



Smart energy outlook

March 2019





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Subgroup definitions

Research methodology

Populus, an independent market research agency, conducted 9,498 interviews using a bespoke online survey, designed to be representative of the adult population of Great Britain aged 21+. The interviews took place between the 6th and 20th November 2018.

We have changed the way we measure ownership within the population so that it continues to accurately reflect the smart population. Presenting respondents with a description of a smart meter and a description of a traditional meter is the best method of accurately measuring ownership.

Smart meter customers featured in this publication did not necessarily take part in the Populus research.

Executive summary

Background

There are currently over 12 million domestic smart meters now operating across Great Britain, with the government aiming to introduce smart meters into every household and small business.

As we continue to transform the way people in all corners of the country buy and use their gas and electricity, smart meters are just the beginning of a modern energy network that will give us greater flexibility and choice in how and when we buy our energy.

The introduction of the smart meter network enables customers to become more conscious of energy usage and also offers an opportunity to make savings on energy bills.

Smart meters free us from the chore of reading our meters and, with the ability to send automatic readings to energy suppliers, customers only pay for the energy they have used so you'll never have the worry of unexpected bills landing on your doormat.

Upgrading analogue meters to smart devices not only have an impact on customers wallets, but the smart grid will help make Britain a cleaner and greener place to live. To be exact, if we all had a smart meter fitted at home the CO² savings would be like planting 10 million trees a year until 2030.

Smart energy outlook is the largest independent barometer of national public opinion on energy and smart meters in Britain, with a sample of almost 10,000 people across the country.

Published twice a year, the research provides a valuable insight into how people with smart meters are benefiting from the new digital technology.

98%

of people across Great Britain
are aware of smart meters

29%

of people now have a smart
meter installed

66%

of people with a smart meter
would recommend getting one



Latest findings

Almost all of Great Britain is now aware of the smart meter rollout. *Smart energy outlook* research shows that 98 per cent of the population has heard of smart meters.

The rollout has captured the attention of nearly 22 million people in Great Britain, who would either recommend, seek or accept a smart meter within the next 6 months, with nearly three in ten of the population having a smart meter installed.

Of those surveyed in *Smart energy outlook*, around eight in ten people with a smart meter said they had a better idea of their energy costs, while more than four in ten said they are now less worried about their bills after having a smart meter installed.

Almost 13 million or 39 per cent of non-owners say they would seek or accept a smart meter within the next six months, as demand for the smart devices continues to be strong.

Recommendation among those with a smart meter is also high. Two thirds of owners would recommend getting a smart meter with younger people being the most likely demographic group to recommend getting a meter installed.

Smart energy outlook shows the smart meter rollout is continuing to gain widespread support throughout Britain as we move towards a modern energy infrastructure which meets the needs of all electricity and gas customers in the 21st century.



79%

of people with smart meters
have a better idea of their
energy costs

65%

of people with smart meters
are more conscious of their
energy use

70%

of people with smart meters
believe their energy bills
are accurate





Smart meters –
awareness and
people who
would like
to upgrade

People in Great Britain know about smart meters

Consumer awareness of smart meters continues to be high. Ninety-eight per cent of adults over 21¹ in Great Britain, nearly everyone in the country knows about

smart meters, which are replacing traditional analogue meters in the biggest national infrastructure project in a generation.

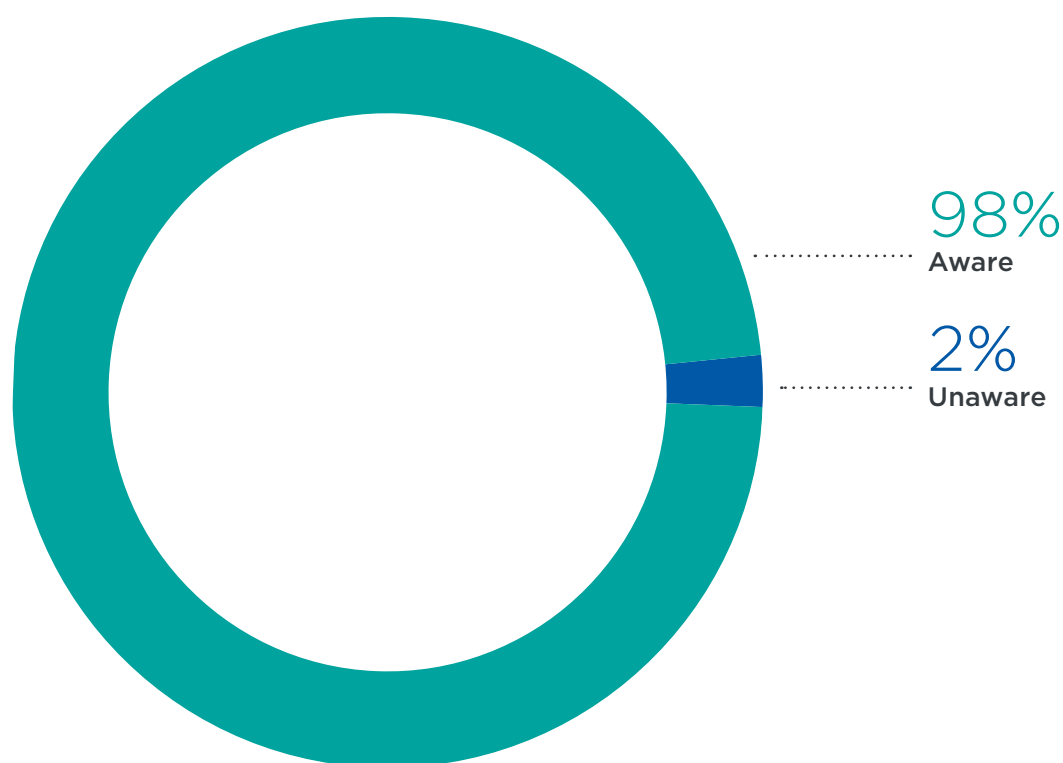


Figure 1.
Percentage of people who say they are aware of smart meters

¹ Prior to August 2017, *Smart energy outlook* reports featured a representative sample of the adult population of Great Britain aged 18+. People aged 18-20 are less likely to be responsible for managing energy bills in comparison to the rest of the British population. A sample of the adult population aged 21+ is now used.

Almost 13 million would seek or accept a smart meter within six months

There are currently more than 12 million smart meters operating in Great Britain² with 29 per cent of the population³ now owning one. Of those who have yet to have a smart meter installed,

12.7 million, or 39 percent of this population, say they would request or accept an offer of a smart meter within the next six months.

29%

Figure 2.

Percentage of people who say they have a smart meter in their home⁴

39%

Figure 3.

Number of people who would like to seek or accept a smart meter in the next six months, of those who haven't upgraded yet

² Department of Business, Energy and Industrial Strategy official statistics, Statistical release and data: Smart Meters, Great Britain quarter 2018

³ Based on an adult population of 48 million aged 21 + (ONS)

⁴ Please note that the definition of smart meter ownership has been updated and now differs from measures used in previous Smart energy outlook reports. Higher volumes of smart meters in homes across Britain means people with smart meters may not have experienced an installation first hand. Throughout this report, people who say they have a smart meter in their home are counted as smart meter owners if they identify a description of a smart meter as closest to the meter they have in their home. People who say they have a smart meter but do not identify this description are not counted as smart meter owners.

Demand for smart meters is strong across the whole of Britain

Appetite from the non-smart population to have a smart meter installed over the next six months remains strong and fairly consistent across Britain's nations and regions.

People living in Scotland, East Midlands and East of England are the most likely to ask for or accept a smart meter within the next six months.

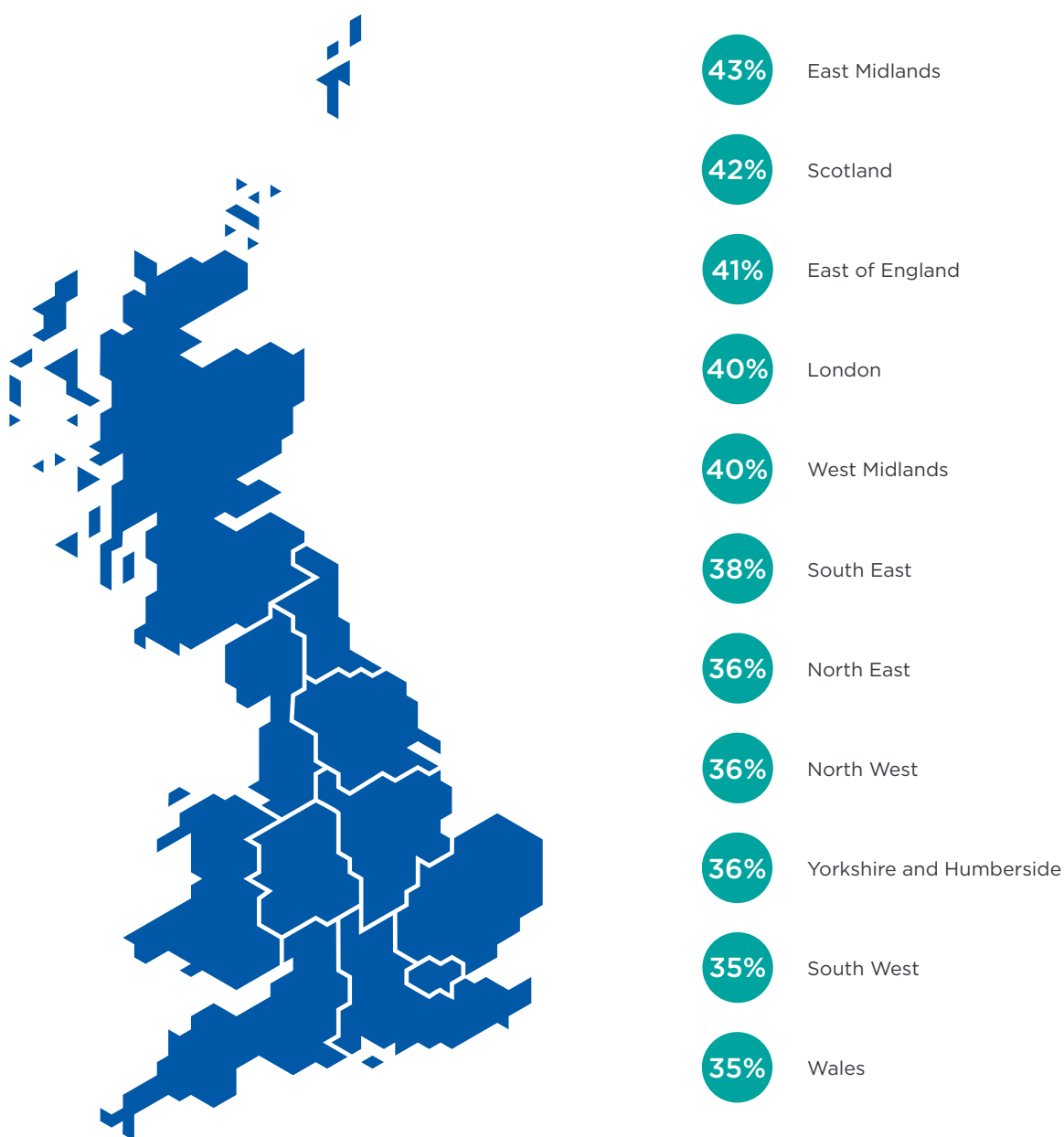


Figure 4. Geographical breakdown showing the proportion of people who would seek or accept a smart meter in the next six months, of those who haven't upgraded yet

Younger people are most likely to want a smart meter

Smart energy outlook research shows some demographic groups⁵ are more likely to seek or accept an offer of a smart meter within six months compared to others.

Younger people aged 21-28, private renters and households using prepay meters are the most likely to request or accept a smart meter in the next six months.

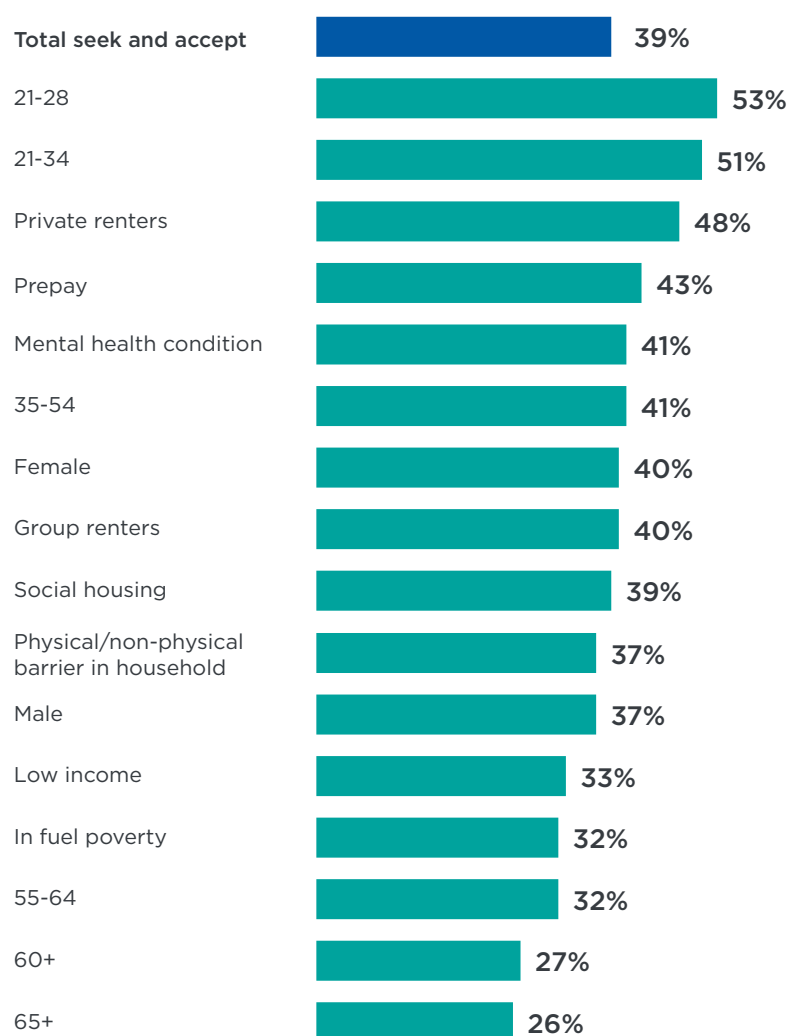


Figure 5.

Demographic breakdown showing proportion of people who would seek or accept a smart meter in the next six months, of those who haven't upgraded yet

⁵ See page 27 for definitions of demographic groups

Andrew rents his home and lives with his wife and three young children. Andrew's smart meter gives him control over his energy bills and helps him to manage his electricity costs with his electric car (EV). Since having an EV, Andrew has been impressed by how little it's impacted his energy bill.

“

I've always thought that if there was a bit more education around energy saving, there would be more understanding about how people can make real changes. That's why smart meters work really well because when you see energy, you can understand it. It does make you think, maybe I could turn that off or maybe I could change that. We've already changed all of our lights to LED bulbs. Small changes like this can really save you a bit of money.

In the past I often worried about not knowing what our energy usage was and where my money was going each month. So, when I heard about smart meters I requested one from my energy supplier and they were able to arrange an installation really quickly.

I got my electric car shortly after having my smart meter installed. When I first considered whether or not to get an EV, my biggest worry was how much it was going to cost me in electricity. But from having a smart meter and seeing the cost of my

electricity in almost real time on my in-home display, I've worked out that charging my car usually only costs me around £1.20 a day.

On busy days where I've topped my car up and both the washing machine and the dishwasher have been on, we've usually only spent around £3 to £4.

Having a smart meter has also encouraged my family to get involved in saving energy, even if it's just turning a few lights off. My eldest son gets taught about saving energy at school, so being able to visualise energy use with a smart meter at home has really helped him to see how he can make a difference, with little things like not charging his tablet when he doesn't need to.

I keep my IHD in my hallway where I can glance at it every time I walk past. There's a really easy dial and traffic light system that makes it easy to see if someone has the kettle on or when I'm charging my car, so I always know when my energy use is at its highest.

Andrew, Bedford

”





Smart meters – the verdict from those who already have one



Over nine million smart meter owners would recommend them to friends and family

More than 12 million⁶ smart meters are now operating in Britain’s households and small businesses, and those with a smart meter already fitted are recommending them to people who haven’t got one. People across Britain are beginning to see the benefits of having a smart meter installed in their home or small business.

Two thirds of people with a smart meter would recommend them to family, neighbours and friends. That’s equivalent to 9.2 million⁷ people who love their smart meter.

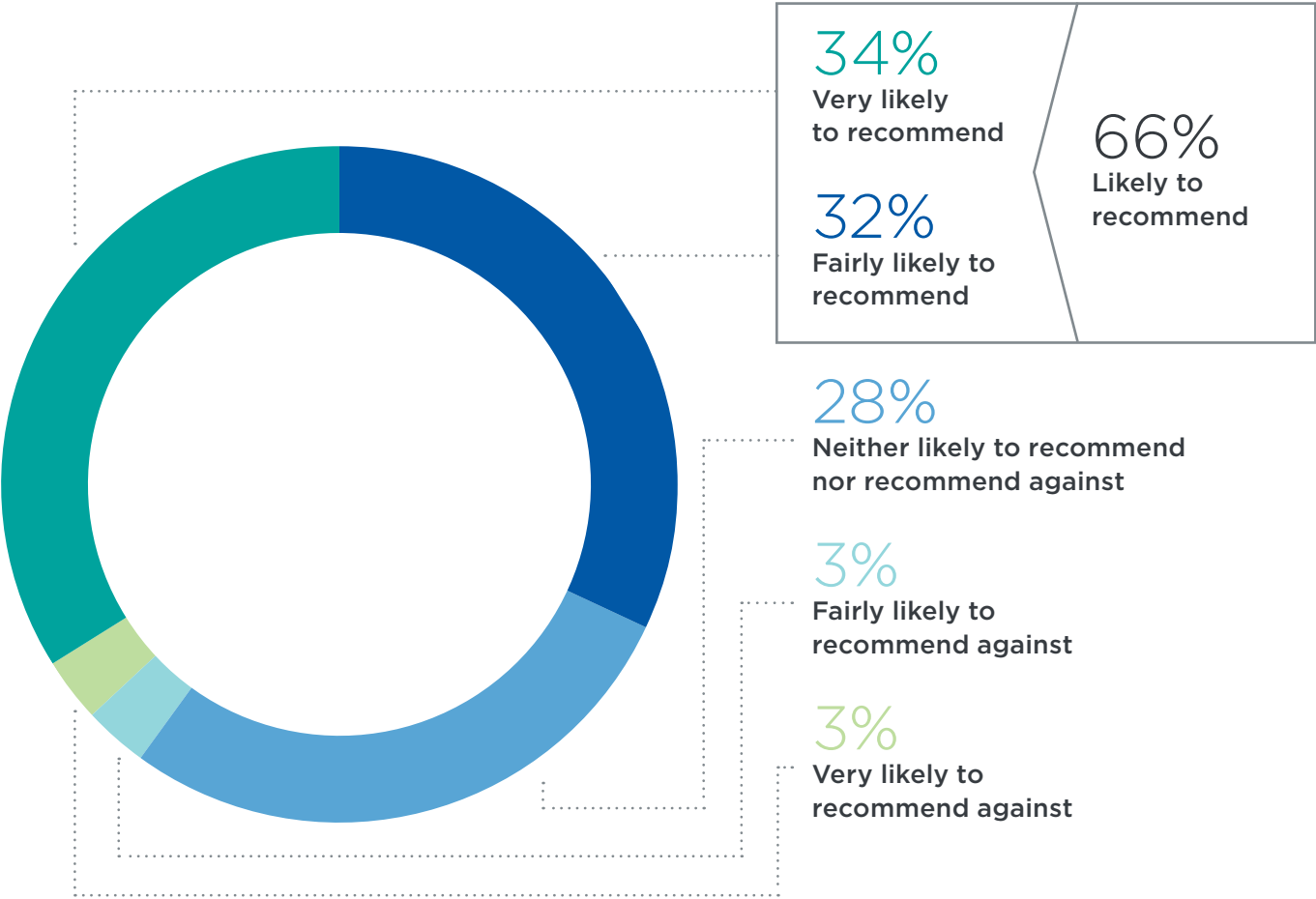


Figure 6.
Likelihood to recommend a smart meter to others (among people with smart meters)

6 Department of Business, Energy and Industrial Strategy (BEIS), Smart Meters, Quarterly Report to end September 2018. Number of smart meters operating across homes and businesses in Great Britain
7 Based on an adult population of 48 million aged 21 + (ONS)

Younger people and pre-pay customers with smart meters are most likely to recommend them

Younger people and pre-payment customers are the most likely to recommend a smart meter to friends, neighbours or a relative.

Simply paying for their energy via an app or over the phone is one of many reasons that this group of people spread positive messages about smart meters.

Smart meters have revolutionised how pre-payment customers pay for their energy, with a trip to the local shop or post office now a thing of the past.

Young people and private renters are also extremely positive about their smart meters.

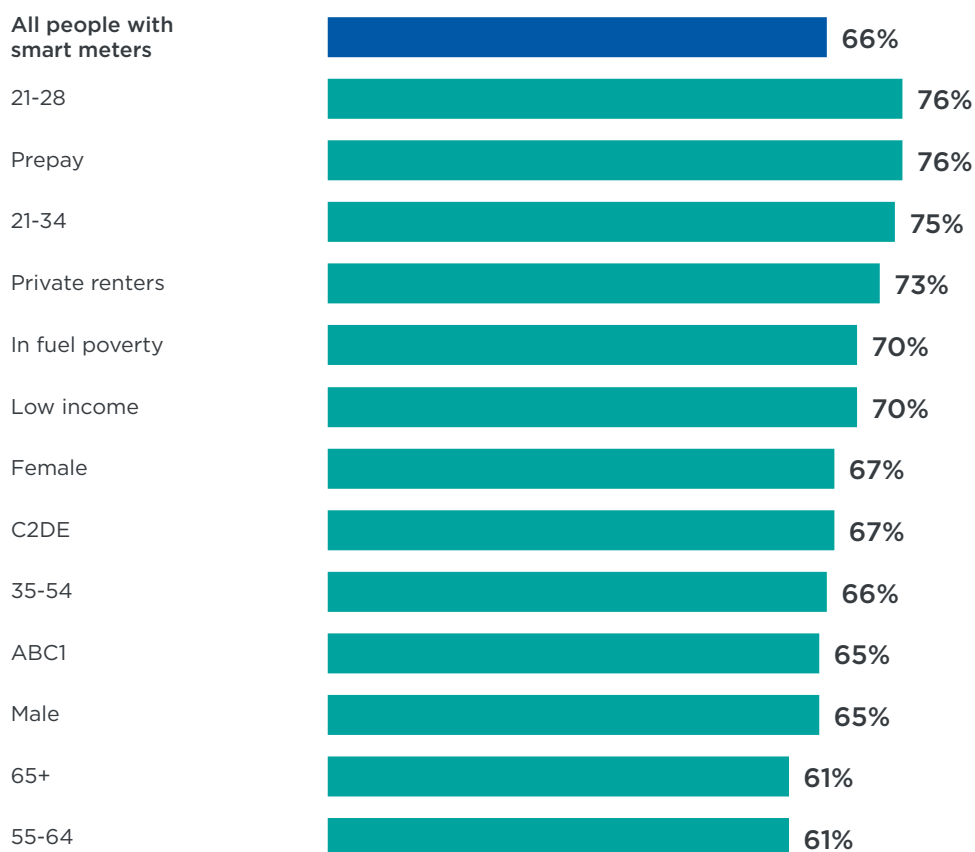


Figure 7. Likelihood to recommend a smart meter to others – demographic breakdown⁸

⁸ See page 27 for definitions of demographic groups

Seeing pounds and pence displayed is the most appealing benefit

Customers feel the most appealing benefit of having a smart meter is seeing in pounds and pence how much energy they are using. Feeling assured their bill is accurate and no longer estimated also appealed.

In home display units allow customers to see their energy use in pounds and pence in almost real time, this attribute was the top ranking with 44 per cent of people saying it was the most appealing benefit of having a smart device.

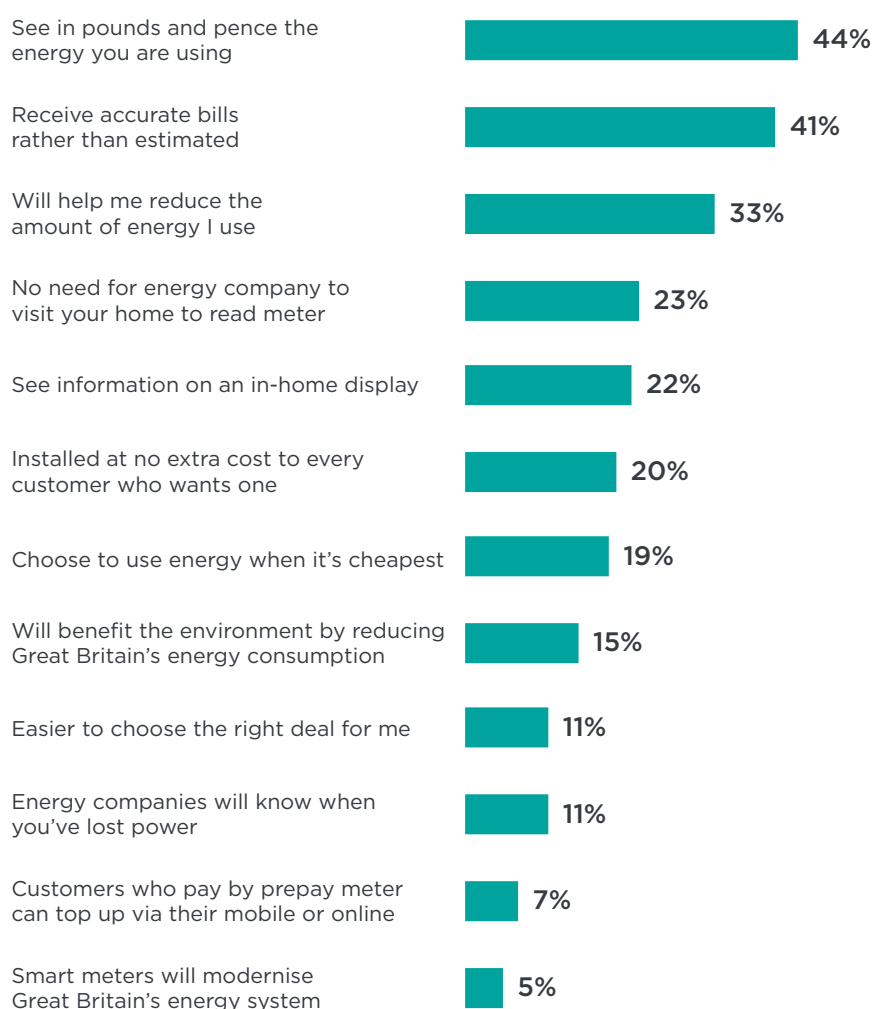


Figure 8.

The appeal of smart meters (top three benefits selected by people across Great Britain)

People consume energy more conservatively thanks to smart meters

Smart meters are having a positive impact on how people consume energy, with nearly three quarters of those surveyed saying they have undertaken more of at least one energy-saving activity since having a smart meter installed.

These activities include turning down the heating, turning off lights in empty rooms and purchasing more energy efficient products. These small changes are just the beginning of ensuring we build a sustainable future for Great Britain.

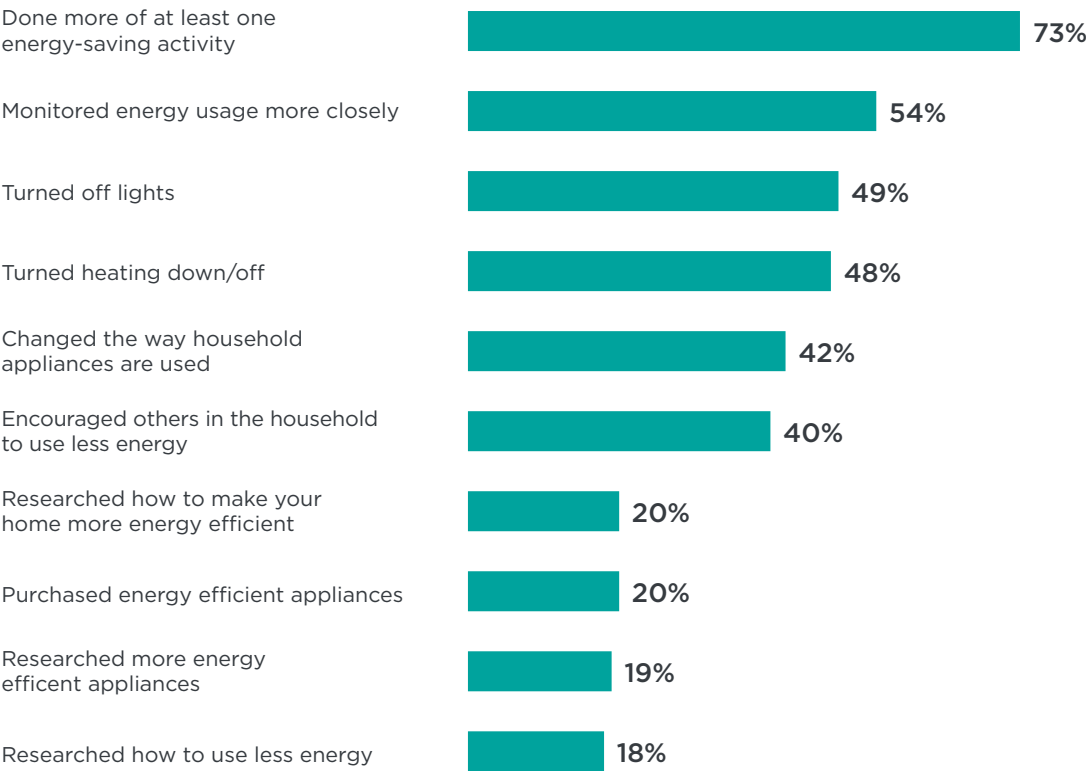


Figure 9. Activities people with smart meters have done more of since getting a smart meter

People with smart meters feel less worried about their bills

Accurate bills and the ability to see in clear and simple terms how much energy you are using in near real-time are tangible benefits to smart meters.

Around eight in ten people questioned believe their smart meter has given them a better idea of what they are spending on energy and almost half are less worried about their bills.

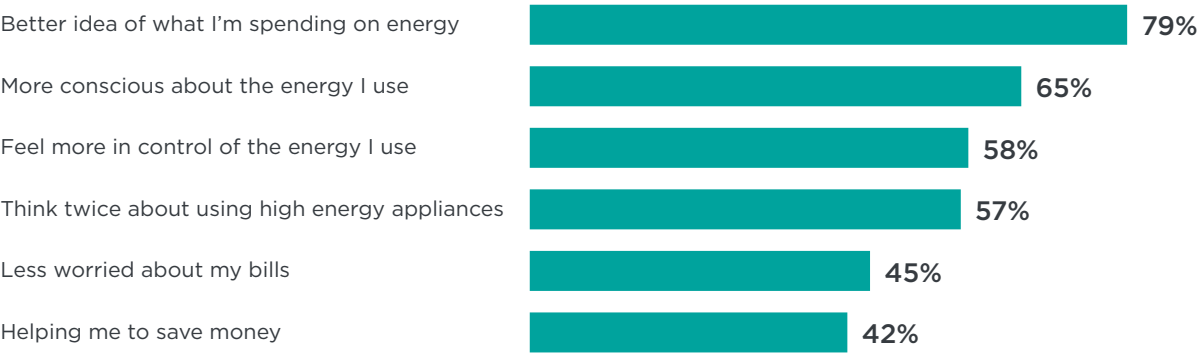


Figure 10.
Experience of people with smart meters

Smart meters give people greater understanding and confidence in managing their energy bills

The rollout of smart meters is giving people more information and greater control of their gas and electricity.

People with smart meters feel they have a better understanding of their bills and believe the device gives them more accurate readings compared with those who have not yet upgraded their meter.

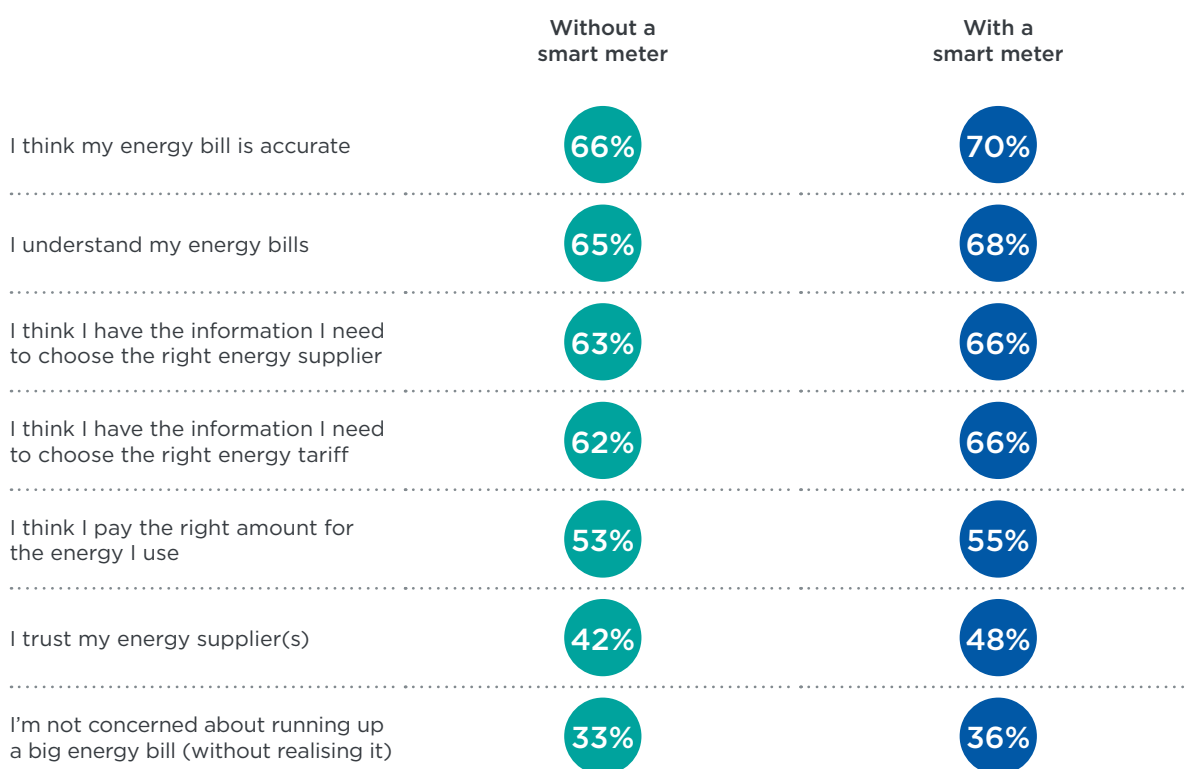


Figure 11.
Attitudes towards energy: people with a smart meter vs. those without one

The longer you have owned a smart meter the more advanced your energy usage attitudes are

The longer people have owned smart meters the more advanced their attitudes are towards the usage and management of their gas and electricity.

Although there is no huge change in attitude towards usage and management of energy depending on how long you've had your meter, those who've had a smart meter for over a year did have slightly more confidence in the device.

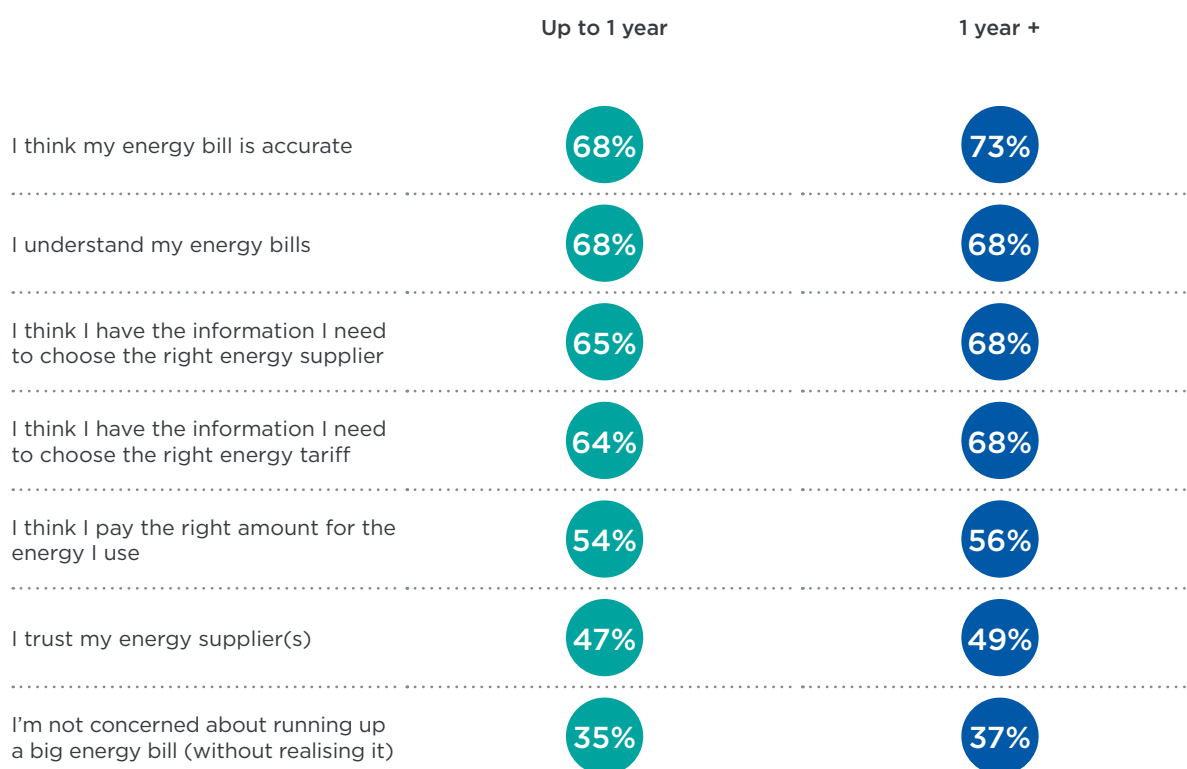


Figure 12.

Attitudes towards energy: people who have had a smart meter for less than a year vs. those who have had one for longer than a year

We've had our two rescue cats, Rusty and Homer, for 12 years. We're very fond of them, though their presence in the house was responsible for a long-running disagreement between us – until we got our smart meter.

“

My husband, Frank, likes to make sure that the cats are safely in the house every evening after they've been out for their night-time prowls. Each night around 8.30pm he turns the three living room spotlight bulbs on to make sure that they can find their way back to the house in the dark. The trouble is that we never know when they'll return – if they're having a particularly exciting evening they might not come in until 11.30pm, which means the lights could be on for three hours or more.

When we got our smart meter from our energy supplier and saw on the in-home

display exactly how much it was costing us in pounds and pence to leave those lights on every night, we both realised that we needed to make a change. Frank didn't want to stop leaving the lights on for the cats, so instead we replaced the bulbs with an energy saving variety, which led to an immediate reduction in our energy bills.

Now we're all happy – Frank gets to keep the lights on for the cats, I'm content in the knowledge that it's costing us a fraction of what we were spending before, and Rusty and Homer always find their way home at night.

Heather and Frank, Dartford

”



In-home displays give customers the control over their energy spend and usage

Smart meters come with a free in-home display (IHD) so customers can see their energy usage clearly shown in pounds and pence. Nine in ten smart meter owners have an IHD, which will connect to meters via a secure wireless network.

People with an IHD feel more aware of how much energy they are using. Around 8 in 10 people with an IHD also feel they have a better understanding of what they are spending on their energy.

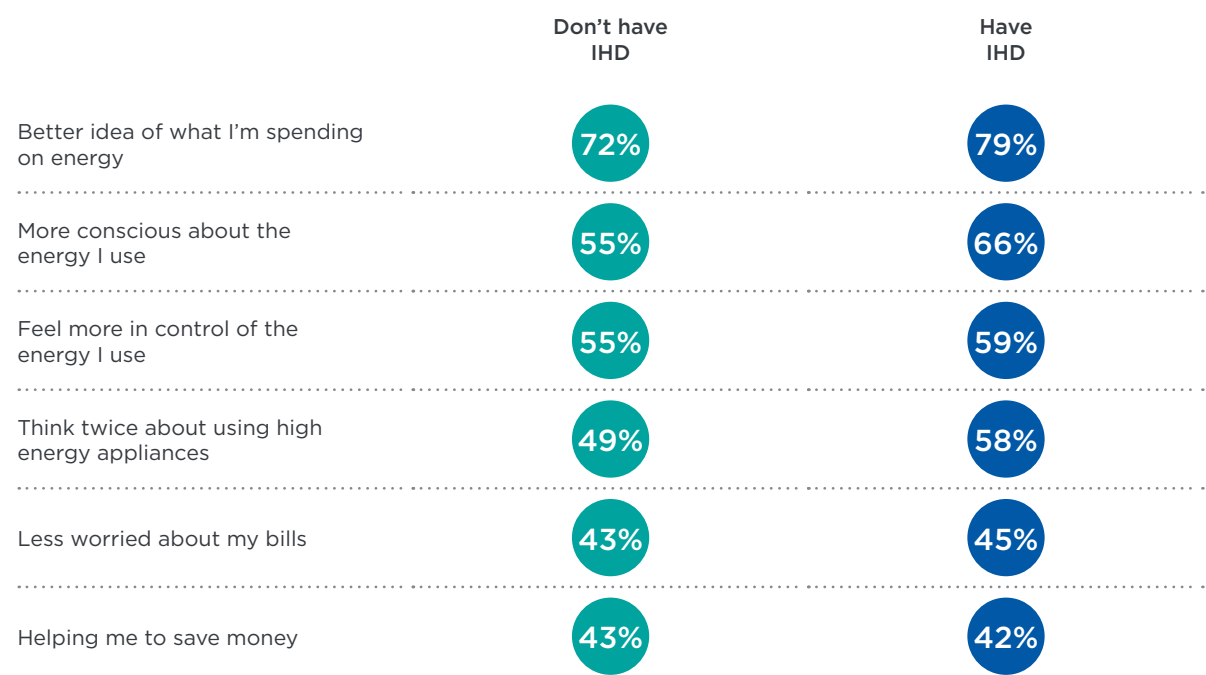


Figure 13. Attitudes towards energy: people with smart meters who have an IHD vs. those who don't



Figure 14. Likelihood to recommend a smart meter to others: people with smart meters who have an IHD vs. those who don't

People with multiple viewing methods feel more in control

There are multiple ways of viewing your energy usage and those who have two or more viewing methods feel significantly more in control of their energy.

People who access their data via multiple devices are also more likely to think twice about using high energy appliances and feel their smart meter is helping them to save money.

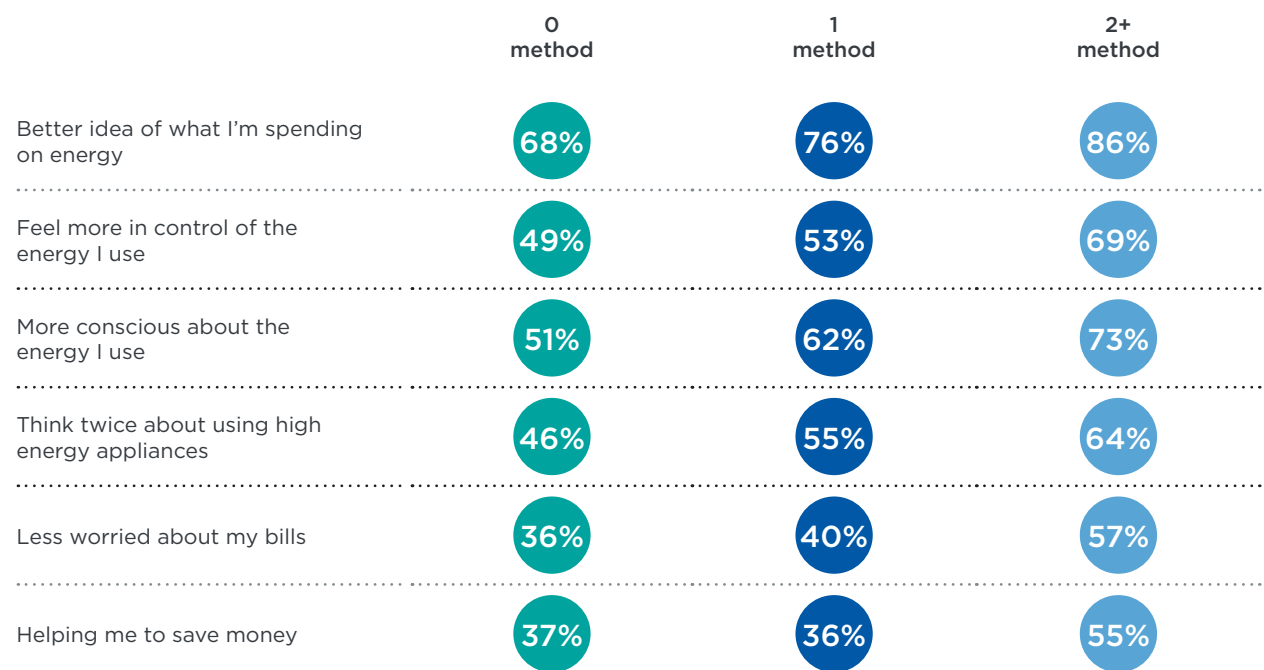


Figure 15. Attitudes to energy: people with different numbers of viewing methods for their smart meter data

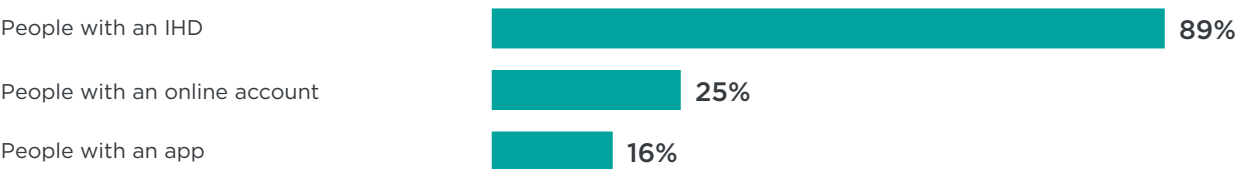


Figure 16. Access to different viewing methods for information about energy use, amongst people with smart meters

Older people are the most likely age group to own a smart meter

Ownership is spread evenly across the different age groups and gender, with more than 12 million smart meters now installed across Great Britain.

Our latest research found that social housing tenants are the most likely group to own a smart meter. While prepay customers and people aged between 55-64 follow closely behind.

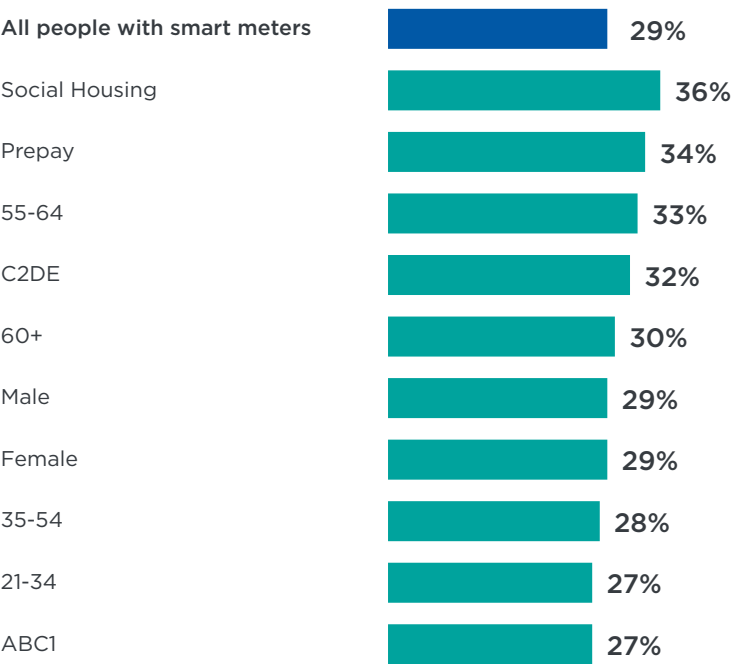


Figure 17. Smart meter ownership among the population of Great Britain – demographic breakdown

Technical and logistical issues are top of the list of concerns

Smart energy outlook interviewed nearly 10,000 people. Across the population of Great Britain, concerns about smart

meters are still relatively low but increased media coverage of real challenges in the delivery of the rollout are influencing consumers.

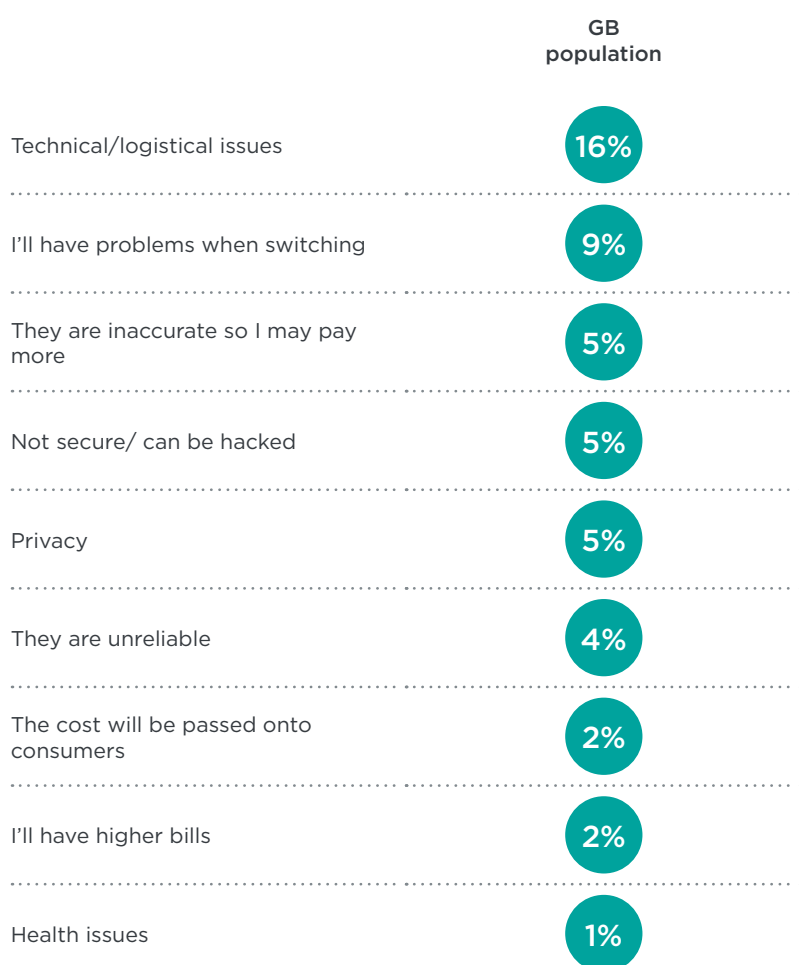


Figure 18.
Concerns expressed about smart meters

Descriptions of demographic groups

As well as age, gender, region and socio-economic group, the data has been segmented. These are defined as:

| | |
|------------------------------------|--|
| Pay by prepay meter | those who pay for their electricity or gas via a prepay meter |
| Fuel poverty | those who spend 10 per cent or more of their income on fuel |
| Low household income | those who have a household income of less than £13,999 per annum |
| Renters | those who rent the property in which they reside |
| Private renters | those who rent from a private landlord |
| Social renters | those who rent from their council or other providers of social rented housing (e.g. housing associations) |
| Group renters | those who rent with at least two other people, neither of which is their partner |
| Disability in the household | those with a health condition lasting, or expected to last, for 12 months or more |
| ABC1, C2DE | demographic classification based on occupation of head of household, as defined by the Market Research Society |



To find out more about smart meters please visit
smartenergyGB.org