



Don't settle for second best

Ensuring energy market reforms stack up for people

Executive summary

As the move to a net zero power system gathers pace, households and businesses will be able to **cut costs by using energy at times when renewable generation is abundant and cheap**. This flexible energy usage will also save money by reducing the amount spent on expensive generation and grid reinforcements to meet peaks in demand, and help integrate new technologies like electric vehicles and batteries.

To achieve this, billions of pounds have been invested into market reforms and infrastructure like smart metering that can help unlock domestic flexibility. Marketwide Half Hourly Settlement (MHHS) is one such reform, and will incentivise suppliers to develop smart products and services for their customers. But we're worried that the benefits of these reforms won't be maximised without action to make them work better for people.

Risks that some consumers on default tariffs may face unfair price rises need to be tackled. Insufficient targeted bill support means that low income consumers could be at extra risk. A sluggish smart meter rollout means a significant number of households across the country can't use smart energy products if they wanted to. And more needs to be done to increase innovation alongside appropriate protections that mean a wide range of consumers are confident to engage - not just the most affluent households.

The next two years will be critical to ensure everything is in place for people across the country to benefit from a net zero electricity system. This paper lays out a set of measures to ensure that happens.

Recommendations

- 1 **Policymakers should tackle risks that could mean people on default tariffs face significant cost increases**, and ensure EV users pay their fair share
- 2 **Introduce a tiered Warm Home Discount** that provides bill discounts to more people on low incomes, with support tailored to energy needs
- 3 **Reset ambition on smart metering** with a renewed policy framework for delivery post-2025
- 4 **Upgrade consumer protections**, by introducing a Consumer Duty for energy retailers and closing protection gaps for firms selling other energy products such as flexibility services
- 5 **Reform retail market rules** that prevent the emergence of new energy supply models, to deliver better choices and ensure fair competition

Introduction

As we move to a net zero power system, **the nature of how we generate, consume and pay for our electricity will change significantly**. At Citizens Advice, we welcome this progress as it can lower household energy bills for good, and reduce households' exposure to volatile gas prices.

Whilst these changes can lead to lower costs overall, there are open questions about how these cost savings are shared between different types of consumers. We want to explore how this could impact households, what factors drive these impacts, and how the Government can **make sure as many people as possible feel the benefits of a net zero power system**.

This discussion paper is intended to provoke debate on how these impacts can be addressed. We would welcome challenges to the ideas it contains. It forms part of a series of papers looking at the future of the retail market:

Future fantastic?

Exploring how the retail market might be rebuilt following the energy price crisis

Balancing act

Exploring the impacts of rebalancing policy costs from electricity to gas bills

Ripping off the band-aids

Exploring the benefits of more specialised energy services and the future of the universal service obligation

Our energy system is changing

Over the last few years, households around the country have felt firsthand the cost of the UK's reliance on burning gas for electricity and heating our homes. Moving to a net zero power system presents a vital opportunity to end our exposure to these volatile prices. But it will also bring its own challenges, as a system with lots of renewables behaves very differently to how power systems have in the past. While some of these changes may seem far-removed from consumers, they will ultimately end up shaping the types of products that suppliers offer households, and affect which consumers are likely to benefit the most from the move to net zero.

More periods where electricity is very cheap

Renewable generation like wind and solar has incredibly low running costs, as they don't have to pay to buy expensive fuel like gas generation does. Currently, this isn't fully reflected in wholesale prices, because the most expensive generator that influences the price consumers pay for electricity is often gas. But as more renewable capacity is built, there will be longer and longer periods when wholesale electricity prices are very low, or even negative. This means that during periods with very high levels of wind, or during the middle of the day when it's sunny, you could expect situations where people might even end up receiving money to use electricity.

Larger differences between low-cost and high-cost periods

While renewables will be the backbone of a net zero power system, there will be a need for low-carbon flexible technologies that can take over the role of gas in providing flexibility in today's power system. At least in the short to medium term, these will be at a similar cost or potentially more expensive than gas generation is today, meaning that we can expect to have large variations between periods of very low wholesale prices when renewables are dominating the system, and periods of very high wholesale prices when back-up technologies are required.

Increasing uptake of low carbon technologies

As more and more people choose to install low carbon technologies, households are becoming a more active part of the energy system. Amid high energy prices, last year saw almost 190,000 certified solar panel installations across the UK.¹ Other technologies like electric vehicles and heat pumps require large amounts of electricity compared to other household appliances, but when combined with smart technology allow people to be more flexible with when they use them. This means that a larger amount of consumer electricity demand will become flexible as uptake of these technologies increases.

Potential for more local variations in prices

As part of the Review of Electricity Market Arrangements (REMA), Government is looking at different reform options that could mean that wholesale electricity prices vary by location.² This is being considered as a tool to reduce the costs of managing constraints on the network - when power can't be transported safely to where it is needed.

In today's market, whilst consumers in different regions see variations in their bills mainly due to network costs, the prices in wholesale markets are the same nationally. If these reforms are taken forward, depending on how they are implemented they could see people paying more or less at different times depending on where they live. We looked at this in more detail our paper [It's all about location](#).

What this means for different consumers

Over the last few years, households around the country have felt firsthand the cost of the UK's reliance on burning gas for electricity and heating our homes.

Moving to a net zero power system presents a vital opportunity to end our exposure to these volatile prices. But it will also bring its own challenges, as a system with lots of renewables behaves very differently to how power systems have in the past.

There are other reforms underway that may incentivise more innovation around ToU tariffs. From November, aggregators (companies that operate and manage a portfolio of flexible resources) will be able to participate in wholesale electricity markets, alongside suppliers.⁴ This will expose suppliers to greater competition in offering new products and services to consumers.

2024

Aggregators can participate in wholesale markets, alongside suppliers

2025

Domestic smart meter rollout planned to be at least 75% complete

2026

Marketwide Half Hourly Settlement is due to be implemented

2027

38% of new vehicles sold must be zero emissions

2028

Target for 600,000 heat pumps to be installed each year

2030

Target for 50 GW Offshore wind

How suppliers are charged for electricity will change

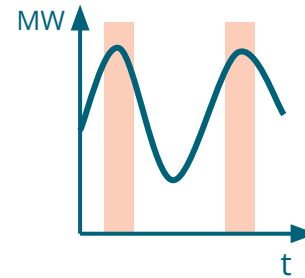
It's not just the wholesale electricity market that is changing - there are major reforms coming in the next few years that will change how electricity suppliers get charged for the electricity that their customers use. That's because in December 2026 the retail market will move to something called **Marketwide Half-Hourly Settlement (MHHS)**.

In today's arrangements, most domestic and small business consumers are charged for their electricity usage based on a handful of meter readings per year. In between, suppliers use average consumption profiles to estimate how much their customers are using. Over time these estimates are compared against validated readings, and supplier costs are adjusted to ensure they end up being accurate overall.

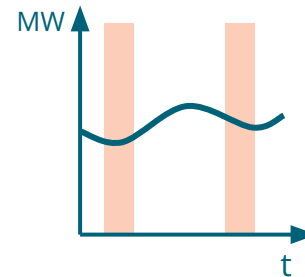
Under MHHS, all customers will be settled on a half-hourly basis. This means that a supplier can be accurately charged for the electricity they have supplied to their customer, according to exactly when that electricity was used in each part of every day. There are some immediate benefits to this in the form of making the process for settlement shorter and more efficient, with less need to adjust suppliers' costs over time. But there are larger impacts as well, which will likely reshape the retail electricity market.

It reveals the costs of supplying different customers

In today's world, imagine two different households that each use the same amount of electricity over a day, but in different ways:



Customer 1 uses a large amount of electricity at peak times (periods where there is large amounts of demand compared to the amount of low-cost supply available)



Customer 2 has more steady usage throughout the day

Under the current system, suppliers don't see any difference between these customers. They are charged the same amount of money for their energy, when in actual fact customer 1 is using more energy at peak times when the cost to the overall system is highest.

MHHS will mean that suppliers would have **a much clearer picture of how expensive different customers are to supply** with electricity.

It provides a strong incentive for suppliers to offer smart Time of Use (ToU) tariffs

MHHS should incentivise suppliers to offer new products and services to customers, including smart ToU tariffs. While ToU tariffs using traditional meters have existed for a long time³, smart metering and MHHS allows suppliers to offer a wider range of ToU tariffs based on a consumer's actual consumption in real time. This can provide benefits to people, and lower the overall cost of transitioning to a net zero power system.

Incentive to offer ToU

Removes operational barriers to offering more ToU tariffs

What happens today..

Some suppliers already offer smart ToU tariffs, but to do so their billing systems will need to be properly configured. As it stands, some suppliers might not see it as worth the effort to establish systems to handle half-hourly data if they are only used to serve a niche customer segment

Suppliers can manage risk better if their customers are on ToU tariffs

When a supplier sets the price of a single-rate tariff today, they are having to make assumptions about how much energy a typical customer will use, and when they use it. In today's world, if these assumptions are wrong and the typical customer is 'peakier' than expected, the risk to the supplier isn't too high. This is because the difference in cost is recovered through charges that are spread across all suppliers.

... and how MHHS will change this

Under MHHS, all suppliers will be required to use the half hourly settlement system, so this barrier to offering smart ToU tariffs won't exist.

Imbalances won't be spread across all suppliers in the same way. Instead, half-hourly data will mean that suppliers have to pay for electricity according to when their customers are using it. This means that suppliers will be exposed to greater risk if they offer single-rate tariffs but their customers use more power at peak times than expected. They can manage this risk better through offering smart ToU tariffs, as the higher cost of using electricity at peak times is reflected in the tariff.

This will result in new impacts on the retail electricity market

We welcome the innovation that MHHS should deliver, as it will mean consumers save money and have access to new types of tariffs. But **without further reforms, we'll fail to maximise these benefits and new risks may emerge.**

As in today's markets, people who engage with the market can see financial benefits - and these can be expected to grow in future. But what will this mean for other consumers who are not engaged? Let's examine in more detail what the possible impacts of these new market arrangements could be.

Lower overall system costs deliver benefits to all - with largest benefits going to those who can be flexible

First of all, it's important to remember that a household shifting demand away from peak times has the impact of lowering costs for everyone - although the main beneficiary will be the customer themselves. By more closely matching demand with the level of cheaper renewable supply that is available at any point in time, flexibility reduces the need to spend money on more expensive generation like gas, or long-duration energy storage, that would be needed when renewable output was lower. It can also reduce the size of peaks in demand, for example if people charge their EVs overnight rather than at 5pm. This reduces the need to reinforce our electricity networks, which is a cost that is spread across all consumers.

Some of these benefits (like avoiding constraint payments and reducing the use of more expensive generators) would be felt immediately, whereas others will take longer to materialise. This is because network reinforcement plans are significant infrastructure decisions with long lead times, the costs of which are spread across the 45 year lifetime of the asset.

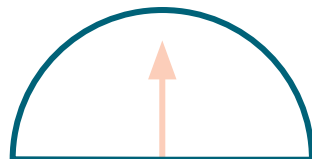
But as more people move away from single-rate tariffs, those who are left could be facing higher costs

The prices of single-rate tariffs offered by suppliers today are determined based on average daily consumption profiles. This is probably a fair assumption, as the majority of households are on single rate tariffs. Under MHHS, this could change: people who already use less at peak times - or can be flexible in response to prices - are likely to switch toward ToU tariffs as they stand to benefit financially. This would leave 'peakier' consumers making up a larger share of customers who still want single rate tariffs. This would have the impact of increasing the cost of single rate tariffs, as suppliers would be exposed to the higher cost of supplying electricity to these customers under MHHS.

This impact could be even greater if some customers with low carbon technologies, such as Electric Vehicles (EVs), choose to remain on single rate tariffs and use these technologies at peak times. **It's unclear how long it could take for these potential cost increases on single rate tariffs to occur.**

Pre-MHHS: Spectrum of consumers on single-rate tariffs

Cost of single rate tariff reflects average consumption profiles



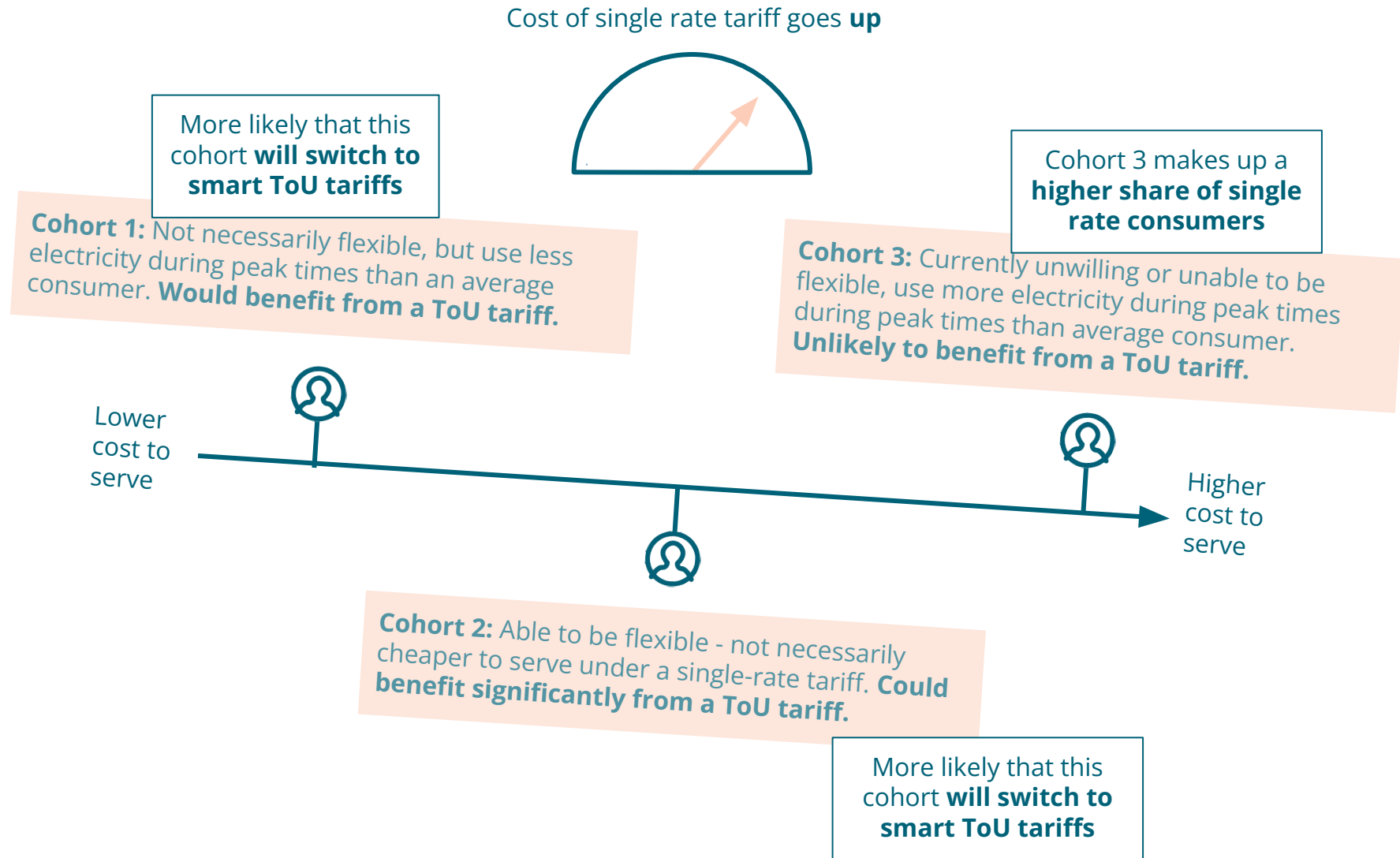
Cohort 1: Not necessarily flexible, but use less electricity during peak times than average consumer. **Would benefit from a ToU tariff.**

Cohort 3: Currently unwilling or unable to be flexible, use more electricity during peak times than an average consumer. **Unlikely to benefit from a ToU tariff.**



Cohort 2: Able to be flexible - not necessarily cheaper to serve under a single-rate tariff. **Could benefit significantly from a ToU tariff.**

Post-MHHS: Likely impact on single-rate tariffs



People's ability to be flexible isn't evenly or fairly distributed

In financial terms, the people who are likely to benefit the most from switching to a time-of-use product are those who have large but flexible electricity demand. For the next few years, this is much more likely to be people who are more affluent, because of the relatively high cost of electric vehicles, heat pumps and solar PV systems. Many of these consumers may already be using a tariff like this today, but could likely benefit from a bigger range of products and services once MHHS is implemented.

For households without large levels of demand, such as consumers with gas central heating, they may not be able to benefit as significantly from being on a time-of-use product, but nor will they see especially large penalties for not changing their usage.⁵

Meanwhile, people with large and inflexible demand, such as those who require electricity to operate medical equipment in the home could be among those worst affected by a move to more cost-reflective pricing.

Beyond this, there will also be certain groups who are less likely to be able to be flexible.

Renters typically can't make changes to the major appliances or heating systems in their homes, and may be unable to have a smart meter if their landlord controls their supply and doesn't consent.

People living in flats may be unable to have flexible heating technologies installed in their homes, and could be unable to charge their EV at home.

Digitally disadvantaged people may not be able to use smart technology to optimise demand, use online switching services or access the best deals.⁶

Maximising benefits for all from electricity system reform

The changes underway in our energy system will help to keep down bills and help us meet our net zero goals. But the benefits of these reforms could be undermined without supporting action to tackle key risks and make them work for a broad range of consumers.

The rest of the paper draws out the key elements that will be needed to make sure that the future of the retail market delivers fair outcomes for all consumers.

We focus on five areas in particular where action is needed to make the future retail market a fair one:

How default tariffs work

Improving targeted bill support

Access to smart meters

Increasing consumer confidence

Improving consumer choice and enabling innovation

What does a default tariff look like under MHHS?

Default tariffs are already a very contentious topic, with the price cap setting the maximum that suppliers can charge for a default tariff. These were introduced to tackle the loyalty penalty and drive more efficient outcomes from suppliers. However, MHHS will make default arrangements more complex, and it's likely that the design of default tariffs and the price cap will need to adapt.

In '[Ripping off the band aids](#)' we laid out five key factors that shape the design and price of a default tariff product: price certainty, payment method, levels of debt support and customer service, and whether it contains a time of use element. In this paper we'll focus in more detail on time of use.

For most people today, the default tariff charges a single rate.⁷ For the reasons laid out in the previous section, these products could become more expensive overall, if less 'peaky' and more flexible consumers move onto time of use tariffs. This would be exacerbated if some higher-demand consumers, who are unwilling to be flexible, use the default tariff as a way of avoiding paying a cost-reflective price for their energy usage.

Introducing a time-of-use element to some or all default tariffs would help mitigate this risk and lower their overall cost. It could also maximise demand side response in the market. It could also protect consumers who roll off fixed term time of use contracts from unwittingly paying higher prices.

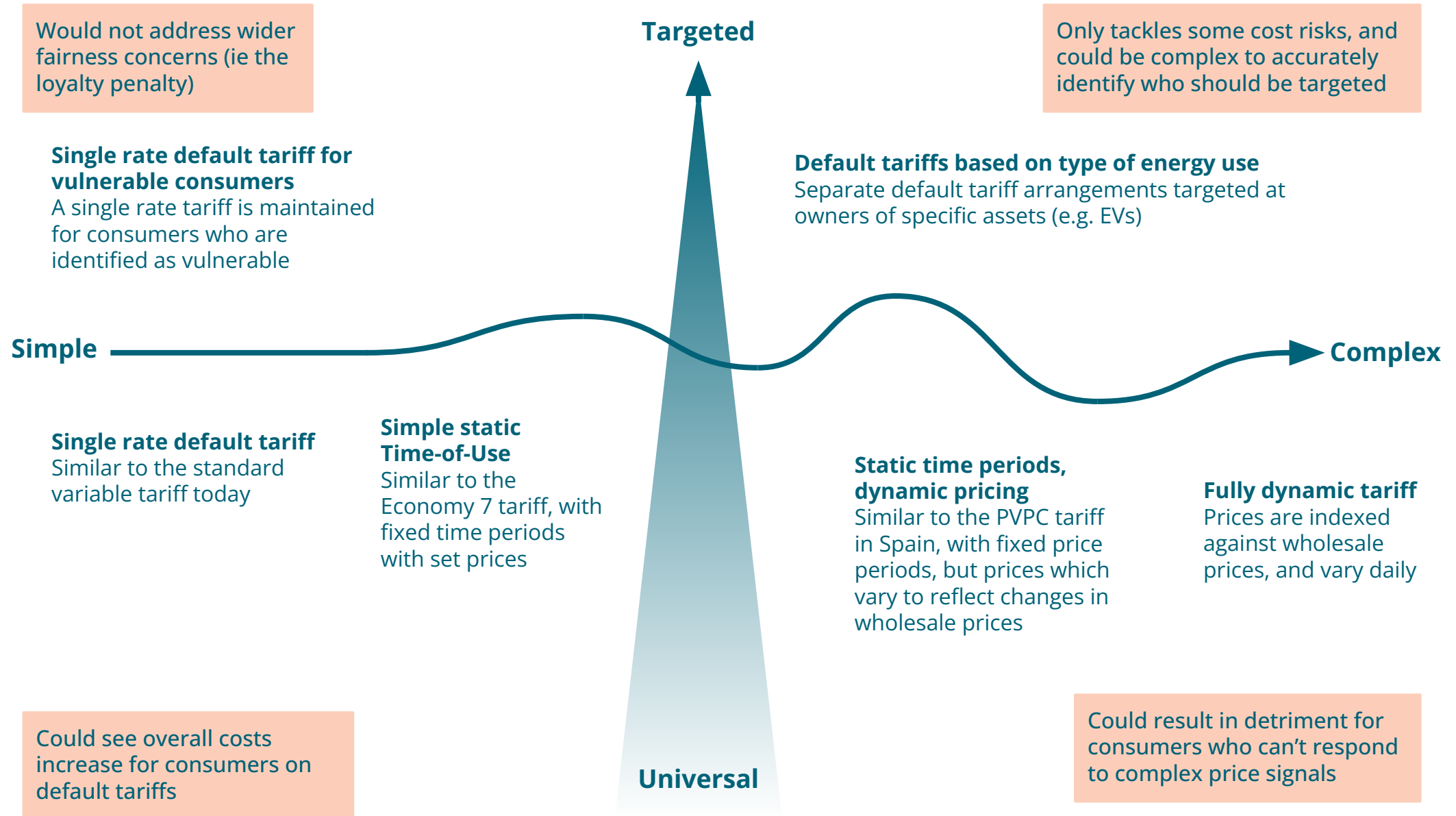
However, it would be a significant change from current arrangements that could be confusing for some consumers, and could result in higher costs for some households who need to use energy at peak times. We set out the various options and risks on the next page.

Alongside changes to default tariff design, Ofgem is also considering reforms to price protection. The current price cap is based on identifying a level of efficient costs which suppliers are able to pass onto their customers. But as more people adopt low-carbon technologies and engage with smart ToU products, the cost of supplying different customers will diverge.

If a supplier ends up with a larger number of disengaged customers who use energy at peak times, they could end up facing significant cost pressures. Without reform, Ofgem would need to increase the price cap to account for these risks, which would reduce the level of protection it provides to consumers on these tariffs.

We don't focus on price protection in this paper, but there are approaches which can apply to each of the different default arrangements which we consider. Overall we think it's important that price protection evolves while continuing to offer safeguards against the loyalty penalty.

Key options and challenges of default tariff reform



Risks of adopting a time of use default tariff

Rising prices for single rate default tariffs could cause harm for consumers on low incomes, and increase energy rationing that we already see today.

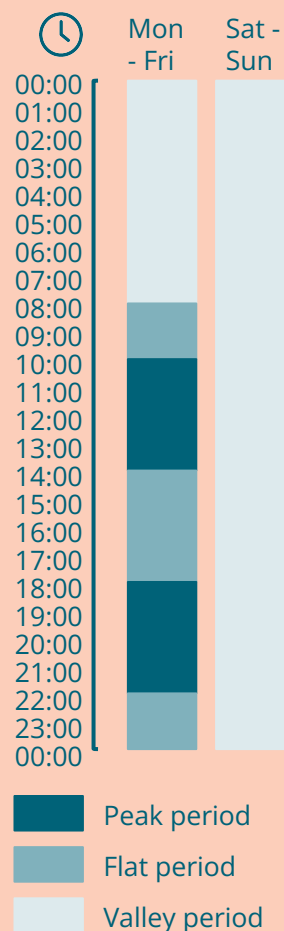
However, while moving towards time of use default tariff would result in lower costs overall, some vulnerable consumers on low incomes who use large amounts of electricity at peak times could see higher bills that they may not be able to manage.

A widespread shift to more cost-reflective pricing could incentivise behaviour change that has harmful consequences for people. For example, a time-of-use tariff could see consumers choose to go without heating or using medical equipment in order to avoid using electricity during peak time periods. These risks grow if default tariffs become more complex or have greater disparity in prices between time periods.

Targeted bill support could help address these risks, by improving the underlying affordability of energy for consumers on low incomes. As an example, the Spanish retail market has a time-of-use tariff as the default electricity tariff, but it was only implemented after a bill support mechanism was established.

The Spanish retail market - a very different default tariff

In 2021, Spain implemented a single regulated tariff for domestic customers known as the Voluntary Price for Small Consumers or PVPC. Instead of being a single rate tariff, the PVPC has three consumption periods.⁸



The exact costs during each of the periods is calculated in a dynamic way in reference to the day ahead electricity price. This caused significant price volatility in recent years, resulting in many consumers switching away from the default tariff in search of fixed prices.⁹

In light of this, from 2024 the price is also determined by future electricity prices as well as the more volatile day ahead price.¹⁰

Households have to be signed up to the PVPC in order to be eligible for the Social Electricity Bonus - a form of bill support that provides discounts of between 25-80% to consumers on low-incomes or in vulnerable circumstances.¹¹

Default tariffs for specific types of energy usage

Another option would be to have a separate default tariff for users of specific assets - for example EVs, or other low carbon technologies like heat pumps.¹²

This would make sure that people who own such assets are properly incentivised to use them flexibly, and reduce the risks of consumers in vulnerable circumstances being unfairly penalised for consuming energy at specific times.

Focuses more granular time-of-use signals on consumers who can respond to them. Consumers with flexible assets with large electricity consumption are more easily able to manage their exposure to price signals.

Avoids assets dropping onto unfavourable contracts at the end of product-specific contracts. Under current default arrangements, a user with an EV might see their bills go up at the end of a contract.

Prevents costs of charging large flexible assets being spread across all consumers. Default arrangements that pass through more of the real cost ensure that EV users pay their fair share.

However, over time a broader range of consumers - including increasing numbers of vulnerable consumers - will adopt these technologies and would become subject to the ToU default.

This approach also doesn't tackle the risk that the cost of single rate tariffs rise because people with less 'peaky' usage are disproportionately likely to move onto smart ToU products.

There are also challenges in the deliverability of a targeted default tariff. Targeting based on overall energy usage may result in people being unintentionally forced onto such a tariff (eg those with traditional electric heating or medical equipment). Using smart meter data to identify types of usage, could be deemed unacceptably invasive.

Smart meters underpin options for default tariff reform

Consumers are able to refuse a smart meter if they don't want one, and can opt-out of sharing the data needed for ToU tariffs to work. This could act as a loophole for users who want to avoid defaults that reflect the real cost of their energy usage.

It may be necessary put in place a requirement for certain users - such as people charging EVs - to have a smart meter installed. There could also be a separate default tariff for non-smart meters, which would likely have higher costs. This would act as an incentive to have a smart meter installed, but could also end up penalising some consumers in vulnerable circumstances, or those who are unable to install a smart meter in their home.

There are real risks for default tariff users - but the scale and speed at which they may develop remains unclear. This makes choosing optimal reform options challenging.

Recommendation

Policymakers should tackle risks that could mean people on default tariffs face significant cost increases, and ensure EV users pay their fair share

Targeted bill support can minimise risks

Pushing forward with these changes to the electricity system will make electricity bills more cost-reflective. While many people will benefit, there is also the risk of some households losing out, and a larger variation in costs between winners and losers.

Following the invasion of Ukraine, energy bills are already unaffordable for millions of households. The more recent reduction in prices from their peak is welcome, but they remain significantly higher than historic norms, and energy debt has reached record levels.

Infrastructure investment in the coming years is likely to put upward pressure on energy bills, and while MHHS will make energy more affordable for some consumers, others risk facing higher prices.

Similar issues will arise if energy policy costs - which are currently recovered via electricity bills - are rebalanced so that a greater proportion is recovered via gas instead. This would benefit those who use electric heat, but increase bills for those with high gas usage. We explored these issues in our paper, [Balancing Act](#).

For these changes to be implemented fairly there has to be a proper system in place for protecting low income consumers.

The best way to achieve this is to provide targeted bill support. Our recent '[Shock Proof](#)' paper outlined how the Warm Home Discount could be reformed to provide this support.

This would provide payments to a wider range of low income households and be more generous, with payments that are better tailored to their energy needs. It would maintain incentives for recipients to engage with the market and take up ToU tariffs where they would benefit from doing so.

Maintaining public support for the transition to a more flexible power system will be key to its long-term success. Targeted bill support can offset the rising cost of single rate tariffs for those most at risk, and make variations in costs between different consumers more socially acceptable.

It must be accompanied by improved energy efficiency schemes to help bring down overall bills for those in inefficient homes, and adequate support to adopt low carbon technologies like heat pumps.

Recommendation

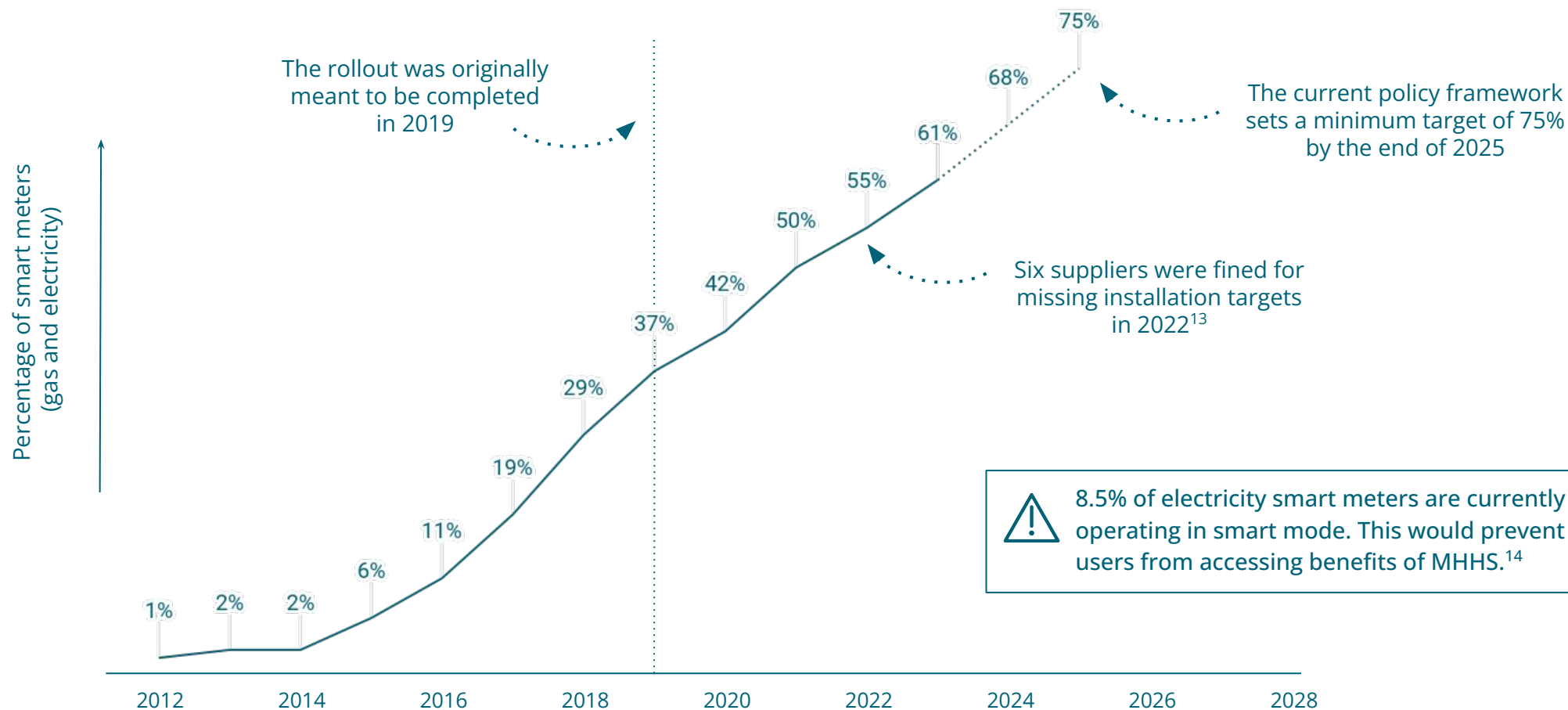
Introduce a tiered Warm Home Discount that provides bill discounts to more people on low incomes, with support tailored to energy needs

Ensuring access to smart meters

To take advantage of new products and services consumers will need to have a working smart meter - but the rollout has been slow and around a quarter of meters still won't be smart by the end of 2025.



There is currently no framework for smart meter delivery beyond 2025.



8.5% of electricity smart meters are currently not operating in smart mode. This would prevent users from accessing benefits of MHHS.¹⁴

Smart meters are vital for consumers to benefit from MHHS

Achieving ~75% smart meter rollout by the end of 2025 will be sufficient to settle all electricity consumption more accurately, as the new system will enable better energy 'profiles' to be used for the minority of consumers without smart meters.

However, people without smart meters won't be able to directly benefit by using the smart products and tariffs that MHHS enables or by using energy flexibly. They may even be at risk of higher costs if the price of single rate tariffs increases. These opportunities and costs may increase appetite for getting a smart meter among some of those who haven't so far.

The take up of smart meters differs significantly by demographic. Homeowners, older people and those on high incomes are more likely to have smart meters, while private renters, younger people and those on lower incomes are less likely to do so. Overcoming barriers to smart meter installation - particularly in the private rented sector - should be a priority to enable the benefits of MHHS to be accessed fairly across society.

Our forthcoming research also shows that there are still significant numbers of households that are interested in having a smart meter installed but have been unable to get one.¹⁵ This can be for a variety of reasons - their energy supplier might not have sufficient installers in a particular region, there may be poor network coverage or there may be unforeseen complications on the day of the installation.

There are also some people who are concerned about the smart meter rollout for a range of reasons, including data privacy, and may perceive them as risking a loss of control due to issues like remote mode switching to prepayment. The transition to MHHS and possible reforms to default tariffs may increase these concerns and create space for misinformation. This is likely to be a communications challenge for the rollout moving forward.

To benefit from new services it's also important that smart meters are operating properly. At the end of 2023 around 8.5% of smart electricity meters were operating in traditional mode. This can already cause a loss of smart services, and once MHHS is introduced it will become even more important that meter issues are resolved promptly to prevent people losing out financially. We will shortly be publishing a detailed report looking at the smart meter rollout.

As it stands, there is no framework for consumers accessing smart meters beyond 2025. Government must develop an ambitious policy framework which tackles the barriers to uptake and ensures that as many people as possible can access smart meters when MHHS is introduced.

Recommendation

The Government should develop an ambitious new smart meter framework from 2026 that tackles barriers to uptake

Increasing consumer confidence in smart products and services

For people to get the most benefit out of these reforms they need to be willing to place trust in new products and services, and able to change the way they use energy. But under current arrangements, there is a risk that many people don't feel ready or able to do so.

People will need to feel confident that the products they choose can work for them, and deliver the outcomes that are promised. It can be difficult for people to successfully compare different smart and ToU tariffs, or understand the value of energy as a service models that include components such as smart-enabled technology or a product maintenance contract. Beyond this, some new providers like aggregators aren't regulated in the same way that suppliers are - this means that people could have considerably less protection if things go wrong.¹⁶

We've called for an upgrade of energy retail regulation based on the FCA's new Consumer Duty, to deliver higher service standards and protections.¹⁷ This would put the onus on firms to focus on real world consumer outcomes. As products become more complex and digitalised, it will help people overcome information asymmetries and force firms to make full use of all available data to understand consumer impacts.

The Smart and Secure Electricity System (SSES) programme is looking to tackle gaps in protections, with the aim of new measures being in place by October 2025 - before MHHS is introduced in December 2026.¹⁸ It is vital that this is able to progress at pace and that any new regulatory frameworks complement a broader Consumer Duty.

Protections to enhance consumer confidence should be accompanied by an information campaign to help households navigate new choices as part of the net zero transition.

This could help to boost people's awareness of the benefits of flexibility. In order to help support people to identify what might work best for them, we see a need for Government to invest in and expand statutory advice that can offer impartial support on topics like smart tariff comparison. This should complement wider national independent net zero advice provision.

More can also be done to identify and tackle barriers that people may face when it comes to engaging with the market and using their energy flexibly, including for renters, those on low incomes and people who are digitally disadvantaged.

Recommendation

Upgrade consumer protections by introducing a Consumer Duty for energy retailers, closing protection gaps for other energy services and improving advice

Improving consumer choice and enabling innovation

MHHS will mean that suppliers can offer a wider range of products and services, while the adoption of new low carbon technologies will mean that people have a wider range of needs. It's clear that in this more complex market getting the best outcomes will rely on people engaging and choosing more tailored products. However, there is a risk that the pace of innovation will be slow if it is reliant on a small number of firms.

'Energy as a service' models could develop which take advantage of MHHS and other reforms and reduce or eliminate the upfront costs of products like heat pumps, in return for managing their home energy as part of a complete service.

These could significantly reduce the financial barriers people on lower and middle incomes face to adopting new technologies, and offer a simpler experience for consumers who are happy to pass more control to firms to deliver certain outcomes.

However, the market is currently dominated by six large energy suppliers, four of which are incumbent firms. While some new services have emerged, particularly from challenger brands, a market of limited size may deliver innovation at a slower pace overall, and delay the benefits of MHHS being achieved.

New entrants could prevent a new oligopoly emerging, spur incumbents to innovate more quickly, and prevent the large challenger brands from entrenching their 'first mover' advantage.

More broadly, current requirements to serve a broad range of consumers also currently limit the ability of suppliers to offer specialised products and services that may meet the needs of specific groups of customers - for example, only serving those with electric vehicles or heat pumps.

There are schemes in place, like Ofgem's 'sandbox', which can enable trials of innovative services, but these may receive less interest and investment from innovators if there are subsequent barriers to commercialising services which are shown to be successful.

Our paper [Ripping Off the Band-Aids](#) set out how the current rules requiring suppliers to serve a broad range of consumers are not achieving their intended outcomes, and are likely to be undermined further as new products and services emerge. We identified options for reform that could deliver better outcomes overall, by enabling more specialised suppliers to emerge while protecting people through measures like a Consumer Duty and default tariff reform.

Firms should be resilient and compete on a level playing field

In 2021 a large number of firms collapsed as energy prices rose, leaving behind costs to consumers of well over £2bn. This was due to lax regulation of new entrants, and exemptions from some rules that allowed rapid, unsustainable growth by allowing them to undercut large and medium sized firms. It's vital that future reforms enable a level playing field for competition and that firms with different customer bases nonetheless pay a fair share of the social costs related to providing energy.

Fair competition also means that energy service providers operating in the energy market should deliver equivalent consumer protections and fair practices - another reason why appropriate regulation of aggregators and intermediaries is vital.

Recommendation

Reform retail market rules that prevent the emergence of new energy services, to deliver better choices for consumers and fair competition



Conclusion

MHHS is just around the corner, and Government and industry are focused on delivering the technical implementation by 2026. But before then, supporting policies have to be put in place to maximise the benefits and ensure they are shared fairly between households, while tackling any emerging risks.

Without action, there is a risk that a move to more cost-reflective pricing could leave some people facing higher costs, or unable to engage to the same extent as other households. **Addressing this is vital to ensure a fair transition, and maintain trust and public support as we move to a flexible net zero power system.**

More broadly, the value to society of implementing these reforms relies on people being able to engage with and respond to new price signals. Retail market reform, if designed well, can help to deliver this, but it cannot be left as an afterthought.

Change is needed in five key areas:

- ① **Default tariff design:** Policymakers should tackle risks that could mean people on default tariffs face significant cost increases, and ensure EV users pay their fair share
- ② **Targeted bill support:** Introduce a tiered Warm Home Discount that provides bill discounts to more people on low incomes, with support tailored to energy needs
- ③ **Smart metering:** The Government should develop an ambitious new smart meter framework from 2026 that tackles barriers to uptake
- ④ **Increase confidence in smart products and services:** Introduce a Consumer Duty for energy retailers and closing protection gaps for other energy services
- ⑤ **Improving consumer choice and enabling innovation:** Reform retail market rules that prevent the emergence of new energy supply models

References and bibliography

1. MCS, [The MCS Data Dashboard](#)
2. Department for Energy Storage and Net Zero (2024), [Review of Electricity Market Arrangements](#)
3. 9% of UK households are on an Economy 7 tariff. This works by metering consumption during two separate periods of each day, but similar to traditional single rate tariffs billing between meter readings has been based on assumed consumption profiles.
4. Elxon, [P415 'Facilitating access to wholesale markets for flexibility dispatched by Virtual Lead Parties'](#)
5. Ofgem (2021) [MHHS Final Impact Assessment](#)
6. Citizens Advice (2022), [Access Denied: Digital disadvantage and exclusion in the energy market](#)
7. In 2022, 9% of households in the UK were on Economy 7 (E7) tariffs, which are simple static time-of-use tariffs with their own price protection. Department for Energy Security and Net Zero (2024), [Annual Domestic Energy Bills, Table 2.2.5](#)
8. Red Eléctrica, [Voluntary price for the small consumer \(PVPC\)](#)
9. Jacint Enrich, Ruoyi Li, Alejandro Mizrahi, Mar Reguant (2023), [Measuring the impact of time-of-use pricing on electricity consumption: Evidence from Spain](#), Journal of Environmental Economics and Management
10. Público (2024), [El cambio que viene este año en la factura de la luz](#)
11. Ibid
12. Department for Energy Security and Net Zero (DESNZ) (2024), [Default energy tariffs for households: call for evidence](#)
13. Ofgem (2023), [Energy suppliers pay a total of £10.8 million for not meeting smart meter installation targets for 2022](#)
14. Department for Energy Security and Net Zero (DESNZ) (2024) [Smart meters in Great Britain, quarterly update December 2023](#)
15. Forthcoming research by Citizens Advice
16. Citizens Advice, ADE and Energy UK (2021), [Demanding attention: Managing risks with demand-side response, to improve consumer experience tomorrow](#)
17. Citizens Advice (2022), [Raising the bar](#)
18. Department for Energy Security and Net Zero (DESNZ) (2023), [Delivering a smart and secure electricity system](#)

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