Get Smarter

Ensuring people benefit from smart meters

citizens advice

May 2024

Executive summary

Despite a slower than planned rollout, more than half of all households in Great Britain now have a smart meter[1], enabling a range of benefits, some of which should be delivered immediately, like an end to estimated bills and new ways for prepayment consumers to top up. Other benefits require people to take action - over 80% of direct consumer financial benefits from smart metering will be achieved by changing behaviour based on engaging with information from the meter.[2]

Most people with smart meters are enjoying these benefits. Almost 7 in 10 people (68%) who have smart meters are happy with them, and the proportion of people with a smart meter who are using smart-enabled products and services has increased since 2018.[3]

Unfortunately, some aspects of the consumer experience of smart meters have worsened. Our research shows that 20% of people with a smart meter reported having to regularly give manual meter readings to their supplier, and more reported having to give them occasionally. The proportion of consumers saying they were unhappy with their smart meter installation has doubled since 2018.

While providing manual meter readings may still be necessary on some rare occasions, these numbers reflect wider problems with some smart meters not communicating wirelessly or energy suppliers not making full use of smart functionality. By the end of 2023 over 11% of meters were reported as not working in 'smart mode'[4], which itself represents just a subset of the problems consumers can encounter with smart meters.

When meters don't work properly it can put consumers at risk of receiving estimated or catch up bills, often without warning. Unexpected bills impact consumers' ability to budget and can cause people to fall into debt. Meters not working properly can also prevent people from using smart energy services like Time of Use and export tariffs, which are needed to make the most efficient use of low carbon technologies like electric vehicles and solar panels.

The people we help with smart meter problems at Citizens Advice often say these have not been addressed promptly by suppliers, causing distrust and disengagement. **Current consumer protections aren't working effectively to deliver a good smart meter experience or a timely fix if things go wrong.**

Executive summary

These issues are leading to negative media stories and word-of-mouth that smart meters are not reliable, reducing enthusiasm to have one installed among those who don't yet. This has been compounded by concerns following the prepayment meter scandal, during which some suppliers inappropriately switched some consumers with smart meters to prepayment.

These stories increased concern among some consumers and damaged support for and trust in smart metering. The smart prepay experience should offer significant benefits compared to traditional prepay, including more ways to pay and better support from suppliers.

We know that people who don't have smart meters will not be able to access the best value energy products in future, so it's vital that consumers are not discouraged from having one installed. However the success of the smart meter rollout cannot be measured just by how many meters have been installed - but rather by how many are consistently working as expected for consumers and allowing them to access the benefits they bring.

Achieving our decarbonisation goals assumes growing engagement with services like energy flexibility, which are underpinned by smart metering.[5] However, when consumers consider smart-enabled services they don't come with a blank slate - their attitudes and trust are shaped by their past experiences with smart meters.

Our research found that people who are unhappy with their smart meter are a third less likely to be making use of new smart-enabled products and services than those who are happy with it. For those who were unhappy with the installation process it was even worse - nearly two thirds were less likely to access new products and services than people who were happy.

Charlie's Story

Charlie is on the Priority Services Register. His smart electricity meter has an issue which means it isn't sending meter reads. He's contacted the supplier but it isn't fixed, and Charlie can't access the meter. Based on estimated bills Charlie has a £500 debt which has now passed to a collection agency.

Claire's Story

Claire moved into a new house with a smart meter 18 months ago and submitted an opening meter reading, but didn't realise she's been getting estimated bills since then. The supplier didn't tell her the meter wasn't sending readings and didn't ask for meter reads. Claire received a catch up bill of £1,000 but is unsure if it is correct.

Executive summary

We're calling for new rules to drive improvements in the smart meter experience so that more smart metering equipment works as promised and if things go wrong there is a plan to fix them, with compensation if it's not done in a timely way. Alongside these changes, we want to see new consumer protections to ensure consumers with smart meters are at lower risk from estimated bills.

There also needs to be much better performance data published to understand what's driving different problems, and a stronger regulatory framework so that consumers will see prompt action to get their smart equipment working, regardless of who's to blame.

Looking ahead we also want to ensure that as many people as possible can access the benefits of smart meters. The Government should do more to tackle the barriers that make it harder for some groups of consumers - like people in rented homes - to have a smart meter installed.

Recommendations

1. New 'Guaranteed Standards' that require suppliers to install and operate meters properly, investigate and address problems in a timely way, and provide compensation when this doesn't happen
2. A reduction in the amount of time consumers with smart meters can be 'backbilled' from 12 to 6 months, to protect them from shock bills if things go wrong
3. New voluntary protections for all consumers with smart meters to be able to get In Home Displays fixed or replaced be closely monitored to ensure all suppliers are addressing IHD issues promptly
4. A stronger regulatory framework that eliminates the "accountability gap" between energy suppliers and the DCC, to ensure prompt action to get smart equipment working no matter the responsible party

Context and Methodology

We conducted research about the early experiences of the smart meter rollout in 2018[6] and examined specific consumer views on the use of data from smart meters in 2019.[7] We also conducted a long-running tracker survey jointly with Ofgem[8] looking at consumer satisfaction with the retail energy market, which includes some questions on smart meters. Data from all of these are included in this report, alongside insights from our Consumer Service and the Extra Help Unit.

We commissioned Savanta to help us understand the consumer experiences of smart meters. This included understanding how satisfied consumers are, whether they are experiencing the promised benefits, and how people without smart meters feel about getting one in the future.

Savanta conducted a large-scale, nationally representative survey of 4,000 adults in Great Britain. Reflecting the state of the rollout at the time the research was undertaken, around half of all respondents had a smart meter and half did not. Though the majority of this survey was conducted online, the research included an offline sample of 100 people to ensure that the views of groups who face digital exclusion were included. This research took place in August 2023 and October 2023.[9]

We have augmented this research with our own insights from contacts to the Citizens Advice Consumer Service, cases from the Extra Help Unit, data from our Energy Satisfaction survey, and past research into consumer experiences with smart meters to offer greater insight into how consumer experience has changed over time and what real-world experiences for consumers look like.

All case studies presented in this report have been anonymised, and names have been changed.

Are smart meters meeting consumer expectations?

The most common reason people chose to install a smart meter was to allow them to monitor their real time energy usage and cost (49%). Other common reasons were to get accurate energy bills (45%) and to avoid having to provide meter readings (38%). These responses are consistent with our 2018 research.[10]

However these expected benefits are not always realised. A third of people report that their smart meter did not meet their expectations on monitoring their energy usage/cost and obtaining accurate bills. People who said their expectations were not met are less likely to be happy with their smart meter, and less likely to engage with smart products and services.

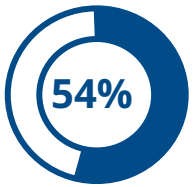
Consumers who wanted certain benefits are more likely to be satisfied that the smart meter meets their expectations. Consumers who got a smart meter to avoid providing meter readings or for new ways of topping up prepayment meters report less of a gap between their expectations and reality than those who expected a reduction of their energy costs.

There may be lessons here for how some of the benefits of smart meters are communicated, to help consumers understand that to directly benefit they are likely to need to take action in response to information about their energy usage. **More ongoing support to help consumers understand how they can save energy is also vital.**

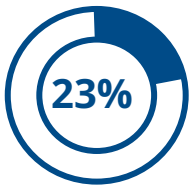
Key reasons for having a smart meter installed		*Proportion with this reason who were disappointed*
Monitor real time energy usage / cost	**49%**	**33%**
Obtain more accurate energy bills	**45%**	**33%**
Avoid having to provide meter readings	**38%**	**22%**
Reduce energy consumption / usage	**38%**	**44%**
Monitor energy / costs over a period of time	**33%**	**30%**
New ways for me to top up my meter	**30%**	**27%**

Too many smart meters aren't working as they should

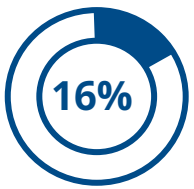
Almost 7 in 10 (68%) of respondents with a smart meter say they are happy with it. However, nearly 1 in 10 (8%) of people are unhappy with their smart meter. **For consumers whose smart meters don't work as expected or who had difficulty during the installation satisfaction is lower:**



Over half (54%) of the people who were unhappy with their smart meter installation were also unhappy with their smart meter overall.



Nearly 1 in 4 (23%) people who still have to give regular manual meter readings to their supplier are unhappy with their smart meter.



Around 1 in 6 (16%) of people who have issues with their In Home Display (IHD) are unhappy with their smart meter.

Some groups of people are also more likely to be unhappy with their smart meter.

- 1 in 10 people aged over 45 are unhappy with their smart meter, compared to 1 in 20 people under 35.
- Nearly 1 in 5 people (18%) who are not confident using the internet are unhappy with their smart meter.

People who aren't happy with their smart meter are also less likely to access new products and services:

- Only 1 in 5 people (18%) who are unhappy with their smart meter accessed new products and services, compared to 1 in 4 (27%) people who are happy with their smart meter.
- Only 1 in 10 (11%) of people who were unhappy with their smart meter installation accessed new products and services compared to 1 in 3 (28%) people who were happy with their smart meter installation.

With much of the benefit of smart meters being derived from these new products and services, addressing issues that reduce consumer enthusiasm should be a top priority.

Too many smart meters aren't working as they should

There are also issues with some of the most basic smart meter benefits. Though the majority of people with a smart meter said that they no longer had to submit readings to their supplier, there is still a significant proportion of people for whom this is not the case.

- 20% of people with a smart meter reported having to give manual meter readings to their supplier regularly.
- A further 24% of people reported having to give manual meter readings occasionally.

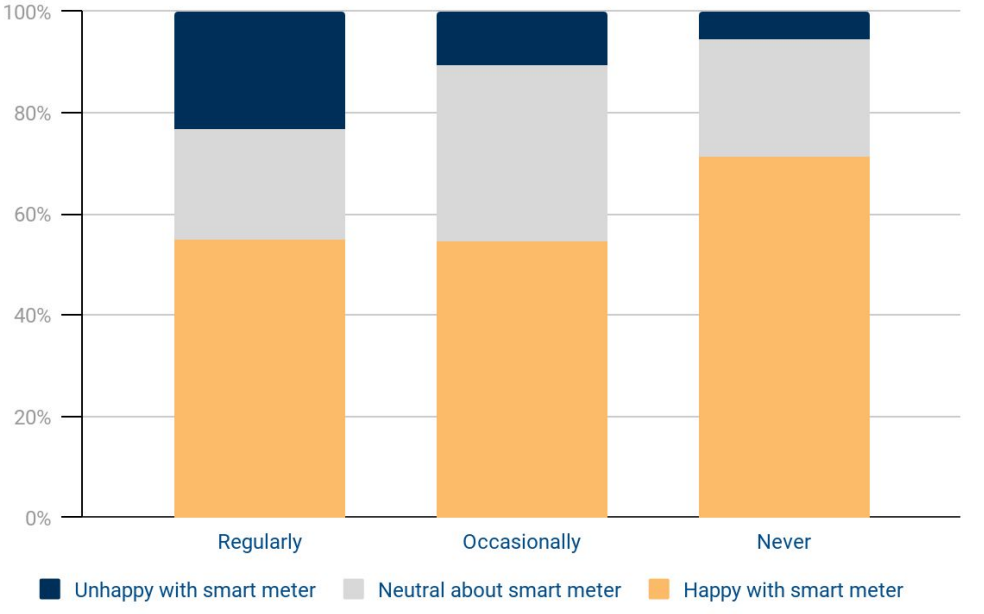
When we asked a similar question in 2018, 22% of respondents said that they had to provide "some" manual meter readings. It is clear that although we are now far further into the smart meter rollout, the average consumer experience of smart meters has not improved in this regard.[11]

Separately, our Energy Satisfaction survey shows that 37% of respondents with a smart meter reported experiencing a problem in the previous three months. The most common cause was a lack of automatic meter readings, affecting around a third of those who had a problem.[12]

This aligns with the experience of people seeking help from Citizens Advice. Of our energy related advice pages "how to read your electricity smart meter" received the third most traffic in the year ending February 2024, narrowly behind the page for reading standard meters.[13] This indicates that a significant proportion of consumers are having to take manual meter reads from their smart meters.

This significantly impacts people's smart meter experience. **People who have to give regular readings are over four times more likely to be unhappy with their smart meter than people who don't.**

Relationship between giving manual reads and smart meter happiness



Too many smart meters aren't working as they should

When smart meters don't send automatic readings to energy suppliers, consumers start to receive estimated rather than accurate bills. Just **over a quarter of all smart meter-related contacts to our Consumer Service in 2023 were about problems with bills**. If this happens, suppliers should proactively inform their customers. However, many of the people who contact Citizens Advice about billing issues have only recently realised that their bills are being estimated and have fallen into debt or overpaid.

In some cases, particularly for vulnerable consumers and those who cannot access their meters, **non-functioning smart metering equipment can cause significant detriment**.

Hanif's Story

Hanif has had a smart meter for many years. Recently their smart meter stopped working and it took around 8 months for it to be replaced with a new meter.

Hanif received estimated bills while the smart meter was not working, as they could not submit meter readings during this time. Now that Hanif has a working meter, their bills are around half the estimated amount. Hanif is concerned they have been overcharged. They have raised a complaint with their supplier but the supplier said there is nothing else they can do now the new meter has been fitted.

The Extra Help Unit, a specialist support team who help the most vulnerable consumers navigate issues with their energy supplier, have raised concerns that smart meter issues are not being addressed promptly, or at all, for consumers. They provided the following statement:

"We have had a cohort of open cases at the Extra Help Unit for many months, where a consumer is requesting a fully operational smart meter or a smart meter in prepayment mode and the supplier is failing to resolve these cases in a timely manner…in some situations we are still not getting to a final resolution or are told that the problem can't be resolved for the time being and the consumer will need to wait until an undisclosed future date"

Johann's Story

Johann's gas meter is not sending meter reads resulting in three years of estimated bills. Making no progress with their supplier, Johann was referred to the Extra Help Unit.

A meter replacement was booked for April 2023 but did not happen. The same happened in July. In September the supplier told Johann to contact his Meter Provider to address the issue. Johann's Meter Provider told them that the smart gas meter had run out of battery.

In October the supplier booked an appointment to fit a non-smart meter without explaining why. Appointments booked to do this in November, December and January all failed and Johann is still awaiting a successful visit.

Too many smart meters aren't working as they should

Experiences like these where smart meters are not communicating with the supplier, and where suppliers are not taking prompt action to resolve the issue, are resulting in significant detriment. They are also negatively affecting the reputation of smart meters and products and services they can enable, including through negative media coverage on these issues. **Nearly half (46%) of people who haven't taken up a smart meter when offered said this was because they had heard or read negative reports about them in the media.**

It's becoming increasingly important for smart meters to work properly so people can benefit from using low carbon technologies flexibly. There are also new risks of financial detriment when things go wrong. Smart Time of Use tariffs, which reward flexible energy usage like EV charging, are reliant on half hourly readings from a smart meter. People with solar panels or batteries, who want to be paid to export electricity to the grid, also need regular readings. Without these meter readings, consumers may be moved to a more expensive single rate or may not be paid for the energy they export. Fully operational smart equipment like In Home Displays are also vital to ensure that consumers can access and understand their usage over time in order to make necessary usage changes.

These energy services will become more common in the coming years as the adoption of these technologies increases and as market reforms from 2025 incentivise suppliers to offer more Time of Use pricing.[14]

Recommendation: Introduce new consumer protections that ensure meter issues are fixed in a timely way

The smart meter network and the “accountability gap”

Smart meters send and receive data wirelessly via the Wide Area Network (WAN) which is operated by the Data Communications Company (DCC).[15] The DCC is responsible for ensuring that smart electricity and gas meters have a wireless connection to reliably send and receive data.

There are a range of reasons that a consumer may not receive smart service - often due to their energy supplier or metering equipment, but sometimes due to issues with the WAN. In these cases it may be the DCC’s responsibility to fix the problem.

Ideally, consumers should not have to be concerned about the technicalities of responsibility between energy suppliers and the DCC. The DCC has no consumer-facing role and consumers have no means to interact with them for help with issues.

Energy suppliers should serve as the single point of contact to resolve issues with a consumer’s smart meter. Parallels can be drawn to services like broadband where the consumer-facing provider is responsible for ensuring service, even where they do not directly own or maintain the network.

However, in practice **when things go wrong consumers often struggle to find out what the problem is, who’s responsible and how long it will take to fix it**. Consumer protections are also opaque. For example, Ofgem rules[16] state that suppliers must ‘take all reasonable steps’ to ensure that smart meters are able to communicate between the consumer’s meter and the energy supplier. However this requirement does not apply if the WAN is not working for those meters. This means that if the supplier considers the problem to be with the WAN consumers may have little direct recourse to getting issues resolved.

In future this “accountability gap” between suppliers and the DCC should be closed. Better data about the performance of different companies that deliver the smart meter system should be published to improve understanding of where responsibility lies. There may also be an opportunity to improve accountability through changes to the DCC’s price control, which is overseen by Ofgem. This could, for example, ensure that suppliers who have to compensate consumers for a lack of smart meter functionality can recover these costs from the DCC, where the issue relates to the WAN.

In the near term it’s vital that this does not act as an impediment to consumers receiving reliable smart service, or prevent consumer protections being ineffective or written in such a way that means consumers can’t quickly and easily resolve their problems.

Problems with smart meters and their possible causes

Many issues with smart meters can have multiple potential causes. This often makes it difficult to establish what the cause of an individual problem is, who is responsible, and if there are any existing obligations which could be applied to resolve it. The below table is based on insight from industry and key stakeholders to provide a general sense of possible responsibility for different issues.

Issue	Potential Cause	Possible Supplier Responsibility?	Possible DCC Responsibility?
In Home Display showing incorrect or no information	Faulty In Home Display	✔	
	Problem with the Home Area Network (HAN)	✔	
	Inaccurate or no tariff data on the meter causing IHD to not display it	✔	✔
Consumer receiving estimated bills or being asked for manual meter reads	A fault with the physical smart meter	✔	
	An issue with firmware not working or not reaching meter	✔	✔
	Supplier not sending requests for meter reads	✔	
	Smart meter readings being requested but not arriving		✔
	Smart meter usage data being received but not used by supplier	✔	
Smart meter not working following installation	Smart meter not able to communicate on WAN or be commissioned		✔
	Smart meter installed incorrectly	✔	
Prepayment top-ups not going onto smart meter	Top-up data not being reliably sent/received via WAN		✔
	Supplier-provided top-up mechanism (e.g. app/web portal) not working	✔	

Experiences of accepting a smart meter and having one installed are mixed

The smart meter installation process plays a key role in how consumers feel about their smart meter on an ongoing basis. This can also cause issues for our clients - around 20% of smart-meter related contacts to the Citizens Advice Consumer Service in 2023 related to installation issues like missed appointments, smart metering equipment not working following an installation visit or not understanding how to use the equipment.

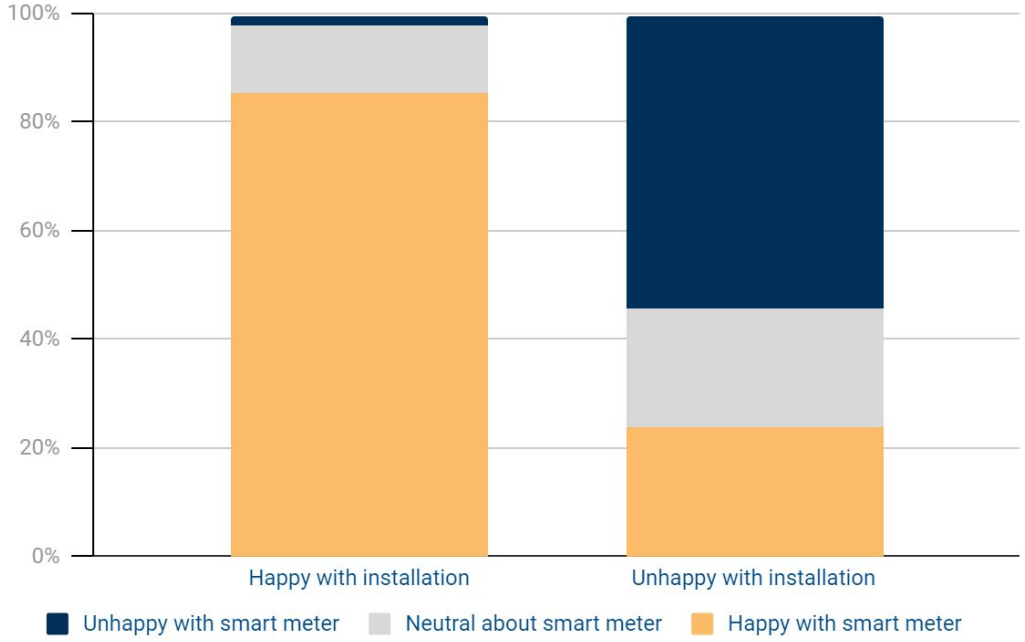
The pre-installation process begins when consumers are offered, or request a smart meter. Most people have a smart meter installed because their supplier asked if they wanted one, although more than 1 in 5 people (22%) proactively requested one. People with prepayment meters are more likely to request a smart meter, likely driven by the additional benefits they provide, including like more ways to top-up and better support from suppliers.

Overall most people had a positive experience with their smart meter installation.

However nearly 1 in 10 people (8%) were unhappy with their installation, double the rate reported in our research 2018.[17]

Satisfaction with the installation also aligns with the ongoing view of smart metering. **Over half (54%) of the people who were unhappy with their installation were also unhappy with their smart meter.**

Relationship between happiness with the installation process and attitudes to smart meter overall



Experiences of accepting a smart meter and having one installed are mixed

The most common reasons people were unhappy with their smart meter installation are that the smart meter or IHD did not work (45%), and because they felt that they had little choice over the installation in the first place (26%). People who felt they had little choice over the installation are also less likely to engage with their smart meter, including checking their IHD and accessing new products and services.

This demonstrates the importance of consumer buy-in to delivering the benefits of smart, and aligns with the findings of previous consumer trials[18] which concluded that a voluntary model for smart meter installations is important in ensuring consumers engage effectively with their smart meters.[19]

People who come to Citizens Advice due to problems with their installation experience a range of issues, including the energy supplier being unable to connect the meter to the communications network and issues with missed installation appointments.

Tom's Story

Tom has fitted solar panels and needs a smart meter to make full use of them. Tom's first booked installation was cancelled 15 minutes before the end of the designated time slot. The next installation was cancelled 30 minutes before the scheduled appointment. Tom has used two days of annual leave. A third appointment has been booked but Tom is worried this will be cancelled too.

Rajni's Story

Rajni recently had a smart meter installed but their supplier told them that they were unable to commission it because of poor signal. Rajni asked for the meter to be changed but their supplier has said there is nothing they can do.

Many consumers who agree to have a smart meter installed still have some concerns about them. Of those with a smart meter only around half (48%) say they didn't have any concerns about having one installed. For those who did have concerns, the most commonly mentioned were around difficulty switching suppliers in the future (14%) and concerns due to hearing or reading negative media reports about smart meters (14%).

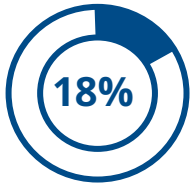
It's vital that suppliers ensure that meters are installed properly and that consumers are happy with the process. The significant reduction in satisfaction reported by those who felt they were not given a choice in having a smart meter shows it's important to provide demonstrable benefits from smart metering, rather than simply pushing an installation on unconvinced customers.

Recommendation: Introduce new consumer protections that ensure smart meters work in a timely way after installation

In Home Displays are an important part of the smart experience

In Home Displays (IHDs) allow consumers to see how much energy they are using in near real-time, and can be used by consumers to confirm their identity when signing up for new smart services. The majority (70%) of smart meter owners we surveyed were offered an IHD and accepted it. Only 6% of people refused the offer of an IHD.

Over one in ten people (11%) said they weren't offered one at all, despite this being a requirement.



Of those who were offered and accepted an IHD, 18% said they weren't shown how to use it during the installation, despite suppliers being required to do so.[20]

The majority of people (70%) are happy using their IHD, and usage among those who have them is high. 87% of consumers who were given an IHD use it, with the majority (62%) reporting that they do so regularly. However, around 1 in 10 (12%) said they never looked at their IHD either through choice or because it does not work.

Our research also shows that IHD usage has increased since 2018, when only 77% of respondents reported using their IHD to monitor their usage.[21] This increase may be due to the increased costs of energy over the last five years, as well as new time of use products, resulting in consumers engaging more actively in monitoring their usage.

Around 3 in 10 (31%) of consumers reported using a mobile app to monitor their usage with over half of them using it alongside their IHD, while the rest relied solely on their app. This research indicates that the benefits and use case for energy apps are distinct and that consumers benefit from a range of means to access their consumption data.

IHDs provide at-a-glance read-outs of energy usage for all occupants of the home while apps allow the person with access - typically the bill-payer - detailed information when notified or if they actively choose to access it. As products like time of use tariffs become more widely available the importance of both is likely to increase.

In Home Displays are an important part of the smart experience

Unfortunately, as with smart meters themselves, IHDs don't always work as promised. **Nearly a third of people (31%) have had issues with their IHD, and many of them found these issues disruptive (43%).** We see these issues in our own data as well. Around 15% of all smart-related contacts to our consumer service were about problems with IHDs.

People who come to Citizens Advice due to problems with their IHD often have the following issues:

- The IHD no longer accurately displays the cost of the energy they're using
- The IHD no longer displays any data from one or both of their smart meters
- The consumer is having difficulty sourcing a replacement IHD

Most energy suppliers have recently signed up to voluntarily replace IHDs for consumers if they stop working. This is a positive step but the results should be monitored closely. If not all suppliers sign up or adhere to them consistently Government should evaluate mandating the principles.

Jessica's Story

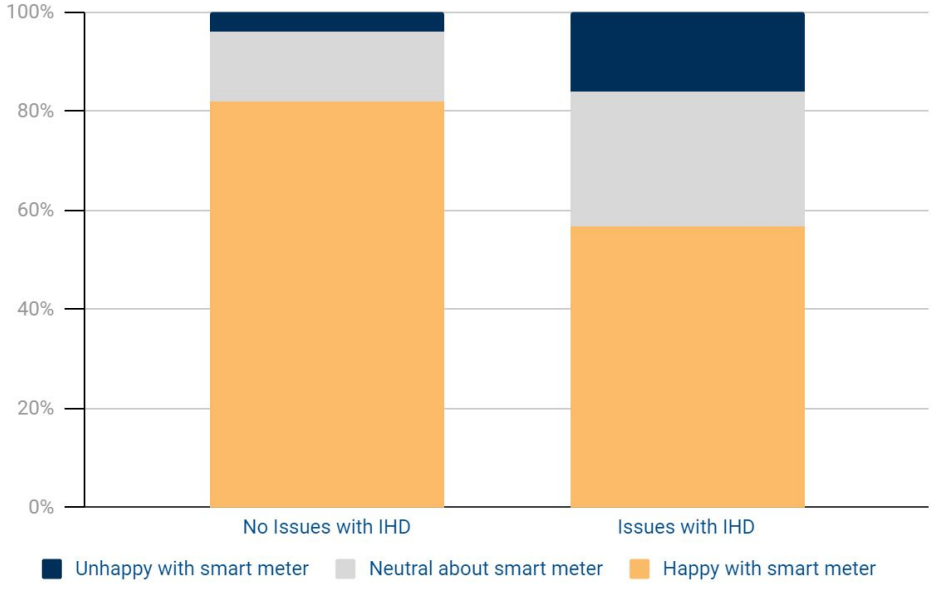
When Jessica's meter was installed the IHD worked, but now it only shows the KwH used, and not the amount in £. Jessica phoned their supplier and tried different ways to reset the display but this has not worked. Jessica's supplier says there is nothing more that can be done.

Ed's Story

Ed's IHD no longer shows the correct price for the energy they are using. Ed contacted their supplier who said that they were developing an app and so are no longer updating the home monitors. Ed would prefer a display.

People who have issues with their IHD are four times more likely to be unhappy with their smart meter than people who don't experience IHD issues, and have lower enthusiasm for smart enabled products and services.

Relationship between IHD issues and happiness with smart meter



Some people struggle to use their In Home Displays

Older people, people who aren't digitally confident and people with health conditions are less likely to say they're happy using their IHD. Some people in these groups may benefit from an accessible IHD (AIHD) to meet their needs.

What is an AIHD?

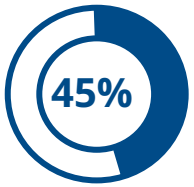
An Accessible In Home Display (AIHD) is an In Home Display which meets all required specifications of a standard IHD but with extra features that make it more accessible for more people, these can include:

- larger buttons
- high contrast displays
- text-to-speech functionality
- haptic feedback (i.e. a physical confirmation when buttons are pressed such as a click or vibration)

All energy suppliers should offer an AIHD to any consumer who needs one. Ensuring that everyone who would benefit from access to an AIHD has one is vital to ensure that the smart meter rollout remains inclusive and accessible to as many consumers as possible.

Our research shows that AIHDs aren't reaching everyone who needs one.

Around 3 in 10 (28%) smart meter users with health conditions think they'd benefit from an AIHD after being told about them in our research



However less than half (45%) of users who identified as having an impairment were offered an AIHD by their supplier.

People who have had their smart meter installed in the past year were more likely to have been offered an AIHD, with 59% being offered one. This is a notable improvement, though there's still work to be done to ensure AIHDs are offered to all consumers who need them, especially those who had a smart meter installed earlier in the rollout before they were widely available.

Recommendation: Ensure more consumers can access an IHD that meets their needs and are supported by their supplier if things go wrong.

Some consumers haven't accepted a smart meter - while others are left waiting

We also examined the experiences of those who don't yet have a smart meter.

Over a quarter (27%) said their supplier hasn't offered them a smart meter.

1 in 10 (10%) had proactively contacted their supplier about a smart meter installation. Of these, 32% are waiting for an installation, 33% were told they were unable to have one and 24% say their supplier has made no efforts to install one.

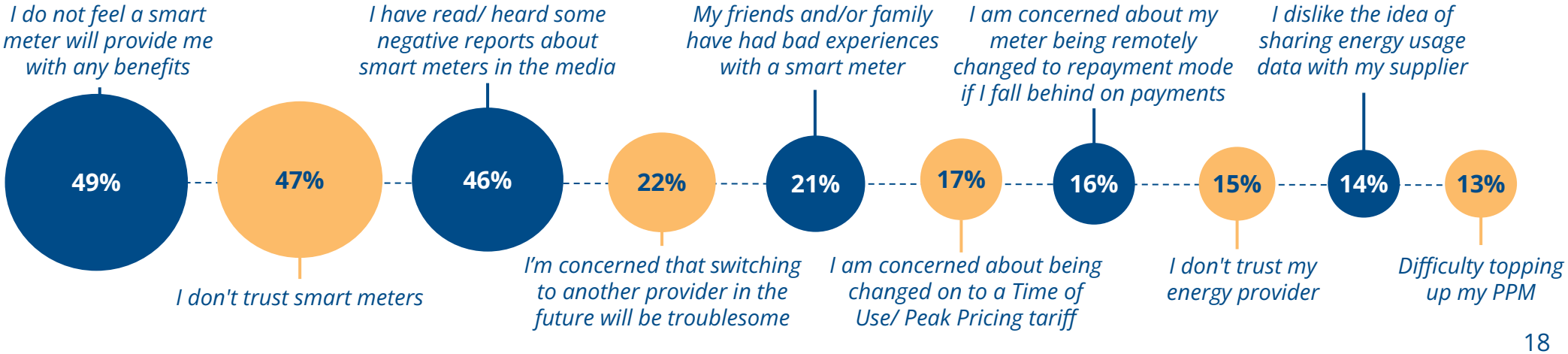
Around half (47%) said their supplier had contacted them about getting a smart meter. Of these, 70% had either not responded or actively rejected the offer, 12% are waiting for an installation and 9% were unable to have one installed.

The most common reasons for not accepting a smart meter are a belief that they won't provide benefits (49%), distrust of the technology (47%) and having heard negative reports about them in the media (46%). Almost a quarter of smart-related contacts to our consumer service are from people who don't want a smart meter.

Over 1 in 5 (22%) of participants who haven't taken up the offer of a smart meter cited concerns about possible problems this could cause when switching energy supplier. Whereas earlier 'SMETS1' smart meters could lose their smart functionality when switching supplier, this issue has significantly improved in recent years.

It's notable that it still remains a significant factor for many consumers, and demonstrates how negative perceptions about smart meters can stick with consumers for the long term. **Today's problems will be tomorrow's reasons for consumer distrust and disengagement.**

Reasons for rejecting a smart meter



Some consumers still want a smart meter - while others are left waiting

In 2023 we saw a notable increase in contacts from consumers worried about smart meters following media coverage of suppliers remotely switching smart meters into prepayment mode for consumers who'd fallen behind on their bills.

Sometimes this occurred without suppliers following appropriate processes to make sure this was a safe way for them to pay.[22] We heard from several consumers who found themselves without power or heat because their smart meter had been switched to prepayment mode without their knowledge and then run out of credit.

Dan's story

Dan has cancer, and returned from a hospital stay to find that his energy supply was off. He called his supplier and learned that his smart meter had been switched to prepay mode. He found a letter about this in a pile by his letterbox. After speaking to his supplier they added a few days of credit but told him he would need to top up after that. He is upset and confused as to what is going on.

Stories like these created understandable anxiety among some consumers, and may reduce take up in coming years. It's vital that Ofgem and energy suppliers show people that tough new rules on involuntary prepayment, introduced in late 2023, are working and that they can have confidence they'll be treated fairly if they fall into debt after having a smart meter installed.

What would help people feel confident in smart meters?

We asked people what information they would need from their energy supplier to make them feel more comfortable about having a smart meter installed.

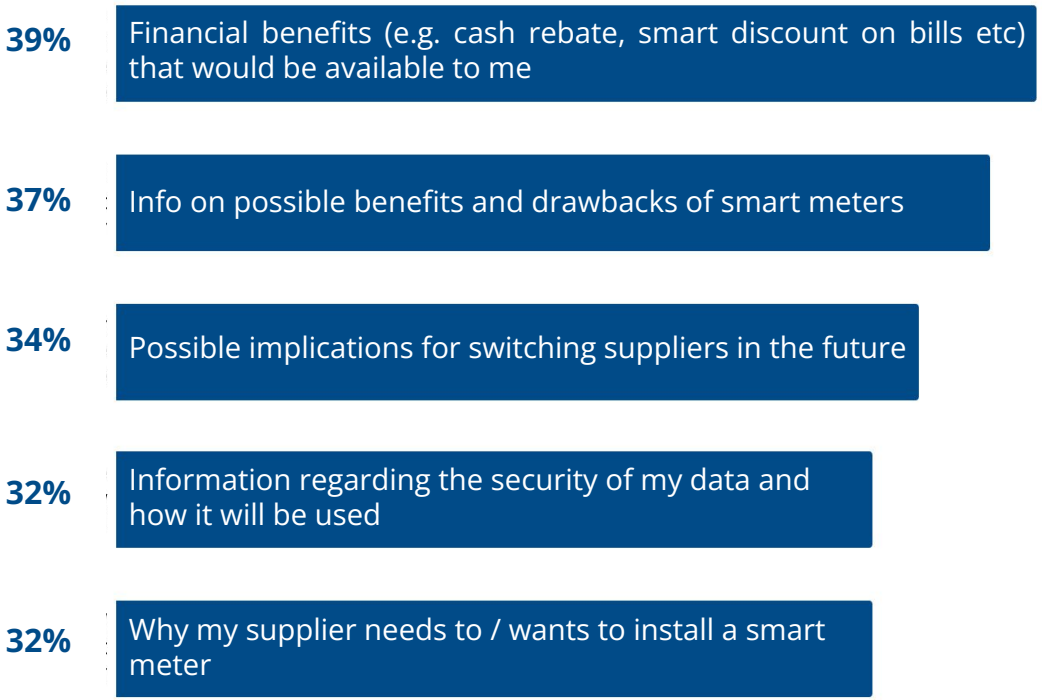
Respondents felt they needed more information about the possible benefits, particularly financial benefits, and drawbacks of having a smart meter. Ideally they wanted benefits to be guaranteed where possible. We've called for energy suppliers to be able to pass a fair share of the financial benefits of smart metering to consumers through the price cap, which is currently the same for all meter types.[23]

This need for more information to make an informed decision mirrors the findings of our Flexible Future report[24] which found that many participants doubted whether the financial reward would be sufficient for them to consider smart products and services

Looking ahead, the energy industry will also need to reassure consumers about the impact of forthcoming reforms to enable more Time of Use pricing, which is a concern for some of those who don't yet have a smart meter. We explored this in more depth in our recent report, Don't settle for second best.

Some consumers still want a smart meter - while others are left waiting

Information needed to feel comfortable with a smart meter



Control over how data from their smart meter is used continues to be an important trust factor for many consumers. While we expect more consumers to opt-in to flexible Time of Use tariffs, which will require half-hourly consumption data to be collected in future, our research found that the majority of consumers across all demographics still consider the ability to opt-out of sharing their smart data to be an important protection to increase trust and confidence to engage with smart..

This was particularly high (88%) for those who are actively using smart products and services and also higher among those who are younger, live in urban areas and are on prepayment.[27] Consumers who don't yet have a smart meter are also 15% more likely to view the ability to opt out of detailed data sharing as important than those who have a smart meter.

This aligns with our previous Clear and In Control research from 2019 which examined consumer attitudes to smart data in great depth[28], and shows that the ability to make choices about sharing smart data remains important to reassure consumers to trust and engage with smart meters and the products and services they enable.

Some consumers still want a smart meter - while others are left waiting

Some people we spoke to wanted a smart meter but didn't have one yet. **Of those without a smart meter, 16% were waiting for an installation visit and 13% were unable to have one installed.** Some consumers are told a smart meter will not work at their property, with many being left unclear as to the reasons for this, whether they can have on in the future, and what they can do next.

Our research suggests that there is still untapped demand for meters, particularly among some specific groups.

Among those who don't yet have a smart meter, the people from some groups with high take up - including older people, those in non-urban areas and homeowners - are more likely to object to an installation.[29] While younger consumers in the private rented sector are among the least likely to currently have a smart meter[30], they are more likely to accept one if given the opportunity.[31]

This shows smart meter uptake could be improved by targeting those groups with organic demand, even if these installations may be more challenging due to building types, locations and access rather than targeting those whose installations will be easiest.

We also know that renters can face additional barriers, such as landlords preventing them from getting smart meters. We've previously called for more to be done to enable tenants to manage their energy and access the benefits of smart meters.[32]

Rachel's story

Rachel requested a smart meter so they can participate in a Time of Use tariff trial. Rachel has been told they need an aerial fitted to make it work. They asked their landlord's permission but are struggling to get information about where the aerial will go, how big it is and how much work is needed. Rachel was sent some documents about the aerial but they are very technical and hard to understand. Rachel's also been told they can only have an aerial if it will also connect enough of their neighbours as well, and that it may not work at all.

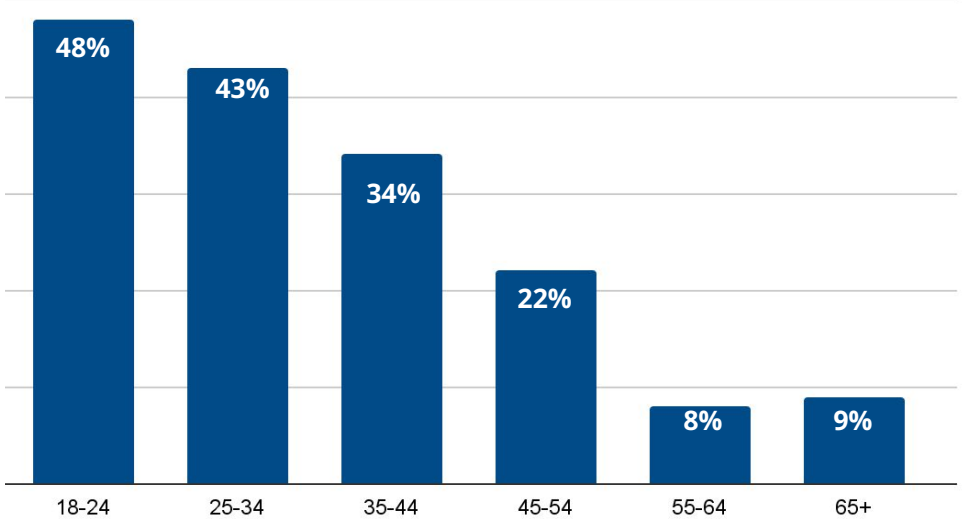
Recommendation: Use new protections to reassure consumers that smart meters will work effectively, and tackle the barriers that put people off accepting a meter or prevent them having one altogether

Smart meter experiences impact appetite for smart-enabled services

Throughout this report we have highlighted that much of the value of smart metering is found in the new products and services it enables. If consumers simply get a smart meter, but make limited use of it, most of the potential consumer and decarbonisation benefits will not be realised.

Currently **one in four (26%) people with a smart meter have accessed new products or services**, such as smart thermostats, energy management apps, and Time of Use tariffs. Such products have increased in popularity since 2018 when only 7% of respondents cited smart enabled products and services as a reason to get a smart meter.[33] People who have accessed new products and services are more likely to be younger, live in urban areas, and have a prepayment meter.

Use of new products and services by age group



Use of new products and services by payment method

Use of new products and services by living area

Consumers who are dissatisfied with their smart meter experience are less likely to engage with new products and services:

- Of people who are happy with their smart meter, 1 in 4 (27%) accessed new products and services, compared to 1 in 5 people (18%) who are unhappy.
- 1 in 3 (28%) people who were happy with their smart meter installation accessed new products and services, compared to just 1 in 10 (11%) people who were unhappy with the installation process.

This suggests that improving the consumer experience of smart metering will also improve consumer confidence to use these products and services in future.

How to deliver better outcomes and improve access to smart meters

When smart metering equipment works as expected consumers are generally happy, their interest in accessing smart-enabled products and services increases and the benefits of smart metering - including saving money and carbon - can be realised.

But too many consumers are struggling with smart metering equipment that doesn't consistently work for them, with a lack of clarity about the root cause or how to get the problem fixed. Current protections can leave consumers with little recourse to get problems fixed, or even find out where the issue lies.

These problems are having significant knock-on effects for the wider reputation of smart metering. Those who say they do not want a smart meter consistently cite concerns about them not working and benefits not being delivered, with similar narratives emerging in the media.

We've identified four key recommendations to tackle these challenges.

1. Guaranteed Standards for smart meters

There are currently strong incentives on energy suppliers to install smart meters, but fewer to ensure that smart metering equipment consistently works for consumers.

Guaranteed Standards set certain minimum performance measures for suppliers in areas like keeping appointments and fixing meters (though this does not currently extend to smart functionality). If suppliers don't meet these standards, affected consumers are automatically compensated.

We think the Guaranteed Standards should be extended to cover key areas which are driving consumer dissatisfaction with smart meters and require suppliers to:

- Ensure that smart meters are commissioned and working promptly after installation
- Promptly identify issues with non-functioning smart metering equipment, keep consumers updated on how and when issues will be resolved and to do so within reasonable time frames
- Use meter readings they receive from smart meters

These rules should mean suppliers fix issues more promptly when smart metering equipment doesn't work as it should, and provide reassurance to consumers that their problems will be addressed.

2. Better protections against shock bills

Current 'back-billing' rules protect consumers from being charged for energy used over a year ago, if the supplier is at fault for not providing an accurate bill earlier. This threshold was designed when most consumers had traditional-style energy meters and suppliers relied on manual meter reads to generate a bill.

Smart meters' ability to remotely send meter readings mean that it is no longer proportionate for energy suppliers to back-bill up to a year's worth of usage. Reducing this allowable time period to six months would incentivise suppliers to ensure smart meters are functioning properly and to proactively inform people if they need to provide manual meter readings in the interim.

We recognise that Guaranteed Standards may take some time to implement, and some may need to consider issues of accountability between suppliers and the DCC. In contrast, back billing protections could be applied relatively quickly and comprehensively.

This change would significantly reduce the impact on consumer finances that shock bills can have for millions of households. The current threshold of one year's usage offers much less protection in real terms following price rises over recent years.

Providing stronger consumer protections is also likely to help incentivise take up of smart meters by consumers who have been reluctant so far, by providing a 'guarantee' of more accurate bills.

3. Ensuring access to a working In Home Display

Our research shows the ongoing value of IHDs to many consumers - but current rules mean that suppliers are only required to replace faulty or broken IHDs in the first year after their installation.

We have already worked with the Government to take some early steps toward addressing this protection gap through the recently published IHD Voluntary Replacement Principles.[34] These set out clear expectations on suppliers to fix issues with IHDs and offer consumers the ability to access replacement IHDs (though in some cases this may incur a cost).

The majority of suppliers have now agreed to follow these principles, however, as they are voluntary not every household is protected. Performance against these new voluntary rules will need to be closely monitored to ensure that consumers are receiving a consistent experience and that all suppliers are following them appropriately. The Government should set a clear timeline for remaining energy suppliers to sign up before it consults on making these rules mandatory.

4. Tackling the 'accountability gap'

We want to see more transparent monitoring and reporting on the performance of the smart metering ecosystem, including the proportion of meters and IHDs which are not working properly, the performance of the wireless network, and supplier reporting on how well they're addressing issues with smart meters.

Ofgem should also use the new DCC price control to improve arrangements between suppliers and the DCC, and ensure the DCC can be held accountable for smart meter problems that are its responsibility. This should include arrangements for suppliers to reclaim compensation payments from the DCC where it is at fault for issues.

The future of the smart meter rollout

Smart meters are an essential prerequisite to access new energy services, and maximise benefits from low carbon technologies like EVs and microgeneration. Market reforms also mean people without smart meters are increasingly likely to face higher costs. It's vital that people who want and need smart meters should be able to access them in a timely way. There also needs to be a clear plan for protecting people who can't have a smart meter from unfair costs.

The current rollout framework ends next year. We want to see an ambitious new approach from 2026 that ensures access to smart meters for all consumers who want them and tackles barriers to uptake, particularly those affecting vulnerable consumers and in the private rented sector. We also want to see accelerated progress in ensuring that people who prepay for energy have access to smart meters. Traditional prepay delivers a much worse service and extra risks for people who can't afford to top up.

There will also be new challenges - for example the need to replace the components of many smart meters in the coming years following the decision to switch off the 2G and 3G mobile frequencies that many meters rely on. It's vital that suppliers are also able to keep smart metering equipment fully working for consumers while managing these operational challenges.

Problems today risk tainting the reputation of smart meters, and the products and services they enable, long into the future. It's important to act now to shore up consumer confidence by providing stronger guarantees of a good smart meter experience.

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