

NIA2 Social Research Final report

August 2021



Contents

Methodology, objectives and who we spoke to

Summary of findings

Infrastructure in general

Investment

Digital communications

Energy

Water supply and waste water

Transport

Solid waste

Flood management



**Methodology, objectives
and who we spoke to**

A reminder of the methodology

Quantitative research

Online survey poll with **6,030** respondents

The survey was representative of the UK population by age, gender and region

Fieldwork conducted between 1 June and 14 June 2021

Qualitative research

6 x 1.5 hour group discussions
6 x 1 hour in depth interviews

Split by: SEG & size of city/town as well as a mix of age, family status and regions and nations

Fieldwork conducted between 16 June and 25 June 2021



Research objectives

The research was focused on regions in the UK to:

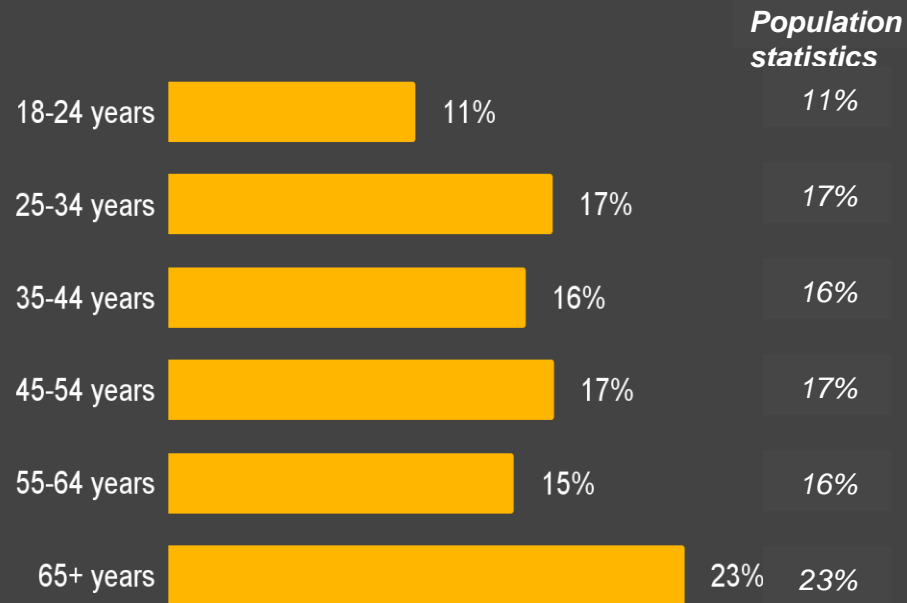
- explore public perceptions of the current state of infrastructure provision in the UK across each of the Commission's six infrastructure sectors (transport, energy, digital, water supply, flood management and waste management);
- explore views on the future trade-offs that may be required due to changing infrastructure demand between 2025-2055; and
- identify priorities for future investment.

The findings from this research will contribute to the Commission's evidence base for its baseline assessment of UK infrastructure.

It should be noted that in some of the sectors covered by the Commission, there is substantial devolution of powers to the devolved administrations, particularly in relation to transport, water supply and waste water, flood management and solid waste.

Please note that throughout the presentation percentage figures may not add to 100% due to rounding

The quantitative survey was nationally representative of the UK population by age, gender, region and ethnicity

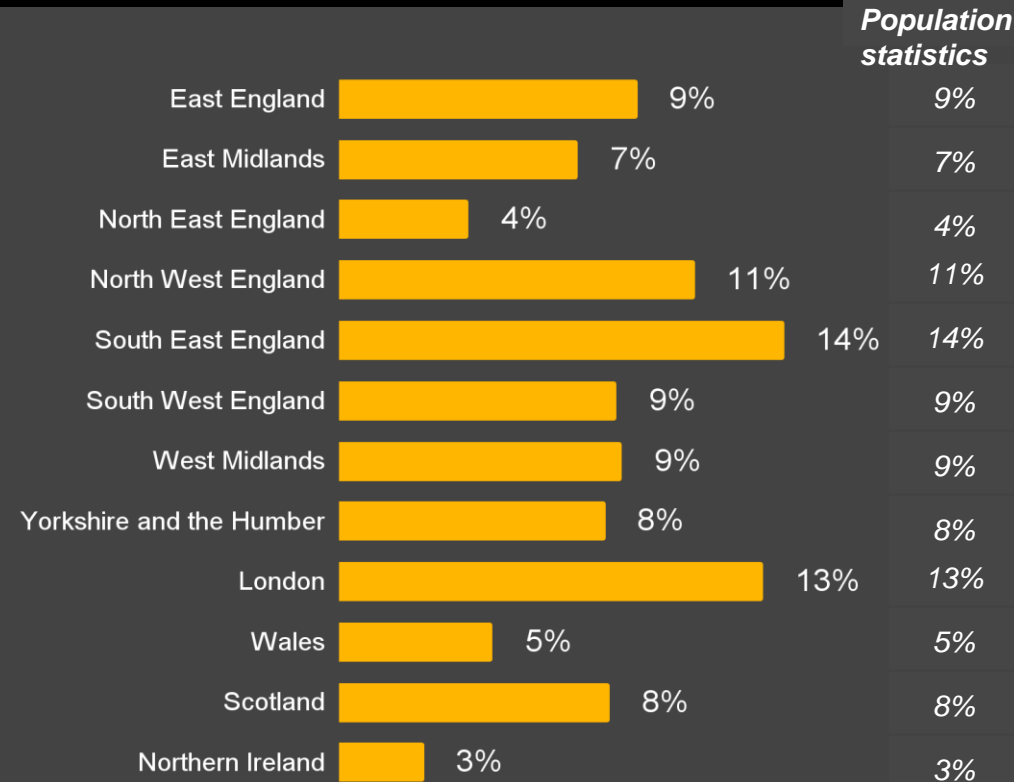


48% Males
51% Females

Population statistics

49% Males

51% Females



86% White

7% Asian

3% Black

3% Mixed/multiple ethnic groups

1% Other ethnic group

Population statistics

86%

8%

3%

2%

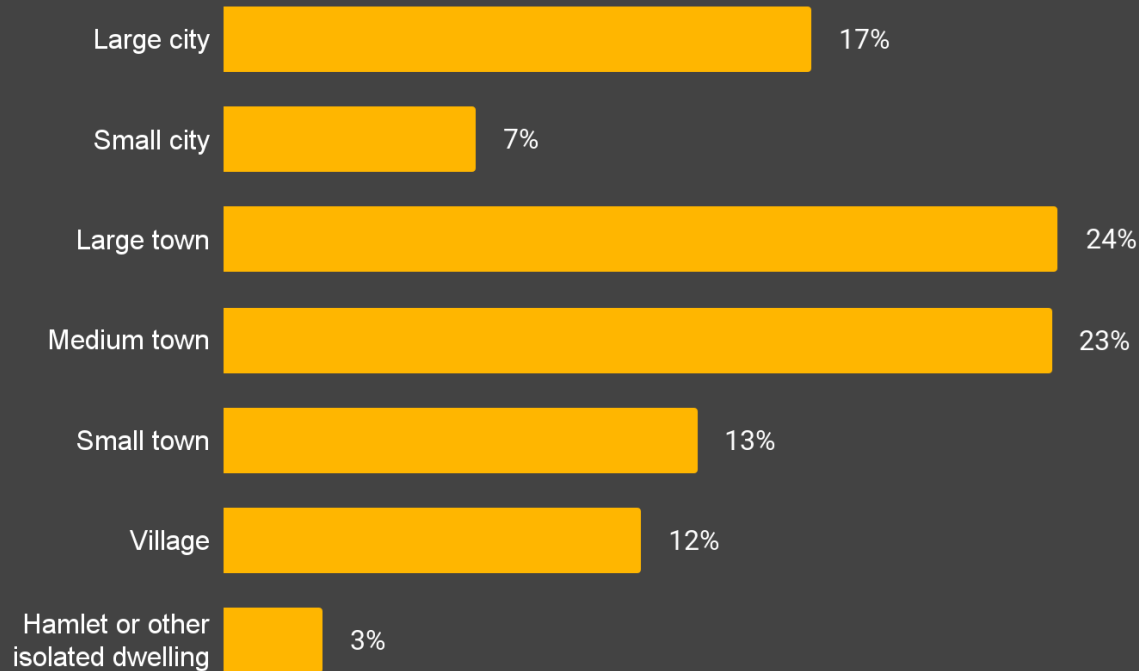
1%

A1. What is your age?
A2. What is your gender?
A3. Where do you live?

Base: 6,030

There was a good spread of respondents across cities, towns and villages/hamlets

Which of the following best describes the area that you live in?



Base: 6,030



Focus groups in the qualitative stage were spread according to the following core criteria (with a mix of SEG, location, age, and family status):

Small town/village (population 5,000 - 20,000)	x2
Medium/large town (population 20,000 - 75,000)	x2
City (population over 225,000)	x2



Depth interviews in the qualitative stage were spread according to the following core criteria, with a focus on vulnerable audiences (with a mix of SEG, location, age, and family status):

Small town/village (population 5,000 - 20,000)	No personal internet access	x1
Medium/large town (population 20,000 - 75,000)	Disability / long term life limiting health condition	x1
City (population over 225,000)	Long term low income	x1

Key terms

Quantitative research analysis notes

Where referenced in commentary around quantitative findings, 'Agreement' is the sum of 'Strongly agree' and 'Agree' combined. Similarly, 'Confidence' is the sum of 'Extremely', 'Very', and 'Quite confident' combined.

'Net agreement' is the sum of 'Strongly agree' and 'Agree', minus the sum of 'Strongly disagree' and 'Disagree'.

'Frequent users' (e.g. of public transport or car) are defined as those who use either form of travel at least once a week, up to a maximum frequency of every day. 'Less frequent users' are those that use either form of travel a maximum of once or twice a week, or once every few months.

'Non-rejectors' is applied to public transport use only and are those that do not travel by public transport but are open to doing so in the future. 'Non-users' are defined as those that never travel by public transport or car.



Summary of findings



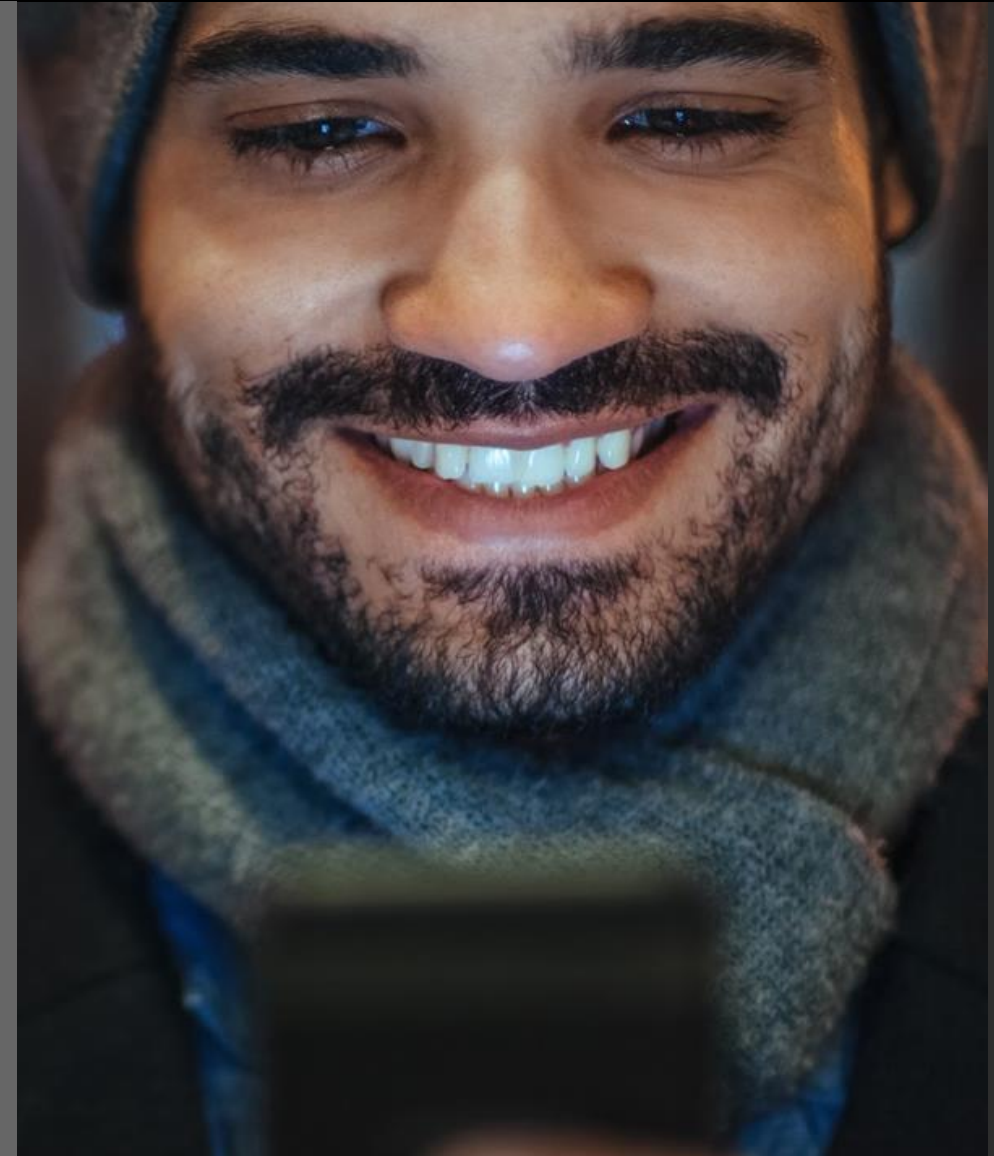
Summary of findings



- Three-quarters of respondents agree that **good infrastructure is essential for people to have a good quality of life.**
 - Health, money, happiness and mental health are the top themes mentioned when respondents were asked what 'quality of life' means to them
 - Spending time with friends/family, work life balance, clean air and spending time outside are other key contributors to quality of life, with a desire to have the right infrastructure in place to meet these personal and social needs
- The environment and quality are the top two factors prioritised in relation to NIC's future planning
 - The environment is increasing in importance since the 2017 assessment when 23% ranked it as a top priority - this has now risen to 29%
 - The need to focus on the environment is seen as more 'overarching' - an 'end goal' which drives timely investment in quality infrastructure which is resilient and leaves a positive legacy for future generations
- Climate change is also viewed as an important vision for UK infrastructure in thirty years' time
 - 38% ranked 'infrastructure leading the fight against climate change, by reducing greenhouse emissions' in their top two priorities (increasing from 26% in the 2017 assessment)
 - 34% ranked 'coping with future challenges, such as increasing population and climate change' in their top two priorities
- Almost six in ten agree that we should prioritise taking action to tackle climate change, even if it means we have higher electricity and heating bills - this shows an increase on 2017 levels when just over four in ten were in agreement

Summary of findings

- Two fifths feel their region receives **lower than average levels of infrastructure investment**
 - This is particularly the view from residents in North East England, North West England, Yorkshire and the Humber and Wales
 - Those living in small towns, villages and hamlets are also more likely to feel they receive lower than average investment levels
 - There are concerns around ‘failing’ high streets, ‘run down’ city centres and poor transport services in some cases (especially in smaller towns and rural areas)
- A quarter of respondents feel that infrastructure should drive regional growth to rebalance economic growth across the country
 - Long term planning is a priority, ranked third as the ‘vision’ of the UK’s infrastructure in 30 years time. Similarly, investing now to save in the long term was ranked third when thinking about future infrastructure planning
 - Many are willing to put up with shorter term higher costs and potential disruption if that leads to better quality, longer lasting and more affordable infrastructure in the future
- Across all areas, those in hamlets are less confident in the UK’s infrastructure meeting needs in 30 years’ time. The qualitative research indicates that this is likely to be because they feel more isolated, less connected and have more experiences of flooding and disruption of water/energy supply



Summary of findings



- Respondents were most confident with **digital infrastructure** in comparison to the other infrastructure sectors
 - 87% were confident that digital communications will meet their needs in the next 30 years - an increase from the 2017 assessment when 82% were confident
 - The UK's digital capabilities have continued to strengthen, and have showed resilience in the face of the COVID-19 pandemic
 - Residents in hamlets are significantly more likely to be **not** confident compared to those in large and small cities, large towns and villages
- **Energy** showed the second highest levels of confidence in meeting people's needs in the next 30 years
 - Confidence has grown since the 2017 assessment from 66% to 80% this year
 - Increased ease of switching providers/services and prominence of green tariff alternatives were seen as key factors behind this growing confidence
 - Residents in hamlets are significantly more likely to be not confident
 - Two in five respondents have become more concerned about household bills over the last year - the main reason being the increasing cost of utility bills
 - Almost half of respondents have reduced the amount of energy/water they use
 - Some respondents described themselves as 'energy conscious', but motivations for this were largely driven by a desire to reduce bills rather than solely to have an environmental impact
 - 45% are unlikely to purchase an electric vehicle in the next five years, with cost being the main reason cited - those living in villages and hamlets are more likely to be concerned about cost and a lack of charging infrastructure

Summary of findings

- **Water supply and waste water** showed the third highest levels of confidence in meeting people's needs in the next 30 years
 - Confidence has grown since the 2017 assessment from 74% to 79% this year
 - Residents in hamlets are significantly more likely to be not confident
 - Whilst there were few issues with water supply, there was a general lack of awareness around supply processes and how water is managed and recycled
- **Transport** showed the third lowest levels of confidence in meeting people's needs in the next 30 years at 73%, however this is an increase from the 2017 assessment when confidence was 61%
 - Confidence is significantly higher among respondents in London and other large and small cities
 - Lack of confidence is significantly higher among respondents living in villages and hamlets, among non-users and less frequent users of public transport and those aged 65+
 - Roads, railways and electric vehicle infrastructure are viewed as the areas most in need of investment
 - Respondents living in villages, and less frequent and non-users of public transport are significantly more likely to rank roads as the number one area of transport in need of improvement



Summary of findings

- **Solid waste** showed the second lowest levels of confidence in meeting people's needs in the next 30 years, however confidence has grown since the 2017 assessment from 57% to 69% this year
 - Residents in hamlets are significantly more likely to be **not** confident
 - Questions were raised around transparency of waste disposal processes, experiences of abandoned waste management schemes and concerns around over consumption and excess packaging
 - Seven in ten respondents agreed that the companies that produce waste should take on more responsibility for recycling and disposing of packaging, even if it means paying more for products with lots of packaging
 - Recycling initiatives (e.g. bottle disposal) were popular to help incentivise customers further
- **Flood management** showed the lowest levels of confidence in meeting people's needs in the next 30 years - it also showed the lowest confidence levels in 2017, however confidence has increased from 49% to 61% this year
 - Concerns raised were largely around the impact of climate change, with some worried that future infrastructure won't be able to withstand more extreme weather (including more frequent flash flooding)
 - Respondents living in villages and hamlets are significantly more likely to not be confident compared to those in towns and cities
 - Half of respondents would be willing to pay £10 more each year for flood protection. While £10 was deemed a 'small amount', some challenged why those not at risk should have to pay for "those who choose to live in at-risk areas"





Infrastructure in general



Good quality infrastructure is so important for quality of life, with health, money and happiness being the top 3 themes

Words/phrases that come to mind when asked about 'quality of life'

(most common coded themes from verbatim comments)

43% Health

28% Money

27% Happiness

19% Mental health



74% agree that good infrastructure is essential for people to have a good quality of life. This was 81% in 2017.

Base: 6,030



Findings here are backed up by our qualitative insights, with respondents spontaneously associating 'quality of life' with spending time with friends/family (albeit virtually during the pandemic), easy access to amenities and 'things to do', work life balance (and not spending time in congestion/traffic jams), and clean air and clean local environments. All of these point to a need for robust infrastructure, such as access to good transport links, strong digital connections, focus on the environment and green solutions, and well managed water and waste supplies.

As in 2017, infrastructure that just delivers a basic provision was only selected by a quarter of respondents to be the 'vision' of the UK's infrastructure in 30 years' time

Only **25%** of respondents felt that infrastructure doesn't need to change the world - just power our homes and businesses and help us communicate and travel (ranked 4th). One in four also ranked this in 2017.

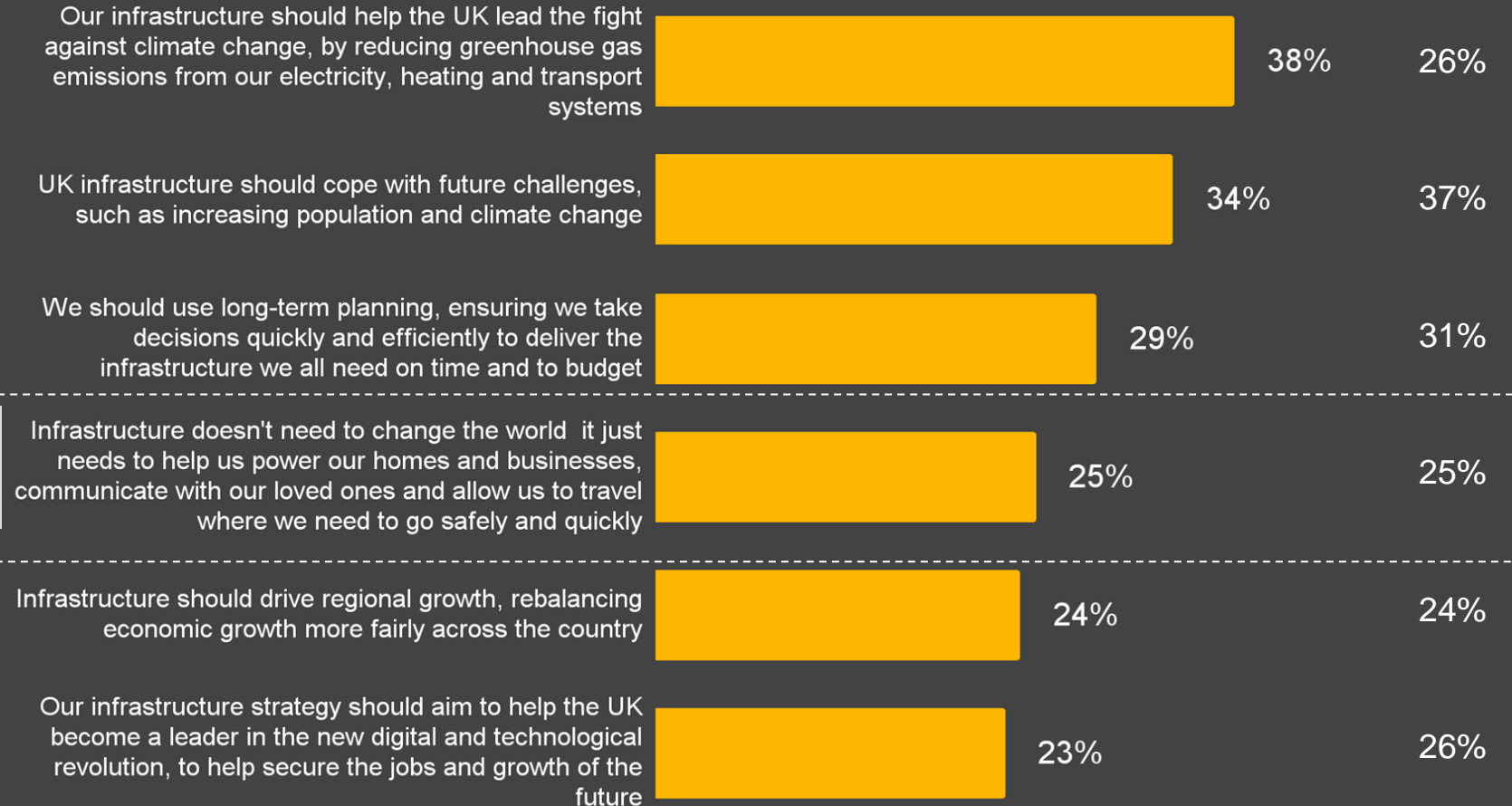
Preference is highest among respondents living in hamlets (34%).



Respondents in the qualitative stage similarly deemed the fight against climate change and protecting the environment crucial. They felt that this should be the core priority when planning for future infrastructure.

Two most preferred statements

2017 NIA1 assessment



When planning for the UK's future infrastructure, achievable targets by the Government were seen as important by almost three quarters of respondents

When planning for the UK's future infrastructure, it would be better for government to have a target that we know is achievable rather than a more ambitious target that might not be met (% agreement)

72% agree that it would be better for government to have a target that is achievable rather than a more ambitious target that might not be met. 2017 agreement levels were broadly similar at 76%.

Base: 6,030

Most likely to Net: 'Agree':

- 65+ (82%)

38%
Strongly agree

34%
Agree

19%
Neither/
Nor

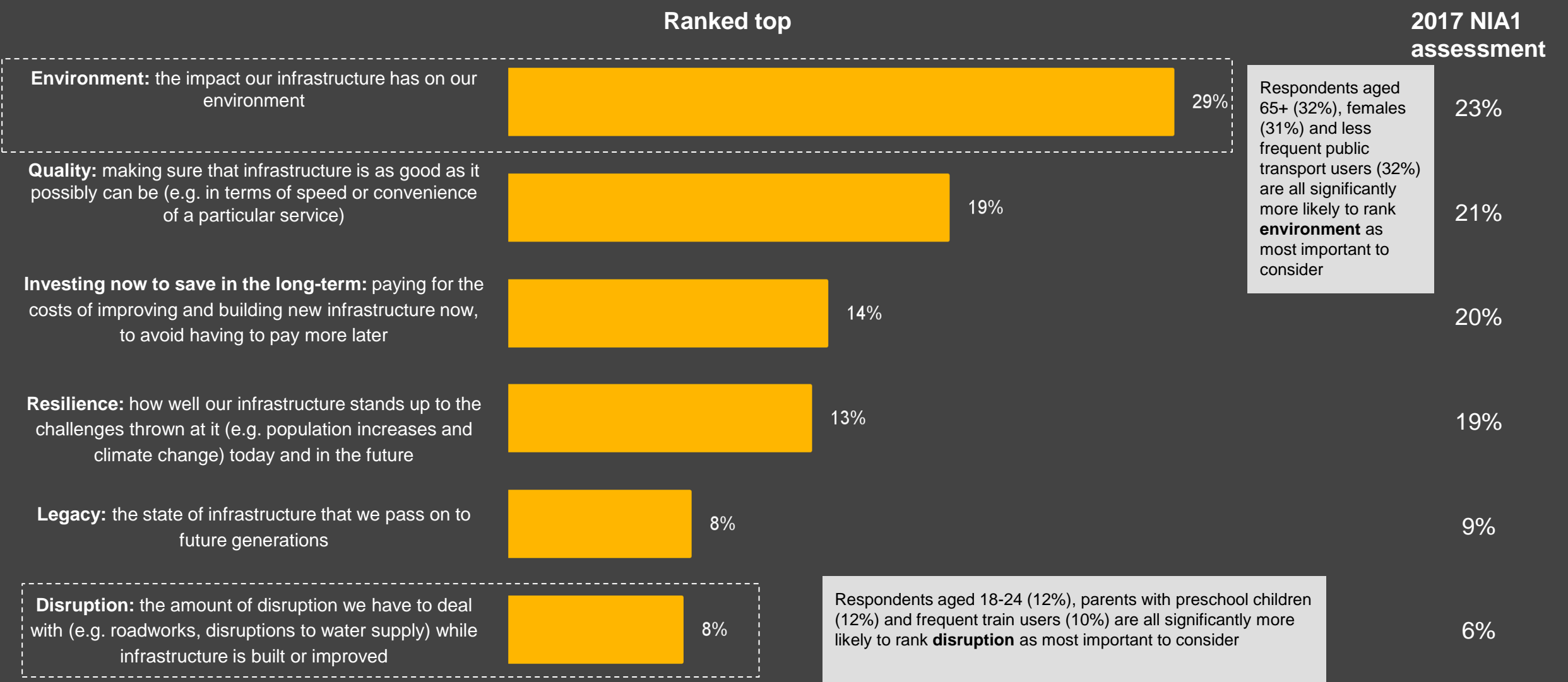
4%
Disagree

2%
Strongly disagree

Don't know: 3%

Net agree: 66%

As in 2017, the environment and quality were the two top factors prioritised in relation to NIC's future planning, with the environment increasing in importance



Qualitatively, respondents felt that looking after the environment should be the 'end goal' and should underpin all decisions around infrastructure



The qualitative stage supported the quantitative findings around the importance of environmental consideration in putting together a plan for the UK's infrastructure. In fact, qualitative respondents felt that the focus on environment is more 'overarching' - it's an 'end goal' which drives Quality, Investing Now, Resilience and Legacy and should underpin all decision-making.

Environment

The impact our infrastructure has on the environment

The environment is almost the overarching thing which happens once all these things are in place. The end product being the environment is better looked after if you get the quality right, invest in the right places and make sure it's resilient

Focus group attendee, Small town / village

Quality

Making sure that infrastructure is as possibly good as it can be

e.g. high quality solutions which don't use more energy/resources to repair/replace later

Investing now

... to save in the long-term:
Paying for the costs of improving and building new infrastructure now, to avoid having to pay more later

e.g. investing in more expensive sustainable options

Resilience

How well our infrastructure stands up to the challenges thrown at it (e.g. population increases and climate change) today and in the future

e.g. solutions that stand up against climate change challenges

Legacy

The state of infrastructure that we pass on to future generations

e.g. ensuring there is a world left for future generations

Disruption

The amount of disruption we have to deal with (e.g. roadworks, disruptions to water supply) while infrastructure is built or improved

While people don't want disruption, this is something they are used to, and are willing to put up with if it's communicated and its benefits are made clear

Climate change is increasing in priority from 2017, and was cited as the top priority for the 'vision' of the UK's infrastructure in 30 years' time

Two most preferred statements

The highest levels of preference are among respondents 65+ (41%), those living in Scotland (41%) and those in small town TTWA's (42%)

Preference is highest among respondents living in hamlets (41%) and villages (38%) and those in South East England (38%)

Our infrastructure should help the UK lead the fight against climate change, by reducing greenhouse gas emissions from our electricity, heating and transport systems

38%

2017 NIA1 assessment

26%

UK infrastructure should cope with future challenges, such as increasing population and climate change

34%

37%

We should use long-term planning, ensuring we take decisions quickly and efficiently to deliver the infrastructure we all need on time and to budget

29%

31%

Infrastructure doesn't need to change the world it just needs to help us power our homes and businesses, communicate with our loved ones and allow us to travel where we need to go safely and quickly

25%

25%

Infrastructure should drive regional growth, rebalancing economic growth more fairly across the country

24%

24%

Our infrastructure strategy should aim to help the UK become a leader in the new digital and technological revolution, to help secure the jobs and growth of the future

23%

26%

Almost **two fifths** of people prioritised the UK leading the fight against climate change as an important part of the vision for UK infrastructure in 30 years' time. This shows an increase on 2017 levels when 26% prioritised this.

There has been an increase since 2017 in those who are open to higher electricity and heating bills if it means tackling climate change was prioritised

57% agree that we should prioritise taking action to tackle climate change, even if it means we have higher electricity and heating bills. This shows an increase on 2017 levels when 44% were in agreement.

Base: 6,030



The environment was a top concern for many in the qualitative stage and this was largely due to the high media coverage on climate change and personalities like David Attenborough supporting the message. However, many feel limited by what they can do personally and feel the responsibility lies with government and large corporations.

It's important, of course it is, and I do my bit. I recycle, I... well I'm not sure what else I can do. It would be good to have more information on how I can do more

**Focus group attendee,
Medium / large town**

We should prioritise taking action to tackle climate change, even if it means we have higher electricity and heating bills
(% agreement)

26%
Strongly agree

31%
Agree

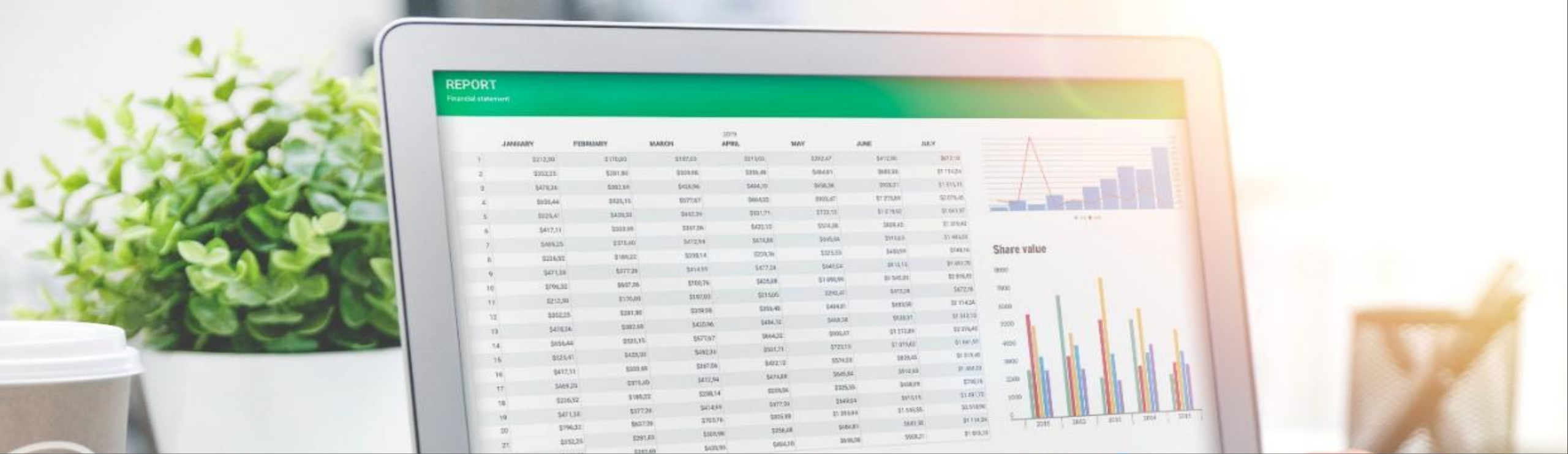
26%
**Neither/
nor**

8%
Disagree

6%
Strongly disagree

Don't know: 3%

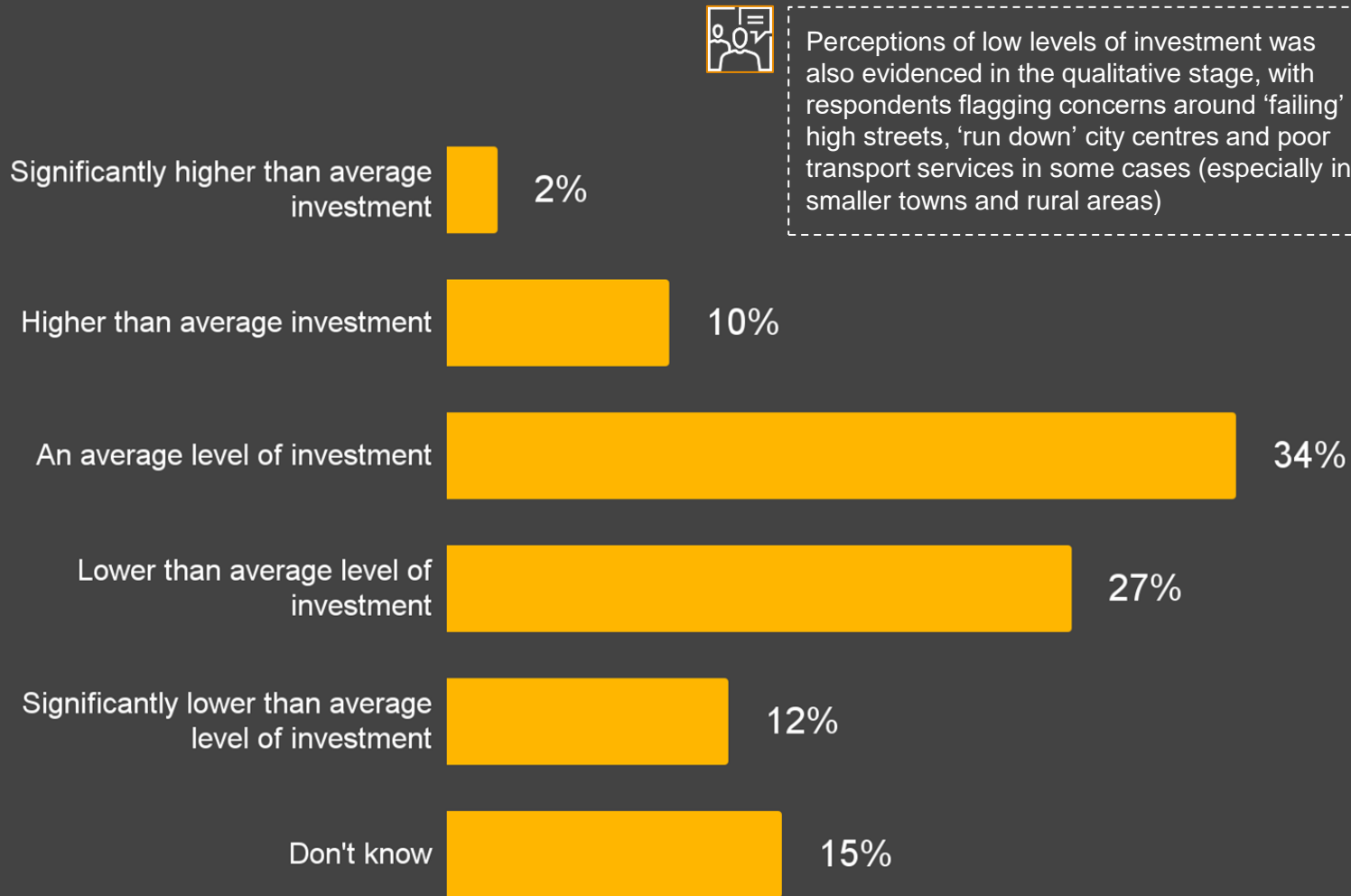
Net agree: 43%



Investment



Two fifths feel their region receives lower than average levels of infrastructure investment



Perceptions of low levels of investment was also evidenced in the qualitative stage, with respondents flagging concerns around 'failing' high streets, 'run down' city centres and poor transport services in some cases (especially in smaller towns and rural areas)

In the town centre at the moment, there's nothing. So many of the shops have shut down, they're empty. There's just nothing, and it's a shame because it's like a lost soul.

Focus group attendee, Medium / large town

Significantly more likely to believe their region receives a significantly higher than average level of investment:

- London (8%)
- SEG A (6%)

Significantly more likely to believe their region receives a higher than average level of investment:

- SEG A (17%)
- South East England (14%)
- 18-24 (14%)
- Male (11% vs 8% among females)

Significantly more likely to believe their region receives lower than average investment:

- North West England (36%)
- Yorkshire and the Humber (36%)
- Village (33%)
- 65+ (31%)
- Major conurbation (36%)

Significantly more likely to believe their region receives a significantly lower than average level of investment:

- North East England (22%)
- Wales (21%)
- North West England (18%)
- Yorkshire and the Humber (17%)
- Small town (16%)
- Village (15%)
- Hamlet (21%)

A quarter believe that infrastructure should drive regional growth to rebalance economic growth across the country

24% stated that

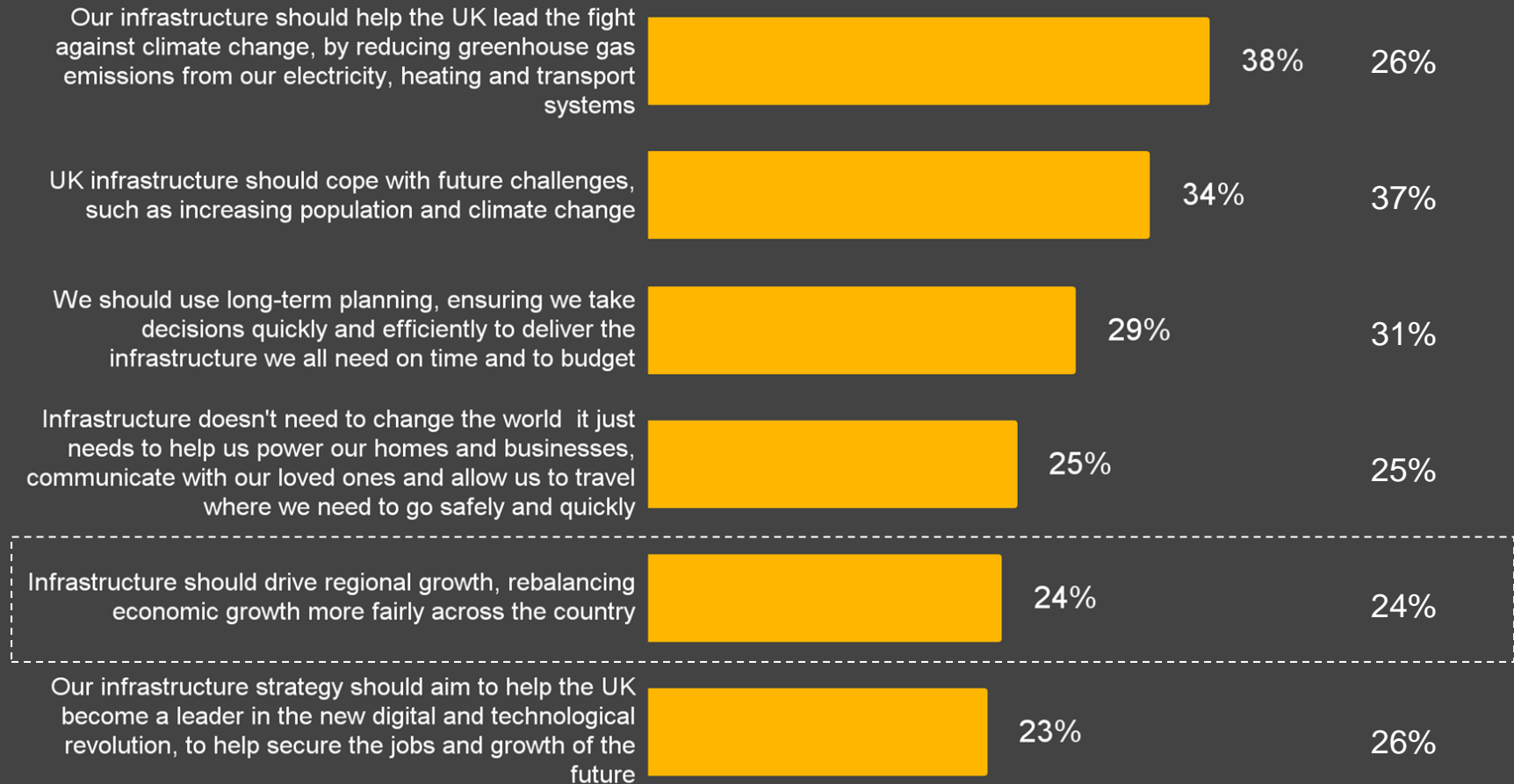
infrastructure should drive regional growth, rebalancing economic growth more fairly across the country (ranked 5th). It was ranked 6th in 2017 by 24%.

Base: 6,030

Among UK regions, preference is highest amongst respondents from Yorkshire and the Humber (32%) and Wales (29%). Preference is also higher among respondents in Major conurbation TTWA's (28%) compared to rural (20%), small town (21%) and large town TTWAs (21%).

Two most preferred statements

2017 NIA1 assessment



Long term planning and investing now to save in the long term are priorities

The following statements all outline a 'vision' for the UK's infrastructure in 30 years' time. Please select your two most preferred statements.

29% felt we should use long-term planning, ensuring we take decisions quickly and efficiently to deliver the infrastructure we all need on time and to budget (ranked 3rd). 31% ranked it in the 2017 assessment (ranked 2nd).

Base: 6,030

The NIC is putting together a plan for what the UK's infrastructure should be like in thirty years time. When putting together this plan, which of the following factors do you think are the most important to consider?

Investing now to save in the long term was ranked **3rd** by 14% in relation to NIC's future planning (20% ranked it in the 2017 assessment).

Base: 6,030



'Investing now to save in the long-term' was considered as a key priority by respondents in the qualitative stage. Many were willing to put up with shorter term higher costs and potential disruption if that led to better quality, longer lasting and more affordable infrastructure in the future.

Investing more now to save in the long term should always be the main priority - prevention is cheaper than the cure

Focus group attendee, Medium / large town

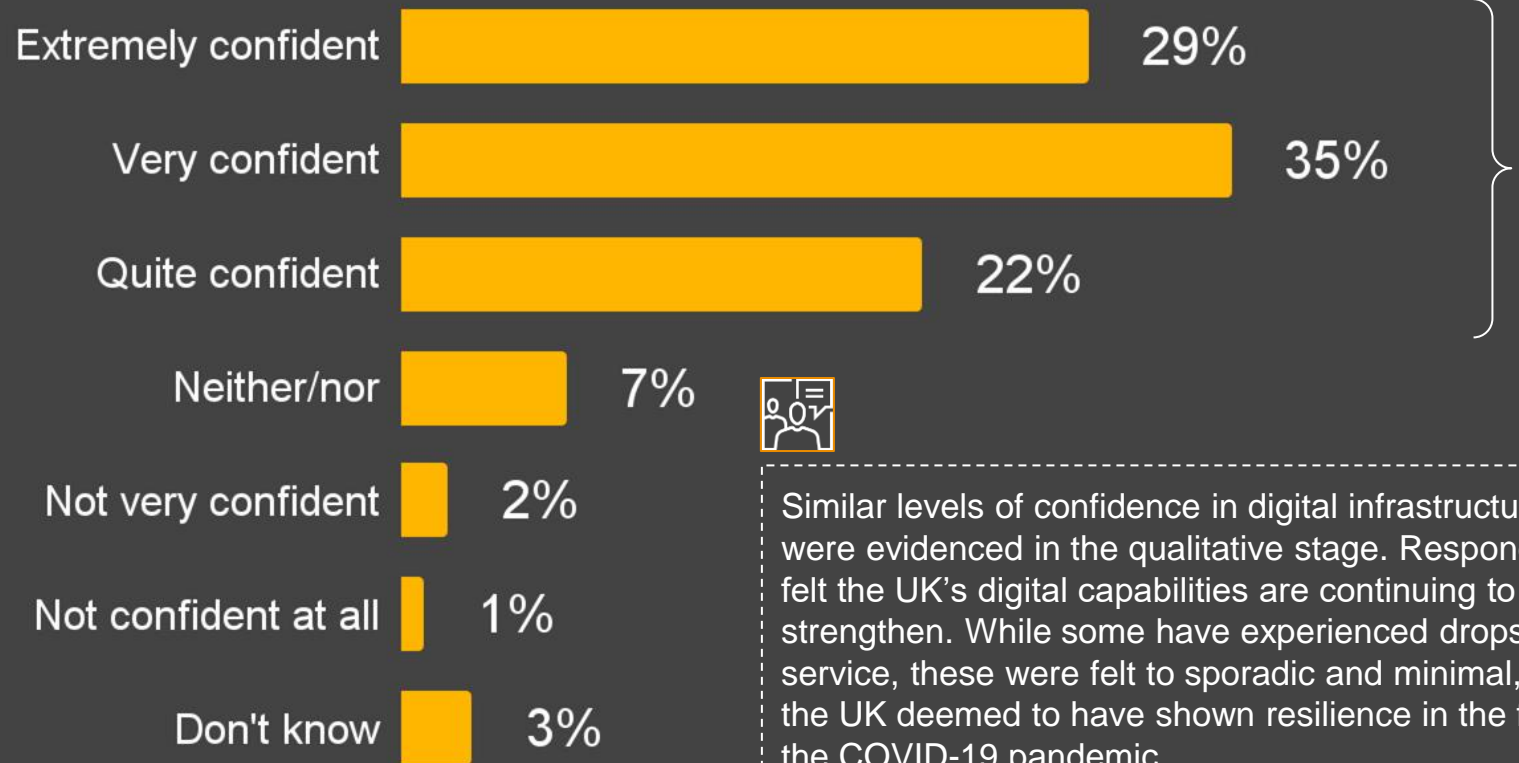
We want things that last. To have this they need to have quality, and this will come at a cost and an investment. It's much better than the council sticking a plaster over it when they run into an issue

Focus group attendee, Medium / large town



Digital communications

Respondents were most confident in the digital infrastructure in comparison to the other infrastructure provisions - this was the same in the 2017 assessment



87% of people were confident that digital communications will meet their needs in the next 30 years. This is an increase from NIA1, when 82% were confident.

Similar levels of confidence in digital infrastructure were evidenced in the qualitative stage. Respondents felt the UK's digital capabilities are continuing to strengthen. While some have experienced drops in service, these were felt to be sporadic and minimal, with the UK deemed to have shown resilience in the face of the COVID-19 pandemic.

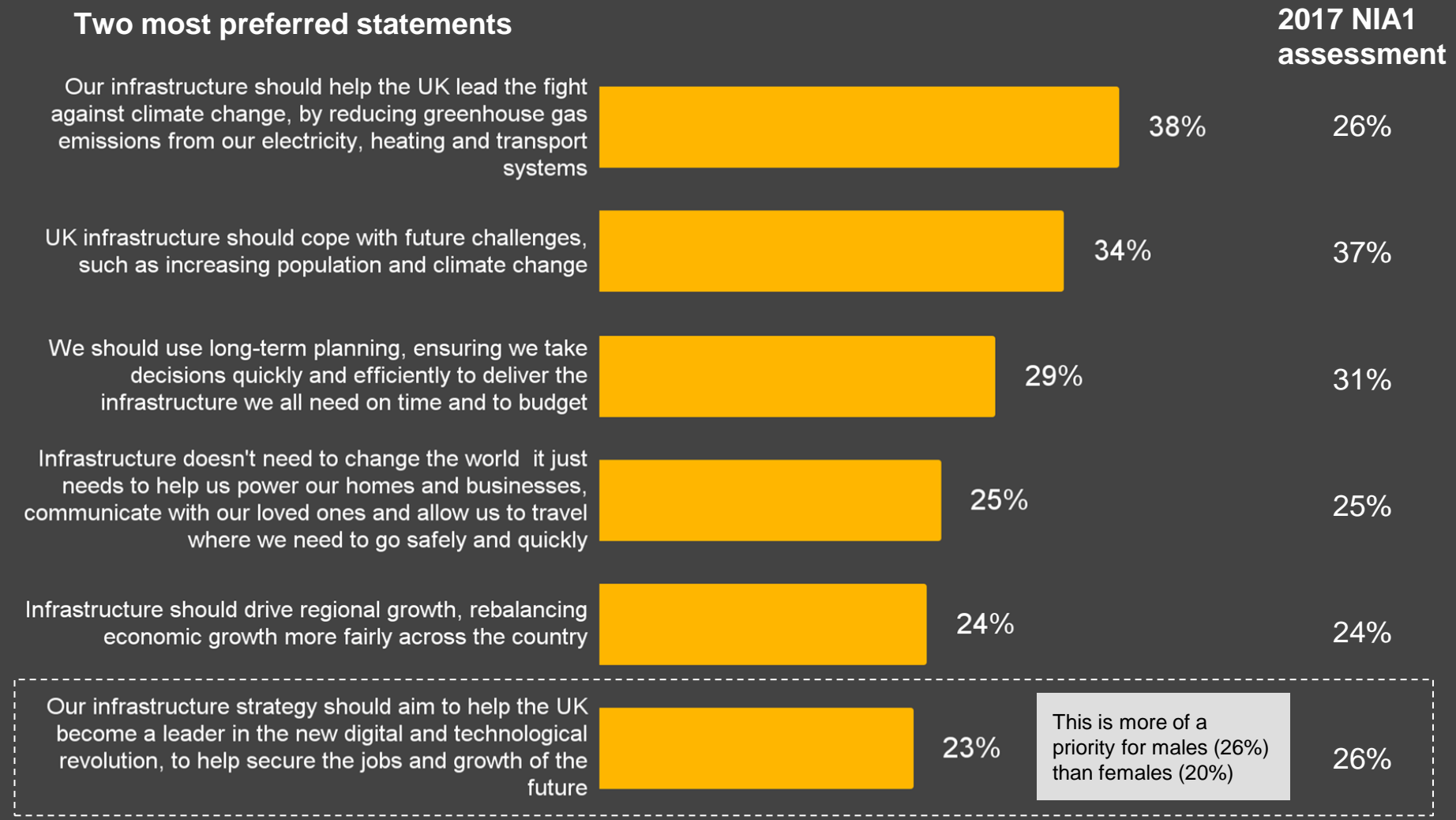
I'm very confident. I think it will [meet our needs]. The pandemic was a good test and we passed - the good digital infrastructure was how we all coped during the pandemic.
Focus group attendee, Large city

Overall 'confidence' is significantly higher among those that are 65+ (90%).

Respondents located in hamlets (8%) are significantly more likely to be not confident ('Not very confident' and 'Not confident at all' combined) compared to those in large (3%) and small cities (4%) and large towns (3%) and villages (3%).

Other areas, such as climate change, were seen as a greater priority than the digital and technological revolution for the 'vision' of the UK's infrastructure in 30 years' time

The UK leading the new digital and technological revolution was ranked last, by 23%, in terms of being an important part of the vision for UK infrastructure in 30 years' time. This was similar to 2017 levels when 26% ranked it as a priority.

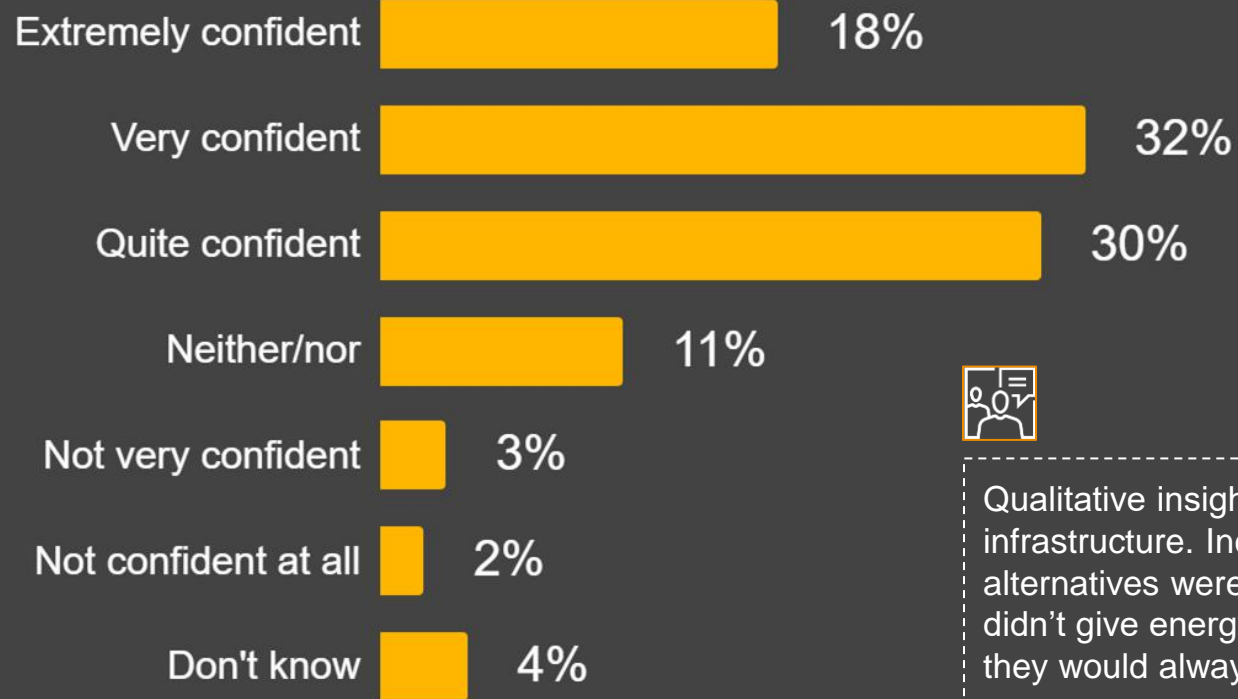




Energy



Energy showed the second highest levels of confidence in meeting people's needs in the next 30 years and confidence has grown since the 2017 assessment



80% of people were confident that energy will meet their needs in the next 30 years. This is an increase from NIA1, when 66% were confident.

Respondents located in hamlets (15%) are significantly more likely to be not confident ('Not confident at all' and 'Not very confident' combined).

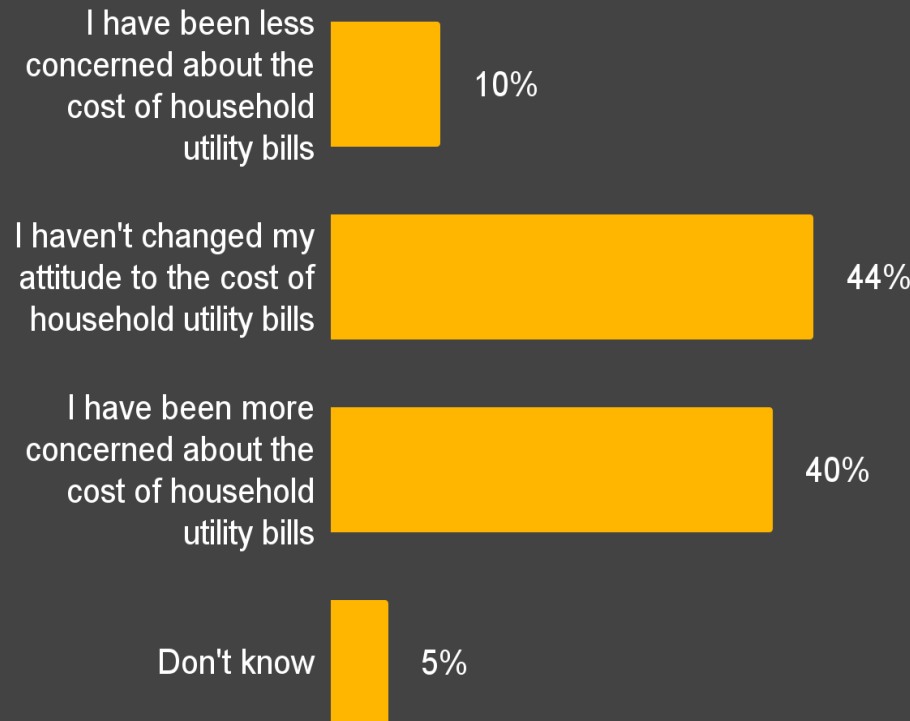


Qualitative insights showed similar levels of confidence in the UK's future energy infrastructure. Increased ease of switching providers/services and prominence of green tariff alternatives were seen as key factors behind this growing confidence. More broadly, many didn't give energy infrastructure too much thought in their day to day lives, and assumed that they would always continue to receive a constant and reliable supply.

I would hope [it will meet our needs]. You just take it for granted don't you?
Focus group attendee, Medium / large town

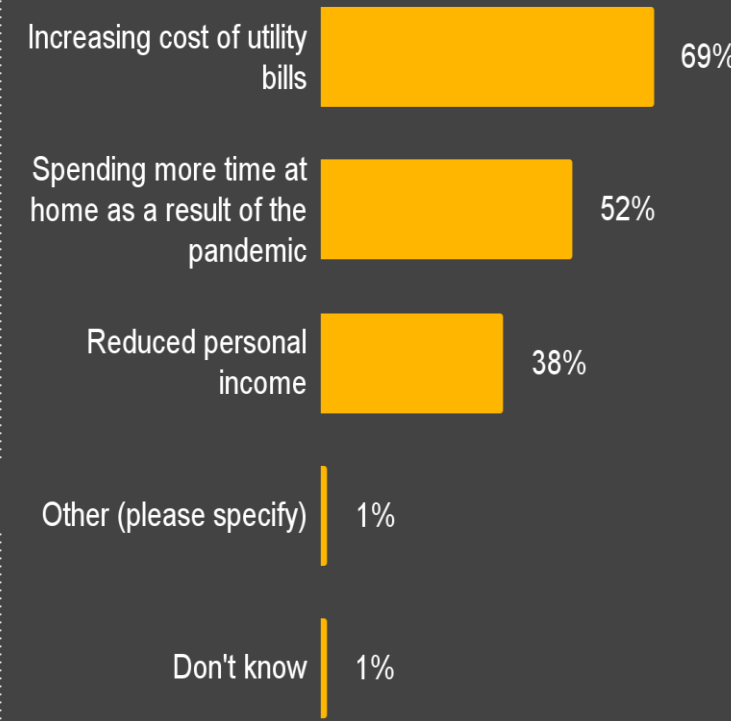
I think we'll be in the realms of sustainable energy in 30 years. I'm not particularly worried about us getting energy though. I think we'll be fine. There'll just be different ways of getting it
Focus group attendee, Medium / large town

A substantial proportion (two in five) have become more concerned about household bills over the last year - the main reason being the increasing cost of utility bills




- Most likely to have become less concerned:**
- 18-24 (17%)
 - 25-34 (14%)
 - 35-44 (15%)
 - Male (12%)
 - London (16%)
 - Student (20%)
 - SEG A (21%)
 - Parent with preschool children (16%) and parent with children 5-18 (15%)
 - Large city (13%)

- Most likely to have become more concerned:**
- 45-54 (48%)
 - 55-64 (48%)
 - Female (45%)
 - SEG E (47%)

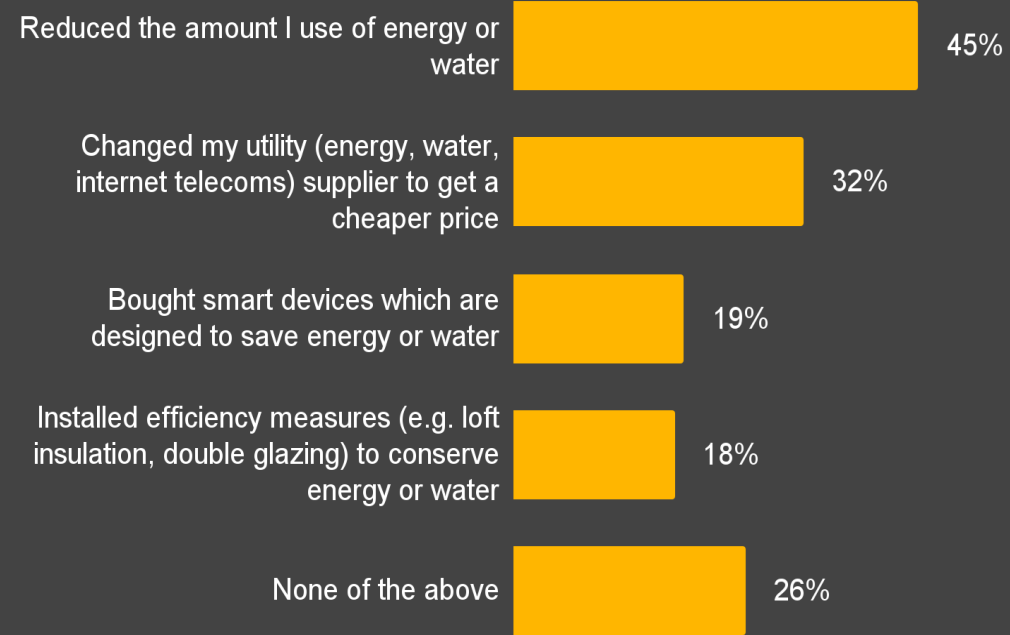
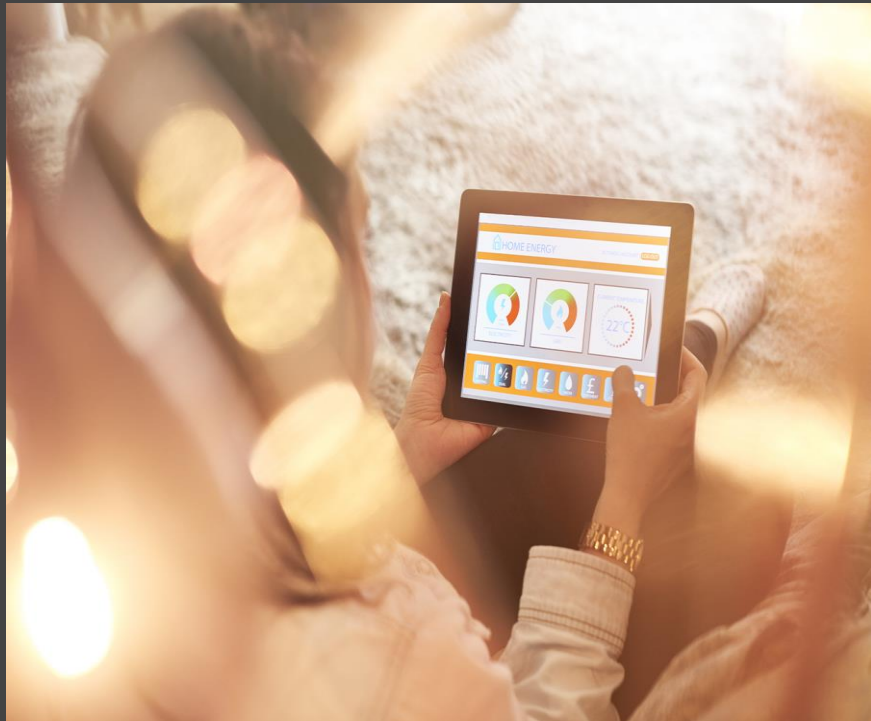


- Most likely to be concerned due to:**
- Increased utility bills:
- 55-64 (78%)
 - 65+ (78%)
 - Parent with children over 18 (75%)
- Spending more time at home as a result of the pandemic:
- 25-34 (60%)
 - Parent with children 5-18 (59%)
- Reduced personal income:
- 55-64 (45%)
 - Those earning less than £15,000 (49%)
 - Single respondents (44%)

 Insight from the qualitative stage also revealed concern about utility bills increasing. Some put this down to being at home more due to the pandemic but others seemed confused, especially if they had a smart meter.

We're all at home so much more now. My wife and I both work from home and when the kids were doing home schooling, we used so much electricity.
Focus group attendee, Small town / village

Almost half of respondents have reduced the amount of energy and/or water they use while a fifth have bought a smart device to save energy and/or water



Reduced the amount I use of energy or water:
Most likely:

- 55-64 (50%)
- 65+ (53%)
- Female (48%)
- Villages (51%)

Changed my utility supplier to get a cheaper price:
Most likely:

- SEG B (39%)
- Parent with children 5-18 (38%)

Bought smart devices which are designed to save energy or water:
Most likely:

- 18-24 (27%)
- 25-34 (25%)
- 35-44 (23%)
- Male (21%)
- SEG A (27%)
- Parent with preschool children (28%) and parent with children 5-18 (23%)

Installed efficiency measures to conserve energy or water:
Most likely:

- 18-24 (23%)
- 25-34 (21%)
- Male (20%)
- London (23%)
- SEG A (30%)
- Parent with preschool children (25%) and parent with children 5-18 (23%)



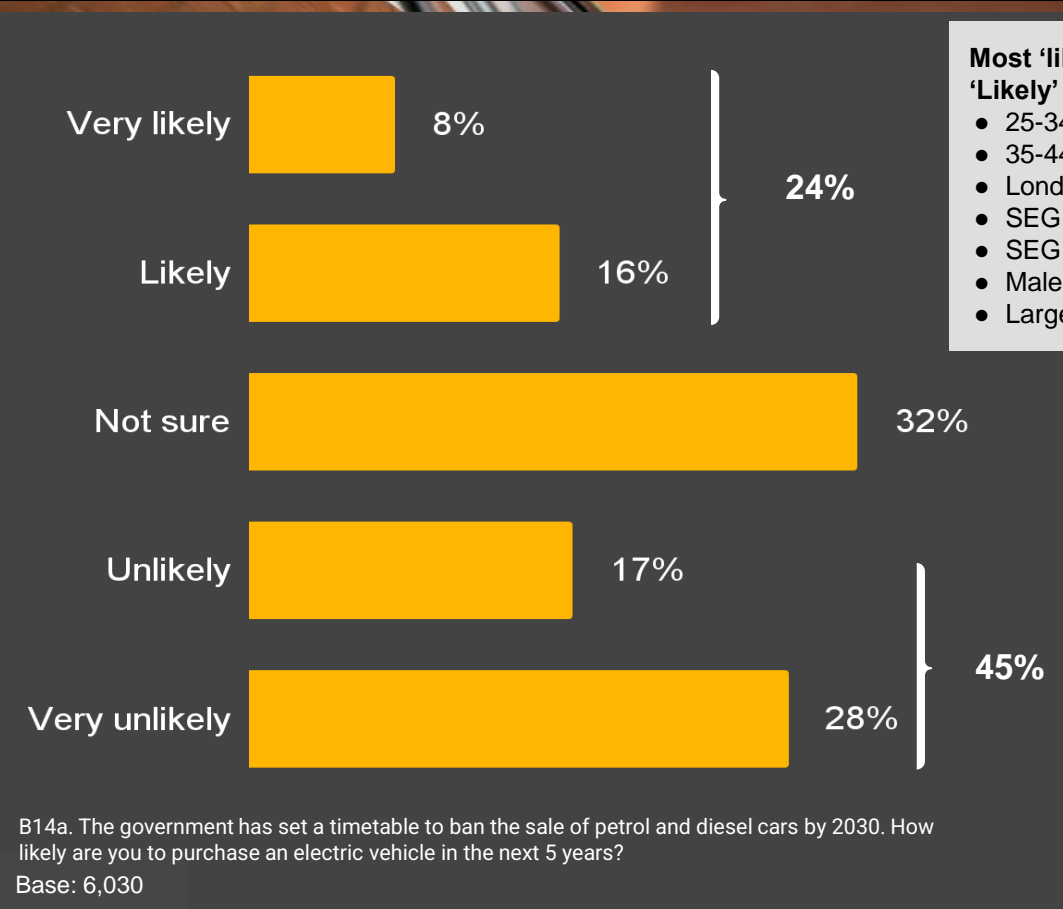
Some respondents in the qualitative stage similarly described themselves as 'energy conscious', and were actively taking (albeit small) steps to reduce the amount of energy they use, e.g. switching lights off, using energy saving light bulbs or installing a smart meter. Motivations for this were largely driven by a desire to reduce bills rather than solely to have an environmental impact. In other cases, the decision to install a smart meter was more passive - often driven by the utility provider.

I've got the LED lights, and I look at energy ratings and try not leave stuff on. But because I live in an old tenement building, there's not much else I can do - I've just done what I can really.
Focus group attendee, Small city

I changed energy companies and they said I had to have one so they came and installed it. I haven't noticed any difference though.
Focus group attendee, Medium / Large town

Only a quarter say they are likely to buy an electric car in the next five years, with those in the older age groups, SEG E and living in small towns and villages more unlikely to purchase

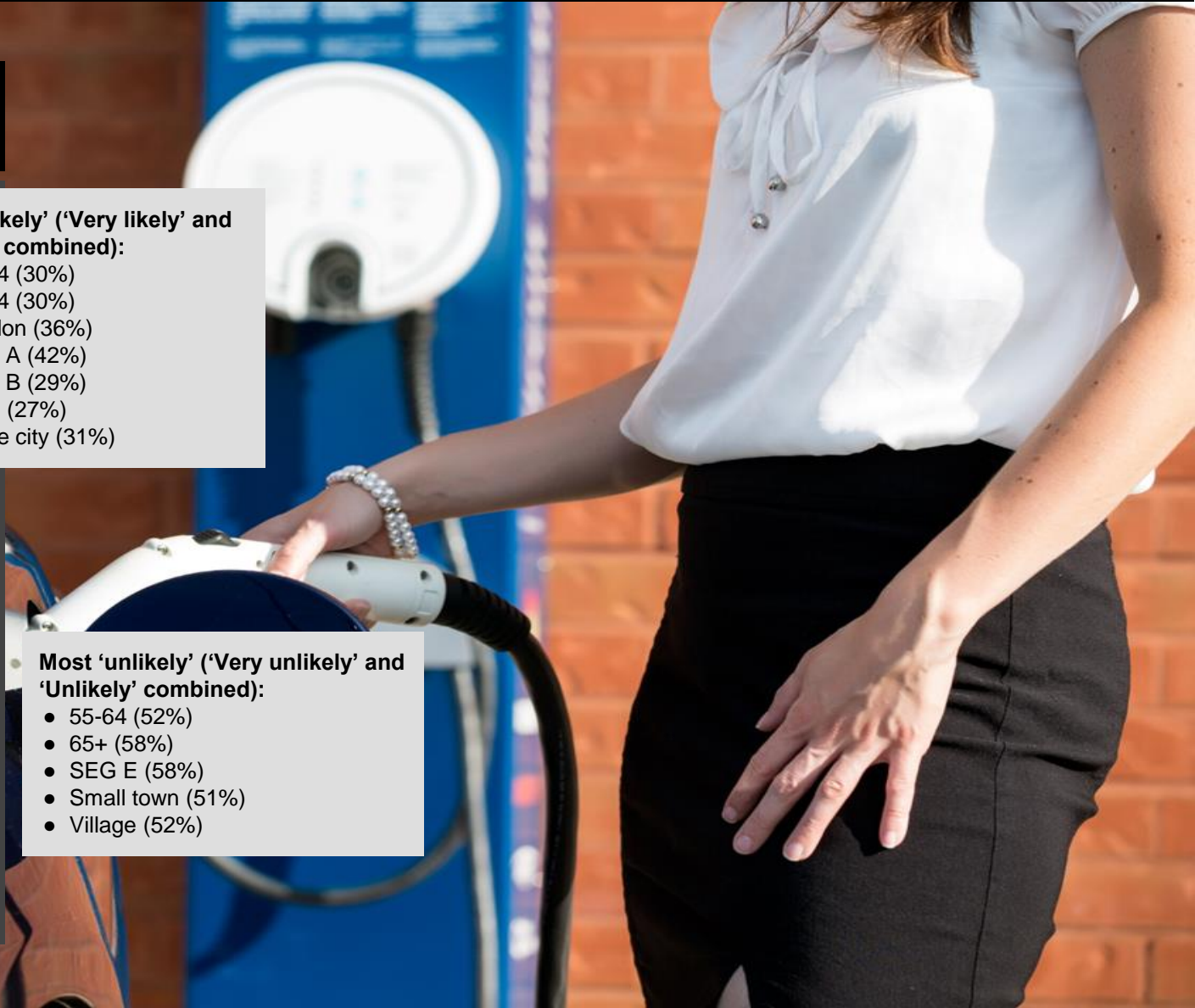
How likely are you to purchase an electric vehicle in the next 5 years?



- Most 'likely' ('Very likely' and 'Likely' combined):**
- 25-34 (30%)
 - 35-44 (30%)
 - London (36%)
 - SEG A (42%)
 - SEG B (29%)
 - Male (27%)
 - Large city (31%)

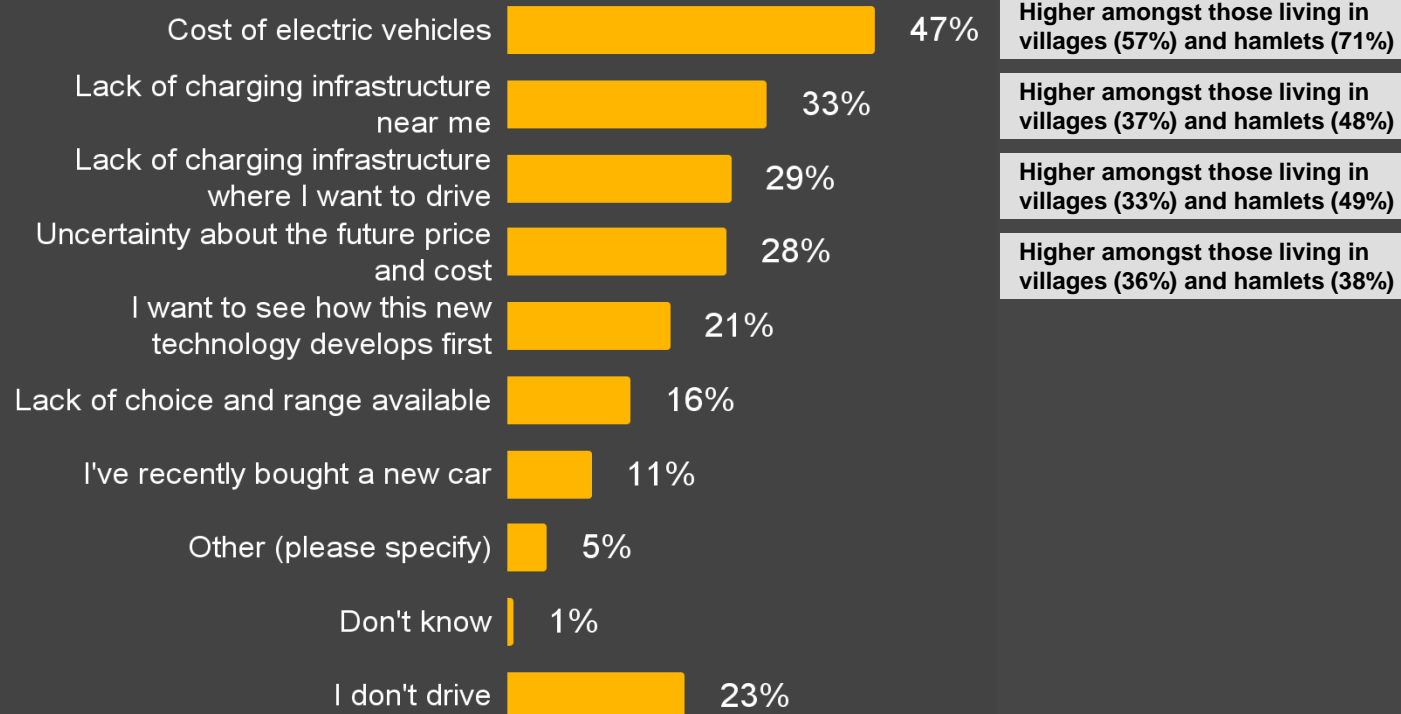
- Most 'unlikely' ('Very unlikely' and 'Unlikely' combined):**
- 55-64 (52%)
 - 65+ (58%)
 - SEG E (58%)
 - Small town (51%)
 - Village (52%)

B14a. The government has set a timetable to ban the sale of petrol and diesel cars by 2030. How likely are you to purchase an electric vehicle in the next 5 years?
Base: 6,030



Half of respondents say they are unlikely to buy due to cost, and a third say this is due to a lack of charging infrastructure

Why are you unlikely to purchase an electric vehicle in the next 5 years?



B14b. Why are you unlikely to purchase an electric vehicle in the next 5 years?

Base: 2,699



Findings align with feedback from the qualitative stage. The key barrier to purchase for respondents here was cost. More widely, some were concerned about 'range anxiety', perceived lack of charge points in their area, and a wider lack of awareness/knowledge about the EV market ("I wouldn't know where to start"). For most, they wanted to wait until EVs become more mainstream and therefore cheaper, with 'better batteries' and better access to charging points

I often end up travelling up to 300 miles per day for work. From what I understand you can only really get a max of 180 miles on full charge. Then you have to find a charger, sit around and wait for it to charge... it just doesn't fit with what I need

Focus group attendee, Small town / village

I've looked into it and I'm tempted but it's too soon. I'm going to wait for the prices to drop. And I've also heard bad stories - my friend calculated his route and knew he had to stop and charge but when he stopped, the bays were full and he had to wait 40 minutes

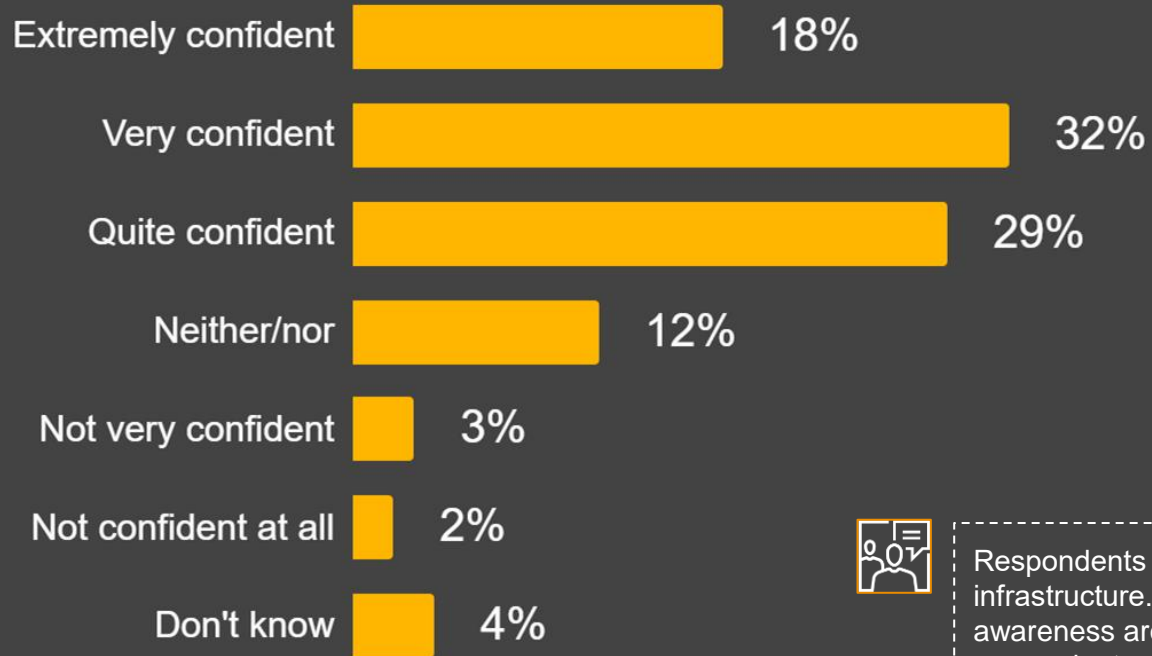
Focus group attendee, Small city



Water supply and waste water



Water supply and waste water showed the third highest levels of confidence in meeting people's needs in the next 30 years, with confidence growing since the 2017 assessment



79% of people were confident that water supply and waste water will meet their needs in the next 30 years. This is an increase from NIA1, when 74% were confident.

Overall confidence is significantly higher among those that are 65+ (81%).
 Those aged 18-24 (8%) and respondents located in hamlets (12%) are significantly more likely to be not confident ('Not confident at all' and 'Not very confident' combined).



Respondents in the qualitative stage showed similar levels of confidence in the UK's water and wastewater infrastructure. While most hadn't faced any issues to date with their supply, there was a general lack of awareness around supply processes, and how water is managed and recycled in their area. Similarly, respondents appeared less water conscious vs energy conscious, with many on fixed tariffs which just "tick along in the background". For many, they haven't really considered that we won't have enough water for the population - being a developed country and being surrounded by water means many take water for granted

To be honest, I'm pretty clueless about how it's managed. As long as there aren't any issues, then I'm not fussed.
Focus group attendee, Medium / large town

I know my council sent me a letter saying they're doing some improvement works in the area for the water. I don't know what for exactly, but I'm fine with this, I don't have any issues with water in the area.
Focus group attendee, Small city

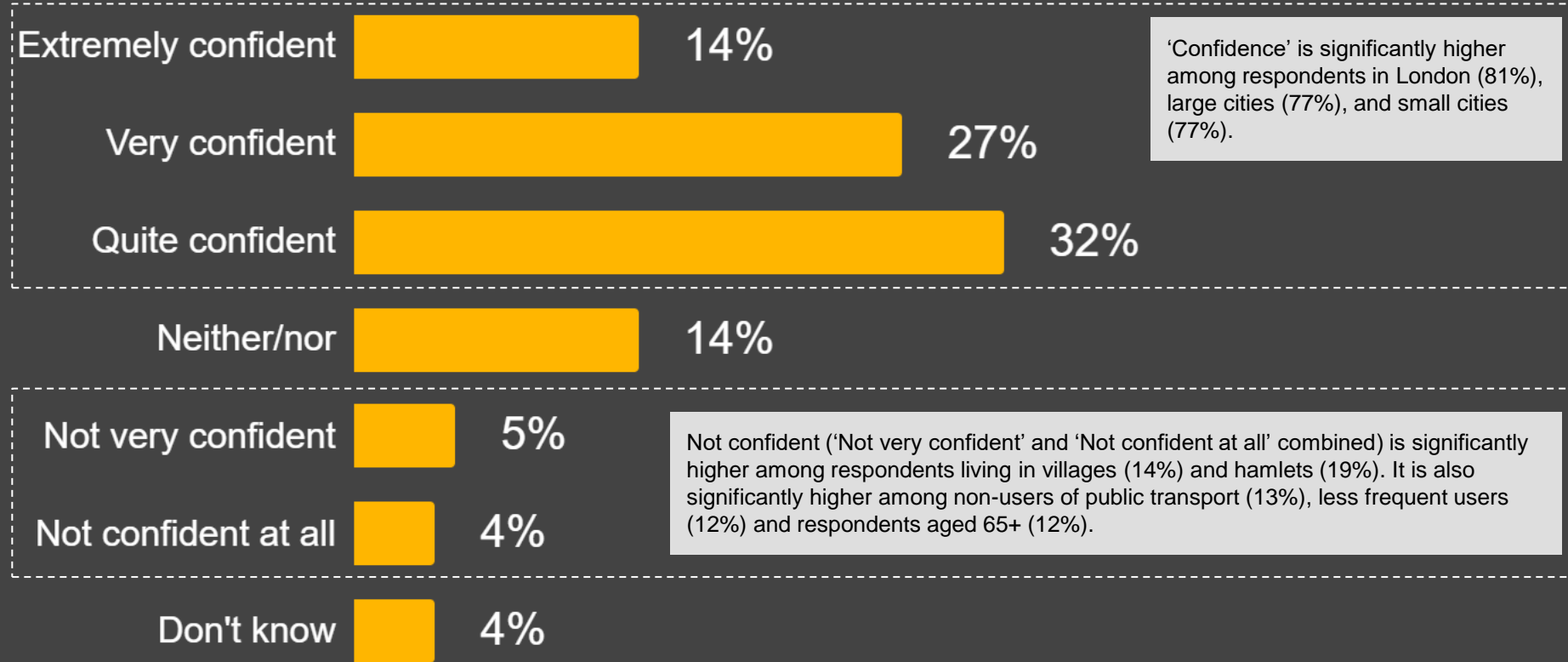


Transport



Transport showed the third lowest levels of confidence in meeting people's needs in the next 30 years, though confidence has increased from the 2017 assessment

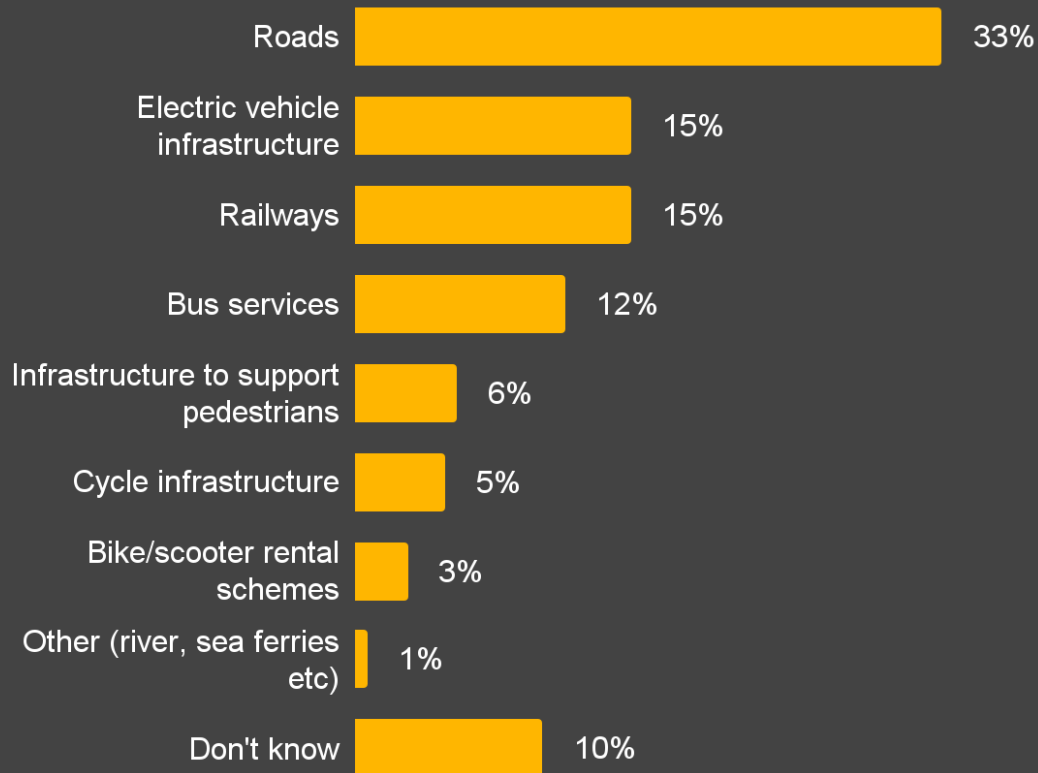
73% of people were confident that transport will meet their needs in the next 30 years. This is an increase from NIA1, when 61% were confident.



Roads, railways and electric vehicle infrastructure are viewed as most in need of investment

Most in need of investment

Ranked top (most in need of investment)



Respondents living in villages (43%) are significantly more likely overall and compared to all others to rank roads at the top area of transport most in need of improvement.

Less frequent (44%) and non-users of public transport (42%) are significantly more likely than regular transport users (27%) to rank roads as the number one area of transport in need of improvement.

All regions, except North East England, are significantly more likely than respondents in London to rank roads as the primary transport area in need of improvement.

Those aged 18-24 are significantly more likely to rank bus services (15%) as most in need of investment.

Respondents who drive frequently (17%) are significantly more likely overall and compared to less frequent drivers (9%) to cite EV infrastructure as most in need of improvement.*

Respondents aged over 55 are significantly more likely to rank EV infrastructure as most in need of improvement compared to all other age groups.

Note: * Base: Frequent drivers: 4,446, Less frequent: 231, Non-drivers: 1,353



Respondents in the qualitative stage similarly agreed that roads should be a priority for investment. Congestion, conditions (e.g. potholes) and network (e.g. "roads can't keep up with the increasing population") were felt to be key drivers behind this need. For those in smaller, more rural locations, improving the public transport network was also important to improve ease of access to surrounding areas and boost feelings of connectedness.

I've got really bad congestion on all my roads. The potholes are severe, and the lack of pedestrian footpaths - these are things which make me unhappy about where I live

Depth interview, Small town / village

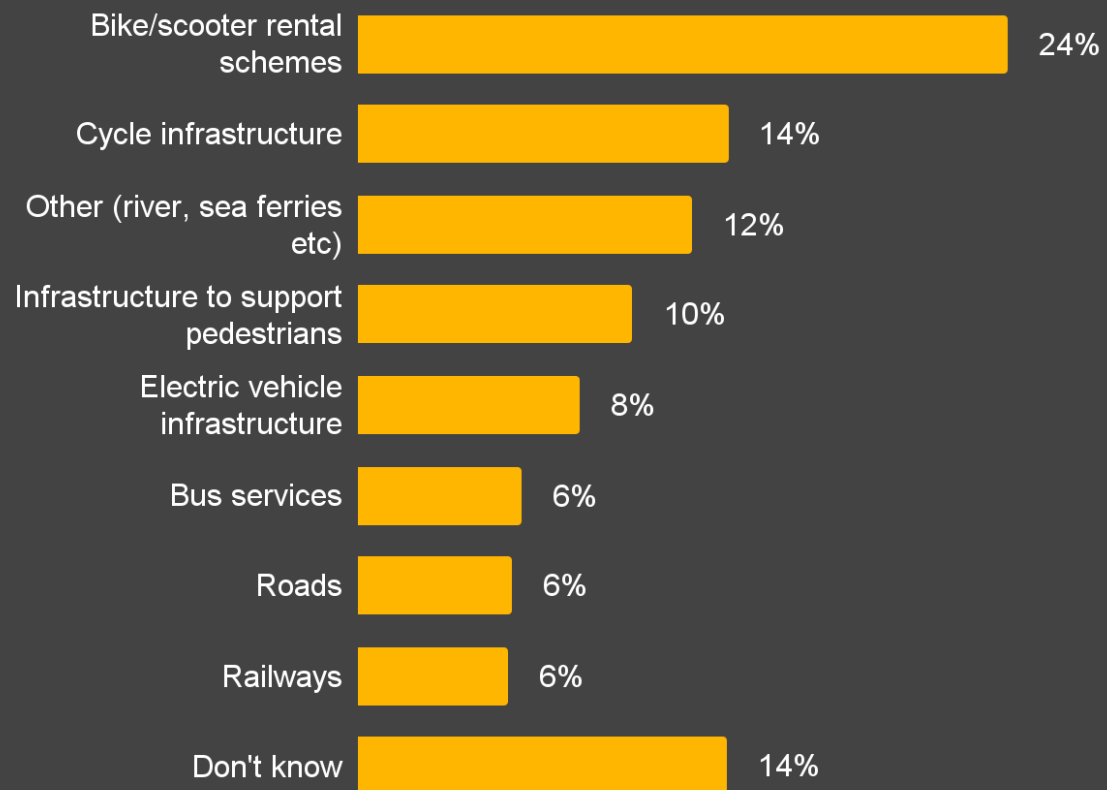
There is one road in and out of my town so if there's an accident, we're stuck

Focus group attendee, Small town / village

Bike/scooter rental schemes are less in need of investment

Least in need of investment

Ranked top (least in need of investment)



Those aged 55 and over are significantly more likely to believe that bike/scooter rental is least in need of investment, compared to those aged between 18-44.

Respondents aged 18-44 are significantly more likely than those 65+ to believe roads are least in need of investment.

Respondents aged 18-44 are also significantly more likely than those aged 55 and over to believe railways are least in need of investment.

Medium sized towns are significantly more likely than large towns to rank electric vehicle infrastructure as least in need of investment.

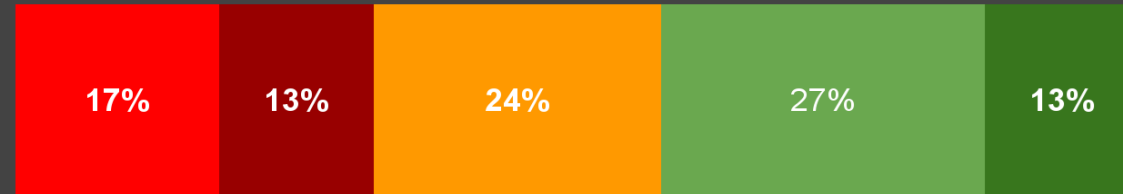
Frequent public transport users are significantly more likely to rank electric vehicles as least in need of improvement compared to non-users of public transport.*

*Note: Base sizes: Frequent users: 3,862, Less frequent users: 1,344, Non-users: 824

More respondents stated they are willing to pay a levy (40%) than were unwilling to pay (31%), if the funds raised were used to improve public transport

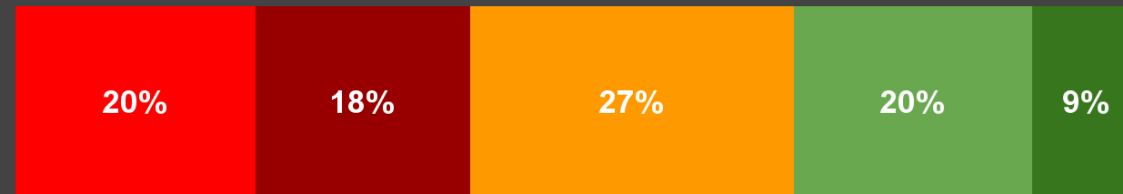
■ Very unwilling
 ■ Unwilling
 ■ Neither/nor
 ■ Willing
 ■ Very willing

NET: Willing 9%



Don't know: 5%

NET: Willing -9%



Don't know: 6%

A congestion charge to enter your nearest city if the funds raised were used to improve public transport into/out of the city

A congestion charge to enter your nearest city if the alternative was an increase in congestion and journey times into/out of the city

Most willing ('Very willing' and 'Willing' combined) to accept a congestion charge if the funds raised were used to improve public transport

- SEG A (47%)
- SEG B (47%)
- Frequent public transport users (45%)
- Large city (43%)

Most willing ('Very willing' and 'Willing' combined) to accept a congestion charge if the alternative was an increase in congestion:

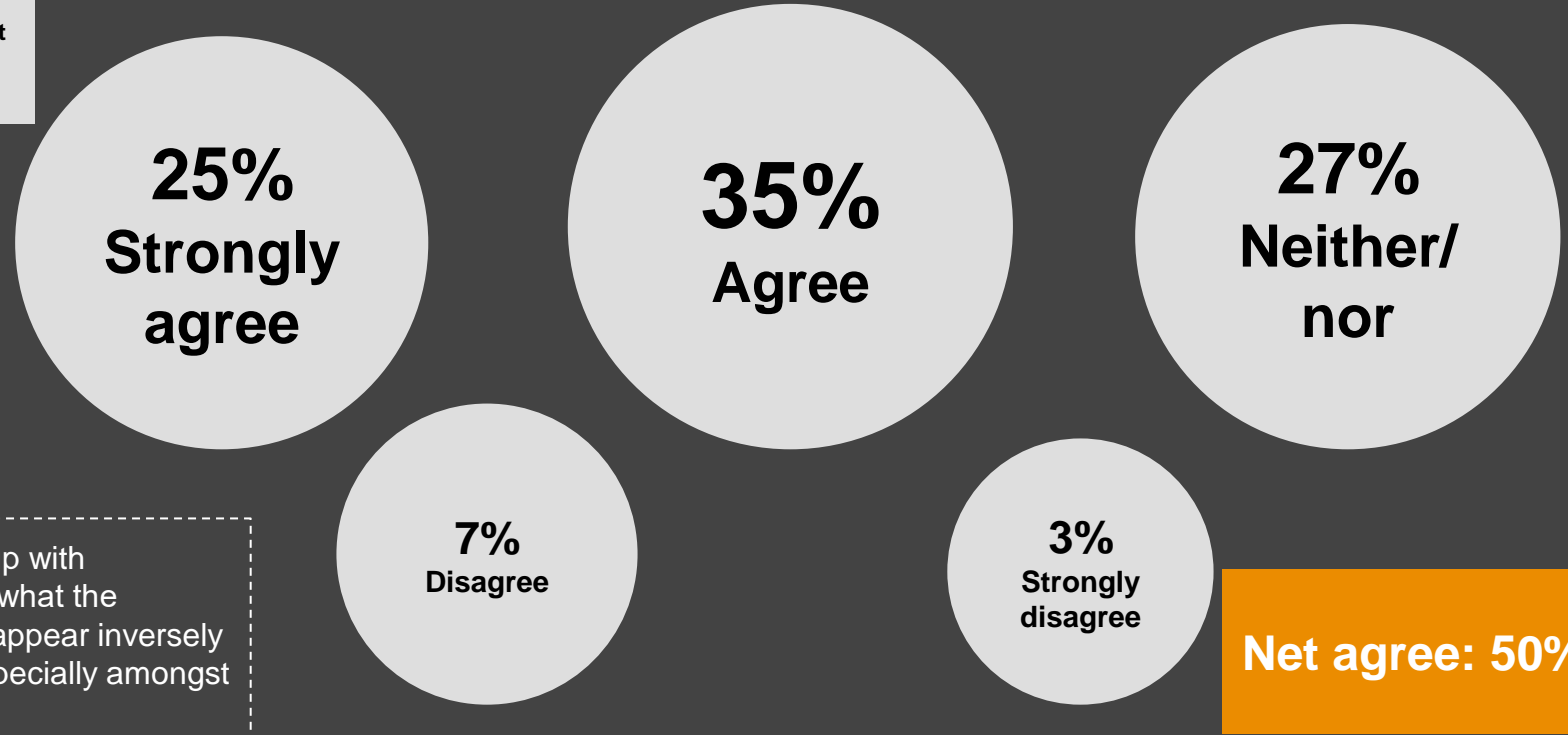
- London (38%)
- SEG A (40%)
- SEG B (34%)
- Frequent public transport users (34%)
- Large city (34%)

Respondents stated that they are also willing to put up with disruption if improvements in transport were made

60% agreed they would be willing to put up with significant disruption (e.g. local roads/ rail routes being closed or very delayed for 6 weeks or more) if it means seeing improvements in infrastructure. This is similar to 2017 levels when 65% were showing willingness.

This is lower amongst less frequent drivers (50%)

I would be willing to put up with significant disruption (e.g. local roads/ rail routes being closed or very delayed for 6 weeks or more) if it means that we see improvements in our infrastructure (% agreement)



Base: 6,030



In the qualitative stage, respondents were willing to put up with disruption, as long as they know why it's happening and what the benefits/outcomes will be. Willingness for disruption did appear inversely proportional to reliance on car and road for transport (especially amongst some vulnerable audiences with specific access needs)

I don't know, 6 weeks seems like a long time... I think I would go stir crazy! Car is the only way I can get around.

Depth interview, Long term health condition, Medium / large town

Don't know: 3%

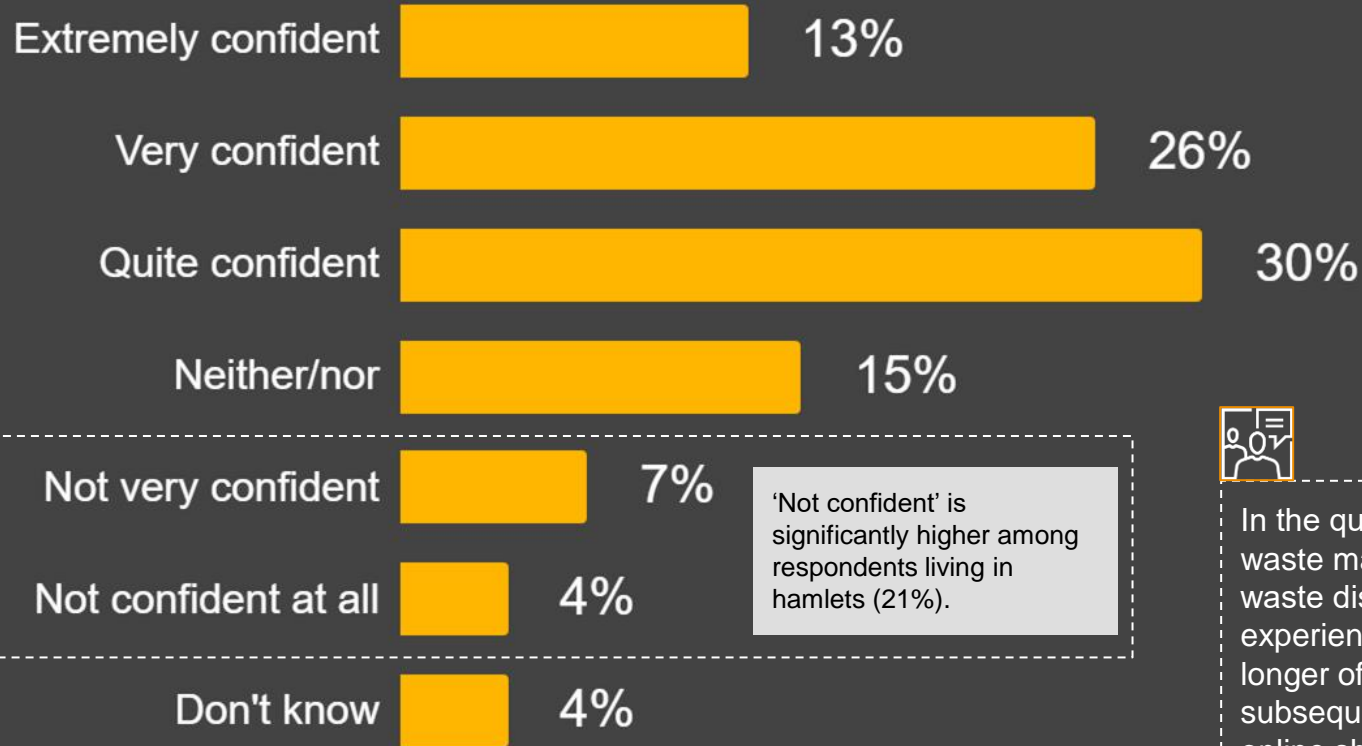
We get loads of roadworks now that last longer than 6 weeks. If they told you why and that it's to improve the infrastructure in the long term, you'd be fine with it.

Focus group attendee, Small city



Solid waste

Solid waste showed the second lowest levels of confidence in meeting people's needs in the next 30 years, though confidence has increased from the 2017 assessment



69% of people were confident that solid waste management will meet their needs in the next 30 years. This is an increase from NIA1, when 57% were confident.

'Not confident' is significantly higher among respondents living in hamlets (21%).



In the qualitative stage, respondents flagged a lack of confidence in the UK's future waste management infrastructure. Questions were raised around transparency of waste disposal processes ("I've heard that recycling just ends up going into landfill"), experiences of abandoned waste management schemes (e.g. food waste caddies no longer offered by a local council) and concerns around over consumption (and subsequent waste) and excess packaging (which was felt to be worsened by more online shopping during the COVID-19 pandemic).

I've heard that your recycling is taken away quite efficiently, but a very small percentage gets recycled... a lot of it just goes to landfill, especially plastics
Focus group attendee, Small town / village

We have a disposal culture which really alarms me. Unless we change our habits, we're going to continue to develop more and more waste and not know what to do with it
Focus group attendee, Medium / large town

Respondents stated that they are willing to pay more for products with lots of packaging if companies responsible for producing waste take on more responsibility for recycling

70%* agree that the companies that produce waste should take on more responsibility for recycling and disposing of packaging, even if it means paying more for products with lots of packaging. This is consistent with 2017 levels when 70% were also in agreement.

*Note: Figure has been rounded

This is higher amongst those living in hamlets (81%)

The companies that produce waste (e.g. supermarkets, online retailers, food suppliers) should take on more responsibility for recycling and disposing of packaging, even if I have to pay more for products with lots of packaging (% agreement)

39%
Strongly agree

30%
Agree

20%
Neither/nor

5%
Disagree

3%
Strongly disagree

Don't know: 3%

Net agree: 62%

Base: 6,030



Respondents in the qualitative stage similarly agreed that companies should take on more responsibility for recycling and disposing of packaging, even if that meant paying more. Recycling initiatives (e.g. bottle disposal) were also popular to help incentivise customers further.

Yes, I think that's fair - charge you more for a product with more packaging. But supermarkets should also incentivise customers to recycle themselves - bottle disposal schemes and things like that

Focus group attendee, Small town / village

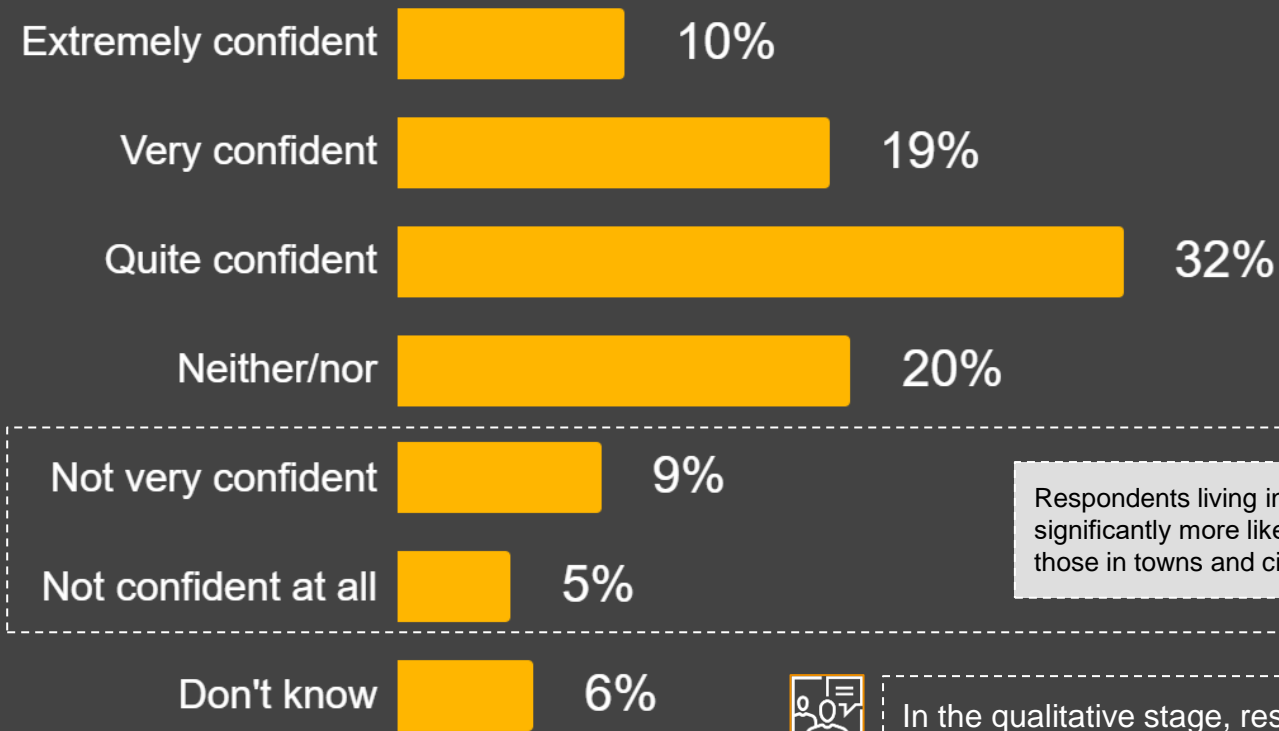


Flood management



Flood management showed the lowest levels of confidence in meeting needs in the next 30 years and whilst it was also the lowest in 2017 confidence levels have increased

It should be noted that the research was conducted before severe flooding hit the UK in July 2021



61% of people were confident that flood management will meet their needs in the next 30 years. This is an increase from NIA1, when 49% were confident.

Respondents living in villages (18%) and hamlets (28%) are significantly more likely to be 'not confident' compared to those in towns and cities.

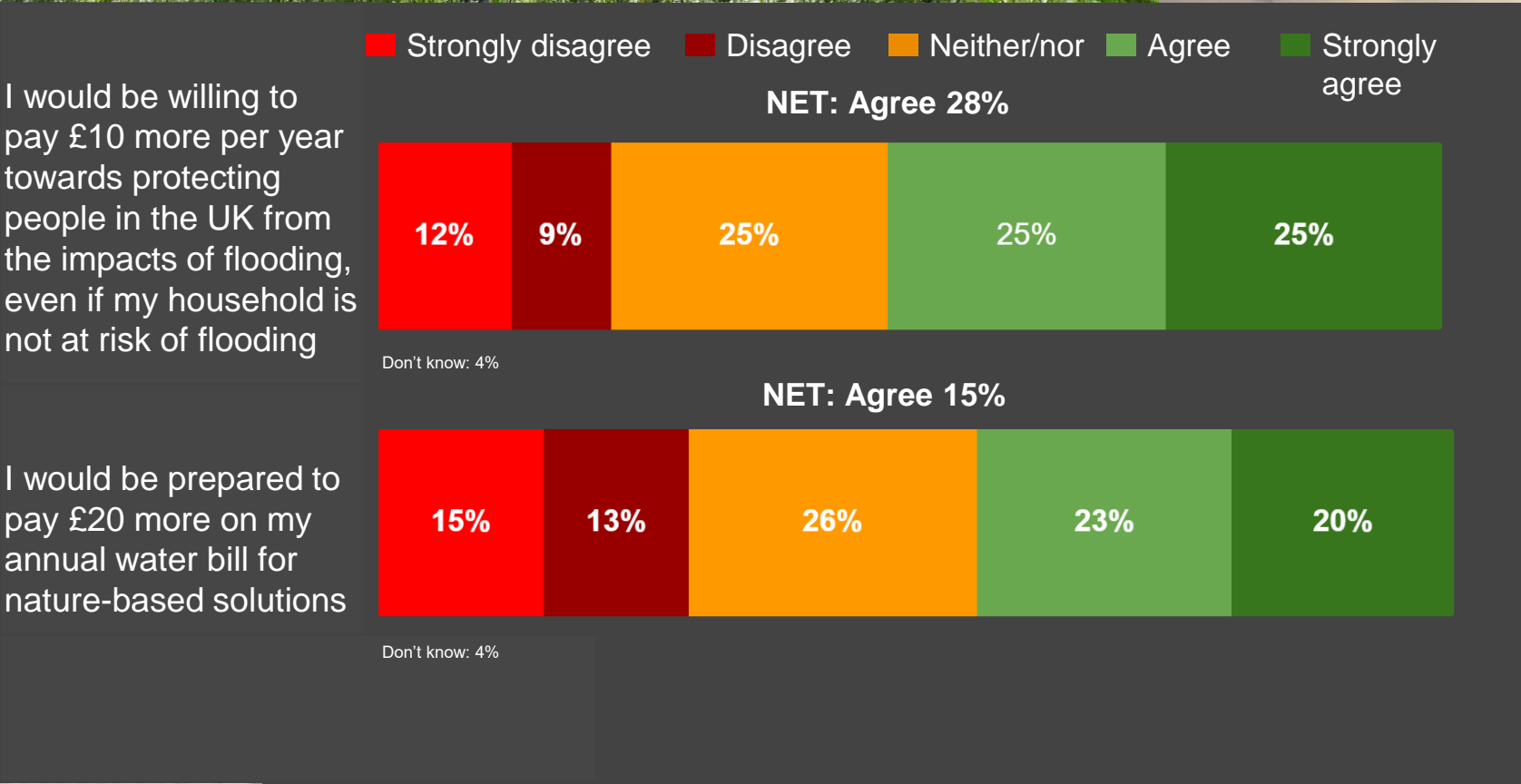


In the qualitative stage, respondents were largely unaware of flood management in the UK, processes behind it, and how it could best meet their needs for the future. Concerns raised were largely around the impact of climate change and population growth, with some worried that future infrastructure won't be able to withstand more extreme weather (including more frequent flash flooding) in the future.

I'm not affected by flooding, but with population increases, and more housing, does that mean less proper drainage? I am quite concerned about that - we don't have any flood risks at the moment, but in 30 years' time that could be completely different

Focus group attendee, Small town / village

Half of respondents would be willing to pay a levy each year for flood protection, which is slightly down on 2017 levels when 57% showed willingness to pay



Respondents in the qualitative stage were mixed about the prospect of paying £10 more a year for additional flood management protection. While £10 was deemed a 'small amount', some challenged why those not at risk should have to pay for "those who choose to live in at-risk areas".



I don't know...you do choose to live in that area, you get the benefits of cheaper housing, maybe if you're paying council tax you should be paying for flood protection this way.
Focus group attendee, Small town / village



There was similarly mixed feedback from respondents in the qualitative stage around the prospect of paying an extra £20 on their annual water bill. While £20 was deemed reasonable, there was a reticence to paying much more than this.

£20 is okay, but there's a limit to what you'd be willing to pay, isn't there?
Focus group attendee, Small town / village

[pwc.com](https://www.pwc.com)

This document has been prepared only for the National Infrastructure Commission and solely for the purpose and on the terms agreed with National Infrastructure Commission. We accept no liability (including for negligence) to anyone else in connection with this document, and it may not be provided to anyone else.

If you receive a request under freedom of information legislation to disclose any information we provided to you, you will consult with us promptly before any disclosure.

© 2021 PricewaterhouseCoopers LLP. All rights reserved. 'PwC' refers to the UK member firm, and may sometimes refer to the PwC network. Each member firm is a separate legal entity. Please see www.pwc.com/structure for further details.