

# The MCS Foundation's response to Ofgem's consultation: Innovation in the energy retail market

## The MCS Foundation triple

Our vision is to make every UK home carbon-free. The MCS Foundation helps drive positive change to decarbonise homes heat and energy through our work programmes, grants and advocacy. We support engagement programmes, fund research and facilitate innovative solutions to drive widespread adoption of renewables to help achieve a Net Zero future. In addition, the Foundation oversees the [Microgeneration Certification Scheme \(MCS\)](#) which defines, maintains and improves quality standards for renewable energy at buildings scale.

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## Summary

To decarbonise the UK's power sector, as well as support the electrification of heat and transport, there needs to be a rapid rethinking of how we approach energy system management.<sup>1</sup> The GB electricity network will feature thousands, or even millions of distributed energy resources, of which the majority will be renewable energy technologies.<sup>2</sup> Thus, we need to develop innovative approaches to system management, including increased deployment of low-carbon flexibility.

Households have the potential to minimise the strain on the grid by shifting electricity consumption to off-peak times, when there is surplus renewable generation. We currently have around 1.8GW of demand-side response capacity according to the ESO Future Energy Scenarios,<sup>3</sup> but domestic demand-side response is still relatively untapped. Dynamic tariffs - which reward customers for using electricity during off-peak times- have already started to emerge. However, with 81% of customers still on standard variable tariffs,<sup>4</sup> this represents a significant untapped opportunity.

Moving forward, the retail market has the potential to support more domestic flexibility if energy suppliers continue to provide more innovative products that appeal to a wider range of customers. We agree that one potential barrier to innovation is the restrictive routes to market, which could prevent new suppliers participating. We therefore welcome this consultation and support the initial work to address some of these barriers. Ofgem must aim to progress this work efficiently, as we expect these types of products to grow in popularity in parallel with the adoption of more microgeneration technologies.

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<sup>1</sup> <https://www.regen.co.uk/wp-content/uploads/Building-a-GB-electricity-network-ready-for-net-zero.pdf>

<sup>2</sup> <https://www.theccc.org.uk/publication/delivering-a-reliable-decarbonised-power-system/>

<sup>3</sup> <https://www.neso.energy/document/322386/download> p.23

<sup>4</sup> [https://www.ofgem.gov.uk/sites/default/files/2024-10/Innovation\\_in\\_the\\_energy\\_retail\\_market.pdf](https://www.ofgem.gov.uk/sites/default/files/2024-10/Innovation_in_the_energy_retail_market.pdf)

Additionally, The MCS Foundation recognises the potential of retail market innovation to further support the equitable rollout of low-carbon technologies. Encouragingly, some energy suppliers have begun to offer installations of small-scale technologies and have formed partnerships with heat pump installers.<sup>5</sup> These collaborations present a promising opportunity to encourage homeowners to switch to low-carbon heating, by offering lower electricity prices. Furthermore, new models, like Energy as a Service, could help homeowners adopt low-carbon solutions without the associated upfront costs. Thus, we are very supportive of Ofgem's objective to support increased innovation. However, there is a risk that larger energy suppliers could dominate the market, potentially crowding out smaller suppliers and, by extension, smaller installers. This concern is particularly relevant if partnerships between energy suppliers and installers are predominantly formed with large-scale players, leaving smaller businesses and local operators at a disadvantage. Ensuring a balanced market that fosters competition and inclusivity will be crucial to supporting both innovation and the rollout of low-carbon technologies.

Our response primarily focuses on the impact of retail market innovation on domestic consumers of electricity. We will address specific concerns in our responses to the questions.

### **Questions:**

#### **Q1. What innovation is currently happening in the domestic and non-domestic retail markets? What is the scale of this innovation?**

The consultation rightly identifies the growing innovation that is already taking place within the retail market. Specific tariffs tailored to support small-scale renewables, like EV and heat pumps tariffs,<sup>6</sup> are being offered by more suppliers. These are designed to lower the running costs of these technologies and make them more competitive. There are also some dynamic tariffs being offered where customers receive a half-hourly price for their electricity, based on the wholesale market cost. We expect these types of tariffs to become more popular with the launch of the Market-Wide Half Hourly Settlement (MWHS) which will mandate the use of half-hourly consumption data for all electricity consumers, regardless of their meter type.<sup>7</sup>

Furthermore, Octopus Energy aim to build 100,000 'Zero Energy Bill Homes' by 2030 which could guarantee homeowners zero bill for 5 to 10 years.<sup>8</sup> Hedonic modelling has shown that these homes command a higher value in the market by 13.2% on average, which is around £40,000,<sup>9</sup> demonstrating the public demand for this innovative energy contract. We think that these types of initiatives are important in demonstrating the economic benefits of small-scale renewables, which could boost consumer confidence in low-carbon technologies. There is a risk, however, that larger energy suppliers could dominate the market, potentially crowding out smaller suppliers and, by extension, smaller installers. This concern is particularly relevant if partnerships between energy

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<sup>5</sup> <https://www.airahome.com/en-gb/energy-tariffs>

<sup>6</sup> <https://www.ovoenergy.com/heat-pump-plus> ; <https://www.scottishpower.co.uk/heat-pump-tariff> ; <https://www.edfenergy.com/heating/electric/air-source-heat-pump-tariff/trial> ; [https://www.britishgas.co.uk/energy/gas-and-electricity/ev-tariff.html?source=Energy-Google-PPC&cid=PPC.cid\\_cname=Energy\\_EV-Tariff\\_Generic&gad\\_source=1&gclid=EAlaIqObChMIpb6s7vHviQMVKopQBh1klxG9EAAYASAAEgJfhfD\\_BwE&gclid=aw.ds](https://www.britishgas.co.uk/energy/gas-and-electricity/ev-tariff.html?source=Energy-Google-PPC&cid=PPC.cid_cname=Energy_EV-Tariff_Generic&gad_source=1&gclid=EAlaIqObChMIpb6s7vHviQMVKopQBh1klxG9EAAYASAAEgJfhfD_BwE&gclid=aw.ds)

<sup>7</sup> <https://www.mhhsprogramme.co.uk/>

<sup>8</sup> <https://octopus.energy/blog/100k-zero-bills-homes-by-2030/>

<sup>9</sup> [https://irp.cdn-website.com/037925b4/files/uploaded/Zero\\_Bills\\_and\\_Higher\\_Values\\_Octopus\\_Report\\_Mar24\\_Final.pdf](https://irp.cdn-website.com/037925b4/files/uploaded/Zero_Bills_and_Higher_Values_Octopus_Report_Mar24_Final.pdf)

suppliers and installers are predominantly formed with large-scale players, leaving smaller businesses and local operators at a disadvantage. Ensuring a balanced market that fosters competition and inclusivity will be crucial to supporting both innovation and the rollout of low-carbon technologies.

According to this consultation, 19% of consumers now use flexible tariffs, which shows a positive shift towards innovative energy products. However, with 81% of customers still on standard variable tariffs, it is evident that there is significant work to be done to ensure these new products reach a wider audience and fully realise their potential.

## **Q2. What innovation should happen to meet consumers' needs and meet net zero?**

Innovation in the retail market should aim to address some of the existing barriers to the net zero transition. For example, one barrier to heat decarbonisation is the higher upfront cost of heat pumps compared to incumbent technologies.<sup>10</sup> While government intervention is essential, commercial entities have a crucial role to play in bridging this gap. Concepts like Energy as a Service (EaaS), which eliminate the need for homeowners to pay upfront costs, could be transformative. It is encouraging to see progress in this area, with companies like E.ON piloting EaaS solutions designed to address this issue.<sup>11</sup> Recent research commissioned by The MCS Foundation examined homeowner attitudes toward retrofit financing, including emerging models.<sup>12</sup> The findings showed that while there is interest in Energy as a Service (EaaS), many homeowners have questions and concerns, which is unsurprising given the early stage of its development. Further research is needed to identify the factors that could make these new financing models more appealing and accessible to homeowners.

Furthermore, we agree that exposing homeowners to stronger price signals will be important to encourage more flexible electricity consumption. Thus, innovation should also take place to offer a wider variety of smart tariffs which encourage flexibility. However, price signals alone are unlikely to be sufficient. One study found that a surprisingly high percentage of participants did not react to price signals, which the author attributes to lack of understanding, lack of interests, or inability to turn down their energy usage.<sup>13</sup> Consumers know very little about how electricity works, including what a kWh is or how much they use.<sup>14</sup> Demand-based pricing adds a whole other complexity to electricity pricing.<sup>15</sup> This once again suggests that empowering consumers to switch to a smart tariff is more complex than simply offering a price signal and innovation alone will not lead to desired outcomes. Automation will be essential to unlock domestic flexibility. The Government's Smart and Secure Electricity Systems (SSES) programme will play a key role in enabling automated energy management, helping consumers maximise the benefits of flexible tariffs and low-carbon technologies. While this lies outside Ofgem's direct remit, we anticipate significant progress over the next five years. It is important that Ofgem remains flexible and ready to support these changes as the market continues to evolve.

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<sup>10</sup> <https://www.which.co.uk/policy-and-insight/article/government-must-do-more-to-tackle-cost-and-other-barriers-discouraging-consumers-from-switching-to-heat-pumps-and-electric-vehicles-which-says-anV5c8w4a6oH>

<sup>11</sup> <https://www.eonenergy.com/newsroom/eon-leads-consortium-to-pilot-heat-and-energy-as-a-service.html>

<sup>12</sup> This will be published in the up and coming months.

<sup>13</sup> <https://www.scopus.com/record/display.uri?eid=2-s2.0-84878047924&origin=inward&txGid=a74a3afd09974ba5892498bd9a6d6673>

<sup>14</sup> <https://www.scopus.com/record/display.uri?eid=2-s2.0-79551533096&origin=inward&txGid=39ecb85800424a5f0930583ab33c29b3>

<sup>15</sup> <https://www.sciencedirect.com/science/article/pii/S1364032121012211#bib16>

Finally, whilst we agree innovation in the retail market is important, the ability of households to participate in demand-side response is heavily dependent on their flexible electricity consumption.<sup>16</sup> A house with small-scale renewables, including solar panels, battery storage, a heat pump, thermal storage and an EV is likely to be able to shift their demand more easily. They may also be able to go one step further than simply turning down their energy demand, selling stored or locally generated energy back to the grid in periods of demand. More dynamic tariffs risk penalising those who cannot respond to price signals and this must be understood when considering any reforms to the retail market. Ofgem must continue to work with DESNZ to forward the rollout of flexible small-scale renewables equitably, whilst continuing to ensure that the retail market works for every type of customer, including those with an inflexible electricity demand.

### **Q3. What will be the impact on consumers of new, innovative products and services? How can we maximise the benefits and minimise the risk?**

The impact of new, innovative products and services on consumers could be significant. First, innovations (like EaaS) could help homeowners transition to low-carbon heating without any upfront costs. This could help to support a more equitable transition, enabling lower-income households without the upfront capital to have small-scale renewables. Second, smart tariffs could enable households to use electricity more flexibly, reducing their energy bills, as well as lowering system-wide costs. According to recent modelling, unlocking domestic flexibility is a triple win.<sup>17</sup>

**1) It reduces energy bills** – A household participating in demand-side response could save up to £370 per year on energy bills in 2040. Even those who are not participating will still save £100 per year, due to the reduced cost in wholesale prices.

**2) It reduces carbon emissions** – Without household flexibility, we would need to build the equivalent of four new gas-fired power stations to meet peak electricity demand in 2040, at the cost of £2.5 billion alongside the associated carbon emissions.

**3) It has wider system benefits by minimising the amount of network reinforcement needed** – Overall energy system savings could reach £14.1 billion by 2040. The reduction of energy demand during peak times minimises costly upgrades to the networks, which could reach almost £1 billion.

To maximise these benefits, it is important to address regulatory barriers that are limiting the development and adoption of innovative solutions in the retail market. However, as noted in the consultation, many challenges require legislative interventions which is the responsibility of the Department for Energy Security and Net Zero. These include increasing public awareness and tackling barriers to adopting low-carbon technologies.

Striking the right balance between supporting innovation and protecting consumers is critical. Recent energy supplier failures highlight the risks involved in the current system, where inadequate financial resilience can lead to market disruptions and erode consumer trust. Since 2018, 40 energy retailers have declared bankruptcy<sup>18</sup> and the Supplier of Last Resort has been implemented with existing

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<sup>16</sup> The Power of Flex [https://www.cornwall-insight.com/wp-content/uploads/2023/08/The-power-of-flex-Rewarding-smarter-energy-usage-1.pdf?utm\\_source=website&utm\\_medium=website](https://www.cornwall-insight.com/wp-content/uploads/2023/08/The-power-of-flex-Rewarding-smarter-energy-usage-1.pdf?utm_source=website&utm_medium=website)

<sup>17</sup> [https://www.cornwall-insight.com/wp-content/uploads/2023/08/The-power-of-flex-Rewarding-smarter-energy-usage-1.pdf?utm\\_source=website&utm\\_medium=website](https://www.cornwall-insight.com/wp-content/uploads/2023/08/The-power-of-flex-Rewarding-smarter-energy-usage-1.pdf?utm_source=website&utm_medium=website)

<sup>18</sup> <https://www.theenergyshop.com/guides/which-energy-suppliers-have-gone-bust>

energy tariffs and credit levied on consumer bills. The bankruptcies since 2021 are estimated to have increased bills by £94 per customer,<sup>19</sup> disproportionately affecting the most vulnerable households. Ensuring that new market entrants are robust and sustainable is essential to minimise these risks while still encouraging innovation.

In summary, new products and services can deliver substantial benefits by reducing costs for consumers and supporting the transition to a low-carbon energy system. However, these benefits will only be fully realised by addressing regulatory and systemic barriers, improving access to low-carbon technologies, and maintaining consumer protections to ensure market stability.

#### **Q4. Are there any additional enablers or barriers to innovation?**

n/a

#### **Q5. What is the most significant barrier to innovation? Why?**

There are multiple interconnected barriers that need to be addressed collectively. Aside from the regulatory barriers in the retail market acknowledged in this consultation, others include:

- The lack of consumer awareness, trust and understanding on innovative products and tariffs.
- There is a reduced level of trust in energy suppliers caused by the recent energy crisis. Domestic customer service satisfaction experienced a significant decline during the energy crisis, dropping from approximately 74% in 2020 to a low of 62% in 2023. Although there was an improvement to 66% in January/February 2024, this level remains below the peak of 75% observed in April 2020, indicating that substantial efforts are still required to restore trust among electricity consumers.<sup>20</sup>
- The low uptake of flexible assets, including heat pumps, thermal storage, EVs and battery storage, limits households' flexible electricity consumption.
- The delay to the smart meter rollout.
- The delay to Market-Wide Half Hourly Settlements (MWHs).
- Current metering rules in the Balancing Mechanism are significantly stifling innovation by making it difficult for demand flexibility providers to participate with domestic assets. The introduction of metering standards by the ESO, requiring sub-100MW participants to report meter readings at 1-second intervals with 1% accuracy, presents a major barrier for domestic flexibility providers. These standards conflict with the legislative metering accuracy requirements for domestic assets outlined in the Metering Certification Regulations 1998 (+2.5%/-3.5%) and the Measuring Instrument Regulations 2016 (+/-2%), which allow for a broader margin of accuracy.<sup>21</sup>

Overall, Ofgem must ensure that the regulatory framework in the retail market strikes a balance between fostering innovation and maintaining robust protections for consumers. This dual responsibility is essential to creating a market that encourages new products while safeguarding customer interests, enabling both the adoption of innovative solutions and trust in the evolving energy landscape.

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<sup>19</sup> [https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Market%20Meltdown%20-%20Dec%202021\\_v2%20\(1\).pdf](https://www.citizensadvice.org.uk/Global/CitizensAdvice/Energy/Market%20Meltdown%20-%20Dec%202021_v2%20(1).pdf)

<sup>20</sup> <https://www.ofgem.gov.uk/sites/default/files/2024-09/OFG2266%20Consumers%20Confidence.pdf>

<sup>21</sup> [ade-report-demanding-more.pdf](#)

**Q6. What innovation is not happening because of regulatory barriers?**

Selling locally generated renewable energy directly to local consumers is unachievable for many small projects because of the costs of becoming an electricity supplier, which have barely changed for the last 30 years.<sup>22</sup> This means that local renewable energy projects have to sell their clean energy to big energy companies for a fraction of the price, rather than having the option for local people to buy directly from source, which in turn leads to significant transmission and distribution losses. The significance of this barrier is evidenced by community energy project case studies from across the UK, all of which identify how expensive it is to become a licensed supplier as a small company. For example, Burnside Community Energy in Cumbria stated that “setting up as a licensed local supplier would certainly be much more attractive if the financial and bureaucratic hurdles were removed or significantly lowered”, while SE24 in South London noted that “We have not considered becoming a licenced supplier because of the sheer cost and complexity of it” and Brent Pure Energy London “It’s all to do with the way the system is organised – the regulations by Ofgem and an access charge to the national grid.”<sup>23</sup>

**Q7. Should we do further work to improve routes to market?**

**Yes.**

As explained in our response to Q7, there are clearly existing regulatory barriers which prevent smaller suppliers of electricity from participating in the market. Notably, becoming a supplier is expensive and administratively challenging. As we move towards a more distributed electricity system, we should be making the most of these assets and the opportunity for local supply.

For this reason, we support Community Energy England’s and Power for People’s proposal of introducing a Local Electricity Bill or equivalent to enable the local supply of electricity. The Bill seeks to support community groups that want to sell the electricity they generate to local consumers. This Bill was introduced under the previous government but did not go through a full legislative process due to the general election. We expect it to be reintroduced into Parliament and debated on soon. This would establish a ‘Right to Local Supply’ and proportion the costs of selling clean electricity to the scale of the local supplier’s operation. The Bill would establish a Community Electricity Export Guarantee and a Community Electricity Supplier Services Scheme.<sup>24</sup>

- *A Community Electricity Export Guarantee*: this would create a right for sites that generate low carbon electricity with a capacity below 5 megawatts to export their electricity to an existing electricity supplier on fair terms.
- *A Community Electricity Supplier Services Scheme*: this would create a requirement on existing larger energy suppliers to work with community schemes to sell the power they generate to local customers. Existing suppliers could charge a fee for doing this, but that fee must be reasonable.

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<sup>22</sup><https://powerforpeople.org.uk/the-local-electricity-bill>

<sup>23</sup><https://static1.squarespace.com/static/61eabf22167cf140f54e11b0/t/62335a94a807904f2a70d66e/1647532698309/The+Call+for+a+Level+Playing+Field.pdf>

<sup>24</sup><https://powerforpeople.org.uk/the-local-electricity-bill>



Together, these would enable smaller-scale renewable energy schemes – especially community-owned and -run ones – to sell their power directly to local households and businesses. Many more community energy projects would become viable as a result.

**Q8: Which routes to market are most attractive and why?**

n/a

**Q9: If you think that we need to improve routes to market, which option do you think should be our top priority and why?**

Among the proposed regulatory changes, we believe that the option to expand Licence Exempt Supply for smaller assets could have the most impact. Most of the suggested changes do little to address the significant administrative complexity of entering the retail market and becoming an energy supplier. However, Licence Exempt Supply offers a potential opportunity to lower the barriers for smaller supply assets, particularly community energy projects, by not requiring them to go through the same rigorous and expensive process.

One of the main obstacles for smaller assets, including community energy initiatives, is the high cost and complexity associated with obtaining a supply licence. These challenges often prevent local groups from selling electricity directly to consumers. To address this, we support Community Energy England's and Power for People's proposal for a Local Electricity Bill or an equivalent measure. This legislation would establish a 'Right to Local Supply,' enabling community groups to sell the electricity they generate to local consumers. By proportioning the operational costs of local supply to the scale of the supplier, this approach would make it feasible for smaller entities to participate in the market. (See Q7)

The benefits of a local electricity framework extend beyond regulatory simplification. Retaining more profits from clean electricity within local communities could drive reinvestment into local services, facilities, and renewable energy infrastructure.<sup>25</sup> This could create a strong incentive to build additional renewable generation and help to bring communities along with the transition.

While it is not guaranteed that Licence Exempt Supply would provide immediate and widespread benefits, it could act as a stepping stone for community energy projects to participate in the retail market more easily. This measure has the potential to enable more local consumption of locally generated electricity, which aligns with broader system benefits, such as mitigating challenges like rising constraint costs. The value of local markets is supported by the Department for Energy Security and Net Zero's 'Review of Electricity Market Arrangements (REMA): Technical Research Supporting Consultation', published on 12th March 2024.<sup>26</sup> This concluded that "local markets can support more efficient use of transmission and distribution system networks and resources, which would contribute to lower system costs."

In summary, Licence Exempt Supply could play a useful interim role in supporting smaller-scale energy projects, before a long-term legislative framework is implemented.

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<sup>25</sup> <https://mcsfoundation.org.uk/projects/the-community-energy-revolution-2/>

<sup>26</sup> <https://www.gov.uk/government/publications/review-of-electricity-market-arrangements-rema-technical-research-supporting-consultation> pg 101

**Q10: What are your views on the options presented for amending routes to market? What would be the risks and benefits of each option?**

We are not convinced that the proposed options address the key barriers to entering the retail market, which are the administrative and cost burdens of becoming a licensed supplier. We do, however, acknowledge that Ofgem has a duty to protect consumers, and that a rigorous process is thus needed.

One proposal that we do think could be valuable is the extension of derogation powers, especially, the additional derogation powers to SLC22.3 which implements the Universal Service Obligation (USO). We agree that some suppliers in the future will likely provide tailored, personalised services to meet the needs of specific customers (e.g. customers with a heat pump).

**Q11: To facilitate innovation, which supply licence conditions would most benefit from being reformed (e.g. adding derogation powers)?**

n/a

**Q12: Are there any other improvements to routes to market which should be considered as part of enabling significant innovation in the retail market?**

n/a