a general sense of appreciation

In line with the ‘we take water for granted’ view that we often hear from UU customers, when presented with information on UU’s role customers were again somewhat surprised and accept they do not think of the scale of the operation.

Many customers are unaware that UU is a regional company supplying the North West; this merely supports the notion that it is a very transactional relationship for many customers.

“I actually thought United Utilities supplied the whole country.”

25-44, ABC1

“It’s kind of amazing really isn’t it. One company is responsible for all of those people and getting water to us and taking it away. I’ve never really thought about it like that.”

25-44, C2DE

Household customers are most likely to agree United Utilities should be responsible for taking a proactive approach to the potential impacts of climate change

Climate change challenges	Household	Future bill payers	Business
Provide water to that is safe to drink	98%	81%	91%
Ensure that there is enough water to meet demand now and, in the future	96%	82%	90%
Fix leaks	95%	75%	89%
Prevent homes, gardens and local areas from being affected by sewer flooding	94%	78%	86%
Encourage customers to not waste water and be water efficient	94%	76%	85%
Consider its impact on the environment	93%	80%	83%
Taking a proactive approach to the potential impact of climate change on our region	86%	78%	78%

Those in CACI segments C (64%) and G (65%) are significantly more likely to strongly agree.

Base: all respondents: 100 (all business respondents) **940 safe to drink 936 enough water to meet demand** (all household respondents) **146** (all FPB respondents)
Q04. To what extent do you agree or disagree that United Utilities has a responsibility for the following areas: *Data labels below 5% have been excluded from the chart.

Despite customers agreeing UU has a role in many areas when prompted, deeper discussion reveals a very transactional relationship void of any real thought into the connection between UU and climate change

"I just wonder how UU consider its impact on the environment. If they do, that's great, but I don't know how and I don't know what I can do to have a positive impact on that.

In terms of United Utilities, I get my bills from them through my emails once a month, but I don't have any contact with them."

25-44, ABC1

Only when prompted and provided with further information in the qualitative phase were customers able to make a connection between climate change challenges and how they impact UU.

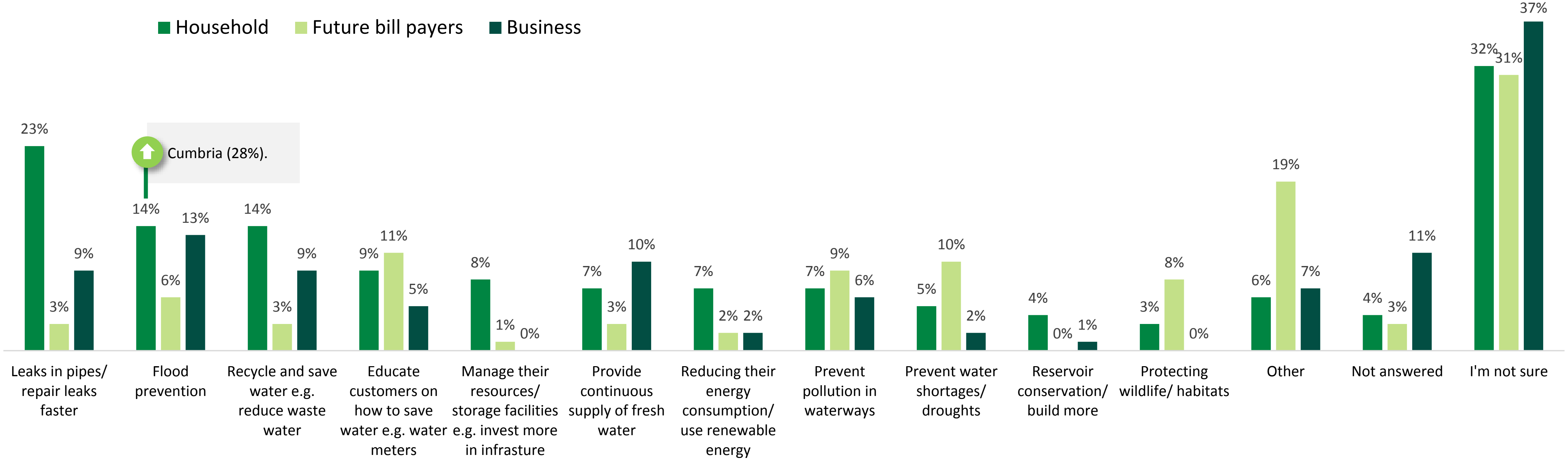
Even then, the connection made was relatively weak and some customers either strived for more information (explored later), or accepted that it's UU's role to be dealing with these challenges and assumed confidence that it is doing so. The view for many was:

'We all need to do our bit. I am in control of what I do, but I can't control what UU do'

45+, ABC1

Around a third of all customers struggled to think of what UU could do to help protect against the impacts of climate change

Customers feel fixing leaks in pipes, preventing floods, recycling water and providing more education are most important for UU when addressing climate change



Base: all respondents: 945 (all B2C respondents) **100** (all B2B respondents) **147** (all FPB respondents) Q07. What for you are the climate challenges that are most important for United Utilities to be addressing to protect against the impact of climate change?

A number felt there was an additional role not mentioned: to support those most vulnerable

Many customers also spontaneously mentioned the impact any issues of supply could have on people's health and wellbeing.

"7 million homes that they've got to provide water for so if there's a drought there's a risk that there's not enough water there that they can clean and pump into people's homes. They have an obligation to provide a service to, especially the most vulnerable people as well so there must be a lot of pressure on them for that."

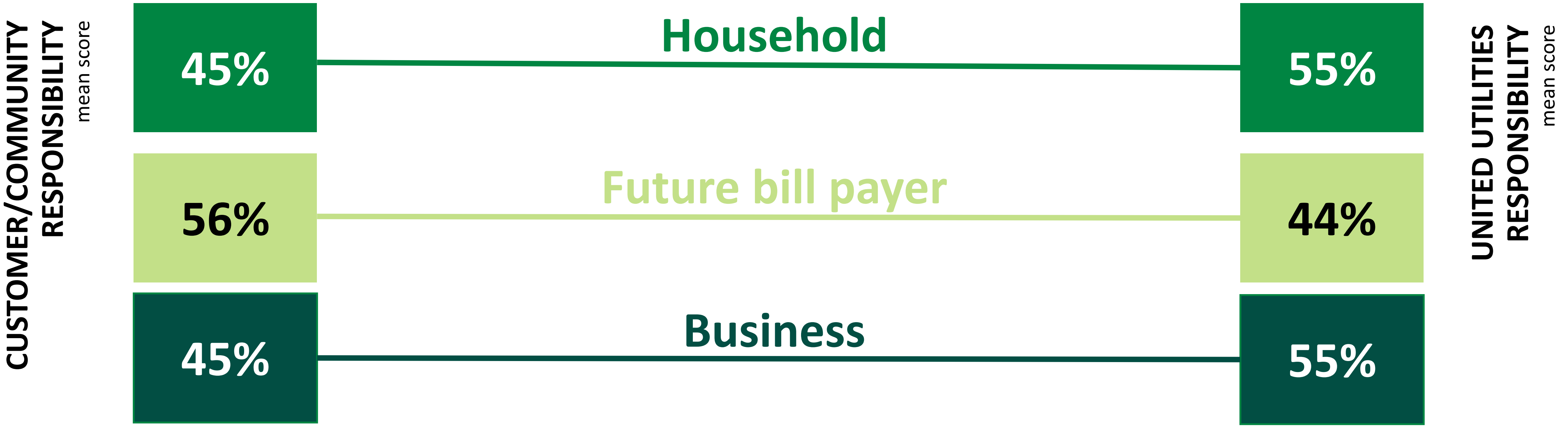
25-44, ABC1

'I think health and well-being is a really important one and it would be interesting to know what United Utilities have in place to identify that, especially vulnerable customers; if you're living on your own and vulnerable, how does that get picked up and measured?'

45+, ABC1

Business & household customers tend to feel the balance is fairly split when it comes to taking action to tackle climate change

Just over half (55%) feel it is UU's responsibility. However, future bill payers feel over half (56%) of the responsibility should lie with the community.



Those in IMD: 7+8 (47%) CACI segments and those in CACI segment U (47%) are more likely to feel it is the customers responsibility.

Base: all respondents 100 (all business respondents) **945** (all household respondents) **143** (all FPB respondents) Q06. What balance of responsibility do you feel there is between the actions taken by United Utilities to tackle climate change in the North West versus the actions of people in the community? *Data labels below 5% have been excluded from the chart.

Exploring Climate Change Challenges

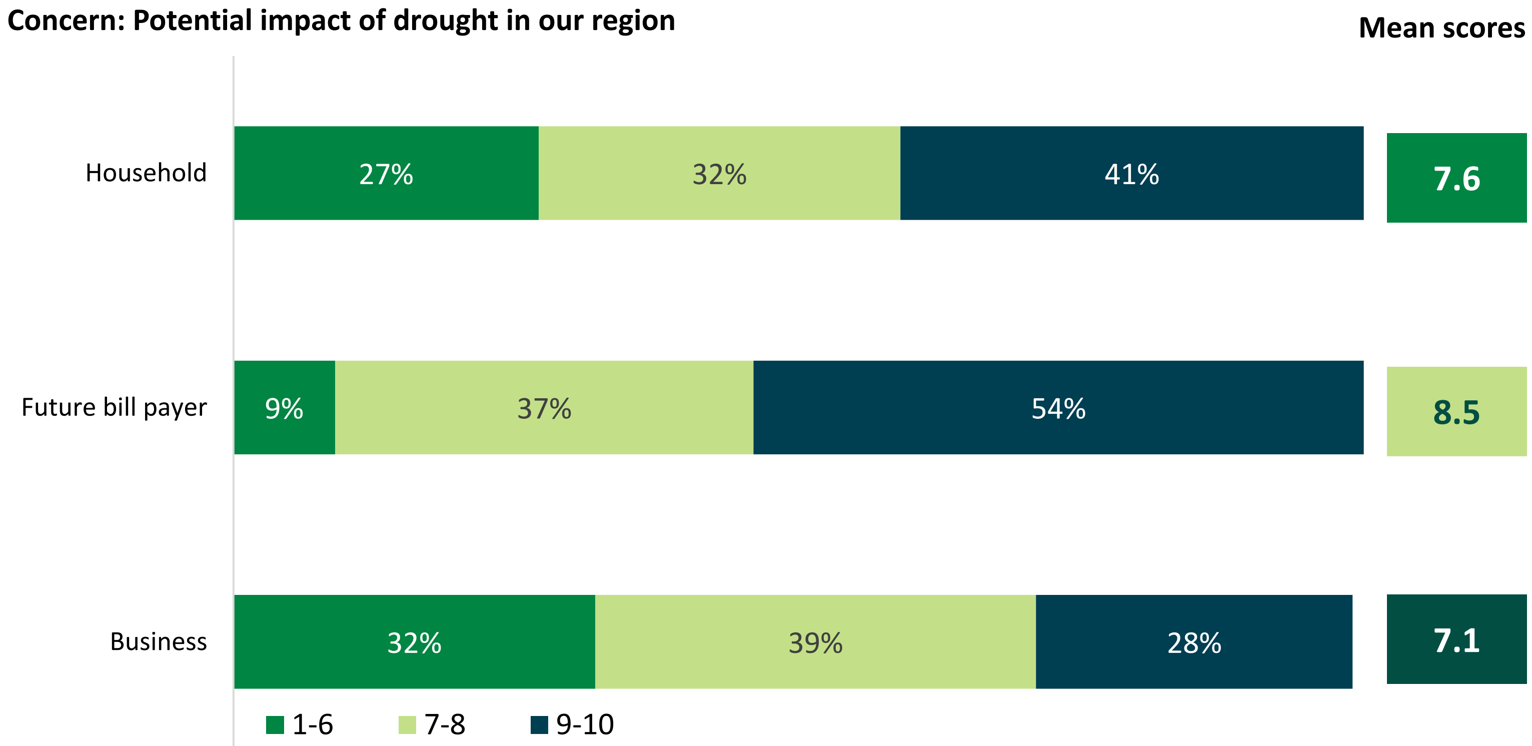
Drought

Across both the qualitative and quantitative research, customers were presented with information relating to droughts, what impact it has to customers and business and informed about some of the areas where UU are working to tackle the impact of drought.

Customers in the qualitative research were provided with information on how UU is maintaining infrastructure (Haweswater Aqueduct) as well as water trading and water efficiency work.

The potential impact of drought is of least concern to business customers

Just under a third (32%) rated it between 1-6 and just over a quarter (27%) of household customers rated it the same.



"Can they empower people to take a bit of ownership themselves? I don't know how this would work because I don't do it.

But if you think of the 'The Good Life' , you know having a water butt, and there are ways of cleaning that water with tablets or machinery or whatever so that people can be more self-sufficient and collect so that they do have their own reserves in every house."

25-44, C2DE

Those in Liverpool (8.0), 65+'s (7.8) and females (8.1) are more likely be concerned about the potential impact of drought.

Base: excluding those who selected 'not sure': 99 (all business respondents) **921** (all household respondents) **147** (all FPB respondents)
Q09. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the potential impact of droughts in our region?

Reactions to water transfer were generally favourable and customers felt encouraged that this was being done, but some questioned whether it was enough

A minority of customers queried whether there was anything else that could be done to tackle the risk of drought – desalination, for example.

"It's really positive and I work in the NHS and it's a shame that all the hospitals don't work together, it should be normal practice it makes sense. If one area has extra and one area is lower than I'm sure they can somehow manage that. On a side note, because obviously the UK is surrounded by sea, I'm wondering why they don't look into – obviously it would cost a lot more - but (look into) using seawater because in the Middle East they do ."

25-44, ABC1

'It's great that we are sharing water across these areas, but if there was a nationwide drought do we have a contingency plan then?

What does that look like and why aren't we thinking about other methods of sourcing water as opposed to just sharing between counties or companies?'

45+, ABC1

Future bill payers were particularly positive about the plans UU have in place to tackle the impact of droughts, especially those relating to water sharing

"Suppose it makes sense. Where I live would probably be a lot closer to some of the water sources that Severn Trent would have, having to come from way up in the North of the region, but for people on the borders of the region it would make a lot of sense to share water."

Future bill payer

"I'd agree with that, especially if there are regions in the country where there is more drought than others…then water sharing…would be really beneficial because it would offer support around the country."

Future bill payer

"I think the water sharing thing would be a positive, because it helps everyone support each other rather than one region being in a drought and having to have hose pipe bans and poor water quality. If everyone could support each other then there would be less chance of each area having issues."

Future bill payer

When prompted, both business and household customers feel identifying & reducing leaks is the top priority when it comes to tackling drought

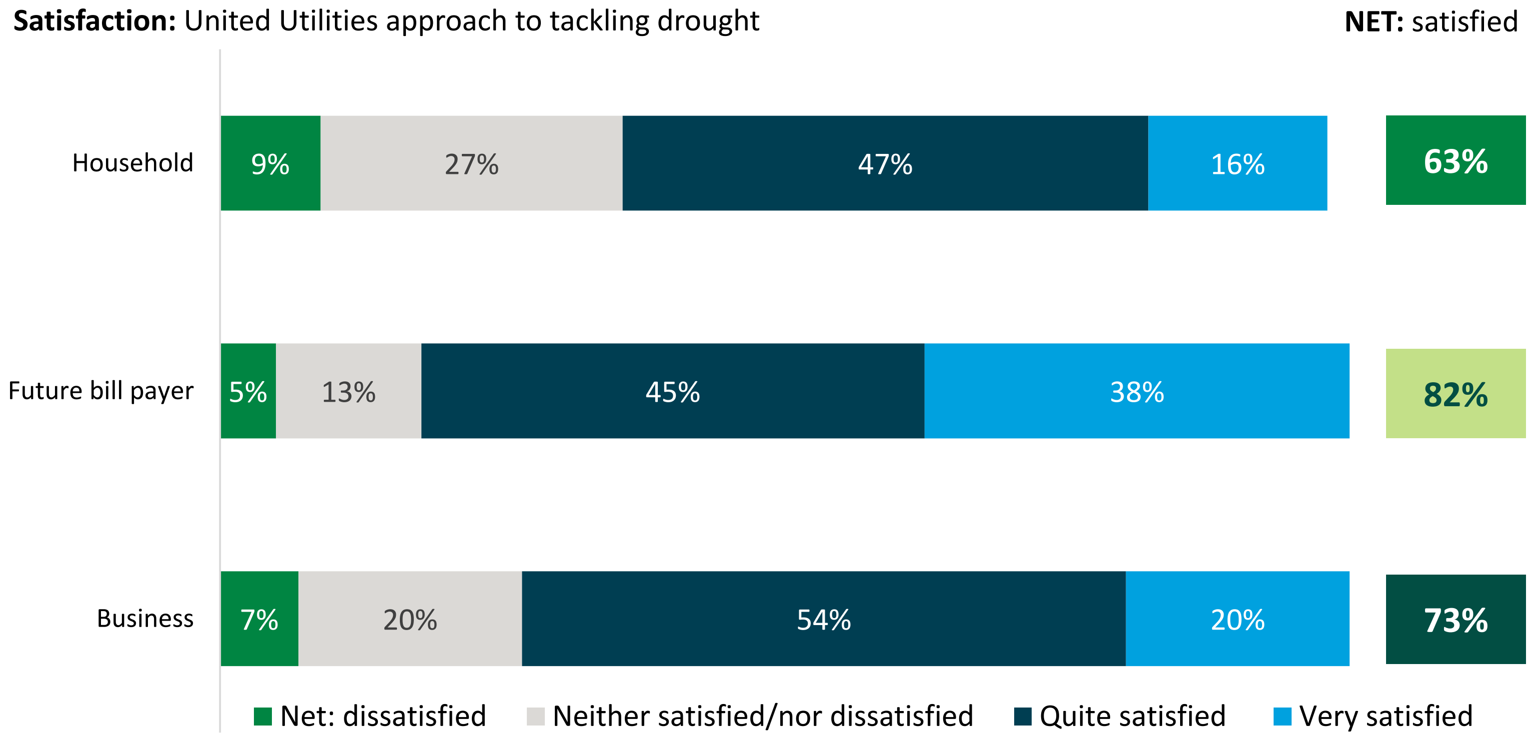
Developing new sources of water, water sharing and encouraging and informing customers about using less water are also rated highly.

Actions to tackle the impact of drought	Household		Future bill payers	Business
Identify and reduce leakage from pipes	91%	CACI: E (99%), 65+ (94%)	59%	79%
Encourage and inform customers about using less water	65%	CACI: C (71%), IMD: 3+4 (72%)	55%	42%
Development of new sources of water, particularly boreholes	50%		60%	50%
Water sharing between different regions of the UK	46%	Cheshire (54%), CACI:U (59%), £50,000 or more (51%)	50%	55%
Install more meters on domestic properties	30%		58%	35%
	I'm not sure: 2%		**I'm not sure:** 1%	**I'm not sure:** 1%

Base: excluding those who selected 'not sure': 100 (all business respondents) **945** (all household respondents) **147** (all FPB respondents) Q010. Please select up to 3 actions which you feel United Utilities should prioritise to tackle the impact of droughts.?

Customers are largely satisfied with the approach United Utilities is taking towards tackling drought

The approach is most positively received by Future bill payers with just under two fifths (38%) feeling very satisfied.



> "I like the idea of water sharing, but if I'm really honest I wouldn't take much notice or take an interest in where it's coming from or anything like that. It's something I take for granted, I turn the tap on and there's water and I pay the bill. ."
>
> **45+, C2DE**

Those in CACI segment F (29%) are more likely to be very satisfied with the approach to tackling drought.

Base: all respondents excluding 'not sure' 97 (all business respondents) **886** (all household respondents) **146** (all FPB respondents)
Q20. Taking into account in the information you have seen regarding the 5 climate challenges, how satisfied are you with the approach United Utilities is currently taking for each?

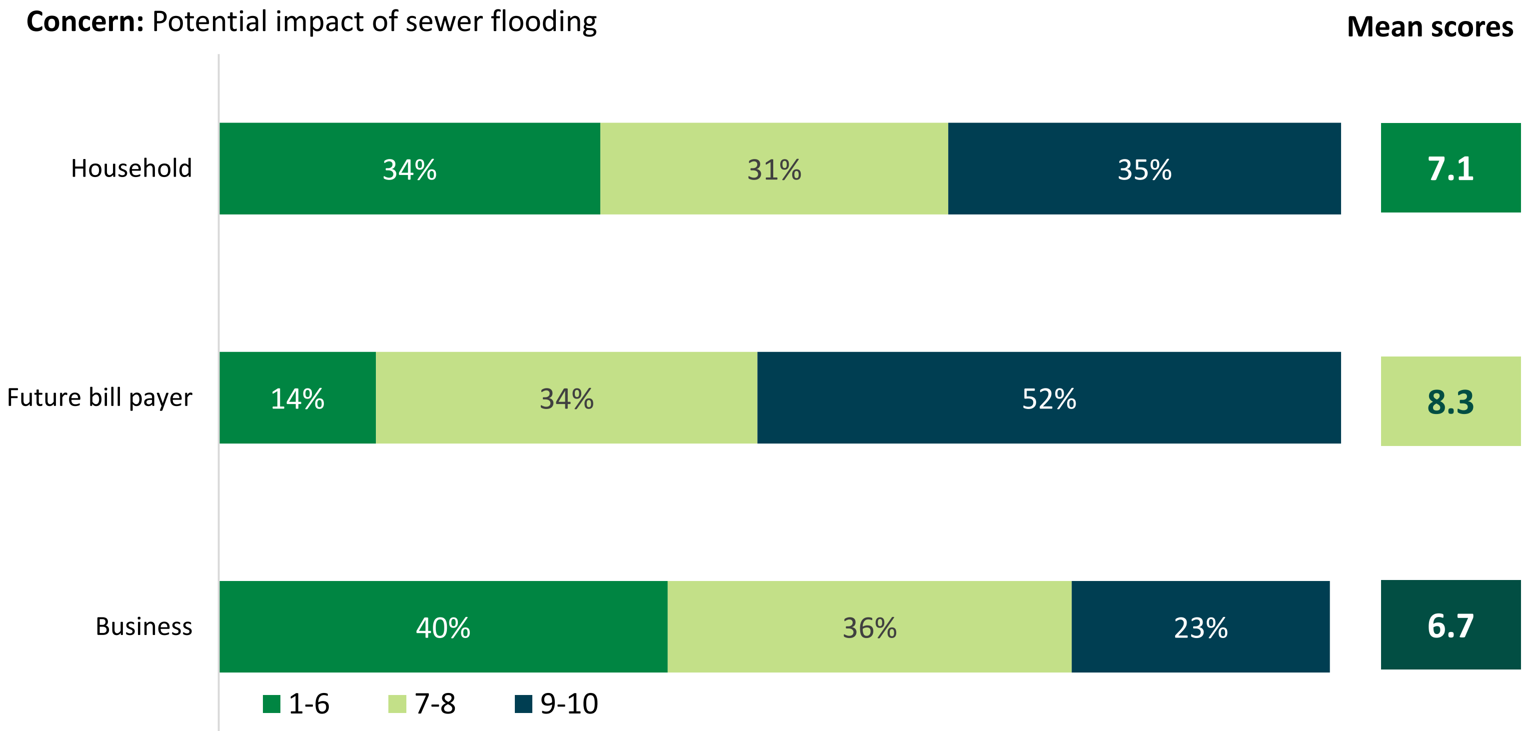
Sewer flooding

Across both the qualitative and quantitative research, customers were presented with information relating to sewer flooding, what impact it has to customers and business and informed about some of the actions UU is doing to tackle the impact of it.

Customers in the qualitative research were provided with information on sustainable drainage solutions as well as working in partnership with the local authorities, Highways Agency and developers.

1 in 10 household and business customers have been affected by sewer flooding

Business customer are the least concerned about the potential impact of sewer flooding in the region.



"I've not experienced it but I imagine the impact would be major. If it's flooded internally, you'll also have to replace things in your home which will be costly. Probably spread disease as well and you'd be quite worried about electrical damage in your house, would it be safe to live in?

I suppose it can also affect businesses if it's on the high street, shops might be damaged."

Future bill payer

Those in CACI segment G and females (7.6) are most concerned with the potential impact of sewer flooding.

Base: all respondents 100 affected 99 potential impact (all business respondents) **945 affected 903 potential impact** (all household respondents) **147** (all FPB respondents) Q11. Have you ever been personally affected by sewer flooding? **all respondents excluding those who selected 'not sure' 99** (all business respondents) **903** (all household respondents) **147** (all FPB respondents) Q012. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the potential impact of sewer flooding in our region?

Customers were largely unaware of sustainable drainage solutions with the exception of water butts

'It sounds quite rude this because I am sure these things cost an absolute fortune, but there doesn't seem to be anything ground-breaking in the mix and that could be the difficulty of the problem to solve. At least four of those images have seemingly been around for a really long time.'

25-44, C2DE

Whilst the majority felt this was a good approach to tackle the impact of water flooding, many described it as being quite 'basic' and would expect things such as tree-planting to be in place.

Customers occasionally queried whether there was something more ground-breaking in this day and age, but accepted they didn't know what this could be.

There were also isolated queries relating to specific solutions, including who was responsible for implementation

Specific queries included:

- *"What does the pervious paving do?*
  And does it just go back into the same sewer line?"
  Future bill payers

- *"These are more rural solutions, what about cities?"*
  25-44 C2DE

- *"With the swales, they are just around new build housing sites, they have got the area to do it or would they be near older properties?"*
  25-44 ABC1

- *"Would it be like UU taking responsibility for this type of stuff or would it fall to local government?"*
  Future bill payers

'If you are looking for what attracts our attention, the wetlands and the swales…we can't do enough for that and it's really good for nature, really nice to look at. I didn't know much about that and if you were to promote that, would be good. It's nice that someone is doing it.'

45+, C2DE

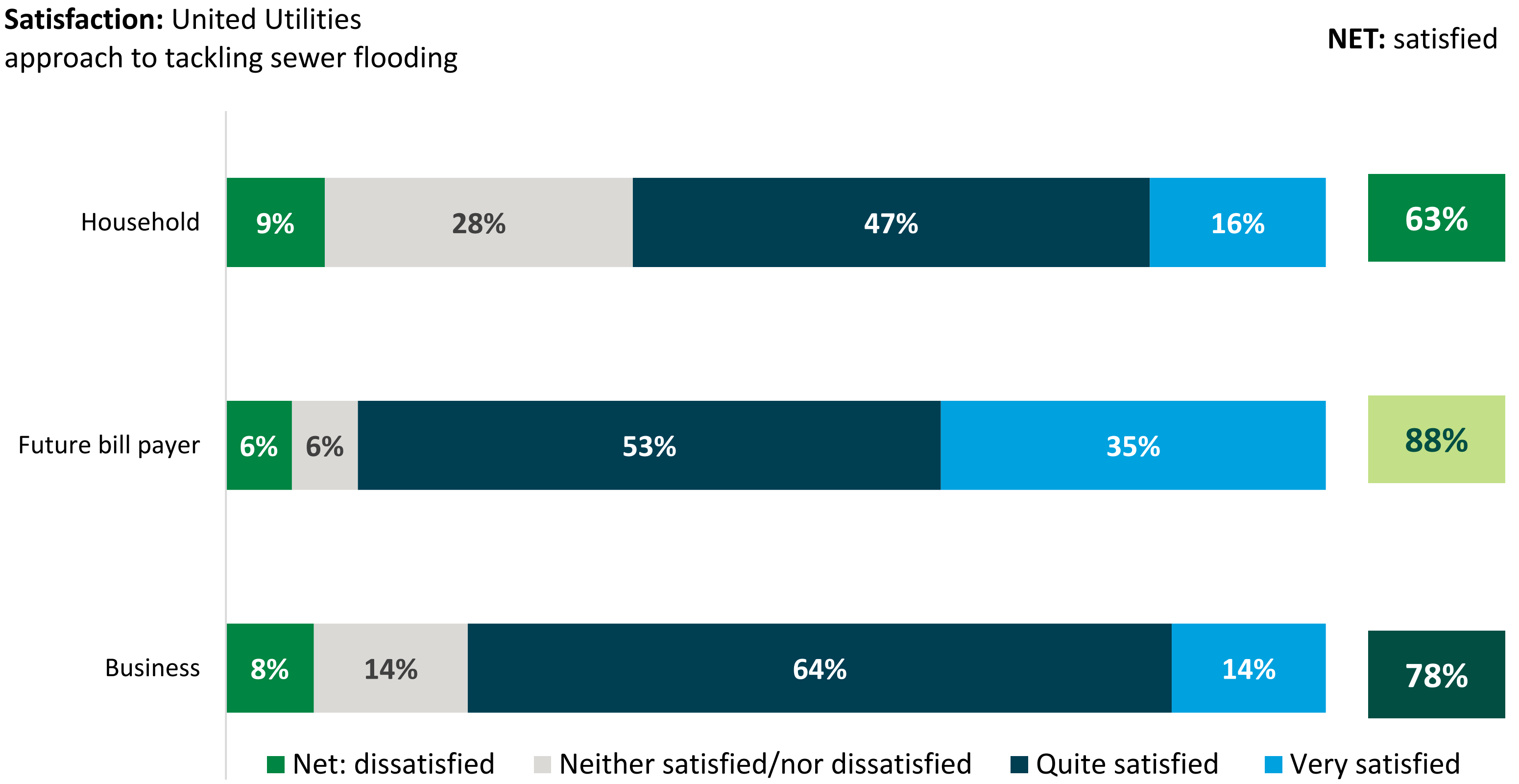
Increasing sewer capacity is the top priority for business & household customers

Whilst household customers (and future bill payers) feel it is important to implement sustainable drainage systems, business customers feel using technology to monitor and better control flows should be a priority.

Actions to tackle the impact of sewer flooding	Household	Future bill payers	Business
Increase sewer capacity and build storm water holding tanks	64% Metered (66%) 55-64 yr olds (69%) Without children (66%)	52%	61%
Implement and encourage sustainable drainage solutions to slow the flow of rainwater into sewers (such as green roofs and permeable paving)	59% CACI: D (72%)	65%	38%
Use technology to monitor and better control flows in the sewer system	53% Cheshire, Greater Manchester (58%), CACI: D (59%)	61%	54%
Install flood protection devices to at-risk properties	46%	57%	52%
Install a 2nd network to separate rainwater from the sewer system	47%	52%	48%
	I'm not sure: 6%	**I'm not sure:** 0%	**I'm not sure:** 3%

Base: all respondents 100 (all business respondents) **945** (all household respondents) **147** (all FPB respondents) Q13. Please select up to 3 actions which you feel United Utilities should prioritise to tackle the impact of sewer flooding.?

Customers are satisfied with the way United Utilities is tackling sewer flooding, with future bill payers most satisfied



"If the information was coming from UU or any business saying this is what we are doing as a solution then that to me is being reactive.

With anything like this it sounds proactive, saying, this is what we are doing in case this happens…if a storm comes, we'll be ready for it. We are planting these trees because even though it's not flooded before, there is a likelihood it might."

45+, C2DE

Those in CACI segment F (27%) are most likely to be very satisfied with the approach to tackling sewer flooding.

Base: all respondents excluding 'not sure' 99 (all business respondents) **881** (all household respondents) **145** (all FPB respondents)
Q20. Taking into account in the information you have seen regarding the 5 climate challenges, how satisfied are you with the approach United Utilities is currently taking for each?

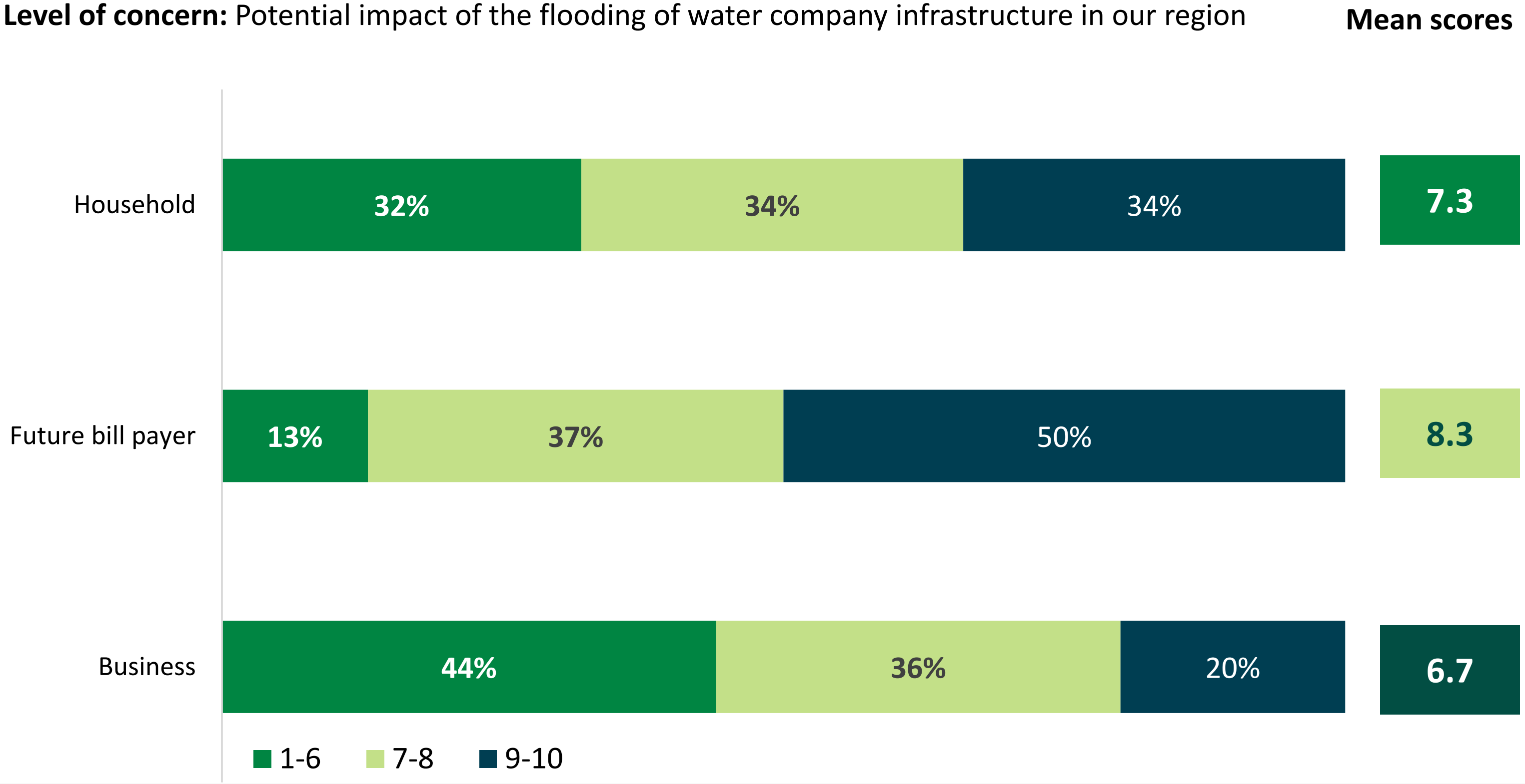
Flooding of infrastructure

Across both the qualitative and quantitative research, customers were presented with information relating to the flooding of infrastructure, what impact it has to customers and business and informed about some of the actions that UU is taking to tackle this.

Customers in the qualitative research were provided with information on how UU is improving forecasting flood events and installing flood defences.

There is a reasonable level of concern with the potential flooding of infrastructure when prompted

Level of concern: Potential impact of the flooding of water company infrastructure in our region



"I think even more so it's their responsibility because it's their assets and it's much easier to tackle because it's a localised area that you can put flood barriers, stick a roof on it, whatever the solution is.

It's easier to manage if you are just dealing with one isolated area than trying to control what the climate is doing across the country."

25-45, ABC1

Those in Cumbria (50%) and in CACI segment G (49%) are most likely to be concerned about the potential impact of the flooding of infrastructure in the region.

Base: excluding those who selected 'not sure': 98 (all business respondents) **866** (all household respondents) **98** (all FPB respondents) Q:14. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the potential impact of the flooding of water company infrastructure in our region?

But it is not as top of mind as other climate change challenges

Generally, customers felt that whilst flooding is becoming more frequent and severe, they hadn’t made the connection between flooding and how it would impact water or wastewater treatment works.

Customers in the qualitative phase generally felt that this area is 100% UU’s responsibility, as it’s their assets to maintain, and there is the expectation this is done to a degree of responsibility for its customers.

‘You see all the flooding that goes on in the streets and around houses and business, but you don’t think that it could also be a problem for the company that provide us with water too!’

25-44, C2DE

Some customers wanted more information on the approaches to tackle this area, but generally it was well received

‘It’s important that methods are put in place in order to help tackle it before it becomes an issue, because then when infrastructure is damaged then it creates a whole other issue that people have to deal with; it just causes a knock-on effect, so the fact that strategies are being put in place and you’re looking forward… that can only be a positive thing..’

Future bill payer

‘It is good that there is a plan in place, that they are being proactive about the severity of what is happening. I don’t know anything about flood defences, so maybe us as customers need educating more on what’s being done. It’s obvious we don’t think of these things day in, day out.’

25-44, C2DE

All customers feel installing permanent flood defences at flood-prone sites should be the top priority

Household and business customers agree building better network connectivity and investing to ensure sites can bounce back quickly should also be priorities.

Actions to tackle the impact of flooding	Household	Future bill payers	Business
Install permanent flood defences at flood-prone sites	81% — 65+ yr olds (87%) Those less than £10,000 (92%)	73%	77%
Build better network connectivity so that supplies can be maintained from elsewhere if a treatment works is flooded	75% — CACI: A (81%) Those without children (77%)	67%	68%
Invest to ensure sites can bounce back quickly once flooding subsides	60%	70%	56%
Improve flood forecasting capabilities	41%	72%	49%

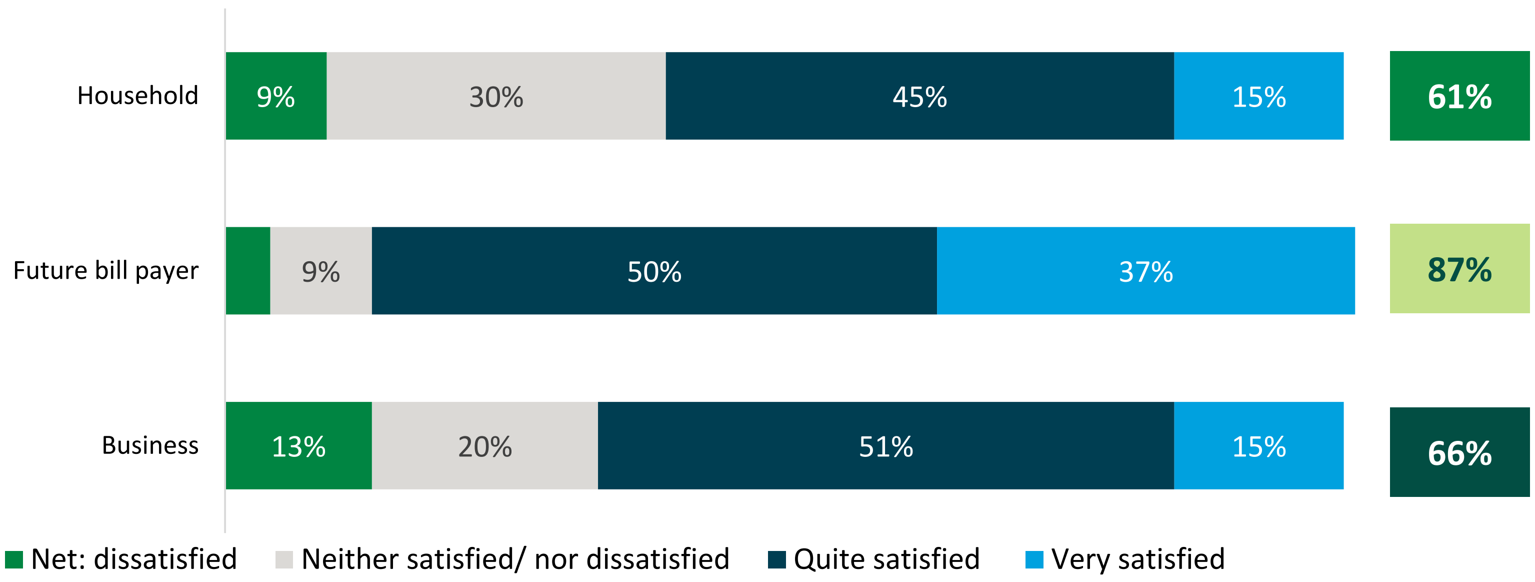
I'm not sure: 7% **I'm not sure:** 0% **I'm not sure:** 2%

Base: all respondents: 100 (all business respondents) **945** (all household respondents) **147** (all FPB respondents) Q015. Please select up to 3 actions which you feel United Utilities should prioritise to tackle the impact of the flooding of infrastructure.

Business and household customers tend to be least satisfied with the approach to tackling flooding of infrastructure compared to approaches for other climate challenges

Just over half (60%) of household customers claim to be satisfied.

Satisfaction: United Utilities approach to tackling flooding of infrastructure **NET:** satisfied



"I don't know if that is something you might want to make the customer more aware of, what flood defences we have got. A report or an advert on the radio or something and just tell us about it, and then I think we would feel more protected."

25-45, ABC1

Those in CACI segment F (26%), SEG: D (22%) and those who would like UU to invest more now (20%) are most likely to be very satisfied with the approach to tackling flooding of infrastructure.

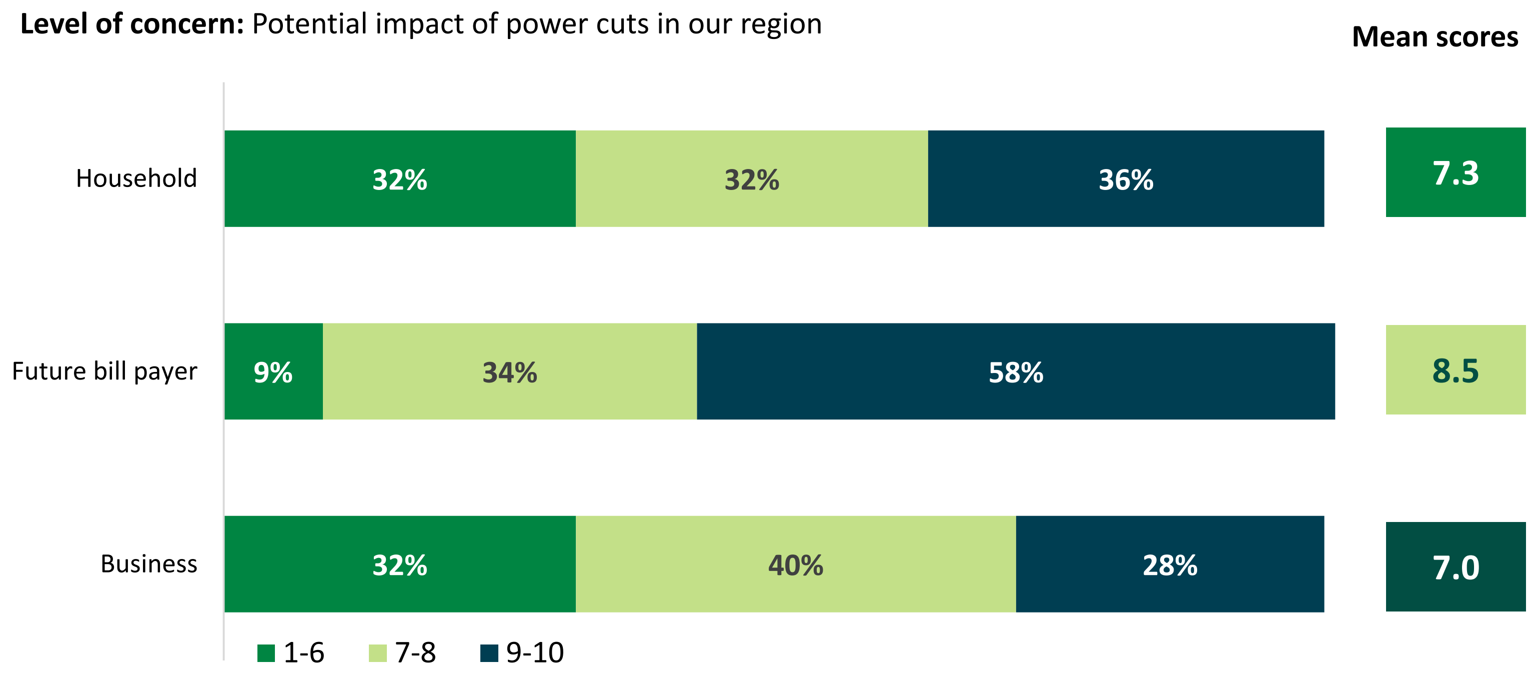
Base: all respondents excluding 'not sure' 98 (all business respondents) **881** (all household respondents) **146** (all FPB respondents)
Q20. Taking into account in the information you have seen regarding the 5 climate challenges, how satisfied are you with the approach United Utilities is currently taking for each?

Power cuts

Across both the qualitative and quantitative research, customers were presented with information relating to power cuts, what impact it has to customers and business and informed about some of the actions UU is taking to tackling this issue.

Customers in the qualitative research were provided with information on how UU is coordinating maintenance work to minimise overall risk to services and installing backup generators.

There is a reasonably high level of concern about the potential impact of power cuts



"It is going to affect the whole infrastructure of getting water to your home, it is going to affect the treatment works, it is going to affect the pumping stations, I would imagine."

25-45, C2DE

Those in CACI segment A (7.6) are most likely to be concerned about the potential impact of power cuts in the region.

Base: excluding those who selected 'not sure': 100 (all business respondents) **919** (all household respondents) **146** (all FPB respondents)
Q16. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the potential impact of power cuts in our region?

However, further digging reveals customers again rarely make the connection between a power outage and issues with water supply

Customers were able to identify when questioned the issues that power cuts could have on the service UU provides, however, many admitted that it's not something they would think of if there was a power cut.

Customers had some queries on what 'smart energy usage and generation' meant – some were confused whether it related to smart meters and the customer consumption.

Many felt educating is key here, and there was a general appetite to hear more of what UU is doing and how customers can help minimise the risk and a potential outage.

"People need to be told to use less water during an outage. If a power outage was expected to last for a prolonged time it would be nice to get a text from UU just informing people to use less water so they won't be placing as much demand on the system."

25-45, C2DE

'People should be prepared to be told what to do in these situations or know when there is a power cut to use less water.

I bet with a lot of people the last thing they will think when there is a power cut is 'oh this is going to affect the water as well now'.'

Future bill payer

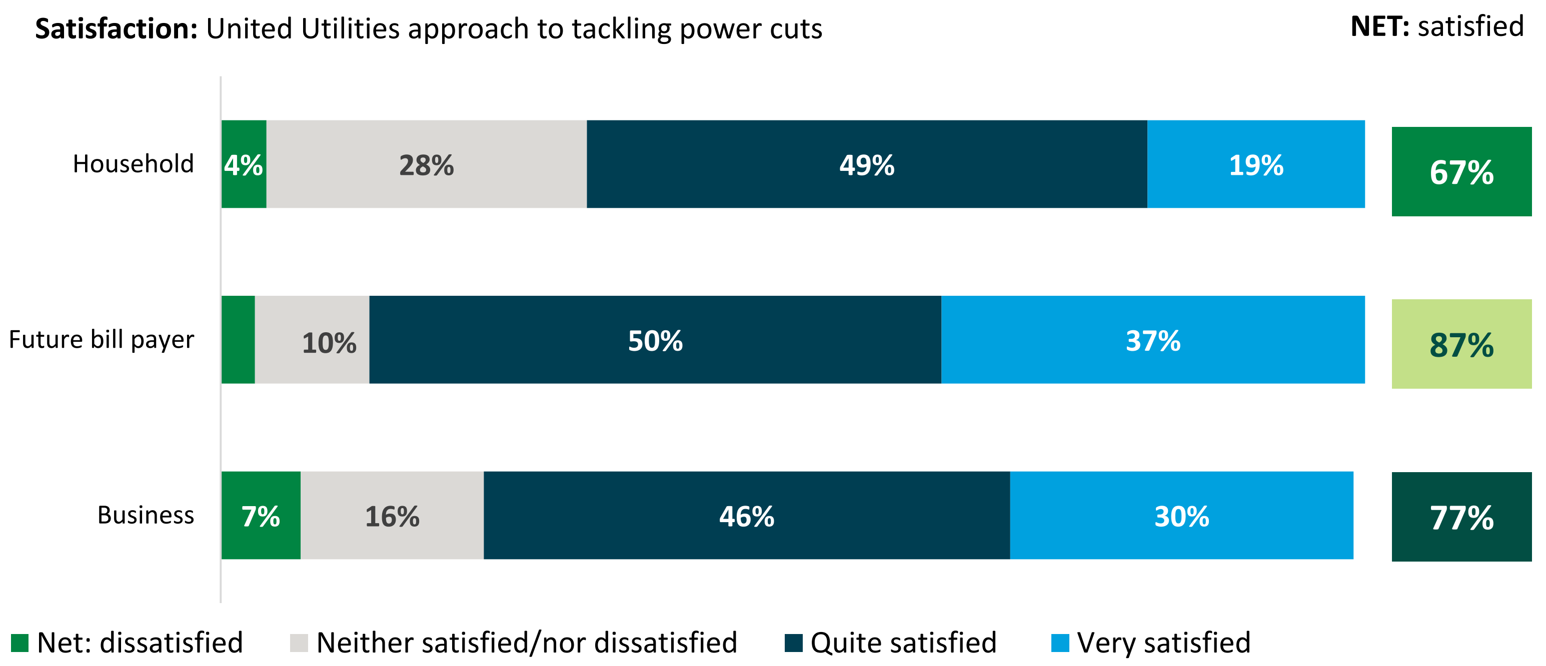
Generating more renewable energy and coordinating with the DNOs to build a more robust network are most favoured

Actions to tackle the impact of power cuts on climate change	Household	Future bill payers	Business
Generate more of our own renewable energy	78%	59%	54%
Coordinate with electricity distribution network operators to help them build a more robust network	67% 35-44 yr olds (72%)	61%	62%
Install more permanent backup generators	44%	61%	53%
Access to temporary generators to support in emergency situations	39%	57%	48%
Be flexible in when and how we use electricity to help stabilise national supply	39%	48%	43%
	I'm not sure: 6%	**I'm not sure:** 0%	**I'm not sure:** 1%

Base: excluding those who selected 'not sure': 100 (all business respondents) **945** (all household respondents) **147** (all FPB respondents) Q017. Please select up to 3 actions which you feel United Utilities should prioritise to tackle the impact of power cuts.

Customers are mostly satisfied with the approach to tackling power cuts

Over three quarters of customers are satisfied, with just under a fifth (19%) of household customers very satisfied.



"It's good to see that across the board they are being proactive with these things.

They are obviously aware of climate change and these issues that are increasing, so it is really good to see them being proactive in thinking about that and putting plans in place to prevent risk."

25-45, ABC1

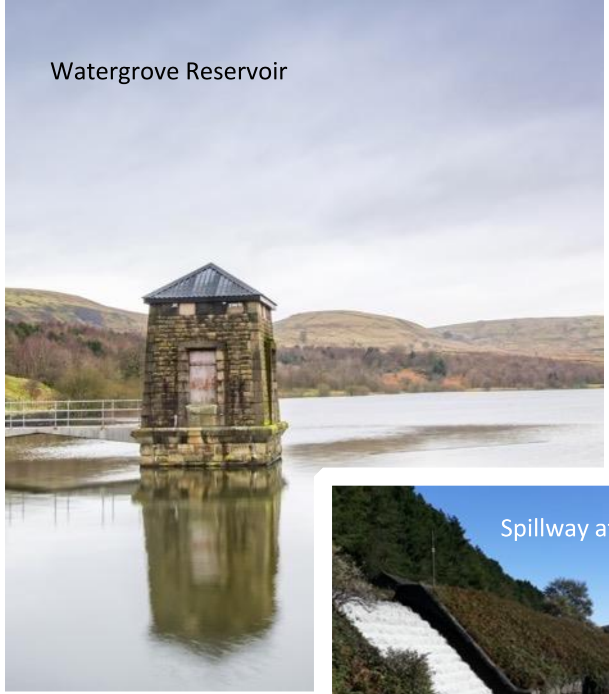
Those in CACI segment F (30%) are most likely to be very satisfied with the approach to tackling power cuts.

Base: all respondents excluding 'not sure' 99 (all business respondents) **945** (all household respondents) **146** (all FPB respondents) Q20. Taking into account in the information you have seen regarding the 5 climate challenges, how satisfied are you with the approach United Utilities is currently taking for each?

The impact of climate change on our natural environment

Across both the qualitative and quantitative research, customers were presented with information relating to climate change and the natural environment, what impact it has to customers and business and informed about some of the actions UU is taking to tackling this issue.

Customers in the qualitative research were provided with information on a number of pledges UU is making, including to be net zero carbon by 2030, restoring peatland and having a fully green fleet by 2028.


Watergrove Reservoir


Moorland Bowland

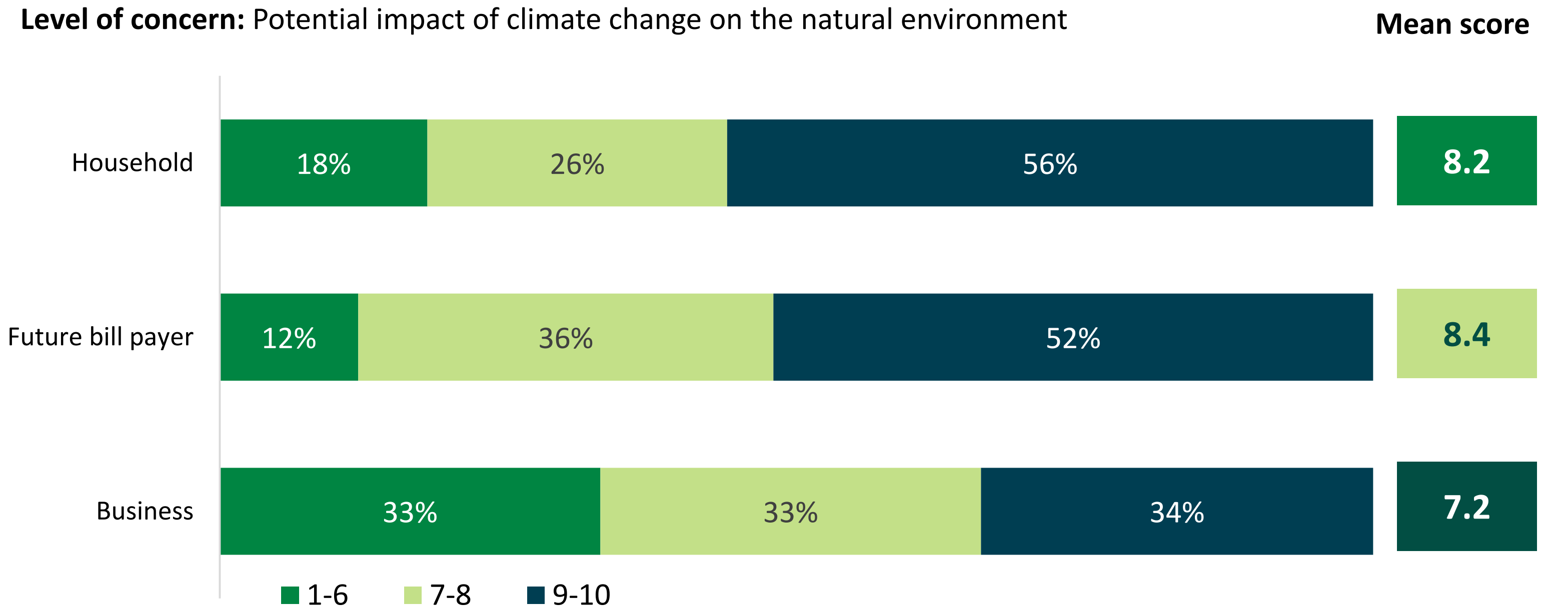

Spillway at Torside Service Reservoir


Torside & Woodhead Reservoirs


Macclesfield Forest

The impact climate change will have on the natural environment is the area of the highest concern amongst household customers

Level of concern: Potential impact of climate change on the natural environment



"When I think of climate change, I think of the natural environment. We're so lucky in our region to have lovely outdoor areas to use.

I couldn't bear the thought of not having access to these places if they were flooded are damaged in anyway."

25-45, ABC1

Those in Liverpool (8.6) and CACI: C are most likely to be concerned about the potential impact of climate change on the natural environment.

Base: excluding those who selected 'not sure': 100 (all business respondents) **918** (all household respondents) **147** (all FPB respondents)
Q018. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the potential impact of climate change on the natural environment in our region?

Customers place more of a connection between climate change & the natural environment than other challenges

When thinking of climate change, changes to the environment was more at the forefront of customers' minds.

Customers place value on having access to outdoor spaces, especially in the midst of the Covid pandemic.

'We all like walking and enjoying the sights and it won't be half as picturesque and difficult to navigate. We take these things for granted but walking, running and jogging in the local area kept me sane during the lockdown.'

25-44, C2DE

Using more 'green' solutions & directly restoring peat land are top priorities for customers

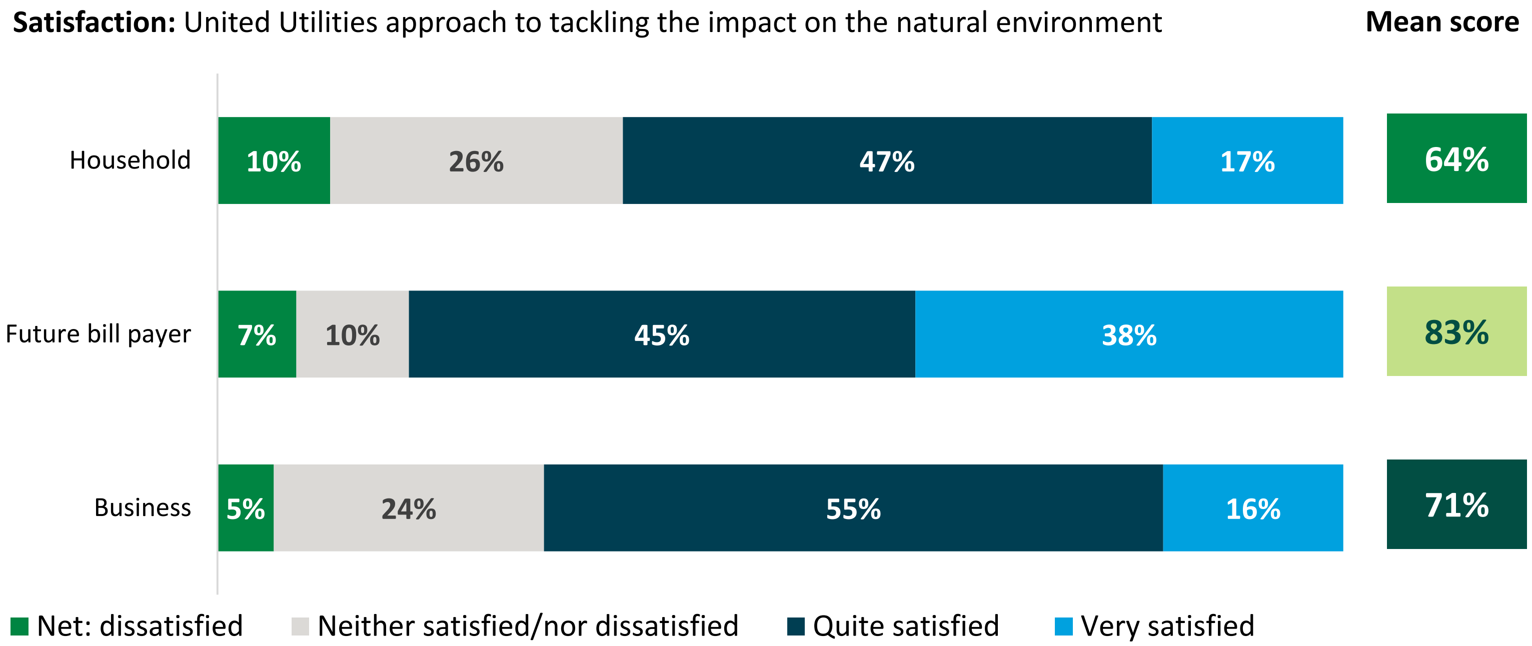
Just under three quarters (73%) of household customers choose this as a top priority.

Actions to tackle the impact of climate change on the natural environment	Household	Future bill payers	Business
Use more 'green' solutions (e.g. building wetlands to treat wastewater, rather than dosing with chemicals)	73% Greater Manchester (77%) CACI: B (85%)	59%	60%
Directly restore peat land and woodland. (the peatland is an area in the region that stores a lot of water; 70% of the UK's drinking water come from areas like this)	72% IMD: 9-10 (81%)	61%	65%
Work in partnerships with farmers, the Environment Agency and others to improve rivers and lakes	64%	50%	48%
Reduce our carbon footprint , by encouraging more efficient use of water, using renewable energy and electric vehicles	53%	58%	55%
Provide net gains in biodiversity from our construction projects	12%	53%	26%
	I'm not sure: 6%	**I'm not sure:** 1%	**I'm not sure:** 4%

Base: excluding those who selected 'not sure': 100 (all business respondents) **945** (all household respondents) **147** (all FPB respondents) Q019. Please select up to 3 actions which you feel United Utilities should prioritise to tackle the impact climate change has on the region's natural environment.

Once again, future bill payers tend to be the most satisfied with this approach

Around half of household and business customers are quite satisfied.



Those in CACI segment F (25%) are most likely to be very satisfied with the approach the impact of the natural environment.

"I think that some of the things you have got on there are really good, 100% renewable energy, I think that is fabulous and the green vehicles because obviously we are all about trying to reduce climate change and them two things are going to do really good.

I don't know if anybody would know about hectares of peat restoration, I don't know about restoration, I don't know why you would have to restore the peat. It might be worth putting some information on about that, but planting trees it is just fabulous. "

25-45, C2DE

Base: all respondents excluding 'not sure' 97 (all business respondents) **882** (all household respondents) **147** (all FPB respondents)
Q20. Taking into account in the information you have seen regarding the 5 climate challenges, how satisfied are you with the approach United Utilities is currently taking for each?

Drought and sewer flooding are key priorities for all groups. However, household customers also consider investment in the natural environment to be important

Ranked climate challenges which customers feel United Utilities should be prioritising investment moving forward (mean score 1-5)

Household	Future bill payers	Business
Natural environment – **2.6**	Drought – **2.2**	Drought – **2.7**
Sewer flooding – **2.7**	Sewer flooding – **2.7**	Flooding of infrastructure – **2.8**
Drought – **2.8**	Flooding of infrastructure – **3.2**	Sewer flooding – **3.1**
Flooding of infrastructure – **3.1**	Natural environment – **3.3**	Power cuts – **3.1**
Power cuts – **3.7**	Power cuts – **3.6**	Natural environment – **3.3**

Base: all respondents 100 (all business respondents) **945** (all household respondents) **147** (all FPB respondents).
Q24. Thinking now about the 5 climate change challenges that have been reviewed, please rank them based on the order in which you feel United Utilities should be prioritising investment moving forward.

Reasons why drought is ranked 1st

"It's the clearest and most pressing requirement for future patient care . Without a clean, assured water supply we can't safely treat our patients."

Business, Healthcare, 10-49

"It's the biggest impact on all of the services the population needs from fire to farming to sustaining the environment."

Female, Families Getting By

"It worries me that across the world we hear more and more about prolonged droughts and it's something that we told is only going to get worse because of human activity and our careless approach to conservation."

Female, Budget Conscious Elderly

Reasons why the natural environment is ranked 1st

"All the rest are about protecting the species that has had the most detrimental and devastating impact on the natural environment. It deserves to be put first."

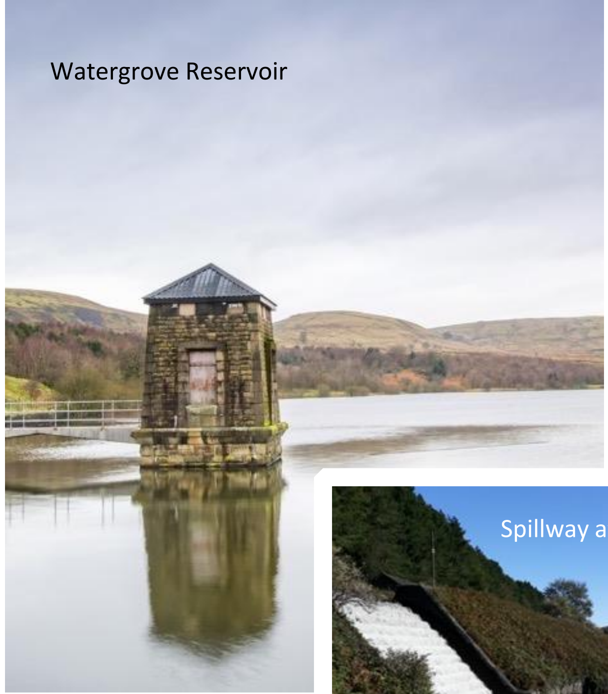
Female, Indebted singles

"If it's damaged, it's difficult to restore. Without a protected natural environment, we have nothing."

Male, Comfortable Mid-Life Established Families

"Looking after the natural environment plays a great part in the climate and the mental health of many people. I spend many hours walking in the Trough of Bowland and it is easy to see how United Utilities have improved the area and hope they will continue."

Male, Budget Conscious Elderly


Watergrove Reservoir


Moorland Bowland


Spillway at Torside Service Reservoir


Torside & Woodhead Reservoirs


Macclesfield Forest

Reasons why sewer flooding is ranked 1st

“This would appear to have the most immediate affect on community health.”

Male, Budget Conscious Elderly

“I feel that this has a big potential of affecting wider population in terms of their health which in term will have a knock on effect on our daily life just like this pandemic has proven. We can't tackle anything if we are not able to.”

Female, Comfortable Mid-life Established Families

“It would cause widespread damage and destruction to property and peoples every day lives.”

Future bill payer

But customers accept that all areas are important, and it's very difficult to prioritise one over another

'They are all very important, when you are looking at droughts and flooding all very important…but they all have to be sorted out.'

Future bill payer

'I think they are all very important, the more that's done to prevent this sort of thing the better. I couldn't put one before the other.'

25-44 C2DE

'Water is a commodity but without power you can't get it, if the infrastructure is flooded…they are all warranting an importance level.'

45+ C2DE

'The one that stands out the most is the flooding of the infrastructure because that's where the water's contained. That's the main source of the water. But they are all important in their own way really.'

25-44 ABC1

Appetite for customer engagement & investment decisions

There is appetite to be kept up-to-date on what UU is doing to tackle the impact of climate change

Customers are generally engaged with the topic and are keen to hear more about what United Utilities is doing in these areas.

The balance in the level of information and through what channels it is delivered is crucial though.

There will not be a one size fits all approach. Some customers are happy to have information at their disposal only, rather than it being directed at them (on the UU website for example), others are keen to be educated more and would like to see the detail.

> ***'Raising awareness of the issue is a massive thing and then also if you know that big companies are taking climate change seriously then the public will know it's an issue that they should be concerned about. They should try and take preventative measures and take any government campaigns seriously, because it could end up affecting them. I think by reaching out to people and telling them they are doing this in order to prevent this is a really positive thing.'***
>
> **Future bill payer**

The areas customers would be interested in being kept up-to-date on in terms of how they are being tackled varies by customer type

Over half (59%) of household customers are most interested in hearing more about approaches to tackle the impact of the natural environment. However, 28% are not interested in being kept up-to-date about any of the climate change challenges.

Areas customers are most interested in being kept up-to-date with in terms of the way United Utilities is tacking the impact to our environment

Household	Future bill payers	Business
Impact of the natural environment (59%)	Droughts (55%)	Power cuts (51%)
Droughts (38%)	Power cuts (47%)	Impact on the natural environment (46%)
Sewer flooding (36%)	Sewer flooding (44%)	Flooding of infrastructure (46%)
Flooding of infrastructure (35%) Cumbria (48%) CACI: A (44%)	Flooding of infrastructure (40%)	Sewer flooding (42%)
Power cuts (35%)	Impact on the natural environment (32%)	Droughts (39%)
None of the above: 28%	**None of the above:** 13%	**None of the above:** 15%

Base: all respondents 100 (all business respondents) **945** (all household respondents) **147** (all FPB respondents)
Q21. Which of the following areas are you interested in being kept up-to-date about in terms of the way United Utilities is tackling the impact on our climate?

Social media, television programmes & advertisements would be well received

‘Getting it on the news is quite important, I see quite a lot of social media ads about climate change and then it tailors what you see, but I hardly ever see climate change on the news…things like strategies that companies are doing in order to help tackle climate change.

So, broadcasting it to multiple different age groups all at once is a massive need, that could be another way.’

Future bill payer

Going into the research, many customers were unaware of the work UU is currently doing. ‘Broadcasting’ this work will be vital to engagement and understanding of the challenges at hand.

Reaching a broad audience is key. Bill payers can be accessed through their UU account, however many felt the best way to educate is through social media, television programmes and advertisements although this would come at a price.

Education in schools can also provide a link between current bill payers and those of the future

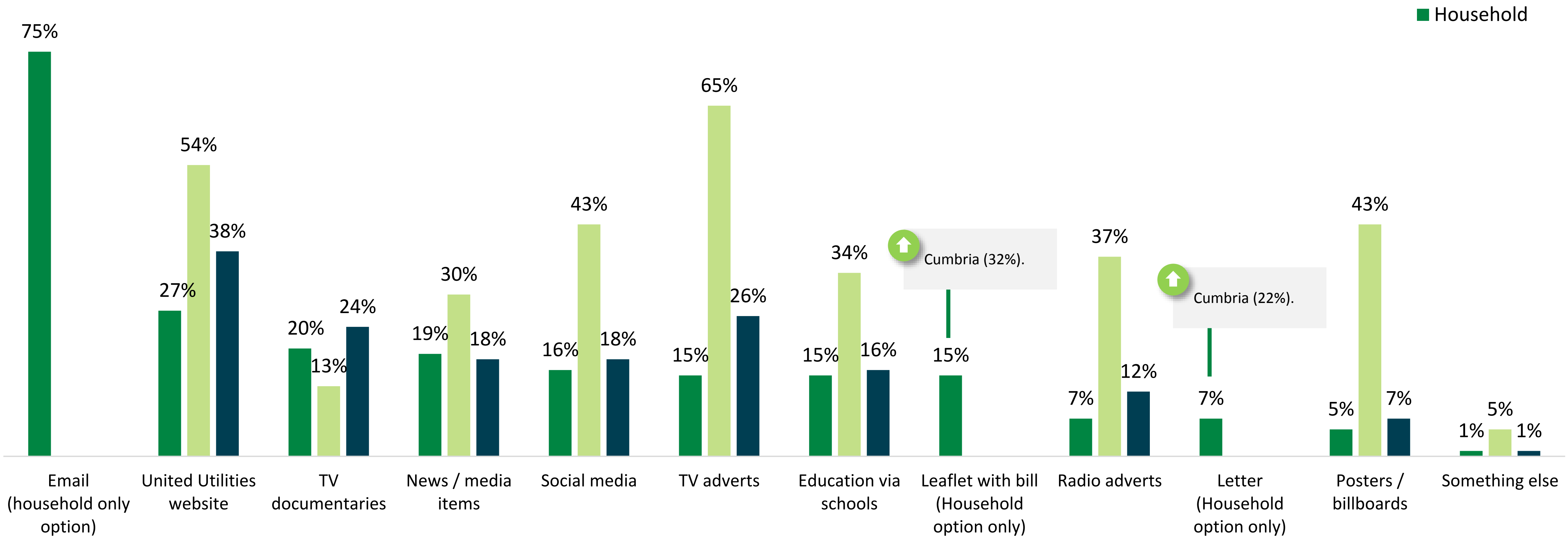
‘TV adverts, short, snappy adverts. For me personally it’s key that it should be education in schools as well.’

25-44, ABC1

‘I wouldn't want anything through the post either and so adverts or in schools and educating people that way would be good. It would defeat the purpose if they sent us a letter wouldn’t it.’

45+ C2DE

Household customers would like to be kept informed via email and the United Utilities website although these customers may be more inclined to opt for this generally as they opened our email…



Base: all respondents interested in being kept up-to-date for at least one area 85 (all business respondents) **678** (all household respondents) **128** (all FPB respondents) Q23. How would you like to be kept informed?

The devil is in the detail, for some, but not all…

'I think it's excellent work and long may it continue, even further. I didn't know all of this until tonight, that UU were actually doing things like this. It's something that's never entered my head.

There's a lot I've learnt tonight and it's very interesting. I didn't realise the investment UU are putting in, it's fantastic really. I'll certainly be looking into it more.'

25-44 C2DE

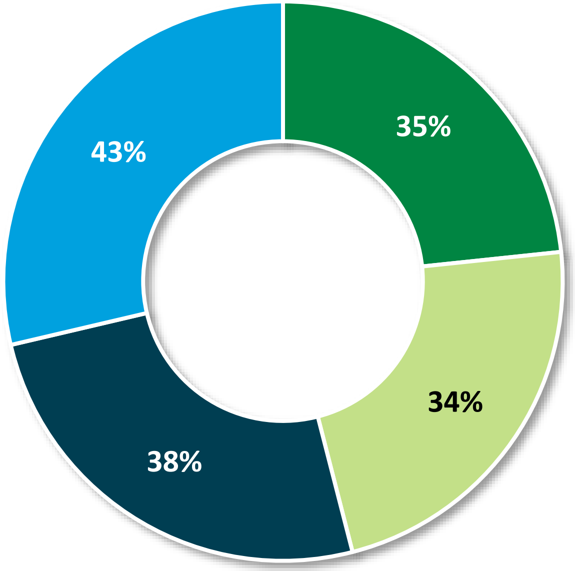
'For me yes, I would like to know as a consumer what they are doing, I wouldn't like information on each individual bit but if they could bulk it together and tell us what they're doing to overcome the impacts of climate change as one, that would be interesting.

If it's too granular I would probably lose interest but yeah just as a very top level.'

25-44 ABC1

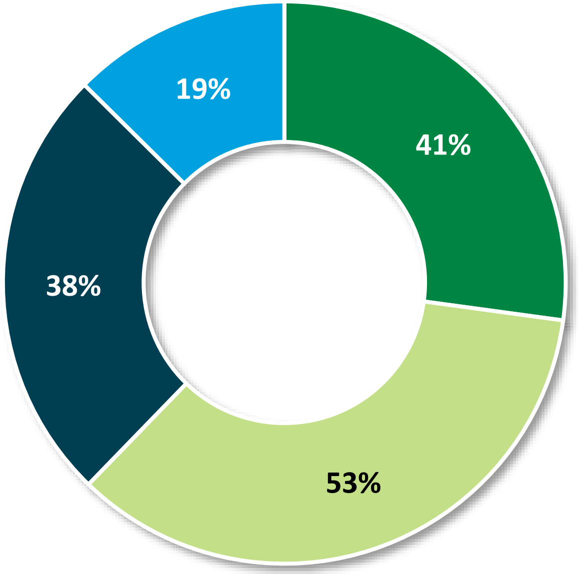
Business customers are more interested in being consulted about climate change than household customers

Household: which, if any, of the following areas are you interested in being consulted about for investment into climate challenges by United Utilities?



- I'm interested in being consulted about the plans UU are considering taking and the impact on my bill
- I'm interested in being consulted about the type of solutions being adopted, the balance between quick fixes and investing now for long term benefit
- I'm interested in the specific projects to address issues in my local area
- I don't want to be consulted

Business: which, if any, of the following areas are you interested in being consulted about for investment into climate challenges by United Utilities?



- I'm interested in being consulted about the plans UU are considering taking and the impact on my bill
- I'm interested in being consulted about the type of solutions being adopted, the balance between quick fixes and investing now for long term benefit
- I'm interested in the specific projects to address issues in my local area
- I don't want to be consulted

Those in CACI segment C (40%), D (41%) and F (41%) and 25-34 yr olds are most likely to want to be interest in being consulted about the plans UU are considering taking and the impact on my bill. Whilst those in CACI segment F () and SEG: A (52%) are most interested in the specific projects to address issues in their local area.

Base: all respondents 100 (all business respondents) **945** (all household respondents) Q27. Which, if any, of the following areas are you interested in being consulted about for investment into climate challenges by United Utilities?

To reinforce the idea we all have a responsibility, getting the community involved was also mentioned by customers

'Getting local councils and businesses involved so it's more like a community thing, so everyone is contributing to planting a million trees and helping restore the peatlands, because then it's not just the company who is responsible for it, it's everyone and then hopefully everyone will try and conserve it a bit more.'

25-44 C2DE

'I think planting trees, it could be interesting to get customers involved with that aspect as well. Maybe doing a few days or just involved with the process more, rather than just from the company's point of view saying oh we're going to do this, maybe get the customers involved.'

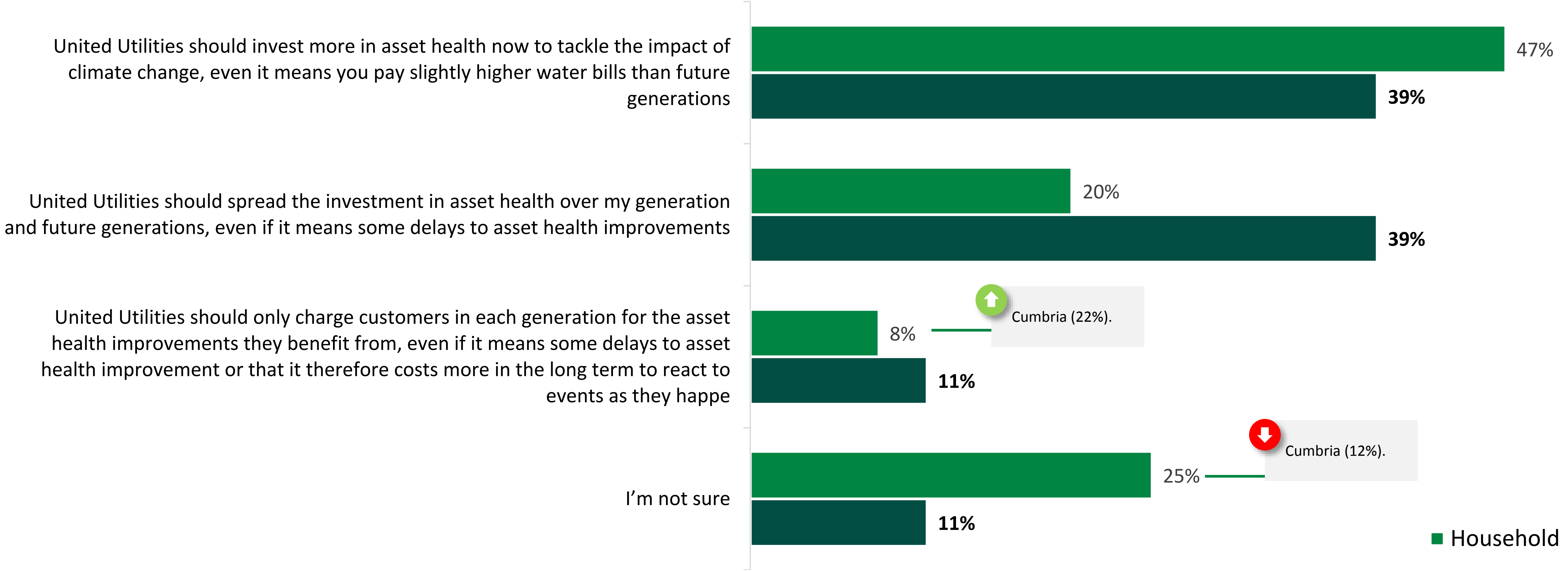
25-44 ABC1

'I think a lot of people aren't into climate change as much as they should be because they feel like it won't impact them, but by encouraging them to do all these things like planting the trees, maybe then they can see how they are personally positively impacting climate change rather than just the company.'

Future bill payer

More household than business customers feel that United Utilities should invest more now to tackle climate even though they would pay a higher bill

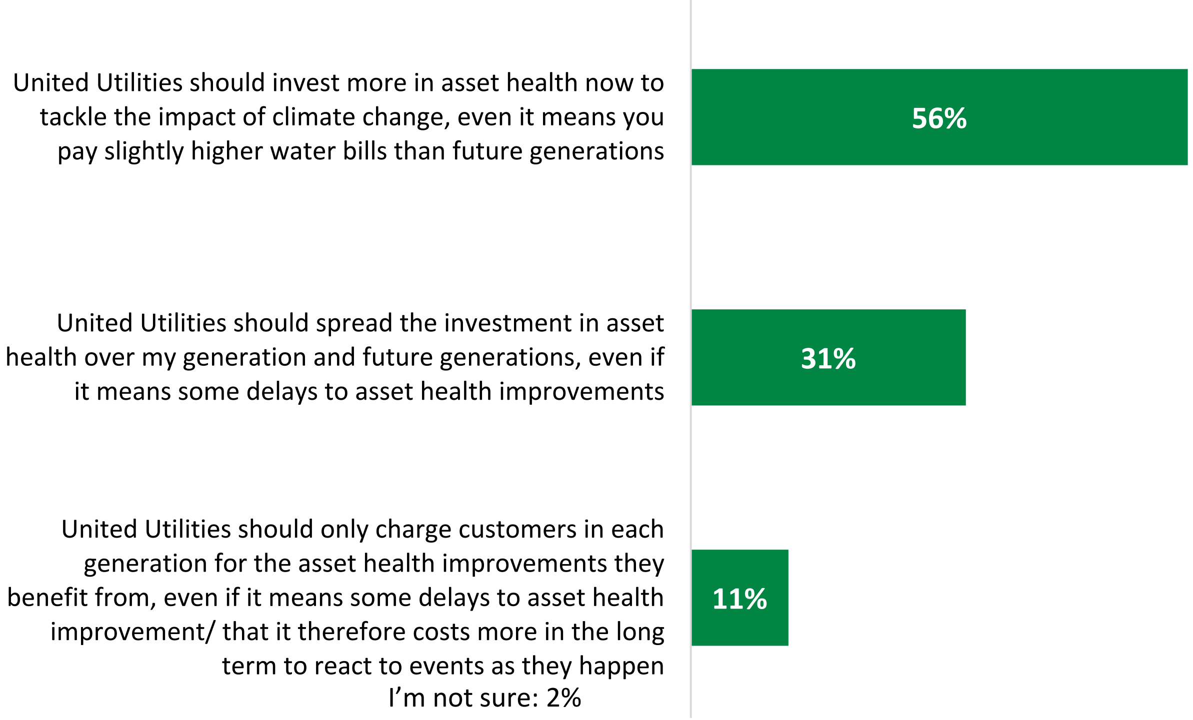
Which of the following options do you think United Utilities should choose?



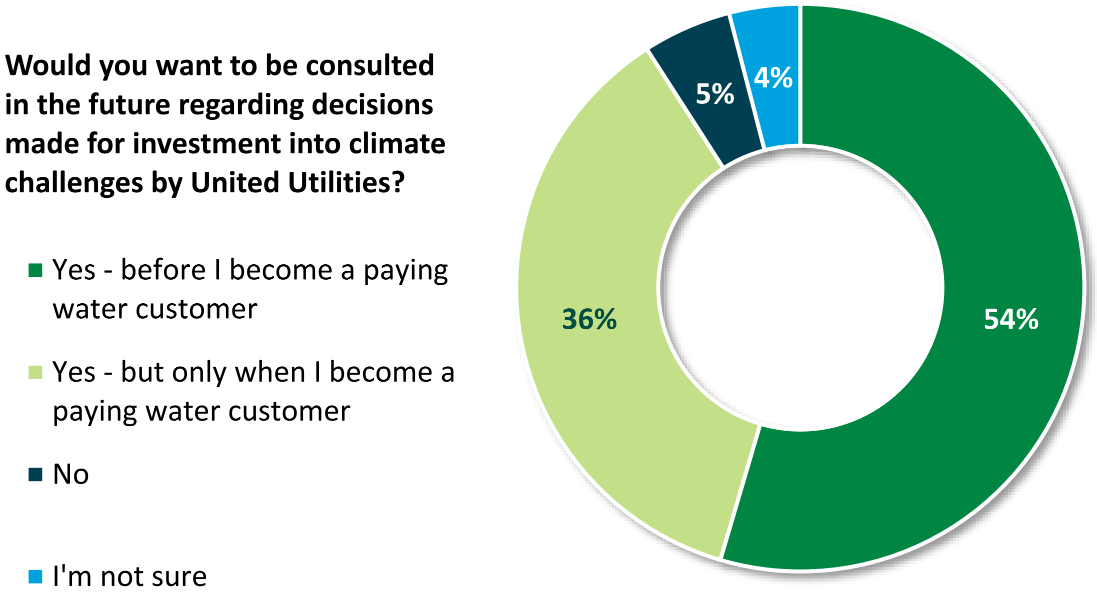
Base: all respondents 100 (all business respondents) **945** (all household respondents) Q26. Which of the following options do you think United Utilities should choose?

Future bill payers would like to be consulted regarding decisions made for investment

Which of the following options do you think United Utilities should choose?



Would you want to be consulted in the future regarding decisions made for investment into climate challenges by United Utilities?



Base: all FPB respondents 147 Q26. Which of the following options do you think United Utilities should choose? Q27. Which, if any, of the following areas are you interested in being consulted about for investment into climate challenges by United Utilities?

United Utilities 5 Climate Change Challenges

Water for the North West

DROUGHT

SEWER FLOODING

FLOODING OF INFRASTRUCTURE

POWER CUTS

NATURAL ENVIRONMENTS

Summary & conclusions

Summary & conclusions

This study has provided robust and strong evidence on the views of household and business customers, as well as the bill payers of the future. It shows clearly where the concern of these groups is relating to climate change, and where investment should be prioritised now and in the future to overcome these challenges.

It is clear that climate change is a concern for many customers, and significantly more so for future bill payers

Customers appear to have a good understanding of UU's role and responsibility, but when probed further there are significant gaps in knowledge

For household and future bill payers, the level of concern with climate change in the UK is only second to the COVID-19 pandemic

With the exception of drought and to some extent sewer flooding, customers did struggle to articulate the link between climate change challenges and the impact this has on UU to do its job, this is even more so the case with future bill payers

Summary & conclusions

When further informed, it instilled a level of respect for UU that they perhaps had not had – the notion of 'we take water for granted' was frequently mentioned

There is an appetite to hear more, but the level of detail and delivery of the content will need to be varied – a 'one size fits all' approach will not work

Generally, customers are satisfied with the steps UU is taking to tackle climate change and there are clear indications on what steps are preferred to others. Tackling drought and sewer flooding is a key priority for all groups

Customers are most open to receiving information via email, however, other channels were mentioned by all groups such as social media, TV programmes and advertising. Many household customers also felt there is a route into schools to educate on these matters

Whilst there are other considerations that need to be taken into account , this consultation provides United Utilities with the evidence it needs to make cases for investment strategy from a customer and future customer viewpoint.

For more information

Ali Sims, Research Director
asims@djsresearch.com

Christian Easdown, Associate Director
ceasdown@djsresearch.com

Faye Jasmine Waterhouse, Senior Research Executive
fwaterhouse@djsresearch.com

Head office: 3 Pavilion Lane, Strines,
Stockport, Cheshire, SK6 7GH

Leeds office: 2 St. David's Court,
David Street, Leeds, LS11 5QA

+44 (0)1663 767 857
djsresearch.co.uk

Appendix

HOUSEHOLD ONLY (N=945)

Demographics

ANNUAL HOUSEHOLD INCOME / IN THE HOUSEHOLD

Demographics	Total % (base)
Less than £10,000	8% (75)
£10,000-£19,999	22% (208)
£20,000-£29,999	18% (168)
£30,000-£39,999	12% (112)
£40,000-£49,999	7% (63)
£50,000 or more	15% (144)
Prefer not to say	19% (176)
Just me, I live alone	33% (315)
My partner	52% (496)
My child/children	24% (228)
Friends	1% (7)
Extended family members	2% (21)
Other	3% (30)

ETHNICITY

Demographics	Total % (base)
Less than £10,000	8% (75)
£10,000-£19,999	22% (208)
£20,000-£29,999	18% (168)
£30,000-£39,999	12% (112)
£40,000-£49,999	7% (63)
£50,000 or more	15% (144)
Prefer not to say	19% (176)
Just me, I live alone	33% (315)
My partner	52% (496)
My child/children	24% (228)
Friends	1% (7)
Extended family members	2% (21)
Other	3% (30)

CHILDREN IN HOME / RELIGION / DISABILITY

Demographics	Total % (base)
1	44% (101)
2	35% (79)
3	9%% (20)
4	3% (6)
Prefer not to say	4% (9)
No children/not applicable	5% (13)
Christianity	47% (449)
Other	3% (28)
None	40% (337)
Prefer not to say	9% (82)
Yes (self)	23% (219)
Yes (other)	10% (94)
No	64% (602)
Don't know/ prefer not to say	7% (66)

***BAME:** White & Black Caribbean, White & Black African, White and Asian, Other Mixed background, Indian, Pakistani, Bangladeshi, Chinese, Other Asian background, African, Caribbean, Other Black/African/Carribean background, Arab, Other ethnic group

BUSINESS ONLY (N=100)

Firmographics

WATER & SEWERAGE BILL ESTIMATE

Firmographics	**Total %** (base)
Less than £500	9% (9)
£500-£900	14% (14)
£1000-£1,999	10% (10)
£2000-£4,999	20% (20)
£5,000-£9,999	12% (12)
£10,000-£49,999	20% (20)
£50,000-£99,999	4% (4)
£100,000-£249,000	3% (3)
£250,000 or more	2% 2)
Don’t know	6% (6)

SECTOR

Firmographics	**Total %** (base)
Agriculture/Forestry/Fishing	1% (1)
Business Services	13% (13)
Catering (e.g. restaurants, cafes, pubs)	7% (5)
Construction and Property Development (including Plumbing/Heating/Electrical)	5% (5)
Education	5% (5)
Energy/Utilities	1% (1)
Entertainment/Culture/Sport	3% 3)
Financial Services	4% (4)
IT/Communication services	12% (12)
Healthcare & Social work: private sector	2% (2)
Healthcare & Social work: public sector	8% (8)
Manufacturing & Engineering	14% (14)
Media/Publishing	2% (2)
Other Services (e.g. Hairdresser/beauty)	1% (1)

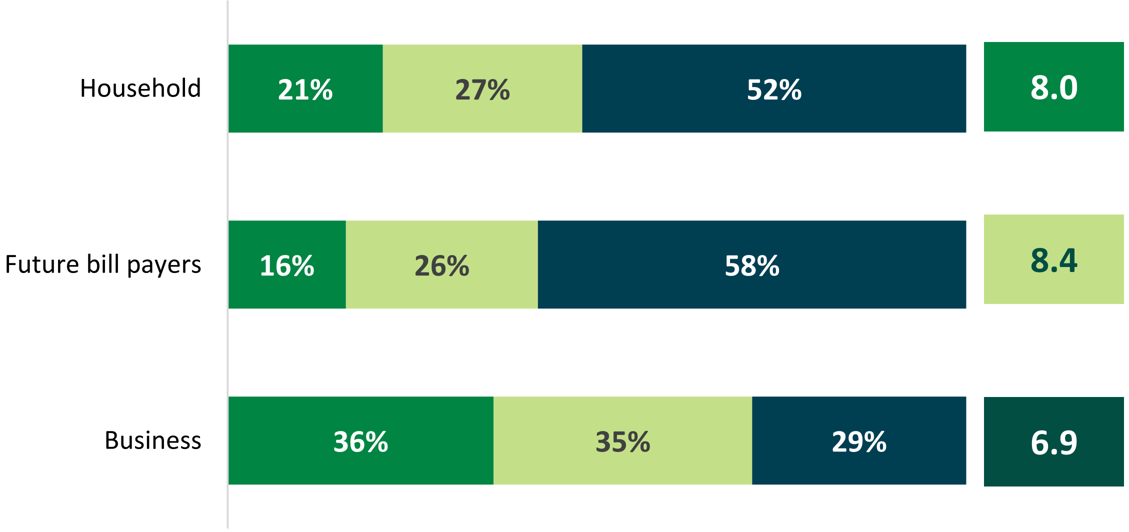
	Firmographics	**Total %** (base)
SECTOR	Retail	11% (11)
	Tourism (e.g. hotels, guest houses, campsites)	3% (3)
	Transport/Distribution	4% (4)
	Wholesale	3% (3)
	Other	1% (1)
COMPANY PROVIDING CUSTOMER SERVICE & READINGS	United Utilities provides customer service & reads meters at the site	75% (75)
	Water Plus provides customer service & reads meters at the site	9% (9)
	Castle Water provides customer service & reads meters at the site	3% (3)
	SSE Water provides customer service & reads meters at the site	2% (2)
	Other	9%
	Don’t know	2%

Climate change in both the UK & NW England is more of a concern to household customers & future bill payers

Future bill payers find most areas concerning while the global recession is understandably more concerning for business rather than household customers.

Concern: Climate change in the UK

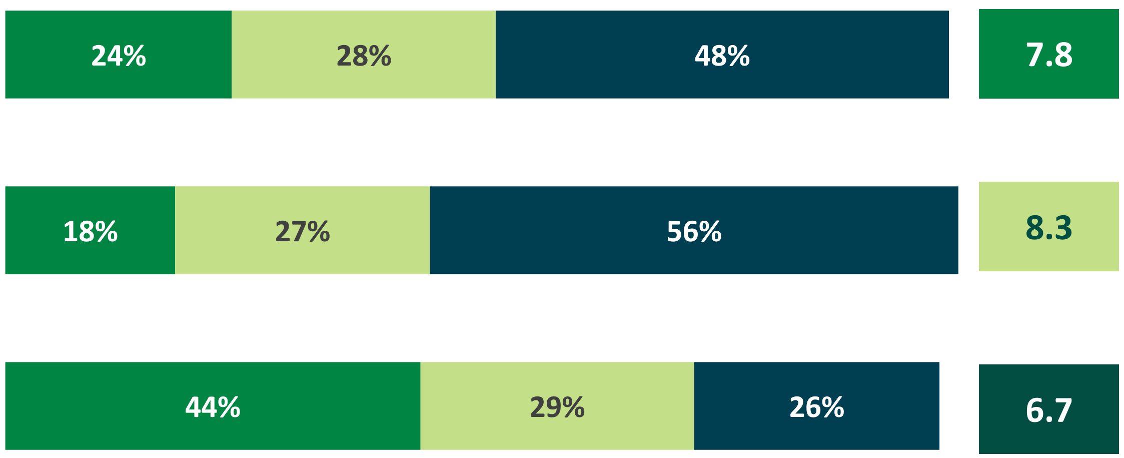
Mean score



Those in Cumbria (38%) are significantly more likely to rate between 1-6/10 compared to household customers in other locations. Females (59%) and CACI segment: A (48%) are less likely to be most concerned (rating 9-10).

Concern: Climate change in the North West

Mean score



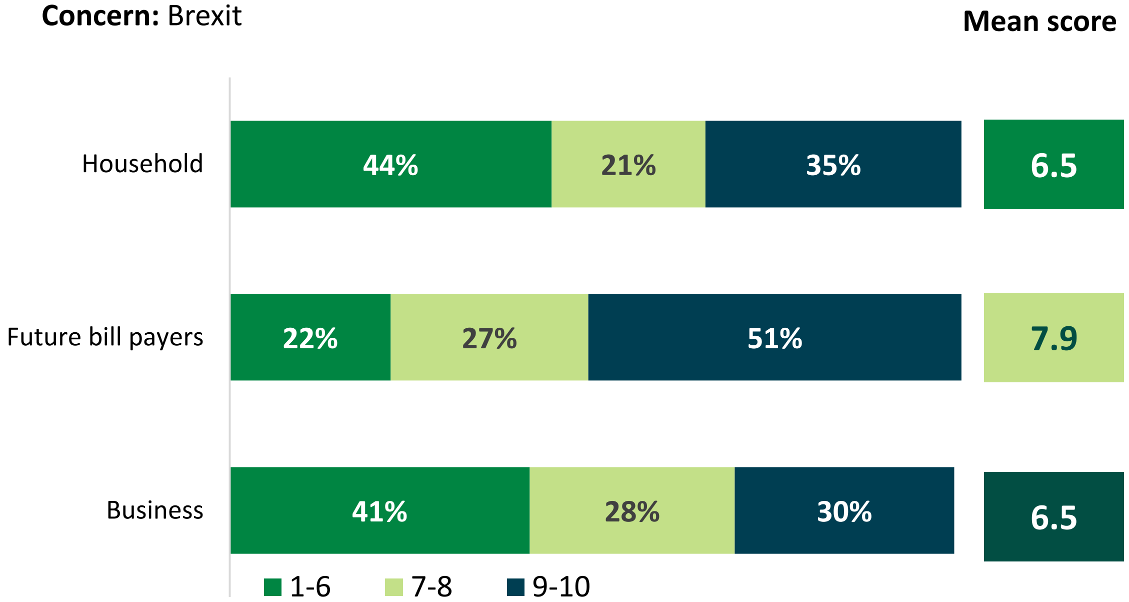
Females (53%) and those who would like UU to invest more in asset health now and pay slightly more (59%) are more likely to be most concerned (rating 9-10).

Base: excluding those who selected 'not sure': 100 UK 99 North West (all business respondents) **933 UK 932 North West** (all household respondents) **147** (all FPB respondents) Q01. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the following?

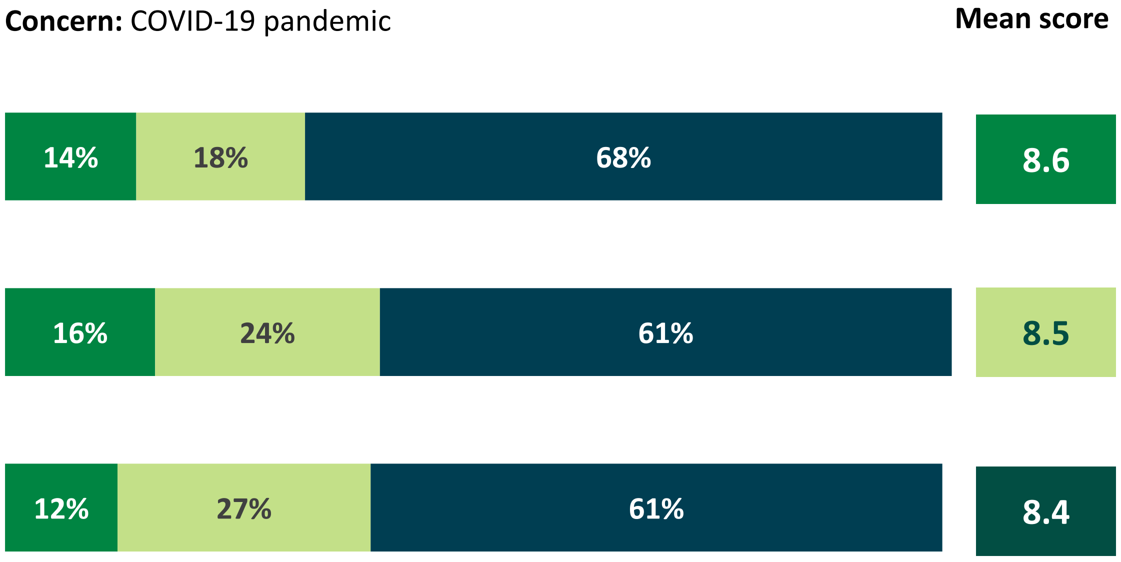
The COVID-19 pandemic is of most concern to customers

While Brexit is of least concern.

Concern: Brexit



Concern: COVID-19 pandemic



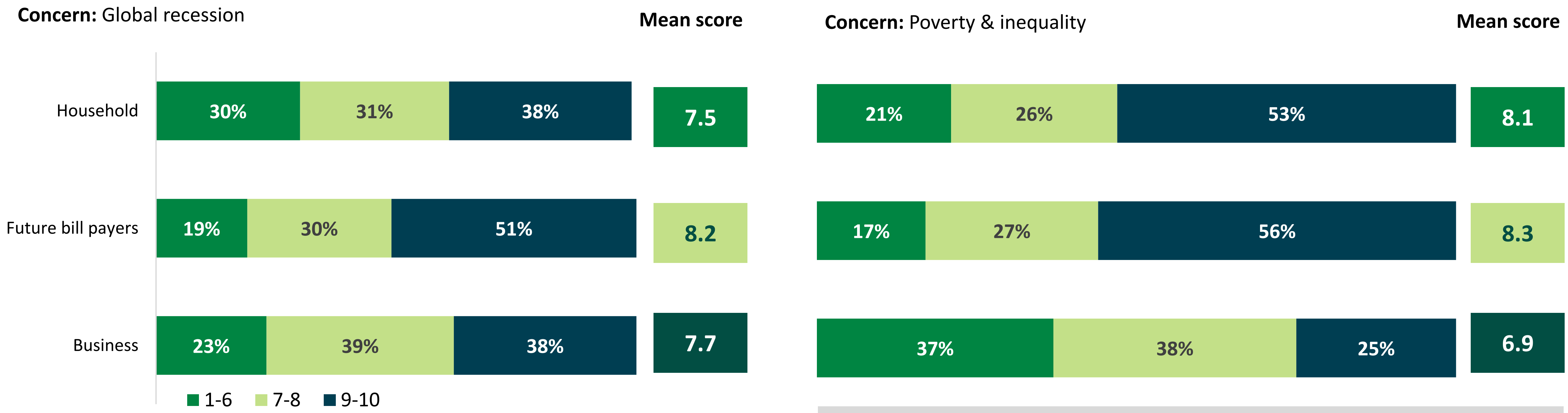
SEG: A (47%) are significantly more likely to be most concerned (9-10) about Brexit compared to other social grades.

65+'s (78%) are significantly more likely to be most concerned (9-10) about COVID-19 compared to younger customers.

Base: excluding those who selected 'not sure': 99 Brexit 100 COVID-19 pandemic (all business respondents) **Brexit 928 COVID-19 942** (all household respondents) **147** (all FPB respondents) Q01. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the following?

The global recession is most concerning to business customers

Only a quarter (25%) are very concerned about poverty & equality compared to over half of household and future bill payers.

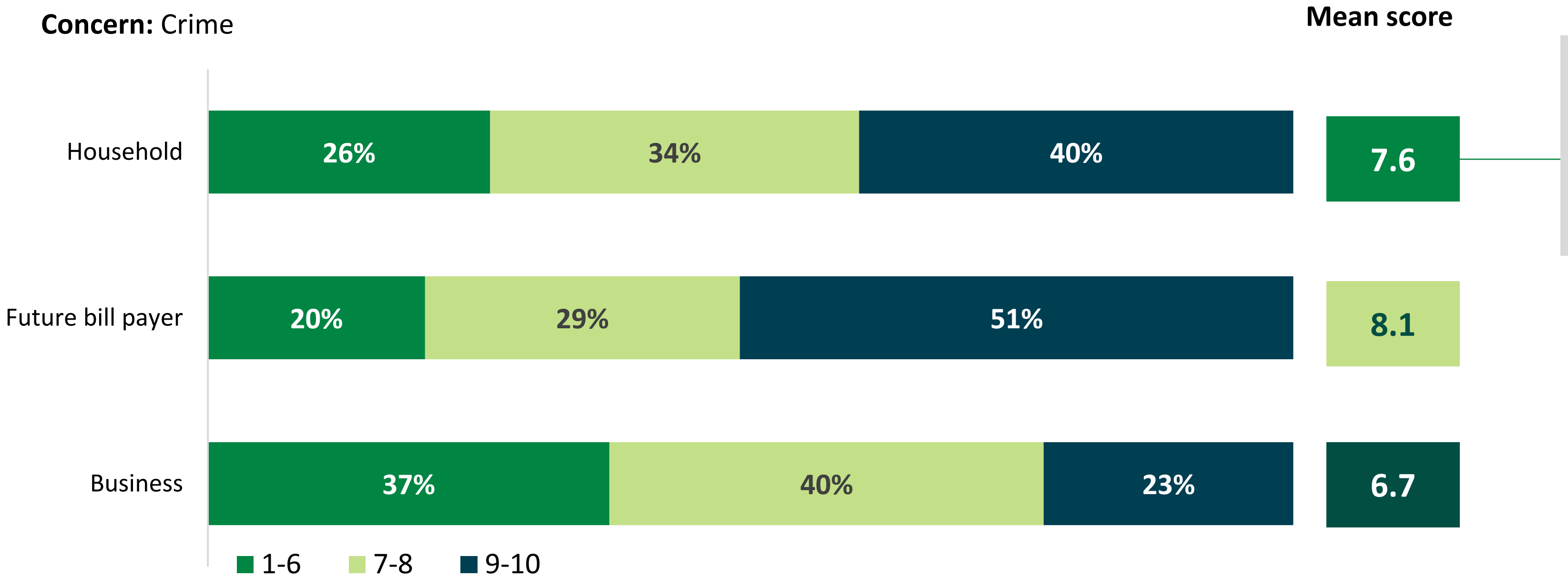


BAME (80%) , those willing to pay more now if UU invest now (58%) Females (63%) and those in CACI segment % (63%) are significantly more likely to be most concerned (9-10) about poverty compared to other social grades.

Base: excluding those who selected 'not sure': 100 (all business respondents) **Global recession 936 Poverty & equality 937** (all household respondents) **147** (all FPB respondents) Q01. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the following?

Crime is least concerning to business customers

Almost two fifths (37%) rate crime between 1-6 in terms of concern.

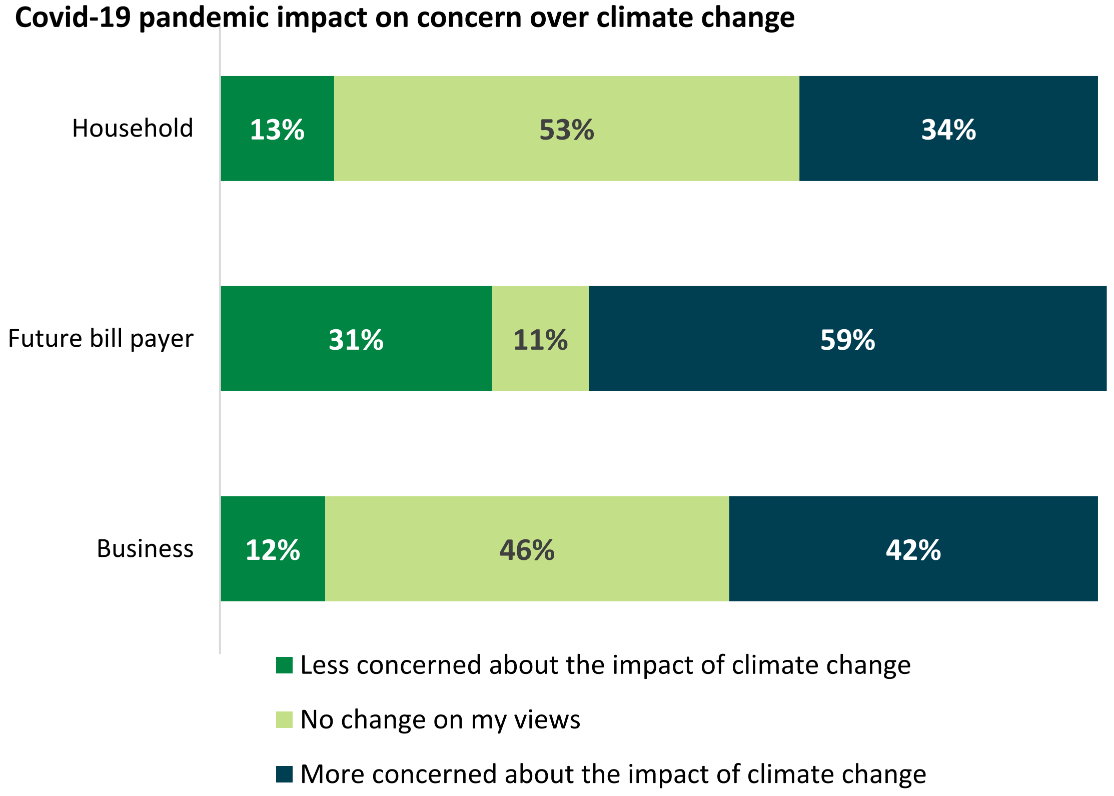


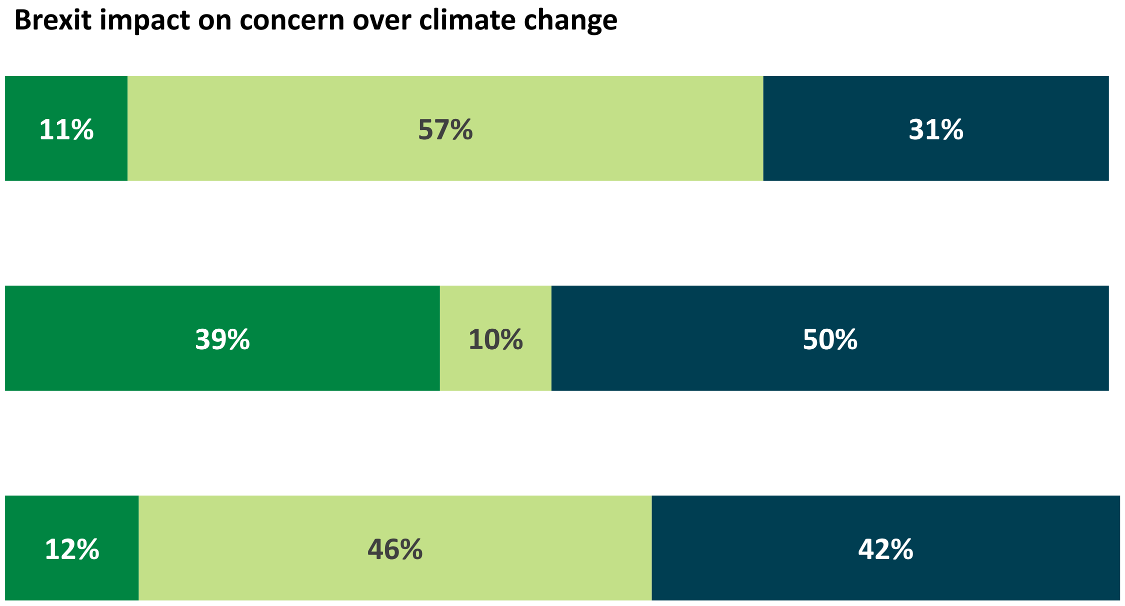
Those in IMD 1+2 (47%) , 65+'s (48%) and those who only charge customers in our generation and the next for improvements even if there are delays or it costs more in long term to react.

Base: excluding those who selected 'not sure': 100 (all business respondents) **942** (all household respondents) **147** (all FPB respondents) Q01.
On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the following?

Both the COVID-19 pandemic and Brexit have had little or no change on how concerned business and household customers are over climate change

Around half feel they have had no change to their views.





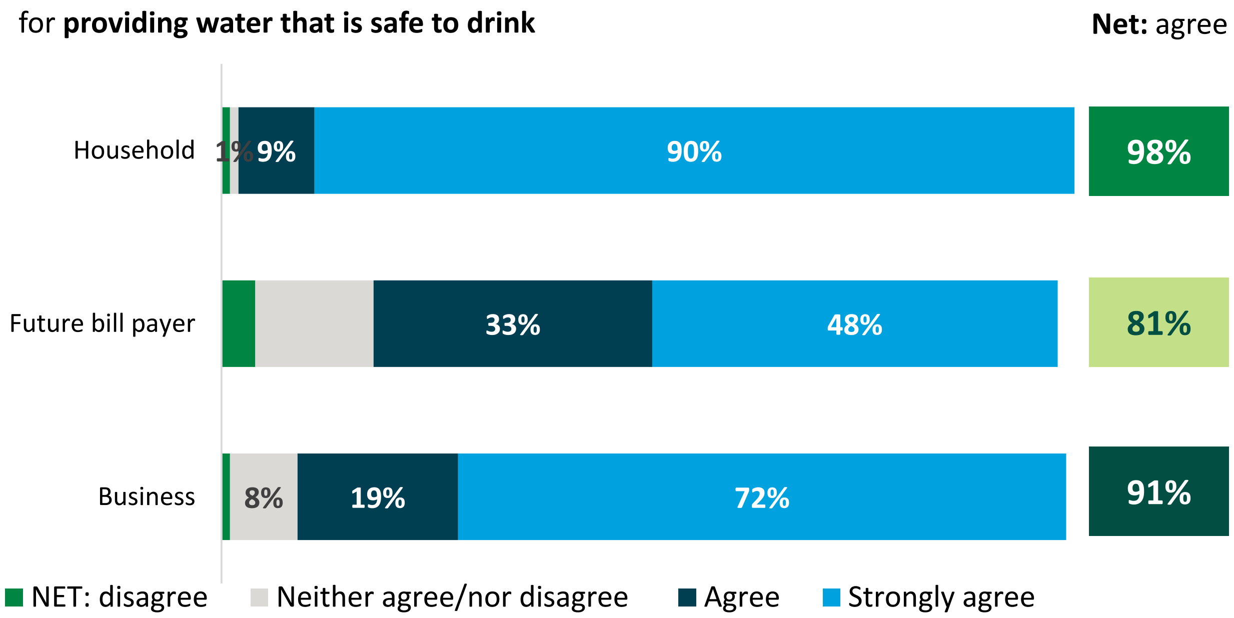
Those aged 25-34 (49%) are significantly more likely to be concerned compared to other age groups.

Base: all respondents: 100 (all business respondents) **945** (all household respondents) **147** (all FPB respondents) Q03. Have any of the following events had an impact on how concerned you are about climate change – if so, have they made you more or less concerned?

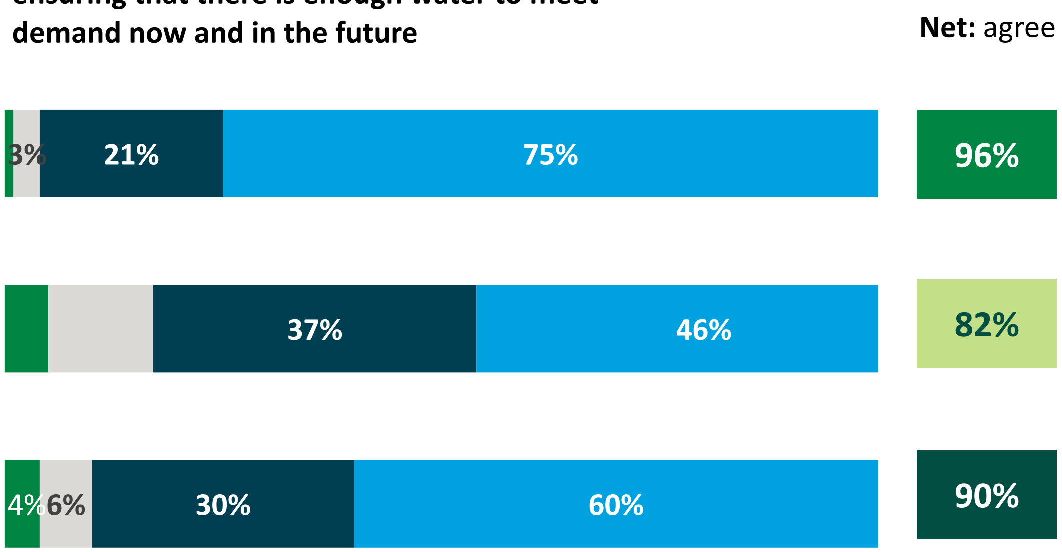
The majority of household customers strongly agree it is United Utilities’ responsibility to provide safe drinking water

Almost three quarters (74%) strongly agree United Utilities should ensure there is enough water to meet demand now and in the future.

United Utilities: Extent to which responsible for **providing water that is safe to drink**



United Utilities: Extent to which responsible for **ensuring that there is enough water to meet demand now and in the future**



Those in CACI segment H (80%) IMD: 1+2 (87%) and SEG: C2 (85%) are significantly less likely to strongly agree.

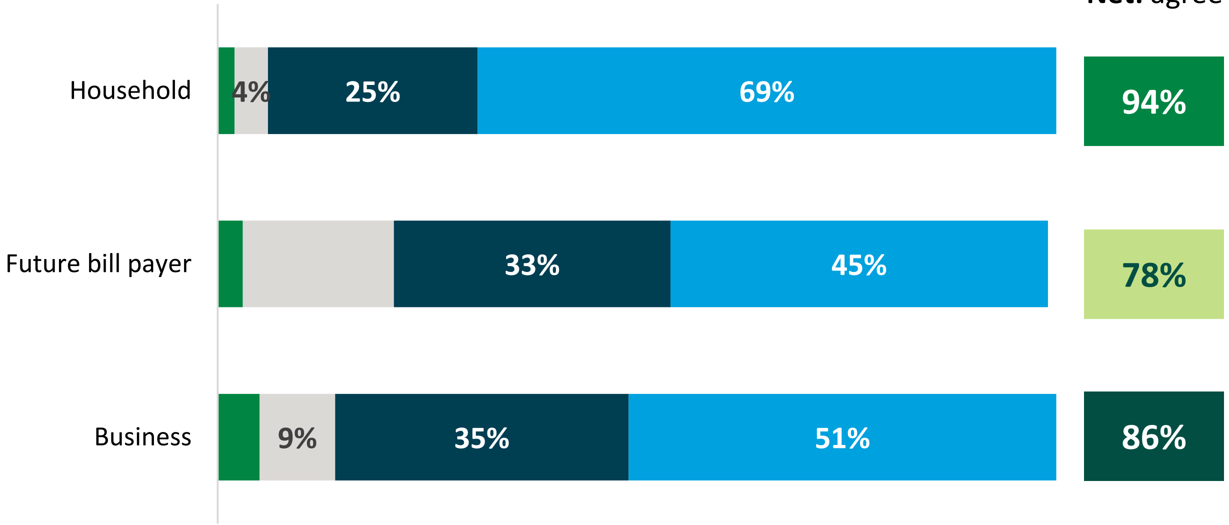
Those in CACI segment E (84%) G (84%) and SEG: A (85%) are significantly more likely to strongly agree.

Base: all respondents: 100 (all business respondents) **940 safe to drink 936 enough water to meet demand** (all household respondents) **146** (all FPB respondents)
Q04. To what extent do you agree or disagree that United Utilities has a responsibility for the following areas: *Data labels below 5% have been excluded from the chart.

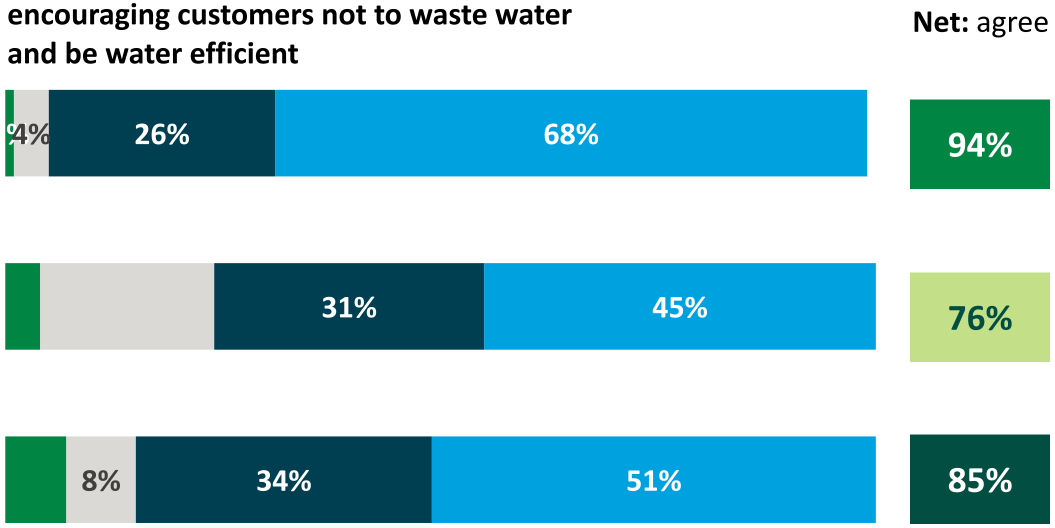
The majority of customers agree it is United Utilities' responsibility to prevent sewer flooding & encourage water efficiency

Over two thirds (68%) of household customers strongly agree.

United Utilities: Extent to which responsible for **preventing homes, gardens and local areas from being affected by sewer flooding**



United Utilities: Extent to which responsible for **encouraging customers not to waste water and be water efficient**



■ NET: disagree ■ Neither agree/nor disagree ■ Agree ■ Strongly agree

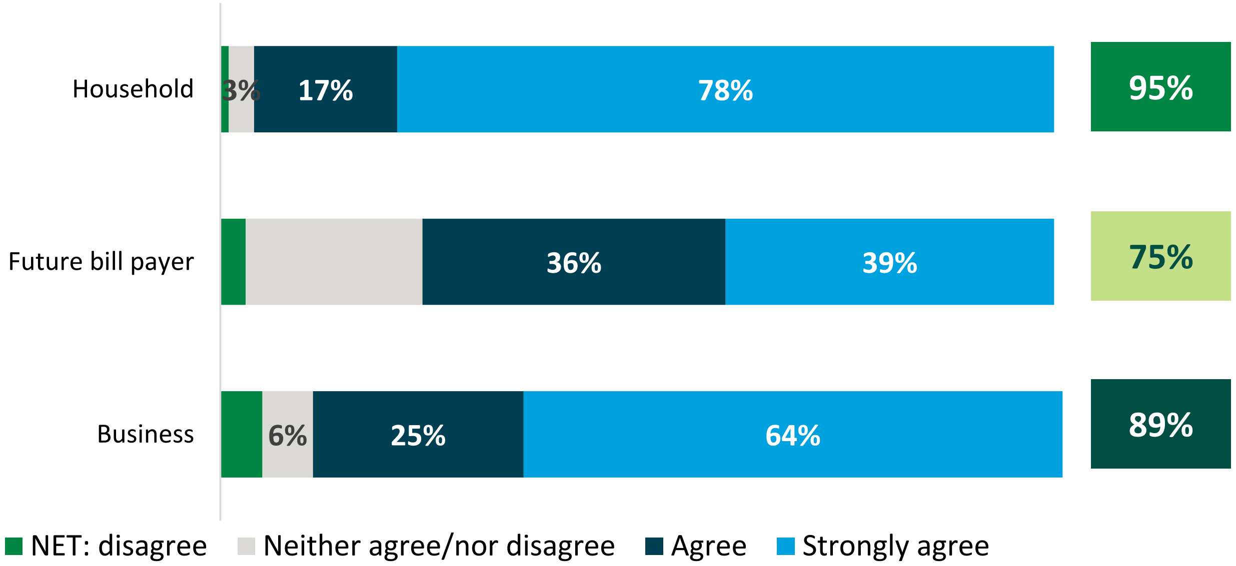
Those aged 65+ (97%) and those in CACI segments E (99%) and A (98%) are significantly more likely to NET:agree UU is responsible.

Base: all respondents: 99 (all business respondents) **934** (all household respondents) **146** (all FPB respondents) Q04. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the following? *Data labels below 5% have been excluded from the chart. *Data labels below 5% have been excluded from the chart.

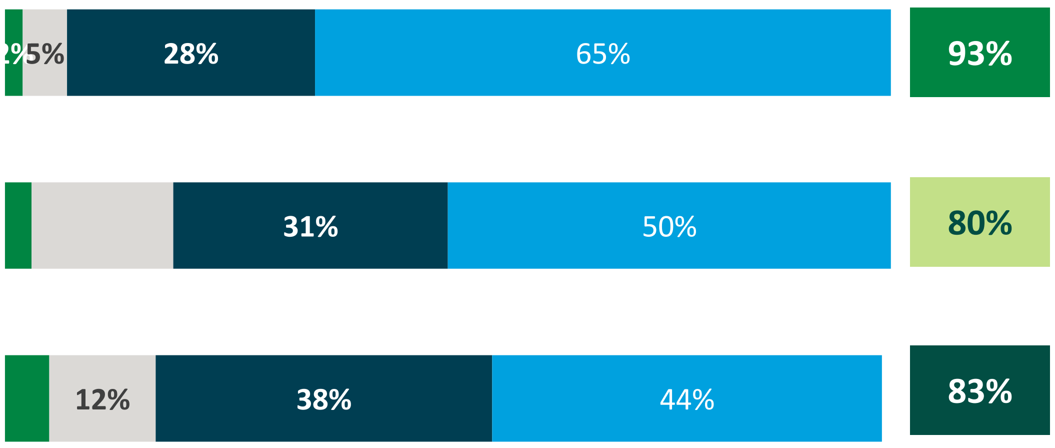
The majority of household and business customers feel United Utilities should be responsible for fixing leaks and considering its impact on the environment

Household customers in particular are more likely to strongly agree.

United Utilities: Extent to which responsible for **fixing leaks**



United Utilities: Extent to which responsible for **considering its impact on the environment**



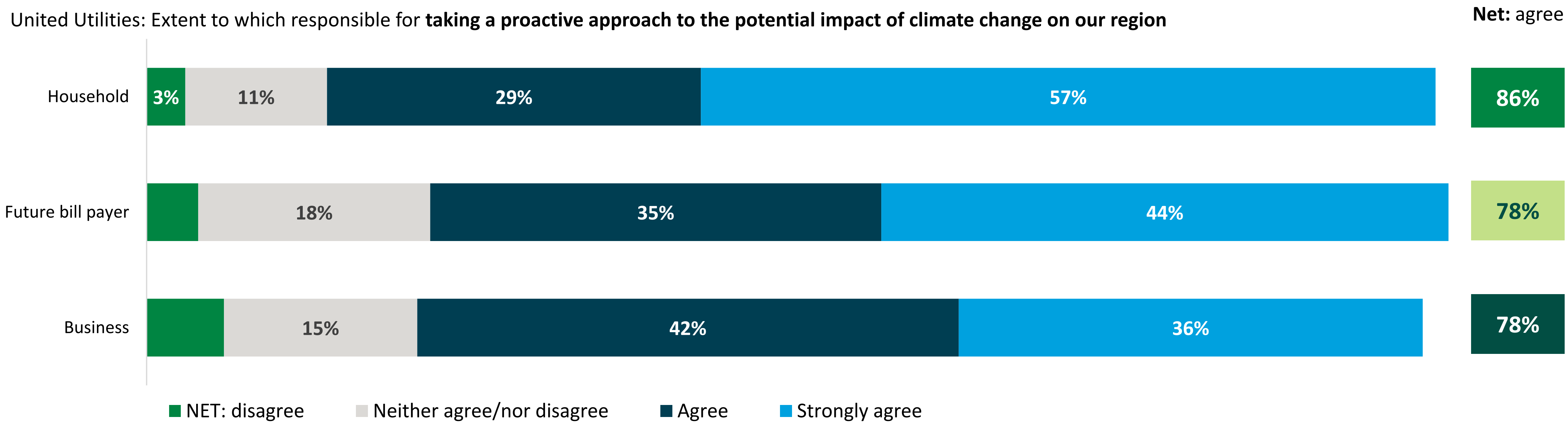
Those aged 65+ (97%) and those in CACI segments E (99%) and A (98%) are significantly more likely to NET:agree UU is responsible.

Base: all respondents: 99 (all business respondents) **fix leaks 936 considers environmental impact 938** (all household respondents) **146** (all FPB respondents)
Q04. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the following? *Data labels below 5% have been excluded from the chart.

Household customers are most likely to agree United Utilities should be responsible for taking a proactive approach to the potential impacts of climate change

Over half (57%) strongly agreeing with this compared to just over a third (36%) of business customers.

United Utilities: Extent to which responsible for **taking a proactive approach to the potential impact of climate change on our region**



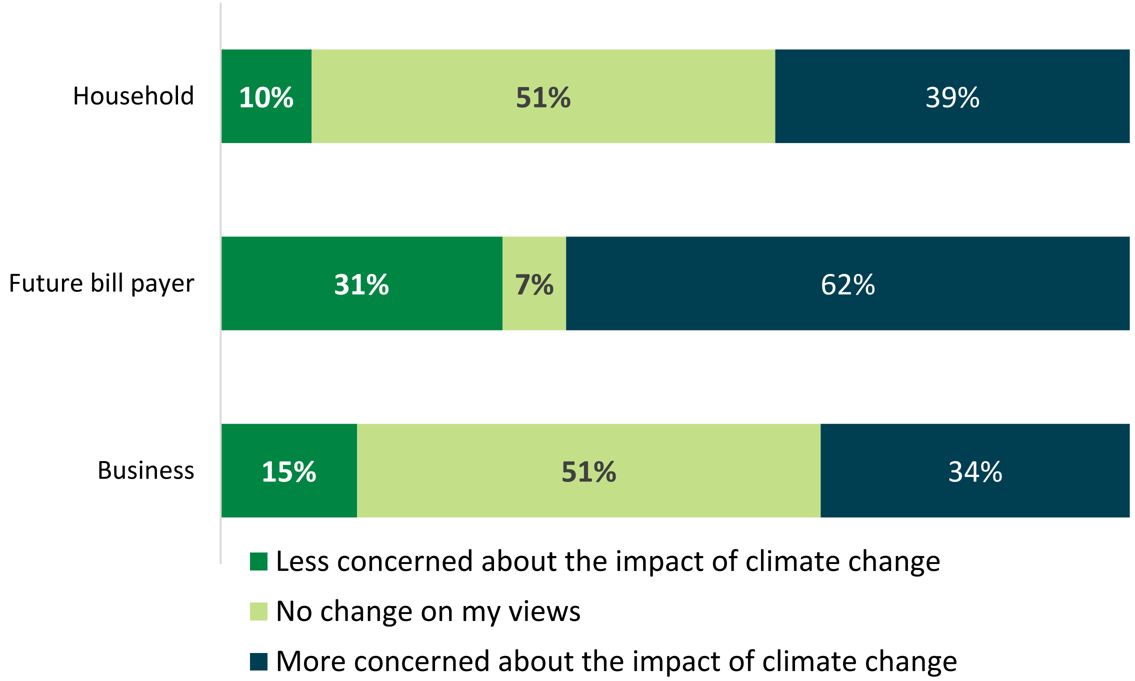
Those in Liverpool (68%) and those in CACI segments C (64%) and G (65%) are significantly more likely to strongly agree.

Base: all respondents: 97 (all business respondents) **932** (all household respondents) **147** (all FPB respondents) Q04. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the following? *Data labels below 5% have been excluded from the chart.

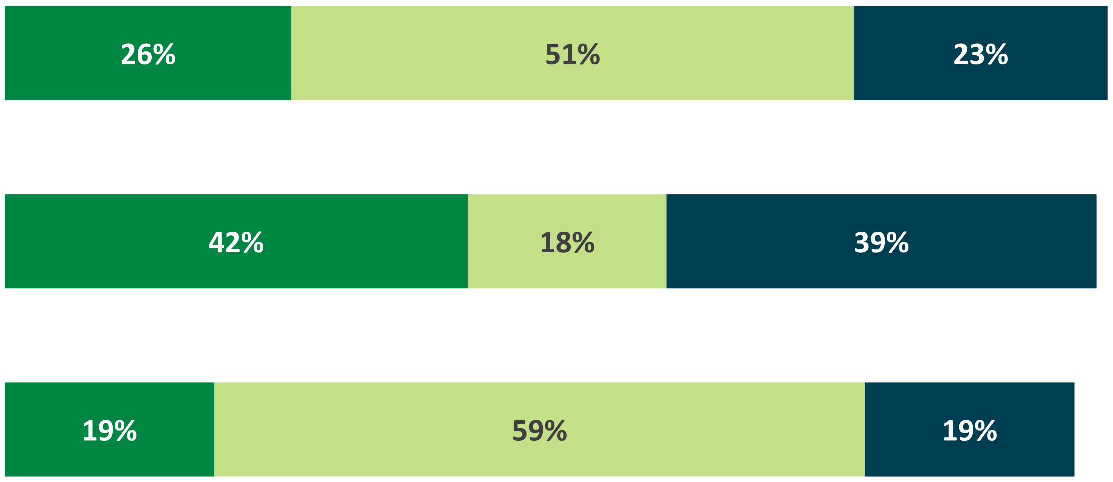
The US election has minimal impact on their concern over climate change

Over a third of business and household customers are more concerned over climate change with the impact from the economic recession, increasing to just under two thirds (62%) of future bill payers.

Economic recession impact on concern over climate change



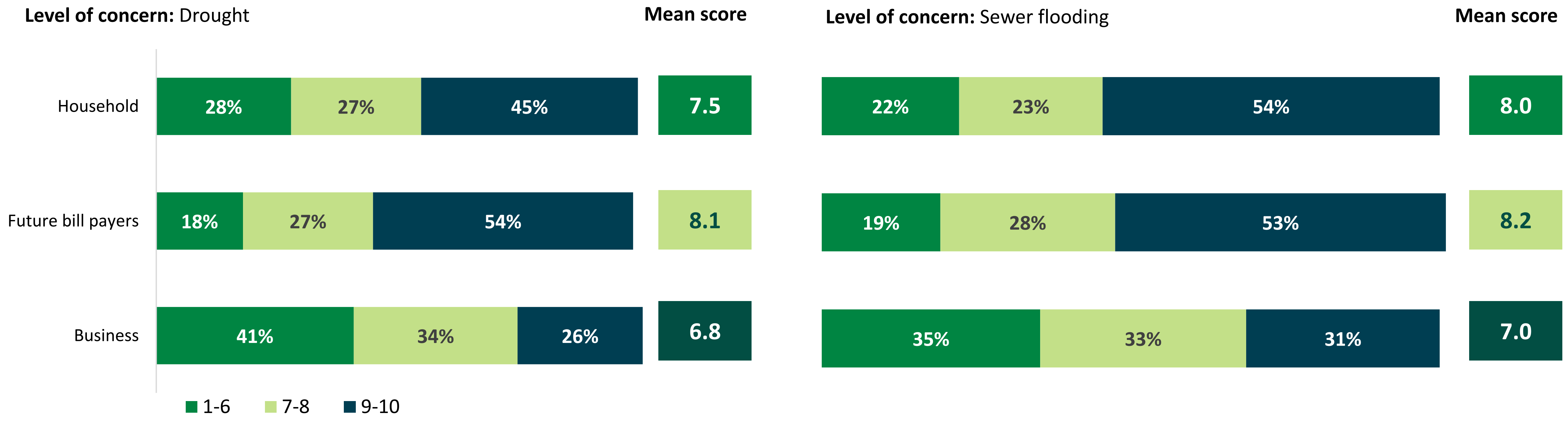
US election impact on concern over climate change



Base: all respondents: 100 (all business respondents) **945** (all household respondents) **147** (all FPB respondents) Q03. Have any of the following events had an impact on how concerned you are about climate change – if so, have they made you more or less concerned?

Customers tend to be more concerned about sewer flooding than drought in the region

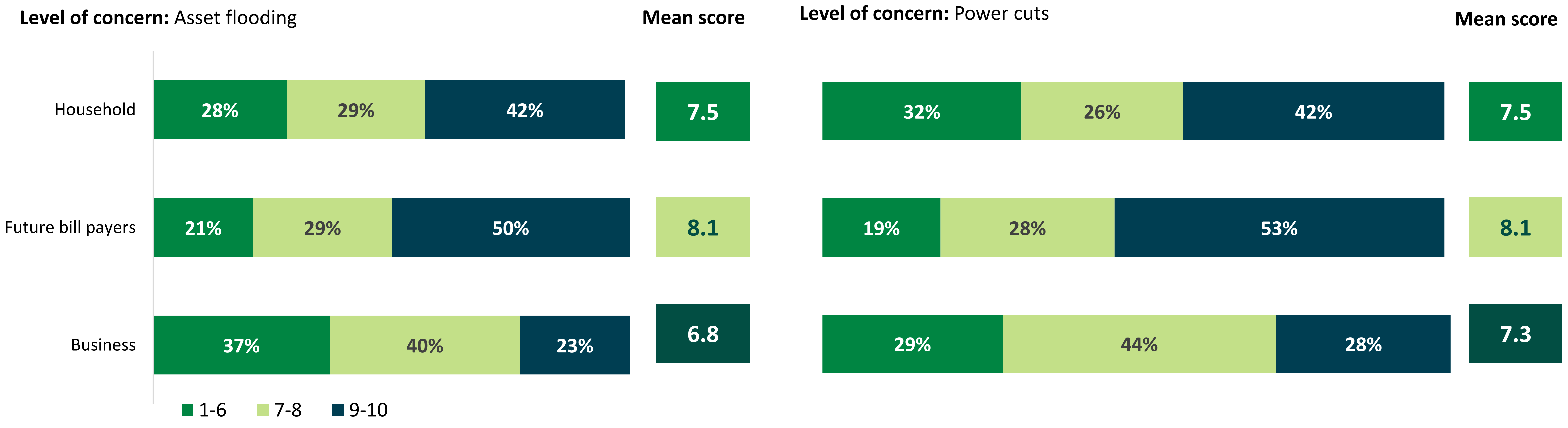
It is of most concern to household customers and future bill payers with over half rating 9-10 in terms of concern.



Base: excluding those who selected 'not sure': Drought 98 Sewer flooding 99 (all business respondents) Drought **905 Sewer flooding 895** (all household respondents) **146** (all FPB respondents) Q08. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the following climate challenges in our region?

Business customers tend to be more concerned about power cuts than asset flooding

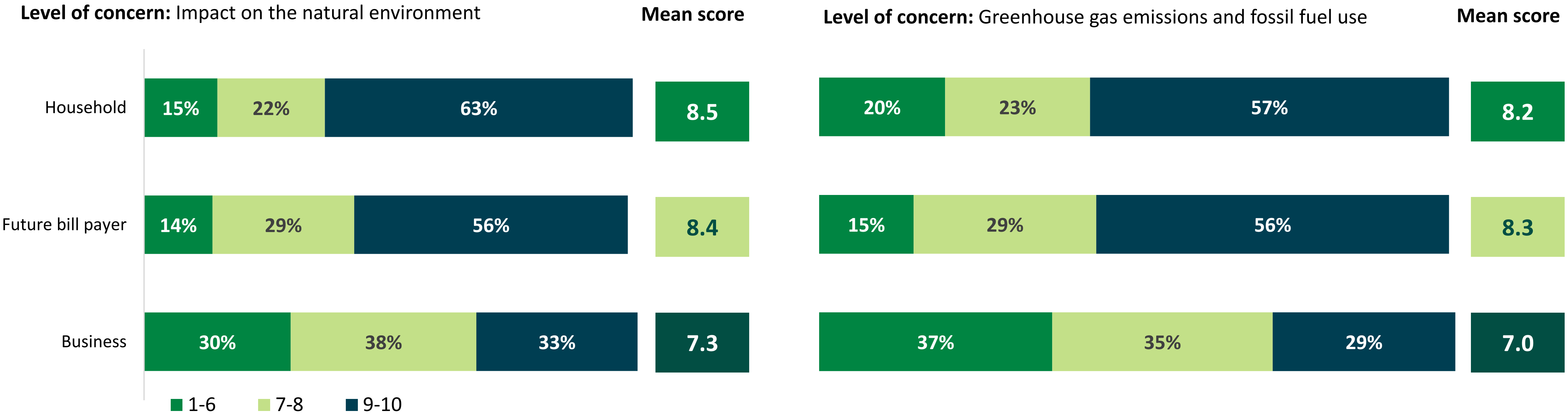
Over a quarter (28%) rating 9-10 in terms of level of concern. Over two fifths (42%) of household customers rate 9-10 for both asset flooding and drought.



Base: excluding those who selected 'not sure': 98 (all business respondents) **Asset flooding 855 Power cuts 905** (all household respondents) **146** (all FPB respondents) Q08. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the following climate challenges in our region?

Business customers tend to be less concerned over the environment & emissions than other customer groups

Over half of household and business customers rate 9-10 for concern over the environment and emissions.

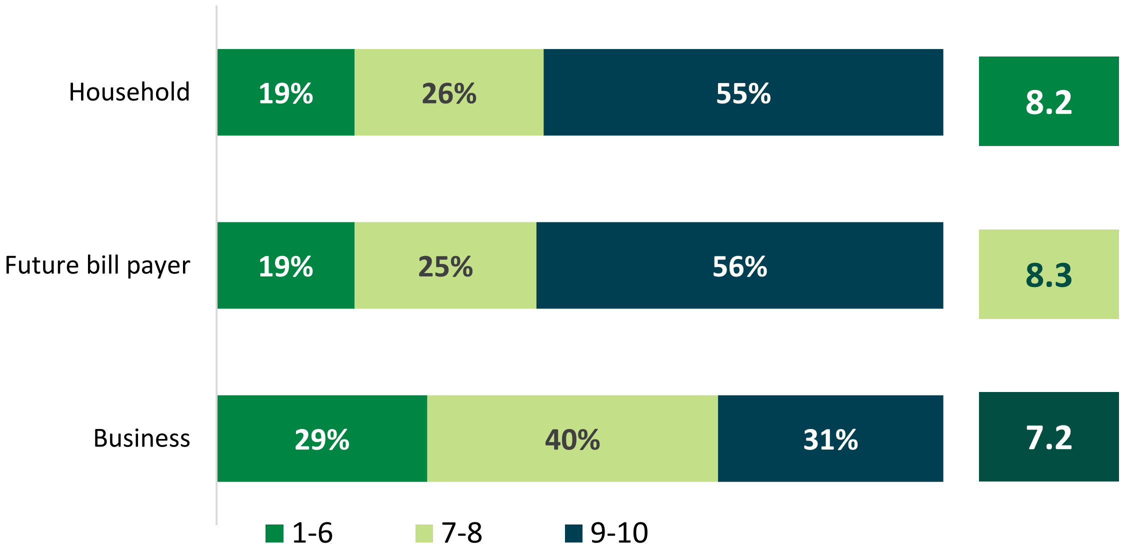


Base: excluding those who selected 'not sure': 98 (all business respondents) **898** (all household respondents) **146** (all FPB respondents)
Q08. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the following climate challenges in our region?

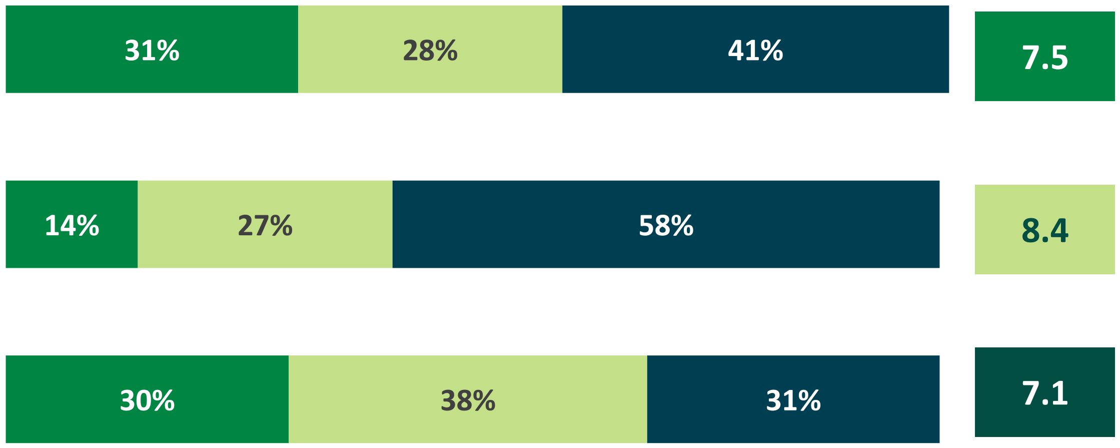
Household & future bill payers are more concerned about agriculture & food supply and health & wellbeing compared to business customers

Over half of household and future bill payers rate these elements 9-10 in terms of level of concern.

Level of concern: Agriculture and food supply — **Mean score**



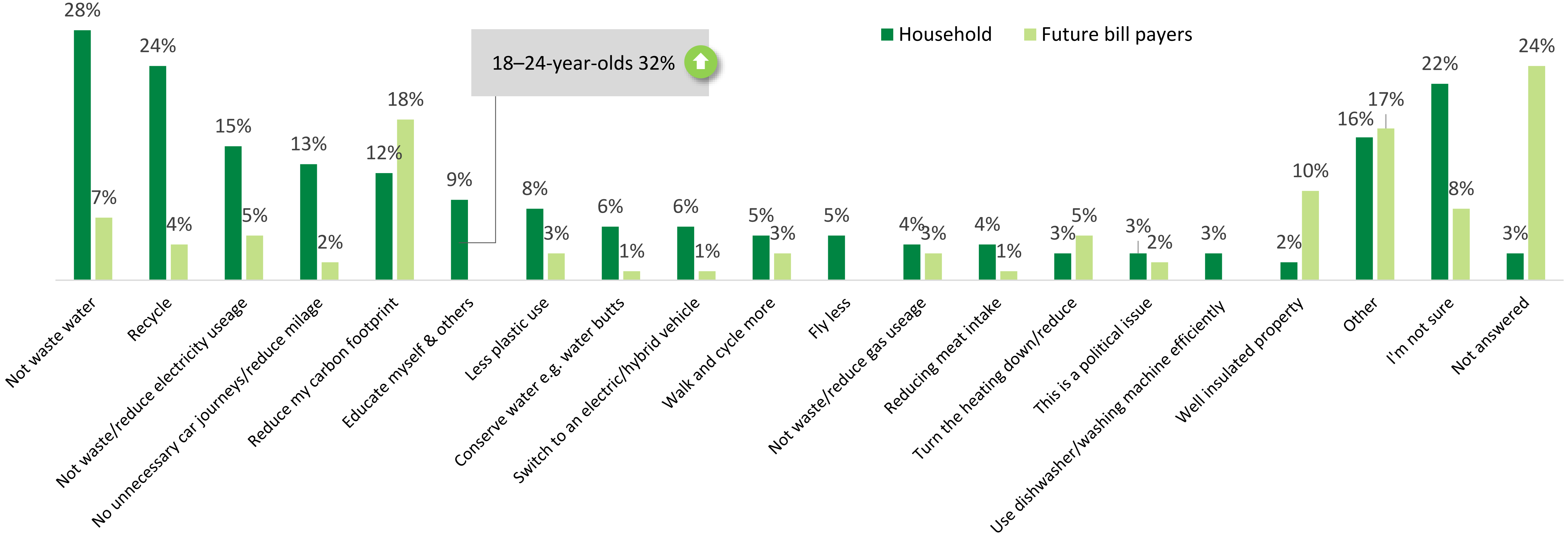
Level of concern: Health & wellbeing — **Mean score**



Base: excluding those who selected 'not sure': Drought 97 Health and wellbeing 99 (all business respondents) **Agriculture and food supply 902 Health & wellbeing 910** (all household respondents) **146** (all FPB respondents) Q08. On a scale of 1-10, where 1 is not at all concerned and 10 is extremely concerned, how concerned are you about the following climate challenges in our region?

Not wasting water, recycling & reducing electricity are the most popular things B2C customers believe they can do to help with climate change

A tenth (10%) of FBP also mention that people can help by having a well insulated property.



Base: all respondents: 945 (all B2C respondents) **147** (all FPB respondents) Q05. What do you feel your role is in tackling climate change? You might want to think about what things you can do to help with climate challenges.